

A Structural Model of US Aggregate Job Flows

Fabrice Collard
CNRS–GREMAQ and IDEI

Patrick Fève
Université de Toulouse I
GREMAQ and IDEI

François Langot*
Cepremap
GAINS (Université du Maine)

Corinne Perraudin
SAMOS (Université de Paris I)

First Draft – September 1997
This Draft – June 2001

Abstract

This paper contributes to the analysis of jobs flows dynamics through the explicit modelling of job creations and job destructions. We propose a simple matching model extended for endogenous separation and tractable heterogeneity. The parameters of the model are estimated using a simulation–based estimation method. We then test the ability of trade externalities, generated by the matching process, to *(i)* propagate reallocation and aggregate disturbances in the whole labor market and *(ii)* generate the observed distribution of aggregate job flows. The results clearly indicate that the model is able to match the dynamics of US aggregate job flows.

Keywords: matching process, stochastic heterogeneity, nonlinear dynamics, simulation based estimation.

JEL Classification: C51, E24, E32

*Address: F. Langot, Cepremap, 142 Rue du Chevaleret, 75013 Paris, France. We would like to thank A. d’Autume, J.P. Benassy, R. Boucekine, P. Cahuc, R. Cooper, S. Gregoir, P.Y. Hélin, T. Kollintzas, F. Kramarz, E. Lehmann, O. Licandro, R. Marimon, F. Portier, J. Rust and two anonymous referees for helpful comments on the previous version of the paper. We are particularly thankful to Phillip Schmidt–Dengler for pointing out some errors in an earlier version of the text. The data were kindly provided by J. Haltiwanger. Previous versions of this paper have also benefited from discussions during presentations at GMM (Cepremap), MAD (U. Paris 1), CREST (INSEE), IOBE (Athens), SEL (Louvain–la–Neuve) and IDEI (Toulouse) seminars, and T2M 98 (Marseille), SED 98 (Philadelphia), EEA 98 (Berlin), Macrodynamic Workshop 98 (Vigo, Spain), SCE 99 (Boston) conferences. The traditional disclaimers apply.