

# The Relationship between Economic Growth, Inequality and Poverty (Case Study of Islamic Countries in the MENA Region)

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**ABSTRACT:** In recent years the emphasis on poverty reduction as one of the country's social development goals. Millennium Development Goals, which were agreed by world leaders in 2000 to reduce poverty at the top of their agenda, is. This study to issue of poverty and peace within the period 2007-1991 the OIC Member States (OIC) in the MENA region (MENA) is concerned. The purpose of this study is the question of whether growth is pro-poor in the countries concerned. To examine this issue from someone named "compensation growth rate of poverty (PEGR)" has been used. This index reflects the direct and indirect effects of economic growth on poverty. The study also between the poor and non-poor distribution of the benefits of growth are discussed. According to the results, we can say that growth occurred in these countries in the period generally been pro-poor; however, since 2000 and in recent years so that improvements can be seen in the index of inequality exacerbated by the growth and development interests, the poor have benefited as well. However, poverty this growth was weak.

**Keywords:** Poverty Inequality and Economic Growth Pro-poor growth, Poverty Rate of Compensation.

## INTRODUCTION

Although economic growth is an important tool for the elimination of poverty, but the bank reports in 2005, the world has shown that despite high economic growth over the past two decades the poverty reduction process has been very slow. The number of poor living on \$ 1 a day or less from 1.2 billion to 1.1 billion people live on reduced and the number of people who live on \$ 2 or less over the course of 2.65 billion has been increased to 2.74 billion. At the beginning of the present century poverty as a serious social and economic damage threatens human society. The growth in member countries of the Organization of Islamic Conference (OIC), which is mainly the underdeveloped countries or developing countries, is important. The country as the main set of developing countries is considered in 2005, only 14.9 percent of GDP (in terms of purchasing power) have dedicated your world. Compare the economic growth of member countries (OIC) with developing countries and the developed world and also reflects the fact that economic growth in these countries against the global trend has been steady level. According to the statistics needed to compensate for the poverty index growth rate, for all countries is available, so in this study between countries (OIC), the countries of the MENA region have been selected as representative. When the global economy, especially in the 90s, the average growth rate of 5.2% of GDP in experienced, serious

discussion about the distribution of growth in developing countries and the question of whether economic growth, an effective way to reduce poverty in developing countries is. (Dollar & Aart, 2002). Answers and arguments presented can be classified in two categories: One side of the debate are optimistic about the growth of the "Trickle Down" expressed their belief that economic growth reduces poverty, in this case, the growth in average incomes to benefit poor people. On the other hand, some economists believe that economic growth benefits the poor is not. These theorists "Immiserizing Growth." Are, in this case that an increase in average revenues at the same time large groups of poor people and emphasize that economic growth may make the poor poorer (Heltberg, 2004). In examining the situation of least developed countries, poverty is considered as one of the characteristics of these countries. The debate in the Islamic world, one of the most important challenges of economic, social and political advocacy. (Kakwani et al., 2008). Therefore, in this study, the effect of economic growth on poverty reduction in the countries of the MENA region has been studied.

### Background research

Results revealed that trade liberalization leads to an increase in exports and imports of the country. But the increase in imports over exports, thus leading to deterioration of economic growth. Samadi et al (2014) spatial analysis to study the impact of income inequality on economic growth in Iran. The results revealed, geographically weighted regression, the effect of income inequality on economic growth has been negative. This dynamic panel data regression is confirmed. Gradstein et al (2007). In an article entitled "The Political Economy of education" simple patterns in the book Robert Bifulco (2006) about the relationship between growth and income inequality is present. A key assumption of this model is that credit restrictions to prevent children through borrowing to finance training. With this pattern in the end it proved that government-funded public education in private education reduces income inequality. In addition to public education, if economic growth is to increase the efficiency of education for poor families with low education level, higher than the returns to education for poor families with high education level.

### METHODOLOGY

**How pro-poor growth measured?** In general, economic growth alone cannot be regarded an important factor for reducing poverty. It is more on the distribution of the resulting growth. In fact, the increase in average income, reducing poverty and increasing inequality, poverty increases. The effect of economic growth, average income (consumption) increases, but inequality may be increasing or decreasing. The increase (decrease) inequality, the relative benefits of growth to the poor less (greater) than the non-poor. In fact, if poverty reduction is associated with a reduction in inequality, growing poverty is desensitization. To be able to pro-poor growth will be determined in practice, to measure poverty and inequality measures required by the would like.

Suppose that a middle-income and middle-income growth rate is real. Therefore:

$$\gamma = d \ln(\mu) \quad (1)$$

The elasticity of total poverty ( $\delta_\alpha$ ) is equal to the relative change in poverty ( $P_\alpha$ ) divided by the average revenue growth rate:

$$\delta_\alpha = \frac{d \ln(P_\alpha)}{\gamma} \quad (2)$$

The elasticity of poverty sensitivity in response to the growth in average income is calculated.

$$\delta_\alpha = \eta_\alpha + \zeta_\alpha \quad (3)$$

$\eta_\alpha$  The elasticity of poverty with respect to growth and  $\zeta_\alpha$  poverty reduction effect of inequality measures. This equation shows how poverty as a result of changes in inequality in the process of change. Fqrzdast economic growth that changes in inequality growth process, reduce overall poverty. In other words, the growth elasticity of poverty Fqrzdast greater than the elasticity of poverty with respect to growth.

Pro-poor growth index Kakwani and Pernia. (2000) ( $\varphi_\alpha$  is:

$$\varphi_\alpha = \frac{\delta_\alpha}{\tau_\alpha} \quad (4)$$

Where ( $\tau_\alpha$ ) elasticity of poverty to inequality changes. In other words, the change in poverty on two factors: the growth rate of average income and the distribution of growth benefits depend. The index of poverty reduction, as a result of an increase in the average revenue growth rate indicates the condition that growth does not cause changes in inequality. Since this index effect of economic growth on poverty and inequality is constant, the index ( $\varphi_\alpha$ ) is preferable. Reduction of the real relative poverty is shown by  $\delta_\alpha \gamma$  the elasticity of poverty. If growth is neutral with

respect to the unequal distribution does not change, then  $\gamma^* a$  the growth rate of relative poverty reduction that is created equal  $\eta_a \gamma^* a$ . The index growth rate to compensate for this deficiency can be written as:

$$\gamma^* a = (\frac{\delta_a}{\eta_a}) \gamma = \varphi_a \gamma \tag{5}$$

After simplification we get:

$$PEGR = \gamma + (\varphi_a - 1) \gamma \tag{6}$$

PEGR growth rate of poverty reduction. The second part of the equation right, benefit (expense) growth, when growth shows Fqrzdast. If studies exist two terms of income or household expenditure growth rate of compensation

is calculated poverty. Suppose  $\mu_1$  and  $\mu_2$  the average income of middle-income periods 1 and 2, then it can be said between the two periods:

$$\hat{\gamma} = (\ln[P_{a2}] - \ln[P_{a1}]) / \gamma^{\wedge} \tag{7}$$

The elasticity of poverty, it can be estimated similarly:

$$\hat{\delta} = (\ln[P_{a2}] - \ln[P_{a1}]) / \gamma^{\wedge} \tag{8}$$

That  $P\alpha_1$  and  $P\alpha_2$  poverty indices are calculated for periods 1 and 2 Shvnd.kshsh poverty to growth changes Hrdvrh by the equation (2) can be calculated:

$$\hat{\gamma}^* a = \gamma + (\frac{\delta_a}{\eta_a} - 1) \gamma \tag{9}$$

And or

$$\hat{\delta}^* a = (\frac{\hat{\delta} a}{\hat{\eta} a}) \hat{\gamma} \tag{10}$$

In this study, the equation (10), which is the poverty rate index compensation To answer the question of whether growth is pro-poor in MENA countries have used or not.

## RESULT

**The effect of economic growth on poverty in MENA countries:** In this section, the concept of poverty from 18 countries in the MENA region in 7 countries debugger That Data contained in them are investigated.

Table 1. The growth rate of compensation poverty.

Country	Year	Loss or benefit	Pegr2	Loss or benefit	Pegr1	B Property Index	A Property Index	Income	Rate Growth
Djibouti	1996	-	-	-	-	1.6	4.8	81.55	-
	2002	-	-	-	-	5.3	18.8	82.28	0.8
Egypt	1991	-	-	-	-	0.6	4.5	100.07	-
	1996	-	-	-	-	0.5	2.5	128.13	0.6
	2000	-0.6	0	-0.5985	0.0015	0.5	2	173.68	-0.1
Iran	2005	-	-	-	-	0.5	2		2.2
	1990	-	-	-	-	1	3.9	8106.23	-
	1994	2.7	0	2.7	0	0.5	2	11744.57	-2.7
	1998	-	-	-	-	0.5	2	10615.76	-8.2
Jordan	2005	-	-	-	-	0.5	2		2.6
	1992	-	-	-	-	0.5	2.8	1.59	8.2
	1997	-8.2	0	-14.15	-5.95	0.5	2	1.99	2.1
	2003	-8.2	0	-3.78	4.42	0.5	2	-	-0.9
Morocco	2006	-8.2	0	-5.02	3.18	0.5	2	-	1.5
	1991	-	-	-	-	0.5	2.5	-	-
Morocco	1999	-	-	-	-	1.2	6.8	66.62	0.9

	2001	-6.42	-5.52	-6.73	-5.83	0.9	6.3	87.11	7.5
	2007	-4.77	-3.87	5.18	6.08	0.5	2.5	91.94	3.1
	1990	-	-	-	-	1.4	0.9	7.09	
Tunisia	1995	-	-	-	-	1.3	6.5	8.85	-0.2
	2000	0.45	0.25	1.53	1.33	0.5	2.6	10.1	2
	1992	-	-	-	-	1.4	4.5		2.6
Yemen	1998	-3.12	-0.52	-3.21	-0.61	3	12.9	123.117	2.2
	2005	-4.21	-1.61	-4.3	-1.7	4.2	17.5	-	0.9

Source: research findings

Table 1 PGR index for 7 countries that statistics of the index "of the poor and poverty gap" exists is calculated. The index table (a) poverty "of the poor" and the indicator (b), "poverty gap" to measure. PEGR column after column in the table is called Loss or benefit. PEGR if the index is greater than the income growth rate is moderate, pro-poor growth and thus has taken advantage of the growth rate of the average income is lower but if PEGR resulting growth has been generating losses as a result of poverty. In Table 2 summarizes the results of these 7 countries are PEGR.

Table 2. Summary of estimate by \$ 1 a day poverty cheaters.

Growing poverty chelates, summary results for the 7 MENA countries (based on a dollar a day poverty line)			
Total		Growth	Growth
Based on the percentage of poor people			
Poverty chelates		3	0
Poverty chelates		7	4
Total		10	4
Based on the poverty gap			
Poverty chelates		2	0
Poverty chelates		8	4
Total		10	4

Source: research findings

In the course of some countries such as Egypt (2000- 1996), Iran (1998- 1990), Jordan (2003 -1997) and Tunisia (1995- 1990) has been negative economic growth. As we know, the negative economic growth if it cannot equal income distribution can reduce poverty. Thus, in the countries listed in Table 1, some countries had negative growth rates in some time periods to evaluate the growth of poverty in these countries into two categories, a set of positive and negative growth rates. However, in this study, none of the countries with negative growth has not been pro-poor growth, but similar studies in the South-East Asian countries by Kakwani and Pernia (2000) was a negative growth and pro-poor nation saw that things could have been. In the first part the results show that 70 percent occurred in this area has been to the detriment of the poor is leading to increasing poverty. In the second part PEGR poverty gap index is calculated, only in two cases and in 8 other Fqrzdast growth is causing growth in the number of countries with positive growth and pro-poor poverty by half the countries with positive growth and causing poverty. It should be noted that in both the 40% of cases with negative growth. This phenomenon is exacerbated Fqrzayy growth and causing the poor in countries with negative growth than countries with positive growth, a decline in incomes suffer more. Given that the number of countries with positive growth and pro-poor than countries with positive growth and was Fqrza can be said that economic growth in the MENA region is not pro-poor and pro-growth pro-poor policies are not applied. Distribution of income in this area using the attached Table 1 is shown in the table below.

Table 3. Distribution of MENA countries classified by income.

Rank	Percentage	Group of Income
2	35	High-income countries
3	15	Upper-middle income countries
4	5	Low-income countries
1	40	Less than middle-income countries

Source: IMF.

According to Table 3, almost half of the countries in the region are less than average in terms of geographical location is located mainly in North Africa. According to the ranking of countries with high income in the next category that most of the countries they are oil-rich countries, especially around the Persian Gulf. On the second ranges, respectively income countries and low-income countries are higher than average. Since the Palestinian position in this ranking is not specified in the World Bank website, so the percentage is less than a hundred. According to Table 3, 40% of revenues in the region are lower than average. Therefore, very few countries \$ 2 a day poverty line, while the poverty line, most of them \$ 1 a day. If in any country poor in terms of proximity to the poverty line category and then index PEGR the poverty line of \$ 1 and \$ 2 per day calculated, the difference showed that the poor closer to the poverty line than the poor from the poverty line have benefited more from economic growth. In this study, because countries within the countries of the estimated poverty line of \$ 2 were not possible. In this study, because countries within the countries of the estimated poverty line of \$ 2 were not possible. Using Table 1 shows the results of pro-poor growth, Loss or benefit countries listed in Table 4. Loss or benefit from pro-poor growth patterns or growth rate of the anti-poverty outcomes that are achieved. In Table 4, the classification is done. Among the seven countries surveyed in Morocco during 2007-2001 with the average income growth rate of 1.3 percent, in line with the country's immense benefit. In the category of countries with very high disadvantage, Jordan in the period 1997- 1992 using the percentage of poor people 15/14 number - and the poverty gap index number 2 / 8- to show. The percentage of poor people to the poverty gap index shows 43% more damage. In other words, in the years after 2003, economic growth has brought more benefits to the poor. The country according to Table 4, in both periods 2003-1997 and 2006-2003, has experienced a huge loss to the poverty gap index (B) show a larger amount of losses.

Table 4. Countries with very high profit or loss.

Country	Growth Rate	Profit (+) or loss (-)	Year
	Poverty gap index	Percentage index of poor people	
Countries with benefit	-	Benefit > 5	Very much
Morocco	-	5.18	2001-2007
Countries with very high losses			Loss > 5
Jordan	-8.2	-14.15	1992-1997
	-8.2	-	1997-2003
	-8.2	-5.02	2003-2006
Morocco	-6.22	-6.73	1999-2001

As shown in Table 4, we see the next section; Morocco in 1999 and 2001, with both poverty indexes has experienced significant losses in the years 2007 to 2001, while the country is very much to the benefit gained. Based on these findings, a few points worth noting: Considering that Morocco's growth rate in the period 2001- 1997, we can say positive and significant losses due to the rate of growth, increasing inequality are growing as a result. During 2001 to 2007, this trend has been reversed against poverty so that the poor were not only growth but also very much benefit as well. Since no significant mutation rate of growth in these years, we can say that this is due to the reduction of inequality. The pattern of growth in the 90's happened in this series of poor countries because about 80 percent of which have been causing growing poverty. But the proliferation of poverty since 2000 has gradually changed to the detriment of growth tends to decrease in almost all countries and even in some of the losses has become useless. It can be expected that economic growth in the future, to the benefit of the poor. Moreover, in all the years of loss due to the growth rate estimated by the poverty gap index, decreased or not changed. At the same time, according to the indicator of poor people have more benefits over time shows it can be said that very poor people have benefited from these benefits and the benefits of growth are not without interest. This confirms the results of Morocco.

### CONCLUSION

The effects of economic growth on poverty in the Middle East and North Africa region (MENA) during the years 1990 to 2007 were studied. For this purpose, the Kakwani et al (2000) is used. The index uses indicators of poverty (headcount, poverty gap, etc.) are estimated. In this study addressed to issue pro-poor growth. The aim of

this study is to estimate the effect of growth on poverty that economic growth in these countries has been poor or not. Index pro-poor growth or "compensation growth rate of poverty" by Kakwani et al (2000) proposed the simultaneous growth and distribution on poverty. According to the research findings, in spite of the fact that the countries of the MENA region witnessed a positive growth rate of compensation poverty index shows that positive growth has not been pro-poor. The benefits of growth have benefited. Another result of the study compared the rate of growth of these countries and to compensate for the poverty index based on the percentage of poor people and the poverty gap and poverty indicators showed positive due to better distribution and reducing inequality cheaters more to increase growth because of the of leap in the growth rate and the growth rate of these countries cannot be seen with light music is changing.

#### **Conflict of interest**

The authors declare no conflict of interest

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