

UNIVERSITY OF CAPE COAST

COMPARISON OF TECHNICAL EFFICIENCY BETWEEN FOREIGN-
OWNED AND DOMESTIC-OWNED PHARMACEUTICAL
MANUFACTURING FIRMS IN GHANA

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature: Date:

Name:

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

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Co-supervisor's Signature: Date:

Name:

ABSTRACT

This study compares technical efficiency levels of foreign-owned firms with that of domestic-owned firms using 2009 survey data of pharmaceutical manufacturing firms in Ghana. Thus, the study attempts to find out whether or not; (a) foreign-owned firms are more technically efficient than domestic-owned firms, (b) the technical efficiency of foreign-owned firms and that of domestic-owned firms are influenced by the same firm-specific characteristic (socio-economic) factors and (c) output levels of foreign-owned firms and domestic-owned firms are each, more responsive to capital than to labour.

The stochastic frontier production function and the ordinary least squares (OLS) model were respectively used to separately estimate mean technical efficiency of each firms group and the factors that influenced technical efficiency levels of firms. Foreign-owned firms were observed to have greater mean technical efficiency level. Professionals employed, ages of firms' plants and maintenance exercises undertaken by firms were observed to have influenced the technical efficiency levels of both firm groups.

The Ghana Investment Promotion Centre should intensify its function to encourage more foreign investors in the pharmaceutical manufacturing industry. Domestic-owned firms should enter into joint venture activities with foreign investors to encourage the transfer of efficiency related technology.

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DEDICATION

To my wife, Leticia and children

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LIST OF ACRONYMS

ACTs	Artemisinin-Based Combination Therapy
APIs	Active Pharmaceutical Ingredients
ARVs	Anti-Retroviral Drugs
CES	Constant Elasticity of Substitution
DEA	Data Envelopment Analysis
DFA	Distribution Free Approach
FDB	Food and Drugs Board
FDH	Full Distribution Hull
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GHS	Ghana Health Service
GMP	Good Management Practices
GIPC	Ghana Investment Promotion Centre
GSE	Ghana Stock Exchange
GSS	Ghana Statistical Service
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndromes
ICB	International Competitive Bidding
KNUST	Kwame Nkrumah University Of Science and Technology

MCP	Malaria Control Programme
MNCs	Multinational Corporations
MOH	Ministry of Health
NCB	National Competitive Bidding
NTD	Priority Endemic Diseases
PMAG	Pharmaceutical Manufacturers Association Of Ghana
R & D	Research and Development
SAP	Structural Adjustment Programme
SFA	Stochastic Frontier Analysis
SOEs	State-Owned Enterprises
TB	Tuberculosis
TGF	The Global Fund
VAT	Value Added Tax
WHO	World Health Organisation

