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DETERMINANTS OF POVERTY IN DIFFERENT COUNTRIES

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ABSTRACT

Poverty is a multifaceted phenomenon that not only has a major impact on the ability to buy goods, but also on the various pressures that may prohibit individuals from enjoying their lives. Poverty is one of the important topics that always discussed by central and local governments in various regions. Poverty is a major problem for the entire world. This study identifies the determinants of poverty in different countries. The chosen countries for this study are Pakistan, Brazil, India, Morocco and Indonesia. The considered variables of the poverty are GDP growth, board money, domestic, education, manufacture, tax, unemployment and population. The data are collected from the secondary resources and the data exploring period is from 1958-2015. The ordinary least square method is used to explore the determinants of poverty. The obtained result shows that poverty has a negative impact on GDP and this factor should be considered if the country decides to change its GDP.

INTRODUCTION

In this 21st century, there are still many people around the world live in extreme poverty. There are nearly 10 percent of the world's population, which mean almost 1 billion people living below the World Bank poverty line of \$1.90 per day [1]. According to Katayama and Wadhwa [2], half of the world's poor live in just 5 countries namely India, Nigeria, Democratic Republic of Congo, Ethiopia, and Bangladesh. Therefore, large reductions in poverty in these five countries will be crucial. "Poverty isn't just an issue for developing nations, with almost one child in every seven across the Organisation for Economic Co-operation and Development (OECD) living on extremely low income and the share rising in many countries" [3].

Olusegun Ayodele Akanbi [4] empirically examines the relationship between governance, physical infrastructure, and the level of poverty in sub-Saharan Africa based on a panel of 19 selected sub-Saharan African countries over the

period 1990–2010 using the two-stage least-squares estimation techniques. The study suggests that governance and infrastructure are significant determinants of poverty in the region. Also, the study finds a sustainable level of poverty could be attained at particular governance and infrastructure rating after controlling for the level of gross domestic product and other factors across the region. Thus, poverty tends to converge as physical infrastructure improvement and better governance are pursued and countries with better governance and infrastructure ratings will achieve lower poverty levels.

Herrera [5] identifies the correlations between corruption, inequality, and poverty for 18 countries around the world that bear witness to the link between these variables. The finding indicated that the “persistent poverty reduction will only succeed if the different types of inequalities are reduced or limited, since it is unacceptable that more than 10% of the inhabitants of the earth live in extreme poverty or that just eight people have the same wealth as half of mankind” [5].

Mackenbach et al. [6] identify the determinants of the magnitude of socioeconomic inequalities in mortality across 17 European countries. The study claims that the magnitude of inequalities in mortality differs importantly between countries. Whereby, smoking, alcohol, and poverty partly drive these between-country variations. Also, factors like national income also influence how large mortality inequalities are. The countries with higher national income, higher quality of government, higher social transfers, higher health care expenditure and more self-expression values have smaller inequalities in mortality [6]. The study outlines analyses of variations in health inequalities between countries can help to identify entry-points for policy.

Gale and Samwick [7] investigated the effects of income tax changes on economic growth reveals that the net impact on growth is uncertain, but many estimates suggest it is either small or negative. The study suggests that not all tax changes will have the same impact on growth. the authors claims that reforms that improve incentives, reduce existing subsidies, avoid windfall gains, and avoid deficit financing will have more auspicious effects on the long-term size of the economy, but may also create trade-offs between equity and efficiency.

Makame and Mzee [8] identify the determinants of poverty on household characteristics in Zanzibar by using a logistic regression mode to venture ratio of the probability of occurrence of poverty in Zanzibar with social dimension. The study indicates the social demographic dimensions are important in explaining poverty and that the likelihood of poverty significant relates to household size, household head, and basic education. The study added that all district in Pemba are on high risk of being enter into poverty.

Quang Dao [9] empirically analyses the determinants of rural poverty in developing countries across 32 developing countries. The results show that income redistribution in favour of the poorest 10 percent of the population, improving the productivity of agricultural workers, raising the economic and

social status of women. The government policies aimed at reducing systemic discrimination against ethnic minorities, encouraging tourism where possible. The deceleration of the rural-urban migration process, results in less pressure on government to provide additional spending on services such as sanitation, health, and education in urban areas.

Although many policies and solutions have been proposed to counter the poverty, but the estimation of the possibilities for reducing world poverty is required and the determinants of poverty should be identified [10]. This study examines the influence of poverty such as (GDP, broad money, domestic credit to private sector, education, manufacturing, tax, unemployment, population) in 5 different countries namely Pakistan, Brazil, Morocco, India and Indonesia. The confirmed period is from 1985 to 2015. The relevant data will be obtaining by using ordinary least square methods to explore the determinants of Poverty.

METHODOLOGY

This research will study the effect of poverty in different countries which is Pakistan, Brazil, India, Morocco and Indonesia in annually of duration period from (1985- 2015). The model of this study is:

$$\log\text{Poverty} = \log\text{GDP} + \log\text{Broad money} + \text{Domestic} + \log\text{Edu} + \log\text{Tax} + \log\text{Manufacturing} + \log\text{Unemployment} + \log\text{Urban Population}$$

Data Analysis

$$\text{GDP growth} = \text{Broad money growth} + \text{Domestic growth} + \text{Educational growth} + \text{Manufacturing growth} + \text{Tax growth} + \text{Unemployment growth} + \text{Urban Population growth}$$

The dependent variable is Poverty, while the explanatory variables include GDP growth, broad money growth (proxy for financial development), Domestic growth, Educational growth, Manufacturing growth, Tax growth, Unemployment growth, Urban population growth. For each variable, growth values are obtained in order to quantify the relationship in percentage terms.

OLS estimation for Pakistan

In order to estimate the major determinants of Poverty for Pakistan, the following model is estimated:

$$\text{Poverty} = 2.59 \text{ GDP growth} - 0.77 \text{ Broad money growth} - 0.19 \text{ Domestic growth} - 0.35 \text{ Educational growth} - 0.002 \text{ Manufacturing growth} + 0.90 \text{ Tax growth} - 0.11 \text{ Unemployment growth} - 31.9 \text{ Urban Population growth}$$

Employing OLS estimation reveals that broad money growth and exports are statically significant, implying that these macroeconomic indicators strongly influence poverty growth in Pakistan. Similarly a 1 percentage point increase in broad money leads to increase in GDP growth. The R-square (Table 1) shows that 0.18 percent of the variations in poverty are explained by GDP growth, broad money growth (proxy for financial development), Domestic

growth, Educational growth, Manufacturing growth, Tax growth, Unemployment growth, Urban population growth.

OLS estimation for Morocco

In order to estimate the major determinants of Poverty for Pakistan, the following model is estimated:

$$\text{Poverty} = -3.12 \text{ GDP growth} - 3.46 \text{ Broad money growth} - 0.02 \text{ Domestic growth} + 0 \text{ Educational growth} - 0.009 \text{ Manufacturing growth} - 0.10 \text{ Tax growth} - 0.01 \text{ Unemployment growth} + 7.42 \text{ Urban Population growth}$$

Employing OLS estimation reveals that broad money growth and exports are statically significant, implying that these macroeconomic indicators strongly influence poverty growth in Morocco. Similarly a 1 percentage point increase in broad money leads to increase in GDP growth. The R-square (Table 2) shows that 0.22 percent of the variations in poverty are explained by GDP growth, broad money growth (proxy for financial development), Domestic growth, Educational growth, Manufacturing growth, Tax growth, Unemployment growth, Urban population growth.

OLS estimation for Brazil

In order to estimate the major determinants of Poverty for Pakistan, the following model is estimated:

$$\text{Poverty} = -2.54 \text{ GDP growth} + 0.11 \text{ Broad money growth} + 0.18 \text{ Educational growth} + 0.002 \text{ Manufacturing growth} + -0.10 \text{ Tax growth} + 0.76 \text{ Unemployment growth} - 17.0 \text{ Urban Population growth}$$

Employing OLS estimation reveals that broad money growth and exports are statically significant, implying that these macroeconomic indicators strongly influence poverty growth in Brazil. Similarly a 1 percentage point increase in broad money leads to increase in GDP growth. The R-square (Table 3) shows that 0.76 percent of the variations in poverty are explained by GDP growth, broad money growth (proxy for financial development), Educational growth, Manufacturing growth, Tax growth, Unemployment growth, Urban population growth.

OLS estimation for India

In order to estimate the major determinants of Poverty for Pakistan, the following model is estimated:

$$\text{Poverty} = -3.14 \text{ GDP growth} + 4.87 \text{ Broad money growth} - 1.04 \text{ Educational growth} + 0.006 \text{ Manufacturing growth} - 0.36 \text{ Tax growth} - 0.18 \text{ Unemployment growth} - 13.6 \text{ Urban Population growth}$$

Employing OLS estimation reveals that broad money growth and exports are statically significant, implying that these macroeconomic indicators strongly

influence poverty growth in India. Similarly a 1 percentage point increase in broad money leads to increase in GDP growth. The R-square (Table 4) shows that 0.28 percent of the variations in poverty are explained by GDP growth, broad money growth (proxy for financial development), Educational growth, Manufacturing growth, Tax growth, Unemployment growth, Urban population growth.

OLS estimation for Indonesia

In order to estimate the major determinants of Poverty for Pakistan, the following model is estimated

$$\text{Poverty} = -3.47 \text{ GDP growth} + 1.34 \text{ Broad money growth} + 0.40 \text{ Educational growth} + 0.177 \text{ Manufacturing growth} - 0.15 \text{ Tax growth} - 0.09 \text{ Unemployment growth} - 11.04 \text{ Urban Population growth}$$

Employing OLS estimation reveals that broad money growth and exports are statically significant, implying that these macroeconomic indicators strongly influence poverty growth in Indonesia. Similarly a 1 percentage point increase in broad money leads to increase in GDP growth. The R-square (Table 5) shows that 0.18 percent of the variations in poverty are explained by GDP growth, broad money growth (proxy for financial development), Educational growth, Manufacturing growth, Tax growth, Unemployment growth, Urban population growth.

Result And Discussion

The model that used to identify the strength of the relationship between the variables with poverty are GDP growth, Board money, Domestic credit, Education, manufacturing, tax, unemployment and population. If P-Value less than 10% that mean the specific variable has statistically significant.

Pakistan

Based on Table 1, the P-Value of all variables are greater than 10%, thus all variables are not statistically significant. From the coefficient, the GDP has a positive impact on the poverty, when the GDP increase by 1 unit, the poverty will increase by 2.59 percent. The Board Money has a negative impact on the Poverty, when the Board Money increase by 1 unit, the poverty will decrease by 0.7 percent. The Domestic has a negative impact on the Poverty, when the Domestic increase by 1 unit, the poverty will decrease by 0.19 percent. The Education has a negative impact on the poverty, when the Education increase by 1 unit, the poverty will decrease by 0.35 percent. The Manufacture has a negative impact on the poverty, when the Manufacture increase by 1 unit, the poverty will decrease by 0.002 percent. The Tax has a positive impact on the poverty, when the Tax increase by 1 unit, the poverty will increase by 0.90 percent. The Unemployment has a negative impact on the poverty, when the Unemployment increase by 1 unit, the poverty will decrease by 0.11 percent. The Population has a negative impact on the poverty, when the Population increase by 1 unit, the poverty will decrease by 31.9 percent.

Table 1.Statistical analysis for Pakistan

	Coefficient	P- Value	R Square
GDP growth	2.597771	0.554	0.180478
Board Money	-0.77135	0.629	0.180478
Domestic	-0.19428	0.895	0.180478
Education	-0.35607	0.39	0.180478
Manufacture	-0.00289	0.59	0.180478
Tax	0.908789	0.122	0.180478
Unemployment	-0.11398	0.526	0.180478
Population	-31.9364	0.371	0.180478

Morocco

Based on Table 2, the P-Value of variables (GDP growth, Domestic, Tax, Unemployment, Population) are greater than 10%, thus these variables are not statistically significant. The P-Value of variables (Board Money, Education, Manufacture) less than 10%, thus these variables are statistically significant. From the coefficient, the GDP has a negative impact on the poverty, when the GDP increase by 1 unit, the poverty will decreased by 3.12 percent. The Board Money has a negative impact on the poverty, when the Board Money increase by 1 unit, the poverty will decrease by 3.4 percent. The Domestic has a negative impact on the poverty, when the Domestic increase by 1 unit, the poverty will decrease by 0.02 percent. The Education has a no impact on the poverty, when the Education increase by 1 unit, the poverty will change by 0 percent. The Manufacture has a negative impact on the poverty, when the Manufacture increase by 1 unit, the poverty will decrease by 0.009 percent. The Tax has a negative impact on the poverty, when the Tax increase by 1 unit, the poverty will decrease by 0.10 percent. The Unemployment has a negative impact on the poverty, when the Unemployment increase by 1 unit, the poverty will decrease by 0.01 percent. The Population has a positive impact on the poverty, when the Population increase by 1 unit, the poverty will increased by 7.4 percent.

Table 2.Statistical analysis for Morocco

	Coefficient	P- Value	R Square
GDP growth	-3.12397	0.118832	0.228091
Board Money	-3.46961	0.057057	0.228091
Domestic	-0.02766	0.931742	0.228091
Education	0	0	0.228091
Manufacture	-0.0097	0	0.228091
Tax	-0.10853	0.615296	0.228091
Unemployment	-0.01336	0.958178	0.228091
Population	7.422355	0.637564	0.228091

Brazil

Based on Table 3, the P-Value of variables (Board Money, Education, Manufacture, Tax, Unemployment, Population) are greater than 10%, thus these variables are not statistically significant. The P-Value of variable (GDP growth) less than 10%, thus these variables are statistically significant. From the coefficient, the GDP has a negative impact on the poverty, when the GDP increase by 1 unit, the poverty will decreased by 2.54 percent. The Board Money has a positive impact on the poverty, when the Board Money increases by 1 unit, the poverty will increased by 0.1 percent. The Education has a positive impact on the poverty, when the Education increases by 1 unit, the poverty will increased by 0.18 percent. The Manufacture has a positive impact on the poverty, when the Manufacture increase by 1 unit, the poverty will increase by 0.002 percent. The Tax has a negative impact on the poverty, when the Tax increase by 1 unit, the poverty will decrease by 0.10 percent. The Unemployment has a positive impact on the poverty, when the unemployment increase by 1 unit, the poverty will increased by 0.76 percent. The Population has a negative impact on the poverty, when the population increase by 1unit, the poverty will decreased by 17.0 percent.

Table 3 Statistical analysis for Brazil

	Coefficient	P- Value	R Square
GDP growth	-2.544216	0.094458	0.76884183
Board Money	0.113582998	0.158727	0.76884183
Education	0.187665069	0.213804	0.76884183
Manufacture	0.002111593	0.775983	0.76884183
Tax	-0.1029081	0.527404	0.76884183
Unemployment	0.769728603	1.770007	0.76884183
Population	-17.0	0.196544	0.76884183

India

Based on Table 4, the P-Value of all variables are greater than 10%, thus all variables are not statistically significant. From the coefficient, the GDP has a negative impact on the poverty, when the GDP increase by 1 unit, poverty will decreased by 3.14 percent. The Board Money has a positive impact on the poverty, when the Board Money increase by 1 unit, the poverty will increased by 4.8 percent. The Education has a negative impact on the poverty, when the Education increase by 1 unit, poverty will decreased by 1.04 percent. The Manufacture has a positive impact on the poverty, when the Manufacture increase by 1 unit, poverty will increase by 0.006 percent. The Tax has a negative impact on the poverty, when the Tax increase by 1 unit, the poverty will decrease by 0.36 percent. The Unemployment has a negative impact on the poverty, when the Unemployment increase by 1 unit, the poverty will decreased by 0.18 percent. The Population has a negative impact on the poverty, when the Population increase by 1 unit, the poverty will decreased by 13.6 percent.

Table 4.Statistical analysis for India

	Coefficient	P- Value	R Square
GDP growth	-3.14184	0.383307	0.288589
Board Money	4.87238	0.10676	0.288589
Education	-1.04244	0.524117	0.288589
Manufacture	0.00684	0.911169	0.288589
Tax	-0.36539	0.29955	0.288589
Unemployment	-0.18785	0.600682	0.288589
Population	-13.6461	0.619853	0.288589

Indonesia

Based on Table 5, the P-Value of all variables are greater than 10%, thus all variables are not statistically significant. From the coefficient, the GDP has a negative impact on the poverty, when the GDP increase by 1 unit, the poverty will decreased by 3.47 percent. The Board Money has a positive impact on the poverty, when the Board Money increase by 1 unit, the poverty will increased by 1.34 percent. The Education has a positive impact on the poverty, when the Education increase by 1 unit, the poverty will increased by 0.40 percent. The Manufacture has a positive impact on the poverty, when the Manufacture increase by 1 unit, the poverty will increase by 0.17 percent. The Tax has a negative impact on the poverty, when the Tax increase by 1 unit, the poverty will decrease by 0.15 percent. The Unemployment has a negative impact on the poverty, when the Unemployment increases by 1 unit, the poverty will decreased by 0.09 percent. The Population has a negative impact on the poverty, when the population increase by 1 unit, the poverty will decreased by 11.04 percent.

Table 5 Statistical analysis for Indonesia

	Coefficient	P- Value	R Square
GDP growth	-3.4765	0.397372	0.184929
Board Money	1.348413	0.446363	0.184929
Education	0.402349	0.153957	0.184929
Manufacture	0.177921	0.456109	0.184929
Tax	-0.15866	0.535215	0.184929
Unemployment	-0.09067	0.691623	0.184929
Population	-11.0463	0.254706	0.184929

CONCLUSION

In conclusion poverty variables have positive and negative impact on Pakistan, Brazil, Morocco, India and Indonesia depending on the move of the GDP in each country. Destitution is an issue that should be address by everyone. This exploration paper is to educate individuals about destitution, to ensure individuals comprehend what neediness is, what is doing to us, and most imperative to advice about what they could do to stop it. The goal of this study is to show a clear and complete picture of the nature of the relationship between the eight variables of Determinants of poverty in the GDP and number of people who employment and how many people educated, and the

Banks are more Develop. More attention should be paid to demand and its impact on GDP. Based on the obtained information, it can be effectively assumed that poverty has a negative impact on GDP. Therefore, before a country decides to change its GDP, its impact on poverty should be considered.

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