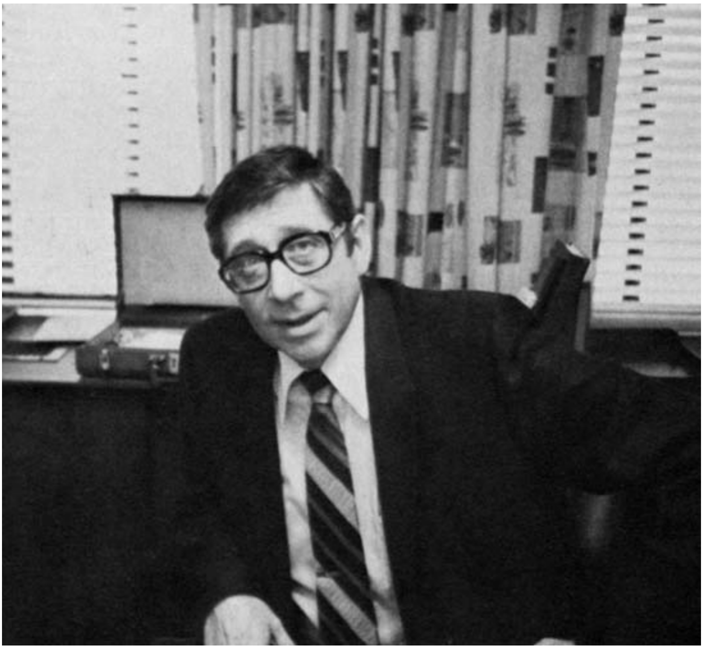
A Tribute to
Ted Balbach

This memorial booklet is a collection of remarks presented at a Federal Reserve Bank of St. Louis symposium held on March 3, 2008, in Ted Balbach's honor; also included are contributions of letters and testimonials from Ted's friends and colleagues.

This collection was compiled and produced by the Research Division of the Federal Reserve Bank of St. Louis. All remarks are attributed to their respective authors—and we are grateful for their contributions—though they do not necessarily reflect official positions of this Reserve Bank or any part of the Federal Reserve System.

"Of the many economists that I have met, Ted Balbach occupied a very special position. More than anyone else he always told it straight…His professional ability was only exceeded by his intellectual integrity. We who had the good fortune of knowing Ted will miss him greatly."

—Murray Weidenbaum,
Edward Mallinckrodt Distinguished University Professor and Honorary Chairman of the Murray Weidenbaum Center on the Economy, Government, and Public Policy at Washington University in St. Louis



Ted Balbach: In Memoriam

by Allan H. Meltzer

Ted Balbach was my friend and fellow worker in the small cohort that worked to improve monetary policy in the 1970s. As most of you know, Ted came to the United States after World War II. He managed to survive the war and the vicious murders known as the final solution.

I first met Ted in the winter of 1952 when I enrolled in graduate school at UCLA. Karl Brunner, then a new assistant professor, offered a course in logic and scientific method. It was a subject he loved, and his enthusiasm brought the material to life. The next fall I joined the teaching assistants and took an economic theory class with Armen Alchian. To put it mildly, it was a puzzling class. We used a textbook by George Stigler. Alchian lectured from Milton Friedman's notes that had been collected by two of his students. None of us knew about Friedman's notes. Trying to relate the lectures to the reading material was a problem.

After each class we went back to the teaching assistants' office where Ted would try to explain what the lecture had been about. After 55 years, I can recall those sessions and remember how much they helped. Ted could make far more sense of the lecture than I could.

Ted was a leader, primus inter pares. He loved to tease Walter Oi, but he helped all of us. The next year, I believe, he was drafted into the army. By the time he returned, I was off to France to work on my dissertation.

Most of the teaching assistants had very little income, but we socialized a lot. There were frequent parties and lots of fun to relieve the anxiety that is an ever-present part of doctoral education.

Ted married Rae and taught for 15 years at California State University at Northridge. One of his students, Jerry Jordan, describes him as an extraordinary teacher. In 1975 he replaced Jerry as senior vice president and director of research at the St. Louis Fed.

Ted wrote a few papers including a paper with Karl Brunner that was the forerunner of the famous Andersen-Jordan paper showing the relative effect of money growth and fiscal measures on GNP growth. During Ted's years as head of research, the department established its reputation as a main center for research on the role of money.

Although Ted and I remained friends, we were geographically far apart. I do not know much about the details of his career, so I plan to talk about his struggle to change monetary policy in the 1970s.

It may be difficult for today's economists to recall some of the disputes of that period. James Tobin had persuaded policymakers and many economists that prices would begin to rise before the economy reached full employment. He said that the way to control inflation was to impose guidelines for wage and price increases. This mixed price level changes with rates of price change—inflation. It took about 20 years before policymakers replaced Tobin's maxim with the claim that low inflation contributed to growth, even that it was necessary for sustained growth.

Other harmful beliefs that have since disappeared were: (1) there was a permanent tradeoff between unemployment and inflation; (2) nominal interest rates did not fully reflect the expected rate of inflation; (3) eurodollars permitted banks to escape restrictive monetary policy; (4) velocity growth was highly variable, so money growth was a poor predictor of inflation; and (5) excess or deficient money growth was usually caused by unanticipated shifts in the demand for money. There were other issues, for example, about exchange rates, but this sample suggests that basic issues were disputed with a majority of economists on the wrong side.

Ted's principal tasks were to maintain and guide the excellence and excitement of the research department, to protect it from internal and external threats, and to educate the presidents. Less than six months after Ted became senior vice president, Darryl Francis retired as president. His successor Larry Roos was a local politician with some banking experience. Arthur Burns wanted someone to silence criticism from St. Louis. Ted took on the task of educating him in monetarism. He succeeded. After seven years, Roos retired. His successor, Ted Roberts, did not stay very long. In June 1985, Tom Melzer became president.

After each class we went back to the teaching assistants' office where Ted would try to explain what the lecture had been about…Ted could make far more sense of the lecture than I could.

Ted succeeded in getting each of the presidents to respect the work of the research department, the staff's analysis, and his analysis and interpretation. This sounds easier than it was. Surprisingly, he succeeded even when his personal relationship with the president was less than cordial.

I draw much of my conclusion about his success as a teacher from reading the transcripts and discussions of open market committee meetings. There I found presidents Roos, Roberts, and Melzer reading opening statements that could have been written or edited by Ted, as I suspect many of them were. But I also find less precise but, nevertheless, broadly consistent statements in the discussions that followed. The presidents absorbed his lessons. Each had a different personality and different interests. A good teacher learns to work with and influence many different students. Ted was able to get through enough so that each of his presidents could speak with conviction about the rate of money growth, the importance of inflation control, and the need to maintain steady and persistent efforts to sustain growth and reduce inflation.

The St. Louis view of monetary policy was not directed solely at achieving and maintaining low inflation. Ted's statements are more balanced. They urged moderate and stable monetary growth in place of the prevailing stop and go policies. They usually recognized that large short-term deviations did not do much damage, if they didn't continue. Their policy accepted and urged others to achieve the two main objectives—stable growth and low inflation. In a 1977 FOMC meeting Larry Roos described the goals of monetary policy as including maintaining economic growth and keeping unemployment at a reasonably low level. St. Louis's presidents often urged concern for both objectives all the time, instead of swinging from heightened concern about inflation to heightened concern about unemployment. They never succeeded in getting this more balanced approach adopted. I do not think we have succeeded yet. Below, I will offer an explanation.

As time went on, events proved Ted and other monetarists right more often than wrong. Although policy did not change, the view gained occasional adherents. At times, the Federal Reserve committed to a policy of lowering inflation. Members swore to themselves and each other that they would persist. When the unemployment rates ticked up, they forgot their pledges and let money growth rise. Does this sound familiar? Last July's concern about inflation seems to have vanished in haste when the unemployment rate moved from 4.7 percent to 5 percent this January.

During Ted's years as head of research, the department established its reputation as a main center for research on the role of money.

Slowly monetarist ideas gained attention in the 1970s. Several members of the FOMC recognized some of the principal problems with operating procedures. They mentioned uncertainty, inaccurate forecasts, the problem of distinguishing permanent or persistent changes from temporary changes. Governor Sherman Maisel chaired a Committee on the Directive that advocated more and better control of reserve growth. His committee and his successors on the committee on the Directive proposed restrictions on reserve growth. These efforts were never successful. President Roos, Henry Wallich, John Balles, and others pointed to the tight control of interest rates as a reason for poor monetary control and urged a wider interest rate band. It didn't happen. Balbach's teachings were heard, but not applied. Even the atheoretical McChesney Martin commented at one point on "the difficulties which men have to distinguish the permanent from the temporary."

One of the lessons of the 1970s is that a country that cannot tolerate a small recession eventually accepts a large recession to reduce inflation. When policy switches from a balanced path to focus exclusively on avoiding recession, markets recognize that the monetary authority is unlikely to persist in anti-inflation policy. Price and wage changes incorporate the information. An anti-inflation policy becomes harder to achieve. Expectations work against the monetary authority. The combination of rising unemployment and rising inflation is called stagflation. The name suggests the apparent mystery that market participants see. There is no mystery—just the expectation that Federal Reserve policy will bring higher inflation.

Ted Balbach saw the problem in the 1970s. As inflation worsened in late 1978, Larry Roos asked his open market colleagues whether the FOMC set its economic objectives or its monetary objective first. Then he asked whether the Federal Reserve members agreed on their ultimate economic objectives and then implemented a monetary policy to achieve the objectives. These questions probably came from Ted.

The answer should have been *No*. The Board's staff made its economic forecast without using any assumption about money growth. Other FOMC members ignored the question. It would be useful to ask the same question now. The apparent answer is that the Federal Reserve wants to avoid a possible recession even though it does not predict there will be one. And like the IMF, the CBO, and many others, it forecasts that 2008 will have positive growth.

My answer to the Balbach-Roos question is that the Federal Reserve has again sacrificed its independence by yielding to pressure from Congress, the administration, and the Wall Street traders. They act as if a solution to problems brought on by negative real interest rates is a return to negative real interest rates.

I understand the pressures they are under. They are the pressures that Ted faced repeatedly. It is an election year. Wall Street traders hope that prices of their portfolio assets will rise with lower interest rates. Chairman Bernanke's phone must ring persistently with calls for help. The Federal Reserve was made independent in 1913 to protect it from these pressures.

The Federal Reserve forecasts that inflation will fall in 2009. Why worry? I hope they are right, but the forecasting record is not comforting. In the 1970s, forecasts underpredicted inflation for 16 quarters in a row. The only overprediction came when inflation declined in the 1980s. Recall that the two most successful Chairmen, Paul Volcker and Alan Greenspan, did not find staff forecasts useful and claimed not to use them. Recall also that the Board's staff continues to rely on a Phillips curve to forecast inflation. A long list of economists concluded that Phillips curve forecasts are unreliable mainly because we lack accurate measures of the natural rate.

Inflation is much lower now than in the first years Ted served as senior vice president. The deflator rose 7.6

percent annual rate when he was appointed. It reached 12.1 percent five years later.

Will history repeat? My guess is that it will. Opposition to current policy seems muted. I hope I am wrong, but history is not comforting. There is frequent clamor for lower interest rates. Clamor for increases is rare.

Ted succeeded in getting each of the [St. Louis Fed] presidents to respect the work of the research department, the staff's analysis, and his analysis and interpretation.

The simple explanation of why inflation persisted and rose on average through the 1970s is that the Federal Reserve did not sustain actions that would end it. "That was basically political," Steven Axilrod told me. Herbert Stein said the same. The Federal Reserve started several times to lower inflation. It was aware that its actions on average increased inflation. At times it brought the inflation rate down, notably in 1976 during the Ford presidency. It did not maintain independence. The election of President Carter on a promise of more job creation and more expansion ended disinflation. Although Burns criticized the new administration's fiscal plan, the Federal Reserve did not want to be accused of undermining the expansion. Ted and his president resisted but were out-voted.

There were many reasons for not insisting on independence and low or zero inflation. At the time the public did not regard inflation as a major problem, and many in the Congress reflected that attitude. Except for the start of the Gerald Ford administration, reducing unemployment dominated reducing inflation in policymakers' minds. The Ford administration's program to "whip inflation now" gave way under popular and Congressional pressure once recession started. Congress and successive administrations interpreted the Employment Act of 1946 as a commitment to full employment, defined as a 4 percent unemployment rate. Low inflation was not mentioned explicitly in the Employment Act.

In his 1979 Per Jacobsen lecture to the IMF in Belgrade, Arthur Burns recognized that he lacked political support for slowing money growth to end inflation. He was not willing to insist on independence to carry out the central bank's responsibility to maintain the value of money. His failure was not the first time the Federal Reserve had chosen not to rely on its statutory independence to change policies. In the late 1940s, it chafed under the policy of pegging interest rates, but it did not act until after Senator Paul Douglas showed support for independent monetary policy and brought many colleagues along. The Martin Federal Reserve engaged in policy coordination, thereby financing a rising budget deficit by issuing money.

Ted Balbach was a hero. He was willing to insist on a less inflationary, more balanced approach to monetary policy… He persisted despite the opposition.

Although many members agreed with Ted that reducing inflation required consistent long-term action, there is scant evidence of longer-term planning. Discussion at FOMC meetings was often between those who favored and opposed raising the federal funds rate an additional 0.12 or 0.25 percentage points. The staff did not consider expectations when making its forecast, as Lyle Gramley noted at one point; expectations entered the member's discussion mainly as evidence of public attitudes and concerns.

The record of the 1970s showed that inflation and unemployment rose together, on average, propelled by expectations of inflation. These errors did not shift concern from quarterly near-term changes to longer-term implications of the FOMC's actions. Some recognized, as Ted had, that FOMC actions had little effect on near-term changes and major effect on the maintained rate of inflation, but this occasional recognition did not lead to changes in procedures.

One important consequence was the failure to distinguish between permanent or persistent problems and transitory or short-term events. The oil price increases in 1973 and 1979 were the most notable examples. In part a result of its short-term focus, the System in the 1970s did not distinguish the one-time price level change induced by the oil price increases from the persistent inflation induced by its policy. The former was real, the latter monetary. If the Federal Reserve had held a coherent view of its objective, it might have recognized that preventing a one-time price level change by reducing aggregate spending worked to stabilize the price level at the cost of recession. Controlling money growth worked to lower inflation and expectations of inflation. Ted argued for controlling money growth to control sustained inflation.

Rising unemployment and inflation did not protect the Federal Reserve from Congressional legislation. Congress found its performance less than satisfactory. It legislated objectives and required more reporting and oversight. The 1970s like the 1930s suggest that poor performance is a greater threat to Federal Reserve independence than effective action to maintain stability.

Despite its problems in the 1970s, the members of the FOMC never discussed how their actions affected inflation and output or whether they could agree upon a framework for improving performance. They argued many times that lower average money growth was necessary to control and lower the inflation rate; they were unwilling to let interest rate variability increase. No one suggested bold, decisive actions to end inflation.

Ted Balbach was a hero. He was willing to insist on a less inflationary, more balanced approach to monetary policy. He was not alone, but he was outnumbered. He persisted despite the opposition. And he was fortunate to see the turnaround when Paul Volcker used the arguments that he had written so often for the presidents he served. Volcker even called himself a practical monetarist.

For me, and I believe for Ted, in 1807, Henry Thornton gave as good a definition of practical monetarism as one can find.

> The policy of the central bank should "limit the total amount of paper issued, and to resort for this purpose, whenever the temptation to borrow is strong, to some effectual principle of restriction; in no case, however, materially to diminish the sum in circulation, but to let it vibrate only within certain limits; to allow a slow and cautious extension of it, as the general trade of the kingdom enlarges itself…To suffer the solicitations of the merchants, or the wishes of government, to determine the measure of bank issues, is unquestionably to adopt a very false principle of conduct.

The European Central Bank is more independent than the Federal Reserve. To date its policy reflects its greater independence. It has pursued both policy goals and has not abandoned its commitment to low inflation.

Ted Balbach fought hard for the Thornton principles. He taught his presidents to honor those principles. In more than 90 years, the Federal Reserve rarely achieved reasonably steady growth and low inflation. The years 1923 to 1929, a few years in the 1950s and early 1960s, and the long period from about 1985 to about 2004 are its best years. Let us hope the policy of 1985 to 2004 and its benefits will return.

While writing the history of the Federal Reserve, I learned that Federal Reserve policy was best in the post-war years when the administration respected independence. The Eisenhower, Reagan, and Clinton years stand out. Most of the rest of the time, the Federal Reserve sacrificed its independence. It is doing so again. To his great credit, Ted fought against it then and, I believe, he would do so again.

Allan H. Meltzer is the Allan H. Meltzer University Professor
of Political Economy at Carnegie Mellon University

Christmas in Lithuania

Due to my old age and thirty-some-odd years' absence from Lithuania, memories are somewhat dim. Some things stand out vividly, however, but I don't know whether these traditions and events are unique to Lithuania or simply things of thirty years past.

Since the country is overwhelmingly Roman Catholic, the centerpiece of Christmas is a midnight Mass, always celebrated with great pomp and circumstance. December 24th is a day of fasting concluded with a meatless dinner at a table covered by straw or hay. To me, Christmas spirit was most obvious just prior to the Mass. If you can imagine a snow-covered countryside ten degrees below zero and hundreds of horse-drawn sleighs with bells moving toward churches, you get the idea. And I don't remember a single Christmas when it wasn't clear and still.

The morning of Christmas day was devoted to children who found their presents under a Christmas tree. After that, products of several weeks of cooking—hams, suckling pigs, all the trimmings, cakes, and sweets—were piled on the largest table in the house and festivities started. Contrary to the traditions here, families did not stay together. Male members would go visit friends and neighbors, as many as they could, eating at every house and washing it down with substantial quantities of vodka. This would continue through the 26th. Meanwhile the ladies would struggle to keep tables piled high and compete in their culinary prowess.

After two days of such activity, I doubt that much was accomplished until after New Year's.

—Ted Balbach,
from the November/December 1975 issue of the Federal Reserve Bank of St. Louis Eighth Note

Anatol "Ted" Balbach, 1927-2007

Ted Balbach was born in Kaunas, Lithuania, on October 31, 1927, and arrived in the United States with his mother in 1948 after World War II. He had a long association with the Federal Reserve Bank of St. Louis and was admired for his service, leadership, and integrity.

Ted served in the U.S. Army from 1955 to 1957. He subsequently finished his doctorate in economics at the University of California–Los Angeles and taught for 15 years at California State University–Northridge. In 1971, he joined the Bank's Research department as a visiting scholar and became a staff member in 1973. He became director of research in 1975.

Ted died in St. Louis on December 1, 2007.

Bank president William Poole came to know Ted and his wife, Rae, during the 1970s: "Ted continued and strengthened the St. Louis Fed research tradition developed and nurtured by Homer Jones, and Ted's leadership helped to establish the Homer Jones Memorial Lecture in 1987. Ted and Rae were especially gracious to my wife, Gerie, and me when we arrived in St. Louis in 1998, and, over the years since, the four of us enjoyed many good meals together. Ted's passing is a personal loss to me, as well as a professional one."

1973

During his tenure, Balbach fostered contacts with central banks around the world, and numerous economists from Europe, Asia, and

South America spent year-long exchanges at the St. Louis Fed. Current research director, Bob Rasche, met Balbach when the two were visiting scholars at the Bank in the early 1970s: "Ted was the principal economic advisor to the Bank's president when the Great Inflation took place. At that time, the St. Louis Fed was one of the few Banks, if not the only one, on the FOMC arguing for low and stable inflation—and arguing that the Fed must be the agent through which low and stable inflation would be achieved. He provided key support while the Fed brought inflation under control."

Following his retirement, Balbach consulted for Fiduciary Asset Management Co. He is survived by his wife of 49 years, Rachel (Rae), and sons Bruce and Adam.

Ted Balbach: Colleague

by Robert H. Rasche

I first encountered Ted Balbach in the late spring of 1971. I say "encountered" because I didn't actually meet him, or have any personal or professional contact until several months later. I had agreed to visit the Research Department at the St. Louis Fed for nine months, beginning in September 1971. My wife, Dottie, and I rented an unfurnished apartment with a 12-month lease starting in June. Ted was also visiting the Bank, but for 12 months starting in June, and had rented a Wash U faculty house for 9 months but starting only in September. Jerry Jordan was the very visible hand that brokered a deal whereby Dottie and I became Ted and Rae's landlords for those extra three months. In spite of that relationship and the cheap rented furniture, we remained good friends over the years!

The period of 1971 to 1972 was an exciting time (at least for economists)! In August 1971, President Nixon invoked wage and price controls and appointed Fed Chairman Arthur Burns head of the Council on Interest and Dividends. Researchers at the Bank engaged in intense and exciting discussions, frequently involving President Darryl Francis, about the wisdom of the controls, the conflict of interest inherent in Chairman Burns's multiple roles, and the necessity of monetary restraint to control the accelerating inflation. Ted jumped into these discussions as an ardent anti-inflationist and an equally ardent free-marketeer!

Ted also revealed his skills as a professional mentor at that time. I recall him enlisting me into a joint effort to nurture Denis Karnosky into the completion of his dissertation. Later in the year, when I was on the job market, we had discussions of the virtue of academic vs.

nonacademic jobs and "good" vs. "bad" academic environments. At the time, I was a young assistant professor and Ted was an experienced professor and administrator at Northridge. He provided a lot of valuable insight. At the end of the year, we went off to Michigan and Ted and Rae returned to California—my expectation was that we were off on our separate academic paths.

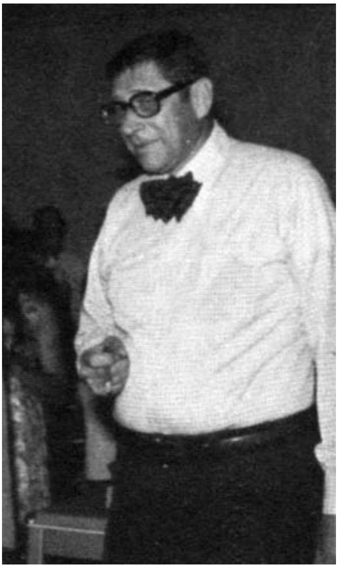
I was really surprised when Ted—the Californian—returned to St. Louis and the Bank the following year. In 1975 Ted took over as director of research. A year later, Darryl Francis retired as Bank president and—much to everyone's surprise (I think)—Larry Roos, a noneconomist and former politician, was appointed his successor.

Ted convinced me to return to the Bank from 1976 to 1977. At that time price controls for the most part were gone and the Great Inflation was intensifying. The debate within the Research Department involved trying to understand the impact of the 1973-1974 "oil shock" on the economy and inflation in particular.

Researchers at the Bank engaged in intense and exciting discussions… Ted jumped into these discussions as an ardent anti-inflationist and an equally ardent free-marketeer!

In my judgment, perhaps Ted's greatest professional achievement was that, in the late 1970s and early 1980s, President Roos consistently argued the "St. Louis line" that monetary restraint was necessary to control inflation and restore price stability. He spoke out at FOMC meetings and in public forums. There are 38 Roos speeches between 1976 and 1982, most of which addressed the inflation problem and the necessity of restoring price stability. I am not sure how Ted pulled this off, but I believe, from reading FOMC transcripts of the late 1970s and early 1980s and the Roos speeches, it is a fair conclusion that Ted, the ardent anti-inflationist, was speaking through the voice of President Roos, both at the FOMC table and in the public speeches.

During Ted's tenure as director of research, a lot of young economists joined the staff of the department. Only a few remain here from those years, but those who left for other jobs have well established careers. This says a lot about the mentoring and professional environment that Ted provided to nurture these colleagues. Ted had some really good skills that he applied in his role as director of research. I vividly recall his repeated question "what's the hypothesis?" Another was his persistent questioning of the use of "may." Typically upon reading or hearing this word his response was: What difference it would make if "may not" was substituted!



1974

Ted retired in 1992 and tried to twist my arm to apply for the job as his successor. His tremendous power of persuasion did not prevail, at least until 1998!

Dottie and I have many pleasant memories of spending time with Ted and Rae over the years. Even after our stint as their landlords, they were gracious enough to host me for weekly dinners the semester I taught an evening course at Washington University. We enjoyed a lot of fun parties with economists (yes, believe it or not!) at the Balbach residence in Kirkwood from 1976 to 1977. There was a Saturday construction adventure supervised by crew chief Denis Karnosky at the Balbach residence during which a redwood deck was added off the family room. It was of utmost importance to Ted that the deck be constructed of redwood (again the California connection)! The rest of us likely were more concerned about the supply of beer than the redwood! When I returned to St. Louis in January 1999 as an "orphan," Ted and Rae again generously hosted weekly dinners in Des Peres until we fully relocated here.

Over the years, Ted was a mentor, confidant, colleague, and close friend. Deep down he was a warm, supportive, caring, and generous person. Certainly for Dottie and me, and likely for everyone acquainted with Ted as well, there is now a huge void that cannot and will not be filled. Ted was an irreplaceable friend who is and will be sorely missed, but who will be well remembered.

Robert H. Rasche is a Senior Vice President and
Director of Research at the Federal Reserve Bank of St. Louis

Ted Balbach: Mentor

by Rik Hafer

Back in the Spring of 1979, when I was planning my limited number of fly-outs, several of my faculty advisors suggested that I should not consider going to a Fed bank. Of course, I did not listen to them and visited St. Louis.

I recall going through the usual interview process: Meet a few staff, a seminar that was more the economists in the audience arguing between themselves than me presenting; lunch *promptly* at 11:30 (if your seminar wasn't quite finished it didn't make any difference); and, at the end of the day, meeting with Ted. Ted and I talked about what research I wanted to pursue working at the Bank, and then he stunned me by making me an offer. Of course I played it coy, asked for a week to decide, but I knew then and there that this is where I wanted to work.

(By the way, three of the four faculty who advised me against taking the job all ended up working at Fed banks. The fourth just didn't move.)

The late 1970s and early 1980s was a unique time in the Research Department. The Fed had announced a change its operating procedures in October 1979, one that seemed to give more weight to the monetarist view. We in the department felt a sense of ownership, a sense of carrying on the well-earned reputation that the St. Louis Fed had inside and outside the System. While some celebrated the Board's announcement, Ted cautioned us that there was still much work to be done.

Ted fostered a competition of ideas. Under his leadership we were exposed to some of the best economic minds and some of the newest ideas in macro-money research. Whether it was at one his and Rae's celebrated parties, at the Bank, through travels to conferences, or through the parade of visiting scholars passing through the department, there was always someone to bounce ideas off and learn from. Ted sent us out to conferences, both here and abroad, and to System meetings that expanded our exposure to other ideas and to other economists. As one who came from a school not known for its macroeconomic tradition, such exposure was more than I ever could have imagined.

Other than the occasional article, Ted's involvement with research came in "managing" the research process. He encouraged what I could politely call "debate," although the debate often occurred in a downright nasty, invective-filled event called a "review meeting." Cliff Stone acted as wrangler, a job for which he should have received hazard pay. I know you might find it amazing that a bunch of PhDs would behave in such a manner, but that was our style.

If this sounds quasi-dysfunctional, you should also know that after excoriating each other's work we all went to lunch together. On Friday nights we found ourselves, as a group, at one of the nearby bars. (Porticos was the favorite: cheap drinks + free appetizers = economist's paradise.) That was the culture Ted fostered. (He went out with us, too.)

The review process forced us to marshal evidence to support whatever position we took—or to reconsider our claim. It was a team-like effort that improved the collective research output of the department, a collaborative venture that many academics seldom encounter.

Ted's key role in the process came after the dust had settled. I remember some of the early articles I wrote for the *Review*. After going through the process you might be asked to visit him in his office to discuss your paper. Ted, sitting behind his big desk, would prompt you to explain your paper. That would launch you off into a discussion of some snazzy new econometric technique you found, how it was perfect to use on this or that data and how, well, don't the results just speak for themselves? If you could just get it past Ted, you were sure that this was a definite hit: If Google had existed, the paper would generate hundreds of hits.

If you had been paying attention, however, you would have seen that Ted had lapsed into the tired look of a late-night desk clerk at a dingy interstate motel. After listening politely, Ted would, peering over the massive framed glasses that unfortunately were popular in the 1980s, utter *the* question: "But what's the hypothesis?" You'd think to yourself: Didn't I just explain all that?

Ted was at least 50, so maybe talking slower would help? You'd take another lap through the econometrics, the results, etc. With an even more tired look, Ted would ask, speaking slower, "What…is…the…hypothesis?!" If you still looked dumfounded (as I often did), Ted would suggest that you think about your paper and come back. Until then, the paper would remain in limbo.

On your way back to your office, you'd mumble complaints about the silly review process and wonder why Ted didn't understand economics. Even so, you'd refine the hypothesis being tested and schedule another meeting with Ted. It took a few meetings but you learned that, when talking to Ted, you had better focus on the *economics* of the paper, not the econometrics (or the math). Unless it was the third or fourth paper on money demand, Ted would smile, give you a mental pat on the back, and send you on your way. Now the paper could appear in the *Review*.

I don't think anyone really enjoyed the review process, at least not as an author. And when it came to meeting with Ted, you always feared "the" question.

Now, almost two decades later, when my students come by to discuss their term papers, I listen intently and, when they are done, ask: "But what is the hypothesis?"

Rik Hafer is a Distinguished Research Professor and Chair of the Department of Economics and Finance at Southern Illinois University at Edwardsville, and a former Economist at the Federal Reserve Bank of St. Louis

Ted Balbach: Advocate

by John A. Tatom

I met Ted Balbach in 1975 in a job interview. I was fortunate to have studied with some top monetary economists that Ted held in high regard. While this was helpful in obtaining an interview, it was not enough. After joining the Federal Reserve Bank of St. Louis, I learned that what landed me both an interview and a job was my rudimentary, but persistent efforts to do economic research while teaching a heavy course load at a couple of small liberal arts colleges. My experience was not unique. Indeed, this was a pattern for Ted. He took in hard-working economists who had worked at small colleges or teaching universities. Of course there were notable exceptions, as some new staff members were hired directly from top-tier universities, but by and large Ted looked for evidence of hard work and commitment to, and at least limited experience in, research. In his recruiting and in many other aspects of his work, Ted was a "small-d" democrat.

My earliest and deepest memory of working for Ted is that he left you alone to do your work, but he demanded results. Ted was an excellent economist and he was able to encourage good work by asking tough questions. He was challenging, but he was also supportive and patient in drawing out the sometimes fuzzy new thoughts or even more obscure emanations of his staff economists. I fondly recall many heated brainstorming sessions with groups of colleagues in his office that went on for hours and centered on key monetary research. Deciphering how to best communicate these ideas was also a critical, if not central, focus of these discussions.

My best example of Ted's support and leadership of his staff is his response to the Board of Governors' pressures on the Bank's publications. All articles published by the District Reserve Banks were reviewed by the Board. Not surprisingly, there were several instances when Board staff raised almost prohibitive objections to articles, in the sense that the cost of revisions became so high as to raise questions about the desirability of publication and whether an article would be hopelessly gutted of content if the Board's recommendations were followed. In one particular case, the Board staff attempted an effective "pocket veto" of one of my articles by escalating the issue to the Chairman, who failed to act on it for three to four months (the normal review period was about two weeks, as I recall). The article was on the effects of financial innovations, specifically new accounts such as money market deposit accounts and NOW accounts, on the measurement of monetary aggregates and the implications for monetary policy. Some bosses, facing such a response "up the line" in their organization, would fire the offending researcher, or at least make apologetic offers to remove any offending components and demand prompt action by his staff. Not Ted. He stood behind his staff, especially on the fully vetted research that had been through his rigorous review process. Of course, he insisted on staff making changes that improved the papers, but that decision was ultimately his and based on the author's and staff analysis.

Not only did he stand behind his staff, he also took such challenges to the next level, persuading his president, Lawrence K. Roos, to support the staff and, in this case, to break the logjam with the Board, even though it meant confronting Chairman Volcker. I do not know the details, but, following a trip to attend a Federal Open Market Committee meeting during which Roos was to meet with the Chairman and Ted was to take up the issue with the head of the FOMC staff, the article was returned to the Bank and it was published. I knew that Ted's leadership was special and that all of the staff were very fortunate to have his leadership, but I did not fully appreciate how unusual and risky it was until later when I learned of the more normal practices in other District Banks and more generally in the private sector.

As a director of research, Ted did not compete with his staff or feel the need to dominate or outshine them. He did not suffer prima donnas well, as he would often point out, but he knew they came with the territory and he knew how to manage them. In today's terms, Ted was a team builder. I think he was amused by occasional outbreaks of intense competition among the staff, but he knew that it energized the staff and the research process. More importantly, he kept his focus, and ours, on getting good work down on paper and out the door. He always had an eye to building an institutional understanding by both staff and the Bank's leadership of the latest work in the research department.

Ted strongly promoted the research department outside the Bank. He built strong relationships with central banks around the world, he made sure that staff economists had opportunities to present their work abroad, and he invited foreign researchers to visit the Bank for longer-term stays. These visitors contributed a great deal to the atmosphere and the spirited discussions in the department. Their visits benefited their home central banks and their own human capital and reputation; often they led to publishable research. Perhaps more importantly, visitors broadened the St. Louis staff's knowledge of foreign monetary policy issues and experience

With visitors from China, 1985

and not infrequently led to reciprocal visits and new research partnerships. These experiences were critical for the Bank's staff development, enhancing the reputation of the department; and they were a great reward for staff work. A European central bank tour that Ted often facilitated for successful young new researchers was tremendous in allowing these new Bank economists to gain a broader perspective of monetary policy and research around the world, to build their own reputations, and to establish deeper research ties for themselves and for the Bank among foreign central banks.

Ted often remarked that strong public support for our research was important for Fed independence and for the support of the diverse research groups within the Fed.

Ted demanded high-quality and timely work. He was excellent in forcing economists to simplify and clarify their hypotheses and to honestly evaluate their results. He did this through strong probing of what each paper's hypothesis was; what were the essential theoretical foundations of the hypothesis; and what was the evidence, the quality of the evidence, and its limitations. He had a keen focus on why each of us conducted the research we did, what it meant for monetary policy or for policymakers, and why it was important for them and for the public.

Ted's first responsibility was clearly to support his president. He educated four of them, though they initially had widely varying levels of knowledge of economics and of monetary policy, with Darryl Francis already having a strong international reputation as a leading policymaker. Working closely with Ted, at least two of the others distinguished themselves as influential monetary policy leaders. They also became important public spokespersons for the Federal Reserve on the conduct of monetary policy, the pursuit of price stability, and the importance of money stock control to achieve it.

Fed research serves a critical public educational responsibility, in Ted's view. He gave many speeches besides those he wrote for his superiors. He pushed the economics staff to write what he called "Level 1" articles intended to educate a lay, non-economist audience about fundamental issues of concern for monetary policy, such as how policy can work and how it may not; the importance of the monetary base and its control, especially for achieving and maintaining price stability; and the nature and costs of inflation. Ted often remarked that strong public support for our research was important for Fed independence and for the support of the diverse research groups within the Fed. He saw an external base of support as an important backstop for our budgetary and political support in Washington.

One minor example of his focus on the Fed's educational role and his desire for building an audience was his response to growing Systemwide pressures to price publications and events. Ted resisted pricing research services and events. He thought the public responsibilities of the Fed required free dissemination of data and research. He eventually gave in to paid subscriptions for the weekly *U.S. Financial Data* to cover only the mailing costs. Thank God for the internet because it removed the pressures to fully price the *U.S. Financial Data* and probably the other publications as well.

I remember Ted's last professional wish on stepping down as director of research. That wish was to understand why interest rate targeting had seemed to begin to work, at least in terms of holding down inflation, and what it was about the conduct of monetary policy that made that seem so. And what was the change in the relationship of interest rate targeting to monetary aggregate growth that made interest rate targeting appear to be more successful? I think many of his former colleagues continue to be preoccupied with those questions, perhaps in part due to the monetary policy record of the past 25 years or so, but also because of Ted's prodding.

Ted Balbach was a good man. He nurtured many economists and facilitated the creation of a substantial body of research. In doing so he was unassuming, genuine, and sincere. He was more than a boss to most of his staff. He was a friend, a father figure, and a mentor. He taught many of us how to work and how to play. Encouraged and supported by Rachel, he was an unpretentious bon vivant and a great host. His legacy includes a substantial body of work on monetary theory and policy and open economy macroeconomic policy. It also includes lasting memories as a role model, both as an intellectual leader in an economic policy research shop and as a friend and a citizen.

John A. Tatom is the Director of Research at the
Networks Financial Institute at Indiana State University, and a
former Economist at the Federal Reserve Bank of St. Louis

Testimonials

Ted hired me in 1979 to edit the Federal Reserve Bank of St. Louis *Review*. In my job interview, he warned me that there were several prima donnas in the department and that I'd have a hard time convincing them to accept my editorial comments. I pretended I was up to the challenge, and Ted offered me the job.

For the first six months afterward, I approached each economist with trepidation. Would this guy be one of the prima donnas? To my surprise, economist after economist accepted the vast majority of my suggestions. I finally asked one of the economists what was going on. He said, "Oh, didn't you know? Before you got here, Ted told us we had to accept all your comments unless you changed our meaning."

Armed with that knowledge and a major burst of adrenalin, I began running roughshod over economist manuscripts with my red felt-tip pen. I talked Scott Hein into accusing the Federal Reserve Board of unnecessary "hoopla" in his *Review* article. I talked Rik Hafer into using a Shakespearean reference in one of his titles. I sent out an interoffice memo on writing style and called myself "editorial kingpin." Did I improve the quality of the department's published work? I think so, but we can all argue about that over a beer or two, can't we? Regardless, I've never forgotten how Ted's support changed the way I approached my job. He gave me the confidence to do what I knew I could do.

I've talked to lots of editors around the Federal Reserve System over the years, and I can tell you that, in many Reserve Banks, they are not highly regarded. That's never the way I felt at the St. Louis Fed, however, and I owe that all to Ted.

—Dan Brennan,
Assistant Vice President, Public and Community Affairs,
Federal Reserve Bank of St. Louis

As one goes through life, there are certain people that you feel very fortunate to have known. For me, Ted Balbach ranks very high on my list.

I am especially grateful for the opportunities and support he provided. I grew professionally as well as personally because of Ted's interest and support. He created an intellectual environment that allowed me to be exposed to many of the brightest minds in the profession. Because of the importance he placed on the intellectual environment, he provided me with opportunities for travel, especially foreign travel, which I had never even imagined prior to coming to the St. Louis Fed. Moreover, he gave me management opportunities that have proven to be both challenging and rewarding.

Without question, Ted was a role model. He was a passionate economist. He was a strong advocate for the ideas and principles in which he believed. In many cases his ideas were not especially popular at the time; however, those ideas have been shown to be correct. Ted was also very adamant about communicating your ideas very clearly. Knowing your audience and using terminology and examples suited to them became one of the first lessons that I learned at the Bank. I also learned from Ted that economists could have very heated arguments, but at the end of the argument you were still expected to be friends. My first exposure to heated arguments at the Bank occurred during my job seminar. The irony is that, despite the fact that it was my seminar, I was simply an observer of a very lengthy argument between Jack Tatom and Gary Santoni over my job paper. At the time I was somewhat bewildered by what took place; however, such arguments soon became a common experience. Intellectual arguments were not limited to seminars. Some of the most heated discussions took place concerning potential *Review* articles. It took me a few times before I was able to fully accept the criticisms that my work was subjected to. It was especially difficult because you were expected to go to lunch with those who had just attacked you. It is a good thing that my attackers did not know many of my thoughts as I sat with a knife and a fork in my hands!

Another admirable characteristic that Ted possessed was tolerance. Given the variety of personalities in our department, tolerance was essential in order to keep the department moving forward. Ted always allowed you to be yourself. He allowed me to manage as I saw fit. Despite some gruffness at times—he barked but he did not bite—he was a very nice person. Ted treated everyone with respect. He was generous with his time and was truly interested in not only you but your entire family. As everyone knows, Ted and Rae were also fabulous hosts.

When I said that Ted treated everyone with respect, I did mean everyone. This respect was mutual. As I would walk down the hall, I would hear him say hello to many Bank staff and, with a smile, the usual reply would be: "Hello, Mr. Balbach." Bank staff respected Ted because he respected them.

I do have one other lasting memory of Ted and that memory is what I call the "Balbach look." This was a look that implicitly asked the following question: "Are you nuts?" I enjoyed observing this look when it was not directed toward me. At some point every economist was subjected to this look. Some were subjected to it frequently. Often Cliff Stone was around when this look was given. When Cliff thought the look was inappropriate, he would laugh (it was high-pitched and very distinctive) and attempt to set Ted straight. In my own case I have a vivid memory of Ted walking into my office with a copy of the *Review* that contained an article I had written. He gave me the look and said: "Why did you write on this topic?" I said: "Why did you approve the topic?" While shaking his head, he said: "I don't know. I don't remember."

—Cletus C. Coughlin,
Vice President and Deputy Director of Research,
Federal Reserve Bank of St. Louis

I first met Ted in the summer of 1985 as a visiting scholar at the Federal Reserve Bank of St Louis. He was director of research at the Bank, heading a bunch of energetic and enthusiastic researchers like Daniel Thornton, Cliff Stone, Gary Santoni, Michael Belongia, Jack Tatom, and others. At first blush he appeared authoritarian and distant. But, after a while I discovered that, although he strongly demanded reasonable performance from his researchers, he also cared about them as human beings and had a surprisingly good grasp of their individual strengths and limitations. In addition to formally being director of research, Ted was really captain of a team and a father figure to his researchers.

The research department at the time was not only a work place. Often after work hours or over weekends most of the researchers and their families would gather at Ted and Rae's place for animated and humorous discussions, wine and copious dinners. During such memorable social encounters, heretic views about the conventional economics of the time were often heard and jokes abounded. Ted and Rae were both the cooks, the hosts as well as central participants in those joyous events. After four rather hot months in St Louis, I returned to my home institution in Tel Aviv and did not see Ted for several years. But, to this day, I vividly remember and cherish the energy, joy, and togetherness of the summer of 1985 into which Ted's multifaceted personality was an essential input.

Over the years I saw Ted sporadically on various occasions, either in St Louis or in Israel, and befriended him. Inexplicably, since we saw each other rather infrequently, I developed a strong feeling of familiarity with him. Possibly this is due to the fact that Ted was born in Lithuania (which is also the birth place of my mother) and had immigrated to the United States after spending the Second World War in Europe, partly in a prisoner's camp. He had a perspective on how miserable life can be and had, therefore, a keen appreciation of the stability and opportunities offered by life in the United States.

Ted, you will be missed by many. May the remembrance of your basically good and full life, as well as colorful personality, offer some consolation to those who currently still mourn your departure.

—Alex Cukierman,
Professor of Economics, Berglas School of Economics,
Tel Aviv University

My association with Ted Balbach initially came through Karl Brunner, who was Ted's PhD dissertation adviser at UCLA and later my colleague at Ohio State. There was a very close intellectual and personal link among all of us who worked with Karl. Over the many years that Ted was in St. Louis and I was at Ohio State and later the Department of State in Washington, we often met at professional meetings. Always the raconteur, it was fun to run into him and Rae. She joined in our shared complaints about the failure of the monetary authorities typically to understand, let alone implement, policies to keep monetary growth and inflation low.

As the director of research, Ted was a very good manager who hired highly qualified people and let them work. Under his leadership, the institution kept its monetarist orientation, following in the footsteps of Homer Jones (with links to Milton Friedman at the University of Chicago) and Jerry Jordan (another of Karl Brunner's UCLA PhDs).

Upon his retirement in 1992, Ted was gracious and accommodating when I took over as director. His was a tough act to follow but he did everything he could to make it easy. We maintained a cordial professional and personal association all the years I was in St. Louis. Ted Balbach was devoted to enhancing the legacy of his office—the highest standards of empirical research about monetary policy for both public information and the formulation of policy positions—and he succeeded.

—William G. Dewald,
Professor Emeritus, Ohio State University;
Former Director of Research, Federal Reserve Bank of St. Louis

1975

One of Ted's invaluable contributions as a leader was to foster collegiality, not only between individuals but between institutions. For this reason, he ushered in an era of unparalleled exchange between the St. Louis Fed, the Swiss National Bank, the Austrian National Bank, the Bundesbank, the Bank of Korea, Tilburg University, the University of London, the University of Bonn—too many places to name. So many people came to identify themselves proudly as "Friends of the Bank," thanks to Ted's hands-on shepherding.

As for Ted's leadership style on the ground, who can forget the way Ted walked the floor of the Research Department and dropped into our offices to coax us into mentioning our recent successes to him? For good measure, Ted would conclude his visit by telling us not to get a big ego, but his covert mission already had been accomplished: to make us feel valued and good about ourselves. At the same time, Ted knew how to be facetious to bring someone back to planet earth. And he made countless similar gestures that made him a beloved figure. That's the unforgettable Ted Balbach we all knew and loved.

—Michael J. Dueker,
Senior Portfolio Strategist, Russell Investments;
Former Assistant Vice President and Economist at the
Federal Reserve Bank of St. Louis

Taking issues seriously and applying economics to get the right answer—not necessarily the off-hand, obvious answer—is one of the distinguishing characteristics of the St. Louis Fed.

Ted contributed a lot to developing that characteristic.

When I visited the St. Louis Fed from 1987 to 1989, one noticeable and distinctive aspect of the Department was the serious—and sometimes heated—evaluation of *Review* articles. Review articles received a more thorough review than most journal articles do. In fact, I remember some academic people's comments about *Review* articles. "Oh, those are inside publications. We discount them because they aren't nearly as hard to get as journal publications." If they only knew. Cliff Stone and the reviewers would go over every line, to make sure the piece was correct, clear, and worthy of publication in the *Review*. Referees can be a pain, but not like reviewers at the St. Louis Fed in that period.

These discussions were serious because everyone cared about what appeared in the *Review*. It was the outlet that established and maintained the Department's reputation, and it still is an important venue for maintaining the Department's reputation. It was not an outlet for second-rate stuff.

Ted maintained that environment. As director of research, he could make it or break it, and he made it. Publications in the *Review* mattered, in terms of both the quality of what appeared and their contribution to intelligent monetary policy.

Actually, I had first met Ted some years before—in the early 1970s when I was employed at the St. Louis Fed before I went to graduate school to get a Ph.D.

When Ted came in the early 1970s, he became involved in monetary policy discussions right away. It was easy to see that he clearly wanted monetary policy to improve and thought that the St. Louis Fed had an important role to play in that transformation. That conviction continued after he became director of research and never lessened as far as I could tell.

There was another distinctive aspect of the St. Louis Fed then. At first glance, it's odd. In briefings for Tom Melzer before FOMC meetings, it was pretty much a written rule that no one discussed the federal funds rate though it was fine—and common—to discuss money growth and its implications for inflation.

I never asked Ted why he wanted to do things this way. It seemed pretty obvious then—and still seems pretty obvious—that this strategy kept the focus on the long-term issues.

In this context, it is interesting to recall that Gary Santoni could be counted on to suggest that the discussion was too short-term and the long term should be borne in mind.

As Gary—and Ted, of course—perceived, it is hard to have meetings eight times a year and say: Well, the issues are pretty much the same as they were last time and the correct course is pretty much the same as it was last time. The tendency to "do something" was there and still is. Something happened in the last eight weeks, even if its long-term significance is nil.

In these circumstances, it's natural to pose the question as so: "What shall we do now?" even though it is all wrong to do that. The correct question is: "What is a sensible path? Are we on it? If not, how do we get there?"

Ted always thought that intelligent monetary policy mattered for people's well being and the Fed had the capability of making things better—or worse. He also believed that the St. Louis Fed had an important role to play in making things better. He had a big part in making that happen.

My main contact with Ted since leaving the St. Louis Fed was at the Bank's annual monetary policy conference. He always was interested in developments, clear in his view about technique for technique's sake, and mindful of the analyses' implications for monetary policy. His views generally were delivered with the wry sense of humor that he had.

I'll miss him, as will all of us. But we shouldn't forget the enormous effect that he had—most obviously here at the St. Louis Fed but also on monetary policy more generally.

You can only talk about people in the way that you knew them. I knew Ted through his work at the St. Louis Fed.

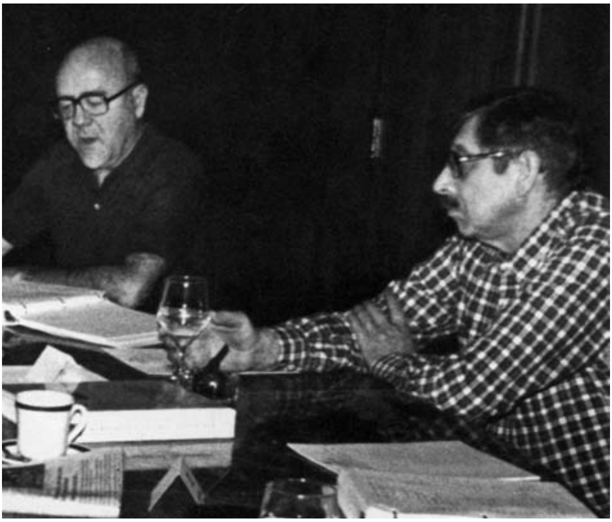
When he and Rae came in the early 1970s, they had a big effect on the atmosphere at the Bank. Rae was finishing her dissertation and was hard at work. Ted was involved in monetary policy and put a lot of time and effort into improving the quality of discussion and, one could hope, monetary policy itself.

—Gerald P. Dwyer,
Vice President and Senior Economist,
Federal Reserve Bank of Atlanta;
Former Visiting Scholar and Economist at the
Federal Reserve Bank of St. Louis

It was with great regret that I learned of the passing away of Ted Balbach at 80 in December 2007. Ted has been a friend and colleague of mine for decades since the mid 70s. I remember him as a friend and an economist of high standing who was able to find a balance between economic theory and the need for adequate policy advice.

—Martin M.G. Fase,
Former Head of Research and Deputy Executive Director,
De Nederlandsche Bank

I met Ted only a couple of times, and this was a very long time ago. Nonetheless, these encounters had a deep and lasting impact. At the time, I was still in my formative years as a young economist at the Oesterreichische Nationalbank who was keenly interested to analyze Austrian monetary policy with the latest tools of the trade. This was in the late 1970s and early 1980s. Of course, I had heard about the frontier monetary research conducted at the St. Louis Fed, but then there was the opportunity to learn directly, when Ted visited the OeNB; a great opportunity for an exchange of views arose. It was hard to explain the Austrian monetary policy concept, but his thoughts did advance my research a lot. Later on he made it possible to present my research at the St. Louis Fed and I vividly recall the intense discussions and the animating evening at his home including a "real" American dinner.



At a meeting with Ted Roberts, 1984

There was another outcome of our meetings, for which the OeNB and I remain very grateful. Ted agreed to an exchange of economists between the St. Louis Fed and the OeNB and, as a consequence, a number of young (-ish) economists could spend time at St. Louis, learn, do research, and upgrade their skills. It has proved to be a lasting gift of his, through which he lives on.

—Eduard Hochreiter,
Director, Joint Vienna Institute

I worked for the bank from 1983 to 1985 when Ted was director of research. His leadership style is one I have tried to emulate during my twelve-plus years as a full-time academic administrator. He really knew what he was doing and was great at it. We all greatly respected (and even revered) him, and he treated us with great respect as well. He had an easy touch in guiding the department and always maintained a calm demeanor, at least when I saw him. He was a fantastic communicator and an incredibly likeable guy. I'm glad I had the opportunity to work with and learn from him.

—Steve Holland,
Professor and Director of the Business Program,
University of Washington Bothell;
Former Economist at the Federal Reserve Bank of St. Louis

I had the privilege to work as a "junior economist" in the Research Department from 1975 to 1978, when Ted was director of research. I remember Ted as a very steady and supportive leader. In a time of oil shocks and a new, non-economist Bank president, Ted kept the Research Department focused on money and the monetary base.

In retrospect, I appreciate the great example Ted set in supporting Rae's career as a professional economist, not a typical path for women in the 1970s. He was also very supportive of my early career development—especially professional conference attendance. After returning from my one annual trip to a professional conference paid for by the Department and confessing to Ted that I hadn't attended any sessions, Ted offered the very sage observation that there was a lot to be learned in the elevators and bars of the conference hotels—a view I have taken to heart. However, when I returned from my next conference, to prove that I had changed my ways I showed Ted a photo I had taken of the participants in the one session I attended. The last time I remember seeing Ted, many years after I left the Fed, was when the WEA annual conference was held in Seattle in 1991. He stopped by one of the conference sessions to say hello. This time I was not only attending, but presenting.

—Nancy Ammon Jianakoplos,
Professor of Economics, Colorado State University;
Former Economist at the Federal Reserve Bank of St. Louis

Over 44 years ago, half-way through my final year of college, I was one class short of enough credits to earn a major in economics with my bachelors degree. My problem was there was only one economics class offered that I had not taken. It was a monetary workshop given by the much-feared chairman of the Economics Department—Professor Anatol Balbach.

Along with a half-dozen brave or desperate seniors, I signed up for an amazing seminar. We spent the entire semester discussing only two papers—the first, I guess, to expose us to bad analysis—the second, Milton Friedman's "Restatement of the Quantity Theory of Money." I not only saw what good economics was all about, but I learned for the first time to ask to be called upon by a professor and to engage my fellow students about what we had read. No other class in the four years influenced me so much.

Looking beyond graduation, my options appeared to be to continue working at the grocery store and wait to be drafted or to join the air force and hope for officer training school and a desk job. Professor Balbach presented another alternative. He urged me to apply for graduate school at his alma mater—UCLA. Although I had never before considered a graduate degree, it was a better option than being drafted into the army.

Ted first persuaded someone to accept my application, then during my first week on campus he and Rachael were visiting some of their former professors when one of them, Herr Dr. Professor Karl Brunner, posted a notice for a new graduate research assistant. Although I had none of the skills Dr. Brunner was looking for, Ted persuaded his former professor to take a chance and see if I could learn what was needed.

Ted's other major professor, Armen Alchian, taught the graduate microeconomics classes at the time and totally puzzled me. Ted had said he was brilliant, but I understood nothing. I waited for weeks for the professor to write an equation or draw a diagram on the board which I could memorize to regurgitate on an exam. What I was learning was that I really did not know what economics was all about.

After three years trying to absorb what UCLA was teaching, Ted offered me the chance to be in the front of the classroom as a visiting professor on his faculty at the state university. That might have become a career had I not had the great luck to get to know two visiting scholars at UCLA—Milton Friedman and Homer Jones. The latter asked me to travel to far off St. Louis to interview, and the former urged me to consider it.

The late 1960s and early 1970s were a uniquely exciting time to be on the staff of the St. Louis Fed, and in 1971 my former teacher, Ted Balbach, accepted our invitation to visit for a year and help us to understand better the extraordinary international developments of the time.

At the end of Ted and Rae's year at the Bank, everyone from the president to the clerks and secretaries were sorry to see them return to California. But, within a year, they had permanently uprooted from California and returned to the Bank.

When I left for a job in the private sector Ted was appointed to take the leadership title to match the role he already played. The timing was crucial. Within a year, Darryl Francis, the Harry Truman of the Federal Reserve, announced he was taking early retirement. The then-Chairman of the Board of Governors, Arthur Burns, welcomed this opportunity to end the maverick role of the Federal Reserve Bank of St. Louis and urged the Board of Directors to name as president a politician with some commercial banking experience.

Burns had not anticipated that Ted, the teacher, would rise to the challenge, and within a year President Roos was campaigning in public and in policy meetings for a return to monetary sanity.

When President Roos left in the early 1980s, a new Fed Chairman, Paul Volcker, saw his chance to bring the maverick under control and persuaded the directors to name as president an investment banker from Wall Street with knowledge of markets, but not the formulation and implementation of monetary policy. Again, tall Paul underestimated Ted, the teacher. Again, within a year, Tom Meltzer began to gain a well-deserved reputation as an articulate advocate of sound money and stable prices.

It is common for people to say that one person cannot make much difference. But, in my case, I would not have had a career as an economist if it had not been for Ted. For Larry Roos and Tom Meltzer, they would not have gained their reputations for strong advocacy of good economics if they had not been tutored by Ted, the teacher.

I have heard it said by great teachers that they want to be judged by the accomplishments of their students. Ted Balbach both taught and inspired his students, his colleagues, and even his bosses. He was the kind of person we would all like to clone.

—Jerry L. Jordan,
Retired President of the Federal Reserve Bank of Cleveland;
Former Director of Research at the Federal Reserve Bank of St. Louis

Ted and I had overlapping careers at the St. Louis Fed—his first seven years and my last. That period started with OPEC's oil embargo and ended with credit controls. It was a time of persistently accelerating inflation and floundering by the monetary authority of the United States. That era ended as the 1980s began—due in no small measure to the work of the Research Department of the St. Louis Fed. Begun by Homer Jones, strengthened by Jerry Jordan, and carried home by Ted Balbach, the analytic output was second to none in the field. We had a hell of good time doing good work. Personally, it was an honor to know and work with Ted.

—Denis S. Karnosky,
Co-founder and Managing Member, PRISM;
Senior Policy Advisor to Heller Bernstein Associates;
Former Deputy Director of Research at the
Federal Reserve Bank of St. Louis

It is with a sense of loss that I add my few words to the many that have honored Ted's contributions to our understanding of the role of money in the U.S. economy—the major accomplishment, in my opinion, of his tenure as director of research at the Federal Reserve Bank of St. Louis. Perhaps equal to my respect for the leadership he provided the many talented economists at the St. Louis Fed in advancing our understanding of the role of money in the U.S. economy is my appreciation of the friendship extended to me these past many years.

—Norman Lefton,
Adjunct Associate Professor of Economics at
Southern Illinois University at Edwardsville and
Washington University in St. Louis

Ted always promoted excellence. In fact, he reveled in it and did everything in his power to sustain it.

In the lonely days when I was the first female financial reporter at the St. Louis *Post-Dispatch*, he was the strongest of supporters and I was blessed by his friendship in the years that followed.

—Pamela Meyer,
Former Financial Reporter at the St. Louis Post-Dispatch

Speaking with the World Affairs Council of St. Louis, 1991

I have fond memories of Ted from frequent meetings at the Konstanz Seminar on Monetary Theory and Policy held in the lovely surroundings of the island of Reichenau in early summer every year. Ted came often during his tenure as head of research at the St. Louis Fed. The meetings are argumentative and stimulating, sometimes perhaps a little too much so; Ted brought a charm and skeptical intelligence to these occasions which as I recall often poured oil on troubled waters, as well as deftly
informing the discussion, particularly on points of policy. I am sad to have missed Ted at the recent St. Louis Fed research conference when illness prevented him from coming along. I will miss his charm and good humor.

—Patrick Minford,
Professor of Applied Economics,
Cardiff Business School, Cardiff University

As senior vice president and director of research, Ted provided the guidance and the encouraging atmosphere in which both Bank economists and visiting scholars could research and publish the monetary and related topics that were so important to developing and refining the "monetarist view" of the bank.

His demeanor was always precise, unyielding, and educational whether advising the Bank president, dignitaries, professionals or the general public on the important role of money supply in the monetary policymaking
decisions for an economy. It was my pleasure to have known, associated with, and learned from Ted.

—Donald W. Moriarty,
Former First Vice President,
Federal Reserve Bank of St. Louis, 1977-1983

When I joined Karl Brunner's project at the University of Konstanz in late 1969, it took him not long to suggest that I visit the Federal Reserve Bank of St. Louis to learn about money supply analysis and monetarism and, of course, to meet his friends. The first time I visited the Bank was early in 1970 when Jerry Jordan was the director of research and Ted Balbach was not yet around. I think I met Ted several years later for the first time. It must have been in early 1976 when Allan Meltzer had invited me as a visiting scholar for half a year to Carnegie Mellon University. I do remember that Ted from the start talked to me as if we had known each other already for many years. At least I felt that way. Since then we met every couple of years in the United States or in Europe, notably at the Konstanz Seminars on Monetary Theory and Monetary Policy, the first conference series that Karl had put up at the Lake of Constance in 1970 with the idea to stir up the European research scene. Ted supported the idea and send members of his department or came over himself.

Visiting the research department at the St. Louis Fed was always a great thing to do, and Ted saw to it that everything worked out in an agreeable and efficient manner. So he would come on the second day to check personally whether the visitor was settled and in command of everything possibly needed. A few days later he would come again and start discussing the research proposal. I remember that when I worked on a piece on the money supply process in Germany, Ted insisted that I first write down all the T-accounts describing the balance sheets of the various parties involved before I dare to write a little "banjo music," i.e., equations. I believe Ted liked music, indeed he once took me along to a classical concert, but I doubt that he liked very much noisy banjo music, famous Eddie Peabody playing the St. Louis Blues possibly an exception. Needless to say that Ted together with his lovely wife, Rae, also cared about the visitor's well-being outside the Bank. They often invited me and other people to their place. I always enjoyed the easy atmosphere at the Balbach's. And part of it was the frank way of talking about serious issues, such as Ted's experience during World War II as a forced Lithuanian laborer in a German labor camp. Of course, mostly we talked about pleasant things to do, especially about what a European might do on a nice Sunday apart from sneaking into the office. Ted was always good at good advice. Once he proposed that I visit the St. Louis art museum and look at the wonderful paintings by the expressionist artist Max Beckmann. At the same time he suggested that I skip the paintings by Wassily Kandinsky because that artist was a "fraud," meaning abstract art wasn't worth looking at to Ted. Well, Ted Balbach was a character. I loved him.

—Manfred J.M. Neumann,
Retired Professor of Economics,
Institut für Internationale Wirtschaftspolitik at the University of Bonn

---

I first met Ted Balbach when I came to spend a year at the Federal Reserve Bank of St. Louis as a visiting scholar in 1987. It was a bewildering experience for a newly minted Doctor rerum politicarum from a Swiss university to start work at one of the hotspots of monetary research in the United States after less than a year of central bank experience back home. The St. Louis Fed research department at the time—seen from a newcomer's standpoint—was undergoing a period of transition. The traditionally strong empiricist approach "simple hypothesis, straight empirical evidence" that had worked so well to straighten out several confusions in monetary and financial economics in the 1960s and 1970s was still very vibrant but also struggling: Econometric money demand equations and inflation equations did not perform quite as well as before. The notion of efficient markets—financial and other markets—started to show cracks both theoretically and empirically (for example with the 1987 crash I witnessed while at the Fed). These challenging but interesting developments had their effect on how research was done at the Federal Reserve Bank of St. Louis and it affected who joined the department and who left the department.

Overseeing and smoothing this difficult process was Ted Balbach. He successfully preserved what is unique at the Fed St. Louis—a no-nonsense style of analysis and clear communication—and allowed his researchers to follow the trend of economics with more mathematics and more econometrics. When it is sometimes pointed out that monetary policy is an art, then it should be added that running a monetary policy research department can be an art too. Ted was indeed a master of this art. He asked much of his researchers and favored competition, but he genuinely liked his people and believed in them. Whatever intellectual controversy could not be settled at work was successfully evened out over a great meal at Ted and Rae's house.

—Tobias Rötheli,
Professor of Macroeconomics,
University of Erfurt, Germany

Ted was the most easygoing even-tempered individual that I've ever been around. In the seven years that I worked for him, I never saw him become visibly upset even though there were a number of occasions that I'm aware of that surely put him to the test. One episode stands out in particular. It occurred with Mel, who was one of the Bank guards. Mel was a moderately successful former heavyweight boxer. I say, "moderately successful," because Mel had won a fair number of his bouts but he had also had his bell rung a few times, which convinced him that there were easier ways to earn a living. In any case, Mel's typical duty station in the bank was in the parking garage checking the authorizations of the people who entered the Bank at that point. Ted parked in the garage and saw Mel every day. They always exchanged some pleasantries as Ted entered. One day Ted happened to be in one of the hallways of the Bank when an unscheduled security drill occurred. The alarms sounded, lights began flashing, and the automatic security doors slid shut. Ted, of course, was surprised and, since Bank employees were supposed to clear the halls in the event of a security breach, Ted began looking for a door to make his exit. But he wasn't fast enough for Mel, who came tearing down the hall, and, when he saw Ted, whipped out his gun, pointed it at Ted, and told him to, "Put 'em up." Ted said, "Mel, it's just me;" but Mel wasn't having any of that. He put Ted up against the wall, frisked him for weapons, and held him there until the all-clear was sounded. Now I think there are many senior vice presidents who would have had Mel's job for that little episode. Not Ted. He treated it as a joke. The next time Ted saw Mel in the garage he held his coat open to show Mel he wasn't packing any artillery and they both had a good laugh.

Ted was a very social person. He never met a stranger. Once, on one of his frequent visits to a local delicatessen, he happened to be standing in front of the cheese counter examining the many varieties of cheese on display. An elderly lady came up to the counter to do some shopping and Ted struck up a conversation with her. During the course of the conversation the lady said, "You are from Lithuania aren't you?" Ted said, "That's right," and, since she happened to be from there as well, they reminisced about the Old Country for a while. As the conversation was ending, Ted said, "How did you know I was from Lithuania?" "Oh, that was easy," she said. "All the old men from Lithuania hang out by the cheese."

Whatever awaits us after we pass through this life; I hope for Ted's sake that somewhere there is a cheese counter to hang out at.

—Gary Santoni,
Professor of Economics, Ball State University;
Former Economist at the Federal Reserve Bank of St. Louis

Ted Balbach,
an excellent economist,
a model central banker,
a champion for sound money,
a great man,
and above all,
a wonderful personal friend for more than twenty years.

—Aurel Schubert,
Oesterreichische Nationalbank,
Vienna, Austria

It is the characters in our lives that enrich us. Ted was a wonderful, colorful character who enriched my life professionally and personally. Ted was my boss for 11 years. He was a wonderful boss and became a close friend. I remember well the first time Jeanne and I were invited to Ted and Rae's for dinner. The discussion was very lively—even animated, covering a wide range of topics. We were surprised by the openness and frank discussions. The evening was just plain fun! In the many dinners that followed, Ted would often entertain us with stories of his days in the military, his venture into

California real estate, his adventures in Iowa, the goings-on in the Research Department or the Bank in wilder times (Jeanne and I lamented that we always missed the good stuff), etc. Whatever the topic, Ted would have a wonderfully colorful story to tell. Dinners or parties at the Balbach's were something to look forward to and savor. They were never dull.

As a boss Ted was great. He listened to suggestions and never took criticisms personally. He opened up opportunities for his staff. He sent me on a central bank tour. He had me spend a week at the Trading Desk of the New York Fed and another week observing "Greenbook" preparation at the Board. He gave me the opportunity to attend the Monetary Policy Conference at Konstanz, the Kansas City Fed's Jackson Hole Conference, and several FOMC meetings.

Ted was extremely well liked by everyone who knew him. He cared about the people he knew and worked with and they cared about him. He treated everyone with respect and everyone at the Bank knew and respected him. Eyes would light up and smiles would appear when they would see "Mr. Balbach" in the hall, elevator, or wherever. Ted is one of those remarkable people that you meet in life that leaves an indelible mark on your heart.

—Dan Thornton,
Vice President and Economic Adviser,
Federal Reserve Bank of St. Louis

Ted was our hero, when I first met him at the Konstanz Seminar in the early 1980s. We—that is, a group of young German and Swiss economists—were all impressed if not scared by all the famous men in the room commenting on rational expectations, the Lucas critique, random walks, and other important things from the land of Economia. Ted was not like them, not imposing, but friendly to us. He would often make a funny remark about something that had come up in the discussion, helping us to feel more at ease with our famous peers and encouraging us to participate in the debate. Karl Brunner wanted us to be active participants, but it was Ted who helped us to do it.

A few years later, Ted invited me to spend a couple of months at the St. Louis Fed to work on a research project. One day, as Ted was walking into my office and looking at the math I was writing on my note pad, he said: "Oh, you are writing banjo music." At first, I felt a bit put-off. Did he not appreciate the formal language of economics? Did he regard my work as a waste of time? But I soon realized that this was not the case. Quite the opposite, in fact. It was just his witty way of warning me not to lose sight of the economics of an argument while doing the math of it. And in that he was right. It is all too easy to become enamoured by formalities and forget thinking about economic content and relevance. The power breakfasts Ted used to hold with a group of economists at the Bank every morning, where fierce and often relentless debates were held over all sorts of economic problems and questions, were a good antidote for making sure that this would not happen to anyone around him.

Soon afterwards, Ilse and I spent the better part of a year in St. Louis, and this was the beginning of a wonderful friendship with Ted and Rae. As our kids grew up, they loved visiting with them, going out to the pumpkin farm and other fun places, being spoiled by Rae, while I was discussing my latest paper with Ted.

Ted was a rare man. He had a sharp mind, a good sense of humor, and a warm heart. We miss him dearly.

—Jürgen von Hagen,
Professor of Economics and Director,
Institut für Internationale Wirtschaftspolitik at the University of Bonn

Of the many economists that I have met, Ted Balbach occupied a very special position. More than anyone else he always told it straight. Ted never even tried to butter up any person or organization as he analyzed an economic issue or situation. His professional ability was only exceeded by his intellectual integrity. We who had the good fortune of knowing Ted will miss him greatly.

—Murray Weidenbaum,
Edward Mallinckrodt Distinguished University Professor and Honorary Chairman of the Murray Weidenbaum Center on the Economy, Government, and Public Policy at Washington University in St. Louis

FEDERAL RESERVE BANK OF ST. LOUIS