The Effect of Trade Liberalization on Income Distribution in Vietnam - Dynamic Computable General Equilibrium Approach

By
Nguyen Manh Toan[1]

Abstract

Although it is widely proven that trade liberalization policies are likely to impact positively on the economic situation at the national level, their effects at the industry level and on the welfare of each household group may be different. Changes in the structure of the economy as well the relative price system may favor certain categories of household while hurt the others. Giving contrasting results in previous studies, further investigation is required on whether trade liberalization will increase or decrease inequality in Vietnam.

Using the computable general equilibrium (CGE) framework, this study explores the links between trade liberalization and income distribution among household groups. For this purpose, a multi-sector dynamic computable general equilibrium (DCGE) model and the corresponding Social Accounting Matrix (SAM) have been developed. In this model, forward-looking economic agents are assumed to optimize their consumption and investment behaviors over a long time span. The model also comprises twenty-six sectors, eight household groups and thirteen factors of production, allows main sources of welfare change to be investigated. A new version of SAM was constructed in this study using the latest 2000 I-O Table.

The model then is used to simulate the impact of a tariff reduction up to 5 percent, which is consistent with common WTO commitments, on the income distribution between eight categories of households. Furthermore, the reduction on tariff revenue is assumed to be offset by the introduction of a uniform increment in indirect tax rates, endogenously determined so as to maintain government revenue neutrality. Because the recent tariff structure of Vietnam strictly prohibits the import of consumption goods but favors the import of intermediate inputs, trade liberalization may probably not help reduce production costs significantly while encouraging people to use imported products rather than the domestically produced ones. In addition, the

---

[1] Doctoral candidate, Department of Economic Development and Policies, Graduate School of International Cooperation Studies, Kobe University, Japan ; E-mail: nm_toan@hotmail.com; address: Kobe University Student House, 7-3-1 Sumiyoshi Yamate, Higashinada ku, Kobe, 658-0063, Room B416.

increase in indirect taxes makes domestic products become less competitive. Therefore, total imports increase remarkably while total export and output of some major sectors decrease, reallocation resources among various industries happened.

The mode allows evaluating the impacts of trade liberalization on the welfare of each household category. Theoretically, lower tariffs mean cheaper prices for imported goods, which undoubtedly have a positive impact on real in comes for some households. However, trade liberalization also leads to change the structure of the economy as well all the relative price system. Workers in some sectors become redundant while the others now may have opportunities to gain a job. Reducing relatively in prices of some products may favor certain category of households (who usually consume them) while increasing relatively in prices of some other products may hurt the others. In order to evaluate the welfare effect on each category of household, Hicksian equivalent variations (EV) were employed. The model is solved by using GAMS software.

The simulation result shows that reduction of tariffs increases the national welfare slightly. However, the distribution of welfare is not equal among households. Urban self-employed household seem gain highest benefit from trade liberalization while the rural-unemployed and farmer households, which is estimated to contain more than 70% of the country population, incur loss. As a result, income distribution gap between the urban and the rural, the rich and the poor seem more and more wider.