"Representative vs. Real Households in CGE Modeling of Inequality"

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When it comes to distributional issues, most disaggregated macroeconomic models of the Computable General Equilibrium type rely on a few representative household groups (RHG) defined by different combinations of factor endowments. To get closer to actual distribution data, it is often assumed, in addition, that each RHG results from the aggregation of households which are heterogeneous in some dimension that follows an exogenously fixed statistical law. Analysis of economic inequality in these models thus essentially corresponds to that of inequality 'between' RHGs. Empirically, however, it is generally observed that changes in inequality 'within' RHGs is at least as, and generally more important than the 'between' component.

This paper investigates the possibility of overcoming that weakness by using real households, as they are observed in standard household surveys, rather than RHGs in the CGE modeling of distributional issues. By doing so, the full heterogeneity of households, either in terms of their factor endowments or in terms of their labor-supply and consumption behavior, would thus be taken into account. In particular, it should be possible to analyze more carefully the central question of how this heterogeneity combines with market equilibrium mechanisms to produce more or less inequality in economic welfare as a consequence of shocks or policy.

This paper explores two ways of integrating micro-economic data on households into CGE modeling and evaluates the difference both methods make in comparison with the standard RHG approach. In the first approach, assumptions are made that permit some kind of separability between the 'macro', or CGE part of the model and its micro-household component. In the second approach, individual households are fully integrated in the computation of market equilibria, leading to a CGE-RHG model where there actually are as many RHGs as there are households in the original data base. Both methods are applied to the analysis of the distributional impact of the 1997 crisis in Indonesia.