

## **The Impact of the Special Mining Tax After the Earthquake 2010 over key variables of the Chilean Economy**

Topic: Modeling the Chilean Economy to Analyze the Future of its Mining Sector

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A severe earthquake occurred in Chile on February 27th of 2010. The magnitude of the damages created the political environment that allowed a change in the tax code and in particular an increase in a mining specific tax. The goal of the change was to increase government revenues and finance the reconstruction process. Copper is the main production in Chile and thus, this specific tax mainly applied to that aforementioned industry.

This paper studies the effect of this tax increase on investment, production, unemployment and other important aggregate economic variables. In particular, we focus our attention in the mining sector. We construct a dynamic input-output model for the Chilean economy. The model is estimated iteratively, and is constructed under a bottom-up philosophy on many sectors, with more precision than the standard 12 sector classification. We compare actual data from the period 2010-2015 with simulated data from the estimated model, adjusting the tax rate to introduce a counterfactual world, in which the taxes would have been the projection of the tax rate of the period 1996-2009, and therefore lower than the actual taxes. Comparing these two set of data, allow us to study the possible effects of the introduction of the new tax scheme in both aggregate and sectorial economic variables. The integration of input-output relations is a key feature of the model and it allow us to study not only the direct effect of the tax increase, but also how dissipates throughout the economy, and how it affected other sectors.