Monetary Economic Research at the St. Louis Fed During Ted Balbach's Tenure as Research Director

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Ted Balbach served as research director at the Federal Reserve Bank of St. Louis from 1975 to 1992. This paper lauds his contributions during that time, including the expanded influence of the *Review*, enhanced databases and data publications, and a visiting scholar program that attracted leading economists from around the world. Balbach is remembered fondly as a visionary leader and gracious mentor.

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BACKGROUND

The monetarist movement took shape in the 1960s. The name gained usage and became trite. Basically, its adherents believed in the quantity theory of money, but in 1968 Karl Brunner named them monetarists. In today's terminology, the movement would be viewed as a network of young economists who shared the belief that the quantity of money was an important variable with explanatory power for the price level and cyclical fluctuations in economic activity.[1]

Graduate students in economics became members of a club that had two branches. One consisted of students of Brunner at UCLA. Ted Balbach was a member of this branch. The other branch centered on students of Milton Friedman, particularly members of the Money Workshop at the University of Chicago and also some who worked on the money and business cycle project at the New York headquarters of the National Bureau of Economic Research.

The two branches shared a common interest in two organizations that bridged their separate memberships. One was the Shadow Open Market Committee (SOMC), formed in 1973 under the aegis of Brunner and Allan Meltzer to advocate improved monetary policy, particularly urging the Fed to act decisively to reduce inflation, which had been accelerating since 1965 absent persistent action to tighten. Members of the SOMC, presumably individuals with monetarist leanings, came from wider backgrounds than those of the two branches. The other organization that bridged the membership of the two branches was the Federal Reserve Bank of St. Louis, which was distinguished as the first bank in the System to be headed by a president who expressed monetarist views and that had a research program (headed by Homer Jones) that featured topics of importance to monetarists. After he retired as research director of the St. Louis Fed, Jones joined the SOMC.

[1] Other elements of monetarism included (i) the view that inflation was everywhere and always a monetary phenomenon; (ii) that the Phillips curve was vertical; (iii) the importance of monetary rules, such as Friedman's constant monetary growth rule, instead of discretion; (iv) a critique of fine tuning; and (v) the dominance of monetary over fiscal policy (Friedman, 1960, 1968; Brunner, 1968; and Stein, 1976).

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One example of the links between Ted at the St. Louis Fed and the SOMC is that the St. Louis commercial bank that employed Ted's wife, Rachel, paid the expenses for her semiannual trip to New York to attend SOMC meetings and report the issues that had been discussed.

We have now set the stage for Ted Balbach's appointment as the St. Louis Fed director of research in 1975. The backdrop was the struggle by leaders of the monetarist movement to uphold propositions about the relation between money and economic variables such as income, prices, and interest rates that Keynesians of that time and earlier denied. Mainstream views (especially in the Federal Reserve System) were predominantly those of Keynesians.

In the period before 1975, research activities at St. Louis had a significant influence on the debates between monetarists and Keynesians. It was exciting for monetarists to score a victory by a St. Louis research product proving a point over a contrary Keynesian position. One such episode occurred in the dispute about the importance of fiscal policy versus monetary policy for economic stabilization. The Keynesian stand was that both mattered. The monetarist position was that only money mattered. The 1968 St. Louis Fed study by Leonall Andersen and Jerry Jordan provided strong support for the monetarist position. According to their data, the response of economic activity from 1952 to 1968 was larger, more predictable, and faster for money than for the fiscal variables of budget cuts or tax changes. The result brought joy to the monetarist camp, although Keynesians were unimpressed by a single-equation triumph—only the result of a multi-equation general equilibrium model could provide credible evidence.

By the time Ted Balbach began managing research, the conflict with Keynesians had lost some of its adversarial ardor in the academic world (although perhaps less so in the Fed). And by the 1980s the Keynesian approach began to shift, becoming more inclusive of monetarist views, especially with regard to inflation as fundamentally a monetary phenomenon. Thereafter, research at St. Louis could concentrate on scholarly issues unrelated to the divisiveness of the earlier conflict.

RESEARCH AT THE ST. LOUIS FED

1967 to 1975

Ted Balbach extended the research program begun by Homer Jones. Leonall Andersen and Jerry Jordan served as research directors between Homer's retirement in 1972 and Ted's appointment in 1975. The chief accomplishments in this period were these: First, the Federal Reserve Bank of St. Louis *Review* developed into a major publication that influenced policymakers and economists in the Fed and other central banks and led notable academics to write for it (see the names listed in the next subsection). Second, a special feature of the *Review* was the attention paid to measurement of the monetary base and other aggregates and also to problems created by System policies, such as lagged reserve requirements for member banks. Data series on monetary aggregates and other variables became essential for serious research on money and the macroeconomy. Third, establishment of a visiting scholars program exposed the bank staff to and allowed them to be influenced by ideas from academia and other central banks and also spread the message of the St. Louis Fed to a wider audience.

The *Review*. The *Review* contained articles on various aspects of monetary economics: monetary policy, money stock determinants, the transmission mechanism, international money, the demand for money, inflation, gold and the balance of payments, monetarism, and monetary versus fiscal policy. The key authors in this period were research staff members: Leonall Andersen, Norm Bowsher, Albert Burger, Keith Carlson, Alton Gilbert, Jerry Jordan, Dennis Karnosky, Michael Keran, Cliff Luttrell, Charlotte Ruebling, Roger Spencer, James Turley, and Ted Balbach.

In addition to articles written by the research staff, several important articles were contributed by scholars in the monetarist camp, including Karl Brunner, David Fand, Milton Friedman, Phil Gramm, Harry Johnson, James Meigs, Allan Meltzer, and Bob Rasche; other important scholars also wrote for the *Review*, giving it a broader coverage. These included Gerry Dwyer, William Gibson, Patric Hendershott, Lawrence Klein, John

Pippenger, Ronald Teigen, Murray Weidenbaum, and William Yohe. The views of senior Fed officials, including Andrew Brimmer, Arthur Burns, Darryl Francis, and Robert Solomon, appeared in various issues.

Data. The public distribution of financial data began on Homer Jones's watch. He first developed the weekly *U.S. Financial Data*, which showed the levels of selected monetary aggregates and their growth rates over various ranges (the famous triangles) as well as other financial data. Jones then started the monthly *Monetary Trends* and *National Economic Trends* publications. The data therein were widely used by the public and within the Federal Reserve System for policy analysis (Poole, 2006).

Visiting Scholars. A visiting scholars program was introduced in the few years before 1975. Many leading academics in the monetarist camp visited the Bank, lectured, and, as noted above, published articles in the *Review*. These included Karl Brunner, Milton Friedman, and Allan Meltzer. A number of scholars from Germany also visited the Bank in these years, including Wolfgang Schmitz, Dieter Hoffman, and Manfred Willms. Scholars from Mexico, Spain, and England also visited. This program preceded the future development of formal links to the hard currency central banks of Switzerland and Austria.

1975 to 1992: Ted Balbach's Term

On Ted's watch all aspects of the program inherited from Homer Jones were greatly expanded, and he added a number of programs of his own design.

The *Review*. The scope of the *Review* broadened greatly under Ted's tutelage. The key monetarist themes remained and were extended. Articles investigated the money supply, money demand, monetarism, inflation, the transmission mechanism of monetary policy, international money, and the balance of payments and exchange rates. These article explored new subjects reflecting changes in the United States and global economies and discoveries of monetary and macroeconomic research. These included fiscal deficits, real interest rates, energy, supply shocks, productivity, economic growth, financial markets, financial innovation, forward exchange markets, real exchange rates, bank failures, rational expectations, tax reform, protectionism, payments system risk, the gold standard, Bretton Woods, and globalization.

Reflecting an expansion of the Research Department, the list of research staff authors expanded. Among new authors were Rae Balbach, Dallas Batten, Michael Belongia, Donald Brown, James Bullard, Alison Butler, Claudia Campbell, Cletus Coughlin, Michael Dueker, Michelle Garfinkel, Rik Hafer, Scott Hein, Steve Holland, Nancy Jianakopolos, Donald Kemp, Kevin Kliesen, Richard Lang, Douglas Mudd, Christopher Neely, Philip Nuetzel, Mack Ott, Michael Pakko, David Resler, Steve Russell, Gary Santoni, Neil Stevens, Courtenay Stone, Jack Tatom, Daniel Thornton, Michael Trebing, Jai-Hoon Yang, and Adam Zaretsky.

Leading academics also contributed important articles, many of them delivered as the Homer Jones Memorial Lecture, a series inaugurated by Ted in 1987. Among the lecturers were Karl Brunner, David Laidler, Allan Meltzer, Anna Schwartz, and Beryl Sprinkel. Many visiting scholars (see Table 1) contributed *Review* articles on diverse subjects.

The *Review*, which was widely and freely disseminated around the world, influenced readers behind the Iron Curtain in the 1970s. According to Jerry Jordan, Václav Havel cited the importance of the *Review*, because it was free and uncensored, in influencing the development of his free-market views hence contributing to the Velvet Revolution in Czechoslovakia.

Ted started the Annual Economic Policy Conference in 1976. This annual series of conferences brought leading economists from around the United States and world to discuss pressing topics of the day in economic policy. The seventeen conference subjects selected during Ted's tenure had such titles as *Financing Economic Growth: The Problems of Capital Formation*; *Stabilization Policies*; *The Supply-Side Effects of Economic Policy*; *The Monetary versus Fiscal Policy Debate*; and *How Open Is the U.S. Economy?* Many of the conferences were published in the

Table 1

Visiting Scholars During Ted Balbach's Tenure

Byung Chan Ahn, *Bank of Korea*

Rachel Balbach, *Boatman's Bank*

Peter Bofinger, *Landeszentralbank, Baden-Württemberg*

Michael D. Bordo, *University of South Carolina; Rutgers University*

K. Alec Chrystal, *City University of London*

Alex Cukierman, *Tel Aviv University*

Lawrence S. Davidson, *Indiana University*

José Luis De Molina, *Banco de España*

Kevin Dowd, *University of Nottingham*

Dean S. Dutton, *Brigham Young University*

Gerald P. Dwyer Jr., *Clemson University*

Salam K. Fayyad, *Yarmouk University (current Prime Minister of the Palestinian Authority)*

Steven M. Fazzari, *Washington University in St. Louis*

Robert Fluri, *Swiss National Bank*

Joel Fried, *University of Western Ontario*

Werner Hermann, *Swiss National Bank*

Donald Hooks, *University of Alabama*

George Hubmer, *Austrian National Bank*

Dennis W. Jansen, *Texas A&M University*

John W. Keating, *Washington University in St. Louis*

Byun Ki-Sook, *Bank of Korea*

Levis A. Kochin, *University of Washington*

Kees G. Koedijk, *Erasmus University Rotterdam; Maastricht University*

Clemens J.M. Kool, *Erasmus University Rotterdam; Maastricht University; Utrecht University*

Fernando Méndez Ibisate, *Universidad Complutense de Madrid*

Laurence H. Meyer, *Washington University in St. Louis*

Dewet Moser, *Swiss National Bank*

Manfred J.M. Neumann, *University of Bonn*

Seonghwan Oh, *University of California–Los Angeles*

Sanghyun Park, *Federal Reserve Bank of New York*

Alex Pollock, *American Enterprise Institute for Public Policy Research*

Dieter Proske, *Austrian National Bank*

Carlos Quiroz, *Banco Central do Brasil*

Robert H. Rasche, *Michigan State University*

Ronald A. Ratti, *University of Missouri–Columbia*

Tobias Rötheli, *Swiss National Bank*

Zalman F. Shiffer, *Bank of Israel*

Courtenay C. Stone, *California State University–Northridge*

Philip Stork, *Maastricht University*

Paul T.W.M. Veugelers, *Erasmus University Rotterdam*

Jürgen von Hagen, *University of Bonn*

Patrick J. Welch, *Saint Louis University*

David C. Wheelock, *University of Texas, Austin*

Geoffrey Wood, *City University of London*

Piyu Yue, *University of Texas*

Mathias Zurlinden, *Swiss National Bank*

Review, a few in a book series by Kluwer. The authors included such luminaries as Alan Blinder, Richard Cooper, Jacob Frenkel, Ben Friedman, Ben McCallum, Rick Mishkin, Bill Poole, Larry Summers, and John Taylor.

Data. Under Ted, databases and data publications were expanded. He started *International Economic Trends* in 1978 and the St. Louis Fed's online database FRED (Federal Reserve Economic Data) in 1991. The latter has been greatly expanded over the years and is very widely used.

Visiting Scholar Program. The visiting scholar program burgeoned under Ted. Over 40 scholars from around the world were numbered among the visitors to the Bank. (See Table 1.) Most stayed at the Bank for six months to a year, interacting with the staff and writing articles for the *Review*.

Other Activities. As noted, Ted designed annual policy conferences beginning in 1976, in collaboration with the Center for American Business and Enterprise at Washington University.

He also instituted the annual Homer Jones Memorial Lecture Series mentioned earlier, with the support of local universities and the local National Association for Business Economics.

Ted also engaged in considerable outreach activities with other "monetarist" central banks. He started a formal exchange program with the Swiss and Austrian national central banks as well as an ongoing informal collaboration with the Bundesbank and the Bank of England. Numerous researchers from these central banks came to St. Louis. In return, a number of the Bank's staff economists were sent to various central banks for extended visits.

Ted usually attended the Konstanz (started in 1970) and Carnegie Rochester (started in 1973) conferences. Sometimes he delegated other researchers to attend these conferences. Ted also sent staff economists to New York and Washington to get firsthand knowledge about how the Open Market Desk worked and to interact with people at the Board. Some of the senior staff were allowed to attend Federal Open Market Committee meetings.

Other Contributions by Ted Balbach[2]

Ted contributed to research at St. Louis in a number of intangible ways and strengthened its position as the premier Research Department of the Reserve Banks of the Federal Reserve System. He was an excellent mentor to the staff and visiting scholars. His role was to encourage research and prod people to do it better in a timely manner. His most important and persistent demand from researchers was presentation and tests of hypotheses with clarity and simplification. He stressed the importance of communication, especially to policymakers and financial market participants. Ted read and commented on every article published in the *Review*.

CONCLUSION

The present status of the *Review* is a tribute to Ted's vision of what it could become. All in all, while Balbach was in charge, the *Review* was a stimulating publication. It is fitting that we honor him for his service.

Ted was the counselor to four presidents of the Federal Reserve Bank of St. Louis (Francis, Roos, Roberts, and Melzer), the latter three having little monetary policy background. He inspired the presidents he served to uphold the principles of price stability and, toward this objective, the control of monetary aggregates.[3] In the era of the Great Inflation and its aftermath, his defense of these principles was not the standard view it has become since.

In the debriefings to the staff after FOMC meetings that Ted attended, he reviewed the discussion in detail. According to those present, he had an excellent and often very humorous grasp on the issues, including the dynamics of the discussion and the inconsistencies in the remarks and votes of the participants.

Ted was a networker par excellence. He knew everybody and everything that was going on in the world of monetarism and monetary policy in the United States and Europe. He facilitated useful communication in the profession. Were he of this generation, he would be an avid user of Facebook and YouTube.

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[2] For help with this and the preceding section, we thank Jack Tatom, Dave Wheelock, and Bob Rasche.

[3] According to Jerry Jordan, the Board of Governors brought these men (who had no prior monetarist leanings) to St. Louis in an attempt to counteract its monetarist orientation. Ted, according to Jordan, instructed them well and convinced them of the importance of "sound money."

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