

INFLUENCE OF ECONOMIC OPPORTUNITY, DEMOGRAPHY, ACCUMULATION OF CAPITAL AND CULTURE TOWARDS POVERTY ERADICATION IN BALI

Marhaeni, Udayana University

ABSTRACT

Objective: The purpose of this study are 1) To examine the economic opportunities, demographic conditions, accumulation of capital and culture owned by the poor in Bali Province 2) To examine perceptions about the availability of infrastructure in pockets of poverty in Bali Province 3) To analyze the role of economic opportunity, infrastructure, demographic condition and culture to the capital accumulation of poor people's in Bali Province 4) Analyze the role of economic opportunities, infrastructure, demographic conditions, culture and capital accumulation on the economic conditions of the poor in Bali Province 5) Analyzed the role of capital accumulation in mediating the influence of economic opportunity, infrastructure, demographic condition and culture on the economic condition of the poor in Bali Province.

Design/Method/Approach: This research was conducted in all regencies/cities in Bali Province with 30 respondents in each regency/a total of 270 respondents. The sampling technique used is accidental sampling, with observation data collection methods, interviews and in-depth interviews. Data analysis technique used is Path Analysis.

Findings: The results of the research indicate that 1) The general economic opportunities held by poor people in the research area are in low condition; the demographic condition of respondents in general has an average number of dependents/children exceeded the government expected; the accumulation of capital owned by respondents is relatively low, the culture possessed by the poor in this research is positive culture 2) In general the condition of infrastructure availability in research in adequate condition. Infrastructure assessed, among others, availability of roads, markets, water and electricity facilities and health facilities 3) Economic opportunities and availability of infrastructure have a positive and significant impact on capital accumulation, which means that the higher the economic opportunity and the availability of infrastructure, the higher the accumulation of capital owned by the poor and vice versa. Cultural and demographic variables have no significant effect on capital accumulation 4) Positive culture variables have a significant positive effect on the economic condition of the poor and also the variable of capital accumulation have positive and significant effect to the economic condition of the poor. The other three variables are the availability of infrastructure, economic opportunities and demographic variables have no significant effect on the economic condition of the poor 5) Capital accumulation variables fully mediate the influence of economic opportunities and infrastructure availability on the economic conditions of the poor, while the other two variables, cultural and demographic variables are not mediated by the accumulation of capital in influencing the economic conditions of the poor.

Originality: This is the one of few studies the Role of Economic Opportunities, Infrastructure, Demographic and Cultural Conditions against Capital Accumulation and Poverty, especially in Bali Province, Indonesia.

Keywords: Economic Opportunities, Infrastructure, Demography, Cultural Conditions, Capital Accumulative, Poverty.

INTRODUCTION

Both government and other organizations have issued various policies and conducted programs to eradicate poverty. These policies have been implemented for decades, but so far they have not given satisfying outcome; there is even a tendency that percentage and numbers poverty keep increasing. However, we have to believe that without these policies poverty level will become far worse. It means the government should run an analysis to improve effectiveness of these programs. Researchers or academics can help the government eradicating poverty by conducting research (Manning, 2017; Moreno-Gil & Ritchie, 2017; Nguyen-Phuong-Mai, 2017). Government and other organizations can use their research findings to conduct community service.

The government's poverty eradication programs can be classified into cluster 1, 2 and 3 (Marhaeni et al., 2012). Cluster 1 aims to reduce expenses such as expenses for education, food and health. Cluster 2 aims to empower individuals living below poverty line and increase their income, while cluster 3 aims to increase productivity of individuals living below poverty line. These policies can work effectively but they cannot reduce number of poor people in a short time. Without government policy, number of poor people will be far worse and individuals living below poverty line will live in a worse condition. Based on these conditions, research or study of discussing poverty is still relevant and very important to help achieving one of the goals of the national development goals that is to increase public welfare.

Data showed that poverty level or percentage in both urban and rural areas tends to increase. Table 1 showed number and percentage of poverty in the cities/municipalities in Bali.

No	Year	Number of Individuals Living Below Poverty Line (millions)	Percentage (%)		
			City	Village	Total
1	2011	182.10	4.2	5.17	4.59
2	2012	158.95	3.81	4.17	3.95
3	2013	182.77	4.17	5.00	4.49
4	2014	195.95	4.35	5.39	4.76

Source: National Bureau of Statistics of Bali, 2014

The table shows that, between 2012 and 2014, poverty in Bali tends to increase. In addition, percentage of poverty in rural areas is higher than that in the cities. The data are empirical evidence supporting an assumption that poverty is associated with rural areas. They also show that rural areas provide fewer opportunities than the city. In conclusion, Table 1 provided a justification that academic studies on poverty are pivotal in order to provide some insights on poverty and more importantly, develop poverty eradication programs.

A number of previous studies on poverty both in Indonesia and foreign countries show that poverty occurs not only in the developing countries but also in the developed countries. Sachs (2006) stated that accumulation of capital is closely related to poverty. It can affect poverty in both individual and regional level. An individual or family who does not have either material capital or human capital tends to be poor and vice versa. Accumulation of capital is influenced by several factors; according to Sachs (2006), there are 4 factors influencing

accumulation of capital, namely opportunities in trading, infrastructure, health conditions and growth of population. High trading will increase accumulation of capital and reduce poverty. Furthermore, adequate infrastructure such as roads encourages economic activities, which in turn can affect accumulation of individual or regional capital. Health conditions will affect human capital. High population growth can reduce accumulation of capital, particularly when it becomes burden and at the same time; can increase accumulation of capital if population growth is considered as capital for development (Lee et al., 2017; Roos, 2017; Sehwat & Giri, 2017; Syed & Butt, 2017).

Another perspective argued that accumulating capital among poor people may be difficult to do. Sarma, 2007 stated really poor people find it difficult to get out of poverty while those who are not so poor may be able to save a little and collect some capital gradually. In general, poor people spend most of their income for consumption and consequently, none is left for investment. As the result, individuals living below poverty line do not seem to be able to end the vicious cycle of poverty (poverty trap). According to O'Connor, 2000, research on poverty should focus on inequality, political economy and cultural aspects that result in economic inequality and eventually poverty.

Suryahadi et al. 2003 found that the economic crisis results in declining welfare of the Indonesian population. Poverty rate increased rapidly from around 15% in mid-1997 to around 33% at the end of 1998. The 18 percent increase made 36 million people poor. After that, the poverty rate declined to 15% at the end of 1999. Poverty rate increased from 2001 to 2002. In short, poverty level is fluctuating. The economic crisis that occurs can affect economic opportunity, reduce people's income and increase poverty rate (Clark et al., 2017; Uzuegbunam et al., 2017).

Lambrecht & Beens, 2005 conducted a study in Belgium about poor population, particularly poor people who have their own businesses. In such developed country, there are also poor people with a standard poverty line that follows income in the country concerned. Poverty line in a more developed country will be higher than that in developing countries. Lambrecht & Beens concluded that individuals living below poverty line are individuals who work in their own business (Cooper & Pamela, 2006; Henley et al., 2017; Jogiyanto, 2004; Patel, 2017). The findings showed that around 25 percents of the Belgium population are self-employed and their income is below the poverty line. Income distribution among these people is unequal. This study concluded that occupation, which reflected accumulation of capital, influence poverty rate.

Inequality is another factor that can influence poverty rate in one area. Capital and human resource inequality determine accumulation of capital that an individual can have, which eventually affects poverty rate. Human resource development paradigm which is reflected by HR (Human Resource) capability determines what can be done and what can be achieved. Poverty is a function described lacking HR capability (Amartya Sen as cited in Nunes, 2002). Based on findings of the previous related studies and the research problems, the statements of problem are as follows: 1) what economic opportunity, demography, accumulation of capital and culture poor people in Bali owes? 2) How individuals living below poverty line in Bali perceived the available infrastructure? 3) What is the role of economic opportunity, infrastructure and demography and culture towards accumulation of capital of individuals living below poverty line in Bali? 4) What is the role of economic opportunity, infrastructure, demography, culture and accumulation of capital towards economic conditions of individuals living below poverty line in Bali? 5) What is the role of accumulation of capital in mediating the influence of economic

opportunity, infrastructure, and demography and culture towards economic conditions of individuals living below poverty line in Bali?

The originality of this study is an in-depth study on poverty eradication. In line with the goal of the national development goals that is to develop a fair and prosperous society based on the Five Pillars, increasing economic welfare which is indicated by people's income is one of the most important goals to achieve. Both the government and Indonesian people should strive to increase income of the population. The national development puts an emphasis on public welfare. Analyzing poverty level is the easiest method to identify whether the national development goals have been achieved or not. High poverty rate means that these goals have not been achieved yet. Data show that number and percentage of individuals living below poverty line in all cities/municipalities in Bali tend to increase. It shows how important it is to find methods to reduce poverty rate so that someday poverty rate in Bali is zero. It happens when all Balinese has sufficient income and live above poverty line. All institutions or individuals including researchers should take an active participation in an effort to eradicate poverty.

Variables discussed in this study consist of both internal within individuals living below poverty line and external factors around individuals living below poverty line; these show their condition. Internal factors consist of demography, culture and accumulation of capital while external factors are infrastructure and economic opportunity. In micro level, demographic factors can represent population growth on a macro basis (Carey & Webb, 2017). In general, individuals living below poverty line think that more children will bring more money for the family and based on this concept it is difficult to improve their quality of life. This condition will influence accumulation of capital of individuals living below poverty line. Culture refers to belief that poverty is fate that no one can avoid. As the consequences, individuals living below poverty line made very little effort to end their poverty cycle, for example very little enthusiasm in creating economic opportunity and taking advantage of an existing economic opportunity. Accumulation of capital is related to how individuals living below poverty line spent their income, which also affects poverty rate. Willingness to save money will determine accumulation of capital and eventually poverty rate (Hussinki et al., 2017). In this study, infrastructure has pivotal role towards poverty rate. The study will provide information about minimum infrastructure individuals living below poverty line should get access to in order to break the poverty cycle.

Based on the elaboration, the significance of the study is: 1) obtain more comprehensive information about poverty rate in Bali for both for academic and practical purposes, 2) find a more effective solution to reduce poverty rate, 3) identify how the government, academics, the public and also individuals living below poverty line can take active participation in poverty eradication program, 4) analyze effectiveness of various poverty eradication programs the government has implemented so far, 5) provide feedback towards various government policies in order to improve effectiveness of these policies, 5) develop a manual for community service describing how several variables (demography, culture, accumulation of capital and economic opportunity) can help individuals living below poverty line escape poverty.

LITERATURE REVIEW

Poverty

There are various concepts or definitions of poverty. The National Bureau of Statistics (BPS) stated that poverty is associated to ability of a person or group of people to fulfill their daily needs. It is evident that BPS used economic concept to describe poverty comparing

economic capacity with certain standards. BPS, 2007 measured poverty based on individual ability to meet his or her basic need. Thus, poor people are individuals unable to fulfill their daily needs (seen from both for food and non-food expenditure). Based on this concept, an individual is poor when his or her average monthly expenditure is below the poverty line. Subandi (2011) stated that the poverty line is a level of income that shows minimum limit for human survival, where humans live in poverty.

In addition to comparing expenditure and certain poverty line, another approach to determine poverty is to use a monthly income or income approach. Someone is poor when his or her monthly income is lower than poverty line. In general, government is responsible for determining poverty line and therefore, poverty line in one area is different from that in another area. Poverty line is also dynamic and will change from time to time. Change can be caused by many factors such as inflation or an increase in living standard, which can change poverty line. The concept of a head count ratio or head count index is a ratio or index that calculates percentage of poor people. The formula is total population whose average expenditure or income is below the poverty line divided by total population and multiplied by 100 percent. Each individual has different income; this income will be contrasted with certain poverty line to determine whether the person's income is below or above the poverty line. In other words, head count ratio aims to calculate percentage of the population whose income is below the poverty line compared to the total population. Units of analysis for calculating poverty are individuals or household.

BPS, 2017 explained that poverty line is total food and non-food poverty line. Food Poverty Line (FPL) is the amount of money spent for minimum need, which equals to 2,100 kilo calories per capita per day. FPL refers to how much money is spent for the 2,100 kilocalories; the amount of money from one place to another is different. BPS used 52 types of commodities to describe FPL, namely grains, root vegetable, beans, meat, eggs, milk, vegetable and fruits, oil and so on. On the other hand, Non-Food Poverty Line (NFPL) is related to minimum amount of money spent for health, education, housing, clothing and so on. NFPL is represented by 47 types of non-food commodities for rural areas and 51 for urban areas.

The World Bank also determines poverty line, of which result can be compared between countries, to find out development of individuals living below poverty line in the world and to evaluate implementation of the Millennium Development Goals (MDGs) or Sustainable Development Goals (SDGs). Collecting data from individuals living below poverty line and developing countries from 1999 to 2005, the World Bank stated that poverty line for poor countries is \$1.25 per capita per day. In addition, the World Bank has also established an international poverty line for all countries, which is \$2 per capita per day (Ruslan, 2013). Using the international poverty line, each country can calculate number and percentage of poor people in their area.

The absolute poverty line, based on either money or calories which later will also be converted into money, the government will find number and percentage of poor people. Using this approach, it can be estimated that at some point there will no longer be poor people. However, type of poverty that will always exist is relative poverty or when one person feels he or she is richer or poorer than others. It happens because an increase in income rate between one person and another is different. This condition causes relative poverty that will always remain. One indicator of relative poverty is percentage of income distribution (Nazara, 1997). For example, an economic system or area can classify its population as poor if their income belongs

to 30 percent of the lowest income from the existing income distribution. Using this concept or approach, relative poverty will always exist.

The World Bank Criteria analyzed inequality in income distribution in a society or country and divided population into the following groups (Subandi, 2011). 20% of the population is high-income population group, 40% is middle income groups and the remaining 40% is low-income population group. Based on these criteria, low-income people will never disappear. This is an approach to see poverty in a relative perspective; it remains.

Poverty Gap

One aspect needed to calculate absolute number and percentage of poor people is one particular poverty line. However, the number and percentage may not represent a more comprehensive and in-depth condition about poverty. Similar number and percentage of poor people does not mean that poor condition in two areas is the same. This requires a deeper analysis, which is analysis on poverty gap or severity of poverty. Poverty gap is determined by how far individuals living below poverty line can make with their average income compared to the existing poverty line. Discrepancy between the average income of individuals living below poverty line and the poverty line is called poverty gap. The higher the discrepancy between the two is, the higher the poverty gap is and vice versa. Based on the gap, one can calculate how much additional income all individuals living below poverty line need to live at or beyond the poverty line (Nazara, 1997). Each individual will need different amount of additional income to live at or beyond the poverty line. Higher additional income means that the poverty gap is higher and vice versa. In conclusion, poverty gap is the amount of additional income an individual or community needs to live at or beyond the poverty line or to break the poverty cycle.

Even though number and percentage of poor people in two areas are similar, it does not mean that condition in these areas is the same. An area that needs higher additional income to reach poverty line has severe poverty level than another area that needs lower additional income to reach the poverty line (Fuchs & Trottier, 2017; Glinavos, 2006). Poverty eradication program helps a population breaks their cycle of poverty. Population that requires the least additional income to achieve poverty line is the most suitable target of this program. This may be unfair because there are other poorer areas that need help. Therefore, number and percentage of individuals living below poverty line alone are not enough to describe poverty; one should understand severity and poverty gap in an area.

Factors Affecting Poverty

A number of empirical and theoretical analyses have been conducted to analyze factors that may influence poverty in developing and developed countries. No country is immune to poverty. Poverty may be caused by natural or cultural issues, production, productivity or development in an area (Subandi, 2011). Besides cultural issues, structural issues, such as lack of strategy and policy on the national development may contribute to poverty.

Besides cultural and structural issues, Shrap, et.al as cited in Subandi (2011) explained that there are 3 causes of poverty, namely: 1) in micro-scale, poverty is caused by discrepancy in resource ownership pattern, which results in a gap in income distribution; 2) poverty is caused by different HR quality; 3) HR is caused by different access to capital. These three results in a condition called vicious circle of poverty. Different access to capital may influence other variables, such as low HR quality and a gap in production ownership pattern can influence low

HR productivity and eventually cause low income or poverty. Low income causes low investment and low investment leads to low capital, which eventually influences low income. We are responsible for helping individuals living below poverty line breaking the vicious cycle of poverty.

The Harrod-Domar Theory (Subandi, 2011) stated that accumulation of capital is very important in increasing economic growth. Accumulation of capital is needed in maintaining economic growth, in which where the element is reduced or used as an investment that will support economic growth. High economic growth will create employment, generate income or and at the end reduce poverty rate. The Harrod-Domar theory is derived from Keynes' analysis on economic activities and labor problems. Besides being analyzed in a macro-scale, the Harrod-Domar theory can also be decreased, per individual or household, to see the role of accumulation of capital towards improving quality of HR or household resource and increase productivity of the individual or household. This is in accordance with Sachs, 2006 that poverty can be caused by conditions of accumulation of capital owned. In macro-scale, accumulation of capital obtained through savings and then transformed into investment will increase aggregate demand through income generation (Brunie et al., 2017).

Furthermore, Sachs (2006) stated that accumulation of capital, which can influence poverty rate, is also influenced by several factors, such as lacking trade opportunities, lacking infrastructure, diseases and population growth. Type of economic opportunity the population will likely achieve is opportunity for trading that generates income for the population. Very little or zero opportunity for trading will result in low accumulation of capital; inability to save money will cause some difficulty in improving quality of life. As the consequence, it is nearly impossible to increase income rate. Lack of infrastructure also has negative influence towards accumulation of capital for example bumpy road as a major obstacle for distribution of goods and services (Hermansson, 2017; Kortt et al., 2017). Evenly distributed goods and services including labor mobility will encourage economic activities in a community group. All of these will increase income rate. Furthermore, disease can influence accumulation of accumulation of capital; an unhealthy individual will not be able to carry out economic activities and as the result, the individual is unable to generate any income.

Growth of population is another aspect that influences accumulation of capital. High population growth will tend to reduce income per capita, increase consumption and decrease opportunity for saving. In micro-scale or based on household, population growth can be proxied by number of family members or children in a household. Assistance, improvement of infrastructure, health improvement and disease control are some of the methods to improve quality of population, as a basis for increasing productivity.

Nunes (2002) stated that there are three factors to discuss in relation to poverty, namely poverty line, instrument to measure poverty and relationship between inequality and poverty. Inequality may refer to unequal HR quality, production factor ownership as well as unequal access. In line with this statement, Amartya Sen as cited as cited in Nunes (2002) examined causes of poverty based on the paradigm of human resource development and HR capability. Poverty is associated to lacking ability. Nunes (2002) further explained the role of economic growth in poverty. Economic growth can reduce poverty through two methods, an increase in unemployment and demand for labor. In addition, economic growth also generates income for workers and increases people's purchasing power, multiplier effect on economic activities of the society.

Unwin (2007) stated that poverty eradication program is impossible. Even though absolute poverty can be eliminated, relative poverty, which means inequality, will remain. This shows that individual development is not the same and this will lead to inequality between individuals or groups. Although it is impossible to eradicate relative poverty, absolute poverty eradication is essential because it supports the national development goals.

METHODOLOGY

The study used quantitative approach with associative explanation and as the result the variables consisted of independent, dependent and intervening variables. Intervening variable was accumulation of capital that had direct influence towards poverty rate, which in this context became both dependent and independent variable. Other variables were economic opportunity, demography, infrastructure and culture, independent variables that influence either intervening or dependent variable. The following model was developed based on both theoretical and empirical studies. Figure 1 described the design (model) used in this study.

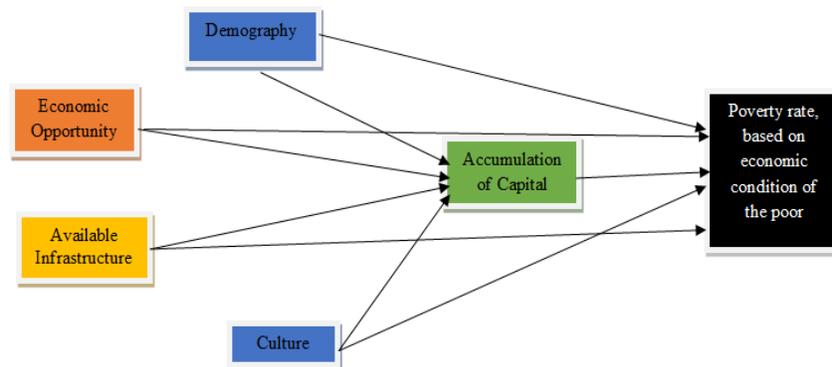


FIGURE 1
DESIGN OF THE STUDY: FACTORS THAT INFLUENCE ACCUMULATION OF CAPITAL AND POVERTY RATE

Based on the theoretical and empirical analysis in Chapter 2 discussing some factors that influence poverty and the previous related studies conducted in several countries, the hypotheses were as follows:

- 1) Economic opportunity and infrastructure have positive influence towards accumulation of capital of individuals living below poverty line in Bali;
- 2) Demography and culture have negative influence towards accumulation of capital of individuals living below poverty line in Bali;
- 3) Economic opportunity, infrastructure and accumulation of capital have positive influence towards economic condition of individuals living below poverty line in Bali;
- 4) Demography and culture have negative influence towards economic condition of individuals living below poverty line in Bali;
- 5) Accumulation of capital is mediating the influence of economic opportunity, infrastructure, demography and culture towards economic condition of individuals living below poverty line in Bali.

The setting of the study was all cities/municipalities in Bali particularly those where poverty rate was high. The respondents were people living in city or municipality with high poverty rate. Even though number and percentage of poverty in each of the city/municipality were different, Bali is still prone to poverty. The study was conducted in all cities/municipalities in Bali in order to provide a comprehensive description about poverty in this province.

The population was everyone who lives below poverty line and the approach used was the National Bureau of Statistics approach. The researchers visited all community groups (banjar) to find out areas with high poverty rate. The researchers selected 30 people from each city/municipality making the total respondents 270. 30 people were selected from each city/municipality as requirement to apply parametric statistics. The researchers also selected 3 informants from each city/municipality making the total informant 27. In short, the total samples and informants were 297.

The sampling technique was non probability sampling, particularly combination between accidental sampling and snowball sampling for selecting the respondents. In general, there are two sampling techniques, namely probability sampling and non probability sampling; both accidental sampling and snowball sampling are categorized as non-probability sampling (Silalahi, 2009). Accidental sampling refers to sampling technique where respondents are selected accidentally and based on particular criterion, which is people living below poverty line. The following sampling technique was snowball sampling that selects respondent based on some recommendation from the previous respondents until researchers obtained an exact number of sample. The sampling technique used to find the informants was purposive sampling, which is categorized as non probability sampling. This sampling technique interviews people who can provide some information from the study (informants). The informants were some staffs working in the village, sub-regional and regional government as well as some staffs from Badan Pemberdayaan Masyarakat dan Desa (BPMD).

RESULTS & DISCUSSION

The Role of Economic Opportunity, Demography and Culture towards Accumulation of Capital of individuals living below poverty line in Bali

The previous relates studies, for instance, Sachs (2006) stated pivotal role of accumulation of capital in poverty eradication program. The analysis stated that accumulation of capital of a family would influence its poverty rate. Higher accumulation of capital resulted in lower poverty rate and at the opposite, lower accumulation of capital would cause higher poverty rate. Besides positive, accumulation of capital also has negative influence towards poverty rate. Furthermore, accumulation of capital would have positive influence towards individual or household income, in which accumulation of capital would increase income rate. Therefore, each effort that aims to increase accumulation of capital of individuals living below poverty line will help them breaking the vicious cycle of poverty.

The Path Analysis resulted in a formula as follows:

$$Y1=0.294 X1+0.156 X 2+0.039 X 3 -0.061 X 4$$

Where, Y1-accumulation of capital; X1-economic opportunity; X2-infrastructure; X3-culture; X4-demography/number of children.

Furthermore, the analysis showed that economic opportunity had positive influence towards accumulation of capital, infrastructure had positive influence towards accumulation of capital and culture had positive influence towards accumulation of capital. At the opposite, demography had negative influence towards accumulation of capital (Sullivan & Hannis, 2017). The data showed that some variables did not have significant influence towards accumulation of capital of the respondents. Table 2 showed result of the analysis.

No	Variable	Standardized Coefficient	T	Sig
1	X1, Economic opportunity	0.294	4.544	0.000
2	X2, Infrastructure	0.156	2.330	0.021
3	X3, Culture	0.039	0.584	0.560
4	X4, Demography/number of children	-0.061	-0.892	0.373
5	Y1, Accumulation of capital	-	-	-

Source: Primary Data Analysis, 2017

Table 2 showed that economic situation of the respondents had significant influence towards their accumulation of capital. The significance was 0.000 or lower than 5%. The economic situation also has positive influence towards accumulation of capital, which means an increase in the respondents' economic situation will result in another increase in the accumulation of capital. At the opposite, decreasing economic condition will reduce the accumulation of capital. The findings supported Sachs (2006) that economic opportunity, measured by opportunity for trading, had positive influence towards accumulation of capital. The variable also showed that individuals living below poverty line should have access to economic opportunity in order to break their vicious cycle of poverty. Both poverty experts and the government should help individuals living below poverty line getting access to economic activity in order to accumulate capital and live beyond the poverty line. Based on the model, economic opportunity helped the respondents accumulating capital and escaped poverty through an increase in their income. Accumulation of capital allowed the respondents to make investment and generate higher income. Sarma (2007) stated that the biggest obstacle of individuals living below poverty line is lack of money for investment as an effort to generate higher income; they spend their income for food and non-food consumption. This is what Sarma (2007) described as the main issue in poverty eradication program.

Available infrastructure was another important variable that influenced the respondents' accumulation of capital. Sachs (2006) described low accumulation of capital is caused by lacking infrastructure. It means that individuals living below poverty line cannot escape poverty due to lack of or poor infrastructure. In other words, people living in isolated areas tend to be poor because they do not have sufficient infrastructure to help them breaking the vicious cycle of poverty.

The findings also showed that infrastructure had influence towards the respondents' accumulation of capital. Table 2 explained that infrastructure had significant influence towards (2.1% or lower than 5%t). Direction of the influence of infrastructure towards accumulation of capital was positive, which means an increase in infrastructure will result in another increase in accumulation of accumulation of capital and poor infrastructure will reduce the accumulation of capital. Poor infrastructure will affect income rate of individuals living below poverty line making it hard for them to escape poverty. The findings are in line with Sachs (2006) that individuals living below poverty line may not be able to escape poverty because of lacking or

poor infrastructure. The data showed that lack of infrastructure resulted in poverty. In short, the findings of this study supported Sachs (2006)'s study.

Another variable that has essential role to eliminate poverty is culture. The literatures and the findings of the study stated that poverty is caused by two aspects, namely structural and cultural aspects. Structural is related to resources individuals living below poverty line has while cultural is related to individuals living below poverty line's attitude related to their effort to escape poverty. Culture, in this context, refers to positive aspects of culture that helps people breaking the poverty cycle. Individuals living below poverty line should stop looking at poverty as their destiny and start making some efforts to better their lives and generate higher income. As an addition, the respondents felt that they can escape poverty and were not happy with their condition. All of these indicators represented positive aspects that can help individuals living below poverty line break the poverty cycle. Higher cultural aspects will increase accumulation of capital and help the respondents escape poverty.

Table 2 showed that the coefficient of culture was 0.039 (positive) and the significance was 0.560. It showed that the respondents did not consider poverty as destiny and they were able to change their destiny. This had positive influence towards accumulation of capital of the respondents, which means higher positive culture will result in higher accumulation of capital and vice-versa. It is implied that the more the respondents think that they can escape poverty the less happy they are with their condition and the harder they work. Hard work means higher accumulation of capital. At the opposite, lower positive culture will decrease the respondents' accumulation of capital. In other words, negative culture, for example considering poverty as destiny, has negative influence towards the respondents' accumulation of capital. The direction of the variable (culture) was in line with the hypotheses, but the significance was 0.560 or higher than 0.05 or 5%. In conclusion, culture had positive but non-significant influence towards accumulation of capital.

The last variable is the demography of which indicators are number of children, number of dependents and age of the last child. Table 2 showed that the standard coefficient of demography was -0.061 and the significance were 0.373. The analysis showed that the direction of demography towards accumulation of capital was negative. It means more dependent, more children and older last child will decrease the respondents' accumulation of capital and vice versa.

Based on the results of the analysis, it can be stated that all variables had influence towards the accumulation of capital which means some of the hypotheses are accepted. However, their degree of significance did not match the hypothesis. Two variables namely culture and demography, did not have significant influence towards the respondents' accumulation of capital. The other two variables, namely economic opportunity and infrastructure, had positive and significant influence towards the respondents' accumulation of capital.

Role of Economic Opportunity, Infrastructure, Demography, Culture and Accumulation of Capital towards Economic Condition of individuals living below poverty line in Bali

From economic perspective, poverty is evaluated based on average income per capita of a household compared to poverty line per capita in each city/municipality where the family lives. In 2016, an area with the highest poverty line in Bali is Badung Municipality and one with the lowest poverty line is Karangasem Municipality. Number of family member in every household

determines how much income the family needs to live above or beyond poverty line. In this study, average income per capita was used to describe economic condition of individuals living below poverty line. Out of 270 respondents (30 from each city/municipality), only 231 live below the poverty line. The researchers ran a Path analysis to these 231 individuals or household to analyze how much influence the variables had towards economic condition of individuals living below poverty line.

The researchers predicted 5 variables that influenced economic condition of individuals living below poverty line, namely economic opportunity, infrastructure, culture, demography and accumulation of capital. Path analysis was conducted towards these variables. Table 3 showed result of the path analysis.

No	Variable	Standardized Coefficient	t	Sig
1	X1, Economic opportunity	0.048	0.865	0.388
2	X2, Infrastructure	-0.209	-3.763	0.000
3	X3, Culture	0.621	11.440	0.000
4	X4, Demography/ number of children	-0.068	-1.211	0.227
5	Y1, Accumulation of Capital	0.132	2.363	0.019
6	Y2, Economic condition of individuals living below poverty line (average income per capita)	-	-	-

Source: Primary Data Analysis, 2017

Based on the data analysis, some of the hypotheses were not accepted. One of the hypotheses stated that economic opportunity had positive influence towards economic condition (average income per capita of low economic household). The result of the analysis showed that economic opportunity had positive influence towards the economic condition of individuals living below poverty line; however, the degree of influence was not significant. It means that the economic opportunity had not been able to cause a significant increase in the economic condition of the respondents. The direction of the influence met the expectation but the degree of influence did not (0.388 or higher than the level of significance of 0.05). Economic opportunity alone is unable to improve economic condition or income per capita of the respondents. Another variable is needed to increase income rate of those who live below the poverty line.

Another hypothesis stated that infrastructure had positive influence towards economic condition of individuals living below poverty line, which means sufficient infrastructure will help those living below poverty line generating higher income. In this context, infrastructure referred to roads, market/shopping center, electricity and water and health facilities available for individuals living below poverty line who live in the setting of the study. Having conducted the data analysis, this hypothesis was rejected; infrastructure did not have positive influence (-0.209) towards the economic condition of individuals living below poverty line. The findings also indicated that infrastructure alone is unable to increase economic condition of the respondents. Another variable is needed before infrastructure can have positive influence towards economic income or average income per capita of people living below poverty line.

It is predicted that positive cultural aspects had positive influence towards economic condition of those living below poverty line. Positive cultural aspects referred to perception that no one is destined to live in poverty, poverty can be eradicated, ability to escape poverty, action plan to break the vicious cycle of poverty and being unhappy in his or her current condition

(poverty). These positive cultural aspects can have positive influence towards economic condition of those living below poverty line. When an individual believes that he or she is not destined to be poor and he or she can or is allowed to escape poverty, the individual will take some efforts to escape poverty, for example taking attempt to generate higher income. Based on the data analysis, positive cultural aspects had positive and significant influence towards economic condition of the respondents where average income per capita became the indicator of economic condition (see Table 3). Table 3 showed that culture had positive influence; the standardized coefficient was 0.621 and the level of significance was 0.000. Based on the findings, it can be concluded that the hypothesis that positive cultural aspects had positive influence towards economic condition of those living below poverty line was accepted. At the opposite, negative cultural aspects will decrease economic condition of individuals living below poverty line. Therefore, programs of which purpose is to increase motivation of those living below poverty line should involve these positive cultural aspects as these aspects help individuals living below poverty line escaping poverty.

It is predicted that demography has influence towards economic condition of people living below poverty line. There is a phenomenon most people who live below the poverty line which is more children generate higher income. More children will bring more money home because these children will work and bring their salary or wage home. As the result, more working children are associated to higher household income. These children may not be able to pursue their dream for education or have access to sufficient health. Development of health facilities and schools as well as family planning in various countries including Indonesia increase cost for having children. Based on the phenomena, the researcher proposed a hypothesis that demography such as number of children, number of dependent and age of the last children has negative influence towards economic condition of those living below poverty line.

The data showed that demography had negative influence towards economic condition of individuals living below poverty line, represented by income per capita of individuals living below poverty line's household. The standardized coefficient was -0.068 which means that demography had negative influence towards economic condition of people living below poverty line. It means demography, such as number of children, number of dependent and age of the last child, had negative influence towards economic condition of individuals living below poverty line. In other words, the respondents who have more children or more dependent will have lower economic condition and vice-versa. The significance was 0.227 which means demography had negative but non-significant influence towards economic condition of individuals living below poverty line. In conclusion, one of the hypotheses that demography had negative and significant influence towards economic condition of individuals living below poverty line cannot be accepted.

The last variable that may have influence towards economic condition of individuals living below poverty line is accumulation of capital. Based on the previous related studies and the literature, accumulation of capital has positive influence towards economic condition of people who live below poverty line. Accumulation of capital is measured based on how many assets a household has and how the household used the assets as capital in order to improve their economic condition. The findings showed that accumulation of capital had positive influence towards economic condition of people living below poverty line. It means an increase in the accumulation of capital will result in another increase in economic condition of individuals living below poverty line and vice-versa. Based on the analysis, the standardized coefficient was 0.132 and the level of significance was 0.019 (Table 3). Comparing the level of the significance

(0.05 or 5%) and the level of significance of the data, accumulation of capital had positive and significant influence towards economic condition of people living below poverty line. Therefore, an alternative to improve economic condition of individuals living below poverty line is to increase their accumulation of capital.

Role of Accumulation of Capital in Mediating the Influence of Economic Opportunity, Infrastructure, Demography and Culture towards Economic Condition of individuals living below poverty line in Bali

It is very important to discuss accumulation of capital of an individual or family in analyzing poverty and individual or household income rate. In this study, accumulation of capital had essential role in calculating income rate of individuals living below poverty line. Besides that, the variables that may have influence towards accumulation of capital of an individual or family are important to discuss. In this study, accumulation of capital was considered as mediating or intervening variable intervening between the influences of the independent variables towards economic condition of individuals living below poverty line in Bali. Therefore, the accumulation of capital functioned as dependent and independent variables. Figure 2 described result of the analysis.

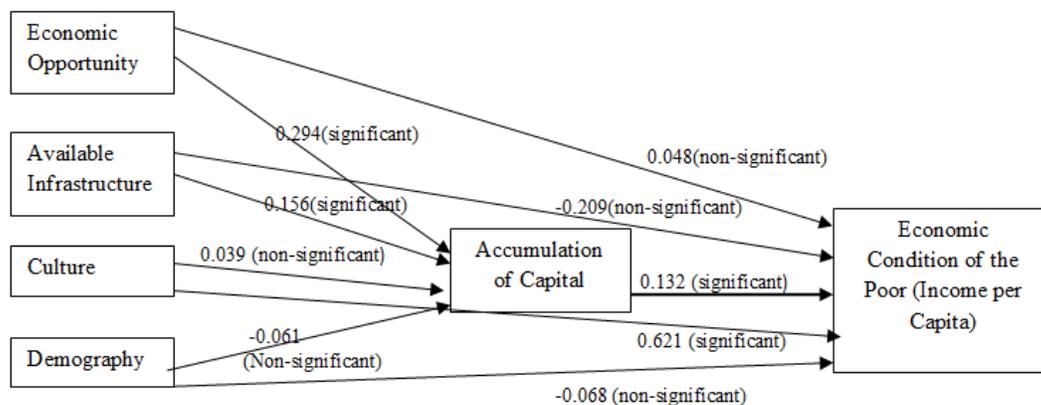


FIGURE 2
INFLUENCE OF ECONOMIC OPPORTUNITY, DEMOGRAPHY, INFRASTRUCTURE AND CULTURE TOWARDS ACCUMULATION OF CAPITAL AND ECONOMIC CONDITION OF INDIVIDUALS LIVING BELOW POVERTY LINE

Figure 2 showed direct influence of the independent variables, namely economic opportunity, infrastructure, demography and culture towards accumulation of capital. Besides that, the figure also described how much influence the four independent variables and accumulation of capital had towards the economic condition of individuals living below poverty line. The analysis also showed that some of the variables had positive influence while some others had negative influence. Looking at the hypotheses, the influence of the independent variables towards the dependent variables matched the hypotheses, but the degree of significance between the variables did not match the hypotheses. Table 4 described result of the statistical analysis.

No	Variable	Direct Influence towards Accumulation of Capital	Direct Influence towards Economic Condition of individuals living below poverty line	Indirect Influence (Role of Accumulation of Capital in Mediating the Influence of Independent Variable towards Dependent Variable)
1	X1, Economic Opportunity	0.294; significant	0.048; non-significant	Significant, full mediation
2	X2, Infrastructure	0.156; significant	- 0.209; non-significant	Significant, full mediation
3	X3, Culture	0.039; non-significant	0.621; significant	Not significant, not mediating
4	X4, Demography/ number of dependence	-0.061; non-significant	- 0.068; non-significant	Not significant, not mediating
5	Y1, Accumulation of capital	-	0.132; significant	-
6	Y2, Economic condition of individuals living below poverty line (average income per capita)	-	-	-

Source: Primary Data Analysis, 2017

Based on Table 4, accumulation of capital was fully mediating 2 independent variables, namely economic opportunity and infrastructure. Accumulation of capital played pivotal role in mediating the influence of economic opportunity and infrastructure towards economic opportunity of individuals living below poverty line. It means even though individuals living below poverty line have access to economic activity, individuals living below poverty line cannot increase their income rate without accumulation of capital. Individuals living below poverty line should have certain amount of capital to use economic opportunity they can access to generate higher income and improve their economic condition. This is similar to the role of infrastructure to improve economic condition of individuals living below poverty line. Individuals living below poverty line are unable to use the infrastructure without accumulation of capital. Therefore, individuals living below poverty line cannot use infrastructure to improve their economic condition when they cannot accumulate capital. It means accumulation of capital is mediating the influence of infrastructure towards economic condition of individuals living below poverty line. The findings of the study showed the role of accumulation of capital in increasing the economic condition of individuals living below poverty line in Bali.

Discussing culture and demography (variables), accumulation of capital was not mediating influence of culture and demography towards economic condition of individuals living below poverty line, particularly income per capita of individuals living below poverty line living in Bali. Demography did not have significant influence towards either the intervening variable (accumulation of capital) or dependent variable (economic condition of individuals living below poverty line), although direction of the influence was different from the hypotheses. Different from the demography, culture had positive and significant influence towards economic condition of individuals living below poverty line but it did not have any influence towards the accumulation of capital. In other words, the accumulation of capital was not mediating the influence of culture towards economic condition of individuals living below poverty line,

particularly average income per capita of individuals living below poverty line in Bali (the province where the study was conducted).

CONCLUSION AND RECOMMENDATION

Based on the findings of the study, it can be concluded that 1) individuals living below poverty line who live in the setting of the study has low economic opportunity and therefore, the government and Non Government Organizations should conduct programs or activities of which goal is to increase economic opportunity of individuals living below poverty line. There are 4 indicators of economic opportunity namely, farmland ownership, authority to manage this farmland, skill mastery and equal access to employment 2) the infrastructure in the setting of the study is in a good condition. Infrastructure, in this context, refers to road; market/shopping center, water, electricity and health facility. Available infrastructure is evaluated based on 5 indicators, namely availability of road, market/shopping center, electricity, water and easy access to health facility 3) economic opportunity and infrastructure have positive and significant influence towards accumulation of capital, which means higher economic opportunity and infrastructure will result in higher accumulation of capital among individuals living below poverty line. Lower economic opportunity and infrastructure will decrease accumulation of capital among individuals living below poverty line. Culture and demography did not have significant influence towards accumulation of capital 4) Culture has positive and significant influence towards economic condition of individuals living below poverty line and accumulation of capital has positive and significant influence towards their economic condition. The other three variables, infrastructure, economic opportunity and demography, do not have significant influence towards economic condition of individuals living below poverty line 5) accumulation of capital is fully mediating the influence of economic opportunity and infrastructure towards economic condition of individuals living below poverty line, while culture and demography are not mediating the influence of accumulation of capital towards economic condition of individuals living below poverty line. It shows pivotal role of economic opportunity and infrastructure in increasing income of individuals living below poverty line through accumulation of capital. In other words, accumulation of capital plays a vital role in increasing income of individuals living below poverty line.

The recommendations are as follows: 1) the government and poverty experts should conduct various programs that provide economic opportunity for individuals living below poverty line allowing them to increase accumulation of capital 2) To increase accumulation of capital of individuals living below poverty line, the government, the banks and other institutions can provide easy access for individuals living below poverty line to get some loan for starting their business and improve their economic condition.

REFERENCES

- Brunie, A., Rutherford, D., Keyes, E. B., & Field, S. (2017). Economic benefits of savings groups in rural Mozambique. *International Journal of Social Economics*, 44(12), 1988-2001.
- Carey, C., & Webb, J. K. (2017). Ponzi schemes and the roles of trust creation and maintenance. *Journal of Financial Crime*, 24(4), 589-600.
- Clark, D. P., Lima, L. R., & Sawyer, W. C. (2017). Stages of diversification in high performing Asian economies. *Journal of Economic Studies*, 44(6), 1017-1029.
- Cooper, D., & Pamela, S. S. (2006). Metode Riset Bisnis, Volume I. PT. *Media Global Edukasi*. Jakarta.

- Fuchs, C., & Trottier, D. (2017). Internet surveillance after Snowden: A critical empirical study of computer experts' attitudes on commercial and state surveillance of the Internet and social media post-Edward Snowden. *Journal of Information, Communication and Ethics in Society*, 15(4), 412-444.
- Glinavos, I. (2006). Book Review of *The End of Poverty: How We Can Make It Happen in Our Lifetime* by Jeffrey D. Sachs. *The Economics of Transition*, (Issue), 575.
- Henley, A., Contreras, F., Espinosa, J. C., & Barbosa, D. (2017). Entrepreneurial intentions of Colombian business students: Planned behaviour, leadership skills and social capital. *International Journal of Entrepreneurial Behavior & Research*, 23(6), 1017-1032.
- Hermansson, C. (2017). Saving motives, gender and the use of financial advisory services. *Managerial Finance*, 43(11), 1202-1223.
- Hussinki, H., Ritala, P., Vanhala, M., & Kianto, A. (2017). Intellectual capital, knowledge management practices and firm performance. *Journal of Intellectual Capital*, 18(4), 904-922.
- Jogiyanto, H. M. (2004). *Metodologi Penelitian Bisnis: salah kaprah dan pengalaman-pengalaman*. Yogyakarta: BPFE.
- Kortt, M. A., Steen, T., & Sinnewe, E. (2017). Church attendance, faith and the allocation of time: evidence from Australia. *International Journal of Social Economics*, 44(12), 2112-2127.
- Lambrech, J., & Beens, E. (2005). Poverty among self-employed businesspeople in a rich country: A misunderstood and distinct reality. *Journal of Developmental Entrepreneurship*, 10(03), 205-222.
- Lee, I. C., Lin, C. Y., & Lin, T. Y. (2017). The creation of national intellectual capital from the perspective of Hofstede's national culture. *Journal of Intellectual Capital*, 18(4), 807-831.
- Manning, P. (2017). The social capital concept in management and organizational literature: A synthesis and critical discussion of contemporary applications and research directions. *International Journal of Organizational Analysis*, 25(5), 875-893.
- Marhaeni, A. A. I. N., Sudibia, K., Wirathi, I. G. A. P., Rustariyuni, S. D., & Dewi, P. M. (2012). Evaluasi Program-program Pengentasan Kemiskinan di Provinsi Bali. *Piramida*, 10(1).
- Moreno-Gil, S., & Ritchie, J. B. (2017). Research based guidelines for effective visitation management of museums' image. *International Journal of Culture, Tourism and Hospitality Research*, 11(4), 534-550.
- Nguyen-Phuong-Mai, M. (2017). A critical analysis of cultural metaphors and static cultural frameworks with insight from cultural neuroscience and evolutionary biology. *Cross Cultural & Strategic Management*, 24(4), 530-553.
- Nunes, C. L. P. (2008). The evolution of the economic thought about poverty measurement. *Perspectives on Integration and Globalisation*, 7, 195.
- O'Connor, A. (2000). Poverty research and policy for the post-welfare era. *Annual Review of Sociology*, 26(1), 547-562.
- Patel, G. H. (2017). Islam and capital, mortared by trust: the case of Sri Lanka. *Society and Business Review*, 12(3), 373-394.
- Roos, G. (2017). Knowledge management, intellectual capital, structural holes, economic complexity and national prosperity. *Journal of Intellectual Capital*, 18(4), 745-770.
- Ruslan K. (2013), *Kemiskinan di Indonesia, Jumlah Si Miskin: Garis Kemiskinan Bank Dunia*.
- Sachs, J. D. (2006). *The end of poverty: economic possibilities for our time*. Penguin.
- Sarma, S. (2007), Review Buku *The End of Poverty*. *Callange*, 50(2), 59-66.
- Sehrawat, M., & Giri, A. K. (2017). Does female human capital contribute to economic growth in india?: an empirical investigation. *International Journal of Social Economics*, 44(11), 1506-1521.
- Silalahi, U. (2009). *Social Research Methods*, PT. Refika Aditama, Bandung .
- Subandi, M. (2011). Developing Islamic economic production. *Science Technology and Development*, 31(4), 348-358.
- Sullivan, S., & Hannis, M. (2017). Mathematics maybe, but not money on balance sheets, numbers and nature in ecological accounting. *Accounting, Auditing & Accountability Journal*, 30(7), 1459-1480.
- Suryahadi, A., Sumarto, S., & Pritchett, L. (2003). Evolution of poverty during the crisis in Indonesia. *Asian Economic Journal*, 17(3), 221-241.
- Syed, M. A., & Butt, S. A. (2017). Financial and non-financial determinants of corporate social responsibility: Empirical evidence from Pakistan. *Social Responsibility Journal*, 13(4), 780-797.
- Unwin, T. (2007). No end to poverty. *The Journal of Development Studies*, 43(5), 929-953.
- Uzuegbunam, I., Liao, Y. C., Pittaway, L., & Jolley, G. J. (2017). Human capital, intellectual capital and government venture capital. *Journal of Entrepreneurship and Public Policy*, 6(3), 359-374.
- Nazara, S. (1997). *Analisis Input-Output*. Lembaga Penerbit, Fakultas Ekonomi, Universitas Indonesia.