TITLE: TRADE COEFFICIENTS AND THE ROLE OF ELASTICITY IN A SPATIAL CGE MODEL BASED ON ARMINGTON ASSUMPTION

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COUNTRY: JAPAN

KEYWORDS: ARMINGTON ASSUMPTION; SPATIAL CGE MODEL; TRADE COEFFICIENT

PAPER CONFERENCE CODE: 211

FULL PAPER IN CD?: YES

ABSTRACT:

Armington Assumption in the context of multi-regional CGE models is commonly interpreted that the same commodity with different origins is an imperfect substitute of each other. A static spatial CGE model that is compatible with this assumption and explicitly considers the transport sector and regional price differentials is formulated. It is shown that the trade coefficients, which are derived endogenously from the optimization behaviors of firms and households, take the form of a potential function. To investigate how the elasticity of substitutions affects the equilibrium solutions, a simpler version of the model, which incorporates 3-regions and 2-sector besides the transport sector, is introduced. It is found that (1) if the commodities produced in different regions are perfect substitutes, the regional economies will either be autarkic or completely symmetric, and (2) if they are imperfect substitutes, the impacts of the elasticity on price equilibrium system as well as trade coefficients are nonlinear and sometimes very sensitive.