A Brief History of the Real Business Cycle – Search & Matching Literature

By Valerie A. Ramey

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I have recently noticed much confusion among recruitment candidates and junior professors in the macroeconomics profession about the search and matching – real business cycle literature. In particular, these researchers seem to be unaware of what was accomplished by the literature in the 1990s. I have discovered that some of this confusion is traced to the forthcoming Handbook of Labor chapter written by Richard Rogerson and Robert Shimer. Several contributors to the earlier literature have commented on the particular focus and omissions in that chapter. Richard Rogerson has responded that the Handbook chapter was not intended to be a survey of literature and that the authors’ intent was to focus on a few points.

Since so many junior researchers are confused about the literature, I thought it would be useful to provide a quick diagrammatic literature review of the process by which the Real Business Cycle literature and Search and Matching literature merged. That diagram is on the following page. An important point to note is that the Rogerson and Shimer statement that their analysis “reaffirms earlier work emphasizing that the presence of search frictions does not substantially modify the behavior of a business cycle model (Merz, 1995; Andolfatto 1996)” (p. 41) is incorrect. Even a cursory reading of the abstract of each of these earlier papers shows this to be an incorrect characterization of the conclusions of these earlier authors. Den Haan, Ramey and Watson (2000), which Rogerson and Shimer do not cite, went further by showing that incorporating endogenous separations and costly capital mobility into an RBC-search and matching model led to more than sufficient amplification and propagation in comparison with the data.

One of the reasons that Rogerson and Shimer contend that search and matching does not lead to amplification is that they study the incremental effect on a model with indivisible labor and lotteries. The indivisible labor model was a very effective stopgap for answering Heckman’s (1984) critique and for finally getting some unemployment into the model. Many researchers, however, see the search and matching model as replacing that set-up with something that is much better at capturing a wide range of interesting facts about labor markets. Moreover, it has excellent microfoundations since the idea that it takes time to find a job/match is an accurate characterization of reality. Therefore, the proper metric for success is whether introducing search and matching into an RBC model without the lotteries parable makes a difference. The answer provided by the earlier literature is “yes.”
A Brief Diagrammatic History of the RBC–Search & Matching Literature

Standard RBC model – Kydland-Prescott (1982) and follow-ups
Divisible labor, no labor market rigidities

Rogerson (1988) and Hansen (1985) respond to Heckman (1984) critique and develop indivisible labor model with lotteries as one way to capture extensive margin and unemployment.

Cogley-Nason (1995), Rotemberg-Woodford (1996) point out that standard RBC model has no propagation

Diamond (1982), Pissarides (1985) show the macro relevance of a search & matching model with exogenous separations.

Mortensen-Pissarides (1994) capture characteristics of gross job flows in a search and matching model with endogenous separations.


Merz (1995), Andolfatto (1996) embed a search & matching model with exogenous separations into DSGE model. They find that it leads to amplification and propagation relative to the standard RBC model.

1980s unemployment research (e.g. Layard, Nickell, Jackman, etc.) considers aggregate labor markets, worker mobility and job vacancies


Blanchard-Diamond (1989, 1990) study the Beveridge curve and gross worker flows.

Shimer (2005) shows that a simple calibrated search & matching model cannot match key aspects of the data. Mortensen- Nagypal (2007) and Hagedorn-Manovskii (2008) argue that this is not true for other calibrations or more general models.
References


