

Federal Reserve Board Oral History Project

Interview with

H. Robert Heller

Former Member, Board of Governors of the Federal Reserve System

Date: July 29, 2010, and July 30, 2010

Location: Washington, D.C.

Interviewers: Lynn Fox, Winthrop P. Hambley, and David H. Small

Federal Reserve Board Oral History Project

In connection with the centennial anniversary of the Federal Reserve in 2013, the Board undertook an oral history project to collect personal recollections of a range of former Governors and senior staff members, including their background and education before working at the Board; important economic, monetary policy, and regulatory developments during their careers; and impressions of the institution's culture.

Following the interview, each participant was given the opportunity to edit and revise the transcript. In some cases, the Board staff also removed confidential FOMC and Board material in accordance with records retention and disposition schedules covering FOMC and Board records that were approved by the National Archives and Records Administration.

Note that the views of the participants and interviewers are their own and are not in any way approved or endorsed by the Board of Governors of the Federal Reserve System. Because the conversations are based on personal recollections, they may include misstatements and errors.

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July 29, 2010 (First Day of Interview)

MS. FOX. Today is Thursday, July 29, 2010. This interview is part of the Oral History Project of the Board of Governors of the Federal Reserve System. I am Lynn Fox, Senior Adviser, in the Office of the Staff Director. I'm joined by Winthrop P. "Win" Hambley, Senior Adviser, in the Office of Board Members, and David H. "Dave" Small of the FOMC (Federal Open Market Committee) Secretariat in the Division of Monetary Affairs. We are interviewing H. Robert Heller, a member of the Board of Governors from August 19, 1986, to July 31, 1989. This interview is taking place at the Board of Governors in Washington, D.C.

Educational and Professional Background

MS. FOX. How did you become interested in economics, and what was your career path?

MR. HELLER. I've been interested in economics since high school. At the end of high school, we had to write an essay on what we wanted to become. I wrote that I wanted to become an economic journalist. That aspiration was never fulfilled. The journalist was never there, but I wrote a lot, and I became an economist.

MS. FOX. Where were you born?

MR. HELLER. I was born in Cologne, Germany. I attended high school in Cologne. It was a UNESCO (United Nations Educational, Scientific, and Cultural Organization) model school, so there was a fair amount of international emphasis in the curriculum. Otherwise, it was just a regular German high school.

As a high school student, I wanted to come to the United States. In those days, the United States was the Promised Land. But that dream didn't work out in high school. I went to the University of Cologne for one semester in the summer of 1960. A little bit later, my

girlfriend got a scholarship to go to a small college in Winona, Minnesota—College of St. Theresa. We drew a circle of 200 miles around Winona, Minnesota. I wrote a letter to every college in the circle, and there were lots of them. I wrote probably 70 to 80 letters to many colleges in Iowa, Minnesota, and Wisconsin. A dozen of the schools sent me application materials. I was admitted at about half a dozen of them, including some very good ones—St. Olaf and Carlton College in Minnesota, Cornell College in Iowa, and Grinnell College in Iowa.

Late in the process I got a letter from Parsons College in Fairfield, Iowa. The college offered paid room, board, and tuition, plus \$50 a month. That was the best offer I had received, so I was off to Fairfield, Iowa. As I got off the plane in New York, there was an article in both *Time* magazine and *Life* magazine. The *Time* magazine headline was “Welcome to Flunk-Out U.” Parsons College was known as the worst college in the Midwest, but I had a really good time there.

Parsons College had almost gone broke a few years before I arrived. Then Millard G. Roberts became the new president. He had a novel concept. He said, “If you pay full tuition, I’ll admit anybody into the college.” Tuition was the same as at Stanford or Harvard. Also, he paid the faculty well. The highest salary levels in an American Association of University Professors survey listed Harvard, Yale, Chicago, Parsons College, Princeton, and so on. Shortly after I left Parsons, a few years later, it lost its accreditation. It’s now the International Maharishi University.

MS. FOX. Did you major in economics at Parsons?

MR. HELLER. No. Lewis F. Wheelock was my adviser. He recommended that I study American history, American government, American political parties since I was now in the

United States. I said, "What about economics?" He growled, but I managed to take a principles course in economics.

I got out of Parsons College within three semesters. It had a trimester system. I graduated from high school in 1960 and came to the United States in the fall of 1960. By August 1961, I had a B.A. because Parsons gave me credit for my one semester in Cologne, a summer semester there. German high school is a year longer than American high school, so I received credit for a year for that. Also, I took a couple of tests in physics and chemistry and received credit. So, after one year, I was out of Parsons with a degree in political science.

I wanted to get back to economics. I applied to several graduate schools for admission into an international relations program. I figured that was a way back where I could combine my studies in political science with economics. The University of Minnesota offered me a good deal as a residence hall counselor. I could earn my living while studying and even got a little pocket money. So I was admitted as an international relations major.

At Minnesota, Professor Werner Levi was my adviser. In later years, Werner and I became colleagues. He had emigrated from Germany in the 1930s. One year out of high school in Germany and there I was in graduate school at the University of Minnesota. Professor Levi sat me down. He looked at my transcript and said, "Who let you in here?" [Laughter] I said, "The chairman did. I have my letter." He dialed the chairman's office, but thank God he wasn't in. He said, "The chairman isn't in. I guess you are in here. Now, what courses do you want to take?" Trying to be the diplomat, I said that I wanted to take his course in international organizations and international law, and I wanted to take another course in international diplomacy, anything he taught. I also said that I wanted to take a course in international economics. I had only taken a principles course in undergraduate school. In order to take

international economics, I had to take intermediate micro, intermediate macro, money and banking. I think those were the prerequisites. Professor Levi said, "If you want to take all those economics courses, why didn't you study economics?" I said, "How can I get into economics graduate school when I've had only a principles course?" He looked at me and said, "You can try, can't you?"

I thought that Professor Levi didn't want me around, so I trotted over to the economics department. The typical attitude in the economics department was, "If you want to major in economics, that's fine with us. If you make it, you make it. If you don't make it, you flunk out. It's your problem." So, as a new graduate student, I was an economics major. I received my M.A. in economics in a year.

Having lived through a winter in Minnesota, in January or February I said, "I've got to get out of here. This is too cold for me." Going to California seemed great. I'd never been there. I applied to Berkeley, Stanford, UCLA, and USC in California. In the end, I went to Berkeley, where I got my Ph.D. degree in economics in 1965.

MR. SMALL. What types of macro theories or paradigms were you taught? Was it a strict Keynesian interpretation?

MR. HELLER. At Minnesota, the professor I remember the most was Martin Bronfenbrenner. He had received his Ph.D. at the University of Chicago, if I recall correctly. He was free-market oriented, but he was also a true Keynesian, so I had a good background there. I really liked the man and took any course that I could get from him. He was a very good teacher.

Berkeley in those days was straight Keynesian, left-wing Keynesian. That was the mid-1960s when Mario Savio, a political activist, was ruling the campus, and the famous free-speech movement was on. I served as a teaching assistant to Andreas Papandreou, who went on to be

the socialist prime minister of Greece. He certainly was a strong Keynesian. Peter Diamond, who recently received the Nobel Prize in economics, was a brand-new assistant professor at that time. He left Berkeley and had his whole career at MIT. Before he left Berkeley, he would come in every now and then and give lectures in an economic theory course that I was taking. I did my thesis on optimal international reserves with Tibor Scitovsky, a Hungarian émigré and a very good economist in international and welfare economics.

MR. SMALL. This was all in the context of the Bretton Woods agreement and fixed exchange rates.

MR. HELLER. Correct. The question was, how much international reserves should a country hold?

MR. HAMBLEY. It is still a relevant question.

MR. HELLER. It is. A couple of years later, Jacob Frenkel, a future governor of the Bank of Israel (1991–2000), wrote a thesis on the same topic. We've been friends ever since. It was an interesting topic, and at that time it was a novel field. Basically, it was a cash management problem: How much cash do you want to hold when you have other alternatives to adjust? Eventually, my thesis was published in the *Economic Journal*. It was a short article.

As I said, Tibor Scitovsky was my major adviser. I told him that I wanted to write about international reserves. He responded that there were already two guys at Berkeley writing on that topic. It was a real popular topic at that time. I remember telling him, "Yes, but I'm going to do it faster than the others." [Laughter] And we did.

Then I taught at UCLA. That's where I got inoculated with free-market economics. UCLA, Chicago, and Virginia formed the conservative, free-market triangle. James M. Buchanan and Milton Friedman were visiting professors. UCLA had some very good faculty.

Armen Alchian was one of the mainstays there. So I turned more and more “free market.” I taught money and banking and international economics and principles. The big lectures were usually fun. And I had good students.

I made a mistake in my career. I went to Hawaii because the chairman of the economics department at UCLA, Wytze Gorter, became first the graduate dean and then the president of the University of Hawaii. Professor Burnham Campbell and he pulled a lot of people from UCLA to Hawaii. Hawaii was the Promised Land in those days. Ronald Reagan, as governor of California (1967–75), was cutting the budgets at UCLA, so I went to Hawaii. Hawaii was not a bad place, but I still don’t know what happened in world history in the early 1970s. When the surf was up, classes were canceled. [Laughter] When President Nixon went off fixed exchange rates, we barely knew about it. The oil embargo was in the early 1970s. There was no oil embargo in Hawaii for a long time. The Arabs didn’t know Hawaii was part of the United States, so we kept getting oil.

I was still interested in international economics, so I called a friend, Rudy Rhomberg, who was at the IMF (International Monetary Fund) here in Washington. I asked him whether I could come to the IMF as a visiting professor or visit as a guest for about a year. He said that the IMF didn’t have visiting professorships or visiting appointments, but there was a vacancy as the chief of the financial studies division, and they wanted me to take that job. I said that I didn’t want to stay there forever. They said that I could quit at any time, but they also said, “We think you’ll like it.”

So I went to the IMF, and I loved it. We had two divisions parallel to each other. One was financial studies, which I was running. The parallel division was special studies, and Andrew Crockett was running that. We’re still good friends. We see each other once a month.

He now lives in San Francisco. He was the general manager of the BIS (Bank for International Settlements) (1994–2003) and executive director of the Bank of England (1989–93). Malcolm Knight also had a great career at the IMF. He was the senior deputy governor of the Bank of Canada (1999–2003), and then he was the successor to Andrew Crockett at the BIS, as the general manager of the BIS (2003–08). He's vice chairman of Deutsche Bank now. Anyhow, it was a great time with great people.

But I also liked California. I went to Berkeley as a student and taught at UCLA. So when the opportunity came to go to Bank of America (BofA), we moved out West again. I spent seven years at Bank of America, from 1978 to 1986. I ran its international economics group. At BofA, you had to be out speaking all the time. I probably did one to three speeches a week with clients and, to the extent possible, in public. That's what we were paid for.

MR. SMALL. Does that mean doing the analysis, or did it involve overseeing traders or feeding information to traders?

MR. HELLER. The international economics group was part of the economics department. John Wilson and Walter Hoadley were running it. John was the director of economics. Walter Hoadley was the chief economist. I was the director of international economics.

What I loved about the position was that you had a multifaceted role. First of all, you dealt with the bank's senior staff a lot. You made a lot of presentations to the managing committee of the bank. I spoke roughly on a monthly basis about what was happening in international markets, what was happening in the international economy. I had a staff of about 12 people, specialists for each region around the world. We produced the *World Economic Outlook*. In those days that was rare, and we had it all on computers. We had a databank that

would grind the numbers and aggregate them so we were able to talk about world economic growth rates, world inflation rates long before that was available in *Businessweek* or the popular press. Two or three times a year we would produce about 200 pages for the management and for the bank as a whole. That was the internal role. I also served on a lot of committees in the bank: the Country Exposure Committee, setting the country limits, how much a bank could lend in different countries; and the International Money Policy Committee. We did foreign exchange forecasts for maybe a dozen currencies on a regular basis.

In response to your question, let me explain how we related to the traders. The first time we came out with a forecast for all these currencies, I presented it in the managing committee. One gentleman asked, "Now that we have this forecast, what are we going to do with it?" There was silence. Suddenly, Paul Verburgt, who was in from London and who was running the international financial center, said, "I don't care what you do with it, as long as you don't give it to my traders." I said, "What do you mean, 'don't give it to my traders'?" The other bankers looked surprised, too. He said, "If you give it to my traders and they lose money on their deals, they will say that you gave us the forecast. I want to hold them responsible." So the forecast was never used for trading positions, although I worked a lot for the trading desks in their customer relations. The traders would say, "We'll have a meeting with some clients. Come along—talk about the deutsche mark, talk about the yen, or whatever." And that's what we did.

MR. SMALL. In 1978, inflation was high. Interest rates were high. There were oil problems. The dollar was falling. On August 6, 1979, Paul Volcker became Chairman of the Federal Reserve. Some of what Volcker did was precipitated by an exchange rate crisis in the United States. What was your view of the Fed and the turmoil?

MR. HELLER. Before Volcker, the Fed always had an interest rate target. Volcker switched it to money supply growth targets. Having rubbed shoulders long enough with Milton Friedman, money supply was one of the Holy Grails, so I thought Volcker was doing the right thing in trying to control the money supply. He stepped on the brakes once; he let loose. He stepped on the brakes again, and the country was for a long time in a very strong recession.

The feeling wasn't all that different from what we have now. It wasn't the crisis atmosphere that you had in the fall of 2008, but bank failures and S&L failures were rampant. In my view, one of the key reasons for those failures was that banks could only offer loans with fixed interest rates and pay fixed interest rates on the deposits. Then money market funds were invented, and the money was flowing out of the banks into these money market funds and out of the demand deposits. Financial institutions had to pay interest rates close to 20 percent while they were making 5 percent on mortgage loans. As a result, virtually every S&L in the country had a negative net worth and was belly-up, de facto. A lot of the small banks were in the same position.

Bank of America was hit by the LDC (less developed countries) debt crisis, because those countries weren't repaying their loans. It was hit by the big exposures it had in Texas in the oil area. It was hit by the inverted yield curve. Bank of America had one unique characteristic that made it even worse and distinguished it from Chase, Citi, and other banks: our large exposure in the agricultural area. BofA was the largest agriculture lender in the country at that time, and the central valley of California was just devastated. In a way, that was the deciding factor that almost made Bank of America run into the ground.

MS. FOX. Would you reflect on being involved in determining how much a financial institution ought to lend to a foreign country?

MR. HELLER. In the bank we were often the brakemen, because we had a strong role in setting country exposure limits. We almost exclusively determined the country risk ratings. We developed a country-risk rating model, a quantitative model we called the “debt service capacity index.” That service capacity index had a couple of simple ratios in it: debt to GDP (gross domestic product), how much the current account deficit was, and similar variables. We had an equation for 100 countries or so.

Years later, after the LDC debt crisis in Latin America and Africa hit, I looked at our old predictions. I think we were wrong in two countries—Egypt and Ghana. We said that these 2 countries out of 100 would go down the drain, but they made it. At that time, Egypt was getting a couple of billion dollars a year from the U.S. Treasury. Basically, the United States bailed them out, so that was not a predictive failure. A lot of foreign aid was flowing into Ghana, so it was making it when we said it would default. Those were pretty powerful tools that we had there.

There were big arguments at the bank. Some people wanted to get rid of us. People in Latin America fought us tooth and nail. Those were big profit divisions. We were just a little staff group. I’m eternally grateful to my boss, Walter Hoadley, for defending us. He was on the managing committee. Otherwise, we would have been history.

MR. HAMBLEY. Before you got there, did BofA have serious problems resulting from previous lending activity? Were you overridden in your judgments on new lending?

MR. HELLER. Oh, yes, we were overridden in many cases.

MR. HAMBLEY. Did you have some success in putting the brakes on, as you said?

MR. HELLER. Yes, but you don’t get them to stop. You slow things down. At the time, Bank of America was the biggest bank in the world, largely due to the international

exposures. It was an international bank, not like now. After the crisis hit the bank, it got rid of nearly all international operations. But I think we were usually on the right side.

MR. HAMBLEY. You saved the bank from a lot of future problems.

MR. HELLER. Well, I don't know. There were hard fights and strong arguments.

Arguments are fine, but sometimes it got a bit dirty and personal. For example, the banker in charge of Latin America thought that we were ruining his book of business. They are not shrinking lilies. [Laughter]

Nomination to the Board

MS. FOX. Were you at Bank of America when you were first considered for the Federal Reserve Board?

MR. HELLER. Yes. After Reagan became President in 1980, I had a couple of discussions with people who joined the Treasury. I talked with the deputy assistant secretary about becoming a World Bank executive director, but I wasn't interested in that position. I loved my job at BofA. During the second Reagan term, Beryl Sprinkel was chairman of the Council of Economic Advisers (CEA), and I knew him. That's when the question of whether I was interested in the Federal Reserve came up.

There were a few openings on the Board. The vice chairmanship was open because Preston Martin had resigned in April 1986. There was a fairly long list of candidates. A colleague of mine at UCLA, William E. "Bill" Gibson, was offered the job. At the time he was in Texas or Chicago. Basically, he said that he wanted to be Vice Chairman of the Federal Reserve or he wouldn't do it. The powers that be—I don't know who it would have been—said "no." I guess I was the number two guy on the list and was nominated to the Board. Later on, Gibson did a turn in the big house. He was convicted of defrauding American Airlines.

MR. HAMBLEY. That was a close call for the Fed. [Laughter] Who else in the Administration did you speak to besides Beryl Sprinkel?

MR. HELLER. There were three people on the interview team—James Baker, Don Regan, and Sprinkel. Those were the three people that basically made the call.

MR. SMALL. What type of questions were you asked?

MR. HELLER. I can't recall the specific questions. They were not confrontational. With Jim Baker and Don Regan, it was getting to know you. It was social. The interview lasted about half an hour to an hour. We talked about free-market principles and things like that, but there was no specific question, such as how would I vote for banks having greater powers. I don't think they were discussing monetary policy, in the sense of asking whether I would advocate tighter or looser conditions right now.

MS. FOX. What did they say about Paul Volcker, Preston Martin, and the Fed?

MR. HELLER. Not a word. I'd never met Volcker.

MS. FOX. After your interview at the White House, how long was it before they sent your name up?

MR. HELLER. For quite a while, nothing happened. Then, when I was in Japan, I received a phone call at an odd hour. It was extremely late at night or extremely early in the morning. There is a 14-hour time difference. A lady was on the line who said, "Don Regan is on the phone for you." Regan said, "The President would like to offer you the job." I said, "I'm delighted." And he said, "Thank you very much. Bye." It was a quick conversation.

MR. HAMBLEY. Did you ever meet with President Reagan?

MR. HELLER. Not up to that time.

MR. HAMBLEY. Did you know either Baker or Regan before this?

MR. HELLER. No.

MR. HAMBLEY. Why do you think that they were interested in your filling a seat on the Board?

MR. HELLER. There were probably a couple of people behind the scenes that pushed for me. I knew Beryl Sprinkel. He was a good, solid monetarist, and he was pushing that. He had been undersecretary of the Treasury before that. There was Jude Wanniski. I knew Jude from economic conferences and places like that. I had known Bob Mundell for a long time. There were a lot of people who knew me. I had gotten to know many of them at the IMF.

I'd like to go back for a moment to my time at the IMF. I was in charge of seminars, and one of the things I loved was my ability to invite anybody in the world to come to the IMF and give a seminar. People loved it. You'd ask somebody in Europe, "Do you want to come to Washington and give a seminar at the IMF?" They would happily accept the invitation to speak at the seminars. The same was true for all the U.S. economists. We'd have a nice luncheon beforehand, usually with the managing director, and then I'd run the seminar. It was wonderful getting to know the cream of the crop in the economic[s] profession. I think that's how I got to know Jude Wanniski and Robert Mundell. I knew Mundell before that; we were interested in the same research areas. He wrote a lot on optimal currency areas and exchange rates, fiscal and monetary policy assignment problems, and even got a Nobel Prize for that.

MR. SMALL. Your background, with an international emphasis, was certainly germane to the key problems facing the Board at the time. There were still some residual LDC problems.

MR. HELLER. Yes. Also, Henry Wallich was the Board's international Governor at that time, but it was clear that he wasn't going to be there forever, and he wasn't in the best of health. I think people were looking for somebody as a backup.

MS. FOX. Had you been politically involved?

MR. HELLER. No. I don't think I ever donated one single dollar to a political campaign.

MS. FOX. What do you recall about the public announcement of your nomination and your first interactions with Board members or staff?

MR. HELLER. A couple of newspapers were flying these trial balloons. At that time, Bill Gibson, a third person, and my name were floated. In those days, I guess that was a way the Administration saw whether there was any real dirt out there about a possible nominee. If so, somebody would start screaming. That was the first public relations wave.

After the official announcement was made, there came a whole set of requests for interviews. Everybody wanted to write a piece on the new Governor-to-be. There were some funny incidents. *Businessweek* wanted a picture of me with the Golden Gate Bridge in the background. When we drove to the Golden Gate Bridge, there were a couple of goons standing where we wanted to take the photo. They said, "You can't proceed beyond this point!" The *Businessweek* reporter said, "What do you mean? This is a free country." They said that Kim Novak, a famous movie star, was about to arrive in 10 minutes. She was working on a remake of *Vertigo*. So we were told that we couldn't proceed. Now I was interested! Now I wanted to stay! It was going to be fun. So they took a picture of me with the Golden Gate Bridge in the background—but without Kim Novak.

I did an interview with a local radio station on a show called *Whalan in the Morning*. It was the typical morning driving show. I liked to listen to Whalan frequently. He played country music and told jokes. Before the interview started, I said, "As to the last question, please ask me if I ever listen to the show." We did the interview, and the last question came: "Do you ever

listen to *Whalan in the Morning?*" I said, "It's the greatest show in the country." And he responded, "Oh my God, this guy actually listens to us. Head for the hills! Sell the dollar, buy pesos." [Laughter]

Phil Frank, a local cartoonist, drew a cartoon about my appointment in the *San Francisco Chronicle*. Every day he had a cartoon. When the local paper, the *Marin Independent Journal*, ran an article with the headline "Marin Man Gets Fed Post," he used that headline for his cartoon and added a drawing of a guy with a post rammed down his throat. So there was a bit of levity in the appointment.

All the interviews took place after the nomination hearings. Before the nomination hearings, it was "Mum's the word." People at the Fed also said, "Don't say anything." We stuck to that. All the stories I just told were after it was okay to speak.

MS. FOX. Tell us about your confirmation hearing.

MR. HELLER. Michael Mussa and I went through the hearing together. He was another good friend and a former UCLA student of mine. He was now teaching at the University of Chicago, and he was nominated to join the President's Council of Economic Advisers (1986–88). Later on, he was the chief economist for the IMF. I think he's still at the Peterson Institute for International Economics.

I was confirmed by the Senate, 92–0. My hearing was fairly easy. Senator Pete Wilson from California (1983–91) sponsored me and introduced me. I talked with many senators beforehand, but it was a brief tour.

MR. SMALL. Do you remember your first meetings with Chairman Volcker? He had just gone through a battle with Reagan appointees. You were another Reagan appointee. Did you detect any tension?

MR. HELLER. No. He was courteous and cordial. He wasn't a backslapper with anybody. He was sort of above it all. That's the way I think he has always been and stayed that way.

MR. HAMBLEY. Was your prior experience testifying on Capitol Hill helpful to you in getting ready for your Fed nomination hearing?

MR. HELLER. Yes, it was helpful. I had testified quite a bit. The first time I was up on the Hill, I testified before the House banking committee. The hearing had something to do with the Eurodollar market. I was representing Bank of America. Jim Leach from Iowa was the chairman of the House banking subcommittee. He seemed friendly, but suddenly he tore into me. I was representing the big bank, Bank of America, versus all the wonderful little banks in Iowa. I thought, "I didn't do anything to you. Why are you doing this to me?" Karen Shaw from Bank of America was with me, and there may have been another person or two. After the hearing, they said, "Don't worry about a thing. It's not you. He wanted to give a speech. He'll print excerpts from that for every little bank in Iowa, send them to the constituents, and say, "Please continue to support me. I'm fighting your good fight against the big banks."

After that, Jim Leach and I were fast friends for years to come. When I came to Washington, we saw each other every now and then. We became the best of friends, but I knew what could happen and the way the game was played.

MS. FOX. Did you get the sense that many in the Senate had a deep understanding or appreciation for international economic issues?

MR. HELLER. I would say "no," but that's a little presumptuous, because I never had big discussions with them. At that time, as a whole, the country was fairly oblivious to international issues. We were on flexible exchange rates by then, but it wasn't driving the

political process. The Latin American debt crisis was there, but it would not be a political issue here at home.

Composition of the Board

MR. SMALL. What do you think about the composition of the Board? What experience do you think the Chairman needs?

MR. HELLER. It is hard for a person who is purely a regulator and doesn't have any interest in economics to serve on the Board. On the other hand, it is also hard for a pure monetary economist who has never been in a bank. Ideally, you want to have both skill sets: economics and banking experience.

Banking Supervision—Mergers and Other Cases

MS. FOX. Were you prepared for the level of responsibility in the banking area, or did that take you by surprise?

MR. HELLER. I was surprised at how much of the work was directed towards the banking supervision and regulation side. I enjoyed that almost more than monetary policy. The monetary policymaking came every six to eight weeks, when there was an FOMC meeting. As a rule, there was a long time in between when nothing much was happening. Sometimes we changed discount rates in between meetings. But banking supervision and regulation was a constant stream. There were always new cases and other things of interest. When I came to the Board, I thought we would be spending 80 percent of our time on monetary policy and 20 percent on banking supervision. For me, the reality was the reverse.

MR. HAMBLEY. What kinds of banking cases were there?

MR. HELLER. There were a lot of mergers. Then there were enforcement actions. In a newspaper interview I said, "Sometimes I feel like Judge Wapner here." Those were the cases

where some little banker in Missouri, Iowa, or Kansas had done something wrong. He was going to be barred from the banking business because he had stolen from the bank or he had run the bank into the ground. Sometimes those enforcement actions were hilarious. That's when I said, "I feel like Judge Wapner." The banking crisis was happening at that time. A lot of small banks were caught in the same difficulties as the S&Ls with that yield curve problem that we talked about before, where they were paying 15 to 20 percent on their money market accounts and earning 5 percent on their long-term mortgage loans.

Some of the times, I was stunned by the mergers and acquisitions. ACORN, the community action group, was protesting almost every bank merger and acquisition.¹ Under the rules, if you had a protest, you had to have a public hearing.² So instead of having the merger and acquisition approved within four to six weeks, it would turn into a half-year process because there had to be special hearings.

I was chairman of the Board's Committee on Banking Supervision and Regulation, so I followed the cases carefully. There was a case where we said, "We'll decide that later." In May we told the bank that we would come back to them in October or something like that. Then, in July, the case came back before the Board, and I said, "Why is it back now instead of October?" It was because some group, usually ACORN, had withdrawn its objection. I asked, "Why was the objection withdrawn?" The response was, "Citibank made a \$200,000 donation to ACORN, and the organization withdrew its protest." I thought that was outrageous. I said to the staff, "Why do you let this happen?" The response was, "It's a free country. If the bank wants to

¹ ACORN, the Association of Community Organizations for Reform Now, was a collection of community-based organizations in the United States that advocated for low- and moderate-income families in several areas, including home mortgage lending.

² Editor's note: Whether a public hearing is required is determined by the Federal Reserve Board's Regulation Y and its Rules of Procedure.

make a donation and ACORN withdraws its objection, what can we do about it?" I thought that process was awful.³

MS. FOX. In many cases, the banks committed to certain kinds of lending. Those commitments resolved the problem for ACORN.

MR. HELLER. Right, but what's the difference between that and extortion? What's the difference between that and what's going on in some banana republic or some of the Arab countries where you have to pay a certain amount of money to get this or that done?

MR. HAMBLEY. The Board had a rule about how cases would be processed, and if somebody protested an application, then there was a delay. People learned about the process, and they used it.

MR. HELLER. Absolutely. If I were in ACORN's shoes, I may have done the same thing. I'd learn how to do it. But I still didn't like it from where I was sitting. After a while, it became routine. You would have a hearing, and then the decision was delayed. That resulted in enormous cost to the bank. Often there was a run-off in deposits, and the institution was being taken over. So I thought this was outrageous. My view was that we should just rule on the merits of the case.

Another thing about the process that irked me, in these fraud cases and other enforcement actions, was that the accused didn't have the right to appear in front of the Board. The Board basically sat there as the judge and jury. The case would be Federal Reserve Board against John Smith from Chillicothe, Iowa, and John Smith never showed up. The staff would talk with him

³ Editor's note: Regulation G of the Board of Governors of the Federal Reserve implements provisions of the Gramm-Leach-Bliley Act that require reporting and public disclosure of written agreements between (1) insured depository institutions or their affiliates and (2) nongovernmental entities or persons, made in connection with fulfillment of Community Reinvestment Act requirements. Also see U.S. Congress, House (2010), *Follow the Money: ACORN, SEIU and Their Political Allies*, staff report prepared for the House Committee on Oversight and Government Reform, 111 Cong. (February 18).

and then provide a summary and an objective judgment. We would say, "Fine, the guy is out of the banking business for life." I always felt that the person should be afforded an opportunity to be there. At that time, I was the young one on the totem pole. Nowadays, I think I would be more adamant about some of those issues.

MS. FOX. People go through an administrative process here, and then they can go to the courts.

MR. HELLER. Absolutely. You could go to an Administrative Court judge. Those guys probably often got away with a slap on the wrist, rather than serving time in the big house.

Initial Impressions upon Joining the Board

MS. FOX. What was it like to be brand new here? How did you become acclimated?

MR. HELLER. I inherited Preston Martin's secretary, Peggy O'Brien. Peggy was very helpful. She played mother hen: "Let me take care of you, young man." She was knowledgeable from her experience with Martin, and she knew how the Board worked. Overall, I felt welcomed by all. It was a cordial group. I don't think in my entire time here that I ever had an angry word with anybody.

MR. HAMBLEY. You overlapped with Henry Wallich for about four months. He left the Board in December 1986. Did you know him before you joined the Board?

MR. HELLER. Yes. I knew him from conferences. He was a professional acquaintance. He was not a close friend, but he was wonderful. Like I said, he wasn't well. One time he had us over for dinner at his house in McLean, Virginia. Shortly after that, he had surgery for a brain tumor (in 1985) and he deteriorated fairly rapidly. He had a hard time speaking at the Board most of the time. A lot of times he didn't come. It was unfortunate. He was a prominent man in

the profession. I was looking forward to working with him and being closer to him, but that never happened due to his illness. He passed away (in September 1988).

MS. FOX. Emmett Rice also left the Board in December 1986, about four months after your arrival. At that point, the Board was down to five members.

MR. HELLER. Right. My kids loved Emmett. They thought he was the nicest old man around.

He took me outside one day. I think we were talking about why he was leaving. He said, "I have a daughter at Stanford and a son at Yale. Their combined tuition is more than my take-home pay." That stuck in my head, because I had two children in middle school at the time.

The Appeal of Being a Board Governor

MR. HAMBLEY. You made a substantial financial sacrifice to work at the Board. What was it about the Fed that appealed to you enough to make that sacrifice?

MR. HELLER. When I talked about the move with Walter Hoadley, one of my bosses at BofA, he said, "The golden ring comes by only once in your life, and you better grab it." That's what it was. If you said that I could come back to the Board now and fill one of the three current vacancies, I'd be happy. It was probably more of a sacrifice for my family than for me, because my family wouldn't be going on the vacations that they wanted to go on and sacrifices like that. It would have been tough for them, because I didn't start out with a lot of money. But it was well worth it. If I had stayed at Bank of America, I would have been a happy camper there, too.

It wasn't that I had to get out of there. I loved the job. I'd say that about any of the jobs I've had. If I had to go back there today, I'd be happy. I even liked my job in Hawaii, although I wouldn't have wanted to be in Hawaii for my entire life. My jobs at the IMF, BofA, UCLA, and Visa were all good. I was lucky. And I really loved the Fed.

MR. HAMBLEY. What drew you to Washington and kept you here for a while?

MR. HELLER. We knew what Washington was all about—the real estate prices and so on. We liked Washington and we still had friends from the IMF days, so moving here wasn't jumping off a 10-foot tower into a totally unknown pool, a totally unknown environment. Remember, I said earlier that we wanted to go back to California because I really like California. That was a part of the decision to go to BofA after working at the IMF. When the Board nomination came along, the family said, "We don't want to go back to Washington. We like California. We have our friends here." Kids of a certain age don't want to move away from their friends. I said, "We've got to do this, but eventually we will come back to California." The Fed appointment is not forever, but mine potentially was a fairly long one. I was nominated to complete the 10 years remaining on Preston Martin's term, so there was an endpoint far in the future.

For an economist, I don't think there is a better job in the country than being on the Federal Reserve Board, because it combines interesting economic work with policy and policymaking decisions. In most others jobs, these two functions are separated. If you're the chairman of the Council of Economic Advisers, you're not a decisionmaker; you give advice. At the Board, you have a more concentrated decisionmaking responsibility than in almost any other place. In that sense, it's like the Congress. At the end of the day, you vote "yes" or you vote "no." If you were, let's say, the Secretary of the Treasury, you don't get to vote on anything. You get to say, "I want to do this. I'd like to do that." Then you get to fight with the Congress, the President, the Secretary of State, or whoever else is involved. Here at the Board you get to vote, and that is an enormous responsibility.

The same thing pertains to the banking supervision arena; either you change the rule or you don't change the rule. Either you let the bank do that or you don't let the bank do that. So you are also part of a judicial system. Where else do you have that? You have legislative-, judicial-, and executive-like powers combined in one agency.

There are only seven of those jobs around. That's why I absolutely loved it. But sometimes you would sit and wonder. After an FOMC decision to raise rates I was on a plane flying somewhere, looking out of the window down on the landscape and saying, "Oh my God, what in the world did I do? Every single one of those people down there now has to pay another \$200 a month for their mortgages." If the Congress had passed a law on that day and taxes had gone up by \$200 for every homeowner, members of the Congress would have been thrown out of office in the next election. But the FOMC did it. You say, "What did you do?" [Laughter] Then you say, "Well, it was the right thing to do."

FOMC Meetings

MS. FOX. When you came [to the Fed], the country was tired of high interest rates. It had been a tough number of years. Some of that frustration was expressed through the political process, with Reagan's election and the appointment of the people that he appointed to the Board. They were for an easier, softer approach to monetary policy. That created an internal discussion here. The February 1986 vote of Governors Johnson, Seger, Angell, and Vice Chairman Preston Martin against Paul Volcker in a discount rate discussion was an unusual event in the history of the Federal Reserve, and it was reported in the newspapers. Did you feel that internal dislocation?

MR. HELLER. I knew about it.

Let me say that every single decision made, with the exception of the first FOMC meeting that I attended [and in the immediate aftermath of the 1987 market crash], was to raise interest rates. They never went down. The perception was, "These guys (the Reagan appointees) are coming in to maybe be a little bit easier." But that never happened. It was a consensus-driven process.

I was sworn in on August 19, 1986, in the Chairman's office. Then Volcker and I walked into the Board Room for the FOMC meeting through the doors that adjoined his office to the Board Room. The whole FOMC stood up for some reason. I never saw them do that again. I sat down in my chair, and they started going around the table discussing the economic scene. I remember the feeling, but I no longer remember the substance of the discussion. The first round was on economic conditions. As they went around the table, everybody talked, and the thoughts and various positions of the Board members became clear to me.

The second round came, and I started quietly counting noses, but it was not easy to do. Half the people were for raising rates and half were for doing nothing. All the Bank presidents spoke out, and I didn't know in my head who was voting and who wasn't voting. In my mind, I kept track of what was being said, and suddenly it occurred to me, "Oh my God, you could be the deciding vote." I got scared. I thought, "What will we do?" In the end, the vote was 10–2.⁴

But there was a consensus-driven process at work. Over the years, I really was impressed by that. Committee members walked into the FOMC meeting with very different views. During the first round, you heard where everybody is coming from. During the second round, which was on financial conditions, people's thoughts started to converge. Then the third round on the

⁴ Governor Henry Wallich and Thomas C. Melzer, president of the Federal Reserve Bank of St. Louis, dissented.

monetary policy directive happened, and it was unanimous. There were dissents sometimes, but not often—one or two people might dissent, just like it is right now.

Let me tell you a funny story: In my day, the issue was always either having a tighter policy or staying pat. In the briefing book, you always had the three alternatives: A, B, C. A was usually the easier one, B was the middle, and C was tighter. But instead of three options, on one occasion there were only two options, and they were called B and C. [Laughter] It didn't make sense. Why didn't you call them A and B? Some of us were laughing about it when somebody said, "That's from the Henry Kissinger days." I said, "What do you mean, 'from the Henry Kissinger days'?" He said, "Henry Kissinger used to go to Nixon with his long decision memos: A, B, C, D, E, F. B was always the right alternative. Kissinger figured that Nixon was not smart enough to pick the right alternative, so B was always the right answer." That same thought applied here. The Governors aren't smart enough to know what the right answer is. [Laughter] B is the always the right answer.

In the FOMC meetings, the directive was issued a little differently from the way it is now. The words "shall," "should," "will," and "would" were very important. That's where the Chairman would do his best to form a consensus on which everyone could agree. For example, if some wanted to raise rates right away while others wanted to wait until the next meeting, the Chairman would say, "Let's keep rates constant but raise them as soon as something happens in the intervening period." We could adjust in the intermeeting period. Everybody was happy with that accommodation, because their views were taken into account. The ability to build a consensus was the genius of both Volcker and Greenspan.

Sometimes I would argue more strongly than I would really feel on a policy issue. I called it "putting out the anchor to windward." For instance, I might argue for the funds rate to

go up 50 basis points when 25 was really where I wanted to be. So the strategy was to overstate your case a bit by saying, "Let's go for 50." Then you compromise down to 25.

MS. FOX. That was your strategy?

MR. HELLER. Not every time, but sometimes you would do that.

MR. HAMBLEY. Both Volcker and Greenspan would use the wording of the directive—the "shalls" and the "wills—to help get everybody on board with the decision.

MR. HELLER. Absolutely. Both of them were masterful in doing that. Both of them were extremely good at building consensus. In that first FOMC meeting, I sat there and thought, "Oh my God, how will he ever get these positions together?"

MS. FOX. I think the point of that discussion is for everyone to make their best argument, and if everyone "puts out the anchor to windward," as you said, it presumably creates a robust conversation. It clearly delineates the places where there are differences.

MR. SMALL. Some Board members have expressed frustration in what they felt was their inability to influence the thinking of the Chairman, whoever that may be. Did you feel you had an impact?

MR. HELLER. I didn't have an impact on Volcker. Volcker knew what he wanted. He tried to get what he wanted and usually got what he wanted. Once, between FOMC meetings, holy hell was breaking loose in the financial markets. The rates were going up, and somebody called me and said, "What's happening? Aren't you sticking to your target rates?" Monetary policy was expressed in terms of reserves, but we had a target interest rate in mind. At the next FOMC meeting, Volcker walked in, sat down, and said, "While there was no overt change in policy, we have been erring on the side of restraint." That became later known as the "snugging up" episode. Somewhere along the line, Volcker had said, "We've been snugging up a little bit."

I had never heard of “snuggling up” in my life. I went home and looked it up in *Webster’s Dictionary*. It is a nautical term. It means tightening the ropes a little bit in the boat. You moor a boat and then you snug it up.

MS. FOX. You do it with horses, too. When you’re riding horses, you snug up to bring them more under control. So it must be a sports term as well.

MR. HELLER. Maybe that’s what he was thinking about rather than the sailing term. “Snug harbor” is another term for “tighten it up.” So he did it without anybody supporting it.

MS. FOX. The Chairman did have authority to act between the meetings.

MR. HELLER. That’s right, because it was all about the “should” and “shall” and fairly permissive language. The directive was always two sentences: “Monetary conditions, reserve conditions shall remain as they are at present. But, on the basis of incoming data, tighter conditions may be appropriate, and looser conditions might be appropriate.” I don’t know exactly all the words we used at the time, but the real signal words were in that second sentence. That told the trading desk at the New York Fed, basically, you could tighten up or you could ease policy. If you take the directive literally, you could go up and you could go down, but because of the asymmetric language, there was a presumption you could tighten. It was within the Chairman’s right. But I don’t know why he didn’t walk in and say, “I’m doing it.” Instead, he was a little opaque about it.

MR. HAMBLEY. I thought that the directive essentially gave discretion to the people at the New York Fed’s trading desk to react to incoming data, with some indication of the preference that the FOMC would have. Are you saying that sometimes a Chairman would simply say, “I know what the words are, and I’m telling the people of New York to do this or that”?

MR. HELLER. It was my understanding, rightly or wrongly, that there was an early morning phone call between the Federal Reserve Bank of New York and the Chairman.

MR. SMALL. I think the morning call usually was more staff-on-staff here and at the Reserve Bank to check numbers.

Was there a lot of overnight flow? Was there a foreign official request for reserves or whatever? But I don't think the Chairman was typically involved. Volcker has indicated that he was not involved, unless there was something they'll be pushing interest rates on. Usually he was just trying to match up what quantities were needed to get to what interest rates and to give him the most available data from the central banks on the reserves front.

Reagan Appointees

MS. FOX. Let's go back to the increase in Reagan appointees on the Board and the February 1986 vote. Did you see fallout from that event?

MR. HELLER. Preston Martin left the Board in April 1986 before I arrived. Pres was not too happy after the February 1986 episode. Manuel Johnson became Vice Chairman of the Board at the time that I joined the Board.

And, in June 1985, after Preston Martin gave a speech in Asia, Volcker said that his comments were incomprehensible. There was some disharmony.

Council of Economic Advisers Lunches with Chairman Volcker

MS. FOX. How were you acculturated at the Board? Who took you to lunch?

MR. HELLER. I always found the food through somehow or other. At the Board, I always found somebody to go to lunch with.

It was rare that anybody went to lunch just with Volcker. There were, however, regular lunches between the undersecretary of the Treasury and the chairman of the Council of

Economic Advisers. The Chairman basically controlled those, and he invited one or two of us. Usually there were more than four people around the table, and nothing happened at those lunches. Beryl Sprinkel would come in for lunch, because he was the chairman of the CEA. He desperately wanted to talk about policy, but Volcker would always say, "The fishing has been pretty good in Idaho." I think Beryl was going nuts. Volcker wouldn't say a word, and we'd sit there. [Laughter] That's the way those lunches went. Sometimes there were staff people, usually, like I said, one or two Governors, maybe Mike Prell.

MS. FOX. It was Don Kohn then.

Splitting the Leadership of Research and Monetary Policy

MR. HELLER. I think Volcker wanted Mike Prell to be the director of both research and monetary policy. Other Governors discussed it, and we said that we liked Don Kohn and that the job should be split, so that's what happened. At one time, did Steve Axilrod have both positions?

MR. SMALL. Axilrod never had both positions. He had his own shop with a small staff group. Jim Kichline was the director of the larger Research and Statistics Division. After Axilrod left, they were combined for a brief period of about a year—there was an office and a division. Then after Kichline left, the Board created two formal divisions. That gave birth to the Division of Monetary Affairs that Kohn headed.

MR. HELLER. Right. That was something that Johnson, Angell, Seger, and I were instrumental in bringing about. We made it clear that we wanted to have Kohn up there and not have just one "prince."

MR. SMALL. "Barons," as they were later called. [Laughter]

MR. HELLER. That was an interesting episode, and that's the way it happened. So a consensus was formed, but I think Volcker disagreed with the rest of us at that time.

Transition from Volcker to Greenspan

MS. FOX. What was it like at the Board upon learning about Paul Volcker's resignation and Alan Greenspan's appointment?

MR. HELLER. There was a lot of speculation in the press: Will Volcker be reappointed or not? People started to talk about it, but, to a great extent, the process was driven by the outside. We were reading the newspaper and listening to the news, just like everybody else. That's how we got our information. The White House didn't call us and ask, "What do you think about Volcker?" There was zero input into that process from our side.

I think Volcker had said that he didn't want to be reappointed. Anyhow, the word was out that it wasn't Volcker; it was going to be Greenspan. At that time I was the Administrative Governor, so I got to go to New York to visit Greenspan and tell him what it was going to be like at the Board. I said, "You will have a security detail with you at all times." He said, "No, I will not have that. Forget that." I said, "I'm sorry, that's not an option. You will have a security detail." "No, I don't want that!" I think he thought it would crimp his lifestyle severely or whatever. When he became Chairman, he did indeed have a security detail, and everything went well.

MR. HAMBLEY. Was security necessary because there had been some credible threats to Fed Chairmen? I know that Chairman Volcker was unpopular at times, especially when he was doing what he needed to do to fight inflation.

MR. HELLER. Yes. Volcker was 6'5" or taller. Once, before security was assigned to the Chairman, we went out for lunch together. We were meeting somebody else—I forgot who it

was. Lunch was at a little restaurant on Connecticut Avenue. We took a staff car to DuPont Circle and then walked the last block or two. A man walked up to Volcker, looked at him, and started ranting and raving. He said something like, "The blood of the world is on your hands!" It was a chance encounter. Nothing happened, but it was not comfortable. In the Volcker days, people also mailed these 2x4s to the Board in protest over what the high interest rates had done to the construction industry. Some of them are trophies now, but not then. There was a lot of tension. So I think the Chairman should have a security detail.

MS. FOX. Chairman Greenspan went through his nomination process much as you did, but the vote wasn't quite as good.

MR. HELLER. Well, he was a known quantity. He had been chairman of the Council of Economic Advisers, and, when you're in public life, you accumulate some enemies. One reason why I got that good vote was that I hadn't been that public. Over time, in Washington, you will accumulate enemies. With all the decisions you make, somebody will be unhappy.

MS. FOX. When Alan Greenspan arrived at the Board, what did he tell his other colleagues or you about how he was going to run the place?

MR. HELLER. He didn't tell us much. But we all thought that it was a much more collegial place. We were talking with him. You could go to his office and chat about things. With Volcker, basically, the phone would ring. Catherine Mallardi, Volcker's secretary, would say, "The Chairman wants to see you." You'd trot down to his office thinking, "What did I do wrong now?"

For instance, when I was still at Bank of America, I committed to give a speech in Frankfurt to the Foreign Exchange Traders Association of Germany. I did foreign exchange forecasting then, and they asked me to come and speak about the outlook for foreign exchange

rates. Then I was appointed to the Board, and they thought, "We really got lucky!" By the time that the speech was to be given, I had become a Board member. Board members kept a list of all the speeches to be given, including the venues, and the list was sent around to everybody.

Like I said, the phone rang, and Catherine Mallardi said that the Chairman wanted to see me. Volcker was sitting behind his desk in a big cloud of smoke. Every chair had a pile of books on it, so you had to stand. He said, "I've been hearing that you're giving a speech in Germany. Cancel it." I said, "That's not possible. It's next week, and something like four or five hundred people will be there." He looked at me and said, "Don't say anything." [Laughter] I said, "I don't think that's an option, either." Because of the way he said "Don't say anything," I think I was laughing. Then he looked at me and said, "Obfuscate! It's a minefield out there." At the time, there was considerable tension in the foreign exchange market. He said, "Why didn't I know about this speech?" I said, "What do you mean, you didn't know about this speech? For the last month or so, it's been on the schedule of speeches that we are planning to give." "Rrrr" was his answer. [Laughter] I gave the Frankfurt speech, and all went well. In any case, we used to call it "going to the woodshed."

MR. HAMBLEY. You gave many speeches and interviews. You were often quoted in the newspapers, and you traveled a lot. Was there some conscious effort to communicate a unified message from the Board while you were here, or were you free, most of the time, to say what you felt?

MR. HELLER. On monetary policy, there was a general understanding that you would speak in support of the current policy directive. I don't think anybody, myself included, ever said in public, "We are not doing the right thing." There was also an understanding that we wouldn't talk about policy for a week or 10 days after a meeting, because we didn't publish

minutes in those days. So, for a week before and after an FOMC meeting, it was quiet. In all monetary policy speeches, we defended the current policy the way it was. I cannot recall anybody speaking against the policy or saying "We should have been tighter" or something like that.

MS. FOX. Maybe I can characterize it this way: If one dissents, it is with modesty. It would be rare to dissent and go out and make a public pronouncement about it. That was the culture.

MR. HELLER. It was a norm of behavior of the Federal Reserve about monetary policy. When Board members spoke on matters like deregulation and mergers and acquisitions, it was different. It was made clear that you could say whatever you wanted to say. Also, there was no effort to get the vote on regulatory matters to be unanimous.

Domestic Monetary Policy

MR. SMALL. Let's switch the focus to domestic monetary policy. When you came to the Board, what did you think were the challenges for the macroeconomy?

MR. HELLER. The 1970s was a period of largely increasing inflation. Arthur Burns was the Fed Chairman from 1970 to 1978. His son, Joe Burns, and I were good friends; we had taught together at UCLA. G. William Miller was Chairman for a short time after Burns, and then Volcker became Chairman. Volcker was nominated by President Carter in 1979, and then Reagan became President soon thereafter, in 1980. Anyhow, Volcker's main job was to bring inflation under control. It was a period of extremely high interest rates. The fed funds rate was 20 percent or thereabouts, and short-term rates were touching 20 just barely. The subsequent recession was over by the time I got to the Board. Then it was a matter of saying, "We don't

want to have this happen again. We want to keep inflation under control." That was the overall policy set. The question was, how fast and how quickly would you tighten again in that process?

MR. SMALL. Unemployment was still on the high side. It was 6 or 7 percent. Trying to keep the unemployment rate low and control inflation must have been a balancing act. You didn't want to squander this legacy of bringing inflation down.

MR. HELLER. I think we absolutely saw it that way. We wanted to continue to consolidate the gains against inflation. That was the one goal that we wanted to achieve for the whole period that I was here. We did a good job, because inflation didn't pick up in that period. In the 1980s, during the Volcker chairmanship, we brought inflation down from the double-digit range to the 5 percent range or so. Then we continued to make progress over the years against inflation.

MR. HAMBLEY. It also ended up being a long period of expansion.

MR. HELLER. Exactly. It became known as the Reagan expansion. I forgot how many years it was, in the end. It may have been the longest peacetime expansion up to that time. Then, during the Clinton years, there was a long expansion again. I see the control of inflation as a precondition for achieving high economic growth and a satisfactory level of employment. If inflation is out of control, economic growth will inevitably suffer.

MR. SMALL. Bob Woodward, in his book *The Maestro*, talks about how Greenspan was attuned to the stock market and quickly raised interest rates when he became the Fed Chairman. Did you notice a change from Volcker to Greenspan in how they looked at the economy, how detail oriented they were, or how they approached the macro forecast?

MR. HELLER. Alan Greenspan was a total aficionado of every little nitty-gritty detail of information that he could get hold of. For instance, he was watching freight car loadings and

paperboard production. I thought, "What the hell? Why is he talking about freight car loadings and paperboard?" Then Greenspan explained, "Everything that goes to market has to be put in a box first and shipped." Freight car loadings and paperboard production were two indicators that he watched, because most products are shipped in a box. Then they are shipped on rails, for the most part, so freight car loadings are another good leading indicator. At a Board meeting, I think Greenspan asked, "What are freight car loadings doing?" The rest of us were sitting there saying, "Who knows?" I think a Board staff member in the third row stood up and said, "Mr. Chairman, last week freight car loadings in the upper Midwest were up so many percent." The staff had an answer for everything.

So, Greenspan loved the little nitty-gritty detail, the minutiae. That's the way he had built a great part of his forecasting career, by watching these weather vanes in the wind.

MR. SMALL. And this contrasted with Volcker?

MR. HELLER. Volcker was a big-picture man. I still have no idea how he thinks about the economy or what he's watching, but I had the impression that it was the bigger picture. Greenspan was an absolute detail-oriented guy.

Policy before the 1987 Stock Market Crash

MR. SMALL. Do you recall watching the market and the policy moves made leading up to the 1987 market crash?

MR. HELLER. Every policy move that we made was on the upside to increase the federal funds rate. As I said to you earlier, sometimes after we had made an interest rate move, you'd wonder what you had done to people. Have we made them a lot poorer? You never feel comfortable about tightening, but we wanted to keep inflation under control. To me, the inflation control, providing a stable environment for the economy, is the main role of the Fed.

The lower unemployment, or the high utilization of resources—whichever way you want to put it—is a result of having that stable monetary environment. In the short run, you may think that you can fool people. You can “goose” the monetary engine, and suddenly people will say, “I’ve got more money in my pocket. Let’s spend it.” But that’s an illusion. As soon as the realization sets in that this was just an illusion, that doesn’t help the country. If you want to get the long-term unemployment rate down or capacity utilization rate up, the best thing you can do as a central bank is to provide a stable monetary environment. That was always my goal. Indirectly, you provide for a high growth rate through a stable monetary environment. If you don’t do that, if your inflation gets out of control, all bets are off. If inflation gets out of control, the real economy will suffer.

MR. HAMBLEY. Is it fair to say that you were striving for a preemptive policy, in that if you thought inflation was about to take off and in view of the fact that policy didn’t work immediately, you would try to head off inflation, because the costs of dealing with it later would be great if it became entrenched?

MR. HELLER. That is a fair statement. But we had early warning indicators before the inflation would really catapult. There’s a whole pipeline to inflation. You have financial market indicators, futures markets, and so on that will give you indicators of what is happening in the financial sector as far as expectations are concerned. You have commodity prices as an early indicator. Having been a farmer in Kansas, Governor Wayne Angell was big on commodity prices as an indicator. Commodity prices feed into producer material prices and then producer prices, wholesale prices, products included in the PPI (producer price index), and that then feeds into the consumer prices. Sometimes I likened it to a snake swallowing a rabbit: Slowly you see the rabbit moving through the snake, so you have fair warning. You’re right that monetary

policy works with a long and variable lag, but you see the indicators before consumer price inflation is finally happening. And when your producer prices are starting to go up, that's when you have no more excuses not to tighten.

MR. SMALL. You have indicated that you were looking at some commodity prices and financial prices. Did you find much value in looking at the real side of commerce, like the unemployment rate, or did that seem unreliable to you?

MR. HELLER. To me, unemployment was always a lagging indicator. It's not a good indicator for the current stance of policy. It's a good indicator of the current phase of the business cycle, and that's what you see right now again. You have a medium-strong recovery in the economy, but unemployment is lagging behind the growth numbers that you see in the real economy. So it's a lagging indicator, and I don't think you can use it as a guide to policy. You may want to get that number to move, but, when it starts to move, it's too late to fight inflation. If you let inflation rise—once you let the cat out of the bag—it's tough to control it, and the price of unemployment will be high. A low unemployment rate is the vindication, the ultimate good result, of past good policy, but it's not something that you can take as a policy guide.

MR. SMALL. What was your experience with the monetary aggregates in practice?

MR. HELLER. My experience was good. Tomorrow I am going to ask Chairman Bernanke whether or not he still looks at the M's (the monetary aggregates). I looked at the M's like a hawk, and, when I got here, the M's were extremely popular. In Chairman Burns's day, we had M's up to M16, if I recall correctly. Everyone was watching all these M's. In monetary policy, you ignore the M's at your own peril. I think it's an important indicator. In those days, people always tried to push us. They would say, "Is it your target?" I've always stayed away

from that formulation. It's an important indicator, just like gold prices, commodity prices, and so on. I would take those as indicators that you want to use to implement your policy.

MR. SMALL. Monetary aggregates were followed closely here at the Board, and they behaved well through your tenure. They were strong [reliable] from 1983 to 1989. But in the early 1990s, when the savings and loans collapsed, the monetary aggregates started to behave unreliably. The velocity started shifting persistently. There was less output, less emphasis—

MR. HELLER. There were always arguments over the aggregates—velocity is changing, this and that. But, in the long term, I think you ignore them at your peril. There was also deregulation then, in a big way. That introduced an instability into the relationship between the monetary aggregates and inflation as well as growth.

1987 Stock Market Crash

MR. SMALL. Where were you during the stock market crash? How concerned were you?

MR. HELLER. I was at the Board, but Greenspan wasn't here. He had flown to Dallas for an ABA (American Bankers Association) convention. When he got on the plane, the market was down 50 to 60 points. When he got off the plane in Dallas, he was met by a staffer from the Dallas Fed. Greenspan asked, "What happened in the market?" The staffer said, "It's down 5-0-9." Greenspan said, "That wasn't bad," thinking it was 5.09. The guy said, "No, no, no." It was down 509 points. Greenspan got on the next plane back to Washington. I was at the Board, and so was Manley Johnson. I think they were all here. It was a Monday. It was upsetting and disconcerting. But then the market caught itself. The downturn didn't last as long as the recent downdrift.

I don't get upset easily, so I can't say that I was pulling my hair out on the day of the crash. On the other hand, I said, "Wow, that's a real movement. What are we going to do about it?" That led me, a lot later, to write an article that the Fed should intervene in the stock market to restore orderly market conditions.

At that October 1987 event, the bid-ask spreads were huge, like 2 percent, so there was no market anymore, just like there wasn't any market anymore for mortgage-backed securities, derivatives, and so on in the recent episode in 2008. In 1987, the Fed basically reacted by telling the banks, "Be sure to lend freely to the investment banks and the brokerage houses. And make sure that Salomon Brothers, Goldman Sachs, and Lehman Brothers will have enough liquidity." I was uncomfortable about that, because here we had a possible conflict between our monetary policy role and our regulatory role. As regulators, our objective is to have the banks safe and sound. In our monetary policy role, we were trying to tell the banks, "Keep lending freely to the brokerage houses to provide liquidity for them. Otherwise, they're going to go down." I thought that was an unfair message, because it was not a public message that was conveyed, it was a private message. If the brokerage houses had gone down, then the banks would have been on the hook for their loans. What would they have done then? "The Fed told us to do this." That was incongruous, as far as I was concerned.

Two years later, after I left the Board, I still didn't like that. So I made some speeches. Then I wrote an article in the *Wall Street Journal*. In the article I suggested that the solution for an event like the 1987 crash, where the bid-ask spreads were so big that the market essentially ceased to exist, is for the Fed to intervene directly in the stock market by making a market by buying the averages, not individual stocks. I didn't want the Fed to be owner of IBM, GM, and what have you. But if you buy the composites, you would be entering the market in a neutral

fashion, more or less. You can argue about what to buy. If the Dow Jones wouldn't be the right index to buy, then maybe the Fed could buy the New York Stock Exchange average. The devil is always in the details. Then somebody will say, "What are you doing with the Nasdaq?" Anyhow, the Fed could buy the whole market average to support the market, to make a market again.

MR. SMALL. You came to the Board with a strong and detailed understanding of the financial system and the markets. A pure monetary theorist, going through the stock market crash, might find out that the problems it generates are much more multidimensional than he would have thought. There are plumbing issues. There's freezing up of markets. There are collateral issues. Did you come across surprises about how complicated this system was? What are some of the concerns that came up during the stock market crash, other than a loss of wealth and people are poor[er], that the educated layman might not know about? Does a policymaker have to know a lot more detail about the system and clearing?

MR. HELLER. The financial markets constitute a complex system with a lot of interactions by a lot of players. And unless the plumbing works, the real economy will be injured; the economy will not be able to operate properly. Like I said, if you tell the banks to lend to the brokers and the brokers get in trouble, then you have potentially created some new time bombs that can blow up in the future. In the case of Black Monday, in October 1987, the institutions did not fail. But I think it is fairer for the Fed to take the loans onto its own books and help the brokers directly. Nowadays, the Fed can do it. I guess we had the power in those days to do it, too. We could have lent to Solomon, Lehman Brothers, and so on under section 13(3) of the Federal Reserve Act. It was a tool that we didn't use at that time. My solution, in a

way, was something along those lines. It would have been a more direct rather than an indirect route.

MR. HAMBLEY. How did the Fed communicate to the banks to lend to the investment banks? Were you among those that communicated the message?

MR. HELLER. No, no, I never did. I think I would have been uncomfortable doing it, too. I think the Chairman talked to the president of the New York Fed, and from there it went either directly or through a senior person.

MR. HAMBLEY. When the stock market crash occurred, did you think that it might have profound macroeconomic implications?

MR. HELLER. Well, in a way, it was a profound implication, because it signaled that market prices and reality were out of line. The market doesn't do that in a vacuum. You can argue that the flash crash in May 2010 happened in a vacuum, and I think it showed the unease of the market to quite an extent. In 1987, people were also talking about program trading causing the crash. That may have been part of what triggered it. The market went down 50 points, and then some computer model says, "If it goes down 50, sell." Trigger prices for sell orders or limit orders are triggered, and then the entire market cascades down. There was a big amount of that happening then as well. We were worried. However, the turmoil didn't last all that long. The clouds passed.

MR. SMALL. The more fully developed financial markets were very robust to shocks, and they were a great source of flexibility in the economy. That gave policymakers confidence—some might argue a little too much confidence—when the subprime market problems came around. It was easy to look at that and say, "These flexible markets, with all

these new instruments that allow for completion of markets, are enhancing the robustness and flexibility of the system."

MR. HELLER. It was probably some of that. Once the episode in 1987 passed, there wasn't any change in policy. As I said, the downturn in the market didn't last long. The markets caught themselves, so the storm clouds passed and drifted away.

MR. SMALL. It wasn't long before you started tightening again, because inflation was a worry.

MR. HAMBLEY. Do you think the Fed contributed to the 1987 stock market crash? I believe that the tightening had begun before then.

MR. HELLER. Maybe, to some extent. It's difficult to say "yes" or "no." Some people would say, "The Fed is tightening, so I want to sell." But was it worth a 500-point drop in the Dow? The answer is clearly "no." There were other forces that were exacerbating the market. A lot of those trading programs and the computer programs probably were responsible. I think for the first time in existence, on a widespread basis, program trading helped to trigger the crash and exacerbate it. Maybe Fed policy contributed to a decline of 50 points. I can understand people who say, "Let's do a little correction," but 500 points? No. There wasn't any abrupt change in Fed policy. It was not like in the Volcker days, in the early 1980s: Let's have short-term rates go up 200 basis points. I think all the movements were 25 to 50 basis points, in that ballpark.

MR. SMALL. They were all pretty small. For example, in 1987, the federal funds rate was 6 percent, then 6.75, then 7 and 7.25.

Challenges for the Banking Industry during Board Tenure

MR. HAMBLEY. When you came to the Board, what did you see as the major challenges facing the banking industry, including your own bank, Bank of America?

MR. HELLER. The banking industry was clearly undergoing a crisis. A lot of banks were going out of business. In 1989, we had about 500 bank failures, so being involved with banking supervision and regulation during that time period was not comfortable. The incoming flack was heavy.

I attributed a lot of the problem to the regulatory environment, especially for banks and savings institutions not being able to pay market-based interest rates for bank deposits. Deregulation was an important issue for me. The banks had a hard time. I put a lot of time into worrying about excessive regulation of the banking system, especially with the restrictive interest rates rules and so on. Then the big debate started on banking deregulation and what should happen.

President Reagan favored deregulation. There was a Board meeting on a rulemaking. It had to do with permissible activities for banks at that time and whether they could underwrite securities. The banks had the power to underwrite municipal securities and things like that. Within that framework there was a certain allowance made for underwriting private-sector securities, to a limited extent. The question before the Board was whether the permissible activities should be broadened to—I forget exactly what it was—10 percent, going up to 25 percent of the overall revenue.

MR. HAMBLEY. Was the issue what does it mean for a bank to be principally engaged in underwriting securities, which was forbidden by the Glass-Steagall Act?

MR. HELLER. Yes, that was it—principally engaged. Then there were these other permissible activities that were the exception to the “principally engaged” rule. That was a big issue for the Board. It was one of the few occasions where the entire Board heard testimony. I think that we heard separately from the CEOs of J.P. Morgan, Chase, and Citibank. I’m not 100 percent sure that those were the first three that had applied. Rodgin Cohen, who was a bank lawyer, testified. It was an exciting event.

In the end, the Board voted 4–2 in favor of allowing these activities. Volcker voted against it, because he was always for the maintenance of Glass-Steagall. And, to my great surprise, Wayne Angell voted against it. He was always talking about free markets, but he was opposed to that. I don’t know why. I think that part of his motivation was that he had been a small banker and didn’t favor big banks getting even bigger. The remaining four Governors voted in favor.

Michael Bradfield was the Board’s general counsel. Afterwards he came to me and said, “Bob, do you realize what you just did?” I said, “Yes, we liberalized the banking sector.” He said, “The Board has considered this issue 12 times before.” I think those were his words, and I hope I got the numbers right. “This was the 13th time, and, for the first time, the vote was in favor of liberalizing. And you did it.” I said, “What do you mean I did it? It was a 4–2 vote. We got a big majority. How was I the deciding vote?” He said, “If you had voted against it, then it would have been 3–3, and 3–3 doesn’t carry. The motion wouldn’t have passed. You’re the fourth vote, so you did it.” [Laughter]

There were a lot of things that motivated me. First, there was the considerable bank distress that we had at that time and had experienced in years before. Second, I grew up in Europe, and most European countries have universal banks. There were no functional

restrictions and no geographic restrictions; it was rare to see liquidity problems in the European banks due to their inability to access funds. Also, they can branch all over the country and serve their customers throughout the country. European banks were doing fine. I thought, "If a bank can make a 20-year loan to a commercial enterprise, to IBM, why can't it underwrite IBM bonds or stocks when the bank will be exposed for only 30 days, maybe less than that? Why can't they carry some of those bonds or stocks in their inventory when they can make a 30-year loan? What's the problem? I never understood that, because it allowed the same bank to service the company in a full, comprehensive manner. There was also international competition around most of the world and certainly against the European banks. I was comfortable with the universal banking model, so the Board vote to broaden securities underwriting was a step taken towards the universal banking model.

MR. HAMBLEY. The Gramm-Leach-Bliley Act finally repealed portions of Glass-Steagall.

MR. HELLER. Glass-Steagall and interstate banking.

MR. HAMBLEY. The law was changed earlier, in 1994, to permit interstate banking and branching. The Gramm-Leach-Bliley Act passed in 1999. Deregulation took a long time.

MR. HELLER. Yes. But in 1994, a lot of liberalization was taken, too. And then the Gramm-Leach-Bliley Act was the culmination of it all.

MR. HAMBLEY. At the time, did you think that the problems hurting banks were partly because their product offerings were limited?

MR. HELLER. Correct.

MR. HAMBLEY. And this is one thing that connected them?

MR. HELLER. Absolutely.

Interstate Banking

MR. HAMBLEY. Interstate banking was another area in which you were interested. Although permitting interstate banking had not been achieved by the time you left the Board, there was some change while you were at the Board. I think there were interstate banking compacts.

MR. HELLER. As long as the headquarters was in one state, in your home state, you could have branches in adjacent states.

MR. HAMBLEY. So it was beginning to change. But by the time you left, full interstate banking was still in the future.

MR. HELLER. Absolutely.

MR. HAMBLEY. Did you think banks were in trouble because of the lack of geographic diversification tied to the inability, in many cases, to branch interstate?

MR. HELLER. I didn't think the banks were in trouble because they couldn't branch interstate. I thought a more geographically diversified bank, a bigger-footprint bank, would be more able to serve its customers. So it was a customer relationship question, as far as I was concerned—being able to serve a big company such as General Motors, IBM, or whatever. Companies like that had to have a bank in every state that they dealt with for payroll, paying suppliers, and other activities. It was a complicated thing for them to do, so why not be able to deal with one bank across the country, like it was possible anywhere else around the world?

Foreign banks were allowed to have offices in different cities in the United States. Deutsche Bank could have an office in New York, Atlanta, Los Angeles, Chicago, and San Francisco. It had offices all over the place. American banks had the same offices. Bank of America had a subsidiary in New York, but that was a different corporation. Why go through all

these shenanigans? The New York office of Bank of America was a huge operation, but it was allowed to service only foreign trade purposes. We were able to serve the international activities of the corporation, but we were not able to serve the domestic activities of IBM or any corporation. That didn't make any sense to me.

Nobody argued recently against the Congress's decision to repeal the McFadden Act (which essentially prohibited interstate branching). Repealing the McFadden Act was absolutely a home run, as far as I'm concerned. Nobody said, "Bring back the McFadden Act, and the American banking system will be a lot better."

Regarding Glass-Steagall, we have a new Volcker rule coming, due to the Dodd-Frank legislation. I am opposed to proprietary trading for banks, at least to any significant degree. It's a difficult line to define. They asked Paul Volcker in the hearings, "How do you know proprietary trading?" I think he gave the answer that everybody has always given: "I know it when I see it." I understand, on the rulemaking side, it's tough sometimes to separate proprietary trading and other types of trading. You can make those rules and allow a little bit of trading—temporary position taking and so on.

I have written several times in some papers about another way to make the financial system better. It has nothing to do with my time as a Governor. It's called PIE, the Prudent Investor Exchange. It protects small investors while it relies on free-market principles. In the stock market, every corporation should have the right to list its securities—on the New York Exchange, the Nasdaq, or wherever—with four rules. Number one, there would be no short sales. Number two, there would be no derivatives tied to it. Number three, there would be no margin trading on that stock. And, number four, there would be a minimum holding period of one week before the stock could be sold again. Those are basically the trading rules in your IRA

(individual retirement account). You can't do any short sales in your IRA, and you can't buy on margin in your IRA. Why do individual investors with IRAs have their hands tied when trading in the same stock while the guys on Wall Street can trade by using their program trading, or trade five times a day on margin, and do anything they want to do? This would be a totally voluntary arrangement for individual institutions. I am not the "free market, so anything goes" guy. I think things go off track, and I think there should be rules. That's appropriate, but they've got to be reasonable.

Bank Holding Company Model versus Universal Banking Model and Nonbank Banks

MR. SMALL. We have the bank holding company model, as opposed to the universal banking model. What did you see the bank holding company model trying to achieve? Do you think its time has passed as a useful structure?

MR. HELLER. Quite often I spoke out in favor of a bank holding company model. A bank holding company is basically a corporation that, among other things, owns a bank. There are bank holding companies where the corporation owns only one bank. I'm on the board of directors of a single-bank holding company in California right now, Bank of Marin Bancorp. We have only one subsidiary, and that is Bank of Marin. But a bank holding company can also own other financial institutions—insurance companies, maybe a brokerage firm, or, in the extreme case, commercial enterprises.

I saw the bank holding company model as a way towards the universal bank. It has some advantages over the universal bank. You have the potential for a separation of functions that are being served by the same overall company, and you can have separate capital requirements for each subsidiary. It's especially relevant in the U.S. context, where you have many different regulators. You can have functional regulation where, let's say, the insurance commissioner is

responsible for the insurance subsidiary, the OCC is responsible for the national bank subsidiary, and so on, and then the Federal Reserve would be responsible for the regulation of the entire structure, the holding company—something not all that dissimilar from what came out of the recent legislation—giving the Fed the ultimate responsibility for the whole institution.

An important aspect of the bank holding company structure is that the holding company has to serve as a source of strength to the bank. That is, the holding company is required to downstream capital to the bank if the bank needs it. On the other hand, the bank regulators can stop the bank from upstreaming capital, paying dividends, and so on. The holding company is there, and, if any of the other subsidiaries gets into difficulty, the bank can be isolated from those difficulties and, therefore, be a stronger institution than it would be in the absence of that holding company structure.

We can debate whether it will always work that way. I think that is the concept of the new legislation, which contains a similar concept where the umbrella supervisor, the consolidated supervisor for the whole organization, can say, “Now you’ve got to do this, now you’ve got to do that, and we’re going to shut down the insurance company, because that’s where all your derivatives went belly-up,” or whichever subsidiary it is. So I feel it’s a valid concept.

MR. HAMBLEY. When you first talked about this as a Governor, was it a way to move toward a universal bank model while also dealing with an existing legal structure? You already had holding companies, and you had banks.

MR. HELLER. Right.

MR. HAMBLEY. At the time, you said that you could imagine a commercial company being part of this holding company. Were there discussions within the Board in response to your

proposal to allow a commercial company to be in the holding company or own this holding company and being a source of strength to the banks it owned? As I recall, Volcker strongly opposed mixing banking and commerce. Was this a big controversy for the Board?

MR. HELLER. Well, like I said, the vote was 4–2. Volcker was an advocate for maintaining Glass-Steagall barriers, no ifs, ands, or buts about it. The intermingling of commerce and banking was unacceptable to him.

I have a story about Sears trying to get into the credit card business. It was a sneaky way that it tried to get in, but we stopped it on my watch at Visa. When all the S&Ls were failing, Jake Garn was a senator from Utah. In 1982, the Congress passed the Garn–St. Germain Depository Institutions Act. Under this legislation, regulators could sell any institution to a buyer, and all existing powers that that institution had would continue to exist. The regulators couldn't say, "You can't do this, you can't do that." Soon thereafter, Sears bought an industrial loan company in Utah and named it, I think, Sears Loan Company Industrial Loan Company, SLC ILC.⁵ The industrial loan company was a credit card issuer with four or five thousand cards issued as a convenience for some people. Sears also issued Discover Card.

When I was at Visa, we had a rule that direct competitors to Visa, with the exception of MasterCard, could not issue Visa cards. That rule has since been litigated and changed. MasterCard had the same rule. "Direct competitor" was defined explicitly as American Express and Discover Card. If you wanted to issue a Visa credit card, you had to get approval for the credit card design. There are certain rules you had to follow on the size of the Visa logo and the placement of the numbers. There couldn't be anything offensive on the front and what have you. A low-level clerk at Visa approved these card designs.

⁵ An industrial loan company is a financial institution that lends money and may be owned by nonfinancial institutions. They are state chartered (with most chartered in Utah) and FDIC insured.

One day, an application came in. SLC ILC wanted 5 million or 10 million cards. It was some huge number. The clerk looked at the application and said, "They must have made a mistake. Maybe they meant 10,000 new cards instead of 10 million. The zeroes are wrong." She called the number listed on the application. The person at the other end answered, "Sears Industrial Loan Company." And she thought, "Sears?" I really have to hand it to that lady. She caught it, and it triggered in her mind at that particular moment that Sears is not welcome here. I still find it astounding. She alerted her boss. He rang the alarm bells that Sears wanted to issue millions of new cards, so we stopped them from doing it.

Sears had printed millions of new cards and had preapproved applications ready to go out the door. We stopped them, and Sears had to throw the cards into the trash. Sears sued us for \$100 million. At that time, Visa's capital was \$40 million. I think the claim was for \$30 million or so in direct damages, which was the cost of printing the credit cards that were ready to mail, and to treble it under antitrust laws, so \$100 million was the suit.

I negotiated for a while with Bill Purcell, who was the chairman of Discover at that time, but we didn't come to an agreement. Visa wanted to fight it. The case went all the way to the U.S. Supreme Court. We lost the lawsuit in the local court in Utah, but the decision was overturned on appeal. Then the Supreme Court refused to take the case, so the appellate decision stood. This was probably the last large suit that Visa won. After I left, Visa hasn't had much of a winning record in court cases.

Banking Regulation and Supervision

MR. SMALL. You came to the Board from the banking industry, from BofA, and you were assigned to the Board's Committee on Banking Supervision and Regulation. What

structures of regulations did you view as worthwhile? You mentioned not allowing proprietary trading in the bank.

MR. HELLER. I don't recall that proprietary trading ever was an issue that came up before the Board, but some of us had informal discussions about it. Bill Taylor was running the Division of Banking Supervision [and Regulation], so I dealt a lot with him. I remember discussions with him. There was some bank that hadn't been doing too well. Suddenly, it had great profits again, and I said, "Isn't it great that it made good profits again?" I was talking with Bill one-on-one, and he looked at me and said, "Those are all trading profits. They go up 20 percent. They go down 20 percent." I thought, "He's absolutely right. That is a volatile activity that the banks should not be hanging their hat on." I agreed with Bill Taylor that you should put tight limits on that type of activity.

I remember talking with Henry Wallich one time about some bank's data that was moving by a significant amount. Profits were up 20 percent or something like that. The bank overall was growing by 20 percent. He looked at me and, in a very measured tone, said, "Anything that moves at 20 percent should worry a central banker."

MR. SMALL. Does that volatility—20 percent up or down—worry you less if it's in an investment bank than if it's in or tied to a commercial bank?

MR. HELLER. It worries me in both cases. In those days, virtually all the investment banks were privately owned. I think Salomon was the first one to go public around that time.

MR. SMALL. That was important because of the risk controls put in place by the partners, because it was proprietary?

MR. HELLER. What worries me is the federal guarantee on deposits. That's when the taxpayer is on the hook. The other thing that worries me equally is the depositor losing his

money. It's important that you have a sure way to preserve the value of your assets and your means of payments. The payment system is one of the absolute backbones of any economy. If the payment system breaks down, the economy will break down. That's what we almost experienced recently.

I wasn't alive in the 1920s, when the payment systems broke down in Germany, Hungary, and other places in Europe. It was a time of hyperinflation. People were wiped out instantly. Inflation destroyed the payment system. In Germany, they used train tickets as currency. Cigarettes were used as currency after World War II. A train ticket from Cologne to Frankfurt was a stable value. People went to the train station, bought train tickets, and said "I'm going to give you that train ticket" when they paid for something. You knew that you could always get on the train and ride from Cologne to Frankfurt.

In those days, the currency in Germany was worthless. In department stores, bells would ring, and all prices would increase tenfold. That is something that you should never allow to happen. So I strongly believe that inflation should be kept at bay. I just as strongly believe that a payment system is the backbone of any economy. So that is something that you want to protect and preserve. That's why I see Visa as a payment system, not as a private enterprise that should make as much money as possible.

MR. SMALL. Where do you differ from Volcker and the Volcker rule?

MR. HELLER. I'm very sympathetic to the Volcker rule—no proprietary trading and activities like that.

MR. SMALL. Do you think that's practical for a large bank?

MR. HELLER. Absolutely. Proprietary trading is a voluntary act. At BofA, I was on the committee that would set the money exposure limits for the bank, the trading limits,

especially in the foreign exchange area. So when you do a trade—foreign exchange, a money trade, bond trade, or whatever it may be—you take on the initial exposure.

Let's talk about foreign exchange. Someone from IBM calls you and says, "IBM wants to buy 100 million British pounds." You do the transaction with them. At that moment, your position will be 100 million out of balance. If you had a zero net exposure before, now you have a 100 million exposure, because you just sold the pounds to IBM. You're short 100 million pounds. At that second, that is a proprietary position. What does a trader do, normally? He picks up his phone and starts buying pounds to replenish that position. He may buy 10 million from Citi, 20 from Wells, and so on until he is roughly square again. Then he can go home and he has made, hopefully, a small profit on that particular trade. If, instead, he keeps building that position in British pounds, if he carries it overnight in large amounts, that is what I would call proprietary trading. He holds it in the hope that the pound will go down, and he'll be able to replenish his position at a better rate later on. That's the profit from proprietary trading. That is different from the trading profit—just earning a small margin on an exchange activity.

Writing an absolute rule to follow those principles we have just pronounced is difficult. What if IBM calls up and wants to sell 500 million pounds? You can't have a rule that just says, "100 million, that's it." On the other hand, anybody who has ever worked at a bank will tell you "I know when it's a proprietary position or not, because the trader, on purpose, will make that position bigger and bigger, rolling the dice." I'm opposed to that. The banks should be doing the trading, but not take proprietary, speculative positions.

MR. SMALL. Would you have imposed this for a universal bank?

MR. HELLER. Absolutely. You can have a universal bank, but you get out of these proprietary positions as fast as is reasonable. You can make a rule that says, if you have a

proprietary position already in one direction, don't pile on. Again, I can think of exceptions to the rule. IBM has just called and wants to sell 100 million pounds. The next phone call is from General Motors; it wants to sell 100 million pounds as well. You can accommodate them both. You can get these runs, but that trader better get on the phone real quick and unload on double time, rather than saying, "Let's sit on my position here and not do anything."

MR. HAMBLEY. In 1987, you became the chairman of the Board's Committee on Banking Supervision and Regulation. How did you get that assignment? What were some of the key supervision issues of the day?

MR. HELLER. I don't remember how I got the position. It was probably Greenspan. Wayne Angell had some banking experience, but otherwise, I think I was the only one at that time who had banking experience. Martha Seger was there.

MS. FOX. She had been a bank supervisor.

MR. HELLER. Yes, but she had no bank experience. Neither did Johnson or Greenspan. So I think it was between Wayne Angell and me, as far as background was concerned. Wayne loved Reserve Bank operations. Traditionally, those two committees involved a lot of work, way too much work. I guess I was the default guy.

MR. HAMBLEY. What were some of the main supervisory issues?

MR. HELLER. Commercial real estate was in trouble, the LDC debt-to-equity swaps were all in vogue. Most of the work of the committee was dealing with individual bank issues and mergers and acquisitions. There was a steady stream of fairly mundane things.

The big issue was the universal banking issue that we just talked about—broadening permissible activities—but that wasn't done at the committee level. That was done at the Board level. Michael Bradfield, the Fed's general counsel, largely worked on it. Then the whole Board

had these hearings where the bankers testified. That's the only instance in which I recall the whole Board hearing testimony from bankers. Maybe I'm missing something, but that was a pretty special event.

Basel I and Capital Requirements

MR. HAMBLEY. Around this time, discussions about what became Basel I took place. Why did these discussions about the need for international capital standards occur, and what role did you play, if any, in developing those standards?

MR. HELLER. The world was becoming a more internationally oriented place. In the late 1980s, banks had branches all over the world. American banks were going abroad *en force*—banks like Chase, Bank of America, Citibank, even Bank of Boston. They had extensive international networks. There was a tide change. Foreign banks were coming here as well. Rather than having a lot of domestically oriented banks around the world, you suddenly had them competing against each other for the same customers in the same market.

Having different capital and regulator rules was problematic. So we tried to get capital rules that would apply to all the competitors. For instance, the Japanese banks had extremely low capital standards. Typically, the German banks also had fairly low capital standards, but they were counting their holdings in commercial enterprises as part of capital. So there were a lot of differences. We tried to establish a more level playing field. I often discussed with Bill Taylor the issue of how we get there. Taylor was the point man. He would go to the international supervisory meetings and work on these rules. I was not part of the Basel group. I had other responsibilities in the international arena, but as far as these capital standards and supervision and bank rules and regulations, Bill Taylor was the driving force.

MR. HAMBLEY. You thought it was desirable to have more uniform capital standards, as a matter of competitive equity.

MR. HELLER. Correct.

MR. HAMBLEY. Were you worried that some large international institution, which was poorly capitalized by our standards, might get into trouble?

MR. HELLER. Yes, but there was also the flipside of that issue. We were worried that Japanese banks coming here would have a competitive advantage, because they could come from a thinly capitalized home base and then buy up U.S. banks, which they were doing extensively at that time. It gave them a strong competitive advantage.

MR. HAMBLEY. But if a Japanese operation in the United States had financial difficulties, were you worried about it having “knock on” effects elsewhere in the United States? Was it basically a competitive issue or a prudential issue? I would think that Bill Taylor would have viewed it as a prudential issue, because he believed that banks should have strong capital.

MR. HELLER. I agreed with him. Here’s a lesson that we have learned. We had all the computer-driven models for risk-based capital. Long after I left the Fed, I was working for Fair Isaac. We bought a company that did risk-based capital calculations. It was called Risk Management Technologies. That was a good technical tool to have for banks, and we tried to sell it to banks. At first I was convinced. Now I think there are severe flaws in these models, because they are backward-looking models.

For an economist, the model has a lot of attraction. I presume that the Fed still uses a big econometric model, and all the numbers in that model are historical. It’s the same thing with these capital adequacy models. I thought, “That’s another economic model that will help banks judge their capital standards and capital requirements.” It is useful to judge what happens if a

bank lends more and takes on certain positions. Will that make the bank a little more risky, a lot more risky, and so on? In the end, will this modeling insulate the bank against all potential problems that it may encounter?

The Fed and the Europeans recently have conducted stress tests using those kinds of models, with some big assumptions thrown in. It gives you some knowledge, but it's just like your econometric models that never forecasted the recession we just went through. I've never seen an economic model that did not forecast everything rosy three years from now. They all do that.

MR. HAMBLEY. They don't predict turning points very well.

MR. HELLER. No. Usually they show that, three years from now, everything will be well. It will be even better, because we are going to do these wonderful things to get back on track. If you see the economy going off track a bit, you nudge it up a bit.

That's the same thing with these capital adequacy models. The surprises always come out of left field. All the new banking regulations that we talk about won't change much of that. A good capital cushion is essential.

I'm in favor of capital cushions in excess of the minimum regulatory requirements. Having only the minimum regulatory requirement counts as zero, as far as your true cushion is concerned, because as soon as you use up 1 percent of that, the regulators will hit you in the nose. The capital you have in excess of that minimum is really your capital cushion. I dare say, there are a lot of bankers out there who don't see it that way. They want to have their capital levels as close to the regulatory minimum as they can get. We saw a lot of problems that resulted from that.

Monetary Policy and Banking Supervision Responsibilities

MR. HAMBLEY. While you were at the Board, you mentioned that the monetary policy moves were predominantly tightening moves, trying to prevent the inflation genie from getting out of the bottle again. At the time, a substantial part of the financial industry—thrifts and banks—was having problems. You mentioned that there were high [that is, lots of] bank failures. What role did the condition of that big part of the financial industry play, if any, in determining what you thought was an appropriate monetary policy? Did you ever do a little less tightening because you were afraid that you were going to cause additional problems for those industries?

MR. HELLER. Let me backtrack a bit and then broaden the question. At one point or another in the past I have probably said that the Fed shouldn't have supervisory responsibilities. There should be two separate agencies: one for monetary policy and one for bank supervision. It is a regulatory jungle out there. Having the same bank regulated by maybe three regulators is crazy. The FDIC, the Fed, the [Office of the] Comptroller of the Currency, and the state supervisor may be involved in supervision, depending on the charter. That is too much of a regulatory overload. If the Fed is the single bank supervisory agency for all the banks in the country, as well as having monetary policy responsibility, I'd say that's too much in one agency.

When it comes down to monetary policy versus regulatory policy, consumer issues, and other responsibilities like that, monetary policy is the Fed's top priority. You can't live without monetary policy. Somebody has got to do that. Secondary to that is banking supervision and regulation.

I don't think we ever had a situation where we said, "Let's go slow on monetary policy in order to keep the banks healthy," or something like that. When the moment calls for tightening,

you have to do so, even if it causes pain, anguish, and maybe failures in the banking system. To that extent, you have to compartmentalize and deal with the second problem later. But because of the conflict, there is a good argument for separating monetary policy and banking supervision.

Some people have argued against separating the monetary policy and supervisory functions and divesting the Fed of the latter. Some of my Board colleagues wanted to have the banks under the Fed's supervision so that they could get to them and say, "You better do this or else." I didn't like that all that much. We talked about some of those situations before.

MR. HAMBLEY. The Fed had what we now call the dual mandate. Apparently, you felt that one aspect of the mandate, price stability, was more important than the other, maximum employment, since the price stability part seems to have been, for you, the Holy Grail of monetary policy. Was there ever a time when you felt that maximum employment had equal importance?

MR. HELLER. No. As I have said, my basic philosophy on that issue is that long-term employment is best served by a stable monetary environment. I want to have a stable monetary environment, and, indirectly therewith, we accomplish the second goal of maximum employment, which is a long-run goal.

MR. HAMBLEY. So you would not try to manipulate demand to meet any short-run employment goal—you would always be looking to achieve the longer-term goal of price stability, because then the other goal would be achieved. Is that a correct statement?

MR. HELLER. That's pretty close, yes. There is one exception to that: a period of absolute monetary financial distress, like in the fall of 2008. In 1987, not much happened but the stock market crash. But this episode in 2008, at that moment, when the house is on fire, you've got to provide liquidity, douse the whole place with liquidity. You mop up later and pull out the

liquidity after that. The Fed did absolutely the right thing, but that is an exception to my overall rule that you don't ever do anything that is inflationary.

MR. SMALL. People point to the fall of 2008 as an example of why monetary policy and supervision and regulation policy need to be housed in the same agency—because when a large institution is going downhill fast, it needs liquidity. Who prints money? Who has the liquidity? When everyone's clamoring for the central bank, the printing press, that's why the central bank needs that supervisory responsibility. Also, it's not only that institutions go belly-up, but whole markets freeze. The central bank is the only one with the fire hose.

Some people tie those circumstances together. They say that the Fed needs to be involved in regulation. The Fed needs to know who to bring together, who needs what, under what conditions, and how the market works so it can inject liquidity efficiently and properly. Is that a compelling argument for the central bank having both monetary policy and supervision responsibility?

MR. HELLER. I have a lot of sympathy for that position. I am not opposed to having the Fed in both functions, and the third one, the payment system. I'm not opposed to it. But if the question is which function is more important, when push comes to shove, if I had to choose between the two, I would grab the monetary policy.

MR. HAMBLEY. While you were at the Board, a big part of the financial system—the thrifths—was shaky. I didn't think that you would want to have a monetary policy that was going to make a bad situation a lot worse. But it sounds like you were willing to do what was right for monetary policy without worrying about that consequence.

MR. HELLER. The one exception that I outlined was a situation like the 2008 market crash, a financial freeze-up, and so on. I'd say, "Provide the liquidity when you have that

disastrous situation. Then pull it out as rapidly as possible, and make your intention known—not the day you put it in, but soon thereafter.” You say, “We have a plan to drain the liquidity out again.” To some extent, it was like Y2K, the year 2000 concern. The Fed provided more liquidity, and when Y2K didn’t result in a freeze-up, the Fed pulled back on the stimulus.

MS. FOX. In the inflationary times, when you had to move rates up, clearly there was harm to the banking system. If the banking system is unhealthy, that generally means the economy is unhealthy. A low interest rate environment is appropriate for both. It’s hard to come up with a situation in which you have to choose. During the Volcker years, a lot of damage had to be done to undo worse damage.

MR. HELLER. Exactly. Once you get into a high-inflation environment, it is difficult to reduce that inflation without doing damage. So you will do the damage. You have a bit of a tradeoff. Unemployment is high right now, but you should not go into a big monetary expansion to reduce that unemployment, because when you have to fight the ensuing inflation, the costs will be bigger. For a politician, the temptation is, “Let’s do it after the next election.” That’s why you have 14-year terms for members of the Board.

MR. SMALL. If you’re dealing with a financial crisis, do you think policymakers should be more constrained, say, by law than they are? The argument is that to avoid things falling apart on their watch, they put out too much liquidity. They overreact and create more asset problems for the next crisis. Do you see that as a danger?

MR. HELLER. That’s a real danger for the politicians. That’s why you have the Board members with 14-year terms, so there are always people on the Board who say, “I’ll be here 10 years from now. I’ll be here 8 years from now.” It is presumed that Board members have the long-term view. You try to minimize the short-term perspectives.

MR. SMALL. I'm thinking of living through a financial crisis like the fourth quarter of 2008, where there is the temptation to keep the banks afloat at any cost so the Great Depression doesn't happen, and that creates a moral hazard.

MR. HELLER. I see that as a different story. It's like the fire department. If the financial markets are freezing up—the house is on fire—then you provide all the liquidity you can. You would never do that in the normal operations of a household. You don't turn the fire hoses onto the roof or stand in the living room with a big fire hose unless the place is on fire. That would be my perspective. Is the place really burning down? Are financial markets and the country going into a freeze-up position? Has trading stopped? Are the spreads big? Have the markets disappeared? I think you can draw that difference, and, under those circumstances, I'm willing to give the regulators close to unlimited power.

The big regulatory council that has been proposed is not the ideal solution. I'm opposed to it as a basic proposition. I think you should give the power to the Federal Reserve. If you're scared to use the power, get Treasury and somebody else to weigh in as well and say, "There really is something going on where you've got to use that extraordinary power." It reminds me of the days when Chairman Bernanke and Secretary Henry Paulson went up to the Hill and told the whole congressional leadership, "You've got to do this by tomorrow. These are extraordinary circumstances." If you want to have a safety valve so that the regulator or the Fed can't totally act alone, fine. You can have the Secretary of the Treasury sign off on it too.

The Board's Responsibility for Implementing Consumer Financial Services Laws

MS. FOX. Beginning in 1968, the Congress gave the Board responsibility for implementing a number of consumer financial service laws. Did you think it was appropriate for

the Board to be involved deeply in consumer protection issues? Do you recall any major consumer issues during your time on the Board?

MR. HELLER. I never thought the Board should be heavily involved in consumer issues. In a way, you'd be playing both sides of the equation. You call yourself a regulator, but you're also an advocate for the banks because you have to make sure that they are healthy. On the other hand, you had the consumers. The banks deal with the same consumers, so I saw that as potentially a conflict situation. I didn't particularly think that the Fed should be involved in consumer affairs.

We talked about the lending commitments that consumer groups, community groups pushed for. If you say "You've got to make a certain amount of loans in particular neighborhoods" where you know that the creditworthiness wasn't going to be up to what it should be, then you have a potential conflict of interest if you tell the bank at the same time "Be sure you don't make any bad loans." Which one is it? Don't make any bad loans, or make loans in the lower-income areas or whatever? I can see both of them as an objective of some people, but the same agency should not be in charge of that. One day you tell the bank "Lend \$10 million to people in the Bronx" or whatever; the next day you say "How stupid were you to make these loans—what was on your mind?"

MS. FOX. The Community Reinvestment Act of 1975, CRA, was not a credit allocation law. Regulators were not supposed to tell banks where to lend. The law requires regulators to encourage banks to make credit available in the entire community in which they serve.

Anyway, your point of view was that the consumer mission was not best done by the central bank.

MR. HELLER. Correct. If banks are discriminating or doing something else that is bad, go after them. There are laws, but it doesn't have to be the bank supervisor, the bank regulator, who enforces them. I think you easily get yourself into a conflict situation.

That's one reason I didn't want to be on the Board's Committee on Consumer and Community Affairs. I was on the Committee on Banking Supervision, and I thought, "You're going to get yourself into a potential conflict situation." It would take a lot of talking out of both sides of my mouth to get through that.

Being Administrative Governor

MS. FOX. You were the Board's Administrative Governor from January to September 1987, replacing Emmett Rice, who had left the Board. Then you were the alternate Administrative Governor until you left the Board; Edward Kelley was the principal Administrative Governor. The Administrative Governor is the CEO for management, operations, facilities, and all the support systems for making policy. What made you willing to be Administrative Governor, and did you enjoy that job? What were some of the projects that you recall from that period? What were some of the lessons learned?

MR. HELLER. I was happy to be Administrative Governor. I have always liked administrative duties. I was involved in running things at the Bank of America and also at the IMF. At the university, I was the chairman for a while. After the Federal Reserve, I was president and CEO of VISA U.S.A., so I'm happy doing administrative things.

In those days, the new man on the block, the youngest one around tenure-wise, got the administrative job, because apparently nobody wanted it, but I really liked it. And I liked the people that I worked with. David Shannon was the head of Human Resources; that was a big

division to deal with. And then the supply group also reported to me, in some sense; Bob Fraser was the man in charge.

MS. FOX. Bob Fraser did facilities, security, and all that.

MR. HELLER. Yes. I liked security. I've always been a frustrated cop. As Administrative Governor, I was in charge of the secret spots where the Fed would go if there was a World War III. There is a secret countryside hiding place under a cow pasture, or at least there was. I don't know whether it's still there.

MS. FOX. We don't have it now. It was in Culpeper, Virginia. I believe that the Library of Congress bought it, and they're using it for storage.

MR. HELLER. Anyhow, I was part of that. I was briefed on what happens if World War III starts. I inspected the facilities where the Fed would be. Having grown up in Germany during World War II, I think our house had a better cellar than that facility. [Laughter] I let it be known that it was not a particularly secure location if the big bombs came down. Those were interesting parts of the job.

Designing the Official Board Flag

MS. FOX. When you joined the Board, you received a small allowance to pick your own furniture.

MR. HELLER. Escorted by Bob Fraser, I picked out desks, chairs, this and that. Later he stopped by and said, "Is everything satisfactory? Can we do anything else for you? There must be something else I can do for you." I figured that I had to give him some more jobs, so I said, "Why don't you get me a couple of those flags that the Chairman has behind his desk?" Paul Volcker had four flags standing behind his desk. I thought they looked absolutely great. Bob's eyes got big and he said, "I can't do anything like that. Those are the Chairman's personal

flags. One flag is from when he was deputy assistant secretary of the Treasury. One is when he was assistant secretary of the Treasury. The other one was when he was undersecretary of the Treasury. And the last one is the American flag." I said, "Okay, then please get me a Federal Reserve flag and a U.S. flag." He said, "I can't do that either. There is no Federal Reserve flag."

A couple of months later, I became the Administrative Governor, and I thought, "Now you're in charge of all this stuff." I called Bob and said, "Remember we talked about a flag? Let's get a flag." Immediately, a research project started. Bob said, "What kind of flag do you have in mind?" I said, "Any old flag." Every other building in the neighborhood has a flag on top. Every department flies a flag. I said, "Go look at the State Department right next door. It has a nice flag."

The Board's Secretary, Bill Wiles, got involved in this project. He was a nice gentleman. Bob and Bill came to me a couple of weeks later and said, "The State Department doesn't have a flag either." I said, "Come on, what's that thing on the top of their building there?" Bob Fraser said, "The State Department displays its seal on cloth. They don't have an official flag." I said, "Okay, let's display our seal on cloth." He got me a couple of xeroxed copies of the Fed seal, and I took it home.

My daughter Kimberly was probably 14, and my son Chris was around 10. I said, "Get out your coloring pencils and crayons and make some nice flags." The kids came up with half a dozen designs, and I picked the winning design. The pirate flag that my son drew was not the winner. My daughter was and still is a good artist. Her flag looked suspiciously like the flag of

Virginia. I took it to the Board staff, and they drew the flag. For a long time I had the original design that my daughter drew in a frame, and it just faded away.⁶

MR. SMALL. This is how she designed it?

MR. HELLER. Exactly. The only difference between these two designs is here—the golden ring includes the stars, and there it excludes the stars in the final design. The stars are in the blue field and here the stars are in the yellow field.

The staff graphics department drew both designs. Then I took it around to the Governors, one-on-one. Everybody was in favor of the flag, so we drew up a memo and took it to the full Board for a vote. There were five votes in favor, with one abstention. Chairman Volcker abstained. After the meeting I said to him, “Paul, when we talked, you told me that you liked the flag. Why didn’t you vote for it?” He looked at me and said, “\$12,600 is an awful lot of money.” He was afraid that somebody in the Congress or God knows where would say, “Why did you spend \$12,600 on flags?” That was the story of the establishment of a Fed flag. There’s a nice history of the flag that the staff prepared.⁷

MS. FOX. The staff did a research study on the history of the seal, which is what was used by your children to develop the color scheme for the flag. The color scheme included a brown eagle, a blue background for the stars, and the red stripes.

MR. HELLER. That’s the official seal colors. It came out great. Just as a footnote, Paul Volcker was very happy when, on his retirement, he received a flag. [Laughter]

MS. FOX. Did you get the first flag?

⁶ Former Governor Heller had two photos—one was the original flag designed by his daughter, and the other was the original design approved by the Board. The color on the original flag was bright blue, but over time it had faded to light blue.

⁷ Office of the Secretary (William W. Wiles) (1987), “Official Board Flag,” memorandum to Governor Heller, Board of Governors of the Federal Reserve System, June 22.

MR. HELLER. No. I didn't get a flag until I retired. I think that's my permanent legacy. Everything else, all the rules we made, sooner or later are overturned, and then there are new rules. Monetary policy goes up and down.

MR. SMALL. You helped deliver price stability.

MR. HELLER. I sure hope so.

Structure of the Federal Reserve

MS. FOX. The Federal Reserve has a complex structure. What did you think about this structure when you first came to the Board and had to work within that framework?

MR. HELLER. I came from Bank of America, where we had something like 150 subsidiaries. Compared to that, the Fed was a piece of cake. Having 12 Reserve Banks rather than 150 subs didn't seem like an overwhelmingly complex structure. There are some fine balances between private and public sector, between regionalization and centralization that the Federal Reserve Act of 1913 tried to achieve. The Fed structure accomplishes that to an admirable degree.

The Federal Reserve Districts are a bit out of date, because they are based on the 1913 economic structure of the country as it existed then. Nobody in his right mind would put a Federal Reserve Bank in Cleveland or Richmond today—no disrespect to those cities. In those days, they were important industrial cities, but now, not much is there except the superb hospital in Cleveland. You could put Richmond and a few of the others in the same box. On the other hand, the San Francisco District is huge compared to the other districts. So if you could reorganize it or redraw the lines, you'd probably do so.

But if you open that particular can of worms—changing the Federal Reserve Districts—you may regret it. Attempting reform can leave you open to political horse trading that we really

don't want. In order to get somebody's vote, you may end up with a headquarters in some place like Omaha because somebody makes his final vote dependent on having something in his hometown. So, overall, I'm happy with the Fed structure.

It is good to have the balance between the regional Districts and the headquarters. That is a desirable feature. You get a lot of different perspectives from the country as a whole. It's just the same thing as if you say, "Why do we have a Congress that is composed of 2 senators from each of the 50 states and over 400 congresspersons based on state populations?" In the same way, we have the Federal Reserve System. We have 12 local representatives representing the different parts of the country. When it comes to making policy, they say, "In Texas, things are booming. Oil prices are up, and everything is well." In Chicago they may say, "Things aren't so good." "Industries are deteriorating in Cleveland," or whatever you have. You bring in a lot of regional perspectives. And the presidents, through their Reserve Banks, collect a lot of information that they present at the FOMC meetings. While everybody makes an effort to represent the national perspective as a whole, they also talk about what's going on in their own region. There's a good emphasis on that. If you are just here, in Washington, D.C., there's a big chance of inbreeding and also a big chance of being too close to the Congress and the whole Washington mindset.

MS. FOX. Were you ever on the board of directors of a Reserve Bank?

MR. HELLER. No, but I've been to many meetings. The Reserve Bank of San Francisco, once a year or something like that, has invited former Board members—Sherman Maisel, Preston Martin, and me.

MS. FOX. Do you think that the bankers, through their seats on the board of directors, exert undue influence in some way in policymaking?

MR. HELLER. No. I am not aware of any instances. If you would tell me that, going forward, all nine members of each Reserve Bank's board of directors will be appointed by the Board of Governors, maybe with a regional nominating committee making suggestions, I think that would be good. I didn't say it's a must.

We don't have an acute problem, but the appearance of conflict of interest is there. If a Reserve Bank president at a board of directors meeting recommends a discount rate change, the directors are two steps ahead of the rest of the world, knowing that you have recommended that change. Whether the Board of Governors will go through with the change is a different story, but the chances are probably significant that the Board of Governors will go ahead and do it. I'd rather avoid that, because somebody can say, "That Reserve Bank director sat in the meeting two days before, and who knows what happened in the bank—proprietary trading, or they shuffled the portfolio," something like that.

MR. SMALL. What about the influence on the Federal Reserve's supervision and regulation? Someone could say a Reserve Bank's board of directors, composed partly of bankers, is not going to select as its Reserve Bank president someone who is going to be an aggressive regulator. Is that an issue?

MR. HELLER. In the end, the Reserve Bank president isn't appointed by the Reserve Bank's board of directors. The local board makes its recommendation. Bank presidents must be approved by the Board of Governors. There were instances where the Federal Reserve Board did not like a person that the regional board of directors came up with, and the Board changed it around. The ultimate authority rests with the Board of Governors for the appointment of a particular person as Reserve Bank president.

The Board's Long-Tenured Staff

MS. FOX. There's a tradition of long tenure by staff here at the Board of Governors.

One argument for long tenure is that the experiential knowledge needed to do the Board's work can only be built up over time. The argument against long tenure is that you can get stale, the structure solidifies, the staff members assume they run the place, and the Governors who come and go are just minor inconveniences. What was your perspective on that issue?

MR. HELLER. When I was here, quite a few people on the Board had that latter perspective.

MR. SMALL. Did Board members ever feel that staff "blew them off," and that the staff was following the Chairman too much?

MR. HELLER. It's my understanding that the staff used to report to the Board as a whole, but when Arthur Burns came in, he changed that. He wanted the staff to report to him.

MS. FOX. Now staff members report to a staff-level director. The staff-level director reports to a Governor, who is the chairperson of their oversight committee. When you were Administrative Governor, you did the performance review, set salary, and approved leave—indicators of responsibility—for the head of the administrative function, Dave Frost probably, maybe also others; you reviewed their performance reports.

MR. HELLER. David Shannon, and later on Bill Taylor.

MS. FOX. When you were head of supervision, Bill Taylor reported to you. You did his performance report, and you worked out his salary. But they report to the Chairman as well. The Chairman relies on certain division directors for input into policy decisions. During your era, some of the Board members felt that the reporting line to the Chairman had become too direct.

MR. HELLER. Did research, monetary affairs, and international report to a Governor in my days?

MS. FOX. Yes. There was a Research Committee, but they worked day-to-day for the Chairman. The assignments were given by the Chairman.

MR. HELLER. Exactly. He was basically running the substance of it. If you played a role, it was an administrative role rather than a substantive role. The Chairman would say, "I want a study done on this or that topic," and it would happen. When I came along, some of the Governors did not have any staff assistants except their own secretary. Manley Johnson had a research assistant.

For monetary policy, most of the forecasts in the Greenbook were done by the staff. We also had the Bluebook. Sometimes I wanted to know what would happen if you increased or decreased the money supply. It was difficult to get something like that out of the staff. Most of the time they would say, "You have the forecast. Here's the Bluebook, and these are the alternatives." I would ask, "What would happen if you kept the money supply growing by 5 percent instead of 3 percent or 10 percent or whatever?" It was difficult to get questions like that answered. Some of my fellow Governors would say, "The staff doesn't do what you want done," or "It takes too long."

When I was at UCLA, I would have studied these research questions myself. But here we didn't have a lot of time to collect our own data. So I got my own research assistant. He was an economist who had worked for me at BofA. At the time, we subscribed to the monetary model that Larry Meyer had developed in St. Louis. It was a model that was more to my liking, because the levers were truly the M's, the monetary policy, rather than the levers being government spending and so on, the largely Keynesian-driven model that the Fed had at that

time. The Fed's model was built together with Professor Larry Klein at the University of Pennsylvania. Bob Parry, the president of the San Francisco Federal Reserve Bank, had helped to develop it.

MR. SMALL. If there was an analysis of banking structure or the economy and the staff came out with position "A" that you disagreed with, would you feel free to call on other staff and say, "Let's develop analysis along this other line"? If staff came out with a certain position, could you reach into the staff for a different way of analyzing something, or was this considered pitting staff against staff?

MR. HELLER. I don't think I ever asked the Board staff to provide alternatives. The economist that I had hired as my personal assistant, Kal Wajid, did the analysis for me. He got along fine with the other staff. He wasn't ostracized. He had lunch with everybody. It wasn't like, "Here's the enemy within." He got along fine with the staff.

I worked with a lot of people. A lot of things were written by the staff. I gave a lot of speeches. Ninety percent of them were written by the staff. Typically, I would meet with the staff about the topics that I wanted to talk about. Staff would write something, and I'd edit it so that it would sound the way I talk. It was a pleasure to work with all the staff. Joe Coyne, the head of Public Affairs at the time, kept me on the track: "No, don't say that."

MR. SMALL. When you're presenting something to another regulatory agency or to the Congress, it's coming from a staff of hundreds of Ph.D.'s, and that gives the presenter more power. Do you think there's a sense of that?

MR. HELLER. You would have to ask the other regulators whether or not they were scared of the Fed. I'm sure they respect the Fed a lot. The key reason for that is the long institutional knowledge that resides here. The Fed has deep resources.

The Fed may be on the verge of being overstaffed rather than understaffed—at least, I always had that feeling. Even if the Board was addressing a minor issue, there would be 30 to 50 people sitting in the Board Room, as many as you could fit in the room. Why do we need all these people? On the other hand, like I said earlier, there was always someone able to answer any question, such as what was happening with the volume of freight car loadings in the upper Midwest. I almost fell off my chair over that one. The staff is an absolutely great resource. Someone was there to answer anything you wanted to know about the economy, whatever sector it was. I had spent a lot of time on foreign countries. At Bank of America, we had maybe a dozen people to cover the world. At the Board, you had hundreds covering the world. It's great.

MS. FOX. More recently, I think the staff has become more available.

MR. HELLER. It depends a lot on the Chairman. In my time, at least, you had division directors who were very protective of the staff. Everything had to go through them, rather than you building up individual relationships with some staffers. In some areas, I started to develop a relationship with staff members, and we got to be friends. I never felt shortchanged. The staff couldn't have been friendlier and more accommodating.

Working with Other Governors

MR. SMALL. What about the tradition of working with other Governors when there were disagreements? Did you wait until you were at the Board meeting for the vote, or did you talk about issues and try to resolve differences one-on-one? Was there a lot of time?

MR. HELLER. A fair amount, yes. I was friendly with Wayne Angell, Manley Johnson, and Martha Seger. And when Mike Kelley came, I talked with Mike a lot about monetary policy—how it worked and issues like that. There was a lot of collegiality. Later on, when John LaWare came, we also talked a lot.

MR. SMALL. Did you talk about your positions before FOMC meeting?

MR. HELLER. Yes, we did that, too. But we were always careful. As soon as you had four, it was unlawful. If three of us were talking in an office informally and suddenly Martha Seger stuck her head in, it was, "Sorry, Martha, can't talk anymore." And I'm not talking about Martha, specifically—it could have been anybody coming in. As soon as the fourth person showed up, you had a voting majority, and that was the end of it.

MS. FOX. Because with four Board members, it became a meeting under the Government in Sunshine Act and had to be an open public meeting.

MR. HELLER. Yes.

MS. FOX. Those were conversations in which you mostly educated each other about your points of view, raised questions, and tossed over the issues?

MR. HELLER. Yes. What about this and that. And, usually, there was something you knew or learned that you could share. Let's say I was coming back from a meeting from the OECD (Organisation for Economic Co-operation and Development). I'd say, "They're really worried about the German exchange rates." In an informal way, you would do a debriefing, and, in an informal way, it was passed on.

MS. FOX. How did you feel about the formal staff briefings?

MR. HELLER. Every Monday morning we had monetary policy briefings.

MS. FOX. There were monetary policy meetings and other closed or open Board meetings to discuss enforcement actions, regulations, and other issues. Were the meetings valuable?

MR. HELLER. Every week you were being spoon-fed all the information available on the economy, so you were always on top of virtually every issue. Nowadays, when people say,

“Would you give a speech on economic policy?” I want to be paid well. It’s a lot of work to write a speech from scratch. It takes me four or five days of preparation, because I’m no longer in the loop on all the issues. When I was at the Board, the briefings were extremely valuable, because you were always informed. You knew what was going on. You were being briefed every week. You soaked it up like a sponge and had a high degree of confidence. You could say things when you were giving a speech, and afterwards, in a question and answer session, you knew that it was correct. It was seldom that you had to say, “I don’t know about that.”

MR. SMALL. If you were asked to give a speech on Fed policy today, do you find that making that speech is much easier, due to the Fed’s relatively new practice of FOMC statements and the publication of the FOMC minutes? Is that a big improvement compared to when you were here and the directive included the “mights,” the “shoulds,” and the “woudls”? Is this substantively a step forward in communication and clarity?

MR. HELLER. Being on the inside, at that time, we knew what the “shoulds” and the “woudls” in the directive were all about, so any speech that we gave, we could always play, “I’m pulling back the curtain of mystery from your eyes.” People were very surprised when you would talk about the monetary policymaking process. I was always surprised at how small the operating targets were, the free reserve targets. We were talking about a couple of hundred million dollars on many days. You were adjusting this small aggregate here and that turned into a bigger monetary target, and that in turn drives the entire economy. It was a very small needle that you were moving, and when you talked about that and the meaning of the policy directive, people always appreciated it. So that was an easy thing to talk about, and people liked it.

Now it’s a lot more in the open. Everything is laid out. I still do an awful lot of TV, mostly on CNBC, sometimes Bloomberg, sometimes on the radio. People watch TV or listen to

the radio around the clock. Bloomberg sometimes gets me in the evenings for its early drive-time show at 5:00 in the morning in London. It's 10:00 p.m. in the evening in San Francisco—that's 5:00 or 6:00 a.m. London time the next day. Everybody around the globe is interconnected and knows the same. I think that's good.

Having Wall Street and the banking system guessing whether or not we had changed policy didn't serve any useful purpose. The only purpose was, you never made a mistake. If you had raised rates and something horrible happened, you could lower rates the next day and say, "It never happened. It was just an aberration." I think that was the main reason for having all this mystery.

MS. FOX. I think the arguments for more transparency had to do with marketplace developments, technology, and access to information. It wasn't feasible or sensible any more to have Fed watchers figure out all those little changes in the way the world worked.

MR. HELLER. It provided good employment opportunities for former Fed staffers and Board members. Every bank had to have one. They'd sit there and say, "Well, that's what is happening."

July 30, 2010 (Second Day of Interview)**The Domestic Macroeconomy**

MR. SMALL. Governor Heller, I thought we might pick up on the domestic macroeconomy. We talked about the 1987 stock market crash. And we talked about the general rise in interest rates to keep inflation steady. That was successful. Inflation came down and was held steady. The unemployment rate came down slowly. But towards the end of your time here, the thrift industry and then the commercial banks started getting into some pretty choppy water.

MR. HELLER. Yes. It was an interesting and exciting time, especially from the vantage point of banking supervision and regulation. We had a front-row seat observing all the banks. There were 500 banks a year going into FDIC receivership. The FDIC and Bill Seidman, its chairman, had all kinds of new techniques for how to resolve the problem. There was the RTC, the Resolution Trust Corporation. Every Thursday, the Federal Reserve would get a green sheet listing five or six banks that were scheduled to fail that coming weekend. That meant the FDIC would march in and close an institution, usually on Friday at close of business. We would have advanced notice because some banks under Federal Reserve supervision, state member banks, were involved. We saw five or six banks fail every week of the year, except the Christmas week and Thanksgiving week, when the examiners and the FDIC staff were all at home on leave and vacation.

It was a steady diet of misery in that department. So, in 1988, when loan rates went up, we felt uncomfortable raising the short rates, because that would influence directly the cost the banks had to pay for their funds. The money market funds, which had become popular in those days—that made life more difficult again for the banking industry. In a way, we were chasing

the long-term rates up. Eventually, we had an inverted yield curve in late 1988, early 1989, and that was not a pleasant environment.

MR. SMALL. It must have been tough raising rates while banks were in difficult times.

MR. HELLER. Exactly. You were making it even more difficult for these banks.

MR. SMALL. What was driving you to raise interest rates?

MR. HELLER. Well, the loan rates were going up on their own. I think there was an expectation that inflation would be rekindled. The country was still under the impression of the extremely high inflation of the late 1970s, the extremely high interest rates of the early 1980s, so any change, any whiff of inflation, was immediately reflected in the long-term rates. And then we had to move the short-term rates up to quell inflationary expectations.

MR. SMALL. Also, this was a period when the Board was managing a fair amount of deregulation on deposit rates, trying to let banks have more access to funds and be competitive. I'm thinking about money market demand [deposit] accounts and the interest on checking.

MR. HELLER. Yes. The money market account, MMDAs, had been invented in the late 1970s or early 1980s, and they became prevalent in that time. Individual depositors who could not earn anything on their checking account deposits were pulling the money out of their checking account and putting it into a money market account. Suddenly the bank had to pay 5 percent interest on it, and they were only earning 5 percent on their old mortgage loans that they still had outstanding. So the bank wasn't making any money, and a lot of banks failed in that environment. At the same time, you had the oil crisis. You had the LDC debt crisis, which especially impacted the internationally active banks. You had an agricultural problem in the United States that impacted a lot of the small banks in the Midwest, as well as Bank of America, which was the largest agricultural lender in the country.

MR. SMALL. The oil crisis was actually declining.

MR. HELLER. In Texas and Louisiana, you saw a lot of bankruptcies in that field. Oil prices had spiked in the early 1970s, and now they were coming down.

Leaving the Board and Impressions of Today's Fed

MR. HAMBLEY. You left the Board on July 31, 1989. Was that a tough decision?

MR. HELLER. Yes. I loved the Board, and I loved my work, but an opportunity became available at Visa. I knew some people at Visa from my early days at Bank of America. Visa had been born out of Bank of America. BankAmericard was the original bank credit card organization. That company eventually was named Visa, and it became a bank-owned cooperative association. Visa was being restructured in 1989. It was breaking up into a domestic USA organization and Visa International on the staff level. There had always been two legal separate entities, but they had been totally staffed by the same people, so the general counsel of Visa USA was also the general counsel of Visa International. The Visa USA and VISA International staffs were broken up, and separate staffs were established.

Somebody approached me and said, "Visa is looking for somebody to run, on the international side, the administrative functions, legal, human resources, security, and risk management"—basically, everything except systems and marketing. Those two departments were not to be under my area of purview. The number of jobs that I thought were open to me after I would leave the Fed was extremely limited, because there's a restriction that for two years you cannot work for any bank that is a member of the Federal Reserve System. So I had to work for a nonbank organization, and Visa was absolutely perfect. I like California, and the family said, "Let's go back."

MR. SMALL. Being a member of the Board of Governors is impressive on a resume. What human capital, if any, do you think you gathered here that you wouldn't have gathered by staying at Bank of America or in academics? Do you think there were certain things that you gained from being here that were of value?

MR. HELLER. Yes, absolutely. First, there was the decisionmaking and voting on a regular basis. Every week, bank regulatory cases were in front of us. Every week, interest rates were considered, whether the discount rate should be maintained or changed. And then the FOMC meetings were held on a regular six-to-eight-week interval. You had a discussion, and then, at the end, you had to make a decision. That became a routine of life that I had not experienced before being at the Board.

Second, I gained a lot of experience in the administrative functions, because I was the Administrative Governor. For instance, the Human Resources Department and the staff for premises and supplies, those administrative functions were reporting to me. The Federal Reserve staff is large. I'd never been involved in supervising that big a structure. Most of the groups that I had supervised before were in the neighborhood of 10 to 20 people, and now it was in the thousands. That's a different perspective. I became comfortable with that. And then, at Visa, I was in charge of those same functions as well.

The payment system was another important experience. Besides monetary policy and banking supervision, the Federal Reserve runs the backbone of the nation's payment system, so I gained a lot of experience there. Visa was a privately owned payment system, so it was also a good fit for me. In some sense, it was a dream job, but I loved the Fed job. I knew I was not going to be here until I retired. My term would end long before that date, so I knew there had to be a second job with the same opportunity. Would I have preferred to make the switch to Visa

two or three years later? Yes, but the position at Visa came up at that time. So I had to take the opportunity while it was available.

MR. SMALL. What is the change in culture like, going from the private sector to the Board, where it is management by consensus, and then switching back to the private sector where you have a CEO-driven chain of command?

MR. HELLER. There is some difference, especially between Visa and the Fed. It was a matter of degree, because Visa was owned and run by a banking consortium. We had a board of directors composed of about 20 bankers: typically, the head of the consumer division, the retail division of the very large banks, and the presidents of the medium- and small-sized banks. In that sense, we were serving a large group of people, of institutions, and there was a lot of balancing involved there, too. So it wasn't unlike an FOMC meeting where you also have a dozen people sitting around the table and bringing in different perspectives from different parts of the country. I think the Fed was a good experience for that particular institution.

MR. SMALL. Were the Fed and Visa very different from Bank of America?

MR. HELLER. Yes. Bank of America was more a CEO-dominated culture. If the CEO wanted something, it would happen. At Visa, if the CEO had an idea, you passed it along to the staff, and the staff would work the idea. The staff would work with a committee of bankers, and that committee in turn would come up with a recommendation. The recommendation would be presented to the board, and the board would be the final decisionmaker. At Visa, the CEO's powers were fairly limited. That has now changed, because Visa has gone from a bank-owned association structure to a regular private stock company. Some banks still own a lot of shares, but Visa has an independent board of directors, and it's a lot more like a regular corporation with a profit orientation right now.

In my days at Visa, if you made a high rate of return, high earnings in one particular year, typically we would lower the fees that we would charge the banks so the money would accrue directly to the banks rather than to Visa. We would be taxed first at the Visa level and then again at the bank level once we would downstream the profits to the banks. So if we lowered the fees charged to the banks, our earnings would drop, and as our earnings decreased, we would see that as a distribution of our funds to the banks who were the owners.

MR. SMALL. Some criticism has been levied at the Federal Reserve that, whether it's interest rates or other areas, it's sluggish to move. Part of that is attributed to its consensus nature. There's 12 Reserve Banks. There's the Board of Governors. Everything has to be discussed by everybody. Everyone has to get along on this dimension so you can get along on that dimension. That structure doesn't work well for quick decisions. What are your thoughts about that criticism?

MR. HELLER. In the normal course of events, I think that is true. The Fed is a consensus-driven organization. That is also one of its significant strengths, because it isn't prone to making quick snap decisions that could turn out to be ill considered and in the extreme wrong at the end. So having a somewhat cumbersome, slow decisionmaking process where everything goes through various staff levels, and maybe the Reserve Banks get involved, is a good thing. In the monetary policy area, you essentially have 13 different research departments—12 for each one of the Reserve Banks and then the research staff here at the Board. So the chance that you make an error is fairly remote, because you have these checks in place. I think that is a good feature of the Federal Reserve System.

I was pleasantly surprised in the recent crisis situation. The Fed was able to act extremely fast, often over weekends, making decisions quickly, putting new facilities into place

and taking action very quickly. It shows that the elephant can tap dance, and, in that sense, the Fed, in a crisis situation, can act quickly. I don't think anybody was arguing that the Fed was too slow in tackling the banking crisis of 2008.

MR. SMALL. Let's take the recent financial crisis and the attempt to change financial supervision in response to that crisis. Are you pleased with the level of public discourse and public policy perspectives that people have, or do you think that maybe bankers see it too much from their side and the Board maybe sees it from a regulator side?

MR. HELLER. You mentioned the bankers and the Board. There's the whole political arena that is involved as well: the public arena. The Fed serves the public at large, it doesn't serve just the banking system. The banking industry got involved in a vocal manner because industry representatives felt that the proposed rules would be impinging on some of their profit sources and the ability to make money. At the Fed, you've got to take a broader public policy perspective and ask yourself the question, "What's good for the country as a whole?" That's the perspective that the Congress and the President also have to bring to the table. They have to consider not only what is good for one individual industry, but what is good for the country as a whole, because, after all, the banking crisis imposed enormous costs on the rest of the economy. If the financial services industry as a whole hadn't made the mistakes that they made, we would all be wealthier, a lot of unemployment would have been avoided, and portfolios would not have been decimated to that degree. So I think the Fed has to take a broader policy perspective in its decisions.

International Banking

MR. SMALL. You were the international Governor for a while. Do you think the Fed has lessons to be learned by looking at other central banks?

MR. HELLER. Absolutely. I'm a great fan of learning from best practices in industry and life in general, so you can also apply that to the Federal Reserve. If things are being run in a more successful way in another country, that's something to watch. If good things have happened in other countries, either on the inflation front, overall in financial services, or whatever, that's something that the United States and that the Federal Reserve can learn from.

I grew up in Germany, and in the 1920s, Germany went through a horrendous inflation. If you read the accounts of it today, you'd say it's amazing that anybody survived it halfway intact. For countries that have gone through high-inflation periods, essentially all bond holdings—all wealth denominated in fixed terms—was wiped out. Germany soon thereafter got into a big war. Historians are still fighting over whether the destruction of the German middle class in the 1920s was part of the reason for the radicalism that you saw in the 1930s. There's certainly some truth to that—maybe a lot of truth to that.

MR. SMALL. Are there features of the European Central Bank, the Bundesbank, or the Bank of England that you would say the Fed could learn from?

MR. HELLER. In many of the European countries—for example, in Germany and in the United Kingdom—you see a separation of the monetary policy function and the supervisory function. It shows that you can run a successful monetary policy without necessarily having the supervisory function as well. There are advantages and disadvantages in having both functions combined or having them separate. Maybe at different times you have a different weight given to these two factors.

In the United States, you have a whole panoply of regulatory agencies. Banks are free to choose a state charter or a national charter. That's our more decentralized system. The United States is a much larger country than any of the European countries. It's roughly the size of the

entire European Union (EU). There are various supervisory agencies in France, Germany, Italy, and so on. There are also some supervisory complications in Europe, just like the complications between individual states in the United States or different federal regulatory agencies.

The United States can learn from the European structure. Best practices are always something to keep an eye on. Therefore, it's important in the banking industry to identify best practices and to learn from the experience of others, good or bad.

MR. SMALL. You have observed the formation of the EU and some of the current challenges it faces with countries' fiscal policies.

MR. HELLER. Yes. The EU was, to quite an extent, a political accomplishment, where countries that had been at war with each other were suddenly part of the same union. People are able to move freely across borders, although it's not totally free. If you speak French, you don't have that easy a life if you move to Italy or to Germany. Even as the formal barriers to movement of labor have been eliminated, there are strong social barriers that still exist, barriers that don't exist in the United States. If you move from Kansas to Minnesota, that's just fine. You pack your suitcase and go. But if you move from Italy to Germany, you may still face some social barriers. But that aside, I think Europe has made a lot of strides.

In the establishment of the currency union, I would have gone slower than they went. I had my own scheme of how to get Europe more united in the currency area. That was not to adopt immediately a common currency, but to have each country's currency revalued so that all currencies in Europe would be exchanging one-to-one. One deutsche mark would be equal to one lira would be equal to one French franc, and so on down the line. For monetary policy, that would have put a tight restriction on the central banks within Europe, because they would have to maintain that par value. But it wouldn't have been a total straightjacket.

After a couple of years, people would have been willing to accept a deutsche mark at par with the French franc or with whatever currency it was, because it would trade at one-to-one. The barriers would have been slowly eliminated. When I said that to some people in Europe, I often got the reaction, "One deutsche mark equal to one lira? Never, over my dead body." But that's what we have now. One euro is exactly the same in Germany or in Italy, so the end result is the same.

But under my approach, it would not have been forced initially, and, very important, a country would still have had an out. Take the recent Greek crisis. If Greece wanted to leave the EU, it still had the drachma. Greece could have said, "Now the drachma is worth only 50 cents" or half as much as one unit of the other currencies. That door would still be open—leaving the EU—in an extreme situation for political or economic reasons. A country would be able to break out of the system as opposed to how it is now, where a country is not able to break off without major upheaval. I thought that would have been a nice in-between step before moving to a total currency union.

MR. SMALL. It's a little hard to look at fiscal policies, both in Europe and the United States. How much does that worry you? Do you have any ideas on how to address that? Deficit spending, in both Europe and the United States, seems to be very large.

MR. HELLER. The Europeans seem to be more serious about addressing the deficits than we are. At the present time, the United States is painting itself into an extreme corner. I don't see any easy way out of the fiscal dilemma with the existing legislation and if current spending trends continue. Spending trends are going to get even worse once the health-care reform law totally kicks in. The federal government will be subsidizing a lot of the health-care payments to be made by people who will have insurance starting, I think, in 2014. So we'll see

an even larger increase in federal spending. At the same time, baby boomers are starting to retire, and federal spending on Social Security and Medicare will increase rapidly towards the end of this decade. If you project that out, the deficit is getting bigger and bigger.

We don't have a revenue problem, we have a spending problem. Federal spending, as a percentage of GDP, will reach levels that have not been seen since World War II. Federal revenues are roughly in line with what they have been over the decades. At the moment, federal revenues are a bit depressed, but the projections are that they will be a little bit higher than the average of the last decade. We need to start turning the rudder around and reduce spending, reduce some of the benefit programs that we have at the federal and at the state level right now. The states have huge deficits. California just announced that it is going to furlough people. The state is probably not going to pay its bills anymore. Last year, California paid its bills with IOUs. How is that any different from Greece? It's no different. We are moving rapidly towards a major fiscal crisis unless we take extremely strong actions now.

A Satisfying Life

MR. SMALL. What's on your own agenda?

MR. HELLER. Well, I'm having a very good life. I have had a satisfying career with lots of interesting jobs. I'm grateful for having had the opportunity to move between academia, government, international government—like the IMF—and the private sector. There aren't many countries where you can do that as easily as in the United States. I have been very fortunate indeed. I came to the United States as a student with two suitcases. I wanted to stay here for one year, but I liked it, so I'm still here. The welcome has always been wonderful. I married a lady from California, and we have two children. They have successful careers. And I have two grandchildren running around. All is well in that department.

I don't have a real full-time job anymore. I'm still involved with a lot of boards. I'm on the board of a bank with a billion in assets, the Bank of Marin. Thank God, it's a healthy bank, and it is growing. I think the bank was rated number 40 among all the small banks in the country recently, according to one yardstick. I'm on the board of a car retail [rental] company, which is very successful, after having lived through some trying times a year or two ago. The automobile industry as a whole went through a big crisis.

I'm on a couple of boards for small private companies. And until a few weeks ago, I was the chairman of Marin General Hospital, which went back to public ownership. In our little community, in a microcosm, we went through the entire debate that you have on the national scene: whether the public sector or the private sector should be the main driver in the health-care system. Our fights over health-care restructuring were just as tough as the fights on the federal level.

I'm still associated with San Francisco State University through a little institute that basically worries about San Francisco Bay and does research on the Bay: It studies the fish, the water streams, the tide lands, and so on. I am also the commodore of the San Francisco Yacht Club. That's great fun.

So I'm involved with the community and with business, but I don't have to punch a time clock anymore, and that is great.

MS. FOX. Thank you for your time.

MR. HELLER. It's a pleasure to be here. I could do a 14-year term—I've got the time now. [Laughter]