Poverty, Inequality and Growth: a Survey of the Literature and Some Facts from Turkey

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Abstract—This survey of recent literature examines the link between growth and poverty. It is widely accepted that economic growth is a necessary condition for sustainable poverty reduction. But it is the fact that the economic growth of some countries has been pro-poor while others not. Some factors such as labor market, policies and demographic factors may lead to a weak relationship between economic performance and poverty rate. In this sense pro-growth policies should be pro-poor to increase the poverty alleviation effects of the growth. The purpose of this study is to review the recent studies on the effects of macroeconomic policies on poverty and inequality and to review the poverty analyses which examine the relationship between growth, poverty and inequality. Also this study provides some facts about the relationship between economic growth, inequality and poverty from Turkey.

Keywords—economic growth, inequality, macroeconomic policy, poverty

I. INTRODUCTION

Understanding of growth and poverty relationship is crucial for the policy makers of developing countries. For many researchers, economic growth is both necessary and sufficient to reduce poverty and they focus on the macroeconomic policies to achieve high growth rate. Generally, findings indicate that all the pro-growth policies lead to lower poverty levels in the long run but there are some evidence indicating that some of these policies may lead to higher inequality and higher poverty in the short-run. In this sense pro-poor policies should be implemented to reduce poverty in both short and long run rather than pro-growth policies.

Since the positive effect of the economic growth on the poverty alleviation may be offset by increasing inequality, it is important to understand the relation between inequality and growth. While some papers revealed that there is a positive impact of economic growth on the inequality and poverty, the others pointed out that there is no strong evidence that growth makes the income distribution more or less equal.

The recent surge of interest concentrated on the policies which should be implemented for a successful poverty reduction. Demand reducing policies, switching policies and some structural reforms such as open trade, privatization and liberalization are the important concepts to examine the poverty and growth relation.

The purpose of this study is to review the recent studies on the effects of macroeconomic policies on poverty and inequality and to review the poverty analyses which examine the relationship between growth, poverty and inequality. In this sense section 2 includes a review of the recent analyses on growth, poverty and inequality. In section 3 policies affecting growth and poverty are discussed. Additionally in this section the effects of trade policies, transition policies and policies associated with crisis are presented by reviewing the empirical analyses. Section 4 elaborates the poverty impacts of the demand reducing and switching policies. Section 5 gives some information about poverty in Turkey. Finally the conclusion is presented in section 6.

II. GROWTH, POVERTY AND INEQUALITY

A large number of papers have recently examined the links between growth and inequality and their impacts. It is generally accepted that growth has an important role for poverty reduction. There is a lot of evidence suggesting that the poor benefit from increasing aggregate income while they suffer from recession. Also if the growth is supported by redistributive policies, poverty can be reduced significantly. Many evidence shows that the poverty reduction effect of economic growth is offset by the increasing inequality [1], [2] [3], [4]. Reference [3] explains this offsetting effect of inequality by two ways. First, since the unequal distributions raise the distrotionary intervention, higher inequality may cause the lower growth rate which has the small effect on the poverty reduction. Second, inequality may affect the share in benefits of growth for the poor. Thus the poor who have the low share of the aggregate income are less likely to benefit from the increasing income [3].

There is no widely accepted view about the relationship between growth and inequality. Some empirical evidence suggests that growth worsens the unequal distribution [5]. Also, while the some papers reveal that there is a positive impact of economic growth on the inequality [6], the others point out that there is no strong evidence that growth make the income distribution more or less equal [7] [8] [9].

References [3] calls the first argument as induced-growth and the second argument as growth-elasticity.

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Constructing a regional panel data of Bangladesh, reference [10] analyzed the impact of growth on both poverty and inequality. He found that growth decreased over all poverty significantly while the inequality in urban areas increased. Also he pointed out that in the urban areas correlation between growth and inequality was higher than in the rural areas. Thus promoting growth in rural areas rather than urban areas would reduce poverty more.

Reference [9] analyzed the impact of economic growth on poverty for 50 developing countries and he found that growth has an important role to reduce poverty in developing countries. He emphasized that if the economic growth is measured by survey mean income (consumption), there is a strong statistically significant relation between growth and poverty reduction. In his analysis, a 1 percentage increase in economic growth produced a 2.59 percent decrease in the proportion of people living in poverty ($1 a person a day). On the other hand if the economic growth is measured by GDP per capita, the statistical relationship between growth and poverty reduction is no longer strong but it still exists. Also he argued that economic growth has little impact on income inequality because economic growth raises incomes for both the rich and the poor proportionally.

There are some strong analytical reasons to suggest that economic growth decreases poverty but different results can be obtained due to the time period, econometric specification and groups. For instance; reference [4] analyzed the relationship between macroeconomic performance and the poverty incidence. They examined the effects of economic performances of U.S. on poverty over the post 1960 period by using national level time series. During the 1960s U.S. experienced a large expansion in GDP and sudden decline in poverty incidence, but during 1970s and 1980s the relation between economic growth and poverty reduction was not strong. Also it was observed that during the recession period in the early 1980s and 1990s, poverty increased sharply. Reference [4] concluded that in the 1990s the poverty rate has been more responsive to the macroeconomic performance than in the 1980s and some factors such as labor market, policies and demographic factors may lead to weak relationship between economic performance and poverty rate during the 1980s.

The incomes of the poor depend on growth and income distribution which may move in the same direction, but it is not necessary. For instance; rapid growth can lead to increasing inequality or income distribution can remain unchanged while the growth rate decreases. Thus poverty can decrease despite an increasing inequality. But it is important to say that increasing inequality may offset the poverty reducing effect of the growth. For instance; reference [2] explained the weak relationship between economic growth of U.S. and poverty reduction during 1980s by changes in the labor market and he mentioned that the positive effect of the economic growth on the poverty alleviation was offset by increasing earnings inequality\(^2\).

Furthermore, reference [11] used the regional level data to analyze the relationship between economic performance and poverty. Because of the regional level data structural and demographic variables were controlled. In contrast to national level analysis, he found that there was no break in the traditional macroeconomic performance and poverty rate relationship during 1980s and changing demographics and lagging unskilled workers income lessened the poverty reducing effect of the economic growth.

Reference [1] defines the growth effect which represents income growth as a shift in log-income distribution without change in its shape. Also he demonstrates the distribution effect by changing the shape of income distribution. Growth effect leads to decrease in the share of population below the poverty line while the distribution effect contributes the poverty reduction by declining income dispersion. Thus we can say that the poverty reduction effect of the growth depends on the distributional effect of the policies.

III. POLICIES AFFECTING GROWTH AND POVERTY TRENDS

It is widely accepted that economic growth is a necessary condition for sustainable poverty reduction. But it is the fact that the economic growth of some countries has been pro-poor while others not [12]. There are some factors affecting growth and poverty trends such as economic reforms, political stability and private endowments.

Analysis of policies suggests that policies may improve income distribution and help the poor or they may worsen income distribution and increase poverty. It is generally supported that the effects of the adjustment policies on income distribution is vague while the poverty impacts are negative.

The recent surge of interest concentrated on the policies which should be implemented for a successful poverty reduction. Empirical evidence shows that poverty outcomes depend on how a given policy affects growth and inequality. It is suggested that growth-enhancing policies can increase the average income by three ways; increasing everyone’s income, increasing mainly the incomes of the rich and increasing mainly the incomes of the poor. In this sense pro-growth policies should be pro-poor to increase the poverty alleviation effects of the growth [13].

For instance; reference [5] examined the impact of the pro-growth policies on poverty and inequality. He concludes that better education and infrastructure and lower inflation lead to increase in growth and decrease in inequality\(^3\). On the other hand, some policies allowing faster growth such as financial development, open trade and smaller size government worsen

\(^2\) Also reference [14] stated that poverty rate was less responsive to the GDP growth during 1980s because of slow productivity growth and expanding wage inequality.

\(^3\) Suggesting that infrastructure both raises growth and decreases income inequality, reference [15] reached the same conclusion for infrastructure development.
the income distribution. Also he argues that all pro-growth policies decreases poverty in the long run but in the short run if the pro-poor policies are not implemented, higher inequality associated with the pro-growth policies may increase poverty.

Using a sample of 52 developing countries for the period 1960 to 1999, reference [13] suggested that financial development policies are both pro-growth and pro-poor. They found that the growth rate of the poor income was higher than the growth rate of GDP per capita. In contrast to reference [5], they argue that since the financial development increased mainly income of the poor, it improves the income distribution and reduces inequality.

Reference [7] examined the links between the income of the poor and aggregate income and they found that increase in overall income led to increase in average income of the poor proportionally. Also introducing policies into the analysis they investigated whether the policies influenced the benefits of economic growth for the poor. It was shown that some policies such as openness to international trade, developed financial markets and improvement in the rule of law increased the income of the poor while they did not alter the inequality. Also reference [7] pointed out that some policies implemented for the fiscal discipline and macroeconomic stability influenced slightly both growth and income distribution.

A. Trade Policies

Many countries implemented structural adjustment programs to provide sustainable economic growth. The recent surge of interest on the relationship between growth and poverty is concentrated on the liberal economic policies such as monetary and fiscal stability and open markets which are expected to raise incomes of both the poor and rich.

Most of the economists argued that trade and economic growth are closely associated and that income poverty is reduced when per capita incomes rise [16] [17] [18]. It is the fact that policies will influence how much the poor benefit from growth. Generally empirical results show that open trade policies which include subsidies, a competitive exchange rate and low tariffs are more desirable to growth than protectionist trade policies. It is important to say that the existence of open external markets and open trade policies does not guarantee success in trade-based economic growth and poverty reduction. Other factors are also crucial, such as human resources, investment, valid macroeconomic policies and administration to take full advantage of the opportunities from world markets.

Individuals both as consumers and producers may be affected by trade policy because of the changes in prices and changes in technology. Since households are not homogenous, some of them are lose from trade. Trade reforms have varying effects on the poverty. For instance; a trade policy which increases the food crop price affects negatively the net buyers while the net sellers are influenced positively⁴. Also producers which compete against the imported goods lose from trade liberalization while the exporters may gain. The important matter is the ability of the household to respond the changes which arise from the trade reform.

One of the sources of benefits from trade reforms is investment. If the domestic reforms are effective, the level of investment is increased by private traders. Higher investment and expansion in the economic activities create new employment opportunities for the unskilled labor, especially in the agriculture which does not require the high skill [19]. Reference [16] argued that investment has an important role to increase growth in the case of open trade. He found that the impact of the open trade regime on the economic growth was largely explained by investment and more than sixty percent of the total effect arose from investment.

Another source of benefit from trade reforms is the technological progress. Open trade regimes induce the economic growth by the way of technological progress. New inputs, new technologies, new management techniques become available to domestic producer. Generally it is accepted that increase in technology and knowledge lead to higher productivity.

For instance; reference [20] claimed that the total factor productivity can be increased by either increase in inputs or higher input quality. Open trade allows to provide higher quality inputs and increases productivity. But also they argued that the relationship between growth and open trade was ambiguous because of the some country specific factors. Also reference [17] constructed ten years averages of total factor productivity growth for 93 advanced and developing countries and he found that more open countries experiences faster productivity growth.

Generally, people living in urban and well connected areas can benefit from trade liberalization, while the poor in the rural areas can not benefit because of the lack of infrastructure. Also since the poor have limited financial source, they can not enter the new market. Thus government should implement some supporting policies with the trade liberalization to create opportunities for the poor. For instance; creating new markets that are pro-poor, encouraging poor to respond changes in prices and new market opportunities, minimizing the transitional unemployment, increasing government spending on pro-poor policies and reducing the vulnerability of the poor are crucial to increase the poverty reduction impacts of the open trade [21].

Reference [22] tested the relation between openness and growth for developing countries. He found that greater openness was associated with higher growth and the strength of association depended on the data specification. Also he argued that the direction of the association was not certain, higher growth rate may lead to more open trade regime and also more open trade regimes may increase the growth rates.

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⁴ Reference [13] argued that rural consumers benefit from trade liberalization because of declining food marketing margins.
Also reference [18] analyzed the relationship between growth in average incomes and growth in incomes of the poorest and they found a strong relationship between them. Also he emphasized that there is no systematic effect of trade volumes on income inequality while the greater trade increases economic growth. They concluded that trade openness leads to faster growth and poverty reduction in poor countries.

B. Transition Policies

Transition from stated-ownership to market based economy may lead to raising new sectors which requires skills and technical knowledge. Since the poor are less mobile because of the lack of education and skill, they are not able to switch jobs on new employment opportunities. Thus transition policies may increase skilled labor demand and skilled labor wages rather than unskilled labor wages [23] [24].

But it is important to say that the implication of transition policies in the short run can be different than long run implications. Because in the long run, rising specialized and science based industries leads to higher growth rate of GDP which reduces the incidence of poverty. Also there will be a significant poverty benefits in the long run if the investment in training is increased. Thus the supporting policies are very important to create benefits for the poor.

Reference [25] investigated the distributional consequences of policies and developments in the period of transition from stated-ownership and central planning to private ownership. Using a dynamic model he explained the wealth distribution and occupational choice in the case of economic transformation. In this model increasing inequality was dependent on privatization of public assets, development of new markets and changes in the returns associated with different skills. Moreover, reference [26] examined the changes in inequality and poverty of Russia during the transition period and his findings supported the dynamic model of Ferreira [25]. They emphasized that privatization of firms and housing, reduction in government spending on social assistance and a surge in earnings dispersion associated with the liberalization and growing private sector increased the inequality in the Russian transition.

C. Economic Crisis and the Following Policies

Crisis and the following policies have different impacts on the different people. Understanding the transmission channels is crucial to protect the poor from negative effects of the crisis. Crisis affects the households through the relative price changes, changes in labor demand, returns on assets and public transfers [26] [27].

Economic and financial crisis may be short lived but its effect on income is substantial. References [23] and [28] argued that among the most important reasons why economic and financial crisis hurt largely the poor are the lack of education, skills and assets. It is the fact that consumption smoothing is one of the ways to lessen the impact of the crisis. Since the poor have not enough assets and they are not able to access to credit markets, they can not smooth the effects of the crisis. Also the poor are less able to switch available job opportunities due to the lack of education and skills. Thus cut in government spending associated with the social assistance and declining direct and indirect income of the poor are important factor affecting the poor most during the crisis.

Reference [28] investigated the impact of financial crisis on income and poverty using a sample of seven countries which experienced financial crisis. They mention that crises are associated with small changes in unemployment and significant decrease in real wages. Since the poor are unable to protect themselves from the impact of the crisis, they accept to work with low wages. The number of family members willing to work with low wage increases to maintain the family income. Thus labor force participation rate increases during the crisis. Also drawing attention to the long-term effects of crisis on poverty, it was stated that “…there are at least three reasons why the short term poverty impacts of economic crisis may have long-term implications even after the economy recovers. First, some workers who lose their jobs during a crisis may not be reemployed in the same field during the recovery. Second, families forced to liquidate assets to smooth consumption may be unable to regain their former livelihood. Third, any declines in nutrition, health and continuity of schooling may have long-term consequences for labor productivity. Such threats of long-run poverty traps from even short-lived crises are in urgent need of further study.” [28]

It is the fact that some evidence suggest that financial crises are associated with reductions in inequality [5]. But some authors argue that crises tend to raise inequality [29]. Many factors change the result of the crisis on the poverty and inequality such as labor mobility, price stickiness, endowments, direct effect of the spending cuts [26].

IV. Different Outcomes of the Policies for Growth and Poverty

Understanding the effects of the macroeconomic policy shocks on the poor is crucial to provide pro-poor policies. Macroeconomic adjustment programs including public sector layoffs and cuts in the real wages, cuts in government expenditure on transfers and subsidies, and increases in public sector prices affect directly the poor [23]. Changes in relative prices, labor demand, returns on assets and public transfers associated with the macroeconomic policy shocks have different impacts on poverty and inequality. In this sense two different types of policies, demand reducing and switching policies, affect the poverty and inequality through these transmission channels.

6 It is important to say that a cut in transfers to low income households as a result of low government revenue mostly affects the urban poor [23]. Rural poor can protect themselves from the effects of cut in transfers through consuming agricultural product which is produced by rural poor.
A. Demand Reducing Policies

It is largely accepted that demand reducing policies have negative effects on the poor\(^7\). Demand reducing policies generally include cuts in government expenditure, rises in taxation, reductions in real wages and credit constraint. In fact reduction in employment and increase in tax leads to shifting activities to the informal sector and this decrease the tax revenue which may be used for infrastructure and social welfare [23].

Both the poor and rich suffer from high price associated with increased indirect taxes and low real wages associated with the reduction in employment. Thus demand reducing policies may affect proportionally the poor and everyone else in society. In this sense the distributional effects of such policy may be very small relative to its effect on poverty.

Consumption reduction can be obtained through reduction in money wages while allowing prices to raise, reduction in public sector employment, raising indirect taxes and reduction in consumer subsidies. Other policies such as credit restraint, high interest rates, and cuts in public sector investment lead to reduction in investment and decline in economic growth. These investment reduction policies which create unemployment have also negative effect on the labor. These shocks affect the people differently due the different skills, endowment and market structure [26].

It is important to say that decrease in government spending is not necessarily associated with increasing poverty, because while the overall government spending decreases the share of the spending on poverty alleviation may increase. Also layoffs of low productivity workers, increasing public sector prices and reduction in government expenditure reduce fiscal deficit and inflation. Thus in the long run these policies may affect the poverty positively [23]\(^8\).

Deflationary policies affect GNP, inflation and the distribution of access to resources. Because of the effects on GNP associated with falling output and employment, deflationary policies hurt the poor. On the other hand it is argued that these policies will reduce inflation and this will help the poor, because the poor suffer more from the high inflation than the rich [30] [23]\(^9\). In fact the effects of inflation vary due to who the poor are. Also if a lower rate of inflation is accompanied with the cost of lower output and employment, the poor might well lose more than they gain from lower inflation.

Furthermore, adjustment policies decrease the macroeconomic volatility, thus it may increase private investment and may help the economic growth and poverty reduction. In summary, demand-reducing policies are more likely to increase poverty and to decrease growth, but also it has some positive effects on poverty reduction and growth. Reference [23] concludes that

“Although there are various channels through which such policies may reduce aggregate demand and worsen poverty (by reducing output and employment), there are also channels through which they may lead to an increase in aggregate demand and lower unemployment.” [23]

B. Exchange Rate Changes and Switching Policies

Government implements the policies for real exchange rate depreciation to reallocate resources toward tradable sectors. Real exchange rate depreciation promotes a reallocation of resources toward agricultural export activities and this leads to increase in income of poor farmers and decrease in poverty. On the other hand because of the reallocation in the tradable sector, real exchange rate depreciation decreases the demand for labor in the non-tradable sector and, it leads to lower employment and nominal wages. Thus the real wages may decrease and poverty may increase [23]. Another important point is that the effects of the exchange rate depreciation may be different due to the endowments distribution [31]. For instance; increase in agricultural trade decreases poverty if the land belongs to poor farmer rather than rich land owners [24].

Also real exchange rate depreciation increases domestic price of imported goods. Generally developing countries import capital goods. Demand for skilled labor decreases because of the increase in price of capital goods. Thus unskilled labor becomes substitute of skilled labor and average income for the poor increases. However if the country experiences a liberalization program which leads to a serious decrease in tariff, cost of imported capital goods may decrease. As a result demand for skilled labor increases while the demand for unskilled labor decreases. Thus average income of the poor decreases and the rate of poverty rises [23]. In this sense the effects of exchange rate depreciation on poverty are not straightforward and will vary with the type of economy.

Switching policies aim to change relative price of tradable goods. Devaluation is the main policy instrument used for switching. It is important to say that while the devaluation increases economic growth, poverty may increases. Explaining the determinants of the poverty in Burkina Faso during the post devaluation growth period, [32] pointed out that

“Results show that the nature and dynamics of poverty determinants are influenced by the spatial location of households and that the post-devaluation growth period did not significantly alter the pattern of poverty determinants. The most significant determinants of poverty over the growth period include the burden of age dependency, human and physical assets, household amenities and spatial location. Though consistently significant at the national level, the direction of association between these determinants and welfare depends on the nature of the determinants.” [32].

\(^7\) It is suggested that these policies affect largely the people employed in the urban sectors while the people in the rural sector protect themselves by self-consumption [23].

\(^8\) Reference [23] also argues that decrease in public spending and investment may increase the private spending and investment, thus the net effect of the lower public spending on the private spending is ambiguous.

\(^9\) Reference [30] argues that the poor are less able to protect themselves from the effects of the inflation than the rich.
V. POVERTY IN TURKEY

Using Turkey joint poverty assessment report (2005), it is concluded that larger households are poorer than smaller households, and if additional household members are more likely to be children, they have a higher poverty rate. Data show that households with no dependents are rarely poor while households with both children and elderly are the poorest. Families with children are the majority of the poor. In Turkey, poverty is strongly associated with age; the elderly are poorer than adults, but not as poor as children.

Inequality is very high in Turkey and data show that there is no improvement in inequality. Regional differences and urban-rural differences determine the high inequality. Poverty rates are significantly different for rural and urban households. The main reasons of this sharp difference are household composition, limited employment opportunities and education. Rural regions are dominated by agriculture offering informal employment opportunities in these regions. In Turkey, type of employment is highly correlated with the poverty status of the individual or household. There is a strong association between poverty and a lack of registration at a social security institution. Thus formal employment as measured by enrollment in social security is crucial to reduce poverty in Turkey.

In general, it is possible to say that education of household head has more important effect on poverty than gender or unemployment in Turkey. Education has identical effects in both urban and rural locations; people who are illiterate or unemployed have higher poverty rates than average, and higher education graduates are much less likely to be poor. In both areas, poverty rates steadily decrease as years of education increase.

Turkey joint poverty assessment report (2005) growth between 1994 and 2002 was not sufficient to produce any sizable reduction in poverty, and the impact of the little growth there was, was dampened by an increase in inequality.

VI. CONCLUSION

It is generally accepted that faster economic growth is associated reducing poverty. But there is no widely accepted view about the relationship between growth and inequality. Some empirical evidence suggests that growth worsens the unequal distribution. Also while the some papers reveal that there is a positive impact of economic growth on the inequality, the others point out that there is no strong evidence that growth make the income distribution more or less equal. Understanding the relationship between growth, poverty and inequality is crucial for the policy implications.

In fact some countries experience faster poverty reduction associated with faster economic growth while other countries experience less poverty response to the faster economic growth. It can be explained by the distributional effect. Also empirical evidence shows that poverty outcomes depend on how a given policy affects growth and inequality.

The recent surge of interest concentrated on the policies which should be implemented for a successful poverty reduction. It is important to say that an effective long-run policy of poverty reduction should concentrate on sustained growth and redistribution. It is suggested that all pro-growth policies decreases poverty in the long run but in the short run if the pro-poor policies are not implemented, higher inequality associated with the pro-growth policies may increase poverty.

Policies affect the growth and poverty through the changes in labor market, relative prices, returns on assets and public spending. In fact since the households and countries are not homogenous, the outcome of the policies is not the same for all countries and households. Both switching and demand reducing policies have different impacts on poverty and it is difficult to say whether the policies hurt or benefit the poor.

REFERENCES