

PHILIPPINE EXPORT EFFICIENCY AND POTENTIAL: AN APPLICATION OF STOCHASTIC FRONTIER GRAVITY MODEL

Roperto S. Deluna Jr¹ and Edgardo D. Cruz²

¹Instructor, School of Applied Economics, University of Southeastern Philippines, PHILIPPINES,
rupert.deluna@usep.edu.ph

²Prof., School of Applied Economics, University of Southeastern Philippines, PHILIPPINES,
ecruz_aug@gmail.com

Abstract

Trade across regions and borders are considered important in improving welfare of people. The Philippines is one of the oldest economies in the world, however, for more than a century it experienced severe trade deficit. This could be due to domestic rigidities and rigidities of its trading partners. This study is focused on examining export efficiency and potential based on trading partner's characteristics using new approach of measuring export potential. The study employed the Stochastic Frontier Gravity Model that measures potential from the frontier unlike the usual measure of gravity model using OLS that measure potential from the mean.

Results show that merchandise export flows of the Philippines is significantly affected by income, market size of the importing partner and the distance between them. The technical efficiency for all countries ranged from 38 to 42%. Countries with larger markets emerged as high export potentials such as USA, China and Japan with potentials ranging from 10 to 30 Trillion US dollars. These potentials have been variable. Results of technical inefficiency model reveal that these potentials are increased by membership of the Philippines to ASEAN, APEC and WTO. Reduction of corruption and freer labor market in the importing country enhanced export potential of Philippine merchandise exports. Commonality of language also enhanced this potential.

Keywords: Merchandise exports, Gravity model, Stochastic Frontier, Philippine export potential

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