Spillover Effects of Germanyâ€™s Final Demand on Southern Europe

Topic: (8.4) International Trade (3)
Author: Oliver Picek

Co-author: Enno SchrÃ¶der

(1) Research question and Abstract:
We calibrate a closed multi-country input-output model with data from the World Input-Output Database to predict spillover effects of Germanyâ€™s final demand on GDP, employment, and the trade balance in Southern European countries. The spillover effects are generally found to be small because the increase in imports is shared between many countries. They are comparatively larger for adjacent countries as well as Eastern European countries included in the German production network. Therefore, Germany alone is unable to make a significant contribution to the external adjustment process in the European South. A common expansion of the surplus countries within the European Union yields a limited magnitude of spillovers as well. However, a Northern European expansion does cause an improvement in the trade balances of the Southern European countries. If the latter decide to expand their economies as a result (in a smaller, and thus asymmetric fashion), strong own multipliers of the fairly closed Southern European economies can cause a sizeable domestic expansion. Overall, successful policies to help growth and employment in Southern Europe must spend funds domestically (either transferred from Germany or raised by domestic governments or the European Union) instead of relying on spillover effects.

2) Method: Impact Analysis based on Multi-regional Input Output Tables

3) Data: World Input-Output Database +

(4) Novelty: Similar estimates based on simple open models for value added or the trade balance already exist and yield very small spillover effects. These models, however, omit Keynesian consumption multipliers as well as any effect of increased profits on investment, and therefore might underestimate spillover effects. In this comprehensive study, we thoroughly include the value added, employment and trade balance effects and compare them across three models. By closing the model with respect to households and firms we do find higher spillover effects more than double the size of the open model, but do have to confirm their limited magnitude even given the more optimistic assumptions on economic multipliers. We are also able to simulate scenarios of asymmetric expansions, providing a potential counterfactual history of Eurozone current account rebalancing.