

Should the Japanese Tax System Be More Progressive? An Evaluation Using Simulated SMCFs Based on the Discrete Choice Model of Labor Supply^{*}

Shun-ichiro Bessho^a

Masayoshi Hayashi^b

Abstract: This paper evaluates the 1999 national income tax reform in Japan by comparing the social marginal costs of public funds (SMCFs) for changing the marginal tax rates in different income brackets before the reform occurred. To do so, we estimate the discrete choice model of labor supply using a data set of Japanese households in 1997 derived from the Employment Status Survey. We obtain an analog of the SMCF that allows for labor supply responses along both the intensive and the extensive margins on an individual basis. We generate such SMCFs using a micro-simulation method that utilizes the discrete choice model estimates for household preferences. Based on the simulated SMCFs evaluated using various distributional weights, we find that the value of the SMCF for a 1% increase in the marginal tax rate in any given income bracket decreases as the bracket moves from the bottom to the top. This finding suggests that the national government should have made the Japanese income tax system more progressive rather than less progressive as carried out in the 1999 reform.

JEL Codes: H21, H24, H31, J22

Keywords: Social marginal cost of public funds; discrete choice model; household labor supply; Japan

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^a Faculty of Economics, Keio University, 2-15-45 Mita, Minato-ku, Tokyo, 108-8345 Japan. E-mail: bessho<<at>>econ.keio.ac.jp. tel: +81-3-5427-1360.

^b Faculty of Economics, The University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo, 113-0033, Japan. E-mail: hayashim<<at>>e.u-tokyo.ac.jp.