Dynamic Labor Demand Estimation and the Stability of Coefficients - The Case of the Czech Republic¹

Miroslav Singer CERGE-EI²

November 1996

Abstract

Estimates of the dynamic labor demand equation, derived from a cost-minimization model on monthly data on Czech firms from 1992 to 1993, are presented together with derived long-term elasticities. The different sets of instruments have been used and the tests of exogeneity carried out. The stability of the parameters and long-term elasticities between 1992 and 1993 have been tested. The low significant estimates of short and long-term elasticities, robust with respect to choice of instruments, suggest the possibility of labor hoarding.

Abstrakt

Odhady parametrů dynamické rovnice odvozené od modelu minimalizace nákladů odhadované pro ČR na firemních měsíčních datech z let 1992 a 1993 datech spolu s odhady dlouhodobých pružností jsou prezentovány v tomto materiálu. Pro ověření vlastností odhadů byly provedeny testy exogenity a použity různé množiny instrumentů stejně, jako byly provedeny testy stability parametrů rovnice a dlouhodobých elasticit mezi roky 1992 a 1993. Nízké, ale signifikantní odhady krátkodobých i dlouhodobých pružností, které byly robustní vzhledem k volbě instrumentů, vedou k hypotéze o hromadění pracovní síly (labor hoarding).

Keywords: labor demand, estimation, monthly panel data, firm

¹ Research on this paper was supported in part by the World Bank Research Project on Enterprises in Transition, and ACE grant (No 92 - 0600 - R). The author would like to thank Cordelia Reimers, Dominique Gross, Orley Ashenfelter, Randall Filer and other participants of the CERGE-EI workshop for their useful comments on the first draft. He also benefitted significantly from the comments and encouragement provided by John Ham and Jan Švejnar. The usual caveat applies.

² A joint workplace of the Center for Economic Research and Graduate Education, Charles University, Prague, and the Economics Institute of the Academy of Sciences of the Czech Republic. Address: CERGE–EI, P.O. Box 882, Politických vězňů 7, Prague 1, 111 21, Czech Republic.