

Interview with Robert Lipsey
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Claudia: It is August 8, [2001] and a quarter to four in the afternoon. I'm at the National Bureau at 1010 Mass. Ave. and I'm interviewing Robert Lipsey. And if you'd be so kind, Robert, to tell us a bit about yourself and when you came to the Bureau and any other details you'd like to share.

Robert: I started at the Bureau in June 1945. And the way it came about is I received a letter in the mail from Geoff [Geoffrey] Moore asking me if I would like to work for the Bureau, and saying that he was writing at Arthur Burns's suggestion. I had been a student of Burns, although I doubt that he knew me very well. But I think that other assistants mentioned my name to him, and suggested me, and so...

Claudia: So you were a student. Is this when you were an undergraduate at...this is a graduate...

Robert: No, I was a graduate student the year before I came to the Bureau. And I was interviewed by Geoff Moore, and Geoff was involved in the business cycle program at... I started out working, and it was called the Business Cycle Unit, which is a dominant unit of the Bureau. That was a continuing project that never had to ask for money, that was thought of as the core of the Bureau, and I spent three months there, partly doing small jobs for Geoff Moore, and partly actually working in the unit.

And the unit consisted of, as far as the assistants were concerned, consisted of I would guess maybe six or seven assistants, research assistants, and their job was to do the business cycle analysis. So seasonal corrections, a large part of the man-hours went into seasonal corrections, and they were not done as now, with pressing a button, but they were done first in a mechanical way; they were charted. Moore and Burns would look at them, often reject them, saying, "Try a different method." And sometimes it could go on for a week before a single series of correction was accepted. And then the business cycle analysis was done with the seasonally corrected data.

Claudia: Let me just ask you one question, at that moment, the government was not doing seasonal corrections to the same series?

Robert: Well, no. The series, I think, went largely published not corrected. But if some were published corrected, the Bureau would not have accepted the results, and would've nevertheless redone the corrections. I don't know how much was published seasonally adjusted at that time but I know this was a major part of the work. And it was not...it was fairly...to people doing it, it was pretty routine job. It was done with a supervisor in the room watching over people, and they were expected to

keep to their work, not wander around.

Claudia: So what was your title? Your title was?

Robert: We were called research assistants, I think. And the person in charge of that room was Sophie Sakowitz. People who worked there... I used to meet Ray Vernon; he would ask me about her because he had worked there in the '30s, and he remembered her very well as a supervisor. In any case, there were other projects that involved individual research people and typically one assistant, and that was considered a much more desirable job. So that when the opportunity came to move out of this unit, I was interviewed by Fabricant, Sol Fabricant, and he hired me to work for him. So, I had a very short experience in that Business Cycle Unit, but fairly vivid.

Claudia: Do you remember when you were in the Business Cycle Unit, there were other research assistants there. Did you become close friends? Was this also a social context of...?

Robert: Oh, yes. There were certain social contexts, although much more in the other room, where people were not so closely supervised. And we did become quite friendly, we'd go out to lunch together. That was quite a different, a different atmosphere. So that was a... I was actually called in by Arthur Burns after I...when I was considering moving. And to my surprise, he urged me very strongly not to make that move. And he stressed how highly he thought of Geoff Moore, and how important the business cycle work was. I made the move nevertheless.

Claudia: Well, maybe he wanted to keep another really good research assistant working on the business cycle project, of course.

Robert: Well, I think Geoff liked me. We had more contact, I had more contact with him than the others did. But still, I was quite taken aback with the director of research calling me in for something like that.

Claudia: Well, it impressed you enough so that you remembered that moment very well. So, three months went by, so now we're still in 1945, maybe 1946...

Robert: '45.

Claudia: Still '45, and now you're working with Fabricant.

Robert: Now I began working for Fabricant, and that continued quite a while. This was a project on the growth of government in the United States, which eventually ended in a book, but preceded by an income and wealth paper, on government wealth, which I had a fairly large part in, and then papers on government employment and other aspects of it.

Claudia: So remind me, this was all levels of government. This was federal, plus state, plus local?

Robert: Yes, the role of government in the economy...

Claudia: Right. So this would have begun with, for the local, it could only go back to 1902, right?

Robert: Well, looking back to what our governments did earlier and because, well, for state governments, there was information. And reading histories of local government, one had some idea of the role of local government earlier.

Claudia: But not a really good series because the statistical data begins in 1902.

Robert: But the statistical data began [inaudible] and basically that the statistical aspects of the study began mainly with 1900 and 1902. So that, I worked on various aspects of that project for the next few years. And the book finally came out in 1952, but I had begun, by that time I had been given my own project. And so then I began the project. Well, at first Fabricant was involved in a part of the [Simon] Kuznets study which he was looking, which we'll talk about that, but it was a large study with many people on it, Fabricant had one aspect of it, and that's where I first began working on foreign investment. I worked with that, the equivalent in those days, of working papers on various aspects of foreign investment.

Claudia: So these were a part of the Occasional Papers?

Robert: These were inputs. No, these were just inputs to the final volume. None of them were published and called working. Actually I'm not certain what the title was.

Claudia: They were internally circulated? They didn't have to go to the board for review or anything?

Robert: These were totally internal. Oh, no, this was for the project itself. And then, at some point, I was given my own project, which was the Price and Quantity Trends project.

Claudia: Tell me a bit about what you mean by "I was given."

Robert: Well, actually we should talk about how the Bureau ran in those days, and that it was a very...the decisions about what to do came down from above, and the Bureau decided, you know, that it was going to work on a certain area. Presumably, that was the director of research and the board took part in that decision. And people moved from one project to another, they may have had some choice, but they may not have had a lot of choice as to what they would do. It was the... Now, the project that was given, I was told that I could have this as my own project, I would have financing, I would have research assistants...

Claudia: Wow, your own research assistants.

Robert: And because it was a very large data collection effort, I had a number, quite a number of assistants to work with. The idea behind it was that it was going to be of help in the business cycle program. But Ilsa Mintz was going to do a study of cyclical behavior of trade of exports and imports. There were no quarterly indexes going back far into the past, and so I was going to put together these indexes, which

would feed into her work. But I had a lot of freedom and I converted the project to something I was more interested in, which became my dissertation eventually. And I was given a great deal of freedom in hiring people. If I wanted more assistants, I would ask, mostly I got them.

Claudia: So, the year that this began...so, you were working on business cycles, you worked for Fabricant, and then you were given your own project, and we date that in...when?

Robert: 1954. It's hard to date it because the projects blended into...one was finishing off...one project was starting, and another...

Claudia: Let me deviate for a second, on a personal note, you were an undergraduate at Columbia, now you're a graduate student, and you're working at the Bureau, you were also sort of registered as a graduate student. How did it work? You took some courses, and then you're sort of doing your own thing, and Columbia doesn't really care.

Robert: Well, I took, I had one year, full time at Columbia before I started at the Bureau. And then once I started, I had to finish my 60 credits, which I did except I guess one course at a time, or two courses. And Columbia was quite relaxed in those days about students.

Claudia: I think they still are.

Robert: Well, no, I think they do try to impose some time limits. I finished...I guess I did a master's, I did get a master's degree writing a paper under Burns in 1946 on an entirely different topic, which was an interesting experience by itself.

Claudia: But the Bureau was in part livelihood, and it turned out that it was also a fount of this dissertation. So, it has many different virtues.

Robert: Well, for me because I liked the work, I enjoyed having my project. There was not much connection with Columbia, but as I did this project, I had originally spoken to Ragnar Nurkse at Columbia. But he never took any real part in it. When I finished, I brought it back to Columbia, and Albert Hirschman very kindly took it on. And I sat in on his seminar for a year or a term, and he had a lot of helpful ideas particularly about how to present. He was interested in the results. And he had very good ideas about how to present it.

So, I had a project. Although I had no particular status, I'm not sure what my title was, but the organization of the Bureau, and at that time, the Bureau had the director of research, really it was the highest ranking person. I guess Moore may have been the associate director but I'm not sure whether he actually had that title. And then there was what was called then the research staff, which consisted of about 20 people at its largest, as far as I can remember. Maybe half were teaching at universities, and half were full-time Bureau employees, and the Bureau, for quite some time maintained a full-time research staff, and thought, I think, that that was desirable to have some mixture. The research assistants were always told they should not look on this as a road to promotion; they were supposed to finish their

work in the university and go off somewhere. There were, in those days, permanent research assistants. Women, several women, who had worked for many years at the Bureau. Two of them worked for Simon Kuznets.

Claudia: Elizabeth Jenks.

Robert: And Lillian Epstein. And they clearly played some important role in his work. Another one worked for Fred Mills, later for [John] Kendrick. But most of the people were young, and stayed, were expected to stay only a short time. Fabricant had come as an assistant and stayed. But I did, and Anna Schwartz.

Claudia: Milton [Friedman] did as well.

Robert: Milton had also. I didn't...

Claudia: Yeah, Milton was Simon's research assistant. And Simon had brought back all the surveys that were the basis of *Income from Independent Professional Practice* in the '30s, and he was told about this "math-y student" at Columbia. And he brought Milton into the project as a research assistant, and then of course Milton stayed with that project. And so many, many, yeah...

Robert: Yeah. But it was, it was considered unusual, and it was not...people, the staff members were not encouraged to include their research assistants as co-authors. In fact there was a couple of episodes in which, at least one I knew of where Steadman was prevented from doing that. And if you thought very highly of the contribution of the research assistant, then the publication would come out with the assistance of somebody who was a research assistant. So, I was given a project. I was given a project I think because this was desired for the business cycle program. And Fabricant thought of these to do it.

Claudia: All that time, though, you did have a sense that you would eventually get your degree. That somehow you would...

Robert: I didn't think much about it. I didn't think much about it. And the Bureau always emphasized that they didn't care whether I got a degree or not. Once it was clear that I was a long-term employee, they emphasized that I shouldn't worry about that. They didn't particularly want me to get it. So, I didn't think too much of it. At some point I decided it would be good I did. And I had to retake some of my exams. Spent a year doing all these things.

Claudia: How much... You may not know the answer to this question. But Arthur Burns, for example, he's full-time faculty, he's probably half-time in terms of the number of courses he has to teach at Columbia because of his position at the Bureau. He comes in probably every day to the Bureau? No?

Robert: I wouldn't...I doubt it. Now, his era at the Bureau then came to an end with Eisenhower's election. So, that was the period, I guess, when he was most active at the Bureau, most, largest presence for all of us who saw him, we could go in and talk to him if we wanted to. Then when he left, Fabricant became director of research, and that led to a real change in emphasis in the Bureau because

Fabricant's interests were not primarily business cycle, he was more interested in long-term issues in productivity and economic growth. So if you look at the annual reports of those years, some major change in the subjects. I think he wrote one about business cycles, but the others were all different topics.

Claudia: And Fabricant stays as director of research until when?

Robert: Well, I'm not sure, but when Burns returned in '57, I believe, then he became the president of the Bureau. And now the positions changed in importance because now he became, once again, became the dominant figure, and he was very dominant. I began to have some administrative role at that point, so I would sit in on meetings. And he clearly...everyone deferred very much to him. So, that director of research was no longer the final word on the...he came back as president, and ruled the Bureau until he left again.

Claudia: And that was when?

Robert: Well, I guess he left at the time of Nixon's campaign.

Claudia: He left in six...well, he left in '59? So that was like two years...

Robert: See, he had this period as chairman of the council.

Claudia: About mid-6, yeah?

Robert: I guess until...when he came back in '57, I believe, and I think he was then the president until '66 when John Meyers...

Claudia: When John took over. That's right. There are so many, many questions that I want to get to. Let me just say one thing, which is I've been reading Milton Friedman's autobiography and some notes of Milton's. Milton has a lovely statement about what it was like when, you know, he moved from the government to the Bureau. Of course it's Milton, so we have to be careful here. But Milton said of what Burns, I think it was, I think it was Burns, not Mitchell, had said to him, and he said, "This is a difficult project that you're going to do. It's going to take a long time. Sit down. Do the research. In a couple of years you'll have the answer." And he was overjoyed. This, this was research. This wasn't, "Okay, turn it over in a couple of months." This was, "Sit back. Think. Think hard, because we want it done right." Is that the sense that...is Milton telling us exactly what was going on? Or is this just Milton's world?

Robert: I would think very much so. I would think that was very much so because that's what I was told also. In fact, maybe even when I was just working as an assistant, that was emphasized, it was a calling, and this was an exciting thing to do. Fabricant loved the work, and he thought it was the best thing in the world to be doing. And the Bureau was so different an organization at that time. I think they thought of themselves as pioneers and as people who were doing something very different from the academic profession, and that this was the only place where you could do anything. It was the home of empirical research, and very few professors were doing empirical research. There wasn't support for it, there wasn't real

encouragement, a great interest in it. But this was what these people thought was the key to really learning about the economy.

This, I think this goes back to Mitchell's ideas, to, somewhat, to institutionalists, the economics, and there were a number of strands that entered into this. But that meant partly that the Bureau was going to do authoritative work, they were going to take whatever time was necessary for it, they were going to do new things that people hadn't done, and they were going to do them right. And so, that was behind the idea that you had this very elaborate procedure before anything got published. Everyone was an employee of the Bureau; you didn't publish outside. You expected to have your work come out as Bureau publications, and it would have to go through...when you finished a manuscript...first of all, you would give seminars to talk about, then when you finished a manuscript, a reading committee of your colleagues would go through it. And that was a very serious going over that it got. People took each other's work seriously, and really...

Claudia: So when you gave seminars, they were in-house seminars, or you were taken on the road?

Robert: No, in-house.

Claudia: In-house. And when you gave an in-house seminar, were people asked to come who were not at the Bureau, but who Burns may have thought had an interest, could add something?

Robert: I can't remember. But they were basically in-house seminars. Maybe some others came, but the place where you got most of your comment and criticism was from your colleagues.

Claudia: And so, who for you, the best criticism was from?

Robert: Well, I guess frequently from Fabricant because he had interest in the project. When I presented my book, Ilse Mintz was one of them, and Jacob Mincer was on the committee. I'm not sure who the third one was, I don't remember. But it was, it got a very thorough review. And that also determined, had a lot to do with what the reviewers said had something to do with your future at the Bureau. And then after that, it went to a committee of directors. And they were also often very thorough. They had very strong opinions.

Claudia: The reviewers were anonymous?

Robert: They weren't anonymous.

Claudia: They weren't anonymous?

Robert: No. It was...

Claudia: But the reviewers were chosen by the director, by the research director of the Bureau?

Robert: Yes.

Claudia: Just as is the case today, although it's a little more of a rubber stamp today.

Robert: Yes, I don't think people take the time that was taken then because they're not full time. That was considered part of your duties, and these were full time people.

Claudia: So the reviewer would be an in-house person, not someone who would be chosen outside?

Robert: Yes, I think sometimes they would send it out to someone, but basically, the real review was your colleagues.

Claudia: Right. Now, so we're sort of chronologically, we're going from '45 up to the '60s, so that's the period that you've just been talking about. And of course, you've finished this project, the project that becomes your dissertation, in about '61, is that right? Or just before?

Robert: I finished probably the manuscript in 1960, in fact. But you know, it starts through this process which took several years before publication. And I think around that time, or maybe '59, I began working also with Raymond Goldsmith, who had a big Bureau project that I also became a co-author on, *Studies in the National Balance Sheet [of the United States]*. So, '59, '60, '61, I was also working with him on that, as well.

Claudia: Right. So, you were working on various things. Now, *Price and Quantity Trends in the Foreign Trade of the United States* was a Princeton Studies in International Economic Relations piece, that was not a Bureau piece?

Robert: Yeah, that was a Bureau publication.

Claudia: Oh, it is a Bureau...

Robert: Princeton was the Bureau publisher in those days.

Claudia: Okay. It's interesting then that it doesn't come up as a Bureau publication....

Robert: Oh, really?

Claudia: Everything else does, but this one doesn't. It comes up as part of the Studies in International Economic Relations, Number 2.

Robert: They were all...those were all Princeton volumes for the Bureau, right, that's a Bureau title.

Claudia: And here I thought that I discovered something, but in fact I haven't discovered anything at all. Who was Doris Preston?

Robert: She started as my research assistant on a project, on the trade project, and then the Bureau got a grant, I think it may have been an NSF [National Science Foundation] grant, which was to start... The Bureau had a lot of construction data that it had received and analyzed over the years. And the idea was to put this out for general use, but then to look for more...over-annotate them in great detail. And this was supposedly going to be the beginnings of doing this for all the Bureau series, all the series that are now on the...but it became obvious that it took so long just to do construction statistics. That was never...never continued.

Claudia: Right. So during the long period that you've just been discussing, lots of people came and went in the Bureau. Anna, for example, was around all that time, although physically she was not always at the Bureau, because she had these four kids...

Robert: Right. But she was associated with the Bureau.

Claudia: She was associated with the Bureau.

Robert: Right.

Claudia: But you would see her every now and then?

Robert: Yes. We didn't know her well. She was quite apart from the rest of us.

Claudia: Would you see Milton?

Robert: Well, there was such a short period, there was a short period when he would be around and we'd see him, but I'm not sure when he left for...

Claudia: And what about Simon?

Robert: Simon was around. But Simon was somewhat aloof, he was on a different floor with his staff. And I saw him later because I became involved in the postwar capital market study, which he was director of, but if it had not been for that... Oh, and he did come to and at times presented at seminars. But again, he wasn't part of the business cycle group. And it was a different...it was a different group.

Claudia: And then he went to Penn, and then he went to Hopkins, or I have that reversed?

Robert: No, that's right.

Claudia: That's right. And then he went to Harvard. So, when he went to Penn, I guess, he no longer came to the Bureau?

Robert: I'm not sure whether he was already at Penn when he did the postwar capital markets. It's a little hard for me to know all the dates. That came out in a series of volumes, of which his was the last, I think. Wrote for quite a long period of time, and he became less and less present as this went along. A lot of it was done when he was not any longer very much at the Bureau, although I think both Lillian

and I've seen Elizabeth Jenks remained during that period.

Claudia: Right. I would have loved to have met them. Of course, I've met Simon. But not... What were they like, Lillian and Elizabeth?

Robert: Two very different... Elizabeth Jenks was an unmarried lady, not just unmarried, but seems to be a little spinster type. Rather sharp-tongued, lived by herself in a big house in Queens, which I think had been her parents' house. Very devoted to Simon and what she was doing. Lillian Epstein was a more, easier person, and I think perhaps was a little bit, maybe somewhat more capable. But they were both...

Claudia: Did they have training in statistics, or economics, or neither?

Robert: They must have had undergraduate degrees, but that's all. I don't think either one did graduate work. If anyone did, Lillian might've..but maybe not. I think basically most of these, both they, and Merton Peck [SP] and Sophie Sakowitz had undergraduate degrees. Sophie's may have been in statistics..

Claudia: Two things about the Bureau. Politics and the two parts of economics, supply versus empirical, so let me group these questions. Did you ever have a sense at the Bureau that there was this other world of politics? That there were people who were Republicans, and people who were Democrats? And there were people who would think of the era of the New Deal one way and people who might think of it in another way? And there were people who were going into the '50s who were, once again, Republicans and people who were Democrats? So, was there... And of course, with Burns at the helm, just as Marty here, it reflects one political view. But sometimes you can have an academic atmosphere which is completely apolitical. So that's one question.

The second one, somewhat unrelated, but have to do with the environment, was there ever a sense that you got that economics was moving more into economic, into theory, and that these foundations of economics were coming into the Bureau, or being, in some sense, held at bay at the Bureau? Or that it didn't really matter?

Robert: Well, those are different issues.

Claudia: Completely different.

Robert: Politics, you know. There were some, you know, there were people who had very strong opinions. Leo Wolman, who was the labor economist, had very strong, very conservative views. And I wasn't even conscious of Burns' views, and was rather surprised that he was well-placed among Republicans when he went to... We thought of him... And my wife once came to a talk that he gave, and he had a way of mumbling under his breath. He was not at all an inspiring speaker, or teacher, to me. And she was sure that he would not go far in the world. And so for him to take on this public role was for me a great surprise, which may reflect my poor judgment, for the way he appeared to us at the Bureau. Certainly he was very...

I don't think there was much discussion of political issues as it applied to the

research at all. At some point, probably a little bit later, an issue came up that people were making political statements, and Bob Shay, who was at Columbia, and who was doing one of those consumer finance studies, wished to write a letter to make some kind of public statement. And I think the Bureau was a little unhappy at first, but they finally issued guidelines for people who wished to make these statements.

He was a very active Democrat, and he wanted to present his views in some public form, and so it was decided how people should identify themselves and make it clear that this was not a Bureau position in any way. In some ways, this goes back to the origins of the Bureau, which you've probably read about, and this consciousness of sort of being above political disagreement, that is that you bring together people of very different political views, but nevertheless that what would come out would be of such high quality that people with the different political views would accept these authoritative...

Claudia: That's a very positivistic view of economics, that you could be completely nonpartisan, nonpolitical, non-ideological.

Robert: Well, I mean, people themselves were not...were known to be ideological, but that you could produce work that would not be subject to that criticism. And so the whole board approval system was in part designed for that, because you'd have the labor union representative and the business-oriented representative who would be often on the same, reading the same manuscript, and you really had to get it by both of them.

Claudia: And what about the possible division between theory and applied? I sort of brought these questions together because they are part of sort of a philosophical notion that you can have something pure and positivistic about economics, so we can leave the political aside. And at the same time, it really doesn't matter if it's theoretically grounded, or empirically grounded, or econometrically grounded, that there is a single truth that we will aim for.

Robert: Of course the accusation of measurement without theory was very painful, I think, and there was some effort to answer that kind of comment. I think Mills's book on prices got some of the same kind of criticism. In a way, the existence of the Bureau was partly a reaction to the academic, the way the academic profession had its interests mainly theoretical. And while, I think, everyone would have denied a dislike of theory, of certain types of theory, I think that runs through Wesley Mitchell's lecture notes. He was very interested in unorthodox theories of all sorts and that's I think built into his philosophy. So, he wouldn't have thought of himself as in opposition to theory, but in opposition to orthodox economics theory, I think.

Claudia: A single theory, yes.

Robert: And that was, I think, there, what was said about it, I think that was certainly his viewpoint.

Claudia: It's interesting, in Milton's memoirs, he has only the highest, highest compliments concerning Mitchell. He never says anything about measurement without theory, and the eclecticism of Mitchell's theoretical underpinnings. There's a

great story about, I don't know if I told you this the last time, about how Kuznets and Friedman wrote a first draft of the paper on income from independent practice – did I tell you this? And they gave it to Mitchell, and Mitchell came in and as Milton said, "He raised holy hell." He said, "Milton..."

Robert: What are you writing?

Claudia: Yes. He certainly hold Milton up as the great teacher in many, many different ways. Well, we're almost out of time, we have hit on just about all the questions that I put down here, some concerning the role of government in the Bureau. Do you have any comments on that?

Robert: Well, I understand that the early period was that the Bureau wanted to stay aloof from government, made a point that it would only do something on a special request from the government, such as something like the Price Statistics Review Committee, or the National Accounts Review Committee. And there had been earlier studies done at the request of some government agency. And then that changed tremendously with John Meyer's coming, because one of his innovations, but he thought was that the world had changed, and the place to go for economic research money was the government. And he began a much more active search for government funds. It's hard to say, the environment changed also, because funds became available at that time, I'm not sure when NSF began supporting economics. So the whole world changed, and that meant the academic community changed because people could get government funding, which made the Bureau change. If you think of the changes that took place in the organization of the Bureau, it wasn't that people got different ideas, but the world changed, and the Bureau really had to adapt. It took quite a while to adapt to a very different relationship with the academic community.

Claudia: So did Burns have...he obviously had very good relations with Rockefeller Foundation, so it must have been someone at Rockefeller who looked to the Bureau, and looked to Burns, realizing that this was a great place to...

Robert: I think it was Mitchell, probably, rather than Burns who inherited this relationship. I think there are things in the minutes, but I don't remember now who the people they dealt with.

Claudia: Right. But that was just an extremely important...it was a gigantic grant of money that the Bureau received, and then, that it drew on for a long time after.

Robert: Yes, but the main thing was the Rockefeller Foundation supported the Bureau, current, it supported its current budget for many years, and then in the 1950s...

Claudia: ...it didn't adapt...

Robert: ...this change to getting a grant, Rockefeller and Ford both, and that also changed the Bureau's financial situation, because there was now for the first time an endowment, which one could draw on, and that gave a certain stability, which had not been there before, it was a very hand-to-mouth operation, especially in the

early...

Claudia: Yes. Did you have any sense, in the hand-to-mouth operation there was as you said, that Business Cycle Project, which, you know, we could look at the financial statements and see what fraction of the funds it took. And then there were all these other projects, and we know exactly which ones they were, did you ever have a sense that some of them were being done because there was the American Council of Life Insurance or whatever, that they were, that their focus came from the funding itself?

Robert: Oh, there was no question I think, that there was a certain mutual interest. The American Council of Life Insurance was the biggest, by far. But, The Association of Reserve City Bankers...there was the Hillside Program, which I haven't said anything about which I'm not sure whom you could find someone to talk about it, which until 1954 was totally separate...

Claudia: And what was it?

Robert: That was the Financial Research Program. And it was in an estate up on Hudson and Riverdale, and we didn't know those people...

Claudia: Who were the people?

Robert: Well, [Raymond] Saulnier was there, and David Durand, and a whole group of others who put out these financial research volumes, and it was also the technological leader of the Bureau, because they were the first to have computers, but they weren't called computers in those days, and when they moved down to Manhattan, that's when most of us first began to have experience...

Claudia: What year are you thinking about?

Robert: '54.

Claudia: Right. And so, we're thinking about a little mainframe of some sort?

Robert: It wasn't a mainframe, it was a collection of IBM... This was a sort of partnership with IBM. I think they were provided maybe free to the Bureau. And there were punch card machines, and there was one machine that did multiplications.

Claudia: Right, right. My father ran an IBM data outfit for a textile manufacturing firm. So my understanding of how computers evolved was going to see him and seeing what his office looked like, and how it evolved from punch cards to then, the 360, and I imagine this was somewhat the same.

Robert: Yes, but that changed the operation of the Bureau tremendously, in terms of research assistants and what they did.

Claudia: Right. We forget that when you had a research design, and correct me if you think this is wrong, when you had a research design, you also had to think about

how much it was going to cost you per data point that you were producing, and when you're doing this all with Marchant calculators, it's going to cost you a lot.

Robert: Yes, and you just didn't do many things that you did very easily later. I think Brad Hickman was one of the people that put out the three-volume study on bonds that started Michael Milken to thinking about the fact that you could do better with low-quality, you could average out risks on low-quality bonds. And that I think was a computer for the Bureau, in that time computer-intensive setting. And for all this I've described, and the seasonal calculations, and also the business cycle analysis eventually was computerized.

Claudia: And so, in your sense, the Bureau, you see a real switch in the mid-'50s, to computers at the Bureau?

Robert: No, just began rather slowly, and it was a small... For my dissertation I worked with those IBM computers, and I was coming in on the weekends, and we moved 60,000 cards...

Claudia: Right. And so you were programming in COBOL, Fortran, SNOBOL...

Robert: No, these machines were plugged, were programmed by plugging in...

Claudia: Yes, by plugs. My father used to have, he used to come home with these great, big boards. So, this was the era of the boards, that's right.

Robert: Boards, right. We had a person who...

Claudia: And you had your little flow chart, and then you would...

Robert: Yeah well, we had someone who would do that, give them instructions. But it would take so long to run, that I said I would come in weekends and run things.

Claudia: But there were also the group of research assistants who would work with...Simon's research assistants, for example, who would work with great big pieces of paper, and multiply things this way, and multiply it in this way...

Robert: Yes, right, that was definitely in the story. Yes, and the work with Goldsmith, that project never, even though the balance sheets were quite complex, never was computerized. It could have been later. It clearly would have.

Claudia: Right. Well, you know, even in my own memory, I could remember when you didn't go to the computing center to do things and you sat around your house and looked at log tables and things so, it's been a long process. I'm being told here that I think we have five minutes. Are there any last things, we talked about so many things, we can of course, have another appointment to do another hour of this, if you want.

Robert: Well, it's up to you. Many things changed of course over these years. John Meyer came in '67, because the Bureau was losing support from foundations, and there was a move to force Burns to step down, or to really change the focus of the

Bureau. And that was mainly that the Bureau was slow on econometrics, and there was a dispute about whether it's antagonistic to econometric work. Well, most of us felt it was. So, Meyer, that was going to be one of the big changes, with his entry. I don't know if you know that about a year after he came, Burns tried to have him removed. And that was a major effort; Burns was very angry with him. And all of us were interviewed by the board, as to what... That must be in the board minutes, if you have them. Very interesting, and Meyer, of course, won. That really was the end of Moore's very strong influence, as Burns' successor, anyway.

And Moore of course went to Washington, but came back later. So, that was a whole new era, very different, different people, different way of organizing. And then during this period, the idea of the Bureau as the employer, and really began...people began to demand to publish outside to some degree. This was in a way the transition to Marty's era, just a different way of running an organization. Just all the full-time people left. Starting in 1950, but certainly by the '60s. The Bureau no longer was going to be the full support of anybody.

Claudia: I have one minute left, and I want to end on an upbeat note, which is, Robert Lipsey has been here at the Bureau, in the new incarnation of the Bureau, at the ITI Conference. You didn't begin with who you are now. So can you just say that you are a professor of...

Robert: Professor Emeritus now, City University of New York, and I'm Director of the New York Office, and Research Associate of the Bureau.

Claudia: And enjoying the new incarnation of the Bureau, perhaps.

Robert: And having a wonderful time.

Claudia: Okay, I think I'm going to have to turn this off. Okay.