Impacts of controlling energy consumption quota on regional development in China-A simulation based on a multi-regional CGE model

Topic: CGE and econometric input-output modelling 4

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Chinese government is considering a new policy to control energy consumption quota in order to promote economic transition of regional development pattern. However there is a controversy about the new policy because all provinces wish to get much more energy consumption quota. In addition, disaggregation of energy consumption quota refers to the tradeoff between equity and efficiency. Authors developed a multi-regional CGE model to simulate the impacts of the policy to control energy consumption quota on regional economy. The results indicate the policy to control energy consumption quota will slow down economic growth of most regions. Disaggregation of energy consumption quota based on efficiency-first principle will enlarge regional disparity. If the disaggregation gives priority to equity, it has more severe negative impacts on the coastal provinces so that it may cause a greater impact on national economic growth. A balanced consideration of equity and efficiency is important for disaggregation of energy consumption quota when the new policy to control energy consumption quota is implemented.