The structuralist theory of â€˜Dutch Diseaseâ€™: some numerical results for Chile

Topic: Input-Output Analysis
Author: Pablo R. Liboreiro

Purpose â€• By means of a practical model, the paper discusses the structuralist theory of the so-called Dutch Disease, which is based on the existence of conflicting claims to product among distinct sectors in a situation of lagging supply of key intermediates

Methods & Data â€• The model is for the Chilean economy and follows a Kaleckian â€˜fix-price/flex-priceâ€™ structure, with 33 production sectors. Once calibrated and parameterized, the model can be solved numerically to estimate the effects of mining activities on other production sectors.

Findings â€• Some results follow from the numerical exercises. Mining-induced cost-push effects are biased against manufactures, while mining-induced demand effects are biased in favour of services. Therefore, high levels of mining activity led to a lower share of manufacturing in income as well as a lower volume of exports of non-mineral goods. However, it cannot in any case be taken for granted that mining will have crowding-out effects on manufacturing output.

Implications â€• The numerical exercises show a link between infrastructure services and mining-induced cost effects, which points to the crucial importance of infrastructure policy in mineral exporting countries. Results also show that the proposal for â€˜achieving economic diversification by restricting miningâ€™ â€“ although tempting â€“ may not work.

Novelty â€• The present study contributes to the literature on Dutch Disease by illustrating the order of magnitude of mining-induced demand and cost effects. These competing effects have been postulated theoretically by structuralist scholars but have not to date been estimated in practical models.