
Karl Brunner, Scholar: An Appreciation

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Karl Brunner

- Scholar but also entrepreneur
- Highly creative
- Thoroughly disciplined
- Swiss upbringing – Stability Principled Opposed inflation and welfare state
- Swiss army in WWII
- Ski patrol

Swiss postwar experience

1. 3 major journals

Classic papers, Tobin, Lucas, Prescott, Taylor, others

2. Conferences

Konstanz revival in Germany, Interlaken, Carnegie-Rochester, others

3. Influencing policy

Thatcher, BoE, SOMC, SNB, Bundesbank

Policy related research

Our relationship

Objectives

1. Economics as Science – Karl Popper
2. Economics as Science – Rudolph Carnap
3. Economics as Science – Our procedure
 - Personal relations
 - Approx 25 papers plus CR volumes
 - General overview – testable models

Scholarly work in economics – main focus

- Prodigious – Includes one paper with 130 printed pages plus appendix
- Broad interests – not confined to monetary and macroeconomics
- Econometrics – Bern – econometric models? – Basman-Klein
- REMM
- NABE lecture the Poverty of Nations
- My paper concentrates on his macro and money

Main contributions

Grouped in 4 general topics

1. Uncertainty
2. Modelling monetary impact
3. Medium of exchange
4. Central banking

1. Uncertainty

- Occurs frequently
- Central to thinking – resisted or ignored
- Illustrate w/ rational expectations – CR but
- Asked by Cong Patman
- 3 pamphlets
 - Fed lacked analytic framework free reserves
 - Interviews Martin, Balderston, NY Fed
 - Incoherent
- Led to major expansion of Board and Reserve Bank research

Uncertainty (2)

Our follow up – Targets and Indicators 1968

- George Horwich volume
- The Meaning of Monetary Indicators conveyed the information about future economic activity from several endogenous variables e.g. money stock, interest rate, free reserves
- Showed that free reserves poor indicator direction often wrong
- None ideal, but money stock least misleading

Uncertainty (3)

- UCLA conference on targets and indicators 1969
- Franco Modigliani, Brookings model, others
- Model builders: no use for an indicator
 - Use the “right” model
 - Denied uncertainty
- Our paper emphasized the uncertainty that surrounds all analytic results
- Fundamental difference – not resolved

Uncertainty (4)

- Bill Dewald wrote a summary of the conference papers and discussion
- Several participants said “continued research was needed to find behavior relationships on which one could base predictions of policy effects. Brunner and Meltzer, among others, stood fast to the position that this was idealistic and impractical because one must evaluate policies in an uncertain world.”
- Note that this discussion took place almost 50 years ago.
- Not much progress since
- When Otmar Issing shows the way in which an indicator can be used.

Uncertainty (5)

- Years later, with Alex Cukierman, we analyzed a different source of policy uncertainty – ***the inability to know whether an observed change is a permanent change or a temporary departure from equilibrium.***
- A 1980 paper produces a Phillips curve.
- One of our main criticisms of Federal Reserve policy in 1964 was excessive attention to very short-term changes.
- This is a source of error when there are persistent and temporary changes.
- From 1986 to about 2002 Greenspan medium-term changes – changes that persisted.
- Striking result – the reduction in economic variability that economists call “the great moderation.”
- The usual Fed policy of paying close attention to noisy short-term indicators appears to increase variability in an uncertain world.

2. Modelling monetary impact

- In the 1950s and 1960s, Milton Friedman revived interest in money, especially the proposition that central banks increased or reduced real and nominal GDP by changing the money stock.
- Friedman never produced an explanation
fundamental issue in monetary economics.
- In 1961 Karl published a detailed explanation of the way money affects the economy and employment.
- Detail below

Modelling monetary impact (2)

- Starting with our paper on Liquidity Traps written between 1965 and 1967 published in the 1968 JPE and followed soon after by Money, Debt and Economic Activity and other papers.
- The central proposition about nominal money affecting real output introduces relative prices.
- Monetary expansion raises asset prices of existing capital on the equity markets and existing housing on housing markets.
- New production of these assets is relatively cheap, so investment shifts to the markets for real output.

Modelling monetary impact (3)

- Journal of Monetary Economics, James Tobin offered a general equilibrium model of a monetary economy.
- ‘q’
- Ignored by Fed and others
- Obvious support in the data
- Paper on Liquidity Traps is that a Liquidity Trap cannot arise in any multi-asset model.
- Zero lower bound for the short-term rate?

Modelling monetary impact (4)

- When I first met Karl as a PhD student, we spent much of our time working through Franco Modigliani's famous *Econometrica* paper of 1944.
- That is basically a sophisticated IS-LM model.
- As our work on credit and money developed, we recognized that the absence of credit and asset markets in IS-LM reduced their relevance.

Modelling monetary impact (5)

- Karl has several papers analyzing IS-LM models – introduced a credit market.
- A large flow of credit increases aggregate demand.
- Response is larger per unit if the increased credit takes the form of loans than if it is an increase in government debt.
- Transmission of monetary policy no longer depends solely on the slopes of IS and LM.
- The increase in credit also increases the money stock.

Modelling monetary impact (6)

- Karl criticized Paul Samuelson's inference that the IS-LM model showed how government action stabilizes an unruly private sector.
- Here and elsewhere he regarded that claim as backward.
- In Karl's view unruly government actions disrupted a stable private sector.

Modelling monetary impact (7)

- In his long 1971 paper for the Swiss journal, Karl described what he believed macroeconomics required.
- It should combine the relative price adjustment and the macro effects, separating effects on real variables and inflation.
- This required integration of credit and asset markets with production.
- This summarized our thinking in the late 1960s and is developed fully in his 1971 paper.
- Contrast with elegant work of Michael Woodford where all the relative price effects are absent and there is no role for money or credit.

Modelling monetary impact (8)

- A central part of Woodford's work
 - The fiscal theory of the price level
- C-R
- Rejected completely
- Surprise and puzzlement, as I am sure Karl would share
- Karl turned to fiscal policy, analyzing three kinds of spending
 - spending on real assets,
 - current output,
 - and labor.
- The relative price and wealth effects of the three differ.
- Again, this demonstrates the importance of moving away from IS-LM by considering relative price and wealth effects.

3. Medium of exchange

The Uses of Money

- When the late Harry Johnson wrote his influential survey of monetary theory, he highlighted Karl's 1961 (yes 1961) JPE review of a major policy study of the time by a group known as the Commission on Money and Credit.
- Before most of Friedman
- Fundamental issue: nominal money affects real demand

Medium of exchange (2)

- Role of relative price in transmission
- Join micro to macro
- Asset markets
- Why money – why money?
- Alchian
- Resources used to shop
- Uncertainty about prices, qualities
- Generalized purchasing power
- Saving for consumer – and for society

4. Central banking

- Patman 1962-64
- Martin, Balderston, Hayes, Rouse, Sternlight
- Questionnaire 4 basic questions

How policy actions affect the monetary system

Understanding of transmission

How above ideas become actions

Ideas based on “tested propositions?”

Central banking (2)

- Monetary policy based on monetary analysis?
- Fed failure – 1964 hearings
- Research program
- Quarterly forecasts short-term
- Karl's 1971 long paper ends with policy analysis

Central banking (3)

Karl describes 3 problems

information

interpretation

determination

Information: Returns to indicator of policy effects

Fed relies on free reserves or short rates

Monthly job growth !!!

Discussion of information problem written 1970 very early

Central banking (4)

- Information problem asks: Where are we now
- Interpretation problem asks: Where are we headed
- Determination problem asks: What is the optimal strategy

Prevailing institutions

Uncertainty about response mechanisms, lengths of lags, etc.

Karl: choose a TARGET

- Use of monetary policy for additional tasks
- BETTER ECONOMICS WAS KARL'S LIFE WORK
- Ahead of his compatriots

Central banking (5)

- Here is a quote from Karl's 1961 JPE review article of Commission on Money and Credit.
- Compare this to my discussions with officials a few years later or even with official Fed discussions now with the limited vision provided by the Phillips curve.
- Here is Karl: Notice in the transmission both the role of relative prices and the integration of micro and macro analysis.

Central banking (6)

Variations in policy variables induce a reallocation of assets (or liabilities) in the balance sheets of economic units which spill over to current output and thus affect the price level. Injections of base money...modify the composition of financial assets and total wealth available to banks and other economic units. Absorption of the new base money requires suitable alteration in asset yields and asset prices. The banks and the public are thus induced to reshuffle their balance sheets to adjust desired and actual balance sheet positions.

Central banking (7)

The interaction of banks and the public, which forms the essential core of money supply theory, generates the peculiar leverage or multiplier effect of injections of base money on bank assets and deposits and correspondingly on specific asset and liability items of the public's balance sheet. The readjustment process induces a change in the relative yield (or price) structure of assets crucial for the transmission of monetary policy action to the rate of economic activity. The relative price of base money and its close substitutes falls and the relative price of other assets rises.

Central banking (8)

The stock of real capital dominates these other assets. The increase in the price of capital relative to the price of financial assets simultaneously raises real capital's market value relative to the capital stock's replacement costs and increases the desired stock relative to the actual stock. The relative increase in the desired stock of capital induces an adjustment of the actual stock through new production. In this manner current output and prices of durable goods are affected by readjustments in the balance sheets and related price movements set in motion by the injection of base money. The wealth, income and relative price effects involved in the whole transmission process also tend to raise demand for non-durable goods.

(1961, p.612)

Central banking (9)

- These paragraphs are the foundation of monetarism and proper policy for price and economic stability.
- Rescue economics from IS-LM and provide an empirically valid statement to guide central bankers.

Conclusion

President Jordan, You have made a wise decision. Although I have only touched on a few areas of his work, I think I have said enough to show that there is much in Karl Brunner's work that is both original and right. I hope that your Brunner conferences will inspire others to build on Karl Brunner's foundations to achieve better results for the free citizens of the world's democracies.

Questions / Discussion