



**International Input-Output Association**

**Working Papers in Input-Output Economics**

**WPIOX 09-012**

**Cristela Goce-Dakila and Francisco G. Dakila Jr.**

**Vulnerability of a Developing Economy to Reduction in  
Overseas Remittances: A CGE Approach**

## **Working Papers in Input-Output Economics**

The Working Papers in Input-Output Economics (WPIOX) archive has been set up under the auspices of the International Input-Output Association. The series aims at disseminating research output amongst those interested in input-output, both academicians and practitioners. The archive contains working papers in input-output economics as defined in its broadest sense. That is, studies that use data collections that are in the format of (or are somehow related to) input-output tables and/or employ input-output type of techniques as tools of analysis.

### **Editors**

Erik Dietzenbacher

Faculty of Economics and Business  
University of Groningen  
PO Box 800  
9700 AV Groningen  
The Netherlands

[h.w.a.dietzenbacher@rug.nl](mailto:h.w.a.dietzenbacher@rug.nl)

Bent Thage

Statistics Denmark  
Sejrøgade 11  
2100 Copenhagen Ø  
Denmark

[bth@dst.dk](mailto:bth@dst.dk)

**Code: WPIOX 09-012**

**Authors: Cristela Goce-Dakila and Francisco G. Dakila Jr.**

**Title: Vulnerability of a Developing Economy to Reduction in Overseas Remittances: A CGE Approach**

**Abstract:**

The paper assesses the welfare and output effects involved in the reduction of overseas remittances to Philippine households across different delineated regions. It utilizes a computable general equilibrium model and a multi-regional social accounting matrix as database. These effects are initially estimated using a five region model with thirty-four regional production sectors and fifteen regional household income groups. A three-level production function is specified which takes the form of Cobb-Douglas-Leontief-Cobb-Douglas type. In contrast, the same effects are estimated using a two-region model with twenty production sectors and a single-stage Leontief production function. The comparative results showed that while the functional specification of the production function and the level of disaggregation of the regional production sectors exert a significant influence on the empirical results, the simulated incidence of a decline in overseas Filipino workers' remittances is broadly consistent.

**Keywords:** Spatial impacts, Remittances, Computable general equilibrium modeling

**Archives:** Impact analysis; CGE models and econometrics; (Inter-) Regional studies

**Correspondence address:**

Cristela Goce-Dakila  
Economics Department  
De La Salle University  
2401 Taft Avenue  
Manila 1004  
1004 Philippines

E-mail: [dakilac@dlsu.edu.ph](mailto:dakilac@dlsu.edu.ph)

**Date of submission:** October 12, 2009