

#### ABSTRACT

**RODIL, N. M., Determinants of Urban Growth in Metro Manila.** Bachelor of Science in Business Administration Major in Economics. De La Salle University-Dasmariñas, City of Dasmariñas, June 2011. Adviser: Mr. Benjamin A. Usigan.

The purpose of this study was to determine the human and physical capital factors that contribute to the urbanization of Metro Manila; and to analyze the impact of selected human and physical capital on the urban growth of Metro Manila. The study used proxy variables for physical capital namely, gross value added in construction, gross value added in manufacturing, and gross value added in utilities; and proxy variables for human capital namely, business permits, rural health units, number of hospitals, live births, gross value added in service, number of elementary and secondary teachers, and number of banks. Income and labor force were used as the dependent variables. Stepwise regression and pairwise Granger causality were used to test the impact of physical capital and human capital on urban growth in Metro Manila.

Number of business permits, gross value added of manufacturing, gross value added of utilities, and number of public elementary school teachers were found to be significantly affecting income of Metro Manila. Number of business permits, gross value added of construction, gross value added of manufacturing, number of live births, gross value added of services, number of public elementary school teachers, and number of banks were found to be significantly affecting the labor force in Metro Manila. Labor force, number of live births, number of banks, gross value added of construction, gross value added of manufacturing Granger caused income while income Granger caused only the number of public elementary school teachers, and gross value added of

manufacturing. Also, number of business permits, gross value added of services, and number of live births Granger caused the labor force, while labor force Granger caused the number of public high school teachers, number of banks, number of rural health units, and gross value added of utilities.

The study concluded that all the physical capital variables have a positive impact on income and labor force while gross value added of manufacturing has a negative impact. All human capital variables have a positive impact on income and labor force.

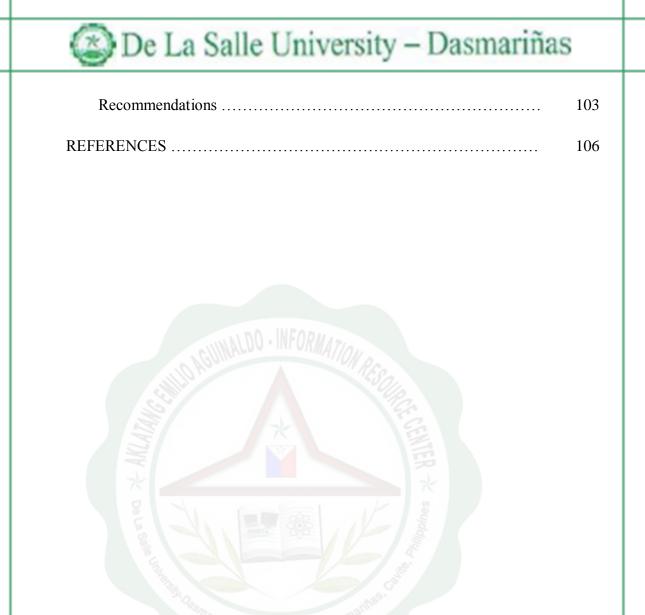
The study recommends that the government should provide greater attention to improve the skills, knowledge, expertise of the labor force, and provide physical and industrial capacity in Metro Manila. Programs of the government should focus on maintaining and improving the physical capital of Metro Manila in terms of three sectors that were considered to be at the forefront of building the infrastructure of a highly urbanized Metro Manila.

#### TABLE OF CONTENTS

Page

TITLE PAGE	
APPROVAL SHEET	
BIOGRAPHICAL SKETCH	
ACKNOWLEDGMENT	
ABSTRACT	vi
TABLE OF CONTENTS	viii
LIST OF TABLES	xi
LIST OF FIGURES.	xii
INTRODUCTION	
Background of the Study	2
Statement of the Problem	6
Objectives of the Study	8
Hypotheses of the Study	8
Significance of the Study	9
Scope and Limitations of the Study	9
Definition of Terms	11
REVIEW OF RELATED LITERATURE	
Urban Growth Theories	13

Growing Cities and Population Growth	
Affecting Urban Growth	17
Human Capital Affecting Urban Growth	20
Developed Constal Affecting Urban Crowth	26
Physical Capital Affecting Urban Growth	20
THEORETICAL/AND CONCEPTUAL FRAMEWORKS	29
METHODOLOGY	37
Research Design	37
Sources of Data	37
Sources of Data	57
Methods of Analysis	38
RESULTS AND DISCUSSION	42
*	
Profile of Metro Manila	42
Urban Growth in Metro Manila	48
	40
Trend of Physical Capital of	
Metro Manila	52
ana namanaa	0-
Trend of Human Capital of Metro Manila	
Metro Manila	63
Impact of Physical and	
Human Capital on Income	86
Impact of Physical and Human	0.1
Capital on Labor Force	91
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	
Summary	101
Summary	101
Conclusions	102



#### LIST OF TABLES

Table		Page
1	Local Government Units in Metro Manila, Philippines, 2007	45
2	Real Gross Domestic Product of Metro Manila, Philippines, 1980-2009	49
3	Result of the Constant Growth Rate Model of Income and Labor Force	50
4	Labor Force in Metro Manila, Philippines, 1980-2009	53
5	GVA of Construction in Metro Manila, 1980-2009	55
6	Regression Result of the Constant Growth Rate Model for Physical Capital	56
7	GVA of Manufacturing in Metro Manila, Philippines, 1980-2009	59
8	GVA of Electricity, Gas, and Water in Metro Manila, Philippines, 1980-2009	61
9	Number of Business Permits in Metro Manila, Philippines, 1980-2009	64
10	Regression Result of the Constant Growth Model of Human Capital	66
11	Number of Rural Health Units in Metro Manila, Philippines, 1980-2009	67

12	Number of Hospitals in Metro Manila, 1980-2009	70
13	Number of Live Births in Metro Manila, Philippines, 1980-2009	73
14	GVA of Services in Metro Manila, Philippines, 1980-2009	76
15	Number of Public Elementary School Teachers in Metro Manila, Philippines, 1980-2009	78
16	Number of Public School Teachers in High Schools in Metro Manila, Philippines, 1980-2009	81
17	Number of Banks in Metro Manila, Philippines, 1980-2009	84
18	Full Model Regression Showing the Impact of Physical and Human Capital on Income	87
19	Stepwise Regression Showing the Impact of Physical Capital and Human Capital on Income	88
20	Full Model Regression Showing the Impact of Physical and Human Capital on Labor Force	93
21	Stepwise Regression Showing the Impact of Physical and Human Capital on Labor Force	94
22	Pairwise Granger Causality Test for Physical and Human Capital and Income	98
23	Pairwise Granger Causality Test for Physical and Human Capital and Labor Force	100

#### LIST OF FIGURES

Figure		Page
1	Conceptual framework showing the impact of physical and Human capital on urban growth of Metro Manila	36
2	Map of Metro Manila	43
3	Trend of real GDP of Metro Manila, Philippines, 1980-2009	51
4	Trend of labor force in Metro Manila, Philippines, 1980-2009	54
5	GVA of construction in Metro Manila, Philippines, 1980-2009	56
6	Trend of GVA of manufacturing in Metro Manila, Philippines, 1980-2009	60
7	Trend of GVA of electricity, gas, and water in Metro Manila, Philippines, 1980-2009	62
8	Number of business permits in Metro Manila, Philippines, 1980-2009	65
9	Number of rural health units in Metro Manila, Philippines, 1980-2009	68
10	Number of hospitals in Metro Manila, Philippines, 1980-2009	71
11	Trend of number of live births in Metro Manila, Philippines, 1980-2009	74
12	Trend of GVA of services in Metro Manila, Philippines, 1980-2009	77

13	Number of public elementary schools teachers in Metro Manila, Philippines, 1980-2009	79
14	Number of public high school teachers in Metro Manila, Philippines, 1980-2009	82
15	Trend of number of banks, Metro Manila, Philippines, 1980-2009	85