

A STUDY ON THE BOP BUSINESS FOR POVERTY REDUCTION IN  
DEVELOPING COUNTRIES

by

HARA MASATOSHI, Ph.D.

DISSERTATION

Presented to the Swiss School of Business and Management Geneva

In Partial Fulfillment

Of the Requirements

For the Degree

DOCTOR OF BUSINESS ADMINISTRATION

SWISS SCHOOL OF BUSINESS AND MANAGEMENT GENEVA

November, 2021

A STUDY ON THE BOP BUSINESS FOR POVERTY REDUCTION IN  
DEVELOPING COUNTRIES

by

HARA MASATOSHI, Ph.D.

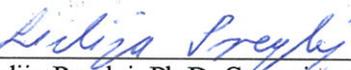
APPROVED BY

  
\_\_\_\_\_

Mario Silic, Ph.D, Chair

  
\_\_\_\_\_

Anna L. Provodnikova, Ph.D, Committee Member

  
\_\_\_\_\_

Lidija Preglej, Ph.D, Committee Member

RECEIVED/APPROVED BY

  
\_\_\_\_\_

Dino Kolak, Admissions Director



## **Dedication**

This study is dedicated to my father, Hiroshi Hara, my mother, Mikiko Hara, my older brother, Akihiko Hara, and my younger brother, Yusuke Hara, who have always encouraged me to pursue the highest level of education in Switzerland that they never achieved.

## **Acknowledgements**

I would like to express my sincere gratitude to Dr. Anna L. Provodnikova, my faculty mentor and chairperson for all the guidance, encouragement, continuous support through this academic process, and the advice and encouragement to pursue my doctoral study on the BOP business for poverty reduction in the developing world.

ABSTRACT

A STUDY ON THE BOP BUSINESS FOR POVERTY REDUCTION IN  
DEVELOPING COUNTRIES

HARA MASATOSHI, Ph.D.  
2021

Dissertation Chair: Dr. ANNA L. PROVODNIKOVA

Alleviating poverty has long been discussed as one of the most significant social issues, especially in the developing world. One major problem in addressing the poverty issue is directly linked not merely to fewer job opportunities and an unstable income, but also to poor health, lack of education, inadequate living standards, lack of income, disempowerment, poor, quality of work, and threat of violence. The Base of Pyramid (BOP) business is referred to as a behavior-oriented model or an approach that helps business organizations sufficiently promote their activities in undeveloped and unserved markets. Promoting the BOP business has, therefore, become one of the most innovative ways to mitigate the poverty, primarily by private sectors. However, little previous research has been conducted on the influence of the BOP business opportunities on the poverty reduction and on the BOP business development strategy in connection with the

barrier issue of lacking the appropriate economic development conditions. Tran's economic development stage model and Vernon's BOP business development model were applied to examine the predictive relationships between poverty reduction and the BOP business maturity. Using secondary data compiled between 2000 and 2020 primarily from the World Development Indicators, the World Governance Indicator, the Human Development Index, and multiple linear regression modeling, the strength of the BOP business cases predicting the percentage change in  $R^2$  variance in the poverty headcount ratio was evaluated in the randomly selected 61 economies. Using natural data, the BOP business was found to be a significant predictor ( $F [1, 1268] = 12.822, p = .000$ ) for poverty headcount ratio, and is thus a major factor in alleviating poverty. Also, employing the grounded theory, through the open, axial, and selective-coding process, developed a conceptual framework of the BOP business development strategy for poverty reduction that combines the economic development conditions per income stage with the BOP business development. Positive social change emanates through continued policy support of the BOP business as a means to mitigate poverty by formulating the framework and its strategy.

## TABLE OF CONTENTS

List of Tables .....	ix
List of Figures .....	x
CHAPTER I: INTRODUCTION.....	1
1.1 Introduction.....	1
1.2 Research Problem .....	2
1.3 Purpose of Research.....	4
1.4 Research Questions (RQs) and Hypotheses.....	4
1.5 Nature of the Study .....	7
1.6 Assumptions.....	11
1.7 Scope and Delimitations .....	15
1.8 Limitations .....	16
1.9 Significance of the Study .....	17
1.10 Summary .....	18
CHAPTER II: REVIEW OF LITERATURE .....	20
2.1 Theoretical Framework.....	20
2.2 Literature Review.....	34
2.3 Research Variables and Entities.....	62
2.4 Identification of the Research Gaps .....	63
2.5 Summary .....	65
CHAPTER III: METHODOLOGY .....	67
3.1 Overview of the Research Problem .....	67
3.2 Methodology for RQ1.....	68
3.3 Methodology for RQ2.....	84
3.4 Summary .....	94
CHAPTER IV: RESULTS.....	97
4.1 Data Collection .....	97
4.2 Study Results .....	118
4.3 Summary .....	144
CHAPTER V: DISCUSSION.....	147
5.1 Interpretations of Finding .....	147
5.2 Limitation of the Study .....	160
5.2 Summary .....	163

CHAPTER VI: SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS.....	166
6.1 Summary of the Study .....	166
6.2 Implications.....	169
6.3 Recommendations for Future Research .....	175
6.4 Conclusion .....	182
APPENDIX A REPRINT PERMISSION FROM THE UNIVERSITY OF GRONINGEN.....	18485
APPENDIX B REPRINT PERMISSION FROM THE UNIVERSITY OF TWINTE .....	18486
REFERENCES .....	18687

## LIST OF TABLES

Table 1. A Conceptual Framework of a BOP Business Development Strategy for Poverty Reduction per Income Stage.....	33
Table 2. Gross Domestic Product per Capita (US\$) World View: 1700 to 2008.....	37
Table 3. The Trend of International Aid for Poverty Reduction .....	41
Table 4. Poverty Situation by Region.....	44
Table 5. Socio-economic Indexes per Region between 1995 and 2019 .....	48
Table 6. Socio-economic Indexes per Region between 1995 and 2019 (Human Capital Aspect).....	49
Table 7. Labelling Conventions for Dependent, Independent, and Controlled Variables .....	113
Table 8. Descriptive Statistics for DV, IV, and CVs: SPSS Imputed Data .....	115
Table 9. Multiple-Linear Regression Model Outputs for RQ1.....	128
Table 10. Multiple-Linear Regression Model Outputs for RQ1 (The Case of FDI as IV).....	128
Table 11. Coding-Process Output for RQ2 (No. 1-8).....	138
Table 12. Coding-Process Output for RQ2 (No. 9-16).....	139
Table 13. Coding-Process Sheet for RQ2 (No. 17-23).....	140
Table 14. Coding-Process Sheet for RQ2 (No. 24-31).....	141
Table 15. Coding-Process Sheet for RQ2 (No. 32-38).....	142
Table 16. Coding-Process Sheet for RQ2 (No. 39-45).....	143

## LIST OF FIGURES

Figure 1. A Theoretical Framework of Poverty Reduction and the BOP	
Business Maturity in an Economy .....	27
Figure 2. The Scatterplot of Residuals for RQ1 .....	121
Figure 3. The Scatterplot of Residuals for RQ1 (The Case of FDI).....	121

# CHAPTER I: INTRODUCTION

## **1.1 Introduction**

While the world economy has dramatically advanced since World War II, many economies have struggled for growth, prosperity, and development. The World Bank (2021) has paid close attention to eradicating poverty for further development in many parts of the world. Previous studies by other researchers have signified the Sustainable Development Goals (SDGs) realization in developing countries to be one of the world's most significant social problems (UN, 2021). Since the outbreak of the COVID-19 pandemic in early 2020 (WHO, 2021), the world economic outlook has further deteriorated (IMF, 2021). Remarkably, developing countries have faced a higher poverty rate as one of the most serious social issues (World Bank, 2021). Under the situation, promoting poverty reduction should further be made even under the pandemic.

It has been common sense that the development sectors, including the governmental sectors, the international organizations, the Non-profit Organizations (NPOs), and the Non-government organizations (NGOs), have been represented to tackle the poverty issue (Otsubo et al., 2009). However, the recent trend has changed; the development sectors have attempted to reduce poverty by employing their business products and services, especially with inclusive business, fair-trade, CSR.

Notably, the "Base of Pyramid" (BOP) business has been paid attention to by international organizations and governments. The BOP business's primary aim is to improve impoverished people's lives by actively involving them in the businesses as consumers, producers, sellers, or distributors (London, 2007). Still, the BOP business has not become a panacea for poverty reduction in all the areas. Since the business model is a relatively new approach, it is necessary to see how much impact poverty reduction has as objectively as possible. Also, because developing countries have different socioeconomic and cultural backgrounds, clarifying the BOP business development's essential conditions should further be considered.

Based on the social problem and background, this study covers business economics and strategic planning, especially with the motivation of analyzing the impact of the BOP business on alleviating poverty in developing countries. Besides, it proposes a conceptual framework relevant to the BOP business conditions for strategic management. In this respect, this study will significantly be contributing to business practice and knowledge advancement. The literature review starts with the introduction of the theory and practices relevant to poverty in the developing country, the practice of the traditional approach to poverty, the BOP approach to poverty, and the identification of the research gaps that were addressed in this study.

## **1.2 Research Problem**

At least, two major gaps in the literature were found to be framed as research problems as follows.

Firstly, despite some advantages of the business style, much less research on the impact of the BOP business on poverty reduction was identified. Indeed, the significant factors of reducing poverty have been led representatively by the governments and the international organizations (Sen, 1999). The poverty issue has been triggered, primarily by the insufficient infrastructure, unskilled labor, market, education, medical, less job-opportunity, etc. (ADB, 2017). Also, Karnani (2009) emphasized that since the BOP approach depends on the free market's invisible hand for mitigating poverty, the nations should further extend a considerable visible hand to the poor to help them avoid poverty. In a word, he can potentially be skeptical about the BOP's effectiveness in alleviating poverty. Thus, it is necessary to quantitatively see the impact of the BOP on poverty reduction in a certain period. In this way, one research problem related to it can be the influence on poverty reduction since its launch.

Secondly, despite the different socio-economic and cultural backgrounds in impoverished areas, expanding the BOP business should be considered further. In various market conditions, industries, products, and services, the processes or the flows of putting the BOP business into practice should be different (Inoue, 2012). Nevertheless, the common conditions should strategically be arranged. Indeed, Hart et al. (2016) mentioned that management theory and research have not progressed at the same pace as the BOP business. Therefore, knowledge relevant to parameters for the integration of business strategy into poverty alleviation remains cloudy. From this point of view, the framework relevant to the BOP business

development should conceptually be developed to make it successful in the long run.

### **1.3 Purpose of Research**

This study's primary purpose is to contribute to mitigating poverty in many parts of the world by quantitatively clarifying the impact of the BOP business on poverty reduction and formulating a conceptual framework of the BOP business development with the essential conditions of the BOP in developing countries via qualitative study, primarily through case studies.

### **1.4 Research Questions (RQs) and Hypotheses**

RQ1: Will the BOP business for alleviating poverty in developing countries predict a statistically significant percent change in  $R^2$  variance when controlling the other factors of governance, industrialization, labor market, infrastructure, and human development composite values?

$H_0$ : There is no statistically significant contribution of the BOP business to the percent change of the  $R^2$  variance in developing countries' poverty alleviation composite scores when controlling the other factors of governance, industrialization, labor market, infrastructure, and human development composite values.

$H_1$ : There is a statistically significant contribution of the BOP business in developing countries to the percent change of the  $R^2$  variance in developing countries' poverty alleviation composite scores when controlling the other

factors of governance, industrialization, labor market, infrastructure, and human development composite values.

1. Controlled variables (CVs):

1-1. Industrialization: The value added of manufacturing (% of GDP) from World Development Indicators (2021) was employed as continuous variables.

1-2. Labor market: The labor force participation rate (% under aged 15-24) from World Development Indicators (2020) will be employed as continuous variables.

1-3. Infrastructure: Transport Service (% of service exports, Balance of Payments) will be employed as continuous variables.

1-4. Human development level: The human development index (HDI) was conceptualized by two scholars of Amartya Sen and Mahbub ul Haq (UNDP. 2021). This concept summarizes the measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living (UNDP. 2021). The HDI is, therefore, composed of life expectancy index, education index, and the Gross National Income (GNI) index, while it does not reflect on inequalities, poverty, human security, empowerment, etc. (UNDP, 2021). The HDI was employed from UNDP (2021) as continuous variables.

1-5. Governance: The index of governance indicators, including transparency in policymaking, efficiency in administration service, investment

environment, and rent seeking from World Governance Indicators (2021) will be employed as the continuous variables.

2. Independent Variables (IVs): The number of cases relevant to the BOP business per each country will be employed as continuous variables (List, 2017).
3. Dependent Variables (DVs): Poverty headcount ratio at \$1.90 a day % of population from World Development Indicators (2021) will be employed as continuous variables.

RQ2: How can the framework of BOP business development as an essential condition in any developing country be formulated and recommended? The grounded theory will be employed from the following three aspects.

1. Development strategies for poverty reduction from international organizations, including the World Bank, the Asian Development Bank (ADB), the African Development Bank (AfDB), the International Monetary Fund (IMF), the United Nations, etc. were examined.
2. Development plans relevant to poverty reduction from the government agencies in China, ASEAN economies, India, Kenya, South Africa, Brazil were also investigated.
3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and their industries were tested.

Based on these three aspects, formulating the framework relevant to the BOP business development and process was qualitatively attempted.

### **1.5 Nature of the Study**

The nature of this study is both quantitative and qualitative approaches; firstly, I used a non-experimental design to analyze the impact of the BOP business approach on poverty alleviation in developing countries. Also, I employed the qualitative research by introducing grounded theory to formulate a framework of the BOP business process as a recommendation for poverty reduction in the undeveloped world.

Specifically, for the first platform for the quantitative analysis (RQ1), I studied the impact of the BOP business approach on poverty reduction with the use of poverty headcount ratio at \$1.90 a day through the non-experimental design. As Tanaka (2015) explained, the non-experimental design has several advantages, including more generalizability of the results than the experimental design and not needing to intentionally manipulate the variables. Because the research purpose and the research questions in this study quantitatively addressed the relationship between the BOP business and poverty reduction on the national scales in developing countries, I chose a non-experimental design.

Consequently, the multiple-linear regression analysis, was made. One primary reason for this is that the regression analysis plays a significant role in measuring the selected IV's effect on the DV by indicating the DV's  $R^2$  increase.  $R^2$  is the coefficient of determination representing how much the IVs statistically contribute

to the DV (Kvalseth, 1985). Therefore, the  $R^2$  variance was measured to see if the IVs influence the DV. The primary purpose of analyzing the effect of the BOP business cases on the poverty headcount ratio in the randomly selected 61 economies was to observe the figures of the  $R^2$  variance as coefficients of determination. The multiple-linear regression analysis allowed me to use the DVs' general values and the interval ratios of the IVs to be measured. Therefore, it was more appropriate for me to employ the multiple-linear regression model.

In processing the data-collection, for RQ1, the variables of the BOP business cases as well as the Foreign Direct Investment (FDI) were employed as IVs, while the other factors of governance, the proportion of the productivity per GDP in manufacturing, labor market, infrastructure, and the HDI were included as the controlled variables (CVs). As a result, in Chapter 4, I address discrepancies in data collection from the plan presented in Chapter 3. Specifically, by tracing the dataset gained through the World Development Indicators (2021), the World Governance Indicators, and the Human Development Index (2021) from 2000 to 2020, the IVs of the BOP business cases had, at least, over 1,250 missing data from 2000 to 2021, due primarily to the lack of the bigdata. Likewise, the DV of poverty headcount ratio governance had only 364 samples ( $n/a = 817$ ). The CV of transport services (% of service exports) had 244 missing data (2000 to 2020). For prescribing the missing data to be clear, I employed secondary data of the FDI for the BOP business as an ad-hoc item from the World Development Indicators (WDI) (2021). More importantly, the multiple-imputation method was introduced

in SPSS ver.27, resulting in a dataset with  $N = 1281$  maximum. I also reported the sample's characteristics from the name convention in SPSS ver.27, descriptive statistics, and the mean average per country in the selected 61 economies. The study results, especially assumption testing and hypotheses testing outcomes, resulting in the null hypotheses' rejection for the RQ1 due to an  $R^2$  increase and Sig. F change was found to be significant.

Also, regarding the RQ2, formulating the framework of BOP business development as an essential condition in any developing country was examined via qualitative study; the grounded theory was employed to examine the several types of frameworks relevant to development strategies in some development sectors, including the World Bank, the United Nations. Also, some countries' development frameworks for poverty reduction in undeveloped regions, including East Asia, Southeast Asia, South Asia, sub-Saharan Africa, and South America were also examined. Further, BOP business strategies in several MNCs were examined.

As a result, for formulating a conceptual framework of development strategies of the BOP business for poverty reduction, I employed the grounded theory with the open, axial, and selective-coding. With the three platforms of 1. Development strategies for poverty reduction from international organizations, 2. Development plans relevant to poverty reduction from the government agencies of 30 economies, and 3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries, I employed 45 samples through the document analysis by excerpting the texts and describe the essences of the texts,

and turning them into labelled words for coding. As a result, the final step of developing a theory for BOP business development strategies to answer RQ2 are sequenced with 1. An initial step of development strategies through improvements in public services, and ownership for agriculture and manufacturing, despite income stages, 2. Depending on the income stage, the development issues need to be prioritized for better business climate, especially for BOP business; food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with global partnerships, especially for rural development, and 3. Developing the BOP business model for social value creation through marketing, technology, and smaller-scale operations, especially in food, energy, housing, water, ICT, and transportation. The framework that I made seen in Table 1 can be justifiable in showing the steps and priorities of addressing the development strategies per income level, connecting the economic development sequences to the possible BOP type per the income stages.

Finally, I discuss the interpretations of the findings, especially from the aspects of the research outcomes of both research questions and the relation to the theoretical frameworks describing the relationship between the poverty reduction of an economy and the BOP business cases in Chapter 5. Then, limitations and recommendations for future studies are mainly discussed based on the discussion of the interpretations. Notably, I give the recommendations, particularly from three perspectives of the evaluation of variables and research methods, the BOP business

in developing countries, and the industrialization for overcoming the most significant topic of poverty for discussion. Finally, social change areas relevant to the study are summarized, primarily implications for further development. Because poverty is not as simple as a movement in one or two variables, I highlight the complications of further socioeconomic development and outside the world for a wrap-up.

## **1.6 Assumptions**

Assumptions can be defined as conditions that researchers cannot demonstrate to be true through the review of publications or working papers and other factors in their studies and that they had thereby to assume to be true (Furlough-Morris, 2017). With this definition, there were several assumptions in this study, primarily from the perspectives of the key variables and entities in this study, the reliability of the data sets, the accessibility to data, the applicability of the study design, and the expected outcomes to the research purposes in the long run. A summary of how the assumptions support the research purposes and the research questions in this study are described below.

First, as for the key variables in this study, in researching poverty reduction, it was necessary to identify the use of poverty headcount ratio (World Bank, 2021). This indicator was employed as a dependent variable in the RQ1: Will the BOP business for alleviating poverty in developing countries predict a statistically significant percent change in  $R^2$  variance when controlling the other factors of education, governance, industrialization, labor market, and infrastructure composite

values? in measuring the impact on poverty alleviation more accurately than using the other indicators, including the Gross National Income (GNI), Gross Domestic Product (GDP) or economic growth rate. The World Bank (2021) estimated the poverty headcount ratio at \$1.90 a day in the WDI (2021). The head count ratio was employed in this study, as this has been one of the most commonly used indicators for observing the poverty rate as well. Thus, I assumed that poverty alleviation represented the most appropriate measurements in observing the impact on poverty reduction.

Second, as for the veracity of the data sets and the accessibility of the data in this study, publicly available data collected were primarily the WDI as well as the World Governance Indicators (WGI, 2021) by the World Bank (2021). The World Bank has been widely recognized as the most reliable international organization to provide and share the socioeconomic datasets of all the countries with researchers, non-governmental organizations (NGOs), and government agencies (World Bank, 2021). The Human Development Index by the United Nations Development Programme (UNDP, 2021) is similarly recognized. I used the dataset of the HDI for approaching the RQ1. These data sets will be assumed to be genuine and accurate. Also, for these two international organizations to be reliable, accountable, and transparent, publicly open data are constantly accessible (UNDP, 2021; World Bank, 2021). These are widely used, so a few citations of studies that used these data helped solidify my assumptions.

Likewise, the BOP business was employed as one of the representative independent variables and entities both in the quantitative and qualitative studies. Essentially, the number of the successful cases of the actual BOP business activities per country with annual base is also a commonly employed element, especially in observing the impact on poverty reduction. From this point of view, the BOP business is assumed to be one of the most appropriate indicators in determining the impact on poverty alleviation.

Third, regarding the applicability of the research design and the expected outcomes, I conducted this quantitative study by collecting the open data with 61 economies for 21 years (1,281 samples), 2000 to 2020, and employing a multiple-linear regression analysis assumed to find a link to the applicability to the research purposes of clarifying the effect of the BOP business on poverty alleviation in developing countries accurately and genuinely. This quantitative study can contribute to improving the BOP business policy for poverty reduction in practice in the long run at a larger scale. In this respect, the quantitative analysis in this study can apply to the research purposes. Also, regarding the applicability of the expected outcome to the research purposes, I assumed that other factors might also have some contributions to poverty reduction, including infrastructure, governance, or the labor market, and the human development level. Sachs (2012) stressed that the other factors of governance, stable labor demand and supply and infrastructure, are of importance in the fundamentals of promoting economic development. The ADB (2017) also demonstrated several factors, including “low level of economic

diversification,” “insufficient advanced infrastructure” “weak institutions,” and “inefficient labor market” (pp. 18-19), contributing to poverty reduction. Finally, Sen (1999) stressed the importance of education and medical health for developing human capabilities in his studies. Based on the existing studies, these other factors, in addition to the enrollment rate in secondary education, can assumingly impact poverty reduction, while it was essential for me to observe if the BOP business can predict poverty reduction. For this reason, it was necessary for me to employ these factors as controlled variables (CVs). From this point of view, the expected outcome is to apply to the research purposes in this study by demonstrating the significance of appropriately allocating the investment for resolving the possible hindrance of poverty in the long run.

Finally, it was also assumed that making a framework of the BOP business development process for poverty mitigation should be signified, especially in qualitatively approaching the RQ2: How can the framework of BOP business development as an essential condition in any developing country be formulated and recommended? World Bank (2000) stressed the significance of forming a framework to tackle poverty as a whole picture and strategy for achieving the social goal. From the point of view, the framework assumingly makes it possible for development and private sectors to see the clear road map for achieving their social and organizational goals. In making the framework, employing some cases in some parts of the world should be assumed to be appropriate. Notably, despite the same status of poverty, it is expected to see the different socio-economic background,

culture, and society, depending on the region. In this regard, it was assumingly proper for me to employ the grounded theory for addressing the significance of developing the conceptual framework relevant to the BOP business development for poverty reduction.

These assumptions above can support the research purposes and the research questions in this study. In particular, the assumptions can help assure the significance of the research purposes of clarifying the influence of the BOP business on poverty reduction in developing countries and formulating the framework of BOP business process through the collection of the open data and the said quantitative and qualitative analyses. These assumptions can also help to apply the research design and expected outcomes to the research purposes in the larger scales scholarly and practically.

### **1.7 Scope and Delimitations**

In this study, I explored the influence of the BOP business on poverty reduction in developing countries. While BOP business has been considered one of the most significant contributions to further development in the developing world since 21st century, the potential of BOP business to eradicate poverty needs to be further clarified. In particular, the BOP business was studied because the opportunity for business activities has been much less in the low and lower-middle income economies than in high-income economies from a statistical viewpoint, is both a social problem and a research problem. The importance of promoting and advancing the BOP business has already been clarified in previous studies, but the influence on

poverty reduction via quantitative approach was not yet sufficiently identified, thus being chosen as the issue of internal validity in this study.

On the other hand, the boundary of populations was arranged by selecting 100 countries in developing countries and the conceptual frameworks representing the relationship between the poverty and the BOP business as the issues of external validity in this study. From these points of view, the potential generalizability of this study can be addressed to delimit the boundaries both of population and the theoretical framework. I can potentially generalize the theoretical relationship between the economic development stage and education level by the income levels classified by the World Bank (2021).

### **1.8 Limitations**

Three limitations can be possible.

Firstly, regarding the quantitative analysis for RQ1, poverty is employed as a study variable by introducing the data from the World Bank (2021). The poverty condition and status can be different country by country. In this way, the historical approach to poverty in each country or in each region was not centered here in the study discussion.

Secondly, regarding the qualitative analysis for RQ2, a formulation of the framework relevant to the BOP business process for poverty reduction may depend on the document survey via coding process to gather the integral parts of the business flow. Though it might be more valuable for me to employ the interview, the procedure might lead to the results with a potential bias in this study; the BOP

business development strategy for poverty reduction might not work for some organizations and areas for practice. In this way, it needs to be addressed.

Finally, I did not employ any specific case studies to be focused on. However, the problem is how the BOP business can approach to poverty reduction. In this way, it would be more beneficial for me to focus on some private sectors, notably by paying closer attention to how they try to approach to poverty reduction, the specific process of poverty reduction, and how the results can be seen more specifically. Of course, there might potentially be further biases in conducting the interview or focusing on some particular organizations. Still, it would be worth conducting the field investigation or the individual or group interview for the data-collection. In these ways, employing the case studies was not conducted in this study.

### **1.9 Significance of the Study**

This study can have implications for social change in addressing poverty reduction by promoting the BOP business in the developing world. Primarily, through this study, I gained insight into the most fundamental phenomenon of the poverty issue in some parts of the world, especially Southeast Asia, South Asia, South America, sub-Saharan Africa. Because this perspective has still not been addressed in previous research, the research can potentially be a major catalyst for growth and prosperity in these regions.

In addition, addressing the significance of formulating a conceptual framework relevant to the BOP business development strategies for poverty reduction in poor economies can help the developing world appropriately arrange the development

strategy to promote poverty reduction as well as maximizing the organizational profits by the national income stage. From this point of view, this practical study can be transferable to all the other income level's economies for managing the organizational and national development as social transformation.

### **1.10 Summary**

In this chapter, I introduced the overall study by identifying the research problems related to how to promote poverty reduction from the perspective of promoting the BOP business in developing countries. I clarified the influence of the BOP business activities on poverty reduction through quantitative analysis as a path to promote further economic development. Studies on poverty reduction to date have been conducted primarily in terms of industrial policies, governance, education, medical health, and political stability. The specific research problem concerning the influence of the BOP business on poverty mitigation has seldom been addressed by previous researchers, in spite of the recognized importance of promoting the business in the developing world. Because promoting the BOP business has resulted in further growth and prosperity in low and lower-income economies in sub-Saharan Africa and South Asia, the effect of the BOP business on poverty reduction needs to be addressed as part of the strategies to promote further economic progress. Also, formulating a framework relevant to the BOP business strategies for poverty reduction needs to be developed. Addressing these factors could offer a significant catalyst and a contribution both to theory and to practice for social change.

In the next chapter, I present a literature review in terms of the search strategy, conceptual framework, and the background of previous studies. Reviewing global development conditions, poverty reduction frameworks, and the concept of the BOP are described in detail.

## CHAPTER II: REVIEW OF LITERATURE

### **2.1 Theoretical and Conceptual Framework**

As previously described, the theoretical framework refers to a general or broader set of ideas by scholars for demonstrating the relationship that exists between the primary variables, primarily through quantitative research (Dickson et al., 2018). Meanwhile, Conceptual framework refers to an analytical tool that is used to have a comprehensive understanding of a phenomenon in various fields of studies by visually explaining key concepts or variables and the relationships between them that need to be studied (Cactus, 2021). With these definitions, in this study, five frameworks were employed in helping me signify the two research purposes of this study, show the connection among key variables and the relation to the research approach and purposes, and contribute to the formulation of my theoretical and conceptual frameworks.

#### **2.1.1. Theoretical Framework: Poverty and BOP Business**

To test hypotheses quantitatively, I used frameworks in a theoretical approach. Specifically, with the research purposes of contributing to the poverty reduction by clarifying the influence of the BOP business approach in developing countries, two primary perspectives of the poverty reduction and the BOP business were developed. Along with these research topics, an explanation of the existing frameworks, primarily from the perspectives of how they relate to the research approach and purposes, is given. With the frameworks, I introduce my theoretical

framework, showing the connections among the key variables and how they informed my analysis of those variables.

With respect to the first framework, the three frameworks by Prehalad (2002), Vernon (1966), and Tran (2016) helped signify the first research purpose of contributing to mitigating poverty by clarifying the influence of the BOP business on poverty in developing countries from the perspective of poverty reduction, economic development, and interacting with other development issues relevant to poverty, including the contribution of promoting education and medical health opportunities, labor productivity in industries and individual skills development to industrialization via the BOP business with larger and broader scales. These frameworks suggested that poverty reduction may be overcome by enhancing the BOP business while exploring interactions with other development issues relevant to poverty.

The BOP business is defined as a behavior-oriented model or an approach that expedites organizations appropriately promote their business activities in undeveloped and unserved markets (Mathur et al., 2016). This approach also opens opportunities for reduction of poverty. Since then, some governments and international organizations have promoted their research on advancing the BOP business and implemented financial support for public sectors in some parts of the world. Consequently, the BOP business cases, especially in the U.S., the U.K., and Japan, have steadily risen. The BOP is composed of several approaches: Firstly, the development sectors, especially the United Nations (2018), have advocated the

Sustainable Development Goals (SDGs) through cooperation, collaboration, and coordination (Zomorrodian, 2011). The organization has encouraged "inclusive business" since 2006 by launching "Growing Inclusive Markets: GIM" for alleviating poverty and improving the lives of others (UNDP, 2021). Secondly, fair-trade is a business model that can support people's lives in developing countries by purchasing the products in the consumer market in developed economies (Ruben, 2008). For alleviating the equality between the rich and poor economies, the fair-trade model has been developed and expanding the market scales since 2004 (Smith, 2009). Finally, the Corporate Social Responsibility (CSR) activity can encourage business organizations to create new values and new markets for enforcing corporate competitiveness, sustainable development, and activation of the entire economy simultaneously (Du et al., 2010). In these ways, the BOP business has been promoted to maximize the organizational benefits and mitigate poverty in the world as a new approach for development in developing countries.

In relation to the BOP business, there is a representative theory of the international product life cycle, referring to the stages of product development in the international market developed by Vernon (1966). Originally, it comes from the product life cycle theory, which explains that product go through five stages of production: introduction, growth, maturity, saturation, and decline. Since products and services can be characterized on the basis of the lifecycle stage as well as the nature or effects of the functions in the market. Based on the original theory,

Vernon (1966) identified three product categories in the international market: new product, maturing product, and standardized product. Basically, new products are composed of local parts and laborers. Moving on to a next phase of growth, product parts and laborers can become more broadly outsourced for the sake of sales channel in the international market. Then, when the products or services become mature, further broader sources are required. It means that outsourcing various aspects of the products and services, including manufacture of parts, assembly, shipping, etc., the requirements for production increase, and thereby increasing demand from global markets. Finally, the products and services will become obsolete; these items will be replaced with further competitive products or services under the competitive market situation. This international product cycle theory can be used to see the impact of the BOP business activities on poverty reduction in a way that the product lifecycle can correspond to poverty reduction. When conducting the BOP business under the harsh marketing conditions in developing countries, the business lifecycle can have the product/service life expectancy. From the start to the end, introduction, growth, maturity, saturation, and decline can work under any circumstance.

Meanwhile, Tran (2016) hypothetically theorized the stages of development in terms of four income groups: low-, lower-middle, higher-middle, and high-income economies. The author then explored how to escape the MIT by dividing the issue into two syndromes: the lower-middle-income trap (LMIT) and the higher-middle income trap (HMIT). He then proposed that improvement in the

institutions for development and room for capital-investment growth offered a path out of the LMIT, while the enhancement of the total-factor productivity (TFP) and human resource development could help national economies to escape the HMIT (Tran, 2016). In his earlier work, Schultz (1971) developed the framework of human capital investment as a factor involved in increasing national income and promoting economic development in the developing world, leading to the realization of poverty mitigation.

Relating to the first purpose of this research, to clarify the influence of the BOP business on poverty reduction, the three frameworks helped frame the quantitative research design in clarifying the significance of pursuing the relationship between the BOP business activities and poverty reduction. The BOP business model elaborated by Prehalad (2002), and the stages of economic development set out by Tran (2016) were each highly relevant. Specifically, the essential prepositions of these frameworks, which are the significance of the BOP business development for poverty reduction and economic growth in the developing countries, the implication of further investment in BOP business activities for individual and social return, and the theoretical clarification of poverty under economic development stages, can help me justify the significance of elucidating the relationship between poverty reduction and the BOP business through the quantitative analysis, thus grounding this study. Therefore, the two frameworks helped me find the connection of the key variables of the BOP business with poverty alleviation. In this way, I used these models as to follow an

econometric approach to quantitatively analyze the relationship between the BOP business and poverty alleviation by achieving the first research purpose.

More importantly, the three frameworks helped me build a theoretical framework that visually demonstrates the relationship between poverty reduction stage and the BOP business opportunities, primarily in reference to the economic development stage model formed by Tran (2016). This framework is composed of income stages to be achieved for further development in the developing countries. The framework can show the connection of the critical variables of poverty headcount ratio (World Bank, 2021) used for poverty and the BOP business activities in this study. With the primary variables, the quantitative approach, the first research purpose, and the research question are linked to the theoretical framework, notably in observing the impact of the BOP business opportunities on poverty alleviation. Thereby, the framework is generalized by traditional models.

Based on these three frameworks of Hart and Prehalad (2002), Vernon (1966) and Tran (2016), a new framework can ultimately be established. Figure 1 below represents the relationship between poverty reduction and the BOP business maturity by income levels, which was primarily applied by Hart and Prehalad (2002), Vernon (1966) and Tran (2016). The BOP business maturity comes from the concept of the product lifecycle theory by Vernon, starting from introduction, growth, maturity, saturation, and decline. Poverty reduction can correspond to the lifecycle of the BOP business activity. Specifically, Line AB stands for the low-income stage with the highest poverty ratio; the countries in the stage should

launch and expedite the BOP business promotion as introduction and growth. Then, the BOP business maturity should further be higher for overcoming the LMIT (Line BC and CC') as maturity and transition to saturation. Also, under the line C-D and DD' with the need for the promotion of science and technology and the innovation (Tran, 2016), the BOP business maturity should further be declined for finally achieving E, and thus escaping the HMIT. This theorization can play a role in making the relationship between poverty reduction and the BOP business maturity visually more evident.

From this point of view, this theoretical framework can show the connection between the key variables of the poverty ratio and the BOP business maturity. With the main variables of the poverty headcount ratio used for the BOP business opportunities, the quantitative approach, the first research purpose, and the research question are connected to this framework, notably in observing the impact of the BOP business cases on the poverty headcount ratio. Thus, the framework can be rationalized with the existing models.

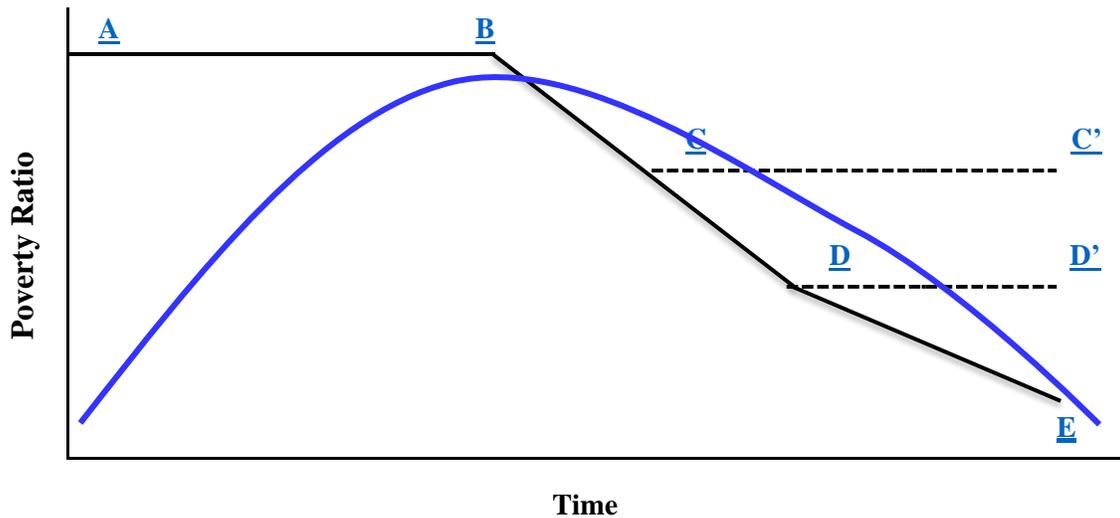


Figure 1

*A Theoretical Framework of Poverty Reduction and the BOP Business Maturity in an Economy*

Note. Based on Hart and Prehalad (2002), Tran (2016), and Vernon (1966), Hara made.

### 2.1.2. Conceptual Framework: BOP Business Development Strategy for Poverty

Secondly, I employed the qualitative study to form a framework relevant to the BOP business development strategies. Through the qualitative approach, a conceptual framework was formulated to visualize the flow chart that represents a strategy to process the BOP business for achieving poverty reduction in developing countries.

In turn, the other three frameworks developed by Simanis and Hart (2008), by Otsuka (2014), and by Tran (2016) were relevant to the second research purpose of this study, developing the BOP business process for poverty reduction in

developing countries. Specifically, Simanis and Hart (2008) formulated the framework of the BOP business development stage. It has historically three steps of first-generation BOP (BOP 1.0), second-generation BOP (BOP 2.0), and third-generation BOP (BOP3.0). BOP 1.0 is for “selling to the poor,” while BOP 2.0 is for “creating mutual value (CMV),” respectively (Simanis and Hart, 2008). BOP 1.0 aimed at having the poor involved with the business for earning benefits until 2007. BOP 2.0, then, aimed at creating the value chain from scratch and grasping the market needs accurately, which was the mainstream until 2012. Then, BOP 3.0 was conceptualized by introducing open innovation approaches and more participatory governance structures under the concept of “wisdom of the crowd” since 2013 (Cañeque and Hart 2015).

Meanwhile, Otsuka (2014) developed the frameworks of promoting poverty reduction by three types of industries, including agricultural, manufacturing, and service industries. With the essences of promoting poverty reduction, the author made several significant components, including infrastructure, private sectors, education, and labor markets, etc., emphasizing the increment of capitals for promoting further productivity (Otsuka, 2014). He conceptualized two main frameworks of development strategies in agricultural and manufacturing industries, respectively. As for the agricultural industry, the initial platform required for further development is to improve the intellectual capital through technological transfer and development. The next sequence is to promote human capital development, especially by focusing on spreading technology and cultivation

methods. He emphasized that increasing the skilled employees need to be further trained to handle the agricultural technology and cultivation. The third platform is to invest irrigated agriculture, transportation and mobile infrastructure. Without the arrangement of infrastructure, it would be next to impossible for local areas to promote agricultural development. Finally, enriching the capitals of credit offerings and financial aid enables local people to promote further transactions in their agricultural businesses so that they can earn their income. Meanwhile, in case of the manufacturing sectors, Otsuka (2014) suggested another framework with a different approach; the initial platform to be built-up is to enhance both intellectual and human capital development. To be more specific, the introduction of technological and business management methods from foreign countries through the spread of on-the-job training (OJT) and education. The author signified that two of the most significant points in promoting manufacturing development in the long term is to promote school education and specific industrial zones under the funding provided by the governments (Otsuka, 2014). The second platform is to arrange the infrastructure, especially by constructing specific industrial zones for the purpose of strengthening industrial congregation. Finally, similar to the agricultural development strategy, enriching the capitals of credit offerings and financial aid enables local people to promote further transactions in their agricultural businesses so that they can earn their income.

Finally, Tran (2016) conceptualized his theoretical framework that represents economic development stage in a nation by categorizing all the nations into four

income groups; low-income, lower-middle income, higher-middle income, and high-income levels. Specifically, Tran (2016) hypothetically theorized the stages of development in terms of four income groups: low-, lower-middle, higher-middle, and high-income economies. The author then explored how to escape the MIT by dividing the issue into two syndromes: the lower-middle-income trap (LMIT) and the higher-middle income trap (HMIT). He then proposed that improvement in the institutions for development and room for capital-investment growth offered a path out of the LMIT, while the enhancement of the total-factor productivity (TFP) and human resource development could help national economies to escape the HMIT (Tran, 2016).

The hypotheses in these three frameworks relevant to the development stages of BOP business in developing countries by Simanis and Hart and poverty reduction strategies per industry by Otsuka and income development stages by Tran addressed RQ2 regarding the BOP business development strategies for promoting poverty reduction. From this point of view, these three frameworks supported this study and showed the connection of the key entities of poverty and the BOP business, linking to the second research purpose by the qualitative approach.

Based on these three frameworks of Simanis and Hart (2008), Otsuka (2014) and Tran (2016), a new conceptual framework can ultimately be established. Table 1 below represents the BOP business development strategies for poverty reduction. Specifically, I classified all the developing countries into three income groups;

low-income, lower-middle income, and higher-middle income levels. As analyzed by Tran (2016), these income levels, especially, lower-middle income and higher-middle income levels depend on the labor conditions; low-income economies and the LMIEs usually tend to face labor-surplus, which means that many laborers are occupied with agriculture. Meanwhile, the HMIEs tend to face labor-supply shortage. This condition has encouraged the HMIEs to promote technological development and transfer from foreign economies for realizing the capital-intensive industries (Tran, 2016).

Furthermore, based on the theoretical frameworks by Otsuka (2014) and Tran (2016), I made five sequences as steps for promoting the BOP business, leading to poverty reduction as a final destination. In common, all the developing countries need to arrange governmental ownership, infrastructure, and education. One different point that needs to be addressed is that HMIEs should focus on promoting higher education, instead of primary education and secondary education, with a view to promoting technological development which is the key for overcoming the HMIT (Tran, 2016). Meanwhile, basic education needs to be further promoted in low-income and LMIEs because there is less enrollment rate (World Bank, 2021). In arranging the infrastructure, the next sequence required for development is to promote technological transfer and development from overseas. Ohno (2010) stressed the significance of learning new knowledge and techniques from advanced economies. Indeed, through the ODA project, technological advancement should further be promoted. The third step is to enhance business

credibility via credit offerings and financial aids from the banks. In a word financial condition needs to be further improved for more investment in technology and trainings for human capital development. Enriching until the third sequence, the FDI can further be enriched. Indeed, the number of the FDI cases in low-income economies is much less than those in the LMIEs and HMIEs (Watanabe, 2012). Unless the minimum conditions for the FDI, it would be challenging for advanced economies to promote the FDI. Finally, the BOP business can further be promoted via the FDI and the other development assistance methods.

Finally, as for the BOP development strategy, with the use of the framework by Simanis and Hart (2008), I used three types of the BOP businesses; BOP 1.0, BOP 2.0, and BOP 3.0. For a quick review, the BOP 1.0 is for the impoverished people to be involved with business, while the BOP 2.0 is for organizations to create the value chain from scratch. Then, the BOP 3.0 is for innovation and participatory governance. Based on the essential idea, the low-income economies should focus on the BOP 1.0 for reducing poverty as an immediate approach. Also, the LMIEs should enhance not only the BOP 1.0 but also BOP 2.0 because they should accelerate the industrial promotion primarily through creation of the value chain. Finally, since the HMIEs have advanced development conditions with less poverty rate, they should promote the BOP 3.0 for expediting technological innovation and enhancing participatory governance, leading to the high-income level.

Income Level	Development Strategy for Stepping into Promoting BOP Business					BOP Business Development Strategy *1		
	Step 1	Step 2	Step 3	Step 4	Step 5	BOP 1.0	BOP 2.0	BOP 3.0
Low-Income Economies	Education Infrastructure, and Ownership	Technological Transfer and Development from Overseas	Enhancing Business Credibility	Promoting FDI	Developing BOP	○	△	×
Lower Middle-Income Economies	Education Infrastructure, and Ownership	Technological Transfer and Development from Overseas	Enhancing Business Credibility	Promoting FDI	Developing BOP	○	○	△
Higher Middle-Income Economies	Higher Education for Science and Technology	Technological Transfer and Development from Overseas	Enhancing Business Credibility	Promoting FDI	Developing BOP	×	○	○

*Table 1*

*A Conceptual Framework of a BOP Business Development Strategy for Poverty Reduction per Income Stage*

*Note.* Based on Simanis and Hart (2008), Otsuka (2014), and Tran (2016), Hara formed the conceptual framework that represents the BOP development strategy for poverty reduction in developing countries. Per income level, processing five steps for BOP business to be arranged needs to be developed, and thereafter prioritizing the types of BOP 1.0, 2.0, and 3.0.

\*1. “○” represents the most significant and recommended level, “△” does less recommendable, and “×” means not recommendable.

In these ways, the conceptual framework relevant to the BOP business development strategy for poverty reduction in developing countries can be formulated. The framework is composed of income level stages, key development platforms, and BOP generation stages. This framework is to visually show the roadmap of poverty reduction per income stage by indicating which development issues should be addressed and which BOP stage can be appropriate to be focused on as clearly as possible.

## **2.2. Overview of the Literature Review**

The literature review is composed of five primary topics of “World Economic Outlook,” “Poverty in Developing Countries,” “Theories of Poverty Reduction,” “The Traditional Approach to Poverty Reduction,” and “The BOP Business Approach to Poverty Reduction.” With these topics, I will further discuss the research variables and then developing an identification of the research gaps to be framed as research problems in this study.

### **2.2.1 World Economic Outlook**

Before discussing poverty issue in developing countries, I overview the world economic outlook. Historically, most developing countries became independent as low-income economies after the Second World War. Upon de-colonialization, all peoples in the developing world were enthusiastic in the pursuit of further economic development. In the 21st century, some economies have made further improvements in quality of life by increasing income levels, facilitating social welfare, stabilizing their political systems, and promoting employment, thus

becoming equivalent to advanced economies including the U.S. and other Western countries.

Whereas some countries have met with success, others have had difficulty in realizing their development goals. East and Southeast Asia, for example, have been more successful than has sub-Saharan Africa (Allen, 2011). Comparative development status reports of different global regions are available from as early as the 16th century using estimates of GDP per capita as continuous. Table 2 represents the trend of GDP per capita from 1700 to 2008 in seven regions: Western Europe, Eastern Europe, Western Offshoots, the former USSR, Latin America, East Asia, the Middle East, and Africa, using data obtained from Angus (2003) and the Groningen Growth and Development Centre (GGDC, 2021). According to Table 1, the GDP per capita in Eastern Europe; Western Offshoots including the U.S., Australia, Canada, and New Zealand; East Asia; Latin America; and Africa was almost equal from 1700 until 1820, ranging from US\$ 450 to 650 per capita, despite the slightly higher level in Western European economies like the United Kingdom and France (about US\$ 1,000). Overall, there was almost no difference in GDP per capita among these regions until after 1820. Examining the years 1913 to 1949, however, the trend shows an emerging difference in GDP per capita among regions. Specifically, economies in Western Europe and their settler colonies drastically increased their national income, reaching approximately US\$ 10,000 before 1965.

On the other hand, nations in East Asia and Africa in particular had US\$ 1,000 in per capita income at this time, placing them at the low-income stage.

Interestingly, however, the tendency substantially changed for the period 1989 to 2008. In East Asia, Japan and South Korea have reached per capita GDP equivalent to those of Western countries. Furthermore, some nations have succeeded in boosting their productivity while others have remained unsuccessful - notably within the Latin American and East Asian regions. For example, Brazil and Mexico had lower GDP than Chile in 2008, within Latin America. Also, while Japan and South Korea reached a figure of around US\$ 20,000, India and the Philippines have had difficulty raising their GDP per capita since 1965. Thus, overall GDP per capita in East Asia is the second-lowest level in the world.

Additionally, although the Middle East, Eastern Europe, and Former USSR have stretched the amount, there has been little substantial change in the GDP amount since 1949. Africa has unfortunately been unsuccessful in increasing the GDP value over time, with the figure never exceeding US\$ 1,500 since 1820. As an overview, until 1820 there was no substantial difference in GDP per capita among the regions of the globe, while differences become more significant between 1913 and 1949. Furthermore, since 1965, the discrepancies in GDP per capita can be identified country by country within regions, notably in East Asia and Latin America. In concrete terms, the increase in GDP per capita in Japan and South Korea has been the most spectacular trend over the last 50 years, as also stated by Perkins (2013).

Region & countries / Year	1700	1820	1913	1949	1965	1989	2008
Total average in Western European countries	1,028	1,234	3,687	5,005	9,130	16,751	22,246
France	910	1,135	3,485	5,186	9,165	17,300	22,223
United Kingdom	1,250	1,706	4,921	6,939	9,752	16,414	23,742
Total average in East European countries	606	683	1,695	2,111	3,664	5,905	8,569
Western offshoots	476	1,202	5,233	9,268	12,967	22,255	30,152
Total average in Latin America	527	691	1,494	2,510	3,447	5,131	6,973
Brazil	459	646	811	1,672	2,448	5,224	6,429
Chile	-	694	2,988	3,670	4,577	6,283	13,185
Mexico	568	759	1,732	2,365	3,702	5,899	7,979
Total average in former USSR	610	688	1,488	2,841	4,634	7,112	7,904
Total average in East Asia	-	556	752	710	945	1,346	2,296
China	600	600	552	448	702	1,834	6,725
Indonesia	580	612	874	803	983	2,351	4,428
India	550	533	673	619	771	1,270	2,975
Japan	570	669	1,387	1,921	5,934	17,943	22,816
Philippines	-	584	988	1,070	1,633	2,184	2,926
South Korea	-	600	869	854	1,436	8,027	19,614
Total average in Middle East	591	607	1,042	1,776	3,033	4,590	6,947
Total average in Sub-Saharan Africa	421	420	637	889	1,181	1,444	1,780
World	615	666	1,524	2,111	3,228	5,130	7,614

*Table 2*

*Gross Domestic Product per Capita (US\$) World View: 1700 to 2008*

*Note.* Reprinted from *Statistics on World Population, GDP, and Per Capita GDP, 1-2008 AD.* by Groningen Growth and Development Centre, 2021, <http://www.ggdcenter.net/maddison/oriindex.htm> Copyright 2009 by the University of Groningen. Reprinted with permission (see Appendix A).

Consequently, stark differences in per capita GDP were identified among the eight regions in 2008. Notably, there is an income gap between the northern part (Western Europe and North America), and the global south, consisting of sub-Saharan Africa, South Asia, and South America. Also, within the Asia, an income discrepancy is quite evident, especially between Japan and South Korea in Northeast Asia on the one hand and Indonesia, India, and the Philippines in Southeast Asia on the other hand (GGDC, 2021).

As a result, stark differences in per capita GDP were uncloudedly identified among the eight regions. In particular, there is an income gap between the northern part (Western Europe and North America), and the global south, consisting of sub-Saharan Africa, South Asia, and South America. Also, within the Asian region, an income discrepancy is quite evident, especially between Japan and South Korea on the one hand and Indonesia, India, and the Philippines on the other hand.

Following this description of the world economic outlook in terms of GDP per capita over the last 300 years, the poverty issue in developing countries provides the next focus of discussion.

### **2.2.2 Poverty in Developing Countries**

Despite the more remarkable economic development progress in many parts of the world, especially by increasing individual income and creating more job opportunities, many developing countries have struggled for poverty reduction over the years (World Bank, 2021). The UNDP (2021) has defined poverty as “a situation where people find it inaccessible to a minimum fundamental in leading

their lives, including education, job, food, medical insurance, water resource, residence, or energy” (UNDP, 2021).

Since World War II, plenty of international organizations and other agencies have tackled with poverty reduction in poor economies as development assistance. Nevertheless, poverty is one of the most crucial social issues in the world. Despite the realization of the greater economic development in some parts of the world, the situation of the impoverished economies has further got deteriorated. JICA (2003) pointed that there has been over double of the economic discrepancies between the richest 20 economies and the poorest 20 economies over the past 60 years. Table 3 represents the trend of international development aid since the 1950s until 2015. In the 1950s to 1960s, economic development policy was mainly managed by nations via planned economy categorized as centralization type (JICA, 2020). Then, during the 1970s to 1980s, three events were prioritized; expanding the BHN approach, focusing on neo-classical approach for market liberalization, and introducing the structural adjustment program (Funazu, 2021).

Interestingly, in 1990, there was a new trend suggested by the UNDP, the human development approach through education, job training, and medical health. This approach was deeply-rooted by the capability approach theorized by the Nobel laureate, Amartya Sen. Then, several new concepts, including international cooperation, comprehensive development framework, or development strategy for poverty reduction were expedited by the international organization (UNDP, 2021).

In 2000, the United Nations launched the Millennium Development Goals (MDGs) agreed upon as a new approach for poverty reduction. In this MDGs, fighting extreme poverty was one of the most important targets to be achieved by 2015 (UNDP, 2021). However, eradication of poverty was not realized until the year. Therefore, since 2015, the new framework of the sustainable development goals (SDGs) was launched, which is different from the MDGs in that OECD economies also need to participate in the project for promoting poverty eradication in the long run (UNDP, 2021).

Since the 1950s, the approach to poverty reduction has continuously been attempted for over 65 years. However, poverty is not yet eradicated as one of the most serious issues in many parts of the world (UNDP, 2021). In this regard, poverty reduction is still one of the most significant social issues to be addressed and resolved as urgently as possible.

<b>Year</b>	<b>The Trend of International Aid for Poverty Reduction</b>
1950s to 1960s	Mainstream of planned economy led by nations as centralization type
1970s to 1980s	Expansion of Basic Human Needs (BHN) approach Mainstream in Neo-classical approach for market liberalization Implementation of the structural adjustment program
1990	Started the "Human Development Report (HDR)" by conceptualizing "Human Development" by UNDP
1996	Development through international cooperation for the 21st Century as DAC new development strategy
1999	Comprehensive Development Framework (CDF) officially announced by the World Bank Agreement on Extended Heavily Indebted Poor Countries (HIPC) Initiative Poverty Reduction Strategy Paper (PSRP) by the World Bank in collaboration with the IMF
2000	World Development Report: Fighting Poverty issued by UNDP Agreement on Millennium Development Goals (MDGs) at the UN Millennium Summit
2001	A Guideline of Poverty Reduction issued by DAC
2003	ODA White Paper 2003 was issued in Japan
2010	Establishment of Extended Credit Facility (ECF)
2015	Sustainable Development Goals (SDGs) officially announced by the United Nations

*Table 3*

*The Trend of International Aid for Poverty Reduction from the 1950s to 2015*

*Note.* Referencing from JICA (2003 and 2020) and Funazu (2012), Hara summarized.

The concept of poverty includes different dimensions of deprivation.

Generally, it is the inability of people to meet economic, social and other standards of well-being (OECD, 2001); the multidimensionality of poverty is now widely accepted. It is based on study that encompasses significant participatory research of

what poor people mean by poverty, covering measures of absolute poverty, including child and infant mortality rates, and relative poverty, as defined by the differing standards of each society. The Development Assistance Committee (DAC) created a framework representing interactive dimensions of poverty and well-beings with five representative capabilities; economic capabilities for making income, consumption, and assets, human capabilities for education, health and nutrition, political capabilities for human rights, freedom, and influence, socio-cultural capabilities for individual status and dignity, and protective capabilities for enhancing insecurity and vulnerability (OECD, 2001). These five dimensions are tightly interrelated to each other for a multidimensional concept. Likewise, Alkire and Santos (2010) stressed that poverty is multi-dimensionally composed of deprivation factors, including poor health, lack of education, inadequate living standards, lack of income, disempowerment, poor, quality of work, and threat of violence. With these factors, the two authors established the Multidimensional Poverty Index (MPI) in their studies, which is widely used in more than 100 countries (Alkire and Santos, 2010). In other words, poverty is not always confined to the income-focused.

It is also necessary to see the statistic fact relevant to poverty. The World Bank has their own database of the World Development Indicators (WDI, 2021) for analyzing the poverty related indicators. Table 4 represents the national population, the number of poor under 1.9US\$ per day, poverty headcount ratio, poverty gap ratio at 1.9US\$ in 2014 to 2015 per six regions of East Asia & Pacific,

Europe & Central Asia, Latin America & Caribbean, Middle East & North Africa, South Asia, Sub-Saharan Africa, and World. As can be seen in the table, it can be observed that sub-Saharan Africa has the highest proportion of the poverty headcount ratio with the figure of 42.3% in 2014 (WDI, 2021). Also, there is the second highest proportion of poverty headcount ratio in South Asia with the value of 15.2% in 2014, while East Asia & Pacific, Europe & Central Asia, Latin America & Caribbean, and Middle East & North Africa have considerably lower rate of poverty headcount ratio with the range of approximately 2 to 4% in 2014 (WDI, 2021).

Likewise, poverty gap ratio, which stands for shortfall in income or consumption from the poverty line \$1.90 a day, had the same trend; sub-Saharan Africa recorded the highest rate of 16.1%, followed by South Asia with the figure of 2.8% (WDI, 2021). On the other hand, the other areas had the lowest proportion of the poverty gap ratio with the figure of approximately more or less 1% (WDI, 2021).

Based on the quick analysis of the poverty trend by region, we can simply conclude that two groups are categorized; one is to succeed in poverty reduction until now, and the other is to fail in poverty reduction. Ultimately, the former is East Asia and the Pacific, and the latter is sub-Saharan Africa and South Asia. Indeed, Otsuka (2014) explained that the current development status in the world can boil down to the successful Asia vis-à-vis the failure Africa. Still, it would be necessary to see the other indexes that need to be addressed in observing the

development status in developing countries from historical perspective. Then, the socio-economic indexes with some items to be addressed continuously were observed.

	Poverty Headcount Ratio under \$1.90 in 2014 (%) *1	Poverty gap at \$1.90 a day in 2014 (%) *2	Number of people below the \$1.90 poverty line in 2015	Number of Population in 2015
East Asia & Pacific	2.7	0.5	18,573,500	2,282,863,725
Europe & Central Asia	1.8	0.5	416,600	906,707,413
Latin America & Caribbean	3.9	1.3	1,462,000	622,301,041
Middle East & North Africa	2.5	0.5	711,400	425,821,771
South Asia	15.2	2.8	53,613,800	1,749,417,067
Sub-Saharan Africa	42.3	16.1	14,902,300	995,458,498
World	10.7	3.2	89,689,700	7,339,076,654

*Table 4*

*Poverty Situation by Region*

*Note.* Referencing from World Development Indicators (2021), Hara summarized.

\*1: Poverty Headcount Ratio: It is the percentage of the population living on less than \$1.90 a day at 2011 international prices (WDI, 2021).

\*2: Poverty Gap Ratio: It is the mean shortfall in income or consumption from the poverty line \$1.90 a day (counting the non-poor as having zero shortfall), expressed as a percentage of the poverty line (WDI, 2021).

To be further specific, Table 5 is the summary of world poverty outlook representing the differences in some significant indicators, including GNI per capita, economic growth rate by two intervals (1995-2006 and 2007-2019), foreign

direct investment rate vis-à-vis GDP, saving rate vis-à-vis GDP in each region between 1995 and 2019. In this respect, this table demonstrates how much poverty head count ratio and the other relevant indicators got improved over the forty years and helps me find which areas or regions the poverty head count ratio should further be improved. Regarding the GDP annual growth rate, in 1995-2006, overall, we could see the positive growth rates despite different figures per region, while negative growth rates were seen between 2007 and 2019, especially in Latin America & Caribbean, Middle East & North Africa, and sub-Saharan Africa. Also, in gaining insight into the poverty headcount ratio at 1.90US\$ per a day, we can easily observe that East Asia and the Pacific drastically improved the poverty rate from 44.6% to 1.2% for over 25 years. We also see the improvement in poverty rate in South Asia from 43.6% to 15.2%. On the other hand, sub-Saharan Africa still has as much as over 40% in 2019. Also, regarding the Gross Domestic Savings, it is said that nations should preserve over 25% savings rate vis-à-vis investment rate (Otsuka, 2014). Sub-Saharan Africa is the only area where the saving rate is below 25% in 2019. Finally, in gaining sight into the value added per industry (agriculture, manufacturing, and service), it is clear that East Asia and the Pacific and Europe & Central Asia have the higher ratio in manufacturing with lower one in agriculture in 2019 vis-à-vis 1995. Meanwhile, South Asia and sub-Saharan Africa have the opposite proportion; lower rate in manufacturing with higher rate in agriculture. There seems no significant difference in the figure of

service industry. However, since service industry handles plenty of types, the productivity completely differs (Otsuka, 2014).

On the other hand, Table 6 is also the summary of world poverty outlook showing the differences in some significant indicators, including, industrial structure per agriculture, manufacturing, and service industry, educational opportunity, and literacy rate from 1995 to 2019. Firstly, in paying attention to the literacy rate both adult and youth, the three regions of East Asia & Pacific, Europe & Central Asia, and Latin America & Caribbean have improved the literacy rate of over 97% in comparison with the ones in 1995. Meanwhile, the rest of Middle East & North Africa, South Asia, and Sub-Saharan Africa surely enhanced the literacy rate vis-à-vis 1995. Still the figure of the literacy rate in these regions on average is 65% to 75% in 2019.

Next, in observing the school enrollment rate in primary education, sub-Saharan Africa and South Asia had the lower proportion of net enrollment rates with the figures of 87.8% and 75.3% vis-à-vis the other regions on average approximately 95%. The similar tendency can be seen both in secondary education and tertiary education as well. In my previous study, secondary education is the major catalyst for promoting economic development through industrialization in Southeast Asia (Hara, 2021). Notably, sub-Saharan Africa considerably had the lower proportion of 35.6% compared with the other regions. Indeed, it has already been evident that human capital development through literacy, numeracy, and medical health is of importance according to the previous study by Schultz (1971)

and Psacharopoulos (1985). In particular, literacy and numeracy are undoubtedly essential components in leading their lives for earning jobs and avoiding poverty. In this regard, it would be essential for the poor economies, especially in sub-Saharan Africa and South Asia to promote human capital development, at least, through the opportunity of school education and literacy improvement.

Region/Year	Poverty Headcount Ratio under \$1.90 (%) *1		GDP Growth (Annual, %) *2		Gross Domestic Savings (% of GDP)		Agriculture, Forestry, and Fishing, Value Added (% of GDP)		Manufacturing, Value Added (% of GDP) *3		Service, Value Added (% of GDP) *4	
	1995	2019	1995-2006	2007-2019	1995	2019	1,995	2,019	1,995	2,019	1,995	2,019
East Asia & Pacific	44.6	1.2	0.7%	-5.2%	35.2	33.5	36.3	16.9	14.3	22.7	49.4	60.4
Europe & Central Asia	6.8	1.1	5.8%	-7.3%	22.3	25.2	22.6	21.5	17.8	13.7	59.6	64.8
Latin America & Caribbean	13.6	3.7	11.9%	-14.8%	21.4	18.6	26.7	26.8	16.5	13.0	56.8	60.2
Middle East & North Africa	6.4	7.0	7.7%	-19.3%	28.1	33.8	40.0	33.8	12.1	12.3	47.9	53.9
South Asia	43.6	15.2	0.9%	-5.3%	23.0	25.6	43.5	35.8	17.3	13.5	39.2	50.7
Sub-Saharan Africa	60.5	40.4	5.5%	-9.0%	23.1	19.8	41.2	39.4	14.3	10.9	44.5	49.7
World	31.3	9.3	3.4%	-5.4%	25.1	25.3	29.7	20.5	16.1	14.5	54.2	65.0

*Table 5*

*Socio-economic Indexes per Region between 1995 and 2019*

*Note.* Based on World Development Indicators (World Bank, 2021), Hara made.

\*1: Poverty Headcount Ratio is the population living on under \$1.90 a day at 2011 international prices (WDI, 2021).

Also, due to the missing data in 2019, I used the figure in 2018 in South Asia, sub-Saharan Africa, and World.

\*2. GDP annual growth rate was measured by using the formula,  $[(G(t+1) - G(t))/G(t)] \times 100$  (United Nations, 2021).

\*3&4. Due to the missing data in 2019, I used the figure in 2018 in East Asia and Pacific.

Region/Year	Literacy Rate, Adult Total (% of people ages 15 and above)		Literacy Rate, Youth Total (% of People Ages 15-24)		School Enrollment, Primary (% Net) *1		School Enrollment, Secondary (% Net)		School Enrollment, Tertiary (%, Gross)	
	1995	2019	1995	2019	1,995	2,018	1,995	2,018	1,995	2,018
East Asia & Pacific	83.2	95.8	95.0	98.7	94.2	95.9	63.2	78.9	14.4	46.6
Europe & Central Asia	95.7	98.4	98.9	99.7	95.0	94.9	83.5	89.9	43.0	72.0
Latin America & Caribbean	86.8	94.3	93.4	98.6	93.6	93.7	64.8	77.5	22.7	52.7
Middle East & North Africa	62.0	79.3	80.9	90.1	83.0	93.7	60.1	72.9	20.0	40.6
South Asia	48.9	73.0	62.6	90.0	74.0	87.8	37.9	60.5	7.5	24.2
Sub-Saharan Africa	54.1	65.5	66.4	76.3	58.0	75.3	20.0	35.6	4.2	9.4
World	76.2	86.5	84.2	91.7	82.7	89.4	54.1	66.3	18.4	38.4

*Table 6*

*Socio-economic Indexes per Region between 1995 and 2019 (Human Capital Aspect)*

*Note.* Based on World Development Indicators (World Bank, 2021), Hara made.

\*1. Due to the missing data of the figures in East Asia & Pacific and Sub-Saharan Africa in 2019, I used the figures in 2009 and 2015, respectively.

\*2. The three indicators of “School Enrollment Rate” in primary, secondary, and tertiary, do have the sufficient missing data, I used the alternative data of 2018.

Without these minimum elements for lives, they can get involved with the “vicious cycle of poverty,” which has caused, primarily in sub-Saharan Africa, South Asia, Southeast Asia, South America, etc. (JICA, 2003). Also, the World Bank has a clear standard of extreme poverty as those who lead their lives with merely 1.90 USD per day, which is also well-known as the “international poverty line” used in the Sustainable Development Goals (SDGs) (World Bank, 2021). These impoverished people are categorized as the so-called “Base of the Pyramid” (Hammond et al., 2007), while Colliar (2008) called it “the Bottom of Billion” in his study. The poverty issue in several areas persists even currently in many parts of the world.

As can be seen in Table 2, situationally, poverty head count ratio has continuously reduced, resulting in a drastic decrease in the number of impoverished people. In 1981, the poverty rate, which stands for those who lived with 1.90USD per day, accounted for approximately 42.7% in developing countries. The figure represented that about 1,940 million people lived in extreme poverty under 1.25USD per day (World Bank, 2021). In 2017, the figure dramatically reduced down to 9.2%, with the number of impoverished people 689 million in the world (World Bank, 2021). Still, many people have suffered from poverty, which needs to be further addressed as one of the world's most significant social issues.

With “poverty,” the UNDP (2021) interestingly established their statistics of the Human Development Index (HDI) with the three elements of life expectancy, literacy rates, school enrollment rates, and GDP per capita. The essence of the idea

comes from Sen (1999) emphasizing the importance of arranging basic education and medical institution for further development and poverty eradication, and then forming his theory of the “Capability Approach” (Sen, 1999, p.5). With the concept, the UNDP emphasized the significance of measuring poverty from other perspectives than individual income, ranking the index scores per nation in the world (UNDP, 2021). The HDI shows that the higher groups are congregated by the OECD nations, while the lower-income economies score lower.

From the economic aspect, Otsuka and Banerjee (1998) stressed the significance of industrialization in rural areas by suggesting creating new job opportunities both in urban and rural areas in East Asia. Also, Banerjee and Duflo (2012) used a randomized controlled trial model, concluding that there are no single means to eradicate poverty. Meanwhile, education is at least one of the appropriate ways to reduce poverty by expanding job opportunities (Banerjee & Duflo, 2012). Likewise, Tran (2010) signified the economic market's maturity and the socio-economic institution for promoting further poverty reduction in undeveloped countries.

Furthermore, there is a geographically stark difference between rural and urban areas in the poverty rate. World Bank (2021) quantitatively estimated that rural areas have higher poverty rates than those in urban areas in developing countries. In nature, the rural areas are lack resources and capital with higher crime rates and racial minorities; it can be easier for a nation to retain the higher poverty rate (USDA, 2020).

Meanwhile, urban areas also have difficulty in improving the poverty rate. In reviewing literature relevant to the mechanism of urban poverty, Harris and Todaro (1970) developed a theory related to the impact of the urban poor, observing a relationship between expected wages and “disguised unemployment” in the developing world. As a result, they formulated the Harris-Todaro Model (Harris & Todaro, 1970, p.134) and challenged the traditional theory of Lewis’s model conceptualizing a “Dual Economy” with traditional (agricultural) and modernized (non-agricultural) sectors by observing the process by which the labor surplus generated in the traditional sector was incorporated into the industrial sector, identifying the “turning point” that led to industrialization (Lewis, 1954, p.164). In other words, in developing countries, people tend to expect that they can find better jobs with higher salaries, while the reality is that many laborers find it challenging to get highly paid. Consequently, this phenomenon has contributed to the vicious cycle of poverty in urban areas.

Another point is that poverty and population growth are inextricably linked to each other. According to the UNFPA (2014), poverty is essentially influenced by population dynamics and rural and urban distribution. It is vital for governments to continuously invest in better health for reducing mortality and morbidity toward poverty reduction. In particular, the improvement in reproductive health access, including family planning, can impact population growth via reductions in fertility and infant mortality (UNFPA, 2014). Principally, developing countries with large youth populations and declining fertility rates can be a significant catalyst for

poverty alleviation. However, there have been higher fertility rates and fewer educational opportunities for children, resulting in a higher poverty rate (World Bank, 2021). In this way, empowering children and women is the key to poverty mitigation as well as the measurement for population growth.

With the previous studies on poverty in developing countries, some approaches have been put into practice for developing countries to overcome the vicious cycle of poverty over the past 70 years. Next, I review some literature relevant to representative theories of poverty reduction.

### **2.2.3 Theories of Poverty Reduction**

Poverty reduction can be used in economic development. Economic development can be defined as the trace of economic progress and prosperity on behalf of the change in industrial structures (Otsuka, 2014). When it comes to poverty issue in developing countries, one major issue to be raised should be unemployment due to the scarce industrial structure; many developing countries have the highest rate of the first industry, including fishery and agriculture, and much less rate of manufacturing and service industries (World Bank, 2021). Under the national structure, plenty of people are, therefore, unable to get higher income due to the lower productivity. In this regard, introducing the mechanism of economic development should be of essence in mitigating poverty in the developing world.

The mechanism of economic development can be understood by examining several representative economic development theories from the 1950s to the 2000s.

Lewis (1954) suggested the theoretical concept of a “Dual Economy” with traditional (agricultural) and modernized (non-agricultural) sectors; he observed the process by which the labor surplus generated in the traditional sector was incorporated into the industrial sector, identifying the “turning point” that led to industrialization (Lewis, 1954, p.164). Considering these models, Rostow (1956) suggested five stages of economic development: from a “traditional society,” to “the pre-conditions of take-off,” “take-off,” the “drive to technological maturity,” and finally “high mass consumption” (Rostow, 1956). Furthermore, paying closer attention to the effect of industrialization on per capita income, Ranis and Fei (1961) developed the principle of wage determination by observing the correlation between labor and productivity in the industrial sectors, formulating the Ranis–Fei Model (Ranis & Fei, 1961). On the other hand, Harris and Todaro (1970) challenged Lewis’s model while developing a theory relevant to the impact of the urban poor, observing a relationship between expected wages and “disguised unemployment” in the developing world, resulting in the Harris–Todaro Model (Harris & Todaro, 1970, p.134). Based on these economic theories, Tran (2016) arrived at a simple conceptual framework describing the economic development stages over time. Invoking such key terms as the “turning point” (Lewis, 1954) and “take-off” (Rostow, 1956), the author formulated a framework progressing from low-income, middle-income, and to high-income stages.

Furthermore, paying closer attention to the stages of the industrialization in East Asia, Ohno (2009) summarized the “catch-up” process of industrialization.

With reference to the East Asian cases, he stressed the importance of improved policy making and private sector activation to reach the tertiary stage and overcoming the MIT (Ohno, 2009). Ohno (2010) formed the stages of “catch-up” industrialization, then classifying industrialization into five stages, from “prior to the industrialization,” to the “initial introduction of foreign capital manufacturing corporations,” “internalization of parts industries,” “internalization of key skills and technology,” and finally the “internalization of innovation” (Ohno, 2010). For instance, paying close attention to four ASEAN countries —Thailand, Malaysia, Vietnam, and the Philippines— his work then located the MIT in the context of the industrialization and identified what is required to step up to the next stage on a case-by-case basis. For instance, to proceed from stage zero to the first stage, foreign manufacturing needs to be introduced in fragile economies, especially in sub-Saharan Africa with the poorest one billion people, “Bottom Billion” (Collier, 2008). In the lower-middle income economies, manufacturing establishments must accumulate through foreign direct investment. After these foreign capital industries mature, parts industries may be internalized, thanks to training opportunities whereby employees can acquire the skills needed to manufacture the parts, producing materials for the third stage. Also, the local economy must master the management techniques and technologies for producing higher-quality products. Finally, innovation and creativity can help manufacturing industries lead to world-class status (Ohno, 2010). In this framework, current LMIEs are to be found in the first stage of this transition, while HMIIEs are at the second stage.

Finally, when gaining insight into low-income economies, plenty of economies are primarily congregated in sub-Saharan Africa and South Asia. The so-called “vicious cycle of poverty” has occurred in these regions. What is more, as Collier (2008) explained, despite the rich natural resources, the benefits cannot be accessed by the poor due to the extractive business condition that wealth is concentrated only on the rich. Due to the negative spiral of poverty, the worst case is that frequent conflict and traditional customs in local areas have continued agonized the local people (Collier, 2007). With these harsh environment, low-income economies have been in challenging situation as of now. In these ways, it is also challenging for business organizations from the OECD economies to intervene the harsh marketing conditions, which can deteriorate the business conditions.

#### **2.2.4 The Traditional Approach to Poverty Reduction**

Conventionally, the primary concept of "Development Assistance" was established under the Cold War's international political structure after the end of World War II, spending over a half-century (DAC, 1996). Poverty reduction has been addressed as a global agenda. International organizations have led it since the social issue has been regarded as a complicated issue in many parts of the world. Conceptually, the approach has been conducted inclusively and variously (Makino, 2004). Namely, the development strategies pursuing poverty reduction was primarily driven by the international organizations, including the United Nations (UN), the World Bank, the International Monetary Fund (IMF), the Asian Development Bank (ADB), the African Development Bank (ADB), etc. (Otsuka,

2014). Conceptually, Bununu (2020) defined poverty reduction as “the improvement of an individual’s or group’s monetary expenditure to an amount above the poverty line while improving access to education, healthcare, information, economic opportunities security of land-tenure, and all the other deprivations associated with it” (Bununu, 2020, p.1) in his study. Since poverty is multifaceted due to the multitude of lack and deprivations that impoverished people are subject to in their daily lives (Bununu, 2020), poverty reduction needs to be multiply approached, especially from education perspectives, healthcare, job opportunities, as well as income increase. Based on the definition of poverty reduction, several approaches to poverty have been introduced as follows.

Firstly, the traditional and general method for poverty reduction has been, for example, dispatch of experts from developed countries, school-building, road construction, technical equipment arrangement via services provided by people and materials (Yamazaki, 2000). The approach is the so-called “project-type” method with specific periods, purposes, budgets, and organizations (JICA, 2021). For instance, in Japan, technical assistance, grant aid, or loan aid as an Official Development Assistance (ODA) have representatively been conducted via Japan International Cooperation Agency (Yanagihara, 2001). The second approach is a “program-type” assistance, which means that a particular development strategy was formulated by the government, civil society, and donors altogether. The donors can remit the necessary amount to the developing countries’ bank accounts along with the request from the governments (Makino, 2004). Lastly, expanding the activities

of non-governmental organizations (NGOs) and non-profit organizations (NPOs) has indeed provided more specific approaches and services directly to further growth and prosperity for the developing world (Takahashi, 2006). Still, the relationship between states and NGOs/NPOs needs to be further cooperative and supportive since they need to be financed to activate their projects under the same vision of further development and poverty eradication (Asad and Kay, 2014).

These methods have been promoted over the past 30 years, especially since the World Development Report's publication in 1990, resulting in the dramatic reduction of poverty until 2017 (World Bank, 2021). Meanwhile, these projects have some limitations in promoting economic growth and poverty reduction, especially in low-income economies in sub-Saharan Africa, South Asia, Asia, and the Pacific. One of the most significant issues in implementing the ODA projects is the more extensive intervention of the governments and international organizations, resulting in undesirable effects on poverty reduction (JICA, 2021).

Straightforwardly, the ODA can be based on the bilateral relationship between a donating nation and a recipient nation.

In these ways, it has been discussed that another method approaching poverty reduction needs to be considered for further poverty alleviation in developing countries. To be more specific, focusing on promoting business activities for trade and investment can create more job opportunities for the general public to earn income. After all, in consideration of the economic capability, the improvement and maintenance of the impoverished people's income levels should be prioritized.

In other words, they need to look for jobs with a certain volume of wages to feed their families, which is one of the significant factors contributing to poverty alleviation. Therefore, poverty reduction through business activities needs to be further considered under globalization.

### **2.2.5 The BOP Business Approach to Poverty Reduction**

The BOP business is inextricably linked to poverty alleviation. It was originated by two scholars, Hart and Prehalad (2002), in their study report in 2000. The BOP business can be defined as a behavior-oriented model or an approach that helps business organizations sufficiently promote their activities in undeveloped and unserved markets (Mathur et al., 2016). This approach also opens opportunities for reduction of poverty. Since then, some governments and international organizations have promoted their research on advancing the BOP business and implemented financial support for public sectors in some parts of the world. Consequently, the BOP business cases, especially in the U.S., the U.K., and Japan, have steadily risen. These cases are mainly for balancing poverty reduction and maximization of the business profits. Thereby, both development sectors and private sectors have paid attention to the promotion of the BOP business.

The BOP business is composed of several styles: Firstly, the development sectors, especially the United Nations (2018), have advocated the Sustainable Development Goals (SDGs) through cooperation, collaboration, and coordination (Zomorrodian, 2011). The organization has encouraged "inclusive business" since 2006 by launching "Growing Inclusive Markets: GIM" for alleviating poverty and

improving the lives of others (UNDP, 2021). Secondly, fair-trade is a business model that can support people's lives in developing countries by purchasing the products in the consumer market in developed economies (Ruben, 2008). For alleviating the equality between the rich and poor economies, the fair-trade model has been developed and expanding the market scales since 2004 (Smith, 2009). Finally, the Corporate Social Responsibility (CSR) activity can encourage business organizations to create new values and new markets for enforcing corporate competitiveness, sustainable development, and activation of the entire economy simultaneously (Du et al., 2010). With the styles, the BOP business has been promoted to maximize the organizational benefits and mitigate poverty.

Theoretically, Simanis and Hart (2008) formulated the framework of the BOP business development stage. It has historically three steps of first-generation BOP (BOP 1.0), second-generation BOP (BOP 2.0), and third-generation BOP (BOP3.0). BOP 1.0 is for “selling to the poor,” while BOP 2.0 is for “creating mutual value (CMV),” respectively (Simanis and Hart, 2008). BOP 1.0 aimed at having the poor involved with the business for earning benefits until 2007. BOP 2.0, then, aimed at creating the value chain from scratch and grasping the market needs accurately, which was the mainstream until 2012. Then, BOP 3.0 was conceptualized by introducing open innovation approaches and more participatory governance structures under the concept of “wisdom of the crowd” since 2013 (Cañeque and Hart 2015). In this way, the approach to poverty reduction through a business should further be signified.

Practically, several cases of the BOP business per each step were put into practice; as the case of BOP 1.0, Schwittay (2011) studied several transnational corporations (TNCs) to see if the poor are willing to work for the market interventions as a potential new market for the TNCs. Specifically, she investigated Hewlett-Packard's (HP's) e-Inclusion program as the first corporate-wide BOP initiative in Costa Rica for improving the lives of rural people by providing access to HP's technology and by creating new job opportunities for electronic entrepreneurs. As a result, however, she concluded that shifting the poor into proto consumers of TNC products and services did not prove to be the primary catalyst of structural drivers for their lives. Her study result neither showed the eradication of poverty nor a corporate fortune at the BOP business in analyzing HP's case (Schwittay, 2011).

Also, as the case of BOP 2.0, the World Bank (2008) reported the BOP business as the significant factor to impacting poverty reduction positively by introducing several successful examples of Unilever, CEMEX, and Nestlé. These organizations have directly worked with the poor in developing countries, reducing the risk of corruption that impacts the poor in their daily business activities when operating in informal markets (World Bank, 2008). Indeed, Nestlé has been involved with poor rural farmers in China; the local banking system became beneficial when it provided its new suppliers with cash payments (Nestlé, 2020). Also, Unilever worked with other private and public partners in India by fighting child malnutrition (SCS, 2013). These activities resulted in a new customer base for banks in low-income areas, increasing the individual income and overcoming poverty.

Finally, as BOP 3.0, Chmielewski et al. (2020) studied the case of the 21 Philippines-based organizations, including private and NPOs, for implementing a market-based approach to poverty alleviation initiatives at the community level. As a result, the authors concluded that these organizations should adopt a more community-centric approach, focusing on establishing a self-reliant community for poverty reduction (Chmielewski et al., 2020). In a word, as introduced before, the more participatory governance structure by the local corporations should further be promoted. Also, Nerurkar (2020) stressed the significance of enhancing innovation, scalability, purpose, and cross-network partnerships as new imperatives posed by BOP 3.0 through the cases of HUL, Essilor, Saravajal, Selco India in India. The author emphasized the significance of forming a framework relevant to BOP 3.0 in analyzing entry into BOP markets (Nerurkar, 2020).

### **2.3 Research Variables and Entities**

Based on the literature review, for this study to be able to clarify the influence of BOP business opportunities on poverty reduction in developing countries and formulate a framework relevant to the BOP business development strategies for poverty alleviation, the research variables are the following.

First, for the first research purpose of the clarification of the influence of the BOP business activities on poverty reduction in developing countries, the dependent variable (DV) should be poverty headcount ration in developing countries since the value is one of the most principal barometers to assess the impact of the BOP business opportunities. Thus, the poverty headcount ratio will be employed as a DV.

For independent variables, since the significant elements of the BOP business activities have been discussed earlier in this chapter, the representative BOP factors will be incorporated as the independent variables (IVs) by the number of the cases in each country per year, which was identified in the previous study by List (2017). Regarding the other factors, including infrastructure, governance, labor market, industrialization, and HDI, however, also demonstrated a strong relationship with poverty reduction in the previous studies. For this reason, these factors need to be controlled as the controlled variables (CVs) so that their influence is held steady in the linear regression, thus allowing the education rates to become the primary driver of prediction.

Second, to investigate the influence of secondary enrollment rates on the ICI in the context of industrialization in Southeast Asia, the entities should be the BOP business stages, the development strategies, and poverty. As explained previously, the relationship between these entities were examined through some documentations via other scholar works, articles, and webpages relevant to poverty and the BOP business in developing countries. In these ways, these entities are of importance, especially in approaching to the RQ2.

#### **2.4 Identification of the Research Gaps**

In reviewing some literature, several agreement items need to be shared; the regular development sectors' traditional approaches need to be continuously conducted. Meanwhile, the BOP business should further be promoted to alleviate poverty in many parts of the world. Then, it is challenging for private sectors,

including the MNCs, to fight against poverty alone. Thus, they should be more cooperative and collaborative with NGOs and states financially, technologically, and resourcefully. Under globalization, overcoming poverty in developing countries via re-vitalization of the business activities in local communities should further be signified in making the business activities' actual involvement and the framework for analyzing the BOP business to be further profitable for the communities.

Despite the benefits of the BOP business through literature review, several research problems, as disagreement, are identified below.

Firstly, despite some advantages of the business style, much less research on the impact of the BOP business on poverty reduction was identified. Indeed, the significant factors of reducing poverty have been led representatively by the governments and the international organizations (Sen, 1999). The poverty issue has been triggered, primarily by the insufficient infrastructure, unskilled labor, market, education, medical, less job-opportunity, etc. (ADB, 2017). Also, Karnani (2009) emphasized that since the BOP approach depends on the free market's invisible hand for mitigating poverty, the nations should further extend a considerable visible hand to the poor to help them avoid poverty. In a word, he can potentially be skeptical about the BOP's effectiveness in alleviating poverty. Thus, it is necessary to quantitatively see the impact of the BOP on poverty reduction in a certain period. In this way, one research problem related to it can be the influence on poverty reduction since its launch.

Secondly, despite the different socio-economic and cultural backgrounds in impoverished areas, expanding the BOP business should be considered further. In various market conditions, industries, products, and services, the processes or the flows of putting the BOP business into practice should be different (Inoue, 2012). Nevertheless, the common conditions should strategically be arranged. Indeed, Hart et al. (2016) mentioned that management theory and research have not progressed at the same pace as the BOP business. Therefore, knowledge relevant to parameters for the integration of business strategy into poverty alleviation remains cloudy. From this point of view, the framework relevant to the BOP business development should conceptually be developed to make it successful in the long run.

All in all, my study can be justified so that the BOP business should further be developed for eradicating poverty in the world. While the study's strength is to cover the developing countries in many parts of the world as an inductive approach, it is necessary to note that the appropriate study variables might not be found as a potential weakness.

## **2.5 Summary**

Above all, it is evident from the literature review that how to mitigate and eradicate poverty in the developing world has been discussed for more than half century, but that little attention has been placed on poverty reduction by promoting the business activities for the BOP layers. Research on the impact of the BOP business opportunity on the poverty headcount ratio has been identified as a gap in the literature. Second, although the role of the BOP business has theoretically and

practically been recognized as one of the most influential ways to promote alleviation of poverty, little research has considered the way to develop the BOP business strategy on poverty reduction in the developing world: another crucial gap.

The present study contributed to filling these gaps, clarifying the influence of the BOP business cases on the poverty reduction in some parts of the world, especially in Southeast Asia, South Asia, Middle East, Sub-Saharan Africa, and South Asia. This study can contribute to further development in the area, helping poverty reduction to be promoted from a business perspective. Expanding BOP business offers a path toward further economic and social development in the developing world. Based on the literature review, Chapter 3 pursues the specific quantitative methodologies proposed to address the study's two research questions, explaining how these questions were approached in more detail.

## CHAPTER III: METHODOLOGY

### **3.1 Overview of the Research Problem**

For quick review, In this study, I employed both quantitative and qualitative methods. Specifically, the quantitative analysis with a non-experimental design will be employed for the first RQ. The non-experimental design has several advantages of getting more generalizability of the results than experimental design and not being required to manipulate the variables intentionally (Tanaka, 2015). Since the first research purpose and the RQ in this study quantitatively pursue the relationship between the BOP business and poverty reduction, it would be appropriate for the first research question to choose the non-experimental design. Further, the figure of  $R^2$  is a significant barometer for determining if null hypotheses can be rejected or not by analyzing if it is lower than .05 to be significant (Kvalseth, 1985). Thus, the multiple linear regression model allowed me to use the DVs' general values and the IVs' interval ratios to be measured. The quantitative method involves primary data, primarily from World Development Indicators (WDI, 2021). The data were analyzed using the statistical tool of SPSS (Ver. 27.0). For these reasons, this study employed a non-experimental design for the RQ.

On the other hand, as for the RQ2, I employed the qualitative analysis to formulate the BOP business development's conceptual framework to be recommended for any developing countries with different socio-economic and

cultural backgrounds. Principally, the qualitative analysis subjectively judges an organizational value or prospects based on non-quantifiable information, including management, the strength of research and development, and labor relations (Strauss, 2008). Then, I employed the grounded theory that usually brings the researchers to an understanding of a complicated issue or object and can extend experience or add strength to what is already recognized through previous research (Creswell, 2013). With the qualitative analysis, I obtained data from diverse secondary sources, especially including the international organizations and government documents, review published articles and seminar materials, and formulating the conceptual framework for developing the BOP business to overcome poverty in the developing world.

### **3.2 Methodology for RQ1**

Here is the part of the quantitative methodology for RQ1: Will the BOP business for alleviating poverty in developing countries predict a statistically significant percent change in  $R^2$  variance when controlling the other factors of education, medical, governance, industrialization, labor market, infrastructure, and human development composite values? The specific methods and procedures are as follows.

#### **3.2.1 Research Design and Rationale**

I employed quantitative analysis with the use of a non-experimental design for the primary purpose of observing the impact of the BOP business opportunities on poverty reduction in developing countries in this study.

For RQ1, I explored the impact of the BOP business activities on poverty alleviation. Because poverty is a kind of socioeconomic phenomenon, the poverty headcount ratio will be employed as a representative DV, in which the IVs were used based on such aspects of the headcount ratio as the BOP business activities. Also, in consideration of the other possible factors of poverty reduction, notably including governance, industrialization, the labor market, infrastructure, and the HDI through the literature review, these variables will be included. However, because I observe the BOP factors predicting poverty reduction, these other factors should be considered as the controlled variables (CVs) to hold steady in the linear regression, thus allowing these BOP business factors to become the primary drivers of prediction.

As for the research design for the RQ1, I examined the relationship between BOP business activities and poverty reduction quantitatively in relation to economic progress in the developing world on a national scale. For such a study, a non-experimental design has several advantages, including more generalizable results than an experimental design and no need to manipulate the variables as an experimental design would require (Tanaka, 2015). A non-experimental design is most appropriate when aiming to clarify the influence of the BOP business activities on poverty alleviation in the context of sustainable development in developing countries.

For the RQ1, the linear regression model was the most appropriate methodological approach to observe the dependent variable (poverty headcount

ratio) in relation to one independent variables. It would be difficult for a study to identify the influence of the BOP business on poverty reduction based on one single period of measurement because business activities and economic metrics change frequently due to constant changes in policy conditions within nations, regions, and even cities (Tanaka, 2015). Thus, it was appropriate for me to observe data over a longer duration, allowing for a broader range of observations. The analysis was, therefore, the most appropriate choice for addressing the RQ1.

For RQ1, the poverty headcount ratio was employed as the DV. The IVs were BOP (the number of cases of the BOP business activities per nation in annual base), governance, industrialization, labor force, and infrastructure. These variables were selected as conditions for promoting economic progress, based on a review of the literature from Doner and Schneider (2015) and the ADB (2017).

The time frame for the multiple regression analysis employed to address these research questions will be a 20-year period from 2001 to 2020. Several international organizations have produced the indexes to be assembled as data set, including the WDI (2020) from the World Bank and the HDI (2020) from the United Nations Development Programme (UNDP, 2021). These sources were used to address the research questions in this study as decisively as possible.

Finally, this research design has the potential to make an important contribution its academic discipline. In pursuit of its first research objective, this design offers quantitative insight into the impact of the BOP business activities on the fundamental challenge facing many undeveloped economies. Because this

perspective has not been addressed in previous research, the design could offer a significant catalyst for further development in the developing world. From this point of view, this design could suggest a new academic horizon in addressing both economic development and business activities in the developing world.

### **3.2.2 Methodology**

Based on the research purposes of contributing to alleviating poverty by examining the influence of the BOP business opportunity on poverty reduction in developing countries by using quantitative analysis and research questions of “Will the BOP business for alleviating poverty in developing countries predict a statistically significant percent change in  $R^2$  variance when controlling the other factors of education, governance, industrialization, labor market, and infrastructure composite values?,” the quantitative methodology of multiple-linear regression model will be employed using specified DVs and IVs. One reason for this is that I will primarily observe the effect of the BOP business activities on poverty mitigation in developing economies, especially by gaining insight into the figures of  $R^2$  variance as coefficients of determination.  $R^2$  stands for the coefficient of determination, indicating how much the IVs statistically contribute to the DV (Kvalseth, 1985).  $R^2$  variance is the figure indicating that the IVs influence the DV via the change in the value of  $R^2$ .  $R^2$  variance is a significant catalyst for the study outcome and process. Notably, the figure is a significant barometer for determining if null hypotheses can be rejected or not by analyzing if it is lower than .05 to be significant. The multiple-linear regression analysis, therefore, allowed me to use

the DVs' general values and the interval ratios of the IVs to be measured, and answering the research questions using the values of  $R^2$  increase. The DV of the poverty headcount ratio is derived from the research purposes of clarifying the effect of the BOP business activities on the poverty headcount ratio in developing countries. On the other hand, as for the first research question, the IV of the number of successful cases of the BOP business and the CVs of *governance*, *industrialization*, *labor force*, *infrastructure*, and *HDI* are derived from the primary conditions of promoting poverty reduction, based on a review of the literature from Doner and Schneider (2015) and the ADB (2017).

#### **3.2.2.1 Population**

Regarding both dependent and independent variables employed in the quantitative study, the target population were those involved in the labor force and educational institutions within the population of 61 out of 196 national economies randomly chosen from all parts of the world, especially sub-Saharan Africa, South Asia, Southeast Asia, Central Aisa, and South America. Also, the poverty headcount ratio will be employed as a measure of poverty rate with less than 1.90 US\$ per day, based on the poverty headcount ratio as estimated by the World Bank (2021). The data elements for RQ1 included the BOP business opportunity (the number of the actual cases per country) as an independent variable, as well as governance, industrialization, labor force, infrastructure, and the HDI as controlled variables.

### 3.2.2.2 Sampling and Sampling Procedures

Since the purpose of this quantitative study is to contribute to mitigating poverty through the BOP business opportunities by clarifying the influence of the BOP business activities on poverty reduction in developing countries, sampling strategy is simply to compile readily accessible data from several international organizations, including the World Bank and the UNDP, from 2000 to 2020. These data are authoritative, definitive, and complete enough to answer my research questions due primarily to high accuracy and reliability through the elaborated investigation, analysis, and endorsement by the government agencies in many parts of the world (World Bank, 2021). These data are also appropriately matched with the variables that I will use for testing the hypothesis, especially in the components of the business activities and economic parameters. For these reasons, I found these data to be the best for the quantitative study.

Regarding the specific procedures, the sample were drawn from the World Development Indicators (WDI, 2021), World Governance Indicators (WGI, 2021), and Human Development Index (UNDP, 2021). Appropriate independent variables will be identified based on their relevance for promoting poverty reduction according to the literature review. In particular, several primary factors, including *governance, labor market, industrialization, infrastructure, human development level, etc.* identified in the literature as contributing to poverty alleviation were included, along with the independent variables relating to RQ1 (the BOP business activities).

As for the sampling frame, the number of observations produces a sample size of 1,281: 61 national economies over 21 years (2000 to 2020) for each variable. Also, the unit of analysis refers to the primary entity that researchers are analyzing in their studies (Mathew, 2018). Also, the units can be classified into several types, including “individuals,” “groups,” “artifacts (books, photos, newspapers),” “geographical units (town, census tract, state),” and “social interactions (dyadic relations, divorces, arrests)” (William, 2020). This time, I relied on the publicly open data, including the poverty headcount ratio, employment rate, etc. from the WDI (2021), the WGI (2021), and the HDI (2021), and I will collect them on a national scale. Principally, these international organizations calculated these data by using the samples of all the citizens in an entire nation at the macro-level (World Bank, 2021; UNDP, 2021). From these points of view, the unit of analysis would be the “national economy.”

Finally, concerning a power analysis, based on the reference from Cohen (1992), in setting up input parameters, the alpha level will be arranged as 0.01 (1%), 0.05 (5%), and 0.1 (10%) accordingly with the figure of power level 0.8 regularly. Also, with the effect size classified into three groups of small (0.2), medium (0.5), and large (0.8), the sample size was automatically determined. Since this study employed at least over 200 sampling data as one group, it was basically be effective to show the significance accurately for multiple regression analysis on the condition of the alpha level 0.05 and power analysis 0.8 (Mizumoto & Takeuchi, 2010).

With the condition above provided by Cohen (1988) as well as Mizumoto and Takeuchi (2010), G\*Power was appropriately used as a tool for calculating the size. In this study, to observe the effect of the BOP business activities on poverty reduction by indicating the figure of  $p < .05$ , the minimum condition of the alpha level I need to select should be 0.05 with power analysis 0.8 under the appropriate condition of effective size  $f^2$  of .15 to be at a significant level. With these three conditions, the minimum required sample size should at least be 68 when using linear regression with a fixed-effect model and one IV (the BOP business activity case) vis-à-vis one DV for RQ1 for observing the  $R^2$  increase.

### **3.2.2.3 Procedures for Primary Data Collection**

For data collection, appropriate variables need to be obtained, notably through the World Development Indicators (WDI, 2021). As described previously, since some primary elements of poverty will be found in previous studies, the independent variables will be chosen based on these studies. Specifically, for RQ1, the independent variables are not limited to the BOP business opportunities, but also include infrastructure, governance, industrialization, and labor market variables, which are representative aspects of international development. These data will primarily be collected from the “World Development Indicators” (WDI, 2021) published. As for the variables of “Governance,” the “World Governance Indicators” (WGI, 2021) were the primary data source for data collection, while the BOP business activities will be gained through the previous study by List (2017) as well as the other sources available from search engines. Then, as of the variables of

“HDI,” the “Human Development Index” was the main data source for data collection.

Also, demographic information was gained for 61 randomly selected economies in sub-Saharan Africa, South Asia, Southeast Asia, and South America from the category of “Population Dynamics” by “World Development Indicators.” (WDI, 2021)

The data were accessed through public downloading functionality. The DV and IVs were applied to my analysis of the data from the data for the period from 2000 to 2020. The reason to select this duration is to maximize the usable amount of data by minimizing the amount of missing data. Also, since this study aims to observe changes in poverty headcount ratio are collected for as long a term as possible for more robust results.

#### **3.2.2.4 Instrumentation and Operationalization of Constructs**

First, as for the instrumentation of the methodology, Otsuka and Kurosaki (2003) provided several quantitative outputs regarding poverty and business in the developing world, using instrumental variables to control potential covariates and confounding factors and thereby observing causality as accurately as possible (Otsuka & Kurosaki, 2003). Since individual income can reflect internal and external environmental factors, including individual ability, ambition, family environment, employment conditions, political stability (Matsushita, 2015), confounding factors should be identified between the dependent and independent variables. One of the approaches to this requirement is to introduce instrumental

variables that correlate with the dependent variables and do not correlate with the error function (Matsushita, 2015).

This approach may help to establish the sufficiency of the instrumentation used to answer the RQ1. Specifically, in the first platform, all the dependent variables, including instrumental variables, were regressed onto exogenous variables, and values of the dependent variables will be predicted. Then, in the second platform, the dependent variable was regressed onto the predicted values developed in the first platform. In the case of this study, removing possible confounding factors between poverty rate and the BOP business activities for RQ1, and then regressing the dependent variable onto the values predicted by the first platform, is a methodology most appropriate to assessing potential causal relationships between those variables.

To maintain the reliability of this study, it is also necessary to be aware of the weak instrumental problem: The regression model can be interpreted as a quantitative methodology representing the relationships between all the endogenous variables and exogenous variables. Thus, variables may show much lower error functions, maintaining consistency in avoiding the impact of the error as much as possible. On the other hand, regarding the validity of the study, it is necessary for the study to avoid bias in evaluating the impact of the BOP business opportunities on poverty alleviation. Since the concepts relating to the key variables of enrollment rate, the poverty headcount ratio has been set by international organizations, this study can ensure a certain level of construct

validity. Using standardized constructs, the quantitative results of the study should reflect the concepts to be measured. Generally, the regressed model can be shown in the following formula:

$$Y_{it} = \alpha + X_{it}\beta + u_{it} \quad (i = 1, \dots, N; t = 1, \dots, T) \dots\dots\dots (1)$$

As for the error terms, the general model of the two-way error component is expected to be used as the fixed effect model with the following formula:

$$u_{it} = \gamma_i + \varepsilon_{it} \dots\dots\dots (2)$$

In fixing the formulas of (1) and (2), the integrated formula is as follows:

$$Y_{it} = \alpha + X_{it}\beta + \gamma_i + \varepsilon_{it} \dots\dots\dots (3)$$

For RQ1, either a fixed effect model or a random effect model must be chosen. As Okui (2015) has explained, it is more appropriate for economic studies to choose the former, a fixed effect model. The author described two specific reasons for this: the ability to analyze the methodology by applying it as the fixed effect, and the importance for social sciences, including economics (Okui, 2015). The application of the model represented by equation (3) to the RQ1 can help this study to show a more authentic analysis though more extensive data. Thus, the

multiple-regression analysis with a fixed effect model was employed to test the hypotheses for RQ1.

Each variable will be classified into three groups for nominal, categorical, and continuous variables, and will be examined using multiple regression analysis for each research question. SPSS ver.27 was used for this analysis as one of the most useful tools available. With data collected through the databases discussed above, the downloaded data were put into an SPSS dataset, then set up for analysis. SPSS includes the multiple-linear regression with fixed-effect model; it was employed for RQ 1. Finally, variable and scale scores were calculated by the multiple-linear regression model. Since the research questions concern the impact of the BOP business opportunities on the poverty headcount ratio, the resulting scores were judged based on the figure of  $R^2$  along with the statistical significance tests at the 1%, 5%, and 10% levels.

### **3.2.3 Data Analysis Plan**

Using the multiple linear regression analysis with a fixed effect model is the appropriate statistical test to answer the research question. It is used when the data are collected over time and the same individuals or analysis unit. Then a regression is run over these two dimensions (cite). Data were collected over 20 years (2001 - 2020).

The SPSS Statistics software version 27.0 was used for the analysis. When completing the dataset gained and chosen through the websites publicly available from several international organizations, each datum will be put in the SPSS data

and classifying the data into three types of categorical, nominal, and continuous accordingly.

The analysis plan was primarily to conduct testing assumption and then testing the hypothesis. In showing the steps, firstly, I developed a plan of how my dataset does not violate any assumptions before conducting the regression analysis. I collected publicly accessible data from international organizations and confirm that there is no statistically significant difference in poverty headcount ratio between selected countries in developing countries. Also, I conducted the assumption testing from the seven types of normality, linearity, homoscedasticity, independence error, zero conditional mean, no perfect collinearity, and no serial correlation.

Secondly, the statistical tests to observe the hypotheses were performed through the variable, and scale scores were calculated by the multiple-regression model using a fixed effects model. Since the research question concerns the impact of the BOP business activities on poverty reduction, the scores were judged primarily by the  $R^2$  based on the Hausman fixed effect model. For each research question,  $R^2$  increase of each dependent variable was used to ascertain whether the hypothesis is valid or null. Also, the procedures for testing assumption were introduced at the stage of arranging the dataset of the variables collected through the open-data publicly available from the World Bank and the United Nations for RQ1, respectively. The variables gained through the dataset were put in the SPSS data and automatically reflected in the data analysis.

At the same time, however, a rationale for including potential covariates and confounding variables could potentially be made. For instance, in the case of potential covariates, as for RQ1 and the relationship between the BOP business activities and poverty reduction, the higher the proportion of the HDI, the lower the poverty headcount ratio is likely to be. Potential confounding variables might include, for example, labor force participation rates and the HDI. Covariates and confounding variables can therefore be expected. All in all, the results of the analysis were interpreted through the  $R^2$  variance.

### **3.2.4 Threats to Validity**

Here is the discussion of threats to validity for RQ1 from the perspectives of external validity, internal validity, construct validity, and ethical procedure as follows.

#### **3.2.4.1 External Validity**

One of the most significant threats in external validity would be whether the results of the research questions can be applicable and transferable to all the countries or not. This study focused on poverty in developing countries, addressing the influence of the BOP business opportunities on poverty reduction with 50 economies in several parts of the world. In a word, under the different population and the development conditions with the various governmental policies for further progress, the variety in the data settings can be observed in this study. In this regard, the result can be observed in the same way.

Nevertheless, as well-known, poverty has occurred in many parts of the world. In a word, in the case of the different environments, the research findings in this study might potentially be changed. Despite identifying the missing data, I might find the testing results to be significant in the  $R^2$  increase in the DV of the poverty headcount ratio for RQ1. No negative effect of the missing data on validity was identified. In this way, the generalizability of the study results to be applicable to other regions can potentially be available.

#### **3.2.4.2 Internal Validity**

As described in the “Instrumentation” above, one of the most significant concerns would be whether it is possible for the study to remove the covariates and confounding factors. In order for this study to remove these two factors, removing the possible confounding factors between the BOP business activities and poverty reduction and making the DV regressed into the predicted values in the first platform can be interpreted as the appropriate methodology in leading to the appropriate causality between those variables.

Nevertheless, still, the weak instrumental problem can potentially occur. In that case, the other methodology will be considered so that the bias-free can be possible. For instance, the Limited Information Maximum Likelihood (LIML) can potentially be suggested by Anderson and Rubin in 1949 as this method has been well-known as an alternate approach to minimize the biases (Matsushita, 2015). In this regard, the LIML can potentially be the alternate in addressing the issue of the confounding factors.

### **3.2.4.3 Construct Validity**

As described in the item of “Instrumentation” above, regarding the validity, this study needs to avoid the bias as appropriately as possible in getting the result of the impact of the BOP business activities on poverty reduction. I will use representative variables of the BOP business cases and poverty rate obtained from international organizations, having been quantified and validated by other international source organizations. In this regard, my study data were assumed to uphold construct validity.

### **3.2.4.4 Ethical Procedure**

Since the data were accessed through the several international organizations’ websites publicly available, there is no ethical concern and no need for institutional permission. Also, there is no plan to intervene with the participants in data collection and describe the treatment, including the protection of personal information. On the other hand, I collected and used the archival data gained through international organizations, including the World Bank (2021) and the United Nations Development Programme (UNDP) (2021), as well as List (2017), as described in the research design.

Finally, regarding the other ethical issues, since this study deals with the development issues in the developing world, the low-income condition is considered to be a serious social issue in the world. In this regard, some may criticize that reducing poverty rate is not everything in the lives of others. Indeed, some researchers specializing in politics, sociology criticize economists, including

business economics, since increasing the income does not constantly make people happy (Otsuka, 2014). Nevertheless, from the perspective of social change, eradicating poverty through business should be justified in the real world in promoting economic progress and reduce extreme poverty in the long run. In this regard, dealing the economic statistics should be justified for the shared incentives scholarly and practically.

### **3.3 Methodology for RQ2**

Here is the part of the quantitative methodology for RQ2: How can the framework of BOP business development as an essential condition in any developing country be formulated and recommended? The specific methods and procedures are as follows.

#### **3.3.1 Research Design and Rationale**

I approach RQ2: How can the framework of BOP business development as an essential condition in any developing country be formulated and recommended? by employing the qualitative method, which is a well-known methodology employed in many research studies for making a specific conceptual framework relevant to the BOP business development strategies for poverty reduction in developing countries. When it comes to make the conceptual framework, the qualitative approach is one of the most suitable ways to be using some data expressed in words and analyzed through interpretations and categorizations (Saldaña, 2009).

Principally, the qualitative method is designed to collect and analyze non-numerical data, including manuscript or audiovisual, to understand concepts, opinions, or experiences with flexibility and focus on retaining rich meaning in interpreting data (Bhandari, 2020). Then, there are representatively two ways of the qualitative analyses, which are interview or document analysis (Glaser and Strauss, 1967). I used the document analysis, instead of the interview method. One reason for this is that I employed some authentic and public documents issued by the international organizations and national governments, which have higher reliability regarding the provided information. Also, the arrangement of the interview setting with government agencies or international organizational agencies seems challenging under the pandemic situation, which will take much time to get the results with the possibility of validity threats in terms of the bias-free conditions. In these regards, it would be appropriate for me to employ the document analysis for interpreting data and gathering in-depth insights into the research problem of poverty through the BOP business and generating new ideas for the study.

### **3.3.2 Methodology**

While several common approaches are available, including grounded theory, ethnography, action research, phenomenological research (Bhandari, 2020), and narrative research, I employed the grounded theory. Grounded theory is a methodology to discover or formulate theories obtained from systematical data with the use of the comparative analysis (Tie et al., 2019).

The grounded theory is appropriate when little is known about a phenomenon; the aim being to generate or form an explanatory theory that uncovers a process integral to the applicable area of inquiry with the characteristics of generating a theory that is grounded in the data (Tie et al., 2019). Since the RQ2 aims to formulate a conceptual framework relevant to the BIP business development strategy for poverty reduction in developing countries, the grounded theory would be one of the most appropriate approaches.

### **3.3.2.1 Population**

Regarding the entities employed in the qualitative study for RQ2, the target population were those involved in the labor force and educational institutions within the population of 30 out of 196 national economies in all parts of the world in several parts of the parts, especially sub-Saharan Africa, South Asia, Southeast Asia, and South America.

### **3.3.2.2 Sampling and Sampling Procedures**

Since the purpose of this qualitative study is to contribute to mitigating poverty through the BOP business opportunities by formulating a conceptual framework of the BOP business development strategies for poverty reduction in developing countries, sampling strategy is simply to compile readily accessible data from several international organizations, including the World Bank and the UN. Also, the national governments with 30 countries selected through the quantitative analysis for RQ2 will be the data sources. Finally, I gain the data relevant to the BOP business models from the current literature.

These data above are authoritative, definitive, and complete enough to answer my research questions due primarily to high accuracy and reliability through the elaborated investigation, analysis, and endorsement by the government agencies in many parts of the world (World Bank, 2021). These data are also appropriately matched with the entities that I used for interpreting the national development plan and the BOP business plan along with the national income levels. For these reasons, I found these data to be the best for my qualitative study. Regarding the specific procedures, the sample will be drawn from the following agencies based on three key phrases of “Development strategies,” “Development plans for poverty reduction” and “BOP Business model” accordingly.

1. Development strategies for poverty reduction from international organizations, including the World Bank (2021), the Asian Development Bank (ADB, 2021), the African Development Bank (AfDB, 2021), the International Monetary Fund (IMF, 2021), the United Nations (2021), etc. were examined.
2. Development plans relevant to poverty reduction from the government agencies of 30 economies, especially in ASEAN economies, India, Kenya, South Africa, Brazil was also investigated.
3. BOP business models, types of the BOP, and the strategies per industry, including the first, second, and third industries were tested.

As for the sampling frame, the number of the sample size was, in total, 30 from national economies in relation to the RQ1 for testing the hypothesis from the national scale's unit analysis. Nevertheless, when it comes to poverty reduction via the BOP business strategies, it is necessary to arrange some representative economies with the national scales, especially BRICS economies (O'Neill, 2011), such as China, Brazil, India, and South Africa (Russia was removed since it is considered as one of the developed economies).

### **3.3.2.3 Procedures for Primary Data Collection**

For data collection, appropriate variables need to be obtained, notably through the World Bank (2021), the United Nations (2021), the ADB (2021), the AfDB (2021), and the IMF (2021) by selecting working papers and publications relevant to "Development strategies," "Development plans for poverty reduction" and "BOP Business model" with a view to a formulation of the framework of the BOP business development strategies for poverty reduction more comprehensively. The data were accessed through public downloading functionality, while the duration of the time frame is for the recent years of, at least, 2001. The reason to select this duration is to maximize the usable amount of data by minimizing the amount of missing information for more robust results. Also, demographic information were gained for 30 selected economies in sub-Saharan Africa, South Asia, Southeast Asia, and South America from the category of "Population Dynamics" by "World Development Indicators." (WDI, 2021)

### **3.3.2.4 Instrumentation and Operationalization of Constructs**

For conducting the grounded theory, the coding should be instrumented and operationalized as appropriate constructs. Coding refers to a method of categorizing the text for establishing a framework of thematic ideas (Gibbs, 2007). In a word, coding is a process of identifying a passage in the text or other data items, investigating and discovering concepts and finding relations between them. By establishing a set of codes that we can apply to categorize our data based on the initial ideas, the data can be contextualized along with the study purpose and RQ2. In these ways, it would be appropriate for me to employ the coding for processing the study analysis for the RQ2.

### **3.3.3 Data Analysis Plan**

Using the grounded theory enabled me to generalize a conceptual framework relevant to the BOP business development strategies for poverty reduction in developing countries with the following data analysis plan.

The first step is to observe the national development strategy plans both in international organizations and the selected 30 economies governments to see the essential strategies of poverty reduction. The integral parts of the strategies should be focused on poverty alleviation plan ahead. The prioritized areas should be different from country to country, depending on the development stage, and thus classifying the different strategies into income stage levels. When it comes to the income stages, it is helpful for me to employ the criteria set by the World Bank (2021); low-income, lower-middle income, higher-middle-income, and high-

income levels. The development stage has different socio-economic situation, and thus strategies being categorized by the income stages.

The next step is to observe the current BOP business models. As seen in the literature review, Simanis and Hart (2008) formulated the framework of the BOP business development stage. It has historically three steps of first-generation BOP (BOP 1.0), second-generation BOP (BOP 2.0), and third-generation BOP (BOP3.0). BOP 1.0 is for “selling to the poor,” while BOP 2.0 is for “creating mutual value (CMV),” respectively (Simanis and Hart, 2008). BOP 1.0 aimed at having the poor involved with the business for earning benefits until 2007. BOP 2.0, then, aimed at creating the value chain from scratch and grasping the market needs accurately, which was the mainstream until 2012. Then, BOP 3.0 was conceptualized by introducing open innovation approaches and more participatory governance structures under the concept of “wisdom of the crowd” since 2013 (Cañeque and Hart, 2015).

When preparing, organizing, reviewing, and exploring the data above, the third step is, then, to see if the new strategies can be formed by interlinking the BOP business models with the national income levels by developing a data coding system and assigning the code to the data. Essentially, the BOP strategies can respond to the socio-economics levels accordingly. Thus, it is necessary to describe and categorize common words, phrases, and ideas in qualitative data and identify and interpret patterns and themes in qualitative data.

The final step is to identify recurring the by linking codes together into cohesive, overarching theory with several approaches of content and thematic contexts (Bhandary, 2020) The final goal is to respond to the RQ2 by forming a conceptual framework representing the BOP business development process for promoting further poverty reduction.

### **3.3.4 Threats to Validity**

Here is the discussion of threats to validity for RQ2 from the perspectives of external validity, internal validity, construct validity, and ethical procedure as follows.

#### **3.3.4.1 External Validity**

One of the most significant threats in external validity would be whether the results of the research questions can be applicable and transferable to all the countries or not. This study focused on poverty in developing countries, formulating a conceptual framework relevant to the BOP business development strategies for poverty alleviation in developing countries in several parts of the world, especially sub-Saharan Africa, South Asia, Southeast Asia, and South America. In a word, under the different population and the development conditions with the various governmental policies for further progress, the variety in the data settings can be observed in this study. In this regard, the result can be observed in the same way.

Nevertheless, as well-known, poverty has occurred almost all parts of the world. In a word, in the case of the different environments, the research findings

in this study might not be successfully applied to the other parts of the world where I did not use for RQ2. In this respect, the generalizability of the study results to be applicable to other regions can potentially be available.

#### **3.2.4.2 Internal Validity**

As described in the “Instrumentation” above, one of the most significant concerns would be whether it is possible for the study to remove as much biases as possible. In order for this study to remove the biases, finding the most reliable documentations relevant to the BOP business activities and poverty reduction can be considered as the appropriate methodology in leading to the appropriate formulation of a conceptual framework representing the process of developing the BOP strategies in the selected developing countries.

Nevertheless, still, the weak instrumental problem can potentially occur. In that case, the other methodology will be considered so that the bias-free can be possible. For instance, the interview with some professionals can also be suggested as this method has been well-known as an alternate approach as grounded theory (Yin, 2009). In this regard, the interview can potentially be the alternate in addressing the issue of the biases.

#### **3.3.4.3 Construct Validity**

As described in the item of “Instrumentation” above, regarding the validity, this study needs to avoid the bias as appropriately as possible in formulation a conceptual framework relevant to the BOP business development strategies for poverty reduction in the developing world. I used the

representative documentations or the other resources available relevant to the BOP business cases and poverty rate obtained from international organizations, governments, NGOs, and MNCs having been quantified and validated by other international source organizations. In this regard, my study data were assumed to uphold construct validity.

#### **3.3.4.4 Ethical Procedure**

Since the data were accessed through the several international organizations' websites publicly available, there is no ethical concern and no need for institutional permission. Also, there is no plan to intervene with the participants in data collection and describe the treatment, including the protection of personal information. On the other hand, I will collect and use the archival documentary gained through international organizations and including the World Bank (2021) and the United Nations Development Programme (2021), as described in the research design.

Finally, regarding the other ethical issues, since this study deals with the development issues in the developing world, the low-income condition is considered to be a serious social issue in the world. In this regard, some may criticize that reducing poverty rate is not everything in the lives of others. Indeed, some researchers specializing in politics, sociology criticize economists, including business economics, since increasing the income does not constantly make people happy (Otsuka, 2014). Nevertheless, from the perspective of social change, eradicating poverty through business should be justified in the real world in

promoting economic progress and reduce extreme poverty in the long run. In this regard, dealing the economic statistics should be justified for the shared incentives scholarly and practically.

### **3.4 Conclusion**

In concluding remarks, I summarized the specific methodologies both for RQ1 and RQ2, respectively.

Firstly, as for RQ1, with the non-experimental design, I focused on the influence of the BOP business opportunities on the poverty headcount ratio in randomly selected 61 economies, especially from Southeast Asia, South Asia, Middle East, Sub-Saharan Africa, and South America with the quantitative study. Specifically, sampling strategy is to earn the commonly accessible data from the several international organizations primarily including World Bank and the United Nations from 2000 to 2020, which can justify the research purposes as a strategy of sampling. The methodology I employed here was the multiple linear regression analysis with a fixed-effect model, primarily for the study purpose of clarifying the impact of the BOP business cases on the poverty headcount ratio by focusing on the figure of the  $R^2$  variance. I used the variables of the BOP, poverty headcount ratio, governance, industrialization, labor force, infrastructure and HDI as for the RQ1. Each variable was classified into three groups of nominals, categorical, and continuous variables accordingly, while the scores were judged by the figure of  $R^2$  increase. Regarding the instrumentation to answer the research questions, the multiple-linear regression analysis was employed for acquiring the expected values. Particularly, removing the possible confounding factors between the BOP business

opportunities and the poverty headcount ratio for RQ1 and then making the DV regressed into the predicted values developed in the first platform can be interpreted as the proper methodology in leading to the appropriate causality. With the approach, the results of testing hypotheses, procedure, and study result for RQ1 can be seen in Chapter 4.

Secondly, as for RQ2, I employed the qualitative analysis; the grounded theory model was employed to develop a conceptual framework for answering how to develop the BOP business strategy for poverty reduction in the developing world. The research question pursues formulation of conceptual framework through the qualitative analysis. Thus, it was appropriate for me to choose the grounded theory, which refers to an approach to generating theories through the coding processes (Williams and Moser, 2019). Also, for me to avoid as much biases as possible, I chose the document analysis, instead of personal or group interview. I made a procedure of conducting the document analysis for the grounded theory approach as follows. Firstly, I conducted the data-collection from the available web-sources, notably including international organizations, scholars' existing studies, local governments. The data were relevant to the three platforms; "1. Development strategies for poverty reduction from international organizations," "2. Development plans relevant to poverty reduction from the government agencies of 30 economies," and "3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries." Consequently, I found 45 samples sourced per organization, author, and nation relevant to development strategies for poverty reduction and the BOP business models and frameworks. These are authentic which were officially issued from the international

organizations, governments, and research institutes. With the approach, the results of procedure, and study result for RQ2 can also be seen in Chapter 4.

## CHAPTER IV:

### RESULTS

#### **4.1 Data Collection**

In this study, I aimed to contribute to mitigating the poverty issues in the developing world, primarily by quantitatively analyzing the influence of the BOP business opportunities on poverty head count ratio. The BOP business cases need to be examined in terms of statistical metrics because the effect of the BOP business opportunities on poverty reduction in developing countries has not been clarified based on empirical findings. Thus, the relationship between BOP business cases and poverty headcount ratio needs to be addressed in this context.

Also, formulating the BOP business development's conceptual framework needs to be encouraged for any developing countries with different socio-economic and cultural backgrounds. Indeed, little research has addressed the specific development strategies of the BOP business both from the aspects of economic development and business management. In this context, with the qualitative analysis, I will obtain data from diverse secondary sources, especially including the international organizations and government documents, review published articles and seminar materials, and formulating the conceptual framework for developing the BOP business process toward the overcome of poverty in the developing world. Here are the research questions and hypotheses:

RQ1: Will the BOP business for alleviating poverty in developing countries predict a statistically significant percent change in  $R^2$  variance when controlling the other factors of education, medical, governance, industrialization, labor market, infrastructure, and human development composite values?

$H_0$ : There is no statistically significant contribution of the BOP business to the percent change of the  $R^2$  variance in developing countries poverty headcount ratio when controlling for governance, industrialization, labor market, infrastructure and human development composite values.

$H_1$ : There is a statistically significant contribution of the BOP business to the percent change of the  $R^2$  variance in developing countries poverty headcount ratio when controlling for governance, industrialization, labor market, infrastructure and human development composite values.

RQ2: How can the framework of BOP business development as an essential condition in any developing country be formulated and recommended?

With these research questions and hypotheses, I begin Chapter 4 with the data collection process for observation and report of characteristics of the sample. I also address discrepancies in data collection from the original plan and report the sample's characteristics from name convention in SPSS, descriptive statistics, and mean average per each country. Then, study results, especially assumption testing and hypotheses testing results relevant to the two research questions, are shown. Finally, I conclude Chapter 4 with a summary of the findings and a transition to Chapter 5.

The data collection was conducted over a 10-week time frame. The data were primarily gained through publicly open websites from the World Bank and the United Nations Development Programme in 2000 to 2020 with 61 economies randomly chosen in some parts of the world, especially from Southeast Asia, South Asia, Middle East, Central Asia, Sub-Saharan Africa, and South America (Afghanistan, Argentina, Bangladesh, Benin, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Chili, Comoros, Congo Democratic Republic, Djibouti, El Salvador, Ethiopia, Gabon, Ghana, Guatemala, Guinea, India, Indonesia, Kenya, Kyrgyzstan, Lao PDR, Lesotho, Liberia, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mexico, Mongolia, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Pakistan, Paraguay, Philippines, Senegal, Sierra Leone, South Africa, Sri Lanka, Sudan, Tajikistan, Tanzania, Thailand, Togo, Uganda, Uruguay, Venezuela, Vietnam, Zambia, and Zimbabwe). In this section, I discuss the review of the results of the sampling procedures for both RQs, the methods of the missing data for RQ1, and the characteristics of the samples.

On the other hand, since RQ2 is based on the grounded theory because I am intended to build a new development strategy relevant to the BOP business in connection with the aim of mitigating poverty in the developing world. Grounded theory has several representative data-collection methods, including interviewing participants with open-ended questions, participant observation through fieldwork by focusing on groups, and study of documents, artifacts, and texts (O’Leary,

2014). It was less appropriate for me to choose group interview or individual interview in answering the research question of the development strategies because interview answers can include much more bias. Instead, documentary analysis can be more appropriate; a form of qualitative research in which documents are interpreted by the scholars to give voice and meaning around an assessment topic (Bowen, 2009). The documents can be collected through public records, personal documents, and physical evidence (O’Leary, 2014). For me to be able to make the development strategies to be reliable, selecting the public records can be a right choice as sources for data-collection and data-analysis, especially in accuracy and officiality. Therefore, along with the three platforms of No. 1. Development strategies for poverty reduction from international organizations, No. 2. Development plans relevant to poverty reduction from the government agencies, and No. 3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries, I found the public records from some agencies useful. As for No. 1., I selected six international organizations of the World Bank (2021), the Asian Development Bank (ADB, 2021), the African Development Bank (AfDB, 2021), the International Monetary Fund (IMF, 2021), the United Nations (2021), and the Organisation for Economic Co-operation and Development (OECD). Also, I found that one Japanese university professor, Otsuka (2014), published his development strategy for poverty reduction in the developing world. As for No. 2, I found public records of 30 economies issued by the national governments from Afghanistan, Bangladesh, Brazil, Burkina Faso,

Cambodia, Central African Republic, Chad, Congo, Dem. Rep., Ethiopia, Ghana, Guinea, India, Indonesia, Kenya, Kyrgyz, Lao PDR, Liberia, Malaysia, Myanmar, Nepal, Nicaragua, Pakistan, South Africa, Tajikistan, Tanzania, Thailand, the Philippines, Uganda, Vietnam, and Zambia. Lastly, as of No.3, five scholars suggested frameworks relevant to the BOP business models, types of the BOP and its strategies in their publications or journals.

Next, I discuss the review of the results of the sampling procedures for both RQs, the methods of the missing data for RQ1, and the characteristics of the samples for both RQs.

#### **4.1.1. Process and Observation**

Overall, for arranging the dataset to approach RQ1, I used the secondary data in several variables for covering the missing data, specifically the IV of “Base of the Pyramid Number of Cases,” the DV of “Poverty head count ratio,” and the CVs of “Governance,” “Industrialization,” “Labor market,” “Infrastructure,” and “Human Development.” The dataset listed the World Development Indicators of WDI, the World Governance Indicators of GNI, the Human Development Index of HDI, and List (2017) ( $N = 1281$ ). The samples gained through the publicly accessible data from the international organizations were completely different. Specifically, for the DV of poverty headcount ratio (at \$1.90 a day percentage of population), the resultant sample was obtained through the WDI (2020) with the figure of  $n = 361$ . Secondly, the IV of the BOP business cases had the figures of the sampling;  $n = 26$  were gained from the previous scholar, List (2017), as well.

Finally, for the CVs, the resultant samples are as follows: The variable data of governance was gained through the WDI. It is composed of six elements of voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption, accordingly (WGI, 2021). Between 2000 and 2020, the WGI did not arrange the data in 2001, thus being  $n = 1220$  per each factor. Secondly, for industrialization, I found the value-added rate in manufacturing per GDP with  $n = 1239$ . Regarding the labor market, I chose the variable data of labor force participation rate for ages 15+ for a total of both male and female with modeled ILO estimate and picked up  $n = 1220$ . Next, for infrastructure, I selected the Transport services (% of service exports, BoP, 2021), resulting in  $n = 1098$  for the designated 21 years from 2000 to 2020 from the WDI (2021).

In analyzing the data for RQ1, some missing data were identified, especially in the IV of the BOP business cases and the DV of poverty headcount ratio. As for the required minimum sample size, in quickly reviewing the data-collection from G\*Power as a tool for calculating the size, I indicated the figure of  $p < .05$ ; the minimum condition of the alpha level is .05 with power analysis .80 under the appropriate condition of effective size  $f^2$  of .15 to be at a significant level with the sole IV of BOP business opportunities vis-à-vis one DV for observing the  $R^2$  increase in Chapter 3. With these conditions, the minimum required sample size was 68 in using linear regression with a fixed-effect model. From this analysis, though the number of the poverty headcount ratio and the BOP business cases

exceeds the minimum number of the sample, they were not sufficient sizes in comparison with the other variables.

Primarily, the number of the BOP business opportunities exceeded the minimum size of 68, while several critical lacking pieces of data were identified. First, there were no data from during 2000-2016 and 2018 to 2020. List (2017) painstakingly picked up the data from all over the world, resulting in 130 in his work in 2017. After all, it was considerably challenging for me to find the specific amount of data per year since 2000, due to the lack of the big-data relevant to the BOP business as pointed out by Raj and Aithal (2018). While the highest amount of data within the DVs was HDI ( $n = 1281$ ), the size of the BOP, as well as the poverty headcount ratio, should preferably be equivalent to the number in the other indicators as the primary parameter in this study. In this respect, further sampling of data-gathering for the BOP business cases and poverty headcount ratio needed to be considered.

On the other hand, for RQ2, I selected 30 economies (Afghanistan, Bangladesh, Brazil, Burkina Faso, Cambodia, Central African Republic, Chad, Congo, Dem. Rep., Ethiopia, Ghana, Guinea, India, Indonesia, Kenya, Kyrgyz, Lao PDR, Liberia, Malaysia, Myanmar, Nepal, Nicaragua, Pakistan, South Africa, Tajikistan, Tanzania, Thailand, Philippines, Uganda, Vietnam, and Zambia) and six international organizations (African Development Bank, Asian Development Bank, International Monetary Fund, Organizations for Economic Co-operation and Development, United Nations Development Programme, and World Bank), and

several experts on Development Economics and business management relevant to the BOP business. For conceptualizing a framework relevant to the BOP business development strategies for poverty reduction, three pillars of 1. Development strategies for poverty reduction from international organizations will be examined. 2. Development plans relevant to poverty reduction from the government agencies of 30 economies, especially in ASEAN economies, India, Kenya, South Africa, Brazil will also be investigated, and 3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries, were tested through the review of official documents available in each economy.

Remarkably, as for 2., I relied on the web source of the IMF where they summarized the development strategies per each country, as well as the government websites. One reason for this is that the IMF provides the public archive data in English, while some countries do only have the ones in their local languages. Of course, I found several archive data from some government agencies in English, but the majority of the archive were found in their local languages. As for the sample size, it is principally appropriate for qualitative scholars to find in minimum 10, preferably, from 20 to 30 in case of building similar segments within the population through interview or archives per segment (Boddy, 2016). I found over 40 archives, primarily through publicly accessible online sources. In this regard, it would be sufficient for me to find the number of the relevant sources.

#### **4.1.2. Prescriptions for the Missing Data**

As noted above, the missing data for several variables were found, despite the secondary data's employment for maximizing the sample size. Specifically, for the missing data identified with over 100, the IV of the BOP business cases had the considerable missing data with the figure of at least over 1255 for 21 years between 2000 to 2020 according to the existing survey by List (2017). Likewise, the IV of poverty headcount ratio does not have the sufficient data for 21 years ( $n/a=920$ ). Finally, the CV of Governance lacked the whole data in 2001 according to the World Bank survey (2021). In summary, the missing data above were found from the dataset collected through List (2017), the World Development Indicators (2020), and World Governance Indicators (2021).

On the other hand, as for the RQ2, since I found the necessary data relevant to the development strategies for poverty reduction, development plans for poverty reduction, and BOP business models, types of the BOP, and the strategies per industry. I employed the archive data, primarily from the international organizations, the government agencies in 30 economies in Southeast Asia, South Asia, Central Asia, Middle East, South Africa, and sub-Saharan Africa, as the primary data due to the most significant entities in this RQ. Specifically, the archive data relevant to the development strategies for poverty reduction and the BOP development strategies or frameworks were obtained. Consequently, 45 resultant samples were found as of these entities sampling. In these ways, I obtained sufficient amount of data for qualitative analysis for RQ2.

For the missing data elements from the outset, the first thing I did was to increase the data amount sourced from the secondary data. Principally, secondary data refers to the existing data collected through the organizations, while primary data is often defined as the one made by the scholars (Surbhi, 2016). As previously explained in Chapter 3, I used the preliminary data through the international organizations, e.g.) the World Bank (2021) and the United Nations Development Programme (2021), while plenty of missing data were still identified. In this regard, I used the other existing data relevant to the BOP business cases from WDI (2021) to cover as much lacking data as possible. The specific methods of the secondary data are described as follows.

Firstly, regarding the BOP business: Number of Case, as previously described, I did not obtain a sufficient number of samples ( $n = 26$ ) from the previous scholar of List (2017). He collected 130 cases of the BOP businesses until 2017. These cases were found only in the year of 2017, applying to randomly chosen 61 countries in this study, resulting in only 26 samples. As Raj and Aithal (2018) stated previously, one of the most serious issues in conducting the research on the BOP business, there is no big data. List (2017) also searched 130 cases in 2017 from different types of sources, including newspapers, academic databases, journals, web-engines, books, etc. (List). In this way, the data collection conducted by the author might be inaccurate, while it can still be used as the number of the cases of BOP business.

Nonetheless, the amount of the BOP business cases is so small and inaccurate in conducting the quantitative analysis. So, I looked for an additional IV relevant to the BOP business. As a result, I found one more variable as reference, which is Foreign Direct Investment (FDI/ Net inflows (BoP, current US\$)) from WDI (2021). FDI is referred to as the total amount of equity capital in the way of direct investment equity net flow, reinvestment of earnings, and other capital (World Bank, 2021). It is principally categorized as cross-border investment in association with a resident in one economy by control or a significant degree of influence on managing an enterprise that is resident in another economy (WDI, 2021). One reason to choose this variable as an additional indicator to analyze the impact on poverty headcount ratio is that BOP is also considered as investment in business development for poverty reduction in the developing world. In this way, it can also be possible to see the difference in the study results between the BOP business cases and the FDI, respectively. Consequently, I found 1212 samples out of 1281 of FDI in 61 economies between 2000 and 2020 from WDI (2021), which is sufficient amount.

Consequently, despite the secondary sources, the missing data for RQ1 remain for some variables. Therefore, statistical procedures were used to impute values for missing data (see Little & Rubin, 2014). The treatment for the missing data should further be identified for the purpose of avoiding making the data biased. Principally, the missing data are classified into three types of MCAR (Missing Completely at Random), MAR (Missing at Random), and MNAR

(Missing Not at Random), accordingly (Enders, 2010). In this way, I prescribed the missing data when collecting them randomly, depending on the years to be investigated by List (2017) and the World Bank (2021), respectively.

Through additional literature review, I considered employing several methods, then chose one of the most appropriate approaches. One way is the so-called “listwise deletion,” which is the most common way to handle the missing data by omitting the cases with the missing data and then employing the remaining data for analysis (Kang, 2013). Secondly, “pairwise deletion” is the other way to eliminate insufficient information only if the specific data-point for testing a particular assumption is missing (Kang, 2013). These two methods are representative to omit the missing data and use the remaining data. However, as expected, an insufficient sample size can be the result. Indeed, when handling the missing data with the listwise deletion, the number of the sampling size for RQ1, for instance, was significantly reduced ( $n = 170$ ).

On the other hand, in the case of the pairwise deletion, given that the data-point, which stands for the IV (BOP business: Number of Cases) predicting the DV in this study, is missing, the number of the size becomes slightly larger than the ones by the listwise deletion with  $n = 368$ . Finally, one more way of handling the missing data is to employ the multiple imputation method. I used SPSS v. 27 for statistical analysis and imputation of missing values function whereby SPSS automatically replaced the missing data with estimated figures (Field, 2018). On behalf of this approach, it was not necessary to omit the lost data.

In choosing one of the most appropriate methods this time, principally, the listwise deletion is regarded as valid only if the amount of omitting data is within 10%. Meanwhile, the multiple imputations do work in over 10% deletion of the missing data from the original dataset (Little & Rubin, 2014). In the case of employing the listwise, the total number of samples when hiring the listwise is only 170, which is surely more than the number calculated by G\*Power's power analysis with the figure of 78. Still, the figure of the samples is not sufficient in comparison with the other variables with the figure of around 1,000 cases. One more way of handling the missing data is that it would be optional for me to employ the pairwise deletion since this method removes only those minus data points but leaves other case observation data present. Nevertheless, the proportion of the IVs' study variable's missing data is around 70%, with the figures of approximately 920 cases, out of the total samples available 1281 in maximum. In this respect, the values may not represent the correct answer if they were directly measured.

Though the replaced missing value is returned based on statistical algorithms from the present values (Enders, 2010), the multiple-imputation method would not sound incomplete. Overall, in considering several approaches to handling the insufficient data, I opted to replace missing data by employing the SPSS imputation function resulting in a retained sufficient sample size ( $N = 1281$ ) in keeping the analysis as unbiased as possible.

#### **4.1.3. Methodologies**

The primary purpose of my research questions observing the effect of the BOP business cases on the poverty headcount ratio in the randomly selected 61 economies is to primarily see the figures of  $R^2$  variance as coefficients of determination. The linear regression model allows me to use the general values of the DVs and the interval ratios of the IVs to be measured. In this way, using the multiple-linear regression model allows me to answer the research questions using the values of  $R^2$  increase as directly as possible. The original formula for the multiple linear regression model is shown as follows:

$$Y = \beta_0 + \beta_1 X_1 + \dots + \beta_n X_n + \varepsilon \dots\dots\dots (1)$$

For a brief explanation of each code, “Y” means the predicted value of the dependent variable, “ $\beta_0$ ” stands for the y-intercept (value of y when all other parameters are arranged to 0), “ $\beta_1 X_1$ ” represents the regression coefficient ( $\beta_1$ ) of the first independent variable ( $X_1$ ). It is worth describing how increasing the figure of the independent variable has on the predicted y value (Bevans, 2020). Then, “ $\beta_n X_n$ ” demonstrates the regression coefficient of the last independent variable. Finally, “ $\varepsilon$ ” represents model error. For example, how much variation there is in our estimate of “Y” needs to be considered. In applying the official formula (1) above to this study, I made the formula for both RQs as (2) below.

$$Y_{phr} = \beta_0 + \beta_1 X_{oth,facs} + \beta_2 X_{bop/fdi} + \varepsilon \dots\dots\dots (2)$$

For simplicity, I made each code for RQ1 specific, e.g.) the code “ $_{phr}$ ” represents poverty headcount ratio for RQ1 as DV. Also, the code “ $_{oth,facs}$ ” means the alternative factors, including *Governance, Industrialization, Labor Market,*

*Employment, Infrastructure, and HDI* fixed as the CVs. Finally, the code “*bop/fdi*,” stands for the BOP business case and FDI as the IV.

The basis of the multiple linear regression model using interval-ratio level data allows relevant interpretation of these data. Thus, I decided to employ the multiple-linear regression model this time.

#### **4.1.4. Characteristics of the Sample**

Firstly, as for RQ1, based on the data collection treatment and consideration of needed methodological changes described above, I explain the characteristics of the sample by gaining insight into the following three perspectives of naming conventions for each variable, descriptive statistics, and the country's mean averages for the DVs and IV. Firstly, this study had, in total, one DV, one main IV plus extra, and 10 CVs both for RQ1. The variable definitions and labeling conventions are summarized both in Table 7. It represents the study's DV, the IVs, and CVs. These name conventions are used in the output tables and were primarily employed as identifiers in SPSS. After handling the missing data, the sample contained in a maximum of  $N = 1281$  cases in all the variables with 21 years from 2000 to 2020 in the randomly selected 61 economies in the developing world (Afghanistan, Argentina, Bangladesh, Benin, Bolivia, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Chili, Comoros, Congo Democratic Republic, Djibouti, El Salvador, Ethiopia, Gabon, Ghana, Guatemala, Guinea, India, Indonesia, Kenya, Kyrgyzstan, Lao PDR, Lesotho, Liberia, Madagascar, Malawi, Malaysia, Mali, Mauritania, Mauritius, Mexico, Mongolia,

Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Pakistan, Paraguay, Philippines, Senegal, Sierra Leone, South Africa, Sri Lanka, Sudan, Tajikistan, Tanzania, Thailand, Togo, Uganda, Uruguay, Venezuela, Vietnam, Zambia, and Zimbabwe). As for the DV, the DV (Poverty headcount ratio) for RQ1 was estimated per each economy by the World Bank (2021). Then, regarding the IV, the BOP business cases were employed as IV\_1 from List (2017). Concurrently, I relied on one secondary data, especially another IV of the FDI was used for reference as IV\_2, due to the lack of sufficient data of the IV\_1. As can be seen in Table 7, I also showed the naming conventions of the three variables of poverty headcount ratio, BOP business cases, and FDI.

Label code	Name	Definition
DV_PHR	Poverty headcount ratio at US\$1.90 a day	The percentage of the population living on less than \$1.90 a day at 2011 international prices (WDI, 2021).
IV1_BOP	The Number of the Cases of the BOP Opportunities	The number of the actual cases of the Base of Pyramid for promoting poverty reduction in the developing world (List, 2017).
IV2_FDI	Foreign Direct Investment, net inflows (% of GDP)	The total amount of equity capital in the way of direct investment equity net flow, reinvestment of earnings, and other capital (WDI, 2021).
CV1_Indust.	Value added in manufacturing industry	Value added in Manufacturing through the data source on structure of output per GDP (WDI, 2021).
CV2_Labor	Labor force participation rate for ages +15 in total	Labor force participation rates and employment rates in the manufacturing industry for men and women over the age of 15 are obtained through the data source on Labor force structure (WDI, 2021).
CV3_Infra.	Transport services (% of service exports (Bop, 2021)	The rate of all transport services, e.g., ship, air, land, internal waterway, space, and pipeline by residents in one economy for another is measured (WDI, 2021).
CV4_GV_1	Governance: Voice and Accountability	The measurement of the extent to which citizens in a country can join the government selection, freedom of expression and a free media (WGI, 2021).
CV4_GV_2	Governance: Political Stability and Absence of Violence/Terrorism	The measurement of the possibility of political instability and politically motivated violence (WGI, 2021).
CV4_GV_3	Governance: Government Effectiveness	The measurement of the quality of public and civil services, and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the commitment to the policies (WGI, 2021).
CV4_GV_4	Governance: Regulatory Quality	The observation of the ability of the government to formulate and implement sound policies and regulations for private sector (WGI, 2021).
CV4_GV_5	Governance: Rule of Law (R/L)	The extent to which agents have confidence in and abide by the rules of society, and the quality of contract enforcement, property rights, the police, and the courts (WGI, 2021).
CV4_GV_6	Governance: Control of Corruption (C/C)	C/C perceps the extent to which public power is used for private gain, including both petty and grand forms of corruption (WGI, 2020).
CV5_HDI	Human Development Index	The summary measurement of average achievement in a long and healthy life, being knowledgeable and a decent standard of living (UNDP, 2021).

*Table 7*

*Labelling Conventions for Dependent, Independent, and Controlled Variables*

*Note.* Study labelling codes and conventions.

Table 7 also shows the CVs for RQ1. Notably, CV\_4 stands for Governance with six components, including voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, the rule of law, and control of corruption gained through the Worldwide Governance Indicators (WGI, 2020). For the other factors of Industrialization, Labor, Employment, and Infrastructure (CV\_1\_Indust, CV\_2\_Labor, CV\_3\_Infra., and CV\_5\_HDI), I employed the data, primarily from the World Bank (2021) and the UNDP (2021) as described in Chapter 3.

Furthermore, as noted in the same chapter, the population was defined as those involved in the labor force and educational institutions within the randomly selected 61 economies in the developing world. The data were identified regarding the DV and IVs through the survey by international organizations. Thus, the data are assumingly regarded as the representative items of the population. It would, then, be more suitable for me to employ the imputation this time since the missing data approach allows me to use the maximum ( $N = 1281$ ) by compensating for the missing values identified through the data-collection with the automatic computation of the SPSS. It is important to note that Table 7 described the additional IV of FDI net inflow (IV\_2\_FDI) as a reference since it would be necessary for me to observe the differences in study results from the one in IV\_1\_BOP due to the large amount of the missing data for making this quantitative study as accurately and objectively as possible.

	Min.	Max.	Mean		SD	Skewness		Kurtosis	
			<i>ST</i>	<i>SE</i>		<i>ST</i>	<i>SE</i>	<i>ST</i>	<i>SE</i>
DV_PHR	-41.67	96.70	22.21	0.62	22.31	0.53	0.06	0.11	0.13
IV1_BOP	1.00	36.00	8.61	0.25	9.24	2.32	0.06	4.19	0.13
IV2_FDI	-37.20	103.30	3.82	0.19	6.87	6.70	0.06	75.75	0.13
CV1_Indust.	3.20	61.70	25.65	0.27	9.68	0.55	0.06	0.47	0.13
CV2_Labor	37.96	94.41	67.60	0.31	11.40	-0.28	0.06	-0.41	0.13
CV3_Infra.	-20.55	81.30	20.01	0.42	15.04	1.09	0.06	1.40	0.13
CV4_GV_1	-2.23	1.31	-0.41	0.01	0.714	-0.07	0.06	-0.58	0.13
CV4_GV_2	-2.81	1.20	-0.57	0.02	0.863	-0.29	0.06	-0.43	0.13
CV4_GV_3	-2.23	1.28	-0.56	0.01	0.646	0.53	0.06	0.12	0.13
CV4_GV_4	-2.36	1.54	-0.50	0.01	0.646	0.17	0.06	0.67	0.13
CV4_GV_5	-2.35	1.43	-0.60	0.01	0.639	0.47	0.06	0.48	0.13
CV4_GV_6	-1.67	1.59	-0.59	0.01	0.601	1.12	0.06	1.77	0.13
CV5_HDI	0.26	0.85	0.56	0.00	0.135	0.12	0.06	-0.93	0.13

Table 8

*Descriptive Statistics for DV, IV, and CVs: SPSS Imputed Data*

Note. *N* = 1281 in all the variables

Note. *ST* = Statistics, *SD* = Standard Deviation, and *SE* = Standard Error

Note. Imputation was conducted by the SPSS ver.27 for filling up the missing data from the original dataset.

With the adjustment of the data-collection through secondary data and the imputed method, the descriptive statistics are outlined in Table 8. These statistics display the representative description, including maximum and minimum, range, mean, standard deviations (*SD*), and skewness and kurtosis values. Primarily, in paying attention to the mean figure, which is often regarded as one of the most significant factors determining the statistical significance by observing the differences in mean values (Masaki, 2017). In focusing on the mean figure, the Poverty headcount ratio (DV\_PHR) has the value of 22.21%. The mean values of

the IVs, including BOP business cases (IV1\_BOP) and FDI (IV2\_FDI) were 8.61 cases and 3.82% accordingly. Also, I arranged 10 CVs aside from the DVs and IVs. Table 8 recorded the negative mean figures in the item of Governance (CV4\_GV\_1 to CV4\_GV\_6), ranging from -0.41 to -0.59. Besides, the values for skewness and kurtosis had various tendencies. The former statistically ranged the figures from -0.29 to 6.70, and the latter did from 75.75 as the largest in IV2\_FDI and the lowest value -0.93 in CV5\_HDI.

On the other hand, as for RQ2, I employed the qualitative analysis. As explained earlier, for me to be able to make the development strategies to be reliable, selecting the public records should be a right way, especially in accuracy and officiality, as sources for data-collection and data-analysis. O’Leary (2014) defined public records as “the official, ongoing records of an organization’s activities. Examples include student transcripts, mission statements, annual reports, policy manuals, student handbooks, strategic plans, and syllabi” in her work. Therefore, along with the three platforms of No. 1. Development strategies for poverty reduction from international organizations, No. 2. Development plans relevant to poverty reduction from the government agencies, and No. 3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries, I found the public records from some agencies useful. As for No. 1., I selected six international organizations of the World Bank (2021), the Asian Development Bank (ADB, 2021), the African Development Bank (AfDB, 2021), the International Monetary Fund (IMF, 2021), the United Nations (2021), and the

Organisation for Economic Co-operation and Development (OECD). Also, I found that one Japanese university professor, Otsuka (2014), provided his development strategy for poverty reduction in the developing world in his work. Then, as for No. 2, I found public records of 30 economies issued by the national governments from Afghanistan, Bangladesh, Brazil, Burkina Faso, Cambodia, Central African Republic, Chad, Congo, Dem. Rep., Ethiopia, Ghana, Guinea, India, Indonesia, Kenya, Kyrgyz, Lao PDR, Liberia, Malaysia, Myanmar, Nepal, Nicaragua, Pakistan, South Africa, Tajikistan, Tanzania, Thailand, the Philippines, Uganda, Vietnam, and Zambia. Lastly, as of No.3, five scholars suggested frameworks relevant to the BOP business models, types of the BOP and its strategies in their publications or journals. These three categories can automatically be used in analyzing the coding extracted through the official records, primarily for developing a theory or conceptual framework (Banning 1995) relevant to the BOP business development. The qualitative analysis is principally characterised as “holistic,” “subjective,” “inductive reasoning,” “shared interpretation,” “words as basic element of analysis,” or “individual interpretation,” and thus being unique (Charmaz, 2006). These samples that I collected through publicly accessed records from international organizations, governments, and some scholars are basically holistic and inductive. Indeed, these samples are descriptive strategies or plans for poverty reduction issued and shared by the said parties, while we see the differences in strategies, especially as for the development plans for poverty reduction per country, organization, or scholar individually. In these respects, the

samples are well-reflected on the regular qualitative data-collection regarding the characteristics of collected samples. Overall, these samples are considered descriptively or conceptually summarized in official documents.

## **4.2. Study Results**

The following section provides the information on the results of the assumption testing for the multiple linear regression model and the study's outcome per each research question. It is composed of firstly assessing if the data meet the assumptions for the panel-data analysis. It will find any changes in the data required to complete the assumptions. Then, for each research question, the procedures and the results are finally shown.

### **4.2.1. Research Question 1**

#### **Assumption Testing**

There were seven tests executed to determine the validity of the assumption tests for fitting regressions with time-series and cross-sectional data. Namely, seven items of (1) normality, (2) linearity, (3) homoscedasticity, (4) independence error, (5) zero conditional mean, (6) no perfect collinearity, and (7) no serial correlation were tested. To perform each test, I ran a series of statistics and output graphs and the results are as follows:

As for (1) normality, the test was conducted to determine whether the DV and the IVs, including CVs, were normally distorted. For the data to be skewed and kurtotic, the figure is principally ranged +/- 2.00 in the case of the normal curve (Field, 2018). The descriptive statistics in Table 8 summarized the tests of

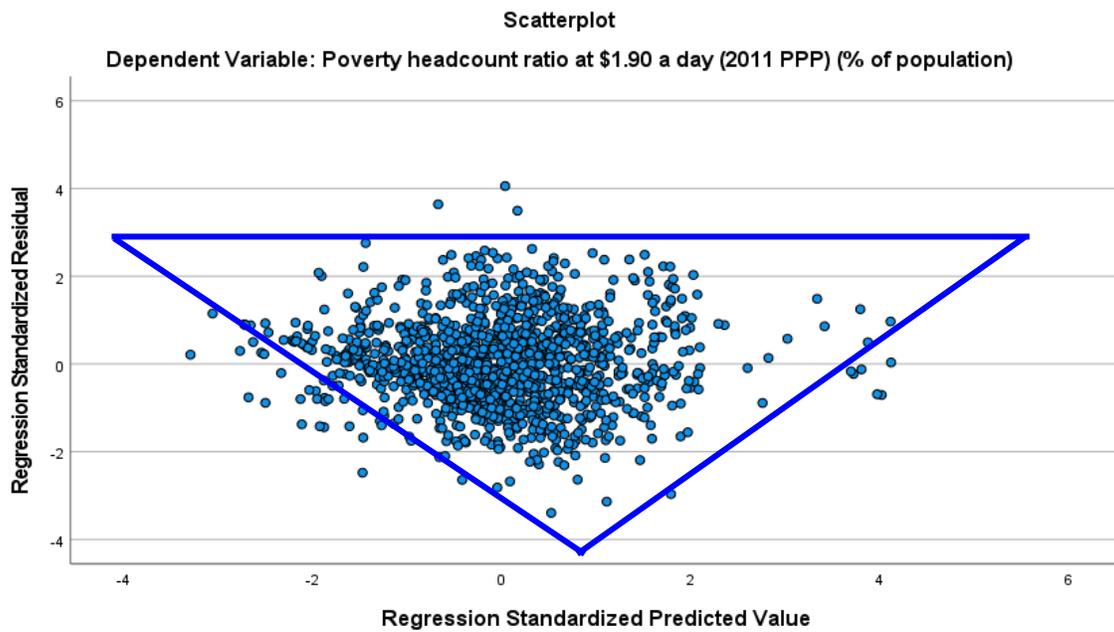
skewness and kurtosis per each variable as well. In focusing on the DV, the poverty headcount ratio (DV\_PHR) was positively skewed with positive kurtosis. Also, the BOP business cases (IV1\_BOP) and FDI (IV2\_FDI) were positively skewed with positive kurtosis. But, these figures exceed over 2.00 as the regular figure range. Several variables, including Labor force participation (CV2\_Labor) and Governance (CV4\_GV\_1 and CV4\_GV\_2) were all negatively skewed with negative kurtoses. Only the variable of HDI (CV\_5\_HDI) was positively skewed with negative kurtosis.

The histograms confirm that data are centrally distributed with fewer data on the tails, especially the lower tail. The Kolmogorov-Smirnov and Shapiro-Wilk were principally both significant ( $p < .001$ ). Both assumption tests are meant to smooth in these data assumptions' violations. For simplicity, the data imply that the distributions are not normally distributed with assumption violations that do not affect the overall regression model output for RQ1.

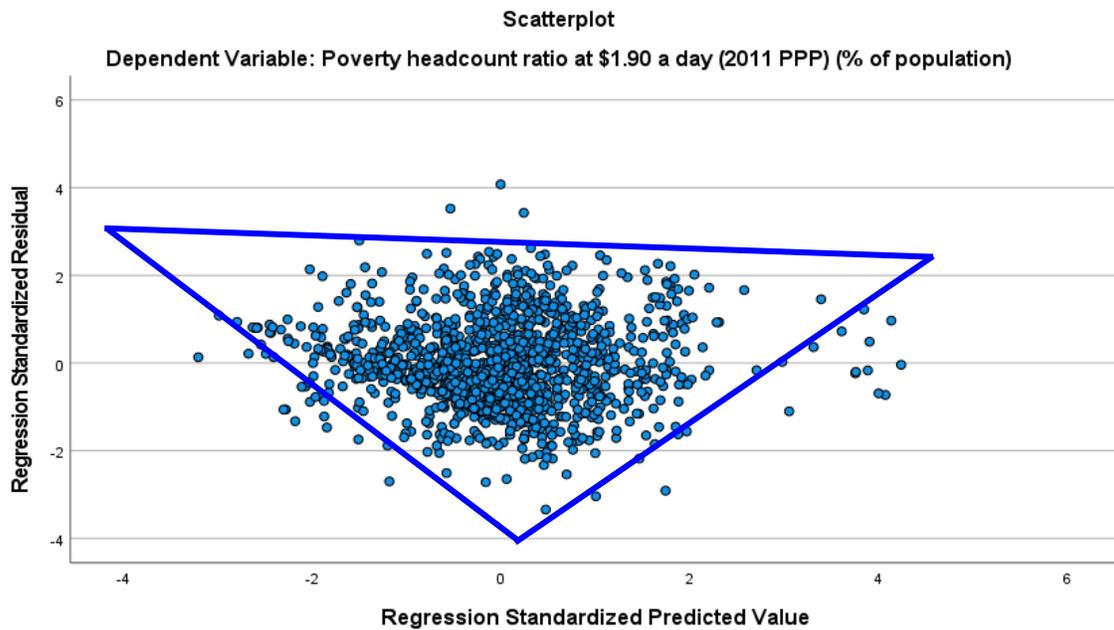
Furthermore, I addressed normality assumptions because the data, especially the DV and the IVs, were not transformed. Usually, the tests on the initial data indicated that there are problems in normality and DV and IVs may require transformation to their natural log for use (see Field, 2018). The primary purpose of conducting the log transformations is to look at the models with and without transformed data to observe how the log transformations did or did not influence the regression model outputs for reference. In my case, I employed another IV of FDI (IV2\_FDI) to see the differences in the model outputs. Therefore, the

descriptive statistics and histograms were not necessarily rerun and summarized in Table 8.

Secondly, regarding (2) linearity and (3) homoscedasticity, an Ordinary Least Squares (OLS) regression was conducted on the normal data. This process created the residual information and scatterplot to test the assumption of linearity and homoscedasticity. Figures 2 and 3 demonstrate the scatterplots of the standardized residuals and predicted value from the regression model with the poverty headcount ratio and the two IVs of the BOP business cases and FDI (IV1\_BOP and IV2\_FDI). There were no scatterplot funnel-shape formations, indicating that a violation of homoscedasticity is not confirmed. Figure 2 and 3 did not seem to have the funnel-shaped scatterplot as well. These two graphs do not seem to show a curve and are likely to meet the linearity.



*Figure 2*  
 The Scatterplot of Residuals for RQ1



*Figure 3*  
 The Scatterplot of Residuals for RQ1 (The Case of FDI)

On the other hand, the Levene statistic test was also significant ( $p < .05$ ) from the category of “Based on Mean” especially in Poverty headcount ratio (DV\_PHR), BOP business cases (IV1\_BOP), and FDI (IV2\_FDI). The figures indicate that the differences gained through the sample variances are unlikely to have occurred based on random sampling from the dataset with equal variances. In this regard, it would be possible to conclude a difference between the variances in the data.

Thirdly, the examination of (4) independent errors assumed that the underlying data came from the sampling methods. Also, the test of (5) zero conditional mean seemed to hold as an assumption based on the residuals' plot against the predictors. Then, for testing, a correlation analysis was executed if there is (6) no perfect collinearity. Indeed, between the DV of the Poverty headcount ratio (DV\_PHR) and the BOP business cases (IV1\_BOP), the figure of the correlation was  $r = .000$ ,  $p < .001$ , with the FDI (IV2\_FDI)  $r = .000$ ,  $p < .001$ . In the presence of these significant  $p$  values, no perfect collinearity was confirmed. Thus, a study weakness resulting from multicollinearity should not necessarily be considered and thus no further being assessed anymore.

Finally, as for (7) no serial correlation, the Durbin Watson statistic in Model 2 in Table 8 is 1.982, while in Table 9 with the figure of 1.973, respectively. The Durbin Watson criteria with the sample size of 100 or more with the model of less than 1.00 could indicate multicollinearity in one or more of the IVs (Field, 2018). Also, it is assumed to be normal to see the test statistic values in the range of 1.5 to 2.5 (Field, 2009). Thus, the values outside of this range could be cause for

concern. In this way, there is no concern in serial correlation to be reported here, especially from the aspect of the Durbin Watson test explained as above.

In total, I decided to use the DV and the IVs from the original dataset as my primary data for statistical analyses, and could not assume the data had independent errors in the value in these variables. On the condition that there is the inherit serial correlation, lack of homogeneity, and lack of independence errors, it is still feasible and reasonable to employ the multiple linear regression model with the SPSS, instead of employing the other methods, including the standard OLS or the panel-data analysis this time.

### **Research Question 1**

RQ1: Will the BOP business for alleviating poverty in developing countries predict a statistically significant percent change in  $R^2$  variance when controlling the other factors of education, governance, industrialization, labor market, infrastructure, and human development composite values?

$H_0$ : There is no statistically significant contribution of the BOP business to the percent change of the  $R^2$  variance in developing countries' poverty alleviation composite scores when controlling the other factors of education, governance, industrialization, labor market, infrastructure, and human development composite values.

$H_1$ : There is a statistically significant contribution of the BOP business in developing countries to the percent change of the  $R^2$  variance in developing countries' poverty alleviation composite scores when controlling the other

factors of education, governance, industrialization, labor market, infrastructure, and human development composite values.

## **Procedures**

For answering RQ1, a multiple linear regression model was employed. The multiple-linear regression model allowed me to estimate the relationship between two or more independent variables and one dependent variable. With the several matched conditions of the assumption testing, including homoscedasticity, normality, independence of errors, and linearity, the multiple linear regression analysis was executed using SPSS. The dependent variable is Poverty headcount ratio (DV\_PHR), while IVs are the BOP business: Number of Cases (IV1\_BOP), as well as Foreign Direct Investment (IV2\_FDI). Also, I used 10 CVs, including Manufacturing rate (CV1\_Indust.), Labor force participation rate (CV2\_Labor), Transport service for infrastructure (CV3\_Infra), the six components of Governance (CV4\_GV\_1 to CV4\_GV\_6), and Human Development Index (CV5\_HDI).

In handling the dataset with the SPSS, CVs were used in model 1 to allow the IVs to be computed freely. With the procedure, all CVs were entered into the "Independents" box first. Once those CVs were entered, I advanced through the regression model formation by putting the BOP business cases (IV1\_BOP) as IVs. As previously described, I handled missing data by using the "exclude case pairwise" command. The same procedure was conducted in the case of additional IV of Foreign Direct Investment (IV2\_FDI).

## Results

Table 9 shows the results of the most appropriate models executed. The summary of the output was generated from the SPSS with the imputed data. In paying close attention to the items of “R Square ( $R^2$ ),” “Adjusted R Square (Adjusted  $R^2$ ),” and “R Square Change ( $R^2$  Change),” accordingly, Model 1 had the figure .613 in R, while  $R^2$  .376 with adjusted  $R^2$  .371, respectively. With these outcomes, the  $R^2$  change had the value of .376 with Significance in F change .000 eventually. Model 2 is the case of putting the BOP business cases (IV1\_BOP) with the figure of the  $R^2$  was .382 with adjustment .377, while  $R^2$  change had the value of .000, which is a deduction from the  $R^2$  in Model 1.

Further, in paying attention to the item of “Sig. F Change,” the figures are .000 in Model 2, illustrated significant ( $p < .05$ ). In a word, I saw the significance in the transition of Model 2 with the missing data imputed based on reported data means. To further investigate these significant outputs, I evaluated the regression model ANOVA outputs for RQ1. Both ANOVA Models 1 to 2 were significant ( $p < .000$ ) illustrating a significant fit of data (see Field, 2018). With the Durbin-Watson figure computed during 1.50 to 2.50, I remain cautious in assuming my IVs are acting independently in the overall models.

Examining Model 2 as the final model, the “Adjusted  $R^2$ ” was 0.371; approximately 37.1% of the BOP business cases account for the primary predictor variables of Poverty headcount ratio in the randomly selected 61 developing countries. In a word, the poverty headcount ratio is not strongly influenced by the

accumulated effects of the BOP business cases. A remaining 62.9% of the predictive influencers remain unmeasured or otherwise unidentified.

Based on these perspectives for testing the RQ1 hypothesis, the alternative hypothesis ( $H_1$ ) states that a statistically significant contribution of the BOP business in developing countries to the percent change of the  $R^2$  variance in developing countries' poverty alleviation composite scores when controlling the other factors of education, governance, industrialization, labor market, infrastructure, and human development composite values. In addition to the confirmation of significance of "Sig F Change" and the certain figure of "Adjusted  $R^2$ " in Model 2, because I observed greater significance of the BOP business cases at least in Table 9, it was possible to be in favor of the  $H_1$  at least from the statistical result. Consequently, for RQ1, I rejected the null hypothesis ( $H_0$ ).

As described earlier, I employed another IV of Foreign Direct Investment (IV2\_FDI) to compare the results with the one in the case of the IV1\_BOP. Table 10 below represents alternative statistical output as an ad-hoc output. The slight difference identified from the results in Table 9 is that the  $R^2$  increase shown in Model 1 below had the same figure, with .376. Nevertheless, the Model 2 value of "Sig. F Change" was .030, illustrating significant ( $p < .05$ ) as found in the untransformed data set. Therefore, Model 2 remained essentially unchanged between the other independent variable.

Likewise, in focusing on the "Adjusted  $R^2$ " in Model 2, it was 0.373. The figure means that approximately 37.3% of the FDI net inflow predict the poverty

headcount ratio in the randomly chosen 61 developing countries. In other words, the poverty headcount ratio is not strongly influenced by direct investment from foreign countries. Still, however, as explained earlier, due primarily to the confirmation of significance of “Sig F Change” with the certain figure of “Adjusted  $R^2$ ” in Model 2, the significance of the FDI (see Table 10) was sufficiently demonstrated.

All in all, examining these data types in the regression models did not alter my interpretive results where my null hypothesis was rejected that the BOP business cases would be one of the superior regression drivers in the status of controlling other factors. Therefore, the null hypothesis for RQ1 was rejected.

Model summary <sup>c</sup>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model Summary				
					R Square change	F Change	df1	df2	Sig. F Change
1	.613 <sub>a</sub>	0.376	0.371	17.7020	0.376	69.588	11	1269	0.000
2	.618 <sub>b</sub>	0.382	<b>0.377</b>	17.6201	0.006	12.822	1	1268	<b>0.000</b>

Table 9

*Multiple-Linear Regression Model Outputs for RQ1*

a. Predictors: (Constant), CV1\_Indust., CV2\_Labor, CV3\_Infra, CV4\_GV\_1, CV4\_GV\_2, CV4\_GV\_3, CV1\_GV\_4, CV1\_GV\_5, CV4\_GV\_6, CV\_5\_HDI

b. Predictors: (Constant), CV1\_Indust., CV2\_Labor, CV3\_Infra, CV4\_GV\_1, CV4\_GV\_2, CV4\_GV\_3, CV1\_GV\_4, CV1\_GV\_5, CV4\_GV\_6, CV\_5\_HDI, **IV1\_BOP**

c. Dependent Variable: DV\_PHR

Durbin-Watson value = 1.973.

Note. Adapted from SPSS output

Model summary <sup>c</sup>									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model Summary				
					R Square change	F Change	df1	df2	Sig. F Change
1	.613 <sub>a</sub>	0.376	0.371	17.7020	0.376	69.588	11	1269	0.000
2	.615 <sub>b</sub>	0.379	<b>0.373</b>	17.6761	0.002	4.720	1	1268	<b>0.030</b>

Table 10

*Multiple-Linear Regression Model Outputs for RQ1 (The Case of FDI as IV)*

a. Predictors: (Constant), CV1\_Indust., CV2\_Labor, CV3\_Infra, CV4\_GV\_1, CV4\_GV\_2, CV4\_GV\_3, CV1\_GV\_4, CV1\_GV\_5, CV4\_GV\_6, CV\_5\_HDI

b. Predictors: (Constant), CV1\_Indust., CV2\_Labor, CV3\_Infra, CV4\_GV\_1, CV4\_GV\_2, CV4\_GV\_3, CV1\_GV\_4, CV1\_GV\_5, CV4\_GV\_6, CV\_5\_HDI, **IV2\_FDI**

c. Dependent Variable: DV\_PHR

Durbin-Watson value = 1.982.

Note. Adapted from SPSS output

## **4.2.2. Research Question 2**

### **Research Question 2**

RQ2: How can the framework of BOP business development as an essential condition in any developing country be formulated and recommended?

#### **Procedures**

As explained earlier, for answering RQ2, I employed the qualitative analysis. This research question pursues formulation of conceptual framework through the qualitative analysis. In this way, it was appropriate for me to choose the grounded theory, which refers to an approach to generating theories through the coding processes (Williams and Moser, 2019). Also, for me to avoid as much biases as possible, I chose the document analysis, instead of personal or group interview. As per instruction of Charmaz (2006), O’Leary (2014), and Triad3 (2016), I followed the following outlines of an eight-step planning process for document analysis:

1. Gathering relevant texts.
2. Developing an organization and management scheme.
3. Making copies of the originals for annotation.
4. Assessing authenticity of documents.
5. Exploring document’s agenda and biases.
6. Exploring background information (e.g., tone, style, purpose).
7. Ask questions about document with 5Ws (What, Who, Which, Where, When) and 1H (How).
8. Exploring contents.

With the outlined processes above, Bowen (2009) and O’Leary (2014) raised two concerns in conducting the document analysis as what researchers should keep in mind; a determination of whether the gathered documents were solicited, edited, and anonymous (Bowen, 2009). Another concern is the “unwitting” evidence or latent content of the document, which refers to the style, tone, agenda, facts or opinions that exist in the document (O’Leary, 2014).

Based on the outlines, I made a procedure of conducting the document analysis for the grounded theory approach as follows. Firstly, I conducted the data-collection from the available web-sources, notably including international organizations, scholars’ existing studies, local governments. The data were relevant to the three platforms; “1. Development strategies for poverty reduction from international organizations,” “2. Development plans relevant to poverty reduction from the government agencies of 30 economies,” and “3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries.” Consequently, I found 45 samples sourced per organization, author, and nation relevant to development strategies for poverty reduction and the BOP business models and frameworks. These are authentic which were officially issued from the international organizations, governments, and research institutes.

After conducting the data-collection through the records’ review, I analyzed the data and excerpted the texts which are directly related to the platforms above. From the excerpted texts, the way I analyzed them was to describe the executive contents one by one. Then, the grounded theory is represented as the inductive approach to demonstrating

the uses of the three-step coding process; open, axial, and selective coding. More significantly, the open, axial, and selective coding processes help us develop a cyclical and evolving data loop. In that way, the scholars can interact, are constantly comparing data, and applying data reduction and consolidation techniques (Williams and Moser, 2019).

Firstly, the open coding refers to the method to make a procedure for developing categories of information by labelling from the summarized description as the first stage (Charmaz, 2006). When labelling the description, I made categories with around 10-word description or a phrase as the most significant items for poverty reduction in the selected countries. I made 45 categories in broad initial thematic domains.

Then, moving on the axial coding as the second stage of analysis, I interconnected the categories that I made in conducting the open coding (Charmaz, 2006). Out of 45 categories, I integrated them into 15 categories. In the first platform of “1. Development strategies for poverty reduction from international organizations,” I have seven samples which are composed of six international organizations (World Bank (2021), ADB (2021), AfDB (2021), UNDP (2021), IMF (2021), and OECD (2021)) and one academic researcher of Otsuka (2014). I classified these seven samples into two categories; the former is from the international organizations, and the latter is from the scholars, because I found some common essences of the development strategies for poverty reduction in the developing world from these six agencies. Then, as for the second platform of “2. Development plans relevant to poverty reduction from the government agencies of 30 economies,” these 30 categorized samples were integrated into six components per

region; Southeast Asia, South Asia, Central Asia, Middle East, Sub-Saharan Africa, and South America. Indeed, when classifying these chosen 30 economies into three income levels (Low-income, Lower-middle income, and Higher-middle income), I found the income stages in each area are almost same, despite merely several different cases. For instance, four economies in South Asia, India, Bangladesh, Nepal, and Pakistan are at the same income stage of lower-middle income. More importantly, the poverty reduction strategies were similar to each other per region. Therefore, these 30 samples were squeezing down to six categories. Finally, as for the third platform of “3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries.” These seven categorized samples were reduced down to six categories. I found two samples quite similar to each other relevant to the goal of the BOP business model.

Next, the selective coding was conducted with the procedure for building a story that connects the categories producing a discursive set of theoretical propositions as the third stage of the analysis (Charmaz, 2006). 15 categories at the second stage of the axial coding were reduced down to three categories simply along with the three platforms. I found the common thematic items per each platform. Finally, these three categories were integrated into one theory developed for answering RQ2.

## **Results**

Table 11, 12, 13, 14, 15, and 16 shows the result of the three-step coding process of open, axial, and selective coding along with the first, second and third platforms. Regarding the platform 1 (“Development strategies for poverty reduction from

international organizations”) in Table 11, we found seven samples (No. 1-No.7) to analyze the open, axial, and selective-coding. Six organizations of the World Bank, ADB, AfDB, UNDP, IMF, and OECD mostly emphasized the significance of “ownership,” “better public service, especially education and health” and “good governance” for anti-poverty, while Otsuka (2014) theoretically developed his economic development strategy for poverty reduction, especially by focusing on the promotion of agriculture and manufacturing in low and lower-middle income economies (Otsuka, 2014). Indeed, most of the poor economies have the highest proportion of agriculture with lower productivity due to the lack of education, irrigation, technological advancement, etc. (Otsuka, 2014). Finally, Tran created his theory of the Lower-middle income trap (LMIT) and higher-middle income trap (HMIE) under the classification of four income stages of low, lower-middle, higher-middle, and high-income (Tran, 2016). With these notions, I made three categories of axial-coding; “ownership, better public services (education and health), governance,” “agriculture and manufacturing,” and “LIT, LMIT, and HMIT” were linear. Based on these categories, then, I made the selective-coding; “initial step of development strategies through improvements in public services, governance, and ownership for developing agriculture and manufacturing towards the upgrade of the income stages” at the end of this analysis. As described in the conceptual framework, the foundation of the development strategies for poverty reduction in the developing countries is to arrange infrastructure, public service, notably education and health, and governance to stabilize the nations. Consequently, I concluded the said selective-coding in the first sequence.

Next, moving on to the next platform 2. “Development plans relevant to poverty reduction from the government agencies of 30 economies,” I analyzed the open, axial, and selective-coding from the 30 samples seen in Table 12, 13, 14, and 15 (No. 8-No.37). As explained earlier, I classified these samples into six groups per area (Southeast Asia, South Asia, Central Asia, Middle East, Sub-Saharan Africa, and South America). Overall, in conducting the open-coding process, some most important key items for poverty reduction were identified, regardless of the areas; “food security,” “infrastructure,” “employment,” “rural development,” “better public service,” “economic institutions” “international and national partnership,” etc. were spectacularly found in these regions in common. Undoubtedly, these items are the most significant catalysts for mitigating poverty, thereby being considered as the axial-coding items. As described, poverty is multi-dimensionally composed of primary five factors to be occurred; health, education, income, living standard, and empowerment (OECD, 2019). In a word, poverty is not merely the state of being with economic condition, but also with the human development conditions. Meanwhile, I found several more key items, especially in low-income economies in Sub-Saharan Africa from Table 14 and 15; “peace-building,” “anti-corruption,” “gender equality,” “better business climate,” were particularly found in the description frequently, as well as the original texts in many low-income economies. In low-income, or lower-middle income, economies, conflict and violence have continued critically damaging the economies (Colliar, 2008). Notably, the West and East Africa, including Burkina Faso, Central African Republic, Chad, Congo, Dem. Rep., Guinea, and Liberia, have frequently led to the conflict with violence. In this regard, social protection

and peace-building need to be further reviewed. Also, the gender inequality level in these areas is significantly higher than the other economies when taking a look at the UNDP's HDI (2021). These economies are congregated in the worst ranking of 150th to 196th of the inequality level annually. Therefore, we can identify the worst scores of "ease of doing business index" estimated by the World Bank (2021). With these axial-coding results per area, I made a selective coding relevant to the platform 2; "food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with glocal partnerships, especially for rural development." For arranging the better business environment via FDI or the BOP business investment as a bridge between international and local stakeholders, the minimum socio-economic status through improvements in infrastructure, peace-building, governance, social protection, needs to be further improved, especially in low and lower-middle income economies in several areas. Therefore, the selective-coding item can be raised as shown above.

Finally, as for the platform 3. "BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries," I found seven samples available from some scholars who have studied the BOP business as well as several international organizations, including the World Bank and ADB as can be seen from Table 16. As shown earlier, the BOP business has still only 20-year history since the advocacy by Prehalad (2004) in 2001, which is a relatively new business style for private sectors. In transition from the open-coding to the axial-coding, some key items were found; "food security," "social value creation,"

“Marketing,” “BOP 1.0, 2.0., and 3.0,” “technology,” and “food, energy, housing, water, ICT, transportation” were the main words to be labelled in axial-coding. The World Bank (2007) estimated the share of the BOP business industry as of 2006 with these six industries to assist in the developing countries. Also, as explained, the BOP business has been progressed, and the phases to be summarized as BOP 1.0, 2.0, and 3.0 theoretically (Simanis and Hart, 2008). Finally, for promoting the BOP business in the developing countries, two key items of technology and marketing are the most influential tools for increasing the business share. With these axial-coding results per area, I made a selective coding relevant to the platform 3; “BOP business model for social value creation through marketing, technology, and smaller-scale operations, along with BOP types of 1.0, 2.0, and 3.0, especially in food, energy, housing, water, ICT, and transportation” finally.

With the open, axial, and selective-coding process with the use of 45 samples, the final step of developing a theory for BOP business development strategies to answer RQ2 is as follows.

1. An initial step of development strategies through improvements in public services, and ownership for developing agriculture and manufacturing towards the upgrade of the income stages.
2. Depending on the income stage, the development issues need to be prioritized for better business climate, especially for BOP business; food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with glocal partnerships, especially for rural development.

3. Developing the BOP business model for social value creation through marketing, technology, and smaller-scale operations, especially in food, energy, housing, water, ICT, and transportation.

Platform	No.	Category	Income Stage	Agency / Country	Open Coding	Axial Coding	Selective Coding	
1. Development strategies for poverty reduction from international organizations	1	International Organization	N/A	World Bank (2021)	Improvements in ownership, budget management, public services	Ownership, better public services (Education and Health), governance	Initial step of development strategies through improvements in public services, governance, and ownership for developing agriculture and manufacturing towards the upgrade of the income stages	
	2	International Organization	N/A	ADB (2021)	Social development and good governance through public services for anti-poverty			
	3	International Organization	N/A	AfDB (2021)	Institutional arrangements in ownership and partnership for better welfare			
	4	International Organization	N/A	IMF (2021)	Objectives, ownership and flexibilities in poor countries			
	5	International Organization	N/A	UNDP (2021)	budget planning, resiliency, employment, innovations, globalization, human development, financial mobility			
	6	International Organization	N/A	OECD (2021)	Governance, transparency, human rights, civil society, justice, public services			
	7	Researcher	N/A	Otsuka (2014)	Agriculture, manufacturing			Agriculture and manufacturing
	8	Researcher	N/A	Tran (2016)	LIT, LMIT, and HMIT under low, Lower-middle, higher-middle income, high-income			LIT, LMIT, and HMIT

*Table 11*

*Coding-Process Output for RQ2 (No. 1-7)*

*Note.* Adapted by Hara

Platform	No.	Category	Income Stage	Agency / Country	Open Coding	Axial Coding	Selective Coding
2. Development plans relevant to poverty reduction from the government agencies of 30 economies	9	Southeast Asia	Lower-middle	The Philippines	food resiliency, governance, disaster risk, governance, social protection	Food security, public service, community empowerment, better business climate, especially in rural areas	Food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with glocal partnerships, especially for rural development
	10	Southeast Asia	Lower-middle	Vietnam	production service, social service, enhancing civil servants		
	11	Southeast Asia	Lower-middle	Lao PDR	Rural development via financial resources		
	12	Southeast Asia	Low	Cambodia	Rural development via democracy, political stability, social responsibility, public services		
	13	Southeast Asia	Higher-middle	Thailand	business environment, economic institutions, infrastructure, climate change		
	14	Southeast Asia	Higher-middle	Malaysia	Rural development through NGOs and private sectors		
	15	Southeast Asia	Lower-middle	Myanmar	Rural areas development from business, agriculture, and infrastructure		
	16	Southeast Asia	Lower-middle	Indonesia	public services, community empowerment		

Table 12

*Coding-Process Output for RQ2 (No. 9-16)*

*Note.* Adapted by Hara

Platform	No.	Category	Income Stage	Agency / Country	Open Coding	Axial Coding	Selective Coding
2. Development plans relevant to poverty reduction from the government agencies of 30 economies	17	South Asia	Lower-middle	India	public services for social development	Public services, food security, infrastructure, business environment, education, employment, and NGOs	Food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with glocal
	18	South Asia	Lower-middle	Bangladesh	food security		
	19	South Asia	Lower-middle	Nepal	infrastructure, business environment, public service, NGOs		
	20	South Asia	Lower-middle	Pakistan	public services, disaster risk, education, employment	Food security, education, infrastructure	partnerships, especially for rural development
	21	Central Asia	Lower-middle	Kyrgyz	human development through education and food security		
	22	Central Asia	Lower-middle	Tajikistan	food security, infrastructure, public services for education and medical health		
	23	Middle East	Low	Afghanistan	Infrastructure, business environment, public service, social protection		

*Table 13*

*Coding-Process Sheet for RQ2 (No. 17-23)*

*Note.* Adapted by Hara

Platform	No.	Category	Income Stage	Agency / Country	Open Coding	Axial Coding	Selective Coding
2. Development plans relevant to poverty reduction from the government agencies of 30 economies	24	Sub-Saharan Africa	Low	Burkina Faso	Equity, public services, employment, governance		Food security, public services (education and medical health), infrastructure, peace-building, governance, human development, anti-corruption, agriculture, food security, infrastructure, employment, gender equality, better business climate, rural development
	25	Sub-Saharan Africa	Low	Central African Republic	Security, peace, governance, business climate, human development, employment	Peace-building, governance, human development, anti-corruption, agriculture, food security, infrastructure, employment, gender equality, better business climate, rural development	
	26	Sub-Saharan Africa	Low	Chad	public services, business environment, anti-corruption		
	27	Sub-Saharan Africa	Low	Congo, Dem. Rep.	Employment, public services, anti-disease		
	28	Sub-Saharan Africa	Low	Ethiopia	Agriculture, industrialization, governance, education		
	29	Sub-Saharan Africa	Lower-middle	Ghana	agriculture, infrastructure, sanitation, public services, governance, decentralization		
	30	Sub-Saharan Africa	Low	Guinea	Agriculture, mines, infrastructure, public services, and business development		
	31	Sub-Saharan Africa	Lower-middle	Kenya	public service, gender free, global partnership		

*Table 14*

*Coding-Process Sheet for RQ2 (No. 24-31)*

*Note.* Adapted by Hara

Platform	No.	Category	Income Stage	Agency / Country	Open Coding	Axial Coding	Selective Coding
3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries	32	Sub-Saharan Africa	Low	Liberia	capacity building, sector coordination, leadership, motivation, private sector		Food security, public services (education and medical health), infrastructure , peace-building, governance, social protection for better business climate with glocal partnerships, especially for rural development
	33	Sub-Saharan Africa	Higher-middle	South Africa	public service, employment, private sectors investment, disaster-risk management	Peace-building, governance, human development, anti-corruption, agriculture, food security, infrastructure, employment, gender equality, better business climate, rural development	
	34	Sub-Saharan Africa	Lower-middle	Tanzania	Employment, gender equality, food security, human development in Rural development		
	35	Sub-Saharan Africa	Low	Uganda	Employment, infrastructure, public services, governance, human development		
	36	Sub-Saharan Africa	Lower-middle	Zambia	employment, infrastructure, gender equality, education		
	37	South America	Higher-middle	Brazil	public service, glocal connection	Public services, global and local connection	
	38	South America	Lower-middle	Nicaragua	democracy, social and environmental development, partnership with others		

Table 15

*Coding-Process Sheet for RQ2 (No. 32-38)*

Note. Adapted by Hara

Platform	No.	Category	Income Stage	Agency / Country	Open Coding	Axial Coding	Selective Coding
3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries	39	Researcher	N/A	Danse, M, et. al	food security	Food Security	BOP business model for
	40	Researcher	N/A	Dent, E., et. al	social value creation per industry	Social value creation	social value creation
	41	Researcher	N/A	Lashitew, A.A, et. al	social value creation	Social value creation	through marketing, technology, and smaller-scale operations, along with BOP types of 1.0, 2.0, and 3.0,
	42	Researcher	N/A	Mathur, M, et. al	Marketing, 8As, establishment, expansion, and stabilization	Marketing	especially in food, energy, housing, water, ICT, and transportation
	43	Researcher	N/A	Simanis and Hart	BOP 1.0, 2.0., and 3.0	BOP 1.0, 2.0., and 3.0	
	44	International Organization	N/A	ADB	technology, information, smaller-scale operations, innovation	Technology, small-scale operations, Asia	
	45	International Organization	N/A	World Bank	Services, products, technologies for social value creation through partnership with many stakeholders	Social value creation in Food, energy, Housing, Water, ICT, Transportation	

Table 16

Coding-Process Sheet for RQ2 (No. 39-45)

Note. Adapted by Hara

### 4.3 Summary

For answering the first research question on the effect of the BOP business opportunities on poverty reduction in the developing countries, the multiple linear regression models were employed. The primary purpose of the research questions is to see the  $R^2$  increase for the dependent variables of the poverty headcount ratio. In this way, I justified using the multiple linear regression model with the SPSS. In the beginning, I observed the assumption testing from the seven types of normality, linearity, homoscedasticity, independence error, zero conditional mean, no perfect collinearity, and no serial correlation. I confirmed several violations, notably in normality, while linearity, homoscedasticity, independence error, and zero conditional means seemed significant. Also, while there seems to be slight collinearity and correlations, I did not observe the perfect conditions in these two tests. From these points of view, overall, there is no problem identified in conducting the assumption testing this time, it might be challenging to generalize the findings beyond the samples this time, though.

In analyzing RQ1, the model's summary was shown in highlighting the  $R^2$ , the adjusted  $R^2$ , and the  $R^2$  increase. Identifying the significance in Model 1, I observed that the  $R^2$  increase was 37.1%. Also, the item of "Sig. F Change" in Model 2 was also significant. Examining the Model 2 as the final model, the "Adjusted  $R^2$ " was 0.377; approximately 37.7% of the BOP business cases account for the primary predictor variables of the poverty headcount ratio, at least, in the randomly selected 61 countries. In a word, on top of the confirmation of significance of "Sig F

Change” and the certain proportion of “Adjusted  $R^2$ ” in Model 2, because I observed significance of the BOP business cases at least in Table 8, as well as Table 9 with another IV of FDI, it was difficult to be in favor of the  $H_1$  at least from the statistical result. Consequently, for RQ1, I rejected the null hypothesis ( $H_0$ ).

Aside from these results summaries, however, if allowed to include several more views that can potentially be additional possible factors, I will make a broader interpretation of the respective research questions. Potentially, observing only one aspect of  $R^2$  increase cannot tell everything relevant to my study on education and development in developing countries, especially in the context of the low and lower-middle income economies. From this point of view, the comprehensive interpretation needs to be further made.

On the other hand, as for RQ2, for formulating a conceptual framework of development strategies of the BOP business for poverty reduction, I employed the grounded theory with the open, axial, and selective-coding. With the three platforms of 1. Development strategies for poverty reduction from international organizations, 2. Development plans relevant to poverty reduction from the government agencies of 30 economies, and 3. BOP business models, types of the BOP, and the strategies per industry, including first, second, and third industries, I employed 45 samples through the document analysis by excerpting the texts and describe the essences of the texts, and turning them into labelled words for coding. As a result, the final step of developing a theory for BOP business development

strategies to answer RQ2 are sequenced with 1. An initial step of development strategies through improvements in public services, and ownership for agriculture and manufacturing, despite income stages, 2. Depending on the income stage, the development issues need to be prioritized for better business climate, especially for BOP business; food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with glocal partnerships, especially for rural development, and 3. Developing the BOP business model for social value creation through marketing, technology, and smaller-scale operations, especially in food, energy, housing, water, ICT, and transportation. The framework that I made seen in Table 1 can be justifiable in showing the steps and priorities of addressing the development strategies per income level, connecting the economic development sequences to the possible BOP type per the income stages.

Based on the study results, in Chapter 5 the discussion of the interpretation of research questions and theoretical frameworks I made in Chapter 2 are first conducted. Then, I provide limitations of this study and recommendations for research to practice by making some suggestions, especially for other interested researchers. Finally, I make implications for theory, practice, and social change before concluding this study in Chapter 6.

## CHAPTER V:

### DISCUSSION

#### **5.1 Interpretations of Findings**

I identified several significant components in this study. First, as for RQ1, the multiple linear regression model allowed me to observe the effect of the BOP business opportunities on the poverty headcount ratio in the developing world only from the value of the  $R^2$  increase as the coefficient of determinations. Through the study, I rejected the null hypotheses for both research questions. Nevertheless, as mentioned earlier, before wrapping up Chapter 4, aside from the  $R^2$  increase, several more perspectives from a broader interpretation for the respective research questions are added for discussion. The  $R^2$  increase might not tell everything relevant to my study on education and development in undeveloped countries. Indeed, many parts of the world's development issues are complicated, and many factors are considered. As for RQ2, the grounded theory, with which I used the three steps of the open, axial, and selective-coding with the selected samples I found from the official records, enabled me to develop a conceptual framework relevant to the BOP business development strategy for poverty reduction. Consequently, I developed a framework which is sequenced with sequenced with 1. An initial step of development strategies through improvements in public services, and ownership for agriculture and manufacturing, despite income stages, 2. Depending on the income stage, the development issues need to be prioritized for better business climate, especially for BOP business; food security, public services

(education and medical health), infrastructure, peace-building, governance, social protection for better business climate with glocal partnerships, especially for rural development, and 3. Developing the BOP business model for social value creation through marketing, technology, and smaller-scale operations, especially in food, energy, housing, water, ICT, and transportation. Nevertheless, the compatibility and validity of the framework need to be further discussed. Thus, I summarize each research question and touch on how to analyze the broader interpretive components in the theoretical frameworks I created in Chapter 2.

### **Research Question 1 Interpretations**

In setting up RQ1, I identified other researchers' works, papers, and articles relevant to poverty issues in the developing world. Through the review of literature, as described in Chapter 2, it is necessary to assume that other factors might also have some other contributions to poverty reduction, including infrastructure, governance, or employment, the labor market, as well as the human development index, including the enrollment rate in secondary education, the life expectancy, the income level. The ADB (2017) demonstrated some other factors, including "low level of economic diversification," "insufficiently advanced infrastructure" "weak institutions," and "inefficient labor market" (pp. 18-19), contributing to the DVs of the poverty headcount ratio. In this way, I had expected a smaller effect of the BOP business opportunity on the DV. Nevertheless, it was worth analyzing the influence of the BOP business cases on the poverty headcount ratio in the poor economies, notably, low and lower-middle income economies (LLMICs).

Furthermore, it is worth sharing the other important outcomes of the analysis through the SPSS, despite the indirect impact on the dependent variable of the poverty headcount ratio. The other study factors of the employment, infrastructure, governance, labor market, industrialization, and human development had a more substantial influence on the poverty headcount ratio rather than the one in the BOP business opportunities. Indeed, the industrial revolution in the United Kingdom and Western European countries led to the expansion of employment and productivity in the manufacturing industry since the 1700s from a historical perspective (Allen, 2012). Another case is that Tran (2016) also stressed the significance of accelerating higher education for enhancing technological advancement. On the other hand, there are higher enrollment rates in primary education both in LMIEs and HMIEs in many parts of the world as the fundamentals, especially improving the literacy and numeracy in youth, which are indispensable for obtaining the jobs.

As can be seen in Table 9 and 10, the study results showed that despite identifying the significance in Model 1, I observed that the  $R^2$  increase in Model 2 was 37.7%. Also, the item of "Sig. F Change" in Model 2 was significant. Examining the Model 2 as the final model, the "Adjusted  $R^2$ " was 0.377; approximately 37.7% of the BOP business cases account for the primary predictor variables of the poverty headcount ratio, at least, in the randomly selected 61 countries. In a word, on top of the confirmation of significance of "Sig F Change" and the certain value of "Adjusted  $R^2$ " in Model 2, because I observed significance of the BOP business cases at least in Table 8, as well as Table 10 with another IV

of FDI, it was feasible to be in favor of the  $H_1$  at least from the statistical result. Consequently, for RQ1, I rejected the null hypothesis ( $H_0$ ).

Nevertheless, what I need to admit is that the sample volume of the IV (IV1\_BOP) was not that sufficient and accurate. As explained in the data-collection, I spent at least over one month collecting the appropriate dataset relevant to the BOP business opportunities (the number of the cases per country, the total amount to be spent per nation annually) from as many sources as possible. Nevertheless, I was not able to find the bigdata relevant to the BOP. Instead, I relied on the data from List (2017) who found as many as 130 cases in the year of 2017. Still, this number of the cases is not sufficient and accurate since the author just collected the data up from nine sources of academic journals, books, Master's thesis, NGO publications, newspapers, research centers, charity publications, websites, global institutions (List, 2017). In this way, even if the data of the IV was imputed by SPSS ver. 27, the sample accuracy might be disadvantageous. To compensate for the shortcoming, I employed the FDI (IV2\_FDI), which is a similar indicator to the BOP in a way that is also meant to be investment in the developing countries. As a result, however, there is no significant influence of the FDI on the poverty headcount ratio. In this regard, the data-analysis seems accurate, and I observed the impact of the BOP business cases on poverty issue, at least, through the multiple-regression analysis. All in all, it would be further beneficial to see how the BOP business can work for poverty reduction from different approaches or

methodologies so that we see the certain effect of the business for poverty reduction.

### **Research Question 2 Interpretations**

In the case of the RQ2, the framework of how to develop the strategy to promote the BOP business for poverty reduction in the developing world needs to be formulated. Conceptually, the essences of economic development and business management were integrated into one concept for realizing both the maximization of business profits and social transformation through poverty reduction in many parts of the world.

The samples that I earned were comprehensive and relatively bias-free because of the analysis of public records and documents which are completely evidence-based information summarized by the authors. Nevertheless, when conducting the data-collection and data-analysis, notably in tackling the platform 2. “Development plans relevant to poverty reduction from the government agencies of 30 economies,” I found that some development plans for poverty reduction in some developing countries were not arranged in a strategy. As Porter (1980) said, “strategy” scholarly refers to competitive position, “deliberately choosing a different set of activities to deliver a unique mix of value.” (Porter, 1980, p.32) In a word, business organizations need to understand their competitors and the market to determine how the business should react in his work. Based on the definition of the competitive strategy, the development strategies for poverty reduction in some countries need to be revised; some LLMICs just provided the necessary items for

promoting further growth and prosperity, but not show their priority areas. In such a way, the BOP business strategy needs to be further considered by selecting some prioritized areas in common so that the national governments can efficiently put them into practice.

One of the most significant contribution of the framework that I developed would be that I made a strategy for the BOP business to be further promoted, depending on the income stages (low, lower-middle, and higher-middle income). In this way, the economic development process can be justified, especially in consideration of the development stages per income. The income stage can be a certain barometer of the national development level, especially indicated by the Gross National Income (GNI) per capita. Interestingly, Tran (2016) hypothetically theorized the stages of development in terms of four income groups: low-, lower-middle, higher-middle, and high-income economies. The author then explored how to escape the MIT by dividing the issue into two syndromes: the lower-middle-income trap (LMIT) and the higher-middle income trap (HMIT). He then proposed that improvement in the institutions for development and room for capital-investment growth offered a path out of the LMIT, while the enhancement of the total-factor productivity (TFP) and human resource development could help national economies to escape the HMIT (Tran, 2016). Based on his theory, for the LLMICs, it would be challenging to promote the BOP business without the arrangement of infrastructure, human resource through education and medical health, and ownership both in public and private sectors. Higher-middle income

economies usually have arranged these foundations for promoting the FDI and other investment for better business climate (Tran, 2016). In these ways, it would be appropriate for me to create the framework that embraces the income stage guidelines.

Another contribution of formulating the framework is to indicate which BOP business needs to be emphasized along with the income stages. As explained earlier, the BOP business has been progressed, and the phases to be summarized as BOP 1.0, 2.0, and 3.0 theoretically by Simanis and Hart (2008). As the BOP is progressed, the BOP level can further be mature. However, the framework that I made emphasizes that the BOP business maturity can be interlinked to the national income stage. In a word, the higher level of the BOP business cannot be realized due to the lack of the arrangements of the economic development foundations. Indeed, it would be challenging for low-income economies to promote the high-tech industry due primarily to the lack of social capital, human capital, and political stability. All in all, the framework for answering RQ2 can materially tell that the BOP business development cannot be realized unless the arrangement of the economic development foundation. Also, this framework emphasizes the importance of arranging the specific strategy for promoting the BOP business in accordance with the national development levels. In these ways, it would be worth developing the strategy on how to develop the BOP business for poverty reduction, despite the lack of the certain impact of its opportunities predicting the poverty headcount ratio in RQ1.

## **Interpretations Related to the Theoretical Frameworks**

As described in Chapter 2, in quickly reviewing the theoretical frameworks representing the relationship between poverty reduction in an economy and the BOP business development, and the framework relevant to how to promote the BOP business development strategy for poverty reduction in the developing world that I showed, here are my interpretations below.

Firstly, for a quick review, the framework that I made for the first study purpose is shown in Figure 1. The figure represents the relationship between poverty reduction and the BOP business maturity by income levels, which was primarily applied by Prehalad (2000), Vernon (1966) and Tran (2016). The BOP business maturity comes from the concept of the product lifecycle theory by Vernon, starting from introduction, growth, maturity, saturation, and decline. Poverty reduction can correspond to the lifecycle of the BOP business activity. Specifically, Line AB stands for the low-income stage with the highest poverty ratio; the countries in the stage should launch and expedite the BOP business promotion as introduction and growth. Then, the BOP business maturity should further be higher for overcoming the LMIT (Line BC and CC') as maturity and transition to saturation. Also, under the line C-D and DD' with the need for the promotion of science and technology and the innovation (Tran, 2016), the BOP business maturity should further be declined for finally achieving E, and thus escaping the HMIT. This theorization can play a role in making the relationship between poverty reduction and the BOP business maturity visually more evident.

From this point of view, this theoretical framework can show the connection between the key variables of the poverty ratio and the BOP business maturity. With the main variables of the Gross National Income (GNI) per capita (Atlas Method, US\$) used for the MIT and the enrollment rate in secondary education, the quantitative approach, the first research purpose, and the research question are connected to this framework, notably in observing the impact of the enrollment rate in secondary education on the GNI per capita. Thus, the framework can be rationalized with the existing models.

Based on the study result of RQ1, this framework can be justified. One reason for this is that as can be seen in Table 8 and 9, I rejected the null hypothesis because we confirmed the significance in Model 2 which includes the IVs of the BOP business case (IV1\_BOP) and of the FDI (IV2\_FDI) with the certain contribution to the poverty headcount ratio. In this respect, it would be feasible to justify the framework of Figure 1, if I rely on the study result of RQ1.

Still, if allowed to interpret the framework from different aspects aside from the study result here, the validity of the framework should further be justifiable. Indeed, several international organizations, especially ADB and the World Bank, have expected the potential in expanding the opportunity of the BOP business and becoming mature of the business cycle along with the income level (ADB, 2021; World Bank, 2021). Also, as Otsuka (2014) stressed, for the business climate to be further improved in the LLMICs, it would be necessary for the public servants to arrange the better public service, especially basic education and medical health,

infrastructure, and governance. Otherwise, it would be next to impossible for the LLMICs to promote the BOP business unless these foundations to be prepared. List (2017) classified the number of the BOP business cases per nation in his previous study. Interestingly, we can see the tendency that the higher income level, the more BOP business opportunities were identified. For instance, in lower-middle and higher-middle income economies, such as India, South Africa, Kenya, and Mexico, had the BOP business cases at least over five cases per year (List, 2017). Further, these economies repeatedly arranged the BOP business in collaboration with several representative organizations, including Danon Group in France, Sumitomo Chemical in Japan, etc. (List, 2017). On the other hand, in case of low-income economies with higher poverty rate, including Cambodia, Ethiopia, Guatemala, Guyana, Lao P.D.R., Nepal, Pakistan, Uganda, Tanzania, Zambia, had only one to two cases (List, 2017). In this way, we can see the slight collinearity between income stage and the number of the BOP business cases. In a word, the income level with poverty rate can see how much preparedness of the economic development conditions, and thus we see the maturity of the BOP business.

From these points of view, in addition to the study result rejecting the null hypothesis for RQ1, there should be some room for positively justifying the theoretical framework representing the relationship between the poverty rate in an economy and the BOP business maturity from the perspective of the actual BOP cases and some notions from several experts in development economics and the

BOP business model. Still, further justification of verifying the theoretical framework that I developed needs to be made.

Secondly, as for the other framework that I created shown in Table 1, here is my interpretation. For a quick review, based on these three frameworks of Simanis and Hart (2008), Otsuka (2014) and Tran (2016), I made a new conceptual framework seen in Table 1. It represents the BOP business development strategies for poverty reduction by classifying all the developing countries into three income groups; low-income, lower-middle income, and higher-middle income levels. As analyzed by Tran (2016), these income levels, especially, lower-middle income and higher-middle income levels depend on the labor conditions; low-income economies and the LMIEs usually tend to face labor-surplus, which means that many laborers are occupied with agriculture. Meanwhile, the HMIEs tend to face labor-supply shortage. This condition has encouraged the HMIEs to promote technological development and transfer from foreign economies for realizing the capital-intensive industries (Tran, 2016).

Based on the theoretical frameworks by Otsuka (2014) and Tran (2016), I made five sequences as steps for promoting the BOP business, leading to poverty reduction as a final destination. In common, all the developing countries need to arrange governmental ownership, infrastructure, and education. One different point that needs to be addressed is that HMIEs should focus on promoting higher education, instead of primary education and secondary education, with a view to promoting technological development which is the key for overcoming the HMIT

for science and technology (Tran, 2016). Meanwhile, basic education needs to be further promoted in low-income and LMIEs because there is less enrollment rate (World Bank, 2021). In arranging the infrastructure, the next sequence required for development is to promote technological transfer and development from overseas. Ohno (2010) stressed the significance of learning new knowledge and techniques from advanced economies. Indeed, through the ODA project, technological advancement should further be promoted. The third step is to enhance business credibility via credit offerings and financial aids from the banks. In a word financial condition needs to be further improved for more investment in technology and trainings for human capital development. Enriching until the third sequence, the FDI can further be enriched. Indeed, the number of the FDI cases in low-income economies is much less than those in the LMIEs and HMIEs (Watanabe, 2011). Unless the minimum conditions for the FDI, it would be challenging for advanced economies to promote the FDI. Finally, the BOP business can further be promoted via the FDI and the other development assistance methods. Then, as for the BOP development strategy, with the use of the framework by Simanis and Hart (2008), I used three types of the BOP; BOP 1.0, BOP 2.0, and BOP 3.0. For a quick review, the BOP 1.0 is for the impoverished people to be involved with business, while the BOP 2.0 is for organizations to create the value chain from scratch. Then, the BOP 3.0 is for innovation and participatory governance. Based on the essential idea, the low-income economies should focus on the BOP 1.0 for reducing poverty as an immediate approach. Also, the LMIEs should enhance not only the BOP 1.0

but also BOP 2.0 because they should accelerate the industrial promotion primarily through creation of the value chain. Finally, since the HMIEs have advanced development conditions with less poverty rate, they should promote the BOP 3.0 for expediting technological innovation and enhancing participatory governance, leading to the high-income level.

The framework can be justified in sustaining the conditions of economic development conditions for poverty reduction, leading to the BOP business development. The combination of economic development model and business framework has not been identified in the literature review. Admittedly, it was challenging for me to integrate two different disciplines into one new crystal that leads to a potential in realizing both social transformation via poverty reduction, but also the maximization of the organizational benefits. Also, the five sequences should strategically be developed so that these items can be smoothly connected with the BOP business development. Finally, one of the most significant contribution of the framework would be to visualize the BOP business development process along with the income level in an economy. Without knowing the development status, it would not make sense for the development agencies to put the BOP business into practice. This framework demonstrates that without foundations of development strategies, the BOP business cannot be promoted in the developing world, especially in the LLMICs. Of course, it would be necessary to consider the study result of the RQ1 to retain the null hypothesis. Still, the BOP business can have a potential in generating the social value creation in the long run

(World Bank, 2007). Therefore, it would be necessary for the experts to formulate new frameworks for brainstorming how to promote the BOP business for mitigating poverty by intervening private sectors. In this way, this framework can be justifiable.

## **5.2 Limitation of the Study**

As described in Chapter 1, three limitations can be raised as follows.

Firstly, regarding the quantitative analysis for RQ1, poverty is employed as a study variable by introducing the data from the World Bank (2021). The poverty condition and status can be different country by country. As explained earlier, currently, multidimensional poverty entails the various kinds of deprivations that the poor undergo in their daily lives; poor health, lack of education, inadequate living standards, disempowerment, poor quality of work, the threat of violence, and living in areas that are environmentally hazardous, among others (OPHI, 2021). In a word, poverty is not merely measured by the income level, but also considered as the lack of opportunities in education, health, employment, or environment to lead their lives. From this point of view, poverty is more complicated than our anticipation, and it would be necessary to see the more specific conditions and status of poverty per regions or areas. Also, I focused on the poverty issue as the contemporary issue, while it has been continued over centuries. In a word, the definition of poverty has been changed as time goes by. In this respect, the historical approach to poverty in each country or in each region were not addressed in the study discussion.

Secondly, regarding the qualitative analysis for RQ2, a formulation of the framework relevant to the BOP business process for poverty reduction may depend on the document survey via coding process to gather the integral parts of the business flow. Indeed, as explained earlier, I employed the qualitative analysis for pursuing the formulation of conceptual framework, and chose the grounded theory with an approach to generating theories through the coding processes (Williams and Moser, 2019). However, the procedure might lead to the results with a potential bias in this study; the BOP business development strategy for poverty reduction might not work for some organizations and areas for practice. For me to formulate as much practical strategy as possible, I relied on the public documents gained through the international organizations, some scholars or experts of the BOP business or economic development, and some national government archives. Consequently, I found 45 samples to be authentic and comprehensive, resulting in the successful formulation of the framework that combines economic development process with the BOP business development process by using the open, axial, and selective-coding sequentially. Therefore, when collecting the samples, I relied on the public records or documents so that I can avoid as much biases as possible. Still, when it comes to the qualitative data-collection, majority of scholars prefer conducting individual or group interview. In particular, some nations want to promote the BOP business, especially for the purpose of the food security or education or medical health benefitted from the advanced economies. In that way, it

might be further valuable for me to employ the interview for obtaining the original data to be used for the qualitative analysis.

Finally, in this study, I did not employ any specific case studies to be focused on. Previously, some scholars who conducted the research on the BOP business models or frameworks, they used to employ case studies by focusing on several industries. As the existing survey conducted by the World Bank (2007), some industries, including food, energy, housing, health, water, ICT, and transportation, are the representative sectors to be promoted. Remarkably, the food industry has the largest proportion in the spendings out of the other industries (World Bank, 2007). Because of the world hunger triggered by food insecurity, especially in the LLMICs in South Asia, Middle East, and Sub-Saharan Africa, the food for the poor with extreme hunger should urgently be supplied, especially for mal-nutritious children and women (UNICEF, 2021). However, the problem is how the BOP business can approach to poverty reduction. In this way, it would be more beneficial for me to focus on some private sectors, notably by paying closer attention to how they try to approach to poverty reduction, the specific process of poverty reduction, and how the results can be seen more specifically. Of course, there might potentially be further biases in conducting the interview or focusing on some particular organizations. Still, it would be worth conducting the field investigation or the individual or group interview for the data-collection. In these ways, employing the case studies was not centered in this study, while it would be

necessary to consider embracing the methods in advancing the BOP business development study in the long run.

### **5.3 Summary**

In this chapter, I discussed the interpretation of the study results both of RQ1 and RQ2, and frameworks that I developed earlier, and then showing the study limitations that were not covered in this study.

Firstly, as for the study results of RQ1, I rejected the null hypothesis that there was statistically significant contribution of the BOP business to the percent change of the  $R^2$  variance in developing countries' poverty alleviation composite scores when controlling the other factors of education, governance, industrialization, labor market, infrastructure, and human development composite values. Meanwhile, I reported that the sample amount of the IV (IV1\_BOP) was not sufficient and accurate, primarily because I was not able to find the bigdata relevant to the BOP, and thus employing the FDI (IV2\_FDI) as an ad-hoc indicator similar to the BOP in a way that is also meant to be investment in the developing countries. As a result, the significant influence of the FDI on the poverty headcount ratio was also identified. In this regard, the data-analysis seems accurate, and I observed the impact of the BOP business cases and the FDI on poverty issue, at least, through the multiple-regression analysis. Based on the result and interpretation, it would be further beneficial to see how the BOP business can work for poverty reduction from different approaches or methodologies so that we see the certain effect of the business for poverty reduction.

On the other hand, as for RQ2, it was clear that the framework of how to develop the strategy to promote the BOP business for poverty reduction in the developing world needs to be formulated. Conceptually, the essences of economic development and business management were integrated into one concept for realizing both the maximization of business profits and social transformation through poverty reduction in many parts of the world. Remarkably, this framework emphasizes the importance of arranging the specific strategy for promoting the BOP business in accordance with the national development levels. In these ways, it would be worth developing the strategy on how to develop the BOP business for poverty reduction in confirmation with the certain impact of its opportunities predicting the poverty headcount ratio in RQ1.

Next, as for the interpretation of the frameworks that I made, the first framework representing the relationship between poverty and the BOP business maturity can be justified, aside from the positive study result of RQ1 to reject the null hypothesis. I stressed that the BOP business can be promoted only if the economic development foundations are sufficiently arranged, including infrastructure, government ownership, basic public services, etc. Also, there can be some collinearity between the national income stages and the BOP business cases from List (2017). Still, there should be some room for further justifying the framework. Further, the other framework that demonstrates the integration of economic development and the BOP business maturity can be justified, primarily in visualizing the strategy to connect the development conditions with the BOP business development. Still, further examination of the

compatibility of the BOP business development strategy needs to be further made in advancing this study.

Finally, I raised three limitations of this study; firstly, the historical approach to poverty in each country or in each region were not addressed in the study discussion. Secondly, it might be further valuable for scholars to employ the interview for obtaining the original data to be used for the qualitative analysis. Thirdly, employing the case studies was not centered in this study.

Based on the discussion here, in Chapter 6, I discuss the summary of this study, implications of this study, and several recommendations for future research.

## CHAPTER VI:

### SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

#### **6.1 Summary of the Study**

In this study, I aimed to overcome the poverty reduction and promote the BOP business opportunities in accordance with the nature of quantitative and qualitative study research. Two major gaps in the literature were found to be framed as research problems. Firstly, despite some advantages of the business style, much less research on the impact of the BOP business on poverty reduction was identified. Indeed, the significant factors of reducing poverty have been led representatively by the governments and the international organizations (Sen, 1999). The poverty issue has been triggered, primarily by the insufficient infrastructure, unskilled labor, market, education, medical, less job-opportunity, etc. (ADB, 2017). Also, Karnani (2009) seemed skeptical about the BOP's effectiveness in alleviating poverty. Thus, it is necessary to quantitatively see the impact of the BOP on poverty reduction in a certain period. Thus, one research problem related to it can be the influence on poverty reduction since its launch.

Secondly, despite the different socio-economic and cultural backgrounds in impoverished areas, expanding the BOP business should be considered further. In various market conditions, industries, products, and services, the processes or the flows of putting the BOP business into practice should be different (Inoue, 2012). Nevertheless, the common conditions should strategically be arranged. Indeed, Hart et al. (2016) mentioned that management theory and research have not progressed at the same pace as the BOP business. Therefore, knowledge relevant to parameters for the integration of business

strategy into poverty alleviation remains cloudy. From this point of view, the framework relevant to the BOP business development should conceptually be developed to make it successful in the long run.

For the quantitative analysis, I used a non-experimental design to analyze the impact of the number of the BOP business cases on the poverty headcount ratio in the developing world. As previously explained, the nonexperimental design has several advantages of obtaining more generalizability of the results than an experimental design without the intentional manipulation of the variables (Tanaka, 2015). For the qualitative analysis, I employed the grounded theory with three-step coding process of the open, axial, and selective coding through the analysis of the selected public records, creating a BOP business development strategy for poverty reduction. As explained earlier, the grounded theory enables me to develop a theory through public records, aside from the interview or field research.

As for RQ1, because the study's research purpose and the research questions quantitatively pursued the relationship between the poverty reduction and the BOP business opportunities on the national scales in randomly selected 61 economies, I chose a nonexperimental design. This design allowed me to analyze the BOP business cases' impact on the poverty headcount ratio in the 61 economies. As a result, in focusing on the values of the  $R^2$ , the adjusted  $R^2$ , the  $R^2$  increase, and Sig. F change, I observed that the figures for the  $R^2$  increase in Model 2 almost remained the same with Models 1 in Table 8. Also, the Sig. F change proved to be significant in Model 2 in controlling the alternative factors of governance, industrialization, employment, infrastructure, the labor

market, and the HDI. Therefore, I rejected the null hypothesis this time. A similar result was also confirmed in the case of another IV of FDI (IV2\_FDI) as an additional ad-hoc item seen in Table 9, and thus the null hypothesis being rejected. Based on these results, I concluded that the null hypothesis for the RQ was rejected.

In turn, as of RQ2, because the study's research purpose and the research questions qualitatively pursued the creation of a conceptual framework that represents how to develop the BOP business strategy for poverty mitigation in the developing world. Conceptually, the essences of economic development and business management were integrated into one concept for realizing both the maximization of business profits and social transformation through poverty reduction in many parts of the world. Notably, this framework emphasizes the importance of arranging the specific strategy for promoting the BOP business in accordance with the national development levels. In these ways, it would be worth developing the strategy on how to promote the BOP business for poverty reduction, on behalf of the identification of the certain impact of its opportunities on poverty in RQ1.

I discussed the interpretations of the findings that relate to previous studies in Chapter 5, especially from the aspects of the research outcomes of both research questions and the relation to the theoretical frameworks describing the relationship between poverty reduction and the maturity of the BOP business in the developing world that I showed in Chapter 2. Then, limitations of this study were discussed based on the interpretations. Notably, as for the limitations, I raised three points; the historical approach to poverty in each country or in each region were not addressed in the study discussion. Secondly, it

might be further valuable for scholars to employ the interview for obtaining the original data to be used for the qualitative analysis. Thirdly, employing the case studies was not centered in this study. Poverty is not as simple as a movement in one or two variables or in several entities. Thus, in this chapter, I highlight the implications and recommendations.

## **6.2 Implications**

Here are three implications in this study.

Firstly, I have an attempt to maximize the potential of the BOP business to be spread in as many developing countries as possible. As already known, the BOP business was advocated in 2000 by Prehalad and Hart (2002), and became well-known as the new way to approach to poverty reduction, primarily by private sectors. However, as List (2017) reviewed, the number of the BOP business cases is only 130 in the world, and several lower-middle and higher-middle income countries had over five cases. In a word, it is normal for an economy to have only one case for the BOP business, at most, a few cases available. With this number of cases, it would be next to impossible for the LLMICs to overcome poverty so shortly. As explained earlier, poverty is multi-dimensionally composed of deprivation factors, including poor health, lack of education, inadequate living standards, lack of income, disempowerment, poor, quality of work, and threat of violence (Alkire and Santos, 2010). Poverty is chronically available in many parts of the world. Therefore, it is not easy for an economy to mitigate chronic poverty completely in a short period. Otsuka (2014) stressed that it is public servants that need to address poverty reduction through policy-making regardless of areas or nations. However, as can

be seen in the analysis of the development strategies for poverty reduction per each country, most of the countries raise the current public service as one of the most significant issues to be addressed. Also, we can easily see that the governmental corruption have frequently occurred, especially in the LLMICs. Under these situations, it would be challenging for the public to rely on the current government and its service, which means that the limitation comes earlier. From this point of view, promoting the BOP business opportunities can be one of the best ways to approach directly to the poor.

Nevertheless, this study showed that it would be challenging for private sectors to take part in the BOP business unless the foundations of the development conditions are arranged. Conversely speaking, as long as the conditions are well-prepared, the BOP business can be realized in an earlier development stage. More specifically, arranging infrastructure, public service, especially basic education and medical health, and governmental ownership or governance can be the major factors maximizing the opportunities for the BOP business, leading to the poverty reduction. Unfortunately, there has been no report that poverty reduction was successful just because of facilitating the BOP business arrangement. Still, private sectors should have the potentials in providing their products or services that can help the developing countries promote poverty mitigation. What this study can imply would be to provide suggestions for expanding the BOP business and maximizing the effectiveness of it. For the BOP to be maximized, the collaboration and coordination between public sectors, private sectors, and experts or researchers should further be promoted. Such partnership will make it possible for them to bridge theory to practice, leading to the better BOP business climate in the long run.

Indeed, Otsuka (2014) emphasized the significance of collaborating researchers and practitioners with the same vision to contribute to eradication of poverty in the world. It might potentially be exaggerative to mention the eradication of poverty, while it would be realistic for these three parties to work together globally and locally so that the BOP business can be expanded. In this way, the maximization of the BOP business opportunities should be implied through this study.

Secondly, business needs to be for social transformation by addressing social issues to be solved. Essentially, new types of businesses has been developed in many parts of the world, especially since the launch of the monetized economy. Remarkably, under the capitalism, as Adam Smith (2015) said, “competition” has been signified by establishing an organizational strategy to survive, and putting into practice for profits individually and organizationally. As a result, those who lose competition or are in the handicapped-areas for marketing may lose their opportunity for them to enrich their environment. The vicious cycle of poverty can happen, especially in the LLMICs. As Piketty (2013) said, far more discrepancy between the rich and the poor in most of the parts of the world can occur in the future under the current principle of the capitalism. Therefore, business promotion was not considered directly for poverty reduction in the developing world, at least, until 20<sup>th</sup> century. In a word, it has been common for people to regard the organizational sole objective as the maximization of the organizational benefits via their products or services by overweighing the other possible competitors.

However, when the time changed, the business trend has also changed, especially since the launch of the SDGs in 2015. Unlike the Millenium

Development Goals, the SDGs also suggested the advanced economies, especially private organizations, to make further awareness and recognition of the global poverty or world hunger occurred in the developing world (UN, 2021). In this way, private sectors should not only be confined to the organizational benefits, but also be considerate in a way that their products and services should be for prompting socio-economic development through poverty reduction. In particular, as the World Bank (2007) reported, some targeting sectors, including food, ICT, infrastructure, water resource, health, energy, and housing, can be significant catalysts predicting poverty reduction, especially in the LLMICs. In this respect, closer attention to the arrangement of the better business climate where the private sectors find it easier to take part in the BOP business program should strongly be paid by the governments. As Otsuka (2014) explained, it is public servants that need to address poverty reduction through policy-making regardless of areas or nations. In this regard, arrangement of the business investment environment needs to be further improved. Meanwhile, the international organizations and national governments need to further collaborate with each other so that business services through private sectors should be recognized as the tool for promote poverty reduction through the report, the social network services, or the paper or journals. The BOP market has over four billion (World Bank, 2021), while the number of the BOP business cases has, at most, less than 200. As Tulder (2008) suggested that the business involvement in addressing the issue of poverty is still far from settled, “first by a lack of meaningful benchmarks, approaches and measurement tools, not by a lack of ‘best-

practice' cases." (Tulder, 2008, p. 27) In this regard, it would be significant for scholars to address the significance of awareness of business for poverty reduction by representing some benchmarks and approaches. Optimistically, the business activities can help the poor become independently business persons to earn money as long as they have basic educations. In this way, accessing the business chance for the poor should not be abandoned so that they can bottom up their living standard without relying on others.

Lastly, the importance of developing a specific strategy can be implied through this study. Needless to say, when developing any types of organizations, it is indispensable for them to establish the vision and objectives before introducing their products or services. However, it should always be strategic. As Porter (1980) said, "strategy" scholarly refers to competitive position, "deliberately choosing a different set of activities to deliver a unique mix of value." (Porter, 1980, p.32) In a word, business organizations need to understand their competitors and the market to determine how the business should react in his work. Based on the definition of the competitive strategy, the development strategies for poverty reduction in some countries need to be revised; some LLMICs just provided the necessary items for promoting further growth and prosperity, but not show their priority areas when observing the document analysis gained through public records, especially from some national governments from low-income economies. Notably, 10 economies in Southeast Asia, Middle East, and Sub-Saharan Africa; Afghanistan, Cambodia, Central African Republic, Burkina Faso, Chad, Congo, Dem. Rep., Ethiopia,

Guinea, Liberia, and Uganda are the cases. Although these countries provided specific development plans for poverty reduction, most of them did not show the prioritized areas in a strategic way. It means that the governments need to grasp which areas should be prioritized in the most efficient way to alleviate poverty in the long run. Otsuka (2014) criticized the government agencies in low-income economies by pinpointing that they do not create the strategic plan. The significance of establishing the strategy in any organization is also emphasized by Bryson (2011). However, when it comes to making strategies, it is not only private organizations, but also government agencies that need to develop the national development strategy in a rolling way. Such implementation needs to be cycled daily, monthly, quarterly, half-yearly, and annually (Bryson, 2011). For the national governments in the LLMICs to create the development strategies to be put into practice, the public servants need to study or learn more about how to make a strategy systematically. One of the best ways would be to study overseas. Some international organizations, including the World Bank, ADB, AfDB, and JICA, offer the scholarship programs for earning Bachelor and Master's degree. Notably, JICA (2020) has several scholarship programs globally as a way of human resource development. Some scholars are allowed to stay in Japan for their Master's or Doctoral degree programs (JICA, 2021). Upon their return to their mother countries, they become policy-makers. In becoming the policy-makers, it would be ideally indispensable for them to be analytic, making comprehensive and inclusive strategies for promoting further development through poverty reduction.

Remarkably, since the early 2020, the outbreak of the COVID-19 pandemic has dramatically deteriorate the world economic outlook, entirely (WHO, 2021).

Notably, the economic damage in the developing countries would be much worse than that of the advanced economies. In this way, the balance between the pandemic and economic development needs to be further considered. All in all, for promoting the BOP business, it would be necessary for all the concerned parties to be analytically strategic in developing the plans so that they can grasp which areas to be prioritized from the aspects of importancy and emergency in mitigating poverty along with the regions. Therefore, the importance of strategy should further be emphasized in making the development plans.

### **6.3 Recommendations for Future Research**

For other students and researchers who are interested in this study on poverty and BOP business in developing countries, here are several recommendations for further consideration in conducting the research both from the research-oriented and practical-oriented aspects.

Firstly, as for RQ1, in evaluating variables and research methods I employed in this study, As previously explained in Chapter 2, the DV I chose was poverty headcount ratio (%) in randomly selected 61 economies since this value was considered one of the principal barometers to assess the impact of the BOP business cases on poverty alleviation. For IVs, I chose the number of the BOP business cases incorporated as the official IV for RQ1. Also, I employed the FDI as an additional ad hoc due to the massive missing data of the BOP. Meanwhile, the alternative elements, including governance,

industrialization, labor market, infrastructure, and HDI were selected as the CVs to demonstrate a substantial contribution to poverty reduction in the previous studies for RQ1.

In reviewing these variables, several recommendations can be given. From the aspect of data collection, it was not that challenging to access the public open data, primarily from several international organizations of the World Bank (2020) and the United Nations (2020) this time. Nevertheless, it was not ignorable to describe that several items had a large amount of missing data, especially the poverty headcount ratio and the BOP business cases. It was challenging to make up for the missing data in creating the dataset from the developing countries in the selected 61 economies. Indeed, the dataset publicly provided, representatively by the World Bank, IMF, ADB, and the United Nations had the missing data, notably in poverty categories, since they rely on the census data from the official government statistical surveys. At the same time, the investigations are incomplete in filling up the data gaps. Also, as previously explained, there were no data from during 2000-2016 and 2018 to 2020 of the BOP business cases. List (2017) carefully picked up the data from all over the world, resulting in 130 in his work in 2017. After all, it was considerably challenging for me to find the specific amount of data per year since 2000, due to the lack of the big-data relevant to the BOP business as pointed out by Raj and Aithal (2018). Thus, it was one of the most serious concerns in conducting the data-collection for the quantitative analysis.

In developing countries, government agencies often do not have enough capacity to collect the household survey entirely. Notably, several countries with plenty of islands

and broader populations in rural areas in the LLMICs have had difficulty sharing the complete version of educational fields every year. In this regard, before collecting the data from the developing countries, further consideration of difficulty in managing enough data and preparedness of the missing data should be made.

On the other hand, as for RQ2, I employed 45 samples from public records, including official development reports issued by the international organizations, national governments in the developing countries, and several experts in economic development and the BOP business. These samples were basically authentic and comprehensive, resulting in the successful formulation of the framework that combines economic development process with the BOP business development process by using the open, axial, and selective-coding sequentially. Thus, for avoiding as much biases as possible, I chose the documentary analysis, instead of conducting the personal or group interview this time. Still, as touched in the limitations of this study, when it comes to the qualitative data-collection, majority of scholars prefer conducting individual or group interview. In particular, some nations want to promote the BOP business, especially for the purpose of the food security or education or medical health benefitted from the advanced economies. In that way, it might be further valuable for future scholars who wish to study the BOP business to employ the interview for obtaining the original data to be used for the qualitative analysis.

For the methodology, as for RQ1, I chose the quantitative analysis with a non-experimental design and then using the multiple-regression model with the SPSS, instead of the panel-data analysis to find the education factors predicting the MIT and the ICI

with the  $R^2$  increase this time. It was appropriate for me to employ the quantitative analysis with the regression model, especially in dealing with the unit of analysis of a national economy and time-series for 20 years and cross-sectional data for nine economies. Employing the CVs helped me address the research problems by catching up with the developing world's real economic issue. Meanwhile, for RQ2, I employed the grounded theory for the qualitative analysis to formulate a framework of how to promote the BOP business development for poverty reduction. It was appropriate for me to choose the methodology because the theory allowed me to create the conceptual framework by using the three steps of open, axial, and selective-coding. As a result, it was feasible for me to formulate the framework that combines economic development conditions with the BOP business progress. In this way, it was proper for scholars who wish to develop a theory through qualitative analysis to employ the grounded theory model.

Recommendably, for those who are interested in analyzing focusing on several areas or provinces in one country, the other methodologies can also be considered. For example, a mixed methods approach could be a significant catalyst in finding something that has not been identified, despite the narrower research population and areas. One reason for this would be that employing the mixed method allows researchers to see the research concern and problem-settings from different points of view, especially from cultural, social, and historical contexts other than the quantitative study, by employing the qualitative analysis as well. In this respect, while economic reviews often require the scholars to reply on the statistical and econometric skills for research, utilizing the other

methods can also benefit a broader range of the public policy study, depending on the specific areas or populations to be studied.

Secondly, as explained earlier, in case of studying the BOP business, introducing the case study would strongly be recommended. Both for RQ1 and RQ2, I did not employ the case study for the purpose of observing the influence of the BOP business opportunities on the poverty headcount ratio and of developing a conceptual framework relevant to the BOP business development process for poverty reduction in the developing world. Case study can be referred to as “an intensive study on a person, a group of people, or a unit, which is aimed to generalize over several units” (Gustafsson, 2017) The case study allows scholars to gain an in-depth understanding of the single phenomenon and involve collecting several different types of data (Heale and Twycross, 2017). In the case of the BOP, some scholars employed the single or multiple case study to collect less than 20 samples by carefully reading the descriptions for open-coding. Of course, in case of employing the case study, it would be necessary to clarify the study purpose so that the data can be useful for the analysis. It would be recommendable for the scholars to gain insight into several targeting industries in assessing their approach to poverty reduction. For instance, for food security, how the food industries can solve the poverty issues in more-depth. It can also be true with the other industries, including infrastructure, ICT education, health, water resource, housing, which have the highest share to be spent for the BOP business (World Bank, 2007). In this way, a single or multiple case studies through industry-based approach can be the first recommendable way. Another approach is to observe the case study by country or by region. In association with the six external

environments that shape business activities, including economic environment, legal environment, competitive environment, technological environment, social environment, and global environment (Bryson, 2011), the BOP business approaches and arrangement can vary, depending on country or region, especially from the aspect of the effect on poverty reduction. Due to difference culture and social backgrounds, the BOP approach to poverty alleviation can differ; the prioritized areas might be different country by country or region by region. For instance, the BOP approach to low-income economies in Sub-Saharan Africa may face the shortage of the food and water supply because of the increasing number of the extreme poverty in hunger or mal-nutrition. Meanwhile, the BOP approach to low-income economies in Middle East may need more house shelters for the displaced people to avoid the conflict or violence. For the scholars to verify the difference in the BOP business approach per region or country, it would be useful for them to employ the case-studies not only for pursuing the research problem, but also for finding something new. Such potential can be hidden in employing the case study. Therefore, it would be recommendable to employ the method in approaching to the BOP business.

Finally, raising more awareness of connecting business administration study with international development would be recommendable. As suggested previously, business should be for poverty reduction. It is generally easy to regard the business studies as the way to become entrepreneurs for maximizing the organizational benefits. However, since the launch of the SDGs in 2015, private sectors should also be more aware of prompting further development not only in their own areas but also for the others in different areas

(UN, 2021). Currently, international development is primarily composed of politics, economics, sociology, and cultural anthropology (Otsubo, et al., 2011). Under the global economy, however, closer attention to the business management for realizing international development in the developing world will further be made. The essence of the business administration is how to develop an organization from the aspects of sales, marketing, human resource, accounting, IT, etc., while there needs to be some other rooms to introduce the concept of international development that is aiming to realize economic development, poverty reduction, good governance, etc. Still, business economics has been under development, while there should further be potential in embracing business administration in international development for contributing to social transformation. In line with the BOP business development, it would be significant for scholars to attempt at connecting the business management with the international development from various aspects in the long run.

#### **6.4 Conclusion**

This chapter summarized the conclusion of this study, discussing the points of Implications and Recommendations. Overall, I addressed the research problem of alleviating the poverty from the perspective of poverty reduction and pursuing the development of a theory for making a strategy of how to promote the BOP business. The study clarified the influence of the BOP business cases on poverty headcount ratio, to be examined through quantitative analysis a path to expand the BOP business in the developing world, in particular. As a result, the study showed a certain figure of  $R^2$  increase for the BOP business cases with statistical significance, resulting in the rejection of the

null hypothesis. Also, I developed a strategic framework for promoting the BOP business for poverty reduction qualitatively with the use of the grounded theory model. I employed 45 samples through the document analysis by excerpting the texts and describe the essences of the texts, and turning them into labelled words for coding. As a result, the final step of developing a theory for BOP business development strategies to answer RQ2 are sequenced with 1. An initial step of development strategies through improvements in public services, and ownership for developing agriculture and manufacturing, toward the upgrade of the income stage, 2. Depending on the income stage, the development issues need to be prioritized for better business climate, especially for BOP business; food security, public services (education and medical health), infrastructure, peace-building, governance, social protection for better business climate with global partnerships, especially for rural development, and 3. Developing the BOP business model for social value creation through marketing, technology, and smaller-scale operations, especially in food, energy, housing, water, ICT, and transportation.

As for this study's implications, three points were discussed: (1) Maximizing the potential of the BOP business to be spread in as many developing countries as possible. (2) Business should be for social transformation in a way to help for others. (3) The significance of developing a specific strategy can be implied.

As for the recommendation, three perspectives of research variables and methods, the employment of case study, and the connection of the BOP business with the international development were addressed. I underlined this study's potential as the cornerstone of the research on education and development, while it can further synergistically work in the

case of employing the other method, especially the mixed method for gaining insight into more specific areas or objects to be investigated as a case study. Also, in each case study in economies within a larger scale of the ASEAN community, employing case studies with the scale of organization level or country/region level were finally addressed for a recommendation. Then, as for the academic challenge to connect the business with international development, I raised the discussion of introducing the business management into the academic field of the international development, aiming to realize economic development, poverty reduction, good governance, etc. In line with the contribution to social transformation, I strongly recommended scholars in considering the potential in connecting the business management with the international development from various perspectives in the long run.

Admittedly, the BOP is not the mainstream in development policies in many parts of the world due to the common recognition of invisible investment. Nevertheless, the opportunity for the poor should not be ignored with the research's back-up on the BOP business and development through poverty reduction. In this way, it would be necessary for me to continuously work on this research issue to realize the social change in the world.

## APPENDIX A

### REPRINT PERMISSION FROM THE UNIVERSITY OF GRONINGEN

[Gentle Request] Reprint Permission of Using Data (Masatoshi Hara/Walden University)

差出人: P.J. Woltjer <[REDACTED]>

送信日時: 2020年5月11日 17:43

宛先: Masatoshi Hara <[REDACTED]>

CC: Masatoshi Hara <[REDACTED]>

件名: Re: [Gentle Request] Reprint Permission of Using Data (Masatoshi Hara/Walden University)

Dear Masatoshi Hara,

I hereby grant permission to utilize the Maddison data you cited. Note that we license our data under the Creative Commons Attribution 4.0 International License meaning users have permission to share and adapt any of our data as long as it is properly cited.

Best regards,  
Jop

Dr. Pieter (Jop) Woltjer | Post Doctoral Researcher | University of Groningen | E: [REDACTED] | W: [REDACTED]

On 2020-05-08 15:14, Masatoshi Hara wrote:

Dear Sir/Madam

This is Masatoshi Hara, a Ph.D. student at Walden University in the United States.  
Here is my gentle request to reply to me to get permission from you to use several data you made in your study.

Due to the university policy of getting "Reprint Permission" from you officially for me to avoid plagiarism in my doctoral dissertation relevant to Middle-income Trap and education at Walden University in the United States, even if it is the publicly-open data, kindly allow me to use the following data below:

Data Name: "Statistics on World Population, GDP and Per Capita GDP, 1-2008 AD  
(Horizontal file, copyright Angus Maddison, University of Groningen)"  
Retrieved from <http://www.ggdc.net/maddison/oriindex.htm>

These data will be employed for showing a simple statistic data of GDP in my doctoral dissertation.  
Also, kindly permit me to use this e-mail as official evidence of reprint permission from you.  
Kindly also let me know if there is a specific procedure for allowing me to use the publicly-open data for my academic study.

Your kind understanding and reply would be appreciated.  
Thank you and Best regards

Masatoshi Hara  
Ph.D. Student

## APPENDIX B

### REPRINT PERMISSION FROM THE UNIVERSITY OF TWINTE



Masa Hara < >

#### (Gentle Request) Reprint Permission of Using Data (Masatoshi Hara)

Masa Hara < >

2021年10月12日 10:38

Librarybackoffice < >

2021年10月6日(水) 20:09 Librarybackoffice < >

Dear Masa,

The pdf of this thesis written by List is publicly available. So you may use the data.

If you have any further questions please let me know.

Met vriendelijke groet,

**Sjors Startman | Content Management | University of Twente | Library, ICT Services & Archive (LISA) / Operational Information and Learning Services**

Campus building Vrijhof, room 384 | T: |

---

**From:** Masa Hara < >

**Sent:** maandag 4 oktober 2021 16:37

**To:** Info (MC) < >; Librarybackoffice < >

**Subject:** (Gentle Request) Reprint Permission of Using Data (Masatoshi Hara)

Dear Sir/Madam,

This is Masatoshi Hara, Doctoral Student at Swiss School of Business and Management in Switzerland.

Here is a gentle request to reply to me to get permission from you to use the data made by your former student.

Due to the university policy of getting "Reprint Permission" from you officially for me to avoid plagiarism in my doctoral dissertation relevant to the BOP (Bottom of the Pyramid) business at my school even if it is the publicly-open data, kindly allow me to use the following data.

(Data Information) Anouk List. (2017). "Business Models at the Bottom of the Pyramid: The Influence of Cultural Aspects" Master Thesis. <https://essay.utwente.nl/73683/>

(Data Name) Table 9: countries (BOP business cases)

These data will be employed for analysing the impact of the BOP on poverty reduction in my study.

---

Also, kindly permit me to use this e-mail as official evidence of reprint permission from you.

Kindly also let me know if there is a specific procedure for allowing me to use the publicly-open data in the thesis for my academic study.

Your kind understanding and

## REFERENCES

### English

- Allen, R. C. (2011). *Global economic history: A very short introduction*. Oxford University Press.
- Asad, A. L. and Kay, T. (2014). Theorizing the relationship between NGOs and the state in medical humanitarian development projects. *Social Science & Medicine*. pp. 1-9. Retrieved from <http://dx.doi.org/10.1016/j.socscimed.2014.04.045>
- African Development Bank. (2004). Bank Group Policy on Poverty Reduction. Retrieved from <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/10000028-EN-BANK-GROUP-POLICY-ON-POVERTY-REDUCTION.PDF>
- (2021). <https://www.afdb.org/en>
- Asian Development Bank. (2004). Enhancing the Fight Against Poverty in Asia and the Pacific: The Poverty Reduction Strategy of the Asian Development Bank. <https://www.adb.org/documents/enhancing-fight-against-poverty-asia-and-pacific-poverty-reduction-strategy-asian>
- (2017). Escaping the Middle-income Trap: Innovate or Perish, *ADB Working Paper Series*. 685, pp.1-35. Retrieved from: <https://www.adb.org/sites/default/files/publication/231951/adbi-wp685.pdf>
- (2021). Inclusive Growth and Poverty Reduction. Retrieved from <https://www.adb.org/what-we-do/themes/social-development/overview/inclusive-growth-poverty-reduction>
- Baines, P., Fill, C., Rosengren, S., and Antonetti, P. (2019). *Marketing*. Oxford University Press.
- Banergee, A. V., & Duflo, E. (2012). *Poor economics: A radical rethinking of the way to fight global poverty*. Public Affairs. pp. 50-58.
- Bevans, R. (2020). An introduction to multiple linear regression. *Statistics*. <https://www.scribbr.com/statistics/multiple-linear->

- regression/#:~:text=What%20is%20multiple%20linear%20regression,variables%20using%20a%20straight%20line
- Bhandari, P. (2020). *An Introduction to Qualitative Research*. Scribbr. Retrieved from <https://www.scribbr.com/methodology/qualitative-research/>
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*. Vol. 9. pp. 27-40. <http://dx.doi.org/10.3316/QRJ0902027>
- Bryson, J. M. (2011). *Strategic planning for public and nonprofit organizations: A guide to strengthening and sustaining organizational achievement*. San Francisco, CA: Jossey-Bass, pp.150-161.
- Bununu, Y. A. (2020). Poverty Reduction: Concept, Approaches, and Case Studies. *Decent Work and Economic Growth*. Springer, Cham, pp.1-12. Retrieved from [https://doi.org/10.1007/978-3-319-71058-7\\_31-1](https://doi.org/10.1007/978-3-319-71058-7_31-1)
- Cañeque, F.C. and Hart, S.L. (2015). *Base of the pyramid 3.0*. Greenleaf Publishing.
- Charmaz, K. (2006). *Constructing Grounded Theory: A practical guide through qualitative analysis*. SAGE Publications Ltd. [http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Charmaz\\_2006.pdf](http://www.sxf.uevora.pt/wp-content/uploads/2013/03/Charmaz_2006.pdf)
- Chmielewski, D., Dembek, K., and Beckett, J. (2020). “Business Unusual”: Building BOP 3.0. *Journal of Business Ethics*. Vol. 161 (1), pp.211-229. Retrieved from [https://researchbank.swinburne.edu.au/file/5533dc44-c455-400d-8689-701941502fce/1/2018-chmielewski-business\\_unusual\\_building.pdf](https://researchbank.swinburne.edu.au/file/5533dc44-c455-400d-8689-701941502fce/1/2018-chmielewski-business_unusual_building.pdf)
- Cohen, J. (1992). A Power Primer. *Quantitative Methods in Psychology*. *Psychological Bulletin*, 112(1), 155-159. <https://doi.org/10.1037/0033-2909.112.1.155>
- Collier, P. (2008). *The bottom billion: Why the poorest countries are failing and what can be done about it*. Oxford University Press, p.7-10.
- Creswell, J. W. (2013). *Qualitative inquiry & research design*. Los Angeles: Sage, pp. 123-134.
- Danse, M., Klerkx, L., Reintjes, J., Rabbinge, R., and Leeuwis, C. (2020). Unravelling inclusive business models for achieving food and nutrition security in BOP markets, *Global Food Security*, Vol. 24.

- <https://reader.elsevier.com/reader/sd/pii/S2211912420300079?token=5E1BE9A4C43EA03E40AA3A5F6218CB7AB99010A0B7BE4FBA691C0EB3091D01297CDB6C99AB46112BB9214B31E485DC55&originRegion=us-east-1&originCreation=20210923141023>
- Dent, E., Ansted, R., and Aasen, C. (2018). Profit and Social Value: An Analysis of Strategies and Sustainability at the Base of the Pyramid. *Journal of International & Interdisciplinary Business Research*. Vol.5.pp.109-137.  
<https://scholars.fhsu.edu/cgi/viewcontent.cgi?article=1065&context=jiibr>
- Development Assistance Committee (DAC). (1996). *Shaping the 21st Century: The Contribution of Development Cooperation*. Organization for Economic Co-operation and Development (OECD). Retrieved from <http://www.oecd.org/dac/htm/stc.htm>
- Dickson, A., Emad, K. H., & Joe, A. A. (2018). Theoretical and conceptual framework: Mandatory ingredients of a quality research. *International Journal of Scientific Research*, 7(1), 6-9. <https://www.doi.org/10.36106/ijsr>
- Doner, R., & Schneider, B. R. (2015). The middle-income trap: More politics than economics. *World Politics*, 68(4), 1-44. Cambridge University Press. Retrieved from <https://doi.org/10.1017/s0043887116000095>
- Du, S., Bhattacharya, C. B., and Sen, S. (2010). Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication *International Journal of Management Review (IJMR)*. Vol. 12 (1), pp.8-19. Retrieved from: <https://doi.org/10.1111/j.1468-2370.2009.00276.x>
- Enders, C. K. (2010). *Applied missing data analysis*. Guilford.
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE.
- Furlough-Morris, S. (2017). Examining poverty, entrepreneurship, and multinational corporation participation in South Africa. *Walden Dissertations and Doctoral Studies Collection*, Walden University, 17&18.

- Gebauer, H., Cabrera, K. V., Reynoso, J., and Valdes, A. (2019). Extending the Base-of-the-Pyramid Concept. *Service Science*. pp. 1-40. Retrieved from [http://DOI: 10.1287/serv.2019.0247](http://DOI:10.1287/serv.2019.0247)
- Gibbs, G. R. (2007). *Analyzing qualitative data*. The SAGE Qualitative Research Kit. Retrieved from <https://dx.doi.org/10.4135/9781849208574>
- Glaser, B.G. and Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine de Gruyter.
- Groningen Growth & Development Centre (GGDC). (2021). *Statistics on world population, GDP, and per capita GDP, 1-2008 AD*. <http://www.ggdc.net/maddison/oriindex.html>
- Government of Malaysia. (2020). *Malaysia Success Story in Poverty Eradication*. Economic Planning Unit. [https://www.epu.gov.my/sites/default/files/2020-02/Malaysia\\_Success\\_Story\\_In\\_Poverty\\_Eradication.pdf](https://www.epu.gov.my/sites/default/files/2020-02/Malaysia_Success_Story_In_Poverty_Eradication.pdf)
- Gustafsson J. (2017). *Single case studies vs. multiple case studies: a comparative study (Thesis)*. Halmstad University.
- Hammond, A., Kramer, W. J., Tran, J., Katz, R., and Walke, C. (2007). *The next 4 billion: Market size and business strategy at the base of the pyramid*. International Finance Corporation, pp. 78-90.
- Hara, M. (2021). Educational Factors Predicting Middle-Income Trap and International Competitiveness Index in Southeast Asia. *Walden University Doctoral Dissertation*. ISBN: 9798505540503, ProQuest Dissertations Publishing.
- Harris, J. R., & Todaro, M. P. (1970). Migration, Unemployment, and Development: A Two-Sector Analysis. *American Economic Review*. Vol. 60. No. 1. pp.126-142. Retrieved from <https://eds-b-ebSCOhost-com.ezp.waldenulibrary.org/eds/pdfviewer/pdfviewer?vid=1&sid=14a84db9-666a-43dd-8706-9fe262e8dcb1%40sessionmgr103>
- Hart, S. L. and Prehalad, C. K. (2000). *Raising the bottom of the pyramid: Strategies for sustainable growth*, pp. 1-19. Retrieved from:

- <http://www.bus.tu.ac.th/usr/wai/xm622/conclude%20monsanto/Bottom%2520of%2520the%2520pyramid.pdf>
- Hart, S., Sharma, S., and Halme, M. (2016). Poverty, Business Strategy, and Sustainable Development. *Organization & Environment*. Vol. 29. No.4, pp. 401-415.  
Retrieved from <https://journals.sagepub.com/doi/full/10.1177/1086026616677170>
- Heale, R. and Twycross, A. (2017). What is a case study? *Evidence Based Nursing*. Vol. 21. No.1. pp.7-8. <https://doi.org/10.1136/eb-2017-102845>
- Hudson, E. (2020). The Ultimate Guide to Marketing Strategies & How to Improve Your Digital Presence. Retrieved from <https://blog.hubspot.com/marketing/digital-strategy-guide>
- Inter-American Development Bank. (2005). Reducing Poverty and Inequality in Brazil. Retrieved from <https://publications.iadb.org/publications/english/document/Reducing-Poverty-and-Inequality-in-Brazil.pdf>
- International Monetary Fund (IMF). (2004). Pakistan: Poverty Reduction Strategy Paper. *IMF Country Report No.04/24*. pp.11-27.  
<https://www.imf.org/external/pubs/ft/scr/2004/cr0424.pdf>
- (2005). Cambodia: Poverty Reduction Strategy Paper; *IMF Country Report No.06/266*. pp.93-95. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2006/cr06266.pdf>
- (2006). Nepal: Poverty Reduction Strategy Paper Progress Report. *IMF Country Report No.07/176*. pp.3-7. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2007/cr07176.pdf>
- (2006). Vietnam: Poverty Reduction Strategy Paper - Annual Progress Report *IMF Country Report No.06/340*. pp. 125-131. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2006/cr06340.pdf>
- (2006). Zambia: Poverty Reduction Strategy Paper. *IMF Country Report No.07/276*, pp.32-33. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2007/cr07276.pdf>

- (2007). Burkina Faso: Poverty Reduction Strategy Paper-Annual Progress Report. *IMF Country Report No.08/212*. pp.2-3. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2008/cr08212.pdf>
- (2007). Lao People's Democratic Republic: Poverty Reduction Strategy Paper - Annual Progress Report. *IMF Country Report No.08/342*. pp.14-15. <https://www.imf.org/external/pubs/ft/scr/2008/cr08342.pdf>
- (2008). Islamic Republic of Afghanistan: Poverty Reduction Strategy Paper (2008-2013). *IMF Country Report No.08/153*, p.13. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2008/cr08153.pdf>
- (2009). Central African Republic: Poverty Reduction Strategy Paper- First Annual Progress Report. *IMF Country Report No.09/240*, pp.83-100. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2009/cr09240.pdf>
- (2010). Ghana: Poverty Reduction Strategy Paper. *IMF Country Report No. 12/203*. p.5. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2012/cr12203.pdf>
- (2010). Liberia: Poverty Reduction Strategy Paper--Second Annual Progress Report, 2009-10. *IMF Country Report No.11/214*. pp.11-15. <https://www.imf.org/external/pubs/ft/scr/2011/cr11214.pdf>
- (2010). Tanzania: Poverty Reduction Strategy Paper. *IMF Country Report No.11/17*. pp.35-62. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2011/cr1117.pdf>
- (2010). The Federal Democratic Republic of Ethiopia: Poverty Reduction Strategy Paper: Growth and Transformation Plan 2010/11–2014/15 – Volume I. *IMF Country Report No.11/304*. p.22. <https://www.imf.org/external/pubs/ft/scr/2011/cr11304.pdf>
- (2011). Kenya: Poverty Reduction Strategy Paper--Progress Report. *IMF Country Report No.12/10*. pp.9-11. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2012/cr1210.pdf>

- (2011). Nicaragua: Poverty Reduction Strategy Paper—Progress Report on National Human Development Plan as of 2010. *IMF Country Report No.11/323*. pp.31-41. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2011/cr11323.pdf>
- (2011). Republic of Tajikistan: Poverty Reduction Strategy Paper--Progress Report. *IMF Country Report No.12/33*. pp. 82-83. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2012/cr1233.pdf>
- (2013). Guinea: Poverty Reduction Strategy Paper. *IMF Country Report No. 13/191*, pp.49-53. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2013/cr13191.pdf>
- (2013). The Kyrgyz Republic: Poverty Reduction Strategy Paper. *IMF Country Report No.14/247*. pp.33-34. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2014/cr14247.pdf>
- (2013). Democratic Republic of the Congo: Poverty Reduction Strategy Paper. *IMF Country Report No.13/226*. p.48. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2013/cr13226.pdf>
- (2014). Uganda: Poverty Reduction Strategy Paper--Progress Report. *IMF Country Report No.14/354*. pp.3-8. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2014/cr14354.pdf>
- (2015). Bangladesh: Progress Report-Poverty Reduction Strategy Paper. *IMF Country Report No. 15/305*. p.172. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2015/cr15305.pdf>
- (2015). Chad: Poverty Reduction Strategy Paper--Joint Staff Advisory Note on the 2013 Monitoring Report of the National Development Plan 2013-15. *IMF Country Report No.15/125*. pp.9-11. Retrieved from <https://www.imf.org/external/pubs/ft/scr/2015/cr15125.pdf>
- (2016). Poverty Reduction Strategy Papers (PRSP). Retrieved from <https://www.imf.org/external/np/prsp/prsp.aspx>

- . (2021). IMF Support for Low-Income Countries. Retrieved from <https://www.imf.org/en/About/Factsheets/IMF-Support-for-Low-Income-Countries>
- . (2021). *World economic outlook database*. Retrieved from <https://www.imf.org/external/pubs/ft/weo/2021/01/weodata/weoseiser.aspx?c=566&t=1>
- Japan International Cooperation Agency (JICA). (2020). JICA President Message for the first JICA scholarship program participant at Joint Program. Retrieved from [https://www.jica.go.jp/english/about/president/speech/200831\\_01.html](https://www.jica.go.jp/english/about/president/speech/200831_01.html)
- . (2021). Japan's ODA and JICA. Retrieved from <https://www.jica.go.jp/english/about/oda/index.html>
- Karnani, A. (2009). The Bottom of the Pyramid Strategy for Reducing Poverty: A Failed Promise. *DESA Working Paper No. 80*, United Nations Economic and Social Affairs, pp. 1-14. Retrieved from [https://www.un.org/esa/desa/papers/2009/wp80\\_2009.pdf](https://www.un.org/esa/desa/papers/2009/wp80_2009.pdf)
- Kim, J. and Castillejos-Petalcorin, C. (2020). *Bottom of the Pyramid: Innovation in Asia*, Asian Development Bank. <https://www.adb.org/sites/default/files/institutional-document/575671/ado2020bp-botp-innovation-asia.pdf>
- Kirchgeorg, M. (2021). Bottom of the Pyramid. Economics. Britannica. Retrieved from <https://www.britannica.com/topic/standard-of-living>
- Kvalseth, T. O. (1985). Cautionary Note about  $R^2$ . *The American Statistician*. 39 (4). Part 1, pp.279-285. Retrieved from: <https://doi.org/10.1080/00031305.1985.10479448>
- Lashitew, A.A., Narayan, S., Rosca, E. et al. (2021). Creating Social Value for the ‘Base of the Pyramid’: An Integrative Review and Research Agenda. *J Bus Ethics*. <https://doi.org/10.1007/s10551-020-04710-2>
- Lewis, A. W. (1954). Economic Development with Unlimited Supplies of Labor. *Manchester School of Economics and Social Studies*, Vol. 22. No.2, pp.139-191. Retrieved from <https://la.utexas.edu/users/hcleaver/368/368lewistable.pdf>

- List, A. (2017). Business models at the Bottom om the Pyramid: The influence of cultural aspects. Master Thesis from the Faculty of Behavioural, Management and Social Sciences at the University of Twente. Retrieved from <http://purl.utwente.nl/essays/73683>
- London, T. (2007). A Base-of-the-Pyramid Perspective on Poverty Alleviation Working Paper. The William Davidson Institute, pp.3-21. Retrieved from: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.555.6798&rep=rep1&type=pdf>
- Management Mania. (2020). Corporate Strategy. Retrieved from <https://managementmania.com/en/corporate-strategy>
- Matthew, D. (2018). 7.3. Unit of analysis and unit of observation. *Scientific Inquiry in Social Work*. Pressbooks.
- Mathur, M. K., Swami, S., and Bhatnager, S. (2016). BOP Business Models and Strategy. *Amity Journal of Management Research, Vol.1. No.1, ADMAA*, pp.110–123. Retrieved from <https://amity.edu/UserFiles/admaa/234Paper%208.pdf>
- Mathur, M., Mehta, R., and Swami, S. (2021). Developing a marketing framework for the bottom of the pyramid consumers, *Journal of Advances in Management Research*, DOI:10.1108/JAMR-01-2020-0015
- National Economic and Development Authority. (2021). *Updated Philippine Development Plan 2017-2022*. <https://pdp.neda.gov.ph/wp-content/uploads/2021/02/20210218-Pre-publication-copy-Updated-Philippine-Development-Plan-2017-2022.pdf>
- National Planning Commission. (2018). Our future - Make it Work. *National Development Plan 2030*. Retrieved from <https://www.gov.za/sites/default/files/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf>
- Nerurkar, O. (2020). BOP 3.0 Opportunity Identification and Sustainable Business Model Innovation Conceptual Framework, *International Journal of Management*, 11(12), pp 511-520. Retrieved from

- [http://www.iaeme.com/MasterAdmin/Journal\\_uploads/IJM/VOLUME\\_11\\_ISSUE\\_12/IJM\\_11\\_12\\_047.pdf](http://www.iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_11_ISSUE_12/IJM_11_12_047.pdf)
- Nestlé. (2020). Delivering Impact through Farmer Connect. Retrieved from <https://www.nestle.com/csv/impact/rural-livelihoods/farm-economics>
- Ohno, K. (2009). The middle-income trap: Implications for industrialization strategies in East Asia and Africa. *GRIPS Development Forum*.
- Ohno, K. (2010). Avoiding the middle-income trap: Renovating industrial policy formulation in Vietnam. *ASEAN Economic Bulletin*, 26(1), Institute of Southeast Asian Studies, 25-43. <https://doi.org/10.1355/AE26-1C>
- O’Neill, J. (2011). Building Better Global Economic BRICs, *Global Economics Paper No: 66*. Goldman Sachs. Retrieved from <https://www.goldmansachs.com/insights/archive/archive-pdfs/build-better-brics.pdf>
- Organisation for Economic Co-operation and Development. (2001). The DAC Guidelines: Poverty Reduction. *International Development*. Retrieved from <https://www.oecd-ilibrary.org/docserver/9789264194779-en.pdf?expires=1626685193&id=id&accname=guest&checksum=7B326193919A62A4F3A85CAE5633B468>
- Organisation for Economic Co-operation and Development. (2019). OECD and Post-2015 Reflections. *Keeping the Multiple Dimensions of Poverty at the Heart of Development*. <https://www.oecd.org/dac/POST-2015%20multidimensional%20poverty.pdf>
- Organisation for Economic Co-operation and Development. (2021). Retrieved from <https://www.oecd.org/>
- Otsuka, K. and Banerjee, A.V. (1998). Rural Industrialization in East Asia, *The Institutional Foundations of East Asian Economic Development*. Springer. pp. 447-481. Retrieved from [https://doi.org/10.1007/978-1-349-26928-0\\_14](https://doi.org/10.1007/978-1-349-26928-0_14)
- Oxford Poverty and Human Development Initiative. (2021). Policy – A Multidimensional Approach. <https://ophi.org.uk/policy/multidimensional-poverty-index/>

- Perkins, D. (2013). *East Asian development: Foundations and strategies*. The Edwin O. Reischauer Lectures.
- Piketty, T. (2013). *Capital in the 21<sup>st</sup> century*. Belknap Press
- Porter, M. E. (1985). *Competitive advantage: Creating and sustaining superior performance*. New York, Free Press.
- Prahalad C. K. (2004). The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits. Knowledge at Wharton. Retrieved from <https://knowledge.wharton.upenn.edu/article/the-fortune-at-the-bottom-of-the-pyramid-eradicating-poverty-through-profits/>
- Prahalad C. K. (2005). *The fortune at the bottom of the pyramid: eradicating poverty through profits*. The USA: Wharton School Publishing, p. 273.
- Prahalad, C. K. and Hammond A. (2002). Serving the World's Poor, Profitably. Retrieved from: <https://hbr.org/2002/09/serving-the-worlds-poor-profitably>
- Prahalad, C. K. and Hart, S. L. (2002). The Fortune at the Bottom of the Pyramid. Retrieved from <https://www.strategy-business.com/article/11518?gko=9b3b4>
- Psacharopoulos, G. (1985). Return to education: A further international update and implications. *Journal of Human Resources*, 20(4), 583-604.
- Raj, K. and Aithal, P.S. (2018). Applicability of the Cockroach Theory - a Case Study of the Healthcare Industry in India. *International Journal of Case Studies in Business, IT and Education (IJCSBE)*, ISSN: 2581-6942, Vol. 2, No. 2. [https://www.researchgate.net/publication/329174420\\_Applicability\\_of\\_the\\_Cockroach\\_Theory-a\\_Case\\_Study\\_of\\_the\\_Healthcare\\_Industry\\_in\\_India](https://www.researchgate.net/publication/329174420_Applicability_of_the_Cockroach_Theory-a_Case_Study_of_the_Healthcare_Industry_in_India)
- Ranis, G., & Fei, J. H. C. (1961). A theory of economic development. *American Economic Review*, 51(4), 12-27.
- Rostow, W. W. (1956). *The stage of economic growth: A non-communist manifesto*. Cambridge University Press.
- Ruben, R. (2008). *The impact of fair trade*. Wageningen Academic Publishers, pp. 43-48.
- Sachs J. (2012), Government, geography, and growth: The true drivers of economic development. *Foreign Affairs*, 91(5), 142-150.

- Saldaña, J. (2009). *The coding manual for qualitative researchers*. SAGE Publication Inc.
- Schwittay, A. (2011). The Marketization of Poverty. *Current Anthropology*. the University of Chicago Press Journals, 52(3). pp. 71-82. Retrieved from <https://www.journals.uchicago.edu/doi/pdf/10.1086/656472>
- Sen, A. (1999). *Development as freedom*. Oxford University Press, pp. 7-11.
- Simanis, E. and Hart, S. L. (2008). *The base of the pyramid protocol: Toward next generation BOP strategy*. Cornell University, pp. 2-16. Retrieved from: <https://www.researchgate.net/publication/271841475>
- Smith, A. (2015). *The wealth of nations: A translation into modern English*. Industrial Systems Research.
- Smith, A.M. (2009). Evaluating the Criticisms of Fair Trade: How Strong is the Argument that Consumers and Businesses should Abandon Fair Trade as a Means to Socialize their Economic Decisions? *Economic Affairs*. 29 (4). pp. 29-36. Retrieved from: <https://doi.org/10.1111/j.1468-0270.2009.01944.x>
- Strauss, A. L. (2008). *Qualitative analysis: For social scientists*. Cambridge University Press, pp.167-178.
- Surbhi, S. (2016). Difference between primary and secondary data. *Key Differences*. <https://keydifferences.com/difference-between-primary-and-secondary-data.html#KeyDifferences>
- Synergos Consulting Services (SCS). (2013). Identification of Levers to Impact the Base of the Pyramid with Nutrition and Sustainable Sourcing Projects. Retrieved from <https://www.synergos.org/sites/default/files/media/documents/synergos-2013-bop-levers-nutrition-and-sustainable-sourcing.pdf>
- Swaen, B. (2021). Constructing a conceptual framework. *Methodology*. Retrieved from: <https://www.scribbr.com/methodology/conceptual-framework/>
- The Government of the Republic of the Union of Myanmar. (2018). *Myanmar Sustainable Development Plan (2018 – 2030)*. Retrieved from

- [https://themimu.info/sites/themimu.info/files/documents/Core\\_Doc\\_Myanmar\\_Sustainable\\_Development\\_Plan\\_2018\\_-\\_2030\\_Aug2018.pdf](https://themimu.info/sites/themimu.info/files/documents/Core_Doc_Myanmar_Sustainable_Development_Plan_2018_-_2030_Aug2018.pdf)
- The National Team for the Acceleration of Poverty Reduction. (2021). Overview of the Acceleration Strategy. Retrieved from <http://www.tnp2k.go.id/acceleration-policies/overview-of-the-acceleration-strategy>
- Tie, Y. C., Birks, M., and Francis, K. (2019). Grounded Theory Research: A Design Framework for Novice Researchers. *SAGE Open Medicine*. National Center for Biotechnology Information (NCBI). Retrieved from <https://dx.doi.org/10.1177%2F2050312118822927>
- Tudler, R. V. (2008). The Role of Business in Poverty Reduction towards a Sustainable Corporate Story? *UNRISD Flagship Report: Combating Poverty and Inequality*. United Nations Research Institute for Social Development. [https://www.unrisd.org/80256B3C005BCCF9/%28httpAuxPages%29/340A393D6E02EE97C12575E0002A6C62/\\$file/WEBvanTulII.pdf](https://www.unrisd.org/80256B3C005BCCF9/%28httpAuxPages%29/340A393D6E02EE97C12575E0002A6C62/$file/WEBvanTulII.pdf)
- 24 Seven Campus. (2020). Marketing Management in Practice. 247Campus Co.Uk. Retrieved from [http://247campus.co.uk/wp-content/uploads/2017/10/Mkt\\_Mgt.pdf](http://247campus.co.uk/wp-content/uploads/2017/10/Mkt_Mgt.pdf)
- (2020). Strategic Management. 247Campus Co.Uk. Retrieved from <http://247campus.co.uk/wp-content/uploads/2017/10/Strategic-Management.pdf>
- (2020). Strategic Resource Management. 247Campus Co.Uk. Retrieved from <http://247campus.co.uk/wp-content/uploads/2017/10/STRATEGIC-RESOURCE-MGMT.pdf>
- United Nations Development Programme. (2013). Poverty Reduction and UNDP. Retrieved from <https://www.undp.org/content/dam/undp/library/corporate/fast-facts/english/FF-Poverty-Reduction.pdf>
- (2021). UNDP and the Private Sector. *Private Sector*. Retrieved from: [https://www.undp.org/content/undp/en/home/partners/private\\_sector.html](https://www.undp.org/content/undp/en/home/partners/private_sector.html)
- United Nations Population Fund. (2014). Population and poverty. Retrieved from <https://www.unfpa.org/resources/population-and-poverty>

- United Nations. (2018). *Sustainable development goals: Sustainable development knowledge platform*. Retrieved from:  
<https://sustainabledevelopment.un.org/?menu=1300>
- United Nations. (2021). SDG Indicator Metadata. Retrieved from  
<https://unstats.un.org/sdgs/metadata/files/Metadata-08-01-01.pdf>
- University of London Center for Development Policy and Research. (2004). Poverty Reduction Strategy Process and National Development Strategies in Asia: A Report to DFID. *Country Study India*. Retrieved from  
<http://gsdrc.org/docs/open/cc101.pdf>
- U.S. Department of Agriculture. (2020). Rural Poverty and Well-Being. *Economic Research Service*. Retrieved from <https://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/#demographics>
- Vernon, R. (1966). "International Investment and International Trade in the Product Cycle." *Quarterly Journal of Economics*. Vol.80 (2). pp.190–207.  
<http://doi:10.2307/1880689>
- William, M. and Moser, T. (2019). The Art of Coding and Thematic Exploration in Qualitative Research. *International Management Review* Vol.15 No. 1.  
<http://www.imrjournal.org/uploads/1/4/2/8/14286482/imr-v15n1art4.pdf>
- William, M. K. T. (2020). Unit of Analysis. *Research Methods Knowledge Base*. Conjoint.ly. Retrieved from <https://conjointly.com/kb/unit-of-analysis/>
- World Bank. (2000). *Causes of poverty and a framework for action*. Retrieved from  
[https://doi.org/10.1596/0195211294\\_Chapter2](https://doi.org/10.1596/0195211294_Chapter2)
- (2005). The Poverty Reduction Strategy Initiative Findings from 10 Country Case Studies of World Bank and IMF Support. *The International Bank for Reconstruction and Development*.  
[https://ieg.worldbankgroup.org/sites/default/files/Data/reports/prsp\\_country\\_case\\_studies.pdf](https://ieg.worldbankgroup.org/sites/default/files/Data/reports/prsp_country_case_studies.pdf)
- (2007). The Next Four Billion: Market Size and Business Strategy at the Base of the Pyramid, *World Resources Institute*

- <https://documents1.worldbank.org/curated/en/779321468175731439/pdf/391270Next040billion.pdf>
- (2008). *Business and Poverty: Opening Markets to the Poor. Special Report*. pp. 5-6. Retrieved from [https://openknowledge.worldbank.org/bitstream/handle/10986/4538/deor\\_10\\_2\\_2.pdf?sequence=1](https://openknowledge.worldbank.org/bitstream/handle/10986/4538/deor_10_2_2.pdf?sequence=1)
- (2021). *Doing business 2020: Comparing business regulation in 190 economies*. Retrieved from: <https://openknowledge.worldbank.org/bitstream/handle/10986/32436/9781464814402.pdf>
- (2021). *The World Bank in Thailand*. <https://www.worldbank.org/en/country/thailand/overview#1>
- (2021). *World bank open data*. Retrieved from: <https://data.worldbank.org/>
- (2021). *World development indicators (WDI) 2020*. Retrieved from: <http://wdi.worldbank.org/tables>
- (2021). *World development report 2021: Data for better lives*. Retrieved from: <https://openknowledge.worldbank.org/bitstream/handle/10986/35218/9781464816000.pdf?sequence=85&isAllowed=y>
- (2021). *World governance indicators (WGI) 2020*. Retrieved from <http://info.worldbank.org/governance/wgi/#home>
- World Health Organization. (2021). *Coronavirus disease (COVID-19) pandemic*. Retrieved from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2020>
- Zomorrodian, A. (2011). *New approach to strategic planning: The impact of leadership and culture on plan implantation via the three Cs: cooperation, collaboration and coordination*. SSRN, pp.12-13. Retrieved from: <http://www.asbbs.org/files/2011/ASBBS2011v1/PDF/Z/Zomorrodian.pdf>

## Japanese

- 井上真希 (Inoue, M.). (2012). 「途上国の貧困削減に向けた BOP ビジネスの役割と課題」 (The Roles and Issues of the BOP Business for Poverty Reduction in Developing Countries), 『2012 年度学生論文集』 (*The Students' Essays in Academic Year 2012*). 早稲田大学社会科学総合学術院 (Faculty of Social Sciences, Waseda University). pp. 97-109. Retrieved from:  
[https://waseda.repo.nii.ac.jp/?action=repository\\_action\\_common\\_download&item\\_id=14964&item\\_no=1&attribute\\_id=162&file\\_no=1](https://waseda.repo.nii.ac.jp/?action=repository_action_common_download&item_id=14964&item_no=1&attribute_id=162&file_no=1)
- 大塚啓二郎・黒崎卓 (Otsuka, K. & Kurosaki, T.). (2003), 『教育と経済発展－途上国における貧困削減に向けて』 (*Education and economic development: For poverty reduction in developing countries.*), 日本経済新聞社 (The Japan Economic Newspaper).
- 大塚啓二郎 (Otsuka, K.). (2014). 『なぜ貧しい国はなくなるのか? 正しい開発戦略を考える』 (*Why do the impoverished countries never disappear? Thinking about the right choice of development strategies.*), 日本経済新聞社 (The Japanese Economy Newspaper), pp. 56-67.
- 大坪滋・木村宏恒・伊東早苗編 (Otsubo, S., Kimura, H., & Ito, S.). (2009). 『国際開発学入門－開発学の学際的構築』 (*Introduction to international development studies – An interdisciplinary approach to development studies*). 勁草テキスト・セクション (Keiso Text Selection), pp. 89-103.
- 奥井亮 (Okui, R.). (2015). 「固定効果と変動効果」 (Fixed effect and random effect) 『日本労働研究雑誌』 (*The Journal of Japanese Labor Study*) No. 657. 6-9.
- 国際協力事業団 (Japan International Cooperation Agency). (2003). 『開発課題に対する効果的アプローチ: 貧困削減』 (*The Effective Approach for Development Issues: Poverty Reduction*). Retrieved from  
<https://openjicareport.jica.go.jp/pdf/11728417.pdf>
- 高橋清貴 (Takahashi, K.). (2006). 「貧困削減の包括的アプローチに向けて－NGOs の視点から－」 (An Inclusive Approach to Poverty Reduction- from the Perspective of

- NGOs). 『ミレニアム開発目標とアフリカ』 (*The MDGs and Africa*). アフリカレポート No. 42 (The Report on Africa, No.42). 日本貿易振興機構(ジェトロ)アジア経済研究所 (Institute of Developing Economies, Japan External Trade Organization (IDE-JETRO)), pp. 8-15. Retrieved from <https://dl.ndl.go.jp/view/prepareDownload?itemId=info%3Andljp%2Fpid%2F8419337&contentNo=1>
- 田中 隆一 (Tanaka, R.). (2015). 『計量経済学の第一歩: 実証分析のススメ』 (*The first step for econometrics: A recommendation of the empirical analysis*). 有斐閣 (Yuhikaku), pp.210-215.
- 趙雪蓮 (Zhao, X). (2013). 「BOP ビジネスについての一考察」(A Study Concerning “Base of the Pyramid (BOP) Business”), 大阪産業大学経営論集 (*Osaka Industrial University Business Management Working Papers*), 第 13 巻 (Vol.13) 第 2・3 合併号 (2&3). Retrieved from <https://core.ac.uk/download/pdf/229479079.pdf>
- トラン ヴァントウ (Tran, V. T.). (2010). 『ベトナム経済発展論－中所得国の罫と新たなドイモイ』 (*Development and transition in the Vietnamese economy*). 勁草書房 (Keiso Shobo), pp. 5-10.
- トラン ヴァントウ (Tran, V. T.). (2016), 「アジア新興国と中所得国の罫」 (Emerging economies and the middle-income trap in Asian perspective). 日本国際経済学会 国際経済 第 67 巻 (*The Japan Society of International Economics – International Economics, Vol. 67*). 69-103.
- トラン ヴァントウ (Tran, V. T.). (2016), 『ASEAN 経済新時代と日本－各国経済と地域の展開』 (*The new horizon of the ASEAN economies and Japan – The new development of each economy and area*), 文真堂 (Bunshindo Publishing).
- 日本国際協力機構 (Japan International Cooperation Agency). (2018). 「第 1 節: 世界情勢と国際援助の動向: グローバル化の光と影」 “1. World Outlook and the Trend of International Aid – Light and Shadow in Globalization” 『第 1 部: 国際協力機構

- の歩み』(1. *History of JICA*). Retrieved from  
[https://www.jica.go.jp/about/history/ku57pq00002jr4ze-att/list01\\_01\\_02\\_01.pdf](https://www.jica.go.jp/about/history/ku57pq00002jr4ze-att/list01_01_02_01.pdf)
- 船津潤(Funatsu, J.). (2012). “Aid, Poverty Reduction, and Public Finance in Developing Countries (I)” No.63. pp. 1-21. Kagoshima Prefectural College. Retrieved from  
[https://www.bing.com/search?q=%E6%8F%B4%E5%8A%A9%E3%83%BB%E8%B2%A7%E5%9B%B0%E5%89%8A%E6%B8%9B%E3%83%BB%E9%80%94%E4%B8%8A%E5%9B%BD%E8%B2%A1%E6%94%BF\(%E4%B8%8A\)&cid=89c7d693893e498cbe8c05c7a6af0714&aqs=edge..69i57j69i60j69i61j69i60.969j0j1&pglt=43&FORM=ANNAB1&PC=U531](https://www.bing.com/search?q=%E6%8F%B4%E5%8A%A9%E3%83%BB%E8%B2%A7%E5%9B%B0%E5%89%8A%E6%B8%9B%E3%83%BB%E9%80%94%E4%B8%8A%E5%9B%BD%E8%B2%A1%E6%94%BF(%E4%B8%8A)&cid=89c7d693893e498cbe8c05c7a6af0714&aqs=edge..69i57j69i60j69i61j69i60.969j0j1&pglt=43&FORM=ANNAB1&PC=U531)
- 牧野耕司(Makino, K). (2004). 「援助アプローチ・戦略に関する一考案」(A Study on Development Assistance Approach and Strategy), 『援助の潮流がわかる本：今、援助で何が焦点となっているのか』(A Book on Development Assistance Trend: What is the Main Focus in Development Assistance Now?), 国際協力出版会 (International Cooperation Press). pp. 25-37. Retrieved from  
[https://www.jica.go.jp/jica-ri/IFIC\\_and\\_JBICI-Studies/jica-ri/publication/archives/jica/field/pdf/200403\\_01\\_04.pdf](https://www.jica.go.jp/jica-ri/IFIC_and_JBICI-Studies/jica-ri/publication/archives/jica/field/pdf/200403_01_04.pdf)
- 松下幸敏 (Matsushita, Y.). (2015). 「多重回帰と操作変数法」(Multiple-regression and instrumental variable method). 『日本労働研究雑誌』 (*Journal of Labor Research in Japan*). No. 657. 10-11.
- 水本篤・竹内理 (Mizumoto, A. & Takeuchi, S.). (2010). 「効果量と検定力分析入門 – 統計的検定を正しく使うために –」(An introduction of effect size and power analysis – for appropriate use of statistic test) 『より良い外国語教育研究のための方法』(*Methods for Foreign Languages Education Research*). 外国語教育メディア学会 (Languages Education Team) 関西支部 (Kansai Branch) メソドロジー研究部会 (Methodology Research Group), 2010 年度報告論集 (A Summary of Reports for Year of 2010). 47–73.

- 山崎幸治(Yamazaki, K.). (2000). 「貧困解消政策:経済研究の成果と展望」(A Policy for Poverty Alleviation: The effect of Economic Study and its Perspective), 『国際開発研究』(*International Development Research*), 第9巻(Vol. 9), 第2号(No. 2), pp.3-15. Retrieved from [https://www.jstage.jst.go.jp/article/jids/9/2/9\\_3/\\_pdf/char/ja](https://www.jstage.jst.go.jp/article/jids/9/2/9_3/_pdf/char/ja)
- 柳原透(Yanagihara, T.) (2001). 「途上国の貧困削減へのアプローチと日本の貢献」(Approach to Poverty Reduction in Developing Countries and Japan's Contribution), 『国際協力研究誌』(*International Cooperation Papers*), Vol.17, No. 2. pp.1-7. Retrieved from [https://www.jica.go.jp/jica-ri/IFIC\\_and\\_JBICI-Studies/jica-ri/publication/archives/jica/kenkyu/01\\_34/pdf/34\\_01.pdf](https://www.jica.go.jp/jica-ri/IFIC_and_JBICI-Studies/jica-ri/publication/archives/jica/kenkyu/01_34/pdf/34_01.pdf)
- 渡辺利夫 (Watanabe, T.). (2012). 『開発経済学入門』 (*Introduction to development economics*). 東洋経済新報社 (Toyo Keizai Shinposha).