Título The cost of failing to prevent gas supply interruption: a CGE assessment for Peru

Tipo de Producto Publicación científica

Autores Mastronardi, L. ; Chisari, O. ; Vásquez Cordano, A. y Romero, C.

Código del Proyecto y Título del Proyecto

D14E01 - Modelo de Equilibrio General Computado Regional para Argentina con desagregación de la Provincia de Buenos Aires

Responsable del Proyecto

Mastronardi, Leonardo

Línea

Equilibrio General Computado

Área Temática

Economía

Fecha

Marzo 2015

INECO
Instituto de Economía

UADE FUNDACIÓN UADE

The cost of failing to prevent gas supply interruption: a CGE assessment for Peru

Abstract:

Since 2000, there has been a noticeable progress in social and economic indicators of Peru. Even though the country risk has diminished dramatically, several threats remain. One of the key ones is the possibility of involuntary (transitory or permanent) interruptions of the natural gas pipeline transportation system. Given the significant endowments of natural gas reserves in Peru (Camisea gas field) and its relevance in the economy, shortages of natural gas due to pipelines failures can wreak havoc because it is important from the government revenue and it is a basic input for domestic manufacturing and household energy consumption.

Earthquakes, unexpected social unrest or intentional actions could interrupt the service of some of the fundamental pipelines of the grid. One pipeline with three branches connects the upstream to the distribution centers. To take into account the economy wide impact of the interruption of gas supply we built a CGE model considering modifications of relative prices, markets reactions and income effects.

We simulate different scenarios considering the three most important branches of the Camisea pipeline. The results show that those shocks would represent an important decline of GDP in the short run when substitution is limited (about or 0.2% by day) and an abrupt reduction of welfare for households. The estimated daily cost is in the range of 335 million of USD for the worst case scenario.