

Economic Impacts of New Agricultural Policy in Japan: Application of the Dynamic Computable General Equilibrium Model

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ABSTRACT

The direct-payment for farmers' income support started in Japan, 2010, with the budget cut in public investment for irrigation and drainage. This study aims to analyze effects of direct payment and public investment by the recursive dynamic Computable General Equilibrium model. Simulation results demonstrate that, first, the direct payment decreases the price of food and other goods with a small increase in agricultural production. Farmers' income increases with a rise in farmland price by direct payment, though the price of rice decreases. Second, unfortunately the direct payment decreases agricultural productivity because of a strong restriction in substitutability between farmland and other input factors. Third, social benefits measured by the Equivalent Variation (EV) increase in the short run, but the increased EV is slightly lower than the introduced budget because of leakage caused by trade and productivity changes. In addition, the effects of this policy chronologically decrease because irrigation and drainage facilities are degraded. Therefore, direct payment can quickly benefit farmers as well as consumers, but as a long term effect the replacement of the budget for agricultural public investment degraded the initial effects.

Key words: *Agricultural public investment, Direct payment, Dynamic CGE model, Equivalent Variation, Irrigation and drainage facilities, Social b*

JEL Classification Code: H30, Q12, Q14, Q18

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