

# The Rise and Fall of Walrasian Economics: The Keynes Effect

D. Wade Hands  
Department of Economics  
University of Puget Sound  
Tacoma, WA USA

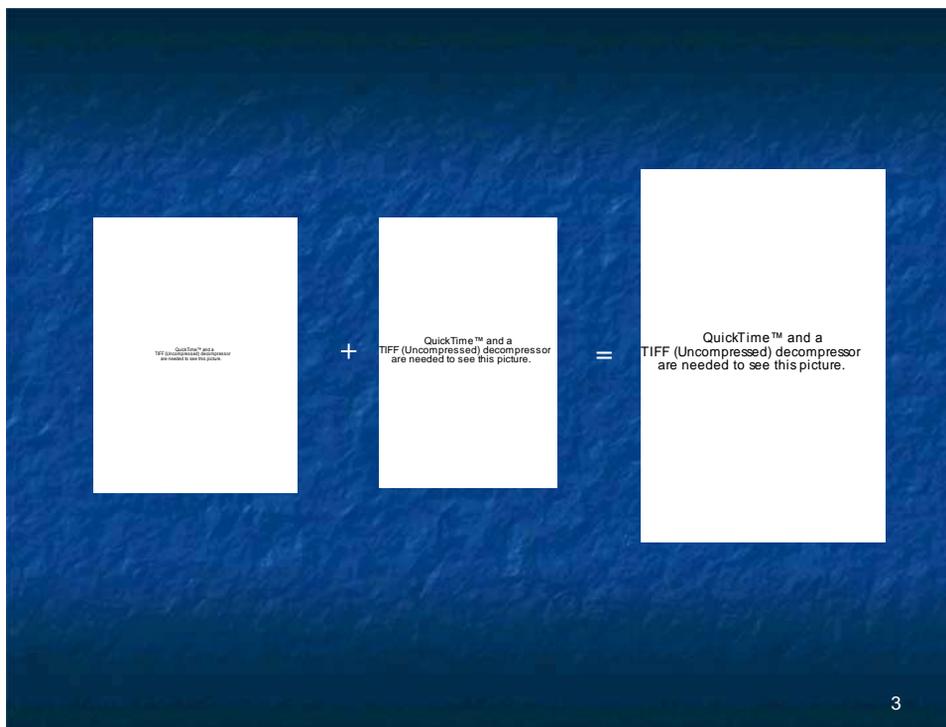
[hands@pugetsound.edu](mailto:hands@pugetsound.edu)

version 1.1

July 2009

15,793 Words

The Issue: It is common to argue that Walrasian economics had an impact on the textbook Keynesian theory (IS-LM) of the late 1950s and 1960s. I argue the flow was a two-way street (actually a co-evolution) in which Keynesian ideas also had an impact on what came to be the standard Walrasian theory during the same period. Keynesian ideas played a role in both the Walrasian victory over other forms of neoclassicism and also the particular form that Walrasian theory ultimately took.



## Some Background and Stage-setting

### Background

1.  $\exists$  A Neoclassical Synthesis
2. There was an extraordinary amount of pluralism/diversity within neoclassical economics 1920-1945 (demand theory in particular)

### Stage-setting

3. The "fit" was only relevant to the relevant theorists (i.e. not necessarily my view)
4. I am not saying Keynes was all that mattered (just that it mattered, and it has not been recognized)

## How Keynesian Economics Mattered to Walrasian GE

- A. Hicks and IS-LM (1st mover advantage)
- B. Market Demand (not individual choice) is Central
- C. Tâtonnement Stability
- D. Reversibility and Path-dependency
- E. Income Matters

5

- B. Market Demand (not individual choice) is Central

Quia Text™ and a  
TMF (TMF) are trademarks of  
the company.

6

## C. Tâtonnement Stability

The "Walrasian tâtonnement" that became standard during the neoclassical synthesis (Samuelson 1941, 1942, 1947):

$$\frac{\partial p_i}{\partial t} = H_i [z_i [p_1(t), p_2(t), \dots, p_n(t)]] \text{ for all } i=1,2,\dots,n. \quad (\text{T})$$

$$\frac{\partial p_i}{\partial t} = k_i z_i [p_1(t), p_2(t), \dots, p_n(t)] \text{ for all } i=1,2,\dots,n. \quad (\text{T}')$$

had a number of Keynesian features (unlike the tâtonnement either before or after the Neoclassical synthesis).

7

## D. Reversibility and Path-dependency

Both Arrow-Debreu GE and IS-LM Keynesianism displaced a variety of competitors that were more time and path sensitive.

The particular Arrow-Debreu version of Walrasian theory characterizes the adjustment of the individual to the optimal (equilibrium) in a very different way than the tâtonnement adjustment of the market to the equilibrium. This combination of agent & market adjustment was unique to synthesis-era Walrasian theory (not present in the Walrasian literature either before or after).

8

## E. Income Matters

No Demand theory that could be compatible with Keynesian economics could be one that did not have a way for changes in income to have real effects.

Perhaps the greatest theoretical monument to the Neoclassical Synthesis was:

$$\frac{\partial x_i^h}{\partial p_j} = S_{ij}^h - d_j^h \frac{\partial d_i^h}{\partial M^h} \quad (S)$$

9

So what caused all the problems for Arrow-Debreu GE during the last few decades?

1. Stability Analysis (the stability problem includes the SMD results, uniqueness, and the failure of the correspondence principle).
2. But what caused the problems for stability analysis?
3. Income Effects!
4. So the problems are (T) and (S)!

10

So the bottom line is:

On the Rise: the co-evolution with Keynesian economics helped the Walrasian program displace its neoclassical competition during the 1930s and 1940s. But the Keynesian influence left its mark in certain theoretical features of the Arrow-Debreu model: (T) and (S) in particular.

On the Fall: Walrasian theory ran into trouble at precisely the points where the Keynesian influence was most pronounced.