

AGGREGATION AND LABOR SUPPLY ELASTICITIES

Alois Kneip

University of Bonn and Hausdorff Center

Monika Merz

University of Vienna

Lidia Storjohann

University of Bonn

Abstract

We outline a formal procedure for deriving the aggregate wage-elasticity of labor supply for a large group of heterogeneous workers who operate under uncertainty. Heterogeneity relates to preferences, income, wealth, and the labor market status. If each worker faces a small, possibly non-uniform wage change, the implied aggregate wage-elasticity can be represented by a closed-form expression. This expression captures an extensive and an intensive margin. We empirically implement the procedure for a dynamic model of individual labor supply and a micro panel of men in Germany from 2000 to 2013. We find that the extensive margin is less time-varying than the intensive margin, and that its size varies with the measure of reservation wages. Self-reported reservation wages render a larger extensive margin than other proxies. The estimated aggregate Frisch wage-elasticity varies between 0.85 and 1.06, and the two margins matter equally strongly for the unbalanced sample. (JEL: C51, E10, J22)

The editor in charge of this paper was Dirk Krueger.

Acknowledgments: We thank Nikolaus Hautsch and Philipp Schmidt-Dengler for their constructive advice and Therese Guttman for outstanding research assistance. All errors are our own. Merz is Research Fellow at CEPR and IZA.

E-mail: akneip@uni-bonn.de (Kneip); monika.merz@univie.ac.at (Merz); lidia_st@uni-bonn.de (Storjohann)