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FINANCIAL ECONOMICS**

MASTER THESIS

**DETERMINANTS OF POVERTY: TURKEY AND MULTI-COUNTRY
EXAMPLES**

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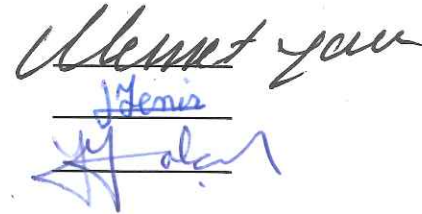
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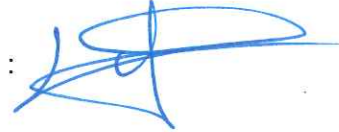


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ÖZ

TÜRKİYE VE ÇOKLU ÜLKE ÖRNEKLERİ İLE YOKSULLUĞUN BELİRLEYİCİLERİ

Muş, Ümmü Eymen

Yüksek Lisans, İktisat Ana Bilim Dalı

Tez Yöneticisi: Prof.Dr.Mehmet Yazıcı

Şubat 2016, 137 Sayfa

Bu çalışmada yoksulluğun tanımı, ölçme yolları detaylı bir şekilde tartışıldıktan sonra yoksulluğun belirleyicilerine ait literatür iki ana başlık altında incelenmiştir. Türkiye'deki yoksulluk profilli mikroekonomik belirleyiciler bakımından incelenmiştir. Yoksulluğun belirleyicilerine ait literatür regresyon metoduyla Dünya Bankası sınıflandırmasına göre gelir grupları için ayrı ayrı analiz edilmiştir. Enflasyonun,ekonomik büyümeni, eşitsiz gelir dağılımının ve döviz kurlarının yoksulluk üzerindeki etkisi incelenmeye çalışılmıştır. Dinamik regresyon metoduyla yapılan analize göre önceki yıla ait fakirliğin ve mevcut büyümenin mevcut fakirlik üzerindeki etkisi gözlenirken enflasyonun yoksulluğa olan etkisi tartışmalıdır. Döviz kurunun fakirliğin literatürde tartışılan iki temel makroekonomik belirleyicisi olan büyüme ve enflasyon üzerindeki etkisi nedeniyle regresyonda kullanılan kontrol değişkenlere dahil edilmemiştir. Bu çalışma, yoksullukla olan mücadelede en önemli katkıyı verenin ekonomik büyüme olduğunu ve bundan hareketle genel fiyat seviyesindeki ve döviz kurlarındaki yüksek oynaklığın büyümeyi engellemesi nedeniyle enflasyon ve kur politikasına büyüme politikaları perspektifinde bakılması gerekliliğini ortaya koymaktadır.

Anahtar Kelimeler: Yoksulluk, Enflasyon, Döviz Kurları,Ekonomik Büyüme

ABSTRACT

DETERMINANTS OF POVERTY: TURKEY AND MULTI-COUNTRY EXAMPLES

Muş, Ümmü Eymen

M.S.c, Financial Economics

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In this study, the definitions of poverty and different ways of poverty measurements have been discussed in detail, the literature on the determinants of poverty at two main headings have been examined. Also poverty profile has been examined by microeconomic conditions in Turkey. Inflation, inequality, economic growth and exchange rates have been studied for their effects on poverty. After examination of, the poverty situations of all income groups according to World Bank classification have been analyzed separately by the method of regression. According to the analysis conducted by the method of dynamic panel generalized least square regression, impact on current poverty from the previous year and the current growth of poverty has been observed, yet the effects of inflation on poverty are controversial. The exchange rate is not included in the regression because the two main macroeconomic discussed determinants of poverty in the literature are used in the regression as control variables that there is multicollinearity between exchange rate, growth and inflation. This study finds that in the fight against the poverty, the most important contribution is gained with economic growth. Since high volatility in price level and exchange rates prevents the growth, inflation and exchange rate policies assessed in the perspective of the importance of growth policy.

Keywords: Poverty, Inflation, Exchange Rates, Poverty in Turkey, Inequality

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CHAPTER 1

1.INTRODUCTION

In the last two century, world average per capita income in constant prices has increased more than eleven times¹. World output has increased significantly.

On the other hand, more than one fifth of individuals cannot earn or spend 1.25 dollar per day. Also, there are still deaths and diseases because of hunger and starvation in today's world. There is still absolute poverty in this age.

As the opinions about the reasons, the structure and measurement of poverty change over time, there is no common definition that everyone can reach an agreement.

Even if poverty changes over time with industrialization and development in Turkey, it has always been a problem in every period. Poverty is a topical economic issue in Turkey. Owing to the lack of officially set poverty line and rates, it can be suggested that the poverty literature in Turkey started very late. Therefore, the studies carried out so far have been performed as narrow-scoped and survey method has been used. Unlike the other studies, panel data regression techniques have been used in this study and this study has examined the world as the level of low income, lower-middle income, upper-middle income, upper lower income(in which Turkey exists) and high-income, and this study aims to make a new contribution to the studies carried out in Turkey. The biggest motivation of this study is to examine poverty with a different technique which has rarely been used in Turkey before

In this study, impacts of such macro as variables inflation, economic growth, inequality and exchange rates on the poverty are discussed. In first chapter, the concepts of poverty and measurement techniques are summarized. In order to assess

¹ Bolt and van Zanden (2013)

variable of the models, different poverty definitions are introduced. Also varying measurement ways in the literature are discussed.

In the third chapter, determinants of the poverty are showed. There are a lot of factors in the literature that may affect poverty or poverty has impacts on them or these factors are interrelated with other. So, for practical reasons, two main headlines are used in this chapter. In macroeconomic instability heading; effects of macroeconomic factors such as growth, inflation, exchange rates, and trade policy are discussed. In structural factors headings; microeconomic or household based factors such as geographical factors, education, inequality, and birth rates are presented. Poverty profile in Turkey is presented in the fourth chapter. With illustrations and summary tables, the general framework about the poverty in the world is indicated shortly.

In the model chapter, with using 124 countries 1981-2010 data series, determinants of poverty are tried to analyze. Last but not least, the work ends with results and all data series used in the regression.

Finally, main guide for both the notions, determinants of the poverty and regression analysis in this study is World Bank Poverty Manual². The manual gives a general concept of poverty and it presents Stata codes and procedures for the regression analysis.

² World Bank (2005) Poverty Manual, All, JH Revision of August 8, 2005

CHAPTER 2

2. POVERTY AND MEASUREMENT

In this chapter, notions of poverty and its measurement will be discussed. In the literature, there are different approaches to defining poverty and determining poverty criteria issues. At the beginning poverty definition is based on income and consumption approaches in the meanwhile definition of poverty is enlarged by non-income indicators. Also, efforts to determining who the poor are have been maintained via improving notions such as absolute poverty, relative poverty, subjective poverty, food poverty and non-food poverty.

2.1 Definition of Poverty

The definition of poverty varies according to the context of the situation and who is defining it³. People coming from various backgrounds define “poverty” differently; even when in each individual’s eyes it is unmistakable⁴. The WB and United Nations (UN) define poverty as follows:

“Poverty is pronounced deprivation in well-being, and comprises many dimensions. It includes low incomes and the inability to acquire the basic goods and services necessary for survival with dignity. Poverty also encompasses low levels of health and education, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity to better one’s life.”⁵

“Fundamentally, poverty is a denial of choices and opportunities, a violation of human dignity. It means lack of basic capacity to participate effectively in

³ Dartanto and Otsubo pp.2-4

⁴ Ravillion 2010 p. 1

⁵ Jonathan and Haughton p 1

society. It means not having enough to feed and clothe a family, not having a school or clinic to go to; not having the land on which to grow one's food or a job to earn one's living, not having access to credit. It means insecurity, powerlessness and exclusion of individuals, households and communities. It means susceptibility to violence, and it often implies living in marginal or fragile environments, without access to clean water or sanitation.”⁶

In general poverty is defined as incapability of providing minimum (socially accepted) living standards or basic needs⁷. Yet this definition is problematic that what are the minimum living standards and basic needs or how to measure them⁸. Living standards and basic needs are varying from country to country even between individuals. Reaching a welfare threshold means in developed countries benefiting from cultural activities and information communication technologies on the other hand in some poor countries maintaining living standards is surviving from starvation and famine⁹.

While defining poverty, primarily notions of monetary and non-monetary poverty should be discussed¹⁰. Non-monetary poverty contains not only monetary dimensions such as inadequate income or consumption but also other social dimensions such as inefficiency in communication, weakness in social relations, inability to locate in social activities¹¹.

In the monetary approach, poverty is then determined by whether the consumption or income level of an individual under a defined poverty line or not. The critical point in this approach is individuals have financially sufficient sources to purchase their requirements. This is the most conventional and preferred way in the literature to discuss and comparing poverty. First of all, after setting or determining a

⁶ World Summit on Social Development in Copenhagen in 1995

⁷ World Bank 2005 p. 9

⁸ Kabaş pp. 1-6

⁹ World Bank pp. 14-15, Şeker pp. 7-8

¹⁰ UN (2009) pp. 49-53

¹¹ Kabaş pp. 7-11, Şeker pp. 9-13, Doğan p. 11

threshold or minimum expenditure level it is easy to measure. Secondly it allows comparing between countries or regions¹².

The second way is asking people whether they have enough foods or incomes or they are satisfied. This is harder than first way and limited international or interregional comparisons¹³.

The Nobel laureate economist Amartya SEN articulated the broadest view that poverty arises when individual lacks key capabilities, and so has insufficient sources or education, or inadequate social security circumstances, or insecurity, or low self-confidence, or a sense of powerlessness, or the absence of rights such as freedom of speech¹⁴. Viewed in this way, poverty is a multi-dimensional phenomenon, and less amenable to simple solutions. In short, according to Sen, poverty is a sort of “deprivation of capabilities”¹⁵. “So, for instance, while higher average incomes will certainly help reduce poverty, these may need to be accompanied by measures to empower the poor, or insure them against risks, or to address specific weaknesses (such as inadequate availability of schools or a corrupt health service)”¹⁶.

There are three types of poverty in monetary approach¹⁷; absolute poverty, relative poverty and subjective poverty¹⁸.

Absolute poverty or extreme poverty is defined as situation that individuals or households are unable to afford basic and survival needs, a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. After determining minimum consumption needs, poverty threshold or poverty line will be calculated. Other way to find absolute poverty line is calculating minimum calorie needs to maintain healthy life. For this calculation, financial amount for minimum daily food requirement is accepted as threshold. This threshold is used as absolute food poverty

¹² World Bank (2005) pp. 9-10

¹³ World Bank (2005) pp. 9-10, Doğan pp. 35-39, Kabaş p. 22

¹⁴ World Bank (2005) pp. 9-10, Kabaş pp. 20-23

¹⁵ Sen pp. 91-92

¹⁶ Sen pp. 90-98

¹⁷ World Bank (2005) pp. 40-46

¹⁸ Şeker pp. 10-13, Doğan pp. 13-17

line¹⁹. Above that amount non-food needs such as shelter and clothing is added and non-food poverty line is calculated. After determining absolute poverty line or daily amount of expenses, income of individuals or households under that determined expenses are called poor. Currently, extreme poverty widely refers to earning below the international poverty line of a \$1.25/day (in 2005 prices), set by the World Bank.

Relative poverty is defined as situation that individuals or households lack the minimum amount of income needed in order to maintain the average standard of living in the society in which they live²⁰. In relative poverty line is usually determined as some rate of average income level of society such as 50 per cent or 60 per cent²¹.

For finding subjective poverty, way is asking an individual defining themselves as poor or not regardless of their income. For example a person is under the absolute or relative poverty line can define as non-poor or an individual above the average income of society may feel that he/she is poor.

The main difference between absolute poverty and relative poverty is appeared while determining poverty threshold. Absolute poverty line is calculated according to maintaining basic human needs while relative poverty line is estimated by according to average income level of society. Actually relative poverty indicates income inequality not the poverty. So individuals under the relative poverty line may be called low income level person instead of poor because they are behind the average income of the society²². Nevertheless EUROSTAT uses the term “poverty risk ratio” instead of “poverty ratio”²³. Important factor is basic needs may vary from country to country. So every society has own different poverty conception even if that country the most developed. Under this approach the most important idea is that basic needs are not constant and they are changing with change in society and the conception of basic needs adopts that change. The question which poverty line should be used may vary according to type of analyses.

¹⁹ World Bank (2005) p.56, Kabaş p. 22

²⁰ Dartanto and Otsubo pp. 7-12

²¹ World Bank (2005) pp.46-47, Kabaş p. 22, Doğan pp. 35-39,

²² Dartonto and Otsubo pp. 1-3

²³ Şeker p. 10

A definition and measurement of the poverty line can be shown as²⁴:

Utility function, $u=f(q,x)$,

where q : quantity of goods and services, x : characteristics of each person.

Demand function, $q=f(p,y,x)$

where p : price of goods and services, y : income of individuals.

Expenditure function, $e=f(p,x,u)$

If the minimum utility (u_{min}) is what is needed to escape from poverty, then the poverty line can be shown (minimum expenditure, e_{min} , that satisfies minimum needs) as:

$z=e_{min}=f(p,x,u_{min})$

by rearranging the expenditure function , the poverty line can be written as,

$z= p*q= p* f(p,y,x)$

If an individual's income is under the poverty line or under the minimum expenditure, then he or she is called "poor".

2.2 Measuring the Welfare (Poverty)

Footsteps for summarizing in measuring poverty are discussed. First of all, indicator of poverty or welfare, namely poverty threshold, should be set. Then a minimum acceptable standard of the poverty line which shows who is the poor and who is not may easily be calculated. Last summary of information from the picture of poverty indicator relative to the poverty threshold is generated.

2.2.1 Choosing Welfare or (Poverty) Indicator

Which indicator of welfare should be used is an important discussion issue for poverty analysis. The most popular two ways are using household income or consumption expenditure data which are of course monetary poverty or welfare. Also there are non-monetary measures of well-being such as school enrollment rate, life expectancy, share of the budget spent on food, social security conditions²⁵.

²⁴ Fields pp. 137-143

²⁵ World Bank (2005) p. 24

2.2.1.1 Income as Welfare Indicator

There are some advantages and disadvantages of choosing income as an indicator for welfare. First of all, it is easy to measure because there are limited income sources. Second, Household income indicates degree of household command over income sources. Third, it is very cheap with the comparison to expenditure surveys. On the other hand it has some practical problems. First, individuals are inclined to show their income low because they may want to take more support or escaping from more tax. Second, seasonal developments affect it. Also, some kind of income may not be easily observed. Last, income does not show hundred percent of welfare²⁶.

2.2.1.2 Expenditure or Consumption as Welfare Indicator

The other traditional way measuring welfare is expenditure or consumption surveys. It also has some superiorities and deficiencies. First of all, it indicates current living standards. Second, it may not be affected from seasonality, so it reflects long term average economic welfare condition. Last the risk of under report is lower than income because there is not obvious risk to hide consumption. On the other hand, some abrupt change in economic condition may change expenditure pattern. Second, live styles may not indicate economic welfare. Third, there are some irregular costs that leads to change expenditure pattern. Last, it is not easy to calculate short term economic usage of some durable goods²⁷.

2.2.1.3 Other Candidate Welfare Indicators

Expenditure and income are two traditional and well-known measurements for well-being. Yet there are other ways of showing welfare or poverty. Even if there is not any problem in measurement of consumption and income, they may not perfectly indicate individual's well-being. These two well-known measurements do not take into account non-monetary welfare factors such as safety, leisure, freely provided public goods (social security and education in some countries). For example if an individual

²⁶ World Bank (2005) pp. 26-27

²⁷ World Bank (2005) pp. 29-35

cannot walk on the street some economists said it is impossible to claim that individual is rich even if he or she has billion dollars banking account.

Also, World Bank poverty manual suggests some indicators²⁸ such as calories consumed per person per day, food consumption as a fraction of total expenditure, measures of outcomes rather than inputs and anthropological method. If minimum living standard is defined only as enough nutrition for survive then calories consumed per person per day may be a good indicator for poverty analysis. Enough nutrition is a debatable issue but 2100 calories per person per day is widely used for poverty analysis²⁹. Yet food habits are different for each country even within the same country. So it is very difficult to determine how to set cost of minimum survival food needs for whole world. Also, beside the feeding habits minimum amount of food varies according to age, sex and job.

2.3 Measures of Poverty or Poverty Indexes

For poverty analysis steps, first of all, poverty is defined and then a type of poverty and a poverty indicator is chosen. The next step is summarizing poverty data for all country that allows international and time welfare comparison. There are some computing methods to aggregate welfare indicators: Foster, Greer and Thorbecke Index, The Watts Index, Sen Index, The Sen-Shorrocks-Thon Index, exit time from poverty³⁰.

2.3.1 Foster, Greer and Thorbecke Index

Foster, Greer and Thorbecke Index (FGT) is accepted as the most extensive poverty measurement method. It shows poverty ratio in total population that under the

²⁸ World Bank (2005) p. 37

²⁹ UN (2009) p. 53

³⁰ Kabaş pp. 23-28

poverty line. Furthermore it also may give implications about depth and severity of the total poverty in the society. The index is computed by the formula below³¹:

$$P_{\alpha} = \frac{\sum_{i=1}^{N_y} ((z - y_i)/z)^{\alpha}}{N}$$

P_{α} : FGT index or poverty ratio,

z : poverty line,

y_i : Income of the i th person,

N_y : Population those income below poverty line

N : total population

α : Poverty response parameter.

FGT index value is increasing when income of poor is decreased or income transfer occurred from poor to poorer individual. The most fascinated features of the index is the formula gives different aspects of poverty if poverty response parameter α is changed³². Namely, when response parameter α is determined bigger than unit value ($\alpha > 1$), the index indicates more sensitive because it takes higher values when income of the poorer decreased. The sensitivity is increasing when α takes higher values. For example if the response parameter α is assumed to be 0 (P_0) than the formula shows the most popular poverty ratio headcount poverty ratio. If response parameter α is assumed to be 1 (P_1) then the formula shows poverty gap. If response parameter α is assumed to be 2 (P_2) then the formula shows squared poverty gap or poverty severity index³³.

The problem about FGT index is there is not a universally accepted poverty response parameter α in the literature. Determining α may be challenging for poverty analysis³⁴.

³¹ World Bank (2005) pp. 69-74

³² Doğan pp. 16-17

³³ Şeker p. 13

³⁴ World Bank (2005) p. 74

2.3.1.1 Headcount Index

Headcount poverty index or poverty ratio P_0 is the ratio of total individual whose income defined under the poverty line. If poverty response parameter α in FGT index formula is 0 than it shows headcount index.

$$\text{It can be shown as } P_0 = \frac{\sum_{i=1}^{N_y} ((z-y_i)/z)^0}{N} \text{ or simply } P_0 = \frac{N_y}{N}$$

N_y shows population whose income under the poverty threshold and N is total population.

Headcount index or simply poverty ratio is the most popular poverty index among the poverty measures³⁵. Main advantages of headcount index are it is easily computed, understandable and widely used internationally³⁶. Furthermore, it is a good indicator for assessing and grasping progress against poverty and understand general frame of poverty. On the other hand, poverty headcount ratio cannot explain severity of poverty and income differences between poor³⁷. For example this ratio does not show any differences between two countries those headcount poverty ratios are same but poverty of once is more severe than the other. In a same way, headcount poverty ratio does not change if income of poor is decreasing. Poverty indicator of this index will not change because of welfare change of individuals whose incomes are under the poverty line. Amartya SEN objects this ratio because of this simplicity even he gives an example that if income of a poor individual decreases then poverty ratio will not change but if he dies then the poverty ratio will decrease. Also headcount poverty ratio will change enormously in the case of small changes in poverty line or in income when income of poor is close to poverty threshold yet the welfare of society have not change significantly.

³⁵ Fields pp. 137-138

³⁶ World Bank (2005) p. 70

³⁷ Kabaş p. 25, Doğan pp.13-14 , Şeker p.11

2.3.1.2 Poverty Gap Index

Another way of poverty measurement is poverty gap ratio. It indicates average level of poverty in the society as percentage of poverty line. Namely, poverty gap ratio is showing the difference between average incomes of the poor from poverty line. First of all incomes gap of poor individuals are calculated. Income gap is equal to difference between income of individual and poverty threshold³⁸. Poverty gap ratio gap cannot be negative because it is computing for only households whose income under the poverty threshold. Poverty gap is equal to zero for non-poor³⁹. Poverty gap is divided to poverty line and summed for all poor and divided to total population and reached to poverty gap ratio⁴⁰.

$$\text{It can be shown as } P_1 = \frac{\sum_{i=1}^{N_y} ((z-y_i)/z)^1}{N} \text{ or simply } P_1 = \frac{\sum_{i=1}^{N_y} (z-y_i)/z}{N}$$

P_1 : Poverty gap ratio,

z : poverty line,

y_i : Income of the i th person,

N_y : Population those income below poverty line

N : total population

Depth of poverty can be measured easily and sensitivity to poverty threshold can be decreased by using poverty gap ratio. Opposite to headcount poverty ratio, any change in income of the poor under the poverty threshold *ceteris paribus* will change poverty gap. Moreover any change in poverty line will not lead to big changes in poverty gap ratio because formula indicates the difference income and poverty threshold.

³⁸ Fields pp.211-213

³⁹ Doğan pp.14-16

⁴⁰ World Bank (2005) pp. 71-73

2.3.1.3 Poverty Severity or Squared Poverty Gap Index

Poverty severity index is calculated by taking square of difference between poverty gap to poverty threshold or simply square of poverty gap index⁴¹. The formula is;

$$P_2 = \frac{\sum_{i=1}^{N_y} ((z-y_i)/z)^2}{N}$$

P_2 : Poverty severity ratio,

z : Poverty line,

y_i : Income of the i th person,

N_y : Population those income below poverty line

N : Total population

If the difference from income of the poor to poverty line is higher poverty severity ratio will assign higher values because it is computed by squaring. Consequently this measurement demonstrates severity of poverty. Also, it regards not only distance from income of poverty to poverty line but also inequality between subgroups of poor. Nevertheless this measurement is not very popular because direct interpretation of poverty severity index is not easy⁴².

An example is given to understand differences three different measurement of FGT index in below table. There are four imaginary countries that Country A, B, C and D.

⁴¹ Doğan p.16, World Bank (2005) p.73, Kabaş p.27, Şeker p. 14

⁴² Kabaş p.27

Table 1 : Comparison of FGT Poverty Measurements

	Country A	Country B	Country C	Country D
Income of 1 (Unit)	10	90	40	95
Income of 2 (Unit)	50	90	50	95
Income of 3 (Unit)	90	90	60	95
Income of 4 (Unit)	115	102	190	95
Income of 5 (Unit)	205	102	190	95
Income of 6 (Unit)	250	246	190	245
Baseline				
Poverty Line (Unit)	100	100	100	100
Head Count Poverty Ratio (%)	50.0	50.0	50.0	83.3
Poverty Gap Ratio (%)	25.0	5.0	25.0	4.2
Poverty Severity Ratio (%)	17.8	0.5	12.8	0.2
Scenario 1				
Poverty Line (Unit)	109	109	109	109
Head Count Poverty Ratio (%)	50.0	83.3	50.0	83.3
Poverty Gap Ratio (%)	29.5	11.8	29.5	11.7
Poverty Severity Ratio (%)	22.7	2.0	17.7	1.6
Scenario 2				
Poverty Line (Unit)	91	91	91	91
Head Count Poverty Ratio (%)	50.0	50.0	50.0	-
Poverty Gap Ratio (%)	20.5	0.5	20.5	-
Poverty Severity Ratio (%)	13.7	0.0	8.7	-

In this example poverty line is defined 100 units in baseline and average income of individuals for all countries is 120 units. Head count poverty ratios are same for Countries A, B, and C and very low for Countries D with respect to rest of the world. Although Country D is more egalitarian than the other countries headcount poverty ratio is higher than the others. In a same way, average income of poor individuals in Country B is higher than poor individuals in Country A and Country C and Country B is more egalitarian than Country A and Country C, head count poverty ratio for all three countries is same, 50 percent. Yet in Country D head count poverty ratio is very high 83 percent. If poverty gap ratios are compared in baseline; the least poverty ratio is seemed in Country D. Also poverty gap ratio of Country B is lower than in Country A and Country C although they have same headcount poverty ratio.

Poverty gap ratios show that Country D needs the least amount of fund in order to fight against poverty among these four countries yet its head count poverty ratio is the highest. Also head count poverty ratios are same in Country A, Country B and Country C however poverty gap ratios are different. For example Country B needs less fund to close poverty gap than Country A and Country C.

Furthermore total income difference in Country C and in Country A is same, yet under the poverty line, Country C seems to be more egalitarian than Country A. Squared poverty gap ratio is used to grasp severity of poverty. Poverty severity ratio of Country C is lower than Country A. Poverty has more negative effects on Country A than in Country C although they have same head count poverty ratios and poverty gap ratio. Namely, these two countries (A and B) have same poverty ratios and need same amount of money to fix poverty but conditions in Country A are more problematic because inequality in this country is higher. On the other hand, poverty severity in Country D which has the highest poverty ratio is the lowest. Baseline scenario shows that looking only headcount index may be misleading. Even welfare conditions in two countries which have same poverty gap may be different.

What happened if general prices are increased or average incomes of poor individuals are decreased or namely poverty line increased in this imaginary world? In scenario 1, poverty line is increased by less than 10 percent (9 percent). Then in countries A, C and D headcount poverty ratios are not changed but poverty ratio in Country B increased from 50 percent to 83.3 percent. As mentioned if income of individuals close to poverty line changes in headcount poverty ratio will be higher because of change in poverty line. Now less than 10 percent inflation makes head country poverty in Country B and Country D is same. On the other hand, poverty gap in country D is lower than in Country B. Also inflation makes poverty gaps higher for all countries. Poverty severity ratios are not changed dramatically as in headcount poverty ratios and poverty gap ratios.

Likewise if general price level is decreased or average income level is increased what happened to FGT poverty measurements? Assuming opposite to Scenario 1 that in Scenario 2 inflation is decreased 9 percent and thereby poverty threshold decreased.

In this case, while headcount poverty ratios in Country A, Country B and, Country C are not changing in Country D the ratio is totally eradicating. It decreased from 83,3 percent to 0 percent. Yet poverty gaps in all countries are not affected like headcount poverty ratios. But the least affected ratio is poverty severity ratio.

2.3.2 Sen Index

Sen Index aggregates the effects of number of the poor individuals, severity of poverty, and income inequality between poor subgroups. The index assesses the head count poverty ratio, poverty gap and Gini coefficient together⁴³. Sen Index formula can be written as:

$$P_s = P_0 G_y + P_1 (1 - G_y)$$

P_s : Sen Index,

P_0 : Poverty head count ratio,

P_1 : Poverty gap ratio,

G_y : Gini Coefficient between poor.

or Sen Index can be shown alternatively as⁴⁴:

$$P_s = P_0 P_1^P (1 + G^{PP})$$

P_1^P : Poverty gap index calculated over poor,

G^{PP} : Gini Coefficient of the poverty gap ratios only between poor.

In the case of $G_y = 1$ shows that there is a full inequality between poor subgroups thereby Sen Index is equal to poverty head count ratio. If the case is opposite $G_y = 0$ namely there is a complete equality between poor then Sen Index is equal to poverty gap ratio. The index has superiority of using income inequality in the equality. Beside this virtue it is used only in academic literature and its reflection on policy is very low⁴⁵.

⁴³ Doğan p. 17, World Bank (2005) p.75

⁴⁴ World Bank (2005) p. 75

⁴⁵ Doğan pp.17-18, Şeker pp. 13-14

2.3.2.1 The Sen-Shorrocks-Thon Index

Although Sen Index is not popular outside the academia, a modified and exciting version of Sen Index is progressed by Sen-Shorrocks-Thon⁴⁶. The formula of Sen-Shorrocks-Thon Index, similar to Sen Index, is obtained from head count poverty ratio, poverty gap ratio and the poverty gap ratio's Gini coefficient for all society can be written as:

$$P_{SST} = P_0 P_1^P (1 + G^{PP})$$

2.3.3 The Watts Index

Watts used a kind of distribution poverty measure first time. It has been popular among the analysts and it can answer the all the poverty measurement theoretical properties. Similar to Sen Index it is rarely used in policy makers⁴⁷. Formula of the Watts Index is:

$$W = \frac{1}{N} \sum_{i=1}^q [\ln(z) - \ln(y_i)]$$

W : Watts Index,

N : Population,

z : Poverty line,

q : Number individual whose income under the poverty line

y_i : Income of the poor individuals.

⁴⁶ World Bank (2005) pp. 75-76

⁴⁷ World Bank (2005) pp. 79-80

CHAPTER 3

3. DETERMINANTS OF POVERTY

Addressing and explaining the causes of poverty is important. World Bank poverty manual as a part of neoliberal international institutions of the world lists characteristics of poverty in four categories⁴⁸; regional, community, household, and individual.

On the other hand, Kabaş classified causes of poverty into five themes⁴⁹; neoliberal policies in emerging countries, macroeconomic conditions, microeconomic conditions, administrative causes, and global order. In this chapter some leading factors causing the poverty are discussed.

Also Sachs differentiates individual from countries⁵⁰. He counts six causes for poverty of households⁵¹; lack of savings, absence of trade, technological reversal, natural resource decline, adverse productivity shock, and population growth. He lists also eight main reasons for poverty and why some countries may not escape from poverty trap⁵²; low savings rates, physical geography, fiscal trap, bad governance, cultural obstacles, political geography, inadequate innovation and research-development, and finally demographic trap or high birth rates.

⁴⁸ World Bank (2005) pp. 125-132

⁴⁹ Kabaş pp. 52-124

⁵⁰ Sachs pp.51-89

⁵¹ Sachs pp.54-56

⁵² Sachs pp.56-66

Table 2. Summary of Poverty Reasons According to World Bank Poverty Manual

Regional characteristics	Isolation/remoteness, including less infrastructure and poorer access to markets and services Resource base, including land availability and quality Weather (e.g. are typhoons or droughts common) and environmental conditions (e.g. frequency of earthquakes) Regional governance and management Inequality
Community characteristics	Infrastructure (e.g. is there piped water, access to a tarred road) Land distribution Access to public goods and services (e.g. proximity of schools, clinics) Social structure and social capital
Household characteristics	Size of household Dependency ratio (i.e. unemployed old and young relative to working age adults) Gender of head; or of household adults on average Assets (typically including land, tools and other means of production, housing, jewelry) Employment and income structure (i.e. proportion of adults employed; type of work – wage labor or self-employment; remittance inflows) Health and education of household members on average
Individual characteristics	Age Education Employment status Health status Ethnicity

Source: World Bank (2005) pp. 125-132

Although many different reasons that lead to poverty may be listed I use two main headlines for the sake of simplicity and easy policy analysis; macroeconomic conditions and other structural factors. Because most of the variables used in the model in next chapter may be classified in these two headlines.

3.1 Macroeconomic Instability

In this heading macroeconomic factors that lead to poverty are discussed. Negative or very low growth rates, high inflation, exchange rate fluctuations and crises may be thought under the macroeconomic instability titles.

3.1.1 Low or negative growth

There is a general consensus that the single most important factor influencing poverty is economic growth⁵³. Also, the effect of growth on the income of the poor was on average no different in poor countries than in rich countries that the poverty-growth relationship had not changed in recent years, and that policy induced growth was as good for the poor as it was for the overall population⁵⁴. Economic growth is one of the factors that increase economic welfare regardless of income level of country. On the other hand, in order to have high and sustainable growth rates, macroeconomic stability is required⁵⁵. Growth rates are low in countries where macroeconomic stability do not exist. Macroeconomic instability, crises and low growth rates are considered to be one of the most important reasons of the poverty.

Long recession or slow growth periods cause welfare loss for developing countries. Long term recession economic performance countries appear too low in per capita growth rates. Small investment dynamics and small investment/GDP ratios are in the center of these recessions period. Priewe and Herr summarized sources and types of recessions or long term slow or negative growth rates⁵⁶:

Stagflation Regimes; monetary and fiscal policy disciplines do not exist or are virtually felt. There is a continuous high inflation and exchange rate depreciation. There is a weak financial system and the capital outflows and dollarization in the economy are observed.

Austerity Regimes; tight monetary and fiscal policies are implemented. High real interest rates, weak financial system, and small current account deficit or small current account surplus due to lower domestic demand are observed. Despite low inflation rate, national currency is not convertible internationally. The depreciation pressure on the national currency is weak. The amount of foreign direct investment is small.

⁵³ Ames et al. pp. 2-3

⁵⁴ Ames et al. p. 4

⁵⁵ Demetry and Squire pp. 39-40

⁵⁶ Priewe and Herr p.68

Structural Noncompetitive Regimes; as in the stagflation and austerity regimes, effects of adjustments on exchange rates is short term because nominal income increases after exchange rate depreciation.

Social Instability Regimes; due to economic and non-economic shocks, continuous social and political instability exist. These crises prevent institutional stability for the minimum growth required.

The worst of these recession regimes is social instability regimes. These countries have higher poverty rates.

On the other hand, the main problems in poor countries that cause to poverty are discussed shortly below:

The vicious cycle of poverty because of low saving rates is a trap for the poor countries and individuals⁵⁷. Economists generally assume that people's willingness to save for future consumption grows with their incomes. The poor people are, the less they can afford to plan for the future and save. The same logic applies to businesses and governments. Thus in poor countries, where most incomes have to be spent to meet current needs national saving tend to be low. Low saving prevents urgent domestic investment. The economy's productivity cannot be increased and incomes cannot be raised without new investment. The biggest problem of these very poor countries is they are in a trap of poverty. Poverty is too heavy and they do not have the capacity to escape from poverty. For example, physical and human capital in many poor countries is insufficient. So natural resources are consumed in an unconscious manner. Under these conditions for the growth of poor countries, more physical, human and natural capital are needed. Therefore they need to increase their savings. But the majority of poor people cannot increase their savings, while they are poor. They use all their income in order to survive⁵⁸. Therefore, economic development of these countries is the more difficult⁵⁹.

⁵⁷ World Bank pp. 31-34

⁵⁸ World Bank pp. 32-33, Sachs pp.57-58, Kabaş pp. 68-73

⁵⁹ World Bank (2005) pp. 125-132, Sachs pp. 57-58

3.1.2 Inflation

All macro impacts of inflation on macroeconomic instability the poverty lines and poverty ratios are based on general prices level⁶⁰. So any changes in general prices level will increase the poverty from the expenditure sides. However some product holders may be benefitted from inflation because their income will also rises yet their expenditures are raised.

When general price level increases there is an increased cost to holding money. If the inflation is entirely unanticipated it can have the redistribution implications, yet inflation will have no impact on individual's desired liquidity. If, in a way, the inflation is anticipated, it will affect desired liquidity in a way that may impose efficiency costs. An increase in the cost of holding money induces a community to divert some resources to the production of money substitutes. So, a product that is nearly costless to society is in part supplanted by goods that have greater costs. These costs constitute the efficiency losses or the welfare effects of anticipated inflation. Both the duration of inflation and the rate of change of prices affect the costs of holding money. Hence, both play a role in determining the volume of resources that goes into economizing on cash balances⁶¹. The theoretical treatment of the welfare losses of anticipated inflation is dealt with in the literature under the head of inflationary finance. The most recent thrust of this literature is to discuss the problem in terms of the optimal level of liquidity⁶². This is the level of liquidity at which the marginal social benefits of liquidity and the marginal social costs are equated, and it is consistent with some steady rate of anticipated inflation. Depending upon the model used for the analysis of this issue estimates regarding this optimal rate of anticipated inflation range from the negative of the real rate of interest up to a moderate positive rate. Therefore while there is no doubt that a sufficiently high anticipated rate of inflation does impose efficiency costs through a misallocation of financial resources for this reason there is considerable controversy as to the level of inflation at which these costs became a significant burden⁶³. The case that inflation is neither entirely expected nor fully unanticipated.

⁶⁰ It discussed in previous chapter in detail.

⁶¹ Palmer pp.48-49

⁶² Palmer p.49

⁶³ Palmer p.49

People may be expecting some inflation but not the exact amount that occurs. Furthermore, even if their expectations regarding the rate of increase of the inflation are correct, there may be a considerable doubt as to which specific prices particularly of financial assets will inflate and at what rates. In final, some efforts are involved simply in determining what happens to various prices as the inflation occurs. All these factors show that during an inflationary period certain kinds of activity, particularly speculation, may become relatively more rewarding than work of the usual productive sort. This also results in efficiency costs, yet ones that are extremely hard to find. It is clear that these costs are likely to become a considerable drag on the economy as hyperinflation (such as in Latin American Countries, or Germany after World War 2, or in East European Countries) is approached in an economy, yet their probable amount at moderate rates of inflation is a subject about which the precise knowledge is impossible. However it would appear that low rate of inflation is not very burdensome. Second aspect of inflation is related to international economy. The problem as usually articulated is that inflation in a country raises the prices of local goods and services relative to those of other countries. This is likely to increase the current account deficits over what it would have been had domestic prices is not risen. Confidence in local financial policy on the part of foreigners decreases. Next, fears of devaluation of the local currency increase, and more gold leaves the economy. Furthermore, it aggravates the difficulty⁶⁴.

For most of the countries high inflation rates is source of macroeconomic instability. Also impacts of inflation on poverty are debatable. First of all “inflation is the cruelest tax of all”⁶⁵ It is argued that inflation hurts poor people more than rich people because people with high incomes protect themselves against inflation better from the poor. High-income people have financial instruments.to protect themselves against inflation. However, people with very little income save a large portion of the money amounts they have in cash. In addition, the poor income is not indexed to inflation as determined by the state. The salaries of the elderly poor are not fully indexed to inflation. Therefore, inflation reduces the real income of the elderly.

⁶⁴ Palmer pp.46-50

⁶⁵ Easterly and Fischer p.2

Subsidies payments and direct transfers to the poor may not be fully indexed to inflation.

Another point is that human capital constitutes an effective guarantee to protect against inflation. However, poor people because they are less educated may not protect themselves against inflation. So, the people who have high human capital are better protected against inflation. Bonds and stocks are also seen as a way of ensuring effective protection against inflation. However, these investment vehicles can be taken by those with high incomes. Human capital of poor people proportionately less than cash in the portfolio. That's why the poor ones do not want inflation more than the rich⁶⁶.

Work of Easterly and Fishers supports the views that inflation is regarded as more of a problem by the poor than it is by the non-poor, and that inflation appears to reduce the relative income of the poor. It thus adds to a growing body of literature that on balance — but not unanimously —tends to support the view that inflation is a cruel tax⁶⁷. Also earlier study show that the poor were adversely affected by higher inflation primarily through a decline in real wages since the poor had small amount of money⁶⁸.

According to Cardoso if the inflation tax that is for poor whose income is already under the poverty line does not change the poverty level but it leads to change and may increase the number of poor that if there are individuals whose income is above and close to poverty line. In this manner, inflation may deteriorate income distribution and lead to increase in poverty level. In addition, if increase in nominal wages is not as fast as the price level then inflation leads to a reduction in real wages. In developing countries, most of the time wages are not indexed to inflation, so in the high inflation periods, wages are increasing more slowly than costs of prices. This leads to fall in real wages and increased poverty⁶⁹.

⁶⁶ Kabaş pp. 70-71

⁶⁷ Easterly and Fischer p.2

⁶⁸ Cardoso pp.24-25

⁶⁹ Cardoso p.2

Palmer lists four basic analytical propositions concerning redistribution effects of inflation. First of all, inflation redistributes real purchasing power (over current output and over assets) from those whose income rises less rapidly relative to the prices they pay as a result of the inflation to those whose incomes rise more rapidly relative to the prices they pay. Secondly, inflation redistributes real purchasing power from those whose assets rise more slowly in price as a result of inflation to those whose assets rise more rapidly than prices. Thirdly, inflation redistributes real purchasing power from creditors to debtors, when debts are stated in fixed monetary terms. Last of all, to the extent that accurate expectations of continuing affect economic behavior, the redistribution effects of indicated will tend to be negated, except where readjustment terms of economic contracts is prevented or retarded such as by government rules, existence of long term contracts, unequal knowledge and unequal bargaining power⁷⁰.

3.1.3 Exchange Rate

Actually in the literature effects of exchange rate on poverty is very limited⁷¹. There are some reasons for this interaction.

First of all, most of the discussions for macroeconomic instability on poverty are focused on inflation because there is a very high correlation between inflation and exchange rate⁷². As discussed in previous chapter poverty is seen usually in low and middle income countries. In high income countries the rate of absolute poverty is zero or very close to the zero⁷³. Since poverty is seen in developing and underdeveloped countries, most of these countries do not have strong currencies like Euro, Pound and Yen. Pass through effect may be seen even for these internationally accepted and convertible countries' currencies⁷⁴. So any change in exchange rates directly affects general prices level⁷⁵. It depends on the import penetration the change in exchange

⁷⁰ Palmer pp.46-47

⁷¹ Helleiner pp. 1-16, Demery and Squire pp. 39-59

⁷² It will be discussed in next chapter

⁷³ <http://iresearch.worldbank.org/PovcalNet/index.htm>

⁷⁴ Anderton pp.4-22

⁷⁵ Ca' Zorzi et. al. pp. 5-29

rates is reflected on general prices level. Therefore analysts are using general prices level as a proxy for exchange rate changes.

Impact of exchange rate on poverty may be seen through growth. In the first step, exchange rates fluctuations lead to macroeconomic instability. The uncertainty affects growth level and indirectly welfare of the economy. So change in exchange rate causes to change in growth level and poverty level of the economy⁷⁶. Trade reform also affects the poor by changing the prices they face as consumers and producers⁷⁷.

3.2 Microeconomic Conditions and Other Structural Factors

In previous part of this section, some macroeconomic factors such as growth, inflation, exchange rate are discussed as determinants of poverty. In this part of this section other microeconomic and structural factors of poverty such as physical and social infrastructure, inequality, and malnutrition are discussed.

3.2.1 Social Capital, Human Capital and Education

Infrastructure is a major determinant of poverty. Physical infrastructures are one of the most important infrastructure determinants of poverty. Other indicators of community level characteristics include average human resource development, access to employment, social mobility and representation, and land distribution.

Health and skill levels are considered to be assets of poor people⁷⁸. With better health or good nutrition, a poor person can work more productively. Similarly, a person with more skills become more productive and increases his revenue. In developing countries, poor people have jobs that are not steady and reliable. In order to understand and to combat the poverty before the focusing on income or consumption levels of poor people, assets of the poor should be assessed⁷⁹.

⁷⁶ Kabaş pp. 52-96, Helleiner pp. 1-16, Sachs pp. 56-72

⁷⁷ Harrison p. 11

⁷⁸ World Bank (2005) p. 127

⁷⁹ Kabaş p.98

The improvements in people's health and education takes place in the center of the development process. People care about health and education of their and their relatives. Therefore, the improvements made in these areas should be the goal of development. At the same time, an individual's health and education status of the production capacity of that individual, that determines the quality of labor. Healthier and better educated will have the capacity to produce more. Productive and skilled workforce is rewarded in the labor market. Therefore, increasing budget shares for the resources for the improvement of people's health and educational conditions will lead to increase productivity income of in the future. The concept of human capital refers to factors owned by education, nutrition, training of an individual. Spending expenditures on these factors are considered investment in human capital, and provides a great advantage to the individual in the future; determine the nature of an individual's labor. This perspective on human capital expenditure to be ties between income and wealth distribution, and allows the investigation of these bonds. A poor country's population does not include completely poor people. In every poor country there is a persistent poverty and has greatly income inequality. This inequality can be seen in most of the area where health and education sectors. According to economic thought a person's level of education, health and nutrition conditions that affect people's labor. Therefore, a person's health, nutrition and education makes an improvement in the quality of those people in the workplace, leading to an increase in productivity and increases revenue.

Everyone to have equal access to education is a human right. However, most of the studies in developing countries, according to the education gap between different groups are increasing. As in physical capital, human capital (literacy and nutrition / health) equal distribution of individual productivity and creates a prerequisite to get rid of poverty.

Ensure a more equal distribution of education, win-win policy in developing countries leads to a great endorsement⁸⁰.

⁸⁰ World Bank (2005) pp. 127-132, Kabaş p. 100

3.2.2 Malnutrition or Undernourishment

There is a close link between poverty and malnutrition because low income families cannot get enough food. It is known that undernourished people very easily gets sick, their immune system is weakened, the muscle strength of them are decreased, they are not prolific in the business environment, psychological disorders are easily occurred. Namely, business capacity is low and life expectancy is very little. That's why they are in poor conditions it is hard to get rid of from poverty⁸¹.

Enough fed workers have the capacity to do work to earn needed income. And Ray claims that work capacity is increased by with nutrition. Another vicious cycle of poverty is observed here that: According to Ray, low income causes malnutrition as well as malnutrition leads to earn lower. This case describes the functional aspects of malnutrition. In fact, social and ethical aspects are also very important. This situation had to be overcome in poor countries leads to a vicious cycle⁸².

3.2.3 Inequality

Inequality is also one of the important determinants of the poverty. In many poor regions, high growth rates are not contributing the eliminating poverty because of high inequality. New works by World Bank show the importance of gender, ethnic, and racial inequality as a dimension and determinants of poverty. Social, economic, and ethnic divisions in regions are often sources of weak or failed development. In the extreme, vicious cycles of social division and failed development erupt into internal conflict within or across regions with devastating consequences for people⁸³.

Not only benefitting from growth even life expectancy from different income groups are very different. UN study indicates that recent research reveals that inequality in life expectancies among countries is also increasing. Nevertheless the continuing improvement of overall life expectancy among the wealthiest countries, significant inequalities are persistent and widening. After having declined between

⁸¹ World Bank (2005) pp. 127-128

⁸² Ray pp. 272-279

⁸³ World Bank (2005) pp. 125-128

1962 and 1987, health inequality among countries began to increase, and by 2002 had reached the same levels as in 1967. As of 2002, life expectancy among the countries with the poorest survival prospects had returned to the 1977 level of 44 years on average⁸⁴.

Same injustice can be seen also in the households. One of the great tragedies of poverty is the failure of sharing poverty equally within the family. Each individual in the family, including children and the elderly should be fed a minimum amount, even if, health care and other structures should benefit from economic opportunities. If this is not achieved the minimum amount cannot be productive and healthy. However, in case of extreme poverty, the equal sharing of resources will not benefit anyone. If they do not equally shared, in the case of some individuals can be healing.

The World Bank data there is a very high correlation between poverty ratio and Gini coefficients. Yet the biggest problem in this issue is that the source of poverty is higher inequality ratios or the same basic reason causes both higher poverty and higher inequality?

⁸⁴ UN (2009) pp. 69-70

CHAPTER 4

4. POVERTY PROFILE IN TURKEY

4.1 Literature Reviews

Poverty, one of the most important issues in development process, is a vital discipline in economics. That poverty was studied as a main subject in World Development Report by World Bank accelerated the studies of poverty.

The first definition of poverty was made by Seebohm Roventree in 1901. According to the definition poverty is something that does not meet the physical needs at min level such as food, and clothing that are necessary to maintain the biological existence of total revenue.

It can be argued that the studies aimed at measuring the dimensions of poverty in Turkey date back to recent years and are very limited.

Owing to the lack of officially set poverty line and rates, it can be suggested that the poverty literature in Turkey started in late 1990s. In Turkey, an official poverty line was first announced in 2004 based on the results of the 2002 Household Budget Survey. Therefore, as well as the studies aimed at measuring poverty and constructing poverty profile, there exists some field studies performed in a specific location with survey.

Some of these studies are; Dağdemir (1992), Erdoğan (1996), Dumanlı (1996), Dansuk (1997), Uygur and Kasnakoğlu (1998), Erdoğan (1998), Dağdemir (1999), Işık and Pınarcıoğlu (2001) Erdoğan (2002), Alıcı (2002) and Pamuk (2002) and Dayıoğlu (2007), World Bank (2000, 2003), World Bank and State Institute of

Statistics (2005), Pınar (2004), Buğra ve Keyder (2003 ve 2006) , Kalaycıoğlu and Rittersberger (2002) ,Coşkun (2012).

Dumanlı (1996) calculated the limit of poverty for 1987 and 1994 thanks to the amount of calorie that a person should take to be fed efficiently and enough per day.

Erdoğan (1996) obtained min food costs of the households with the help of the calorie that should take min per day by using 1994 Households Income and Consumption Expenses as Turkey in general, village, city and 7 geographical regions. Erdoğan (1998), analyzed poverty according to the approaches of basic needs and min food expenses using the same data. In Turkey, 4,60% of the city dwellers and 11,82% of village dwellers are poor. Erdoğan (1998) also studied the relationship between the demographic structure of the society and poverty and concluded that the drop in education level increases poverty.

As a similar study Dansuk (1997) argued the dimensions of poverty in Turkey and their relationship with the social demonstrations and determined that the rate of poverty is high among people with no education or low education, women, free of social security services and living in villages.

Dağdemir (1999) focuses on the poverty problem in Turkey during the economic recession period of 1987–1994. Besides the headcount rate, the change in poverty is analyzed using the poverty gap measure and income inequality among the poor.

Pınar (2004) focuses on the effects of public expenditures and taxes on income inequality using the 1994 Household Income and Consumption Survey and the 2002 Household Budget Survey. According to his results, expenditures and social transfers favorably affect the low-income groups.

Buğra and Keyder (2003 and 2006)'s studies focus on changing poverty kinds dealing with what factors determine poverty in both city and village levels. They determined the structure of immigration changed and the new immigrants were excluded from the society.

Mainly based on face-face interviews, Buğra and Keyder (2003)' research is about the new forms of poverty which result from a series of structural changes in Turkey with specific references to Istanbul.

Adaman and Keyder (2006) focus on the poor and socially excluded people in slums of the selected cities (Adana, Ankara, Diyarbakır, Gaziantep, Istanbul and Izmir) via interviews and meetings with socially excluded groups. Keyder (2005) studies the social exclusion in Istanbul mainly focusing on changes in the nature of employment, the commodification of land and housing.

As one can see, poverty studies in Turkey focus on income poverty in general and the other studies covering the other dimensions of poverty mostly rely on field studies.

4.2 Poverty Profile in Turkey

In this part, poverty profile in Turkey will be developed by examining how poverty changes with regard to household and individual characteristics such as education, age, gender etc. Poverty statistics are explained based on the results of Income and Life Conditions Research by TÜİK. As relative income poverty criterion has been accepted by TÜİK, this study has been depended on the criterion. Within this scope, raw data of Income and Life Conditions Research has been used to examine how poverty changes with regard to household and individual characteristics.

TÜİK conducted Household Income and Consumption Expenses Survey in 1987 for the first time. The next Household Income and Consumption Expenses Survey were carried out in 1994. Household Budget Surveys were performed regularly every year from 2002 to 2006. Income and Life Conditions Research on which panel survey method is used have been carried out within the scope of EU accession since 2006. The population rate living under the breadline in Turkey fell to the low levels by the end of 2002-2013.

Table 3.The poverty rates according to poverty line methods, 2002-2013

Methods	Percentage of poor individuals (%)											
	2002	2003	2004	2005	2006	2007 ⁽³⁾	2008	2009	2010	2011	2012	2013
Turkey												
Food poverty ⁽⁴⁾	1,35	1,29	1,29	0,87	0,74	0,48	0,54	0,48	.	.	.	.
Complete poverty (food+nonfood) ⁽⁴⁾	26,96	28,12	25,60	20,50	17,81	17,79	17,11	18,08	.	.	.	.
Below 1 \$ per capita per day ⁽¹⁾	0,20	0,01	0,02	0,01	.	.	.	.	.	.	.	.
Below 2,15 \$ per capita per day ⁽¹⁾	3,04	2,39	2,49	1,55	1,41	0,52	0,47	0,22	0,21	0,14	0,06	0,06
Below 4,3 \$ per capita per day ⁽¹⁾	30,30	23,75	20,89	16,36	13,33	8,41	6,83	4,35	3,66	2,79	2,27	2,06
Relative poverty based on expenditure ⁽²⁾⁽⁴⁾	14,74	15,51	14,18	16,16	14,50	14,70	15,06	15,12	.	.	.	.
Urban	2002	2003	2004	2005	2006	2007⁽³⁾	2008	2009	2010	2011	2012	2013
Food poverty ⁽⁴⁾	0,92	0,74	0,62	0,64	0,04	0,07	0,25	0,06	.	.	.	.
Complete poverty (food+nonfood) ⁽⁴⁾	21,95	22,30	16,57	12,83	9,31	10,36	9,38	8,86	.	.	.	.
Below 1 \$ per capita per day ⁽¹⁾	0,03	0,01	0,01	.	.	.	.	.	.	.	.	.
Below 2,15 \$ per capita per day ⁽¹⁾	2,37	1,54	1,23	0,97	0,24	0,09	0,19	0,04	0,04	0,02	0,02	0,02
Below 4,3 \$ per capita per day ⁽¹⁾	24,62	18,31	13,51	10,05	6,13	4,40	3,07	0,96	0,97	0,94	0,60	0,64
Relative poverty based on expenditure ⁽²⁾⁽⁴⁾	11,33	11,26	8,34	9,89	6,97	8,38	8,01	6,59	.	.	.	.
Rural												
Food poverty ⁽⁴⁾	2,01	2,15	2,36	1,24	1,91	1,41	1,18	1,42	.	.	.	.
Complete poverty (food+nonfood) ⁽⁴⁾	34,48	37,13	39,97	32,95	31,98	34,80	34,62	38,69	.	.	.	.
Below 1 \$ per capita per day ⁽¹⁾	0,46	0,01	0,02	0,04	.	.	.	.	.	.	.	.
Below 2,15 \$ per capita per day ⁽¹⁾	4,06	3,71	4,51	2,49	3,36	1,49	1,11	0,63	0,57	0,42	0,14	0,13
Below 4,3 \$ per capita per day ⁽¹⁾	38,82	32,18	32,62	26,59	25,35	17,59	15,33	11,92	9,61	6,83	5,88	5,13
Relative poverty based on expenditure ⁽²⁾⁽⁴⁾	19,86	22,08	23,48	26,35	27,06	29,16	31,00	34,20	.	.	.	.

Source: Turk Stat, Poverty Study, 2013 (1) Here the current PPP values in TL are used for the equivalents of 1 \$. (2) It's based on the 50% of equalized median consumption expenditure. (3) New population projections are used since 2007. (4) Values are not calculated due to the methodological revision studies since 2010.

In Table 3, Turkey has been examined in terms of rural, urban and the country in general between 2002 and 2013 within the scopes of food poverty, complete

poverty, below 1 \$ per capita per day, below 2,15 \$ per capita per day, below 4,3 \$ per capita per day, and relative poverty based on expenditure. Turkey is classified as an upper middle income economy or a lower middle income economy in World Bank Income. Furthermore, the scales, which are between 4,126 and 12,745 or 1,045 and 4,125 respectively, are valid as an upper middle income economy or lower income economy while calculating poverty in Turkey, so the scales of 4,3 \$ per capita per day and below 2,15 \$ per capita per day are taken into account.

Food poverty in Turkey and population rate, the daily income which is below 1 \$ is quite low. Population rate, the daily income of which is below 2, 15 and 4, 3 \$ decreased dramatically in the year given.

This situation can be interpreted as Turkey made great progress as of absolute poverty between 2002 and 2013.

In addition, when poverty rates in question are examined within the analysis of residential area, it is seen that rural poverty is high in comparison with urban poverty.

Population rates, daily income of which remains below 1 and 2,15 USA dollars with food poverty decrease within rural population as well and reach rather low values.

However, poverty rates calculated by taking food and non-food expenses into consideration are at rather high values within rural population. Population rate, the daily income of which remained below 4,3 USA dollars between 2010 and 2013 gets value below 1% within urban population, while is approximately 7% within rural population likewise. This situation shows rural poverty maintains its importance in Turkey.

Table 4.Income-Based Relative Poverty Threshold Number and Poverty Rate

Years	Poverty threshold (TL)	Number of poors(Thousand)	Poverty rate (%)
2006	2 822	16 932	25.0
2007	3616	15589	22.8
2008	3 775	16 381	23.7
2009	4 197	16 806	23.8
2010	4 426	16 746	23.5
2011	4 849	16 390	22.6
2012	5 373	16 602	22.6
2013	5 956	16 578	22.3

Source: Table is made by author using TurkStat data

In Table 4, income-based relative poverty indicators explained as a result of Income and Life Conditions Research are offered. In accordance with that income-based relative poverty rates in Turkey regressed from 25 to 22, 3 between years 2006-2013. A noticeable fall is not seen in the number of poor individuals.

Within the scope of Income and Life Conditions Research poverty threshold, the number of poor individuals and poverty rates are explained on the basis of level 1 regions. TÜİK, on the basis of level 1 region, calculates the number of poor individuals and poverty rates with regard to the poverty threshold calculated for both Turkey and regions separately.

4.2.1 Education

There is a strong relationship between education and poverty. Although the level of education increases has a reducing effect on poverty, the increase of poverty causes the level of education to decrease restricting the access to training services. Therefore, it is possible to talk about a two way causality relationship between poverty and education.

Table 5. Poverty rate based on education level, Turkey, 2006-2014

Years	Poverty rate (%)				
	Illiterate	Literate with degree	no Less than high school	High school or equivalent	Higher education
2006	32.8	27.8	15.4	14.3	0.7
2007	30.7	24.9	12.5	5.2	0.8
2008	29.5	24.2	13.3	5.2	0.7
2009	32.7	27.2	13.9	5.1	1.2
2010	28.8	27.5	14.3	4.5	1.0
2011	28.9	27.0	13.1	5.8	1.1
2012	30.1	26.1	13.5	5.9	1.1
2013	26.6	23.7	12.4	5.6	1.8
2014	27.7	25.1	12.5	5.7	1.3

Source: Table is made author with using Turk Stat data

As it seen in Table 5, there is significant difference between all groups in terms of poverty rates in Turkey. While the difference between illiterate level and higher education level was roughly 32% in 2006, this value maintained the same level approximately until 2014. There is a poverty difference of 30% between the lower and upper limit of education. Furthermore, the rise in educational level between 2006 and 2014 caused poverty rate to decrease. While illiterate level decreased at a rate of 5% between these years, less than high school level decreased at a rate of 7%. The biggest decrease is observed at the high school level as 9%. As well as the biggest effect of education is the increase of employment opportunities, it is accepted in literature that education enables an individual to adapt to social and environmental changes more easily, and has some roles such as increasing of political and social participation and protection against risks.

Monthly gross wage bounded to gender and education in 2006 and 2010 is shown as in the following. As it is also seen in the table, the rise in educational level is reflected to the wages and this rise reduces poverty rate. Even if the rise in educational level is higher in gross wages of females by comparison to males, wages of the male employees at every educational level is higher than female employees.

Table 6. Monthly Average Gross Wage and Yearly Average Gross Earnings by Sex and Educational Attainment

Educational attainment	Monthly average gross wage (TL)			
	Annual average gross earnings (TL)			
	2006	2010	2006	2010
Total	1 103	1 512	14 252	19 694
Primary school and below	764	1 032	9 676	13 099
Primary education and secondary school	760	1 026	9 640	13 043
High school	922	1 280	11 802	16 414
Vocational high school	1 233	1 593	16 334	21 280
Higher education	2 088	2 663	27 310	35 383
Male	1 107	1 510	14 316	19 683
Primary school and below	784	1 066	9 952	13 526
Primary education and secondary school	788	1 061	9 999	13 505
High school	943	1 317	12 042	16 907
Vocational high school	1 298	1 649	17 312	22 195
Higher education	2 231	2 842	29 258	37 878
Female	1 091	1 519	14 036	19 728
Primary school and below	650	874	8 159	11 065
Primary education and secondary school	640	870	8 064	10 949
High school	870	1 177	11 182	15 049
Vocational high school	944	1 336	11 990	17 109
Higher education	1 837	2 380	23 899	31 437

Source: Table is made author with using Turk Stat data

In order to understand the relationship between educational level and poverty more clearly, marriages at all educational levels in 2006 and 2010 have been examined assuming both parents work and household consists of 4 individuals (a family with two children) and calculated income per capita. The gross wages in those years have been converted to net wages according to the year's conditions and total wages have been calculated roughly dividing into 4 and the same negative relation has been observed.

Table 7. Income Based on Education Level

		2006				
MALE	FEMALE	MALE	FEMALE	total	daily	per person
Primary school and below	Primary school and below	6.691,04	5.588,67	12.279,710	33,64304	8,410760274
	Primary education and secondary school	6.691,05	5.502,72	12.193,770	33,40759	8,35189726
	High school	6.691,06	7.386,57	14.077,630	38,56885	9,642212329
	Vocational high school	6.691,07	7.985,12	14.676,190	40,20874	10,05218493
	Higher education	6.691,08	15.156,06	21.847,140	59,85518	14,96379452
Primary education and secondary school	Primary school and below	6.723,32	5.588,68	12.312,000	33,73151	8,432876712
	Primary education and secondary school	6.723,33	5.502,73	12.226,060	33,49605	8,374013699
	High school	6.723,34	7.386,58	14.109,920	38,65732	9,664328767
	Vocational high school	6.723,35	7.985,13	14.708,480	40,29721	10,07430137
	Higher education	6.723,36	15.156,07	21.879,430	59,94364	14,98591096
High school	Primary school and below	7.976,96	5.588,69	13.565,650	37,16616	9,291541096
	Primary education and secondary school	7.976,97	5.502,74	13.479,710	36,93071	9,232678082
	High school	7.976,98	7.386,59	15.363,570	42,09197	10,52299315
	Vocational high school	7.976,99	7.985,14	15.962,130	43,73186	10,93296575
	Higher education	7.976,10	15.156,08	23.132,180	63,37584	15,8439589
Vocational high school	Primary school and below	10.848,21	5.588,70	16.436,910	45,03263	11,25815753
	Primary education and secondary school	10.848,22	5.502,75	16.350,970	44,79718	11,19929452
	High school	10.848,23	7.386,60	18.234,830	49,95844	12,48960959
	Vocational high school	10.848,24	7.985,15	18.833,390	51,59833	12,89958219
	Higher education	10.848,25	15.156,09	26.004,340	71,24477	17,81119178

	Primary school and below	18.061,36	5.588,71	23.650,070	64,79471	16,19867808
	Primary education and secondary school	18.061,37	5.502,76	23.564,130	64,55926	16,13981507
Higher education	High school	18.061,38	7.386,61	25.447,990	69,72052	17,43013014
	Vocational high school	18.061,39	7.985,16	26.046,550	71,36041	17,84010274
	Higher education	18.061,40	15.156,10	33.217,500	91,00685	22,75171233

2010

	MALE	FEMALE	MALE	FEMALE	total	daily	per person
Primary school and below		Primary school and below	9.710,27	8.158,78	17.869,050	48,9563	12,23907534
		Primary education and secondary school	9.710,28	8.126,45	17.836,730	48,86775	12,21693836
		High school	9.710,29	10.607,25	20.317,540	55,66449	13,91612329
		Vocational high school	9.710,30	11.892,08	21.602,380	59,1846	14,79615068
		Higher education	9.710,31	20.169,12	29.879,430	81,86145	20,46536301
Primary education and secondary school		Primary school and below	9.669,90	8.158,79	17.828,690	48,84573	12,21143151
		Primary education and secondary school	9.669,91	8.126,46	17.796,370	48,75718	12,18929452
		High school	9.669,92	10.607,26	20.277,180	55,55392	13,88847945
		Vocational high school	9.669,93	11.892,09	21.562,020	59,07403	14,76850685
		Higher education	9.669,94	20.169,13	29.839,070	81,75088	20,43771918
High school		Primary school and below	12.174,93	8.158,80	20.333,730	55,70885	13,92721233
		Primary education and secondary school	12.174,94	8.126,47	20.301,410	55,6203	13,90507534
		High school	12.174,95	10.607,27	22.782,220	62,41704	15,60426027
		Vocational high school	12.174,96	11.892,10	24.067,060	65,93715	16,48428767
		Higher education	12.174,97	20.169,14	32.344,110	88,614	22,1535
	Primary school and below	14.421,42	8.158,81	22.580,230	61,86364	15,46591096	

Vocational school	Primary education and secondary school	14.421,43	8.126,48	22.547,910	61,7751	15,44377397
	High school	14.421,44	10.607,28	25.028,720	68,57184	17,1429589
	high Vocational high school	14.421,45	11.892,11	26.313,560	72,09195	18,0229863
	Higher education	14.421,46	20.169,15	34.590,610	94,76879	23,69219863
Higher education	Primary school and below	23.572,57	8.158,82	31.731,390	86,93532	21,73382877
	Primary education and secondary school	23.572,58	8.126,49	31.699,070	86,84677	21,71169178
	High school	23.572,59	10.607,29	34.179,880	93,64351	23,41087671
	Vocational high school	23.572,60	11.892,12	35.464,720	97,16362	24,29090411
	Higher education	23.572,61	20.169,16	43.741,770	119,8405	29,96011644

Source: Table is made by author using Turk Stat data

As it is seen in the tables, despite a recovery in 2010 rather than 2006, the most prosperous level is in the marriages with higher education levels and the poorest level is in the marriages with primary school and below levels, the daily income of which remains 2.15 dollars. The individuals with lower educational levels face with poverty risk.

The marriages of higher education levels reduce the risk of poverty, and facilitate better standard of living for their children. As the children of parents with higher education have better life conditions, better opportunities to improve themselves and better life standard, they face with less risk of poverty. On the other hand, the children of lower education levels face with many difficulties such as leaving school at an early age and working, that will be examined in detail in next parts, and they may have to get lower education as their parents, so poverty is transferred equally from one generation to the other one. As a result, solving the problem of poverty becomes harder.

4.2.2 Gender

People deprived of minimum life standards interact with the cases of unemployment, deprivation, discrimination and social exclusion. Females and children are the most disadvantageous groups. Today, studies about females who are mostly exposed to several discriminations and cannot participate in work life sufficiently are of great value all over the world.

Female employment in Turkey is lower when compared to EU countries. The rate of non-employed or unemployed females is high. Cultural factors and weak employment generation capacity of education are some of the reasons to explain the low employment rates of females in Turkey.

2004-2013 employment data according to gender in Turkey shows that male employment is three times more than female employment, in spite of the rise in female employments over the years.

Table 8. Economic Activity by Years and Sex (Thousand people, 15+ ages)

YEARS	TOTAL	MALE	FEMALE
2004	19 632	14 585	5 047
2005	20 067	14 959	5 108
2006	20 423	15 165	5 258
2007	20 738	15 382	5 356
2008	21 194	15 598	5 595
2009	21 277	15 406	5 871
2010	22 594	16 170	6 425
2011	24 110	17 137	6 973
2012	24 821	17 512	7 309
2013	25 524	17 883	7 641

Source: Table is made by author using Turk Stat data

As it is seen in the Table 8, between 2004 and 2013 male dominance over work life continues to grow, although the number of female employees rises. The number of male employees is about three times more than that of female employees. The female ones are proved to be the disadvantageous groups.

If the relationship of employment rate with genders is examined in more detailed, the severity of the situation could be seen in regions.

Table 9.Female-Male Employment According To Regions

YEARS	2004		2005		2006		2007		2008		2009	
REGIONS	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Istanbul	2 783	737	2 929	780	2 970	838	2 998	850	3 026	897	2 855	871
West												
Marmara	735	319	767	312	763	311	780	336	771	323	778	341
Aegean	2 130	865	2 131	779	2 167	790	2 173	806	2 156	784	2 114	885
East Marmara	1 348	439	1 439	478	1 488	487	1 527	498	1 587	529	1 538	550
West Anatolia	1 354	379	1 399	376	1 445	407	1 524	437	1 559	522	1 524	564
Mediterranean	1 733	532	1 785	623	1 863	697	1 923	728	1 935	732	1 945	766
Central												
Anatolia	740	199	765	242	762	212	779	206	757	174	767	218
West Black Sea	1 001	531	1 019	513	1 053	555	1 059	561	1 053	623	1 044	638
East Black Sea	620	476	636	452	611	435	588	422	639	432	635	440
Northeast												
Anatolia	459	233	444	234	435	201	409	188	434	227	436	216
Middle East												
Anatolia	588	132	554	165	568	207	590	195	620	158	638	185
Southeast												
Anatolia	1 095	204	1 092	155	1 038	118	1 032	129	1 062	195	1 132	197

YEARS	2010		2011		2012		2013	
REGIONS	Male	Female	Male	Female	Male	Female	Male	Female
Istanbul	2 988	959	3 161	1 050	3 281	1 212	3 351	1 308
West								
Marmara	798	358	845	362	864	383	879	400
Aegean	2 265	1 011	2 420	1 145	2 490	1 241	2 530	1 265
East Marmara	1 603	590	1 741	706	1 826	727	1 909	817
West Anatolia	1 598	595	1 675	612	1 711	632	1 757	667
Mediterranean	2 073	931	2 161	1 001	2 226	979	2 246	966
Central								
Anatolia	807	278	874	343	897	365	902	370
West Black								
Sea	1 029	570	1 095	642	1 068	598	1 058	562
East Black Sea	620	416	623	414	605	426	593	365
Northeast								
Anatolia	444	214	466	204	467	204	472	227
Middle East								
Anatolia	672	228	749	267	766	313	788	350
Southeast								
Anatolia	1 272	274	1 327	228	1 311	228	1 399	346

Source : Turk Stat

Turk Stat divides the regions in Turkey into twelve, and the noticeable part about is that Istanbul is regarded as a different region because of its population, thus, the number of employees in Istanbul is much higher than the other regions.

As it is seen in Table 9, based on employment, female poverty is higher than male poverty in all the regions. The regions that have the highest difference between female and male poverty rates are Central Anatolia and Southeast Anatolia regions, and the region that has the lowest difference is Aegean Region.

4.2.3 Health

Being deprived of the opportunities and options that are necessary for people to maintain a long and healthy life lies within the definition of poverty. The subject of health interests deeply both state and its citizens. The investments of state in health, accessibility to doctors, doctor efficiency, and sufficiency of medical organizations are of significance subjects in poverty being examined.

Table 10. The relationship of physicians and patients in Turkey between 2009 and 2014

Number of physicians, number of persons per physician and number of patient hospital visits per physician, 2009-2014			
Years	Number of physicians	Number of persons per physician	Number of patient hospital visits per physician
2009	118 641	612	4 447
2010	123 447	597	4 367
2011	126 029	593	4 850
2012	129 772	583	4 791
2013	133 775	573	4 712
2014	135 616	573	4 648

Source: Ministry of Health

The expenses of the state between 1999 and 2014 have increased substantially. In 2014 the expenses have reached 19 times more than the ones in 1999 and this is one of the most significant indicators of rise in employment level as one can see in the following tables 11 and 12.

That the state increases the investments of health services makes people prefer state hospitals rather than the private ones and gives the opportunity of accessing health services easily, especially for the people who have difficulty in accessing because of poverty. As in shown in table 10, between 2009 and 2014 there was no significant difference in the number of patients per physicians.

Table 11. Indicators on Health Expenditures

Sağlık harcamaları ile ilgili göstergeler, 1999-2014
Indicators on health expenditures, 1999-2014

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Toplam sağlık harcaması (Milyon TL) Total health expenditure (Million TL)	4 985	8 248	12 396	18 774	24 279	30 021	35 359	44 069	50 904	57 740	57 911	61 678	68 607	74 189	84 390	94 750
Toplam sağlık harcamasının gayri safi yurtiçi hasılaya oranı (%) Proportion of total health expenditure to gross domestic product (%)	4,8	4,9	5,2	5,4	5,3	5,4	5,4	5,8	6,0	6,1	6,1	5,6	5,3	5,2	5,4	5,4

Kaynak: TÜİK, Sağlık Harcamaları İstatistikleri
Source: TurkStat, Health Expenditure Statistics



Table 12. Number of Medical Instructions**Sağlık kurumu sayısı, toplam yatak sayısı ve 1000 kişi başına düşen yatak sayısı, 1967-2014**

Number of medical institutions, total hospital beds and number of hospital beds per 1000 population, 1967-2014

Yıllar Years	Toplam sağlık kurumu sayısı Total number of medical institutions	Yataklı sağlık kurumu sayısı ⁽²⁾ Number of inpatient medical institutions ⁽²⁾	Yataksız sağlık kurumu sayısı ⁽¹⁾ Number of outpatient medical institutions ⁽¹⁾	Toplam yatak sayısı ⁽²⁾ Total number of hospital beds ⁽²⁾	1000 kişi başına düşen yatak sayısı Number of hospital beds per 1000 population
1967	664	664	-	59 173	1.81
1968	681	681	-	64 966	1.93
1969	725	725	-	69 224	2.01
1970	743	743	-	71 486	2.02
1971	759	759	-	74 556	2.06
1972	778	778	-	77 372	2.08
1973	790	790	-	81 075	2.13
1974	796	796	-	83 458	2.14
1975	798	798	-	81 264	2.03
1976	790	790	-	82 945	2.03
1977	772	772	-	83 036	1.99
1978	776	776	-	86 526	2.03
1979	822	822	-	96 752	2.22
1980	827	827	-	99 117	2.23
1981	831	831	-	97 765	2.15
1982	648	648	-	96 138	2.06
1983	646	646	-	99 396	2.08
1984	687	687	-	100 496	2.05
1985	722	722	-	103 918	2.07
1986	736	736	-	107 152	2.08
1987	756	756	-	111 135	2.12
1988	777	777	-	112 248	2.11
1989	812	812	-	116 061	2.14
1990	857	857	-	120 738	2.19
1991	899	899	-	123 706	2.21
1992	928	928	-	126 611	2.22
1993	962	962	-	131 874	2.28
1994	982	982	-	134 665	2.29
1995	1 009	1 009	-	136 072	2.28
1996	1 034	1 034	-	139 919	2.31
1997	1 078	1 078	-	144 984	2.35
1998	1 138	1 138	-	148 987	2.39
1999	1 171	1 171	-	153 465	2.42
2000	10 747	1 183	9 564	134 950	2.08
2001	10 581	1 199	9 382	140 710	2.14
2002	9 685	1 156	8 529	164 471	2.48
2003	9 183	1 174	8 009	165 465	2.46
2004	9 038	1 217	7 821	166 707	2.45
2005	8 870	1 196	7 674	170 972	2.48
2006	9 831	1 203	8 628	174 342	2.50
2007	11 839	1 317	10 522	178 000	2.52
2008	13 818	1 350	12 468	183 183	2.56
2009	15 205	1 389	13 816	188 638	2.60
2010	26 993	1 439	25 554	200 239	2.72
2011	27 997	1 453	26 544	194 504	2.60
2012	29 960	1 483	28 477	200 072	2.65
2013	30 116	1 517	28 599	202 031	2.64
2014	30 176	1 528	28 648	206 836	2.66

Kaynak: Sağlık Bakanlığı

Source: Ministry of Health

⁽¹⁾ Sağlık Ocağı, Aile Hekimliği Birimi, Verem Savaş Dispanseri, AÇSAP Merkezi, Kanser Erken Teşhis, Tarama ve Eğitim Merkezi sayıları toplama dahil edilmiştir. Değerler geriye dönük güncellenmiştir. 2000 yılı öncesi için, tanıma uygun sağlıklı verilere ulaşılamamıştır.

⁽¹⁾ The numbers of Community Health Centers, Family Medicine Units, Tuberculosis Dispensaries, MCH/FP Centers, Cancer Early Diagnosis, Screening and Training Centers are included in the total. Values are updated backwards. Reliable data in compliance with the description could not be obtained before the year 2000.

⁽²⁾ 2002 yılı öncesinde Milli Savunma Bakanlığına bağlı

⁽²⁾ Ministry of National Defence hospitals are not included before 2002.

4.2.4 Household

Household is the base unit in which economic production, legacy, child raising, and sheltering arrange and take place.

While family is a social unit, household is the place where this unit lives. Household may be more or less than the family members. Therefore, in the studies carried out, poverty calculations have been done on the basis of the number of individuals living in the household.

Table 13.Rate of Poor Household

Household size	Rate of poor household (%)							
	2002	2003	2004	2005	2006	2007	2008	2009
TURKEY	22,45	23,02	20,67	15,42	13,98	13,64	13,52	14,54
1-2	16,51	13,41	14,49	8,44	10,95	9,36	9,85	11,52
3-4	16,37	17,08	13,71	9,22	8,27	8,06	8,23	9,41
5-6	29,03	31,67	27,40	22,41	17,54	20,79	21,14	21,79
7+	45,95	48,41	51,06	44,08	41,83	39,79	37,68	38,50

Source: Table is made by author using Turk Stat data

Table 14.Type of Family and Poverty

Years	Nucleus family (with children)	Nucleus family (without children)	Patriarchal or extensive family	A single adult family, other	TURKEY
2002	21,76	15,05	30,08	22,42	22,45
2003	23,92	13,25	28,87	19,16	23,02
2004	20,15	12,99	28,16	20,10	20,67
2005	15,03	8,35	23,15	11,75	15,42
2006	13,60	10,14	17,11	15,74	13,98
2007	12,58	7,92	20,28	14,19	13,64
2008	12,32	8,69	18,81	16,57	13,52
2009	12,98	9,81	21,43	16,62	14,54

Source: Table is made by author using Turk Stat data

As it is seen in the table13 there is a strong relation between household and poverty. Poverty rate increases as the household size grows in spite of the decrease in poverty rate in Turkey between 2002 and 2009. While in 2002, poverty rate in Turkey is 22,45%, poverty rate becomes higher in extensive families, and becomes lower in nucleus families. On the other hand, in 2009, poverty rate falls to 14,54%, while poverty rate in extensive families decreases, it still remains as higher than the general rate.

As it is seen in the table14, nucleus families face with less poverty risk than extensive families.

4.2.5 Employment Status and Sector

Table 15. Poverty rates according to employment status and sector of household member

Hanehalkı fertlerinin işteki durumuna ve çalıştığı sektöre göre yoksulluk oranları, TÜRKİYE
Poverty rates according to employment status and sector of household members, TURKEY

İşteki durum ve sektör - Employment status and sector	Fert yoksulluk oranı - Rate of poor individuals (%)							
	2002	2003	2004	2005	2006	2007(*)	2008	2009
İstihdamdaki fertler - Employed members	25.08	26.12	23.33	18.96	15.81	14.21	14.82	15.37
İşteki durum - Employment status								
Ücretli, maaşlı - Regular employee	13.64	15.28	10.35	6.57	6.00	5.82	5.93	6.05
Yevmiyeli - Casual employee	45.01	43.09	37.52	32.12	28.63	26.71	28.56	26.86
İşveren - Employer	8.99	8.84	6.94	4.80	3.75	3.15	1.87	2.33
Kendi hesabına - Self employed	29.91	32.38	30.48	26.22	22.06	22.89	24.10	22.49
Ücretsiz aile işçisi - Unpaid family workers	35.33	38.51	38.73	34.52	31.98	28.58	32.03	29.58
Sektör - Sector								
Tarım - Agriculture	36.42	39.89	40.88	37.24	33.86	32.05	37.97	33.01
Sanayi - Industry	20.99	21.34	15.64	9.85	10.12	9.70	9.71	9.63
Hizmet - Service	25.82	16.76	12.36	8.68	7.23	7.35	6.82	7.16

(*) Yeni nüfus projeksiyonlarına göre revize edilmiştir - Figures were revised according to new population projections.

2009 Yoksulluk Çalışması Sonuçları, TÜİK - Results of 2009 Poverty Study, TURKSTAT

The poorest individuals are casual employees who work irregularly, are paid irregularly, and are unaware of how to spend or save money properly, and unpaid family members who never get payment. Even though this trend tends to change in a positive way from 2002 towards 2009, these groups still remain as the most disadvantageous in terms of poverty. On the other hand, between 2002 and 2009, the most advantageous groups are regular employees who are paid regularly and monthly.

Of all the sectors, the most disadvantageous groups are the agricultural employees. Poverty rate of employees in agriculture changes a ratio of 3%, although poverty rate of employed members in general changes a ratio of 10% between 2002 and 2009. The condition of agricultural employees as a disadvantageous group will be examined in detail in the following table.

Table 16. Average Wages of Agricultural Employees (TL)

Years	Average daily wages of seasonal agricultural employees			Average monthly wages of permanent agricultural employees		
	Female	Male	Average	Female	Male	Average
1996	0,47	0,68	0,55	10	14	13
1997	1	1	1	26	30	30
1998	2	2	2	51	58	57
1999	3	4	3	90	108	107
2000	4	6	5	123	141	139
2001	5	7	7	163	203	200
2002	7	9	8	195	248	244
2003	9	12	11	232	306	297
2004	12	15	13	286	362	360
2005	14	18	15	314	403	391
2006	16	22	18	377	511	488
2007	19	26	22	550	706	694
2008	21	29	25	641	822	803
2009	23	32	27	650	836	806
2010	25	35	29	732	906	884
2011	29	38	33	748	1 022	979
2012	33	43	38	858	1 128	1 090
2013	36	48	42	1 032	1 262	1 232
2014	41	54	48	1 118	1 304	1 284

Sources: Agricultural Price Structure

Within the scope of the Table 15 shown agricultural employees, female employees and casual employees are the most disadvantageous groups. For this reason, we have examined the agricultural employees seasonally and regularly by dividing into males and females between 1996 and 2014 as in the Table16.

Table 17. Daily Wages both Sex and Type of Work

Years	Women (Season)	Women (Permenant)	Years	Man (Season)	Man (Permanent)
1996	0.47	0.33	1996	0.68	0.45
1997	0.91	0.88	1997	1	1.00
1998	1.98	1.70	1998	2	1.92
1999	2.95	3.01	1999	4	3.59
2000	3.93	4.09	2000	6	4.69
2001	4.87	5.43	2001	7	6.75
2002	6.85	6.49	2002	9	8.28
2003	9.46	7.75	2003	12	10.19
2004	11.92	9.54	2004	15	12.07
2005	13.62	10.48	2005	18	13.45
2006	16.04	12.57	2006	22	17.04
2007	19.17	18.34	2007	26	23.55
2008	21.18	21.37	2008	29	27.38
2009	22.65	21.68	2009	32	27.87
2010	24.75	24.38	2010	35	30.20
2011	28.52	24.94	2011	38	34.06
2012	33.26	28.60	2012	43	37.60
2013	36.24	34.39	2013	48	42.06
2014	41.43	37.26	2014	54	43.47

Source: Table is made by author using Turk Stat

There has been a severe difference for both male and female seasonal and regular employees in agricultural sector between 1996 and 2014. There is a severe recovery on the wages that the employees got between 1996 and 2014, and the rate of average wages increased more than 30 times. However there is no negative discrimination or disadvantage between females and males as in the other sectors. The real problem lies in seasonal and regular employees in agricultural sector. These values have been indicated in detail as in the following tables.

Table 18.1996-2014 Wages for Women

Years	Women Season	Women Permanant
1996	0,47	10
1997	1	26
1998	2	51
1999	3	90
2000	4	123
2001	5	163
2002	7	195
2003	9	232
2004	12	286
2005	14	314
2006	16	377
2007	19	550
2008	21	641
2009	23	650
2010	25	732
2011	29	748
2012	33	858
2013	36	1 032
2014	41	1 118

Source: Table is made by author using Turk Stat data

As we see woman have more disadvantages in this sector than men. In both cases, permanent and seasonal, their wages are lower than men.

4.2.6 Children (Below 18)

As the poor families cannot provide their children with sufficient facilities, they send them to work and make them work by force. The children starting to work at an early age become excluded from social life, stay away from educational environment and their health and psychology collapse. The poverty of the children is related to that of their parents. The crucial reason for that is to have a family of lower educational level and work at irregular jobs with low wages.

As it is seen in the following table, there is no severe difference between rural and urban through 2006 to 2012. The male children work more than the female ones and children over 15 works more likewise. The most significant reasons are cultural and social factors.

Table 19. Working Children in Economic Activity 2006-2012(Thousands)

	URBAN		RURAL	
	2006	2012	2006	2012
Total	490	400	400	493
6-14	120	79	165	214
15-17	370	322	235	279
Male	362	302	239	312
6-14	88	57	103	128
15-17	274	246	137	184
Female	128	98	161	181
6-14	32	22	63	86
15-17	96	76	98	95

Source: Table is made by author using Turk Stat DATA

As in the following Table 20 even though the number of self-employed is very low, the numbers of regular or casual employee and unpaid family employees are close, since the children in poor families take over some roles about making the family live on. For instance, they may have to look after their siblings or someone old at home.

Table 20.(2006) Status in Employment (Thousands)

AGE &SEX	(2006) Status in employment		
	Regular or casual employee	Self employed	Unpaid family worker
Total	505	24	362
6-14	103	6	176
15-17	402	18	186
Male	348	19	235
6-14	67	4	119
15-17	280	15	116
Female	157	5	127
6-14	36	2	57
15-17	121	3	70

Source: Turk Stat

As it can be seen in Table 20, in 2006, the total number of children employees as either regular or casual is 505 thousands, the 348 thousands of which are male and 157 thousands of which are female, which means male employees are higher than the female ones. The total number of children employees as self-employed is 24 thousands, the 19 thousands of which are male and 5 thousands of which are female, which means male employees are higher than the female ones, as well. And like the regular or casual employees and self-employed, the total value of children employees as unpaid family workers is 362 thousands, the 235 thousands of which are male and 127 thousands of which are female, which means male employees are higher than the female ones. What can be seen clearly from the values is the number of self-employed ones is very low and the number of male children employees is greater than the females. Although in 2012, as it can be seen in the following table, there has been some decrease in the number of children employees as regular or casual, there has been an increase in the number of unpaid family workers. Besides, the number of employees between the ages of 15 and 17 is much higher than the number of employees between the ages of 6 and 14.

Table 21. Status in employment (2012)

AGE &SEX	(2012) Status in employment		
	Regular or casual employee	Self employed	Unpaid family worker
Total	470	10	413
6-14	70	1	222
15-17	400	9	191
Male	353	10	252
6-14	50	1	133
15-17	303	9	118
Female	117	1	161
6-14	19	-	88
15-17	98	1	73

Source: Turk Stat

Table 22.Status in Employment for Urban and Rural(Thousands)

AGE &SEX	(2006) Status in employment					
	Regular or casual employee		Self employed		Unpaid family worker	
	Urban	Rural	Urban	Rural	Urban	Rural
Total	384	120	16	8	90	271
6-14	70	33	5	2	45	130
15-17	314	87	11	7	45	141
Male	272	75	12	7	77	158
6-14	49	19	3	2	37	82
15-17	224	56	10	5	41	75
Female	112	45	3	2	13	113
6-14	21	15	2	-	9	48
15-17	91	31	1	2	4	65

Source: Turk Stat

As it can be seen in Table 22, in 2006, the total number of children employees as either regular or casual is 384 thousands, the 272 thousands of which are male and 112 thousands of which are female, which means male employees are higher than the female ones within the scope of urban, and the total number of children employees as either regular or casual is 120 thousands, the 75 thousands of which are male and 45 thousands of which are female within the scope of rural. The total number of children employees as self-employed is 16 thousands in urban and 8 thousands in rural. The number of self-employed ones is higher in urban than in rural, and the number of male children employees are higher than the female ones in both urban and rural as well. In addition, like the regular or casual employees and self-employed, , the total number of children employees as unpaid family workers is 90 thousands in urban, and 271 thousands in rural which have a great male dominance over female in both urban and rural. As one can clearly notice from the number that, the number of unpaid family workers in terms of rural is far higher than in urban. That may result from gardening or agricultural factors, husbandry, lack of having access to schools etc. Although in 2012, there has been a slight decrease in both urban and rural, the number of children employees remain mostly the same.

Table 23.Status in employment (2012) for Rural and Urban (Thousands)
(2012) Status in employment

AGE &SEX	Regular or casual employee		Self employed		Unpaid family worker	
	Urban	Rural	Urban	Rural	Urban	Rural
Total	324	145	5	5	71	342
6-14	45	25	1	-	33	189
15-17	280	121	4	5	38	153
Male	246	107	5	5	51	200
6-14	32	18	1	-	24	110
15-17	214	88	4	5	28	91
Female	78	38	0	0	19	142
6-14	13	6	-	-	9	79
15-17	66	32	0	0	10	63

Source: Turk Stat

Table 24.Total Number of Children Not Attending School

Age group and sex	Total number of children not attending school					
	Total	Urban	Rural	TOTAL	Urban	Rural
	2006			2012		
	(Oct.-Nov.-Dec.)			(Oct.-Nov.-Dec.)		
Total	2 314	1 311	1 002	1 297	639	658
6-14	860	458	402	319	154	166
15-17	1 454	854	600	978	486	492
Male	983	630	353	628	340	289
6-14	345	212	133	133	76	58
15-17	638	418	220	495	264	231
Female	1 331	682	650	669	300	369
6-14	515	246	269	186	78	108
15-17	816	436	381	483	222	261

Source: Turk Stat

When the rates of rural and urban are compared in 2006 and 2012, there has been no severe difference between rural and urban. It shows that if the children come from a poor family, they tend to work no matter what their gender is and where they live.

Table 25.Activity of Non-Educated Children (Thousands)

Age group and sex	2006			2012		
	Engaged in economic activity	Engaged in household chores	Not working	Engaged in economic activity	Engaged in household chores	Not working
Total	618	1 023	673	448	503	346
6-14	115	293	452	53	112	155
15-17	502	730	222	395	391	192
Male	398	180	404	311	98	219
6-14	67	38	240	24	21	89
15-17	331	142	164	287	77	131
Female	220	842	269	136	405	127
6-14	48	254	212	29	91	66
15-17	171	588	57	108	314	61

Source: Turk Stat

The children, who do not attend school, become engaged in economic activity, household chores, or do not work at all. The reason for that are mainly the illiterate parents or the parents with lower educational levels as they do not make their children study. These findings have encouraged me to study the relationships between both the mother's educational level and her children, and the father's educational level and his children.

Table 26.Educational Status of Related Children

Educational status of related children(%)	Educational status of mother (%)					
	No graduate	Less than high school	General high school	Vocational and technical high school	Higher education	Unknown
No graduate	22.1	3.4	1.2	1.3	1.3	11.1
Less than high school	57.2	51.0	9.5	12.4	2.2	49.2
General high school	9.5	15.8	24.9	21.9	12.6	17.5
Vocational and technical high school	6.8	15.4	9.5	13.7	3.0	11.1
Higher education	4.4	14.5	54.9	50.6	81.0	12.7

Source: Table is made by author using Turk Stat data

Table 27.Educational Status of Related Girls

Educational status of related girls (%)	Educational status of mother(%)					
	No graduate	Less than high school	General high school	Vocational and technical high school	Higher education	Unknown
No graduate	32.0	4.2	1.5	0.8	1.8	14.7
Less than high school	54.5	54.5	5.8	9.8	2.7	55.9
General high school	6.1	15.2	24.3	26.2	9.7	20.6
Vocational and technical high school	3.9	12.4	10.2	10.7	3.5	2.9
Higher education	3.4	13.8	58.3	51.6	82.3	2.9

Source: Table is made by author using Turk Stat data

Table 28.Educational Status of Related Boys (%)

Educational status of related boys (%)	Educational status of mother (%)					
	No graduate	Less than high school	General high school	Vocational and technical high school	Higher education	Unknown
No graduate	11.5	2.5	0.5	1.8	0.8	6.9
Less than high school	60.0	47.2	13.4	15.2	1.7	41.4
General high school	13.1	16.5	25.8	17.0	14.4	10.3
Vocational and technical high school	9.9	18.7	9.3	17.0	3.4	20.7
Higher education	5.5	15.2	51.0	49.1	79.7	20.7

Source: Table is made by author using Turk Stat data

Table 29. Educational Status of Related Children (%)

Educational status of related children (%)	Educational status of father (%)						
	No graduate	Less than high school	General high school	Vocational and technical high school	Higher education	Unknown	
No graduate	30.7	7.8	3.0	1.5	1.3	14.2	
Less than high school	55.1	56.9	22.8	20.1	7.2	48.3	
General high school	7.3	13.5	25.9	19.7	17.8	18.3	
Vocational and technical high school	4.6	12.4	16.7	18.5	9.6	10.0	
Higher education	2.3	9.4	31.6	40.5	63.9	10.0	

Source: Table is made by author using Turk Stat data

Table 30. Educational Status of Related Girls (%)

Educational status of related girls(%)	Educational status of father (%)					
	No graduate	Less than high school	General high school	Vocational and technical high school	Higher education	Unknown
No graduate	42.7	11.2	4.1	1.6	1.4	20.0
Less than high school	48.9	59.3	25.5	20.8	8.1	50.8
General high school	4.5	11.6	25.1	21.2	17.0	18.5
Vocational and technical high school	2.5	9.2	14.9	15.5	9.7	4.6
Higher education	1.4	8.7	30.7	41.2	63.8	4.6

Source: Table is made by author using Turk Stat data

Table 31. Educational Status of Related Boys (%)

Educational status of related boys(%)	Educational status of father (%)						
	No graduate	Less than high school	General high school	Vocational and technical high school	Higher education	Unknown	
No graduate	17.2	4.2	1.8	1.3	1.2	7.3	
Less than high school	62.1	54.3	19.9	19.0	6.2	45.5	
General high school	10.4	15.4	26.9	18.1	18.8	16.4	
Vocational and technical high school	6.9	15.9	18.9	21.5	9.5	16.4	
Higher education	3.3	10.2	32.6	39.7	64.0	16.4	

Source: Table is made by author using Turk Stat data

As it is seen in the Tables from 26 to 31, there is strong relationship between the parents' educational levels and those of children as in poverty and education. When a mother does not graduate (22.1% in Turkey), her daughter does not graduate at a ratio of %32; her son does not graduate at a ratio of 11.5%. When a father does not graduate (30.7% in Turkey), his daughter does not graduate at a ratio of 42.7%; his son does not graduate at a ratio of 17.2%. Within the scope of these finding, we can conclude that an illiterate father has a more adverse effect on his children, especially on the girls. If the father doesn't graduate, he does not encourage his children to study. As it is stated in literature, the strongest relationship is between poverty and education, because being without education or illiterate produces new illiteracy.

CHAPTER 5

5. MODEL

5.1 Variables

It should be stated before discussing variables of the model that variables of the regression model in this study were chosen with the help of poverty definition and the determinants analyses discussed in previous chapters. With the help of the World Bank Poverty Manual, panel data regression techniques⁸⁵. And Stata Program⁸⁶ is used in this study. In this model, 124 countries, 28 of which are low income countries, 41 of which are lower middle income countries, 43 of which are upper middle income countries, and 12 of which are high income countries in 1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, and 2010.

Table 32. Description and Sources of Data Used in the Regression

Variable	Description	Period/Unit	Source
Poverty headcount ratio below the international poverty line at \$ 1.25 PPP (% of population)	Population below \$1.25 a day is the percentage of the population living on less than \$1.25 a day at 2005 international prices. As a result of revisions in PPP exchange rates, poverty rates for individual countries cannot be compared with poverty rates reported in earlier editions.	1981, 1984, 1987, 1990, 1993, 1996, 1999, 2002, 2005, 2008, and 2010, percentage	PovcalNet from World Bank Database
Inflation, average consumer prices	Increase in the general price level of goods and services in an economy over a period of time Data are in constant 2005 U.S. dollars.	Consistent with poverty data/ 2010:100	IMF, World Economic Outlook

⁸⁵ World Bank (2005) pp. 125-136

⁸⁶ World Bank (2005) pp. 168-213

			Database, April 2014
Nominal Exchange Rate	Official Exchange Rate with respect to US Dollar	Consistent with poverty data/ 2010:100	World Bank Database and usda.gov
Gross domestic product based on purchasing-power-parity (PPP) per capita GDP	GDP per capita is gross domestic product divided by midyear population.	Consistent with poverty data/ Current international dollar	IMF, World Economic Outlook Database, April 2014
GINI index	Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line.	Average of 1981-2010 period / Percentage (Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.)	World Bank Database
Primary School Enrollment Ratio	Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.	Average of 1981-2010 period / Percentage	UNESCO Institute for Statistics.

Secondary School Enrollment Ratio	Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.	Average of 1981-2010 period / Percentage	UNESCO Institute for Statistics.
Tertiary School Enrollment Ratio	Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachers.	Average of 1981-2010 period / Percentage	UNESCO Institute for Statistics.
CPIA economic management cluster average (Ins1)	The economic management cluster includes macroeconomic management, fiscal policy, and debt policy.	Average of 1981-2010 period / 1-6 (1=low to 6=high)	World Bank Group, CPIA database (http://www.worldbank.org/ida)
CPIA public sector management and institutions cluster average (Ins2)	The public sector management and institutions cluster includes property rights and rule-based governance, quality of budgetary and financial management, efficiency of revenue mobilization, quality of public administration, and transparency, accountability, and corruption in the public sector.	Average of 1981-2010 period / 1-6 (1=low to 6=high)	World Bank Group, CPIA database (http://www.worldbank.org/ida)

CPIA policies for social inclusion/equity cluster average (Ins3)	The policies for social inclusion and equity cluster include gender equality, equity of public resource use, building human resources, social protection and labor, and policies and institutions for environmental sustainability.	Average of 1981-2010 period / 1-6 (1=low to 6=high)	World Bank Group, CPIA database (http://www.worldbank.org/ida)
CPIA structural policies cluster average (Ins4)	The structural policies cluster includes trade, financial sector, and business regulatory environment.	Average of 1981-2010 period / 1-6 (1=low to 6=high)	World Bank Group, CPIA database (http://www.worldbank.org/ida)

5.2 Panel Least Squared Regression Model

After discussing determinants of the poverty; inflation, exchange rate and per capita GDP are chosen as macroeconomic independent variables and inequality, level of education, and institutional factors are preferred as microeconomic and other structural factors. So the first panel regression trial will be:

$$\ln p = \beta_0 + \beta_1 \ln inf + \beta_2 \ln er + \beta_3 \ln gdp c + \beta_4 \ln gini + \beta_4 * SEP + \beta_6 * SES + \beta_7 * SET + \beta_8 * ins1 + \beta_9 * ins2 + \beta_{10} * ins3 + \beta_{11} * ins4 + \epsilon. (1),$$

$\ln p$: natural logarithm of headcount poverty ratio below PPP international \$ 1.25

$\ln inf$: natural logarithm of consumer prices index

$\ln er$: , official exchange rate

$\ln gdp c$: and GDP per capita income

SEP: gross enrollment ratio of primary

SES, secondary

SET tertiary schools

The institutional assessments;

$ins1$: economic management

$ins2$: public sector management

$ins3$: inclusion policies

$ins4$: structural trade policies of that country.

Summary of the regression results are shown below.

Table 33.Summary of the Regression 1

Independent Variable	Robust			
	Coefficients	Std. Err.	t-statistic	P>|t|
Lninf	-0.12	0.06	-1.94	0.05
Lner	0.13	0.06	2.07	0.04
Lngdpc	-0.63	0.07	-9.15	0.00
Lngini	0.39	0.19	2.06	0.04
SEP	0.00	0.00	2.63	0.01
SES	-0.01	0.00	-2.79	0.01
SET	-0.03	0.01	-2.23	0.03
ins1	-0.21	0.15	-1.39	0.16
ins2	0.00	0.15	-0.02	0.98
ins3	0.17	0.08	2.11	0.04
ins4	0.02	0.16	0.12	0.90
_cons	6.71	0.81	8.27	0.00

Dependent Variable: Population Head Count Ratio (% of Population Living Below the Poverty Line)

Number of Observations : 617
 F(11, 605) : 33.99
 Prob > F : 0.0000
 R-Squared : 0.5982

The above estimation results are obtained by using panel data methods which is not used fixed effect estimator. The fixed effect estimator in this case is not suitable for our sample. The reason behind this issue is the structure of the Gini variable. The Gini variable is bounded between (0.0, 1.0) which is similar with a dummy variable, hence the most known phenomenon called dummy variable trap takes place when we employ fixed effect estimator. Therefore the Pooled OLS version of the Panel data estimator is used. On the other hand, before explaining the estimation results, the model misspecification (or diagnostic) of the regression should be checked. Thus, we first checked heteroscedasticity problem and conclude that there is no heteroscedasticity due to the reason that we have already used robust standard errors.

For the multicollinearity problem a researcher can use correlation matrix, as we did in the following Table 34.

As it can be seen from correlation matrix there is a very high correlation between CPI and exchange rate and it may cause multicollinearity problem. As a matter of fact the presence of a multicollinearity problem can be seen from the collinearity statistics table, given that if one of the regression coefficients' Variance Inflation Factors' (VIF) value is larger than 5, then there is a multicollinearity problem in the regression model. The table below shows that the VIF values of lninf and lner are bigger than 5.

Table 34.Correlation Matrix

	lnp	lninf	lner	lngdpc	lngini	SEP	SES	SET	ins1	ins2	ins3	ins4
lnp	1.000											
	-											
lninf	0.117	1.000										
	-											
lner	0.114	0.994	1.000									
	-											
lngdpc	0.693	0.191	0.190	1.000								
lngini	0.124	-0.115	-0.100	0.039	1.000							
	-											
SEP	0.251	-0.062	-0.043	0.335	0.216	1.000						
	-											
SES	0.637	0.078	0.093	0.593	-0.139	0.527	1.000					
	-											
SET	0.593	0.085	0.094	0.473	-0.171	0.288	0.810	1.000				
	-											
ins1	0.322	0.188	0.193	0.302	-0.142	0.128	0.397	0.395	1.000			
	-											
ins2	0.215	0.109	0.110	0.170	-0.189	0.240	0.417	0.369	0.694	1.000		
	-											
ins3	0.103	0.089	0.090	0.061	-0.204	0.010	0.267	0.335	0.570	0.727	1.000	
	-											
ins4	0.166	0.192	0.190	0.181	-0.100	0.127	0.277	0.221	0.766	0.868	0.713	1.000

So for this data set, as it discussed in previous chapter in detail, inflation and exchange rate can be used interchangeably because of very high correlation.

Table 35.Multicollinearity Statistics for The First Regression

Variable	VIF	1/VIF
Lninf	87.55	0.011422
Lner	86.72	0.011531
ins4	6.79	0.147314
ins2	5.77	0.173404
SES	4.97	0.201112
SET	3.56	0.281035
ins1	2.88	0.347802
ins3	2.57	0.388807
SEP	1.82	0.550328
Lngdpc	1.79	0.558868
Lngini	1.28	0.78318

Although the first panel regression gives implications to having robust results, exchange rate and structural trade policies data should be omitted from the analysis. So in order to have more robust results the regression may be;

$$\ln p = \beta_0 + \beta_1 * \ln inf + \beta_2 * \ln gdpc + \beta_3 * \ln gini + \beta_4 * SEP + \beta_5 * SES + \beta_6 * SET + \beta_7 * ins1 + \beta_8 * ins2 + \beta_9 * ins3 + \epsilon. (2)$$

For checking multicollinearity problem, VIF values of coefficient are given below. VIF values for all independent variable were used in the regression are less than 5 except enrollment ratios, so there may be multicollinearity problem between the variables.

Table 36.Multicollinearity Statistics for The Regression 2

Variable	VIF	1/VIF
SES	5.00	0.200044
SET	3.35	0.298075
ins2	3.23	0.309947
ins3	2.39	0.419059
ins1	2.20	0.45543
SEP	1.78	0.561289
Lngdpc	1.73	0.57792
Lngini	1.22	0.8178
Lninf	1.09	0.913635

The summary of the panel least squared second regression is given below:

Table 37.Summary of the Regression 2

Independent Variable	Robust			
	Coefficients	Std. Err.	t-statistic	P>|t|
Lninf	0.01	0.00	2.03	0.04
Lngdpc	-0.65	0.07	-9.03	0.00
Lngini	0.50	0.19	2.63	0.01
SEP	0.00	0.00	2.97	0.00
SES	-0.01	0.00	-2.79	0.01
SET	-0.02	0.01	-2.17	0.03
ins1	-0.24	0.13	-1.82	0.07
ins2	0.04	0.13	0.34	0.73
ins3	0.16	0.08	2.11	0.04
_cons	6.48	0.75	8.69	0.00

Dependent Variable: Population Head Count Ratio (% of Population Living Below the Poverty Line)

Number of Observations : 623
 F(11, 605) : 40.75
 Prob > F : 0.0000
 R-Squared : 0.5894

The regression 2 analyzes data from all of the 124 countries together. It takes the natural logarithm of poverty head count ratio or the percentage of population living below the \$1.25 per day poverty line (lnp) as the dependent variable and natural logarithm of average of the yearly inflation (lninf), natural logarithm of GDP per capita (lngdpc), natural logarithm of Gini coefficient (lngini), primary school enrollment ratio (SEP), secondary school enrollment ratio (SES), tertiary school enrollment ratio (SET), and institutional factors (ins1, ins2 and ins3) as regressors. The used model is Panel Least Squared model. The values of coefficients and R squared are very close to the zero. As mentioned in VIF statistics, there may be collinearity problems between primary, secondary, and tertiary enrollment ratios. In fact, it is impossible to enroll tertiary school without graduating or enrolling from primary and secondary school. Yet inverse is possible. Also determinants of the institutional factors are affected from growth even main determinant of the some institutional factors is growth itself. Therefore, to avoid multicollinearity and to have precise analysis about, institutional factors and primary and secondary school enrollment ratio variables are omitted from the analysis. So in order to have more robust results the third regression may be;

$$\ln p = \beta_0 + \beta_1 * \ln inf + \beta_2 * \ln gdpc + \beta_3 * \ln gini + \beta_4 * SET + \epsilon. \quad (3)$$

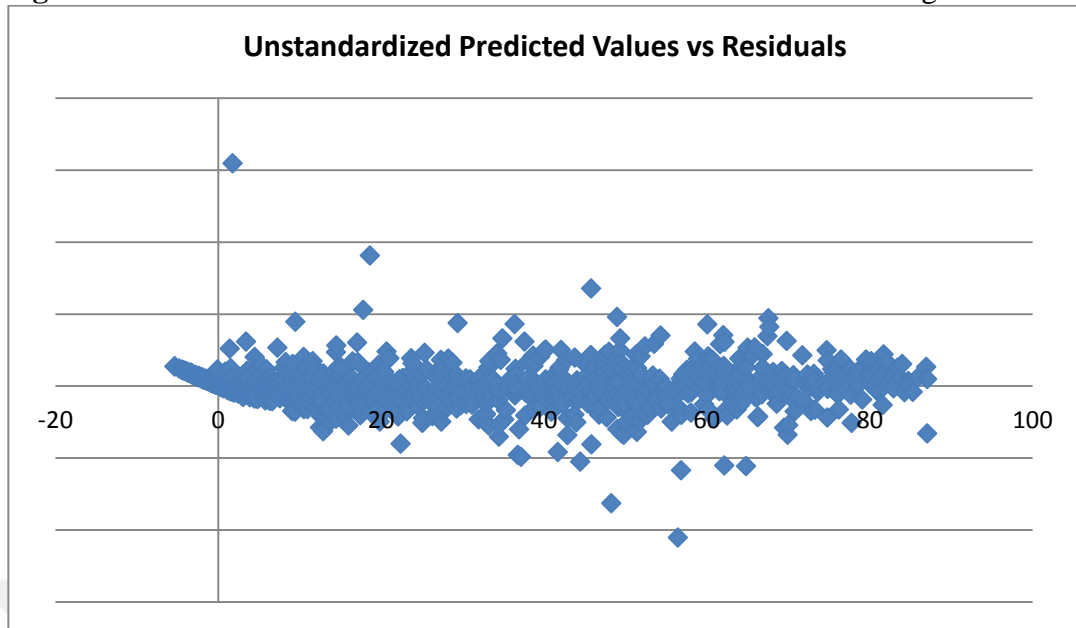
Table 38. Multicollinearity Statistics for The Regression 3

Variable	VIF	1/VIF
SET	2.1	0.5
lngdpc	1.9	0.5
lngini	1.1	0.9
Lninf	1.1	1.0

For checking multicollinearity problem, VIF values of coefficient are given above. VIF values for all independent variable were used in the regression are less than 5, so there is no severe multicollinearity problem in the variables.

After checking multicollinearity and because of using robust standard errors there is no heteroscedasticity problem.

Figure 1. Unstandardized Predicted Values vs Residuals for Second Regression



Next, the scatter plot shows that the residuals seem to be randomly distributed with respect to the predicted values for the model. So, the regression model may not be affected by omitted variable bias.

The above test and visual inspections show that the models do not have serious omitted variable bias, multicollinearity, or heteroskedasticity problems. Null hypothesis is that inflation has no significant effect on poverty:

$$H_0 : \beta_1=0$$

$$H_1 : \beta_1\neq 0$$

Table 39. Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
Poverty	1308	28	27	0	98
Inflation	1215	50	34	0	101
GDPC	1194	4188	4403	168	29403
Gini	1364	42	9	24	69
SET	1342	16	15	0	56

Table 40.Summary Statistics for Panel Least Squared Regression Model 3

Income Level	Independent Variable	Coefficient	Robust Std. Err.	t-statistic	P>|t|	R-Square	Number of observations
World	lninf	0.04	0.01	4.32	0.00	0.7649	1143
	lngdpc	-1.07	0.04	-24.71	0.00		
	lngini	2.73	0.15	17.74	0.00		
	SET	-0.04	0.00	-11.84	0.00		
	_cons	1.00	0.54	1.84	0.07		
Low Income Economies	lninf	0.01	0.00	4.07	0.00	0.4933	292
	lngdpc	-0.49	0.04	-12.46	0.00		
	lngini	0.16	0.10	1.58	0.12		
	SET	-0.03	0.01	-2.99	0.00		
	_cons	6.68	0.39	17.06	0.00		
Lower-middle-income economies	lninf	0.09	0.03	3.21	0.00	0.4767	391
	lngdpc	-0.92	0.12	-7.38	0.00		
	lngini	1.20	0.27	4.49	0.00		
	SET	-0.04	0.01	-6.15	0.00		
	_cons	5.62	0.95	5.89	0.00		
Upper-middle-income economies	lninf	0.03	0.01	2.49	0.01	0.6568	376
	lngdpc	-1.21	0.10	-12.06	0.00		
	lngini	4.46	0.26	16.92	0.00		
	SET	-0.03	0.01	-5.82	0.00		
	_cons	-4.48	1.43	-3.13	0.00		
High Income Economies	lninf	0.21	0.07	2.90	0.01	0.6903	84
	lngdpc	-1.32	0.28	-4.70	0.00		
	lngini	3.28	0.38	8.57	0.00		
	SET	-0.01	0.01	-1.22	0.23		
	_cons	-0.99	3.65	-0.27	0.79		

Dependent Variable: Population Head Count Ratio (% of Population Living Below the Poverty Line)

The above showed that results of panel least square regression 3 for all 124 countries and for different income groups. In this subsection each income groups are examined.

5.2.1 All Countries

In the panel least squared regression 3, the coefficient of \ln_{inf} is equal to 0.04. This implies that, *ceteris paribus*, one percentage increase in inflation level is associated with 0.04 percent increase in the head count poverty ratio. i.e., an increase in the general price level by unit percent can result in an increase in the percentage of population living below the poverty line by 0.04 percent. Namely elasticity of the poverty to the inflation is 4 percent. The sign of this coefficient is as expected and significant under the 1 percent.

Elasticity of poverty to the per capita income is -1.07 unit. The sign is expected and significant under the 1 percent. One unit percent increase in per capita GDP leads to 1.07 percent decrease in poverty. Therefore, elasticity is bigger than a unit and implies unit increase in growth leads decrease more than one unit in poverty.

Another factor that causes the poverty is inequality. It causes to compensate the effects of improvements of growth. Even as it is opposed to expectation the largest contribution is not coming from GDP per capita. The main determinant is Gini coefficient. Elasticity of poverty to the Gini coefficients is 2.73 units. The sign is expected and significant under the 1 percent. Namely, one unit percent decrease in Gini coefficients improves to 2.73 percent in poverty.

Coefficient of the tertiary school enrollment ratio is 4 percent. The sign of the coefficient is as expected and significant under 1 percent. The coefficient is statistically significant and compatible with the literature but value is very low. Hence, one unit increase in tertiary school enrollment will decrease the poverty .04 percent.

In summary, according to the result of the model indicates that for 124 countries poverty is increasing with inflation and inequality and decreasing with economic growth and education. Also, any effort to change inequality gives more contribution to poverty reduction than decreasing inflation or growing the economy.

5.2.2 Low Income Countries

There are 28 low income countries which have poverty and other data for the analysis. According to Povcal database, between 1981-2010 period, average head count poverty ratio for these countries is 59.9 percent, maximum poverty is 98.2 percent and the minimum is 6.6 percent. Also, average per capita GDP is 803.5 dollar in terms of year 2005 PPP, and the maximum is 2299.5 dollar and the lowest is 168.2 dollar. In the same period average Gini coefficients for this income group is 42.3 percent and increased to 64.3 as a highest record and 30.1 is the lowest among the group data. Lastly, according to World Bank database, for the same period, average tertiary enrollment ratio for the low income countries is only 3.1 percent and 20.9 percent is the highest and 0.5 percent the lowest ratio.

The second regression on Table 23 details the results from analysis of the relationship between the dependent variable and the independent variables in low income countries. The results, in this case, are slightly different than those in the case of all the countries combined. In the low income countries, the value of the coefficient between inflation and poverty is lower than for all countries case. The coefficient on $\ln\text{inf}$ is 0.01 which is small compared to the coefficient in for all countries' case. Although this coefficient is statistically significant and the sign of the coefficient is positive which is as expected yet the value of the coefficient is very small. Even the value of R-squared is 0.49 that is also low as compared to the previous regression. This means that in low income countries, inflation has a small positive relationship and very small contribution to the poverty. This apart, the coefficients on $\ln\text{gdpc}$ and SET have negative signs. That is, an increase in GDP per capita reduces poverty and so does the tertiary school enrollment. Also the coefficient on $\ln\text{gini}$ has negative sign as $\ln\text{inf}$. All the signs of the coefficients are as they are expected. However, the coefficient on $\ln\text{gini}$ is not statistically significant at 5 percent or even 10 percent level. On the other hand other three independent variables are statistically significant at 1 percent level.

Therefore, all of the independent variables have signs on the coefficients for low income countries similar to the all countries regression. So the coefficients of the independent variables, in low income countries confirm or wholly the findings in the

case of all the developing countries combined except the coefficient of $\ln gini$ is not statistically significant at 10 percent level. Since the R-squared is lower than the all countries regression, the independent variables can only explain 49 percent of the variation in the dependent variable.

5.2.3 Lower Middle Income Countries

There are 41 lower middle income countries which have poverty and other data for the analysis. According to Povcal database, between 1981-2010 period, average head count poverty ratio for these countries is 29.7 percent, maximum poverty is 84.2 percent and the minimum is 0.2 percent, as it is expected very high standard deviation that is 21.5 percent. Also, average per capita GDP is 2442.1 dollar in terms of year 2005 PPP, and the maximum is 16925.4 dollar and the lowest is 277.9 dollar. In the same period average Gini coefficients for this income group is 42.9 percent and increased to 61.1 as a highest record and 28.8 is the lowest among the group data. Lastly, according to World Bank database, for the same period, average tertiary enrollment ratio for the low income countries is 13.1 percent and 53.5 percent is the highest and 1.2 percent the lowest ratio.

From third line in regression 3 of Table 40, it can be seen the relationship between the poverty head count ratio and the independent variables in the lower middle income countries. The coefficients of $\ln inf$ and $\ln gini$ have a positive sign and positive relationship with the poverty head count ratio. This implies that in lower middle income countries also, an increase in the price level and inequality increase the percentage of population below the poverty line. All the coefficients of independent variables are statistically significant at 1 percent level and have the expected negative signs as well. The low value of R-squared that is 48 percent shows that only about 48 percent of the variations in the dependent variable can be explained by the independent variables. Among the all income groups the highest coefficients of tertiary school enrollment education is the lower middle economies.

Furthermore, the results in lower middle income countries are consistent with in the all countries cases.

5.2.4 Upper Middle Income Countries

According to World Bank classification, there are 43 upper middle income countries which have poverty and other data for the analysis. According to Povcal database, between 1981-2010 period, average head count poverty ratio for these countries is 11 percent, maximum poverty is 84 percent and the minimum is 0.2 percent. Also, average per capita GDP is 6539 dollar in terms of year 2005 PPP, and the maximum is 22658 dollar and the lowest is 287.1 dollar. In the same period average Gini coefficients for this income group is 43.7 percent and increased to 69.1 as a highest record and 26.9 is the lowest among the group data. Lastly, according to World Bank database, for the same period, average tertiary enrollment ratio for the low income countries is 21.7 percent and 52.3 percent is the highest and 1.4 percent the lowest ratio.

All four coefficients of control variables have expected signs and they are statistically significant at 1 percent level except $\ln inf$ that is statistically significant at 5 percent level. There are positive relation between poverty and variables of inflation and inequality as it is expected. Also education and growth make poverty rate decreases according to the regression model.

5.2.5 High Income Countries

According to World Bank classification, there are 12 high income countries which have poverty and other data for the analysis. According to Povcal database, between 1981-2010 period, average head count poverty ratio for these countries is 0.9 percent, maximum poverty is 8.3 percent and the minimum is 0.1 percent. Also, average per capita GDP is 12302 dollar in terms of year 2005 PPP, and the maximum is 29403 dollar and the lowest is 3262 dollar. In the same period average Gini coefficients for this income group is 34.9 percent and increased to 54.6 as a highest record and 23.9 is the lowest among the group data. Lastly, according to World Bank database, for the same period, average tertiary enrollment ratio for the low income

countries is 37.7 percent and 56.3 percent is the highest and 6.3 percent the lowest ratio.

In high income countries, elasticity of the poverty to the inflation is the highest among the all income groups that is 0.21. The sign of $\ln inf$ is positive as it is expected and statistically significant at 1 percent level. The signs of all control variables are as they are expected and they are statistically significant at 1 percent level except tertiary school enrollment ratio is not statistically significant even at 10 percent level.

5.3 Dynamic Panel Generalized Least Squared Regression Model

The reason why I formed dynamic GLS model after the static one is to comprehend the effect of poverty in the previous period on the next period. In order to see dynamic effects of poverty, lagged dependent variable ($\ln p$) is added to in the set of regressors.

$$\ln p_{i,t} = \beta_0 + \beta_1 * \ln p_{i,t-1} + \beta_2 * \ln inf_{i,t} + \beta_3 * \ln gdp_{i,t} + \beta_4 * \ln gini_{i,t} + \beta_5 * SEP_{i,t} + \varepsilon_{i,t} \quad (4),$$

Null hypothesis is that inflation has no significant effect on poverty:

$$H_0 : \beta_2 = 0$$

$$H_1 : \beta_2 \neq 0$$

The summary of the results are shown in below table.

Table 41. Summary Statistics for Dynamic Panel Generalized Least Squared Regression Model 4

Independent Variable	Robust				Income Level	R-Squared	Number of observations
	Coefficients	Std. Err.	t-statistic	P>|t|			
l.lnp	0.82	0.04	22.20	0.00			
lninf	-0.01	0.00	-2.27	0.02			
lngdpc	-0.28	0.05	-6.24	0.00			
lngini	0.60	0.10	6.29	0.00			
SET	0.00	0.00	-1.34	0.18			
_cons	0.42	0.35	1.20	0.23	World	0.9293	1049
l.lnp	0.79	0.08	9.95	0.00			
lninf	0.00	0.00	-0.30	0.76			
lngdpc	-0.18	0.05	-3.74	0.00			
lngini	0.13	0.05	2.67	0.01	Low		
SET	-0.01	0.01	-1.26	0.21	Income		
_cons	1.56	0.57	2.76	0.01	Economies	0.818	268
l.lnp	0.91	0.04	23.40	0.00			
lninf	-0.02	0.02	-0.85	0.40			
lngdpc	-0.19	0.06	-3.39	0.00	Lower-		
lngini	0.51	0.11	4.65	0.00	middle-		
SET	0.00	0.00	-0.81	0.42	income		
_cons	-0.12	0.52	-0.24	0.81	economies	0.8936	362
l.lnp	0.75	0.07	10.03	0.00			
lninf	-0.01	0.01	-1.39	0.17			
lngdpc	-0.44	0.15	-2.98	0.00	Upper-		
lngini	1.14	0.29	3.97	0.00	middle-		
SET	0.00	0.00	-0.52	0.60	income		
_cons	-0.15	1.16	-0.13	0.90	economies	0.8445	343
l.lnp	0.59	0.10	5.87	0.00			
lninf	0.05	0.09	0.56	0.58			
lngdpc	-0.71	0.27	-2.61	0.01			
lngini	1.00	0.54	1.87	0.07	High		
SET	0.00	0.01	-0.46	0.65	Income		
_cons	2.48	3.59	0.69	0.49	Economies	0.8096	76

5.3.1 All Countries

In the dynamic panel generalized least squared regression 4, it is clear that after the inclusion of lagged dependent variable ($l.lnp$) in the set of regressors, the effect of inflation on poverty is small and surprisingly negative, as the coefficient on $lninf$ is only -0.01 . Also, the coefficient is statistically insignificant at 1 percent level, yet is statistically significant at 5 percent level.

The one period natural logarithm of lagged value of the poverty determines 0.82 percent of the variation in the natural logarithm of poverty level in the current year. Elasticity of current poverty level to previous poverty level is 0.82. The coefficient is statistically significant at 1 percent level. The coefficient on $lngdpc$ has a negative sign which is consistent with the previous observations. The coefficient is statistically significant at 1 percent level as well. Educational attainment has a small but positive effect on poverty which is statistically insignificant. The $lngini$ coefficient has positive sign as it is expected and it is statistically significant at 1 percent level. The value of R-squared that is 0.9293 for this regression is also high which means that about 93 percent of the variations in the dependent variable can be explained by the independent variables.

5.3.2 Low Income Countries

The second regression on Table 41 details the results from analysis of the relationship between the dependent variable and the independent variables in low income countries. The results, in this case, are slightly different than those in the case of all the countries combined. In the low income countries, the sign of the coefficient between inflation and poverty is opposite to for all countries case and as it is expected. Although sign of $lninf$ is positive and expected, value of coefficient is close to zero and statistically insignificant. The one period natural logarithm of lagged value of the poverty determines 0.79 percent of the variation in the natural logarithm of poverty level in the current year. Elasticity of current poverty level to previous poverty level is 0.79. The coefficient is statistically significant at 1 percent level. The coefficient on $lngdpc$ has a negative sign which is consistent with the previous observations. The

coefficient of growth is statistically significant at 1 percent level as well. Educational attainment has a small and negative effect on poverty as it is expected which is statistically insignificant. The $\ln gini$ coefficient has positive sign as it is expected and it is statistically significant at 1 percent level. The value of R-squared that is 0.818 for this regression is also high which means that about 82 percent of the variations in the dependent variable can be explained by the independent variables.

5.3.3 Lower Middle Income Countries

The third regression on Table 41 details the results from analysis of the relationship between the dependent variable and the independent variables in lower middle income countries. The results, in this case, are almost same those in the case of all the countries combined except that the sign of $\ln inf$ is same with as in all countries case yet it is statistically insignificant. The one period natural logarithm of lagged value of the poverty determines 0.79 percent of the variation in the natural logarithm of poverty level in the current year. Elasticity of current poverty level to previous poverty level is 0.91. The coefficient is statistically significant at 1 percent level. The coefficient on $\ln gdp$ has a negative sign which is consistent with the previous observations. The coefficient of growth is statistically significant at 1 percent level as well. Educational attainment has a very small and positive effect on poverty as it is opposed to expect which is statistically insignificant. The $\ln gini$ coefficient has positive sign as it is expected and it is statistically significant at 1 percent level. The value of R-squared that is 0.894 for this regression is also high which means that about 89 percent of the variations in the dependent variable can be explained by the independent variables.

5.3.4 Upper Middle Income Countries

The fourth regression on Table 41 details the results from analysis of the relationship between the dependent variable and the independent variables in upper middle income countries. The case is almost same in upper middle income countries. The effect of inflation on poverty is unexpected and statistically insignificant even at 10 percent level.

5.3.5 High Income Countries

In high income countries, the case is almost same in upper middle income countries. The effect of inflation on poverty is as it expected and statistically insignificant even at 10 percent level.

5.4 About Inflation and Poverty

In dynamic generalized least squared regression model the result of the impacts on the inflation on the poverty is puzzling. A negative coefficient on \ln_{inf} means that an increase in inflation is associated with reduced levels of poverty. Also coefficients of the \ln_{inf} in some sub income groups are statistically insignificant. This may have many different explanations. First, since poverty has a negative correlation with income, one can argue that the governments might be following expansionary monetary policies to boost economic growth and reduce poverty and hence there is a negative relationship between poverty and inflation. As discussed in detail in previous chapter, poverty is declining. More people can afford goods and services that were previously out of their reach. So demand for essential commodities is increasing at a higher rate. Thus, reduced levels of poverty are pushing demands for consumer goods and services up. As a result, the prices increase and hence, a negative relationship between poverty level and inflation may be observed in the case of low income countries.

As discussed in the literature review, all studies predict a general increase in poverty rates based on 2007-2008 international food price crisis, but according to these regression models and set of data, there is not a significant relation between poverty and general price levels. Some reasons why changes in prices are not a significant explanatory variable may include:

Poverty head count ratios at 1.25 dollar have been used for analyses. By definition of poverty and poverty line, number of the poor is determined by income and prices. If a poverty headcount ratio at \$2 a day or national poverty rates instead of

\$1.25 a day (PPP) (percent of population) were used, then food prices might be a good representative of prices. In a same way instead of general prices level if basic food prices were used then analysis may give more robust results.

There is quite a variance in relative incomes depending on which group of households are selected for comparison. Thus, one could reach very different conclusions by selecting different sub-groups for comparison. Therefore, it is essential for future studies to be very precise about which groups are used for comparisons and why⁸⁷. Yet, as it can be seen Table 42, the poverty rate at \$1.25 a day decreased in 37 out of 47 countries and increased in 9 of them. A poverty rate at \$1.25 a day was even totally eradicated in Chile, Malaysia, and Russia. At this level of poverty, it is obvious that most of the poor's budget goes toward purchasing basic foods. Although staples prices more than doubled during the crisis, even the poverty rate at \$1.25 a day did not increase in the majority of the countries studied.

Table 42. Changes in Poverty Rate at \$1.25 a day (PPP) (% of population)

Country Name	Initial Poverty Rate		Poverty After Shock		Percentage Change	Status
	Percent	Year	Percent	Year		
Albania	0.85	2005	0.62	2008	-27.06	Poverty Decreased
Argentina	3.13	2006	0.87	2009	-72.20	Poverty Decreased
Armenia	36.80	2003	1.28	2008	-96.52	Poverty Decreased
Azerbaijan	0.03	2005	1.04	2008	3366.67	Poverty Increased
Belarus	0.18	2005	0.10	2008	-44.44	Poverty Decreased
Bolivia	19.62	2005	13.64	2007	-30.48	Poverty Decreased
Bosnia and Herzegovina	0.16	2004	0.04	2007	-75.00	Poverty Decreased
Brazil	7.76	2005	4.25	2008	-45.23	Poverty Decreased
Bulgaria	43.70	2003	1.04	2007	-97.62	Poverty Decreased
Cambodia	40.19	2004	28.27	2007	-29.66	Poverty Decreased
Cameroon	32.81	2001	9.56	2007	-70.86	Poverty Decreased
Central African Republic	62.43	2004	62.83	2008	0.64	Poverty Increased
Chile	0.19	2006	0.00	2009	-100.00	Poverty Decreased
Costa Rica	2.37	2005	0.65	2009	-72.57	Poverty Decreased
Cote d'Ivoire	23.34	2002	23.75	2008	1.76	Poverty Increased
Croatia	0.06	2004	0.06	2008	0.00	No Change

⁸⁷ Aksoy and Isik-Dikmelik pp. 16-17

Dominican Republic	3.96	2006	4.29	2007	8.33	Poverty Increased
Ecuador	9.78	2005	4.43	2009	-54.70	Poverty Decreased
El Salvador	11.17	2005	5.11	2008	-54.25	Poverty Decreased
Georgia	14.09	2005	15.27	2008	8.37	Poverty Increased
Guinea	70.13	2002	43.34	2007	-38.20	Poverty Decreased
Honduras	22.19	2005	23.25	2007	4.78	Poverty Increased
Hungary	0.13	2004	0.17	2007	30.77	Poverty Increased
Indonesia	28.04	2006	18.70	2009	-33.31	Poverty Decreased
Kazakhstan	3.12	2006	0.17	2007	-94.55	Poverty Decreased
Kyrgyz Republic	21.81	2004	1.90	2007	-91.29	Poverty Decreased
Lao PDR	43.96	2002	33.88	2008	-22.93	Poverty Decreased
Lithuania	0.43	2004	0.16	2008	-62.79	Poverty Decreased
Macedonia, FYR	0.47	2006	0.29	2008	-38.30	Poverty Decreased
Malaysia	0.54	2004	0.00	2008	-100.00	Poverty Decreased
Mexico	1.02	2006	1.79	2008	75.49	Poverty Increased
Moldova	8.14	2004	1.86	2007	-77.15	Poverty Decreased
Morocco	6.25	2001	2.50	2007	-60.00	Poverty Decreased
Mozambique	74.69	2003	59.58	2008	-20.23	Poverty Decreased
Niger	65.88	2005	43.09	2007	-34.59	Poverty Decreased
Panama	9.48	2006	2.37	2009	-75.00	Poverty Decreased
Paraguay	9.02	2005	5.08	2008	-43.68	Poverty Decreased
Peru	7.94	2006	5.90	2009	-25.69	Poverty Decreased
Poland	0.10	2005	0.07	2008	-30.00	Poverty Decreased
Romania	0.75	2005	0.50	2008	-33.33	Poverty Decreased
Russian Federation	0.16	2005	0.00	2008	-100.00	Poverty Decreased
Sri Lanka	13.95	2002	7.04	2007	-49.53	Poverty Decreased
Timor-Leste	52.94	2001	37.44	2007	-29.28	Poverty Decreased
Uganda	51.53	2005	37.73	2009	-26.78	Poverty Decreased
Ukraine	0.10	2005	0.04	2008	-60.00	Poverty Decreased
Uruguay	0.02	2006	0.03	2009	50.00	Poverty Increased
Vietnam	21.31	2006	13.10	2008	-38.53	Poverty Decreased

Source: World bank Stat Database

As can be seen in Table 43, the budget share of staples in the low-income countries studied is 11.3 percent. Even if poverty data for all low-income countries was available, the effect of higher food prices on poverty for these countries is unknown.

Table 43. Budget Shares for Food and Basic Foods

	Food, Beverages & Tobacco	Basic Foods
Low-income	0.485	0.113
Middle-income	0.311	0.039
High-income	0.204	0.018

Source: USDA⁸⁸.

Since the definitions of poverty and poverty lines include prices, it is reasonable to question which has a greater effect on the poor in the least developed countries⁸⁹: food or energy prices? As shown in Table 43, the food budget share of the low income countries is very high. Also, the poor themselves indicate that they were much more affected by increases in food prices than increases in oil prices because direct effects (those felt by consumers) were nearly always estimated to be much greater for food prices. However, the world fuel price increase was estimated to have a greater effect on poverty than the food price increase in some countries when accounting for indirect effects such as transportation costs and input prices⁹⁰. So, food prices inflation may not reflect the burden on consumers, even on the poor, as much as energy price inflation.

Consumers are not passive, even the poor⁹¹. If the price of one kind of food rises because of an international food crisis or draught they will change their diet. This will cause the price of the food to begin to decrease and the price of its substitute to increase. Even for staples foods (wheat, maize, or rice), the poor will responding to higher prices by buying cheaper or lower quality varieties.

Another consumer behavior during a food price crisis is changing the mode of consumption; when food prices increase, the poor incline to auto-consumption. Non-

⁸⁸ The 144 countries covered by the 2005 ICP are divided into low-, middle-, and high-income countries, based on their income relative to that of the United States.

⁸⁹ Compton et al. pp. 53-54

⁹⁰ Arndt et al. p.22, Compton et al. pp. 53-54

⁹¹ Compton et al. pp. 27-29

monetary consumption of food expenditure is at the maximum among the expenditure types.

The poverty line was summarized as in definition of poverty,

$$z = p * q = p * f(p, y, x)$$

where, p=price level, q=demand function, y=income, and x=characteristics of consumers.

According to this equation, the poverty rate increases with increases in price levels and decreases in income. As Aksoy and Isik-Dikmelik asked, how do the elasticities of the poverty rate change with respect to food price inflation⁹²?

$$z = p_{food} * q = p_{food} * f(p_{food}, y(p_{food}), x)$$

Increases in food prices directly and indirectly lead to an increase in wages according to the structure of the economy⁹³. An increase in prices decreases purchasing power, while an increase in wages makes income levels higher. In other words, increases in wages the offset effects of food price inflation for net food sellers and some food buyers who have business with agriculture. Ivanic and Martin's simulation model shows that if wages impact is considered, poverty rate increases become smoother.

Most of the literature discussed in the Second Section predicted that the international food price crisis would have instant impacts on poverty levels, whereas both the percentage changes in food prices and in poverty rates used in the regression model in this paper are yearly averages. Actually, there is no available data to show instant changes in poverty levels, and it is very difficult to evaluate policy goals with respect to instant changes in poverty.

⁹² Aksoy and Isik-Dikmelik pp. 10-12

⁹³ Aksoy and Isik-Dikmelik pp.5-8, Compton et al. pp. 27-28

Table 44. Annual Real Food Price Indices (2002-2004=100)

	2000	2005	2006	2007	2008	2009	2010	2011
Food	93.1	109.7	116.5	139.4	164.4	134.9	158.1	202.5
Cereals	87.7	96.8	112.0	146.7	195.9	149.4	156.0	221.3
Yearly Percentage Changes								
Food	-0.1	4.3	6.2	19.7	17.9	-18.0	17.2	28.1
Cereals	-3.9	-3.7	15.6	31.0	33.5	-23.8	4.4	41.9

Source: FAO Price Indices

The 2007-2008 international food crises are correlated with not only with high food prices, but also stock levels, government interventions, and international panic conditions. Several protests and riots might attract attentions on impacts of higher food prices on poverty. Nevertheless, as Table 44 shows, real food price levels and percentage changes in 2011 are higher than in 2007 and 2008, but the panic atmosphere in 2011 is not as obvious as during the years of the international food price crisis.

Yearly averages and changes in real food and staples prices may be misleading. But even monthly changes in real food prices in 2010 and 2011 show the same pattern as the crisis period in. If protests and riots are accepted as leading indicators of the worsening influence of higher food prices on welfare, then real price changes and levels in 2010 and 2011 are not as influential as in 2007 and 2008 on poverty rates. So, higher food prices with wrong government interventions and low stock levels may increase poverty rates, but there is no clear evidence that higher food prices do so.

CHAPTER 6

6. RESULTS AND DISCUSSION

In the beginning of the 1980's more than half of the world lived under the 1.25 poverty line while this ratio has decreased to one fifth of the world. It seems that fight against poverty is successful yet there are still 1.3 billion people living under 1.25 dollar a day; and over 2 billion people living under 2 dollar per day⁹⁴.

This study finds that in the fight against the poverty, the most important contribution is gained with economic growth.

The ultimate purpose of economy politics is to increase the welfare of all the individuals and classes that form the society. While economy grows, the best way to analyze the change in the level of welfares of all the individuals is to follow the change in the statistics of poverty and income distribution. Growth speed and the increase of income per capita give a general idea of the change in the level of welfare. On the other hand income distribution and poverty data are the main indicators that they clearly show the distribution of welfare increase between the individuals during growth. Within this scope, the income distribution that is about the sharing of national income in a country and poverty data are the important indicators to show the level of welfare in the country. Ricardo who emphasizes the decrease in the inequalities of income distribution is more important that the increase in the income level, explains the importance of the matter in the letter of Mathus as "According to you, economy researches the reasons for national welfare. However in my opinion, economy must research how these welfare growths are shared among the ones who join the production. I have believed the former definition is more deceptive and pointless, and the latter reflects the actual purpose of the science." Thus, what is more important that

⁹⁴ Lagarde

the economic growth is how distributing the income. The growth that makes the rich richer and makes the poor poorer will not be able to solve the problem of poverty.

Another result found in this study, there is no direct relation between exchange rate and poverty, but we know that for the poverty reduction, economic stability is the most important factor. Economic stability makes growth higher and sustainable. Exchange rate is one of the factors for the economic stability. With the degree of dollarization any fluctuations in exchange rate may hurt economic stability and directly growth. In the short run dollarization provide stability in exchange rate and increase welfare but in the long run, vulnerability risk increases and external shocks become more detrimental for the welfare of the economy. Also it increases the inequality and makes the poor poorer. Therefore although there is no direct relation between exchange rate fluctuations and poverty, exchange rate fluctuations make economic vulnerability higher via trade deficits, foreign debt stocks and external shocks.

Same expression is appropriate for the inflation and poverty relations. Although the literature shows that countries that had very high inflation rates did not have a good record in the poverty reduction strategy, the model used in this study showed that there is not significant relation between inflation and poverty. The source and composition of poverty is important because impacts of different inflation on poverty are also different. For example if there is a high inflation rates because of higher food prices then poverty in rural areas may decrease while in urban areas poverty rises. Welfare effects of high oil prices are varying in Middle East or Central Asia and in East Asia or Europe. Another factor is inflation and growth relations. Countries that have negative or double digit positive inflation are not growing well even sometimes in recession so their poverty rates are not decreasing even sometimes rising. Namely situation of exchange rate is valid in the general prices level. If the general prices destabilize economic structures then it also may hurt the economic welfare and lead to increase poverty rates.

In our study about Turkey's poverty profile scope of microeconomic conditions we come to several conclusions. Facing with poverty problem risk is very

high for children because of their families' living standards. In addition we examine the most disadvantages groups who are woman, work in agricultural sector, have lowest education level and live in rural. Turkey has been examined within the group of upper middle income countries as it is in that group according to the classification of World Bank Manual. According to the panel data regression result, Turkey is parallel to the world. As seen in the static and dynamic results of the model, all the results of the classifications are similar to those of upper lower economy in which Turkey exists. Even if the volume of the results are different, the effects of them are the same, that means, inequality and inflation increase poverty, while economy and education decrease poverty at static approach.



REFERENCES

Achia, T., N O, A. Wangombe, N. Khadioli, A Logistic Regression Model to Identify Key Determinants of Poverty Using Demographic and Health Survey Data, *European Journal of Social Sciences* – Volume 13, Number 1 (2010) pp. 38-45

Aksoy, A. and A. Isik-Dikmelik, Are Low Food Prices Pro-Poor? Net Food Buyers and Sellers in Low-Income Countries, The World Bank Development Group Trade Team, June 2008.

Alston, J. M., J. M. Beddow, and P. G. Pardey, Agricultural Research, Productivity, and Food Commodity Prices, *Agricultural and Resource Economics Update V 12 no.2- Nov/Dec 2008*, University of California, Gianni Foundation of Agricultural Economics

Ames, B., W. Brown, S. Devarajan, and A. Izquierdo, Macroeconomic Policy and Poverty Reduction, PRSP Sourcebook Chapter 6, April 2, 2001

Anderton, B. (2003), Extra-Euro Area Manufacturing Import Prices and Exchange Rate Pass-Through, ECB Working Paper No. 219

Asian Development Bank, Global food price inflation and developing Asia, Mandaluyong City, Philippines: Asian Development Bank, March 2011

Aydın, K., T. Güloğlu, Türkiye’de Nispi Yoksulluğun Sosyo-Ekonomik Analizi, Sosyal Siyaset Konferansları, Sayı: 60, 2011/1, s. 89–118. <http://www.iudergi.com/tr/index.php/sosyalsiyaset>

Baker, P. and C. W. Dugger, The New York Times Published: July 8, 2009

Berg, A. and E. Borensztein, Full Dollarization The Pros and Cons, *International Monetary Fund* December 2000, <https://www.imf.org/external/pubs/ft/issues/issues24/>

Berg, A. and E. Borensztein, The Choice of Exchange Rate Regime and Monetary Target in Highly Dollarized Economies, *International Monetary Fund*, IMF Working Paper No. WP/00/29, February 2000

Berg, A. and E. Borensztein, The Pros and Cons of Full Dollarization, *International Monetary Fund*, IMF Working Paper No. WP/00/50, March 2000

Bobenrieth, E. and B. D. Wright, The Food Price Crisis Of 2007/2008: Evidence And Implications, University Of Concepcion, Chile, And University Of California, Berkeley, Symposium Santiago, Chile 4-6 November 2009

Bolt, J. and J. L. van Zanden (2013). The First Update of the Maddison Project; Re-Estimating Growth Before 1820. Maddison Project Working Paper 4.

Brown L. R., World On the Edge: How to Prevent Environmental and Economic Collapse, New York: W.W. Norton & Company, 2010.

Ca' Zorzi, M., E. Hahn, and M. Sánchez, Exchange Rate Pass-Through in Emerging Markets, ECB Working Paper Series. NO 739 / March 2007

Cardoso, E., Inflation and Poverty, NBER Working Paper Series. NO 4006 / March 1992

Carter, C., G. Rauser, and A. Smith, The Food Price Boom and Bust, Agricultural and Resource Economics Update V 12 no.2- Nov/Dec 2008, University of California, Gianni Foundation of Agricultural Economics

Chen, S., and M. Ravallion, China is Poorer Than We Thought, But No Less Successful in The Fight Against Poverty, Policy Research Working Paper 4621, The World Bank Development Research Group Director's Office May 2008

Compton, J., S. Wiggins, and S. Keats, Impacts of the Global Food Crisis on the Poor: What is the Evidence?, Overseas Development Institute, 111 Westminster Bridge Road London UK, 2011.

Dansuk, E., "Türkiye'de Yoksulluğun Ölçülmesi ve Sosyo-Ekonomik Yapılarla İlişkisi", DPT Uzmanlık Tezi, Ankara, 1997

Dartanto, T., and S. Otsubo, Measurements and Determinants of Multifaceted Poverty: Absolute, Relative, and Subjective Poverty in Indonesia, JICA Research Institute No 54 February 2013, Japan.

de Gorter, H., D. R. Just, The Social Cost and Benefits of Biofuels: The Intersection of Environmental, Energy and Agricultural Policy, Applied Economic Perspectives and Policy (2010) volume 32, number 1, pp. 4–32

de Hoyos, R., R. Lessem, Food Shares in Consumption: New Evidence Using Engel Curves for the Developing World, mywebpage.wisc.edu/rlessem/web/engel.pdf

Demery, L. and L. Squire, Macroeconomic Adjustment and Poverty In Africa: An Emerging Picture, The World Bank Research Observer, Vol. 11, No. 1 (February 1996) pp.39-59

Doğan, E., Türkiye'de Yoksulluğun Ölçülmesi, Planlama Uzmanlık Tezi, Ankara, Nisan 2014

Dumanlı, R., “Yoksulluk ve Türkiye’deki Boyutları”, DPT Uzmanlık Tezi, Ankara, 1996

Easterly, W., The effect of IMF and World Bank programmes on poverty, WIDER Discussion Papers // World Institute for Development Economics (UNUWIDER), No. 2001/102, ISBN 9291900273. 2001

Epaulard, A., Macroeconomic Performance and Poverty Reduction, IMF Working Paper No WP/03/72, April 2003

European Food Security Group, The Food Price Crisis: What Needs to Be Done, October 2008 <http://www.scribd.com/doc/7404340/The-Food-Price-Crisis-What-needs-to-be-done>

FAO, Agricultural and Trade Statistics 2010

FAO, Hunger On the Rise. Soaring Prices Add 75 Million People to Global Hunger Rolls. Briefing Paper: Rome, 2008

Fields, G., Poverty, Inequality, and Development, Cambridge University Press, 1980

Green, D., From Poverty to Power, Oxfam International, Reprinted Edition 2013

Gündüz, Y. B., C. Ebeke, B. Hacibedel, L. Kaltani, The Economic Impact of IMF-Supported Programs in Low-Income Countries, IMF, 2013

Harrison, A., Globalization and Poverty, NBER Working Paper Series No 12347, June 2006

Headey, D., Rethinking the global food crisis: The role of trade shocks, Food Policy 36, 2011 136-146

Headey, D., S. Fan, Anatomy of a Crisis: the Causes and Consequences of Surging Food Prices, Agricultural Economics 39 (2008) supplement pp. 375–391

Helleiner, G., Trade, Exchange Rates And Global Poverty: Policies For The Poorest, University of Toronto, July 2011

Honohan, P., Dollarization and Exchange Rate Fluctuations, Prepared for the Central Bank of Turkey 75th Anniversary Conference: “Dollarization: Consequences and Policy Options” Istanbul, December 14-15, 2006

Horton, S., T., Kerr, and D., Diakosavvas, The Social Costs of Higher Food Prices: Some Cross-Country Evidence, World Development. Vol. 16, No. 7. pp. 847-856, 1988.

International Monetary Fund, Globalization and Inequality, World Economic Outlook, October 2007

International Monetary Fund, Food and Fuel Prices—Recent Developments, Macroeconomic Impact, and Policy Responses, Prepared by the Fiscal Affairs, Policy Development and Review, and Research Departments, June 30, 2008

International Monetary Fund, World Economic Outlook Database, October 2010

Ivanic M. and W. Martin, Implications of Higher Global Food Prices for Poverty in Low-Income Countries, *Agricultural Economics* 39 (2008) supplement pp. 405.416

Janvry, A., E. Sadoulet, The Global Food Crisis: Identification of the Vulnerable and Policy Responses, *Agricultural and Resource Economics Update V 12 no.2- Nov/Dec 2008*, University of California, Gianni Foundation of Agricultural Economics

Kabaş, T., Gelişmekte Olan Ülkelerde Yoksulluğun Nedenleri ve Yoksullukla Mücadele Yolları, Çukurova Üniversitesi Doktora Tezi, Adana 2009

Kappel, R., R. Pfeiffer, J. Werner, What Became of the Food Price Crisis in 2008?, Accepted for publication in: “Aussenwirtschaft”. *Swiss Review of International Economic Relations*, Issue 2010-I, NADEL, ETH Zürich, CH-8092 Zürich

Karapinar, B., C. Haberli, (eds) *Food Crises and the WTO*, Cambridge University Press 2010

Lagarde, C., “Stability and Growth for Poverty Reduction” International Monetary Fund Bretton Woods Committee Annual Meeting Washington DC, May 15, 2013

Ligon, E., Food Prices and the Welfare of Poor Consumers, *Agricultural and Resource Economics Update V 12 no.2- Nov/Dec 2008*, University of California, Gianni Foundation of Agricultural Economics

Mikkelsen, R., *The Global Fertilizer Situation: What Is Going On?*, IPNI, Merced CA.

Minoiu, C. and S. G. Reddy, Estimating Poverty and Inequality from Grouped Data: How Well Do Parametric Methods Perform? Columbia University, February 2008

Ncube, M.; Anyanwu, J.C. and Hausken, K., Inequality, Economic Growth, and Poverty in the Middle East and North Africa (MENA), Working Paper Series No 195 African Development Bank, Tunis, Tunisia, 2013

Ng F., A. Aksoy, Food Price Increases and Net Food Importing Countries: Lessons from the Recent Past, *Agricultural Economics* 39 (2008) supplement pp. 443-452

OECD (2001), The DAC Guidelines, Poverty Reduction

Øyen, E., Best Practices in Poverty Reduction An Analytical Framework, CROP International Studies in Poverty Research, 2002

Palmer, J., L., Inflation, Unemployment and Poverty, Lexington Books, 1973

Ravallion, M., Poverty Lines across the World, The World Bank Development Research Group Director's Office, April 2010.

Ravallion, M., S. Chen, and P. Sangraula, Dollar a Day Revisited, Policy Research Working Paper 4620, The World Bank Development Research Group Director's Office May 2008

Ray, D., Development Economics, Princeton University Press, 1998

Reinhart, C. M., K. S. Rogoff, and M. A. Savastano, Addicted to Dollars, NBER Working Paper Series Working Paper 10015, October 2003

Sachs, J., D., The End of Poverty, Penguin Books, 2005

Sawada, Y. and P. A. Yotopoulos, Growth and Poverty Reduction Under Globalization: The Systematic Impact of Exchange Rate Misalignment, SIEPR Discussion Paper No. 0614 December 2006, pp. 82-114.

Sen, A., Development As Freedom, Anchor Books, New York, 1999 pp. 87-110

Şeker, S. D., Türkiye'de Sosyal Transferlerin Yoksulluk Üzerindeki Etkileri, DPT Uzmanlık Tezi, Ankara, 2008

Talukdar, S. R., The Effect Of Inflation On Poverty In Developing Countries: A Panel Data Analysis, Texas Tech University, August 2012

Tripp, R., The Enabling Environment For Agricultural Technology In Sub-Saharan Africa And The Potential Role Of Donors, ODI Natural Resource Perspectives Number 84 April 2003.

United Nations, Rethinking Poverty Report on the World Social Situation 2010, New York, 2009

Walsh, J. P., Reconsidering the Role of Food Prices in Inflation. IMF Working Paper WP/11/71, April 2011.

World Bank (2002) Globalization, Growth and Poverty, 2002

World Bank (2005) Poverty Manual, All, JH Revision of August 8, 2005

World Bank Statistical Database, data.worldbank.org

World Ethanol and Biofuels Report, vol. 8, no. 16 (28 April 2010), p. 328

Wright, B., Speculators, Storage, and the Price of Rice, Agricultural and Resource Economics Update V 12 no.2- Nov/Dec 2008, University of California, Gianni Foundation of Agricultural Economics



APPENDICES

Table 45 .World Bank Income Based Classification of Countries

Low-income economies (\$1,045 or less)		
Afghanistan	Gambia, The	Nepal
Bangladesh	Guinea	Niger
Benin	Guinea-Bissau	Rwanda
Burkina Faso	Haiti	Sierra Leone
Burundi	Kenya	Somalia
Cambodia	Korea, Dem Rep.	Tajikistan
Central African Republic	Liberia	Tanzania
Chad	Madagascar	Togo
Comoros	Malawi	Uganda
Congo, Dem. Rep	Mali	Zimbabwe
Eritrea	Mozambique	
Ethiopia	Myanmar	
Lower-middle-income economies (\$1,046 to \$4,125)		
Armenia	Kiribati	São Tomé and Príncipe
Bhutan	Kosovo	Senegal
Bolivia	Kyrgyz Republic	Solomon Islands
Cameroon	Lao PDR	South Sudan
Cabo Verde	Lesotho	Sri Lanka
Congo, Rep.	Mauritania	Sudan
Côte d'Ivoire	Micronesia, Fed. Sts.	Swaziland
Djibouti	Moldova	Syrian Arab Republic
Egypt, Arab Rep.	Mongolia	Timor-Leste
El Salvador	Morocco	Ukraine
Georgia	Nicaragua	Uzbekistan
Ghana	Nigeria	Vanuatu
Guatemala	Pakistan	Vietnam
Guyana	Papua New Guinea	West Bank and Gaza
Honduras	Paraguay	Yemen, Rep.

Indonesia	Philippines	Zambia
India	Samoa	
Upper-middle-income economies (\$4,126 to \$12,745)		
Angola	Fiji	Palau
Albania	Gabon	Panama
Algeria	Grenada	Peru
American Samoa	Hungary	Romania
Argentina	Iran, Islamic Rep.	Serbia
Azerbaijan	Iraq	Seychelles
Belarus	Jamaica	South Africa
Belize	Jordan	St. Lucia
Bosnia and Herzegovina	Kazakhstan	St. Vincent and the Grenadines
Botswana	Lebanon	Suriname
Upper-middle-income economies (\$4,126 to \$12,745) (Continued)		
Brazil	Libya	Thailand
Bulgaria	Macedonia, FYR	Tonga
China	Malaysia	Tunisia
Colombia	Maldives	Turkey
Costa Rica	Marshall Islands	Turkmenistan
Cuba	Mauritius	Tuvalu
Dominica	Mexico	Venezuela, RB
Dominican Republic	Montenegro	
Ecuador	Namibia	
High-income economies (\$12,746 or more)		
Andorra	French Polynesia	Norway
Antigua and Barbuda	Germany	Oman
Aruba	Greece	Poland
Australia	Greenland	Portugal
Austria	Guam	Puerto Rico
Bahamas, The	Hong Kong SAR, China	Qatar
Bahrain	Iceland	Russian Federation
Barbados	Ireland	San Marino
Belgium	Isle of Man	Saudi Arabia
Bermuda	Israel	Singapore
Brunei Darussalam	Italy	Saint Maarten

Canada	Japan	Slovak Republic
Cayman Islands	Korea, Rep.	Slovenia
Channel Islands	Kuwait	Spain
Chile	Latvia	St. Kitts and Nevis
Croatia	Liechtenstein	St. Martin
Curacao	Lithuania	Sweden
Cyprus	Luxembourg	Switzerland
Czech Republic	Macao SAR, China	Trinidad and Tobago
Denmark	Malta	Turks and Caicos Islands
Estonia	Monaco	United Arab Emirates
Equatorial Guinea	Netherlands	United Kingdom
Faeroe Islands	New Caledonia	United States
Finland	New Zealand	Uruguay
France	Northern Mariana Islands	Virgin Islands (U.S.)



Table 46.Data Series for Low-Income Economies

Country	Year	POVERTY	Gini	Inf	E		Av.
					Rate	GDPC	SET
Bangladesh	1981	58.9	33.2	13.1	25.8	365.9	5.6
Bangladesh	1984	58.9	33.2	17.9	36.4	434.3	5.6
Bangladesh	1987	56.0	33.2	24.2	44.4	480.5	5.6
Bangladesh	1990	68.4	33.2	31.8	49.6	554.5	5.6
Bangladesh	1993	63.4	33.2	36.8	56.8	638.8	5.6
Bangladesh	1996	60.6	33.2	44.1	60.0	732.0	5.6
Bangladesh	1999	60.1	33.2	53.3	70.5	838.3	5.6
Bangladesh	2002	54.6	33.2	57.8	83.1	980.5	5.6
Bangladesh	2005	50.5	33.2	69.1	92.4	1213.1	5.6
Bangladesh	2008	46.6	33.2	87.7	98.5	1519.0	5.6
Bangladesh	2010	43.3	32.1	100.0	100.0	1709.3	5.6
Benin	1981	31.5	36.2	32.0	54.9	635.3	3.3
Benin	1984	40.3	36.2	34.5	88.2	661.9	3.3
Benin	1987	41.1	36.2	34.5	60.7	682.4	3.3
Benin	1990	42.1	36.2	36.0	55.0	759.9	3.3
Benin	1993	42.4	36.2	39.1	57.2	854.4	3.3
Benin	1996	39.3	36.2	65.1	103.3	941.1	3.3
Benin	1999	45.4	36.2	71.7	124.3	1044.5	3.3
Benin	2002	44.4	36.2	79.6	140.7	1168.0	3.3
Benin	2005	49.9	36.2	85.9	106.5	1279.4	3.3
Benin	2008	44.8	36.2	97.0	90.4	1434.7	3.3
Benin	2010	44.2	36.2	100.0	100.0	1453.6	3.3
Burkina Faso	1981	74.9	46.5	36.7	54.9	368.7	1.3
Burkina Faso	1984	74.8	46.5	46.7	88.2	398.1	1.3
Burkina Faso	1987	71.9	46.5	47.3	60.7	507.3	1.3
Burkina Faso	1990	72.2	46.5	48.7	55.0	556.2	1.3
Burkina Faso	1993	70.6	46.5	49.2	57.2	624.5	1.3
Burkina Faso	1996	70.6	39.0	70.2	103.3	725.7	1.3
Burkina Faso	1999	66.7	46.9	75.0	124.3	845.1	1.3
Burkina Faso	2002	60.6	52.4	80.2	140.7	941.4	1.3
Burkina Faso	2005	50.7	37.6	86.8	106.5	1074.2	1.3
Burkina Faso	2008	45.1	39.8	98.1	90.4	1236.3	1.3
Burkina Faso	2010	44.6	39.8	100.0	100.0	1335.2	1.3

Burundi	1981	86.5	33.3	5.7	7.3	317.8	1.3
Burundi	1984	88.7	33.3	7.4	9.7	342.5	1.3
Burundi	1987	85.5	33.3	8.4	10.0	412.8	1.3
Burundi	1990	84.9	33.3	10.5	13.9	464.9	1.3
Burundi	1993	85.6	33.3	13.2	19.7	476.9	1.3
Burundi	1996	88.9	33.3	22.9	24.6	390.8	1.3
Burundi	1999	86.2	42.4	34.9	45.8	410.2	1.3
Burundi	2002	83.8	42.4	46.6	75.6	404.5	1.3
Burundi	2005	82.8	42.4	58.4	87.9	470.4	1.3
Burundi	2008	80.6	33.3	91.8	96.3	544.8	1.3
Burundi	2010	79.8	33.3	100.0	100.0	577.9	1.3
Cambodia	1981	73.8	37.9				2.8
Cambodia	1984	70.1	37.9				2.8
Cambodia	1987	68.5	37.9	0.7		484.7	2.8
Cambodia	1990	57.6	37.9	3.4	10.2	564.6	2.8
Cambodia	1993	45.9	37.9	37.0	64.3	667.7	2.8
Cambodia	1996	40.6	37.9	48.2	62.7	677.5	2.8
Cambodia	1999	42.0	37.9	61.3	91.0	830.8	2.8
Cambodia	2002	43.0	37.9	60.7	93.5	1053.3	2.8
Cambodia	2005	33.8	37.9	67.8	97.8	1456.7	2.8
Cambodia	2008	22.8	37.9	96.8	96.9	1943.7	2.8
Cambodia	2010	14.7	37.9	100.0	100.0	2050.0	2.8
Central African Republic	1981	78.0	61.3	36.7	54.9	511.6	1.5
Central African Republic	1984	78.2	61.3	48.9	88.2	541.5	1.5
Central African Republic	1987	79.4	61.3	51.4	60.7	571.9	1.5
Central African Republic	1990	80.5	61.3	49.6	55.0	599.3	1.5
Central African Republic	1993	82.2	59.5	46.4	57.2	566.6	1.5
Central African Republic	1996	75.4	43.3	71.5	103.3	551.9	1.5
Central African Republic	1999	65.9	43.3	70.3	124.3	625.2	1.5
Central African Republic	2002	60.1	43.3	77.1	140.7	649.0	1.5
Central African Republic	2005	63.2	56.2	80.9	106.5	675.3	1.5
Central African Republic	2008	62.8	56.3	95.2	90.4	771.1	1.5
Central African Republic	2010	62.3	56.3	100.0	100.0	793.0	1.5
Chad	1981	79.9	39.5	35.9	54.9	435.3	1.1
Chad	1984	73.8	39.5	49.6	88.2	592.8	1.1
Chad	1987	71.8	39.5	44.0	60.7	704.2	1.1

Chad	1990	69.1	39.5	48.4	55.0	825.1	1.1
Chad	1993	74.0	39.5	43.2	57.2	920.4	1.1
Chad	1996	72.2	39.5	71.6	103.3	936.8	1.1
Chad	1999	71.3	39.5	72.2	124.3	1016.9	1.1
Chad	2002	67.4	39.5	88.6	140.7	1203.4	1.1
Chad	2005	40.1	39.5	85.9	106.5	1865.5	1.1
Chad	2008	44.9	39.5	92.8	90.4	2001.7	1.1
Chad	2010	46.4	39.5	100.0	100.0	2299.5	1.1
Comoros	1981	40.0	44.1	35.2	73.2	640.4	2.9
Comoros	1984	37.8	44.1	46.9	117.6	772.6	2.9
Comoros	1987	38.8	44.1	46.6	80.9	802.6	2.9
Comoros	1990	40.0	44.1	45.2	73.3	853.0	2.9
Comoros	1993	40.6	44.1	46.2	76.2	956.2	2.9
Comoros	1996	44.9	44.1	60.4	103.3	907.4	2.9
Comoros	1999	45.2	44.1	62.8	124.3	980.9	2.9
Comoros	2002	44.8	44.1	72.7	140.7	1045.2	2.9
Comoros	2005	45.5	64.3	81.1	106.5	1128.0	2.9
Comoros	2008	47.7	64.3	91.8	90.4	1174.5	2.9
Comoros	2010	48.3	64.3	100.0	100.0	1193.9	2.9
Congo, Dem. Rep.	1981	45.7	44.1	0.0	0.0	609.3	2.6
Congo, Dem. Rep.	1984	46.7	44.1	0.0	0.0	668.7	2.6
Congo, Dem. Rep.	1987	47.2	44.1	0.0	0.0	707.5	2.6
Congo, Dem. Rep.	1990	56.3	44.1	0.0	0.0	663.3	2.6
Congo, Dem. Rep.	1993	77.3	44.1	0.0	0.0	461.9	2.6
Congo, Dem. Rep.	1996	82.1	44.1	0.0	0.1	428.8	2.6
Congo, Dem. Rep.	1999	87.2	44.1	0.7	0.4	374.9	2.6
Congo, Dem. Rep.	2002	90.1	44.1	25.0	38.3	344.5	2.6
Congo, Dem. Rep.	2005	88.2	44.1	35.5	52.3	435.4	2.6
Congo, Dem. Rep.	2008	86.2	44.4	55.4	61.7	511.0	2.6
Congo, Dem. Rep.	2010	85.0	44.4	100.0	100.0	541.0	2.6
Ethiopia	1981	62.6	29.8	11.7	14.4	313.9	1.1
Ethiopia	1984	67.7	29.8	13.0	14.4	348.3	1.1
Ethiopia	1987	57.9	29.8	14.8	14.4	377.8	1.1
Ethiopia	1990	62.1	29.8	17.4	14.4	392.2	1.1
Ethiopia	1993	62.2	29.8	28.1	34.7	367.3	1.1
Ethiopia	1996	51.9	29.8	32.5	44.1	441.3	1.1

Ethiopia	1999	55.2	29.8	33.0	55.1	446.2	1.1
Ethiopia	2002	48.2	29.8	32.7	59.5	506.9	1.1
Ethiopia	2005	39.0	29.8	44.4	60.1	630.2	1.1
Ethiopia	2008	32.2	29.8	85.2	66.6	881.1	1.1
Ethiopia	2010	30.7	29.8	100.0	100.0	1047.2	1.1
Gambia, The	1981	45.8	46.3	7.4	7.1	755.5	2.0
Gambia, The	1984	72.9	46.3	10.8	12.8	974.3	2.0
Gambia, The	1987	71.3	46.3	24.8	25.3	1017.3	2.0
Gambia, The	1990	68.5	46.3	33.6	28.1	1128.0	2.0
Gambia, The	1993	63.6	46.3	42.5	32.5	1204.9	2.0
Gambia, The	1996	67.8	46.3	46.8	35.0	1239.3	2.0
Gambia, The	1999	60.0	49.9	50.4	40.7	1369.7	2.0
Gambia, The	2002	33.4	46.9	57.7	71.1	1437.7	2.0
Gambia, The	2005	33.6	46.9	81.1	102.0	1568.9	2.0
Gambia, The	2008	32.1	46.9	91.0	79.2	1723.6	2.0
Gambia, The	2010	29.8	46.9	100.0	100.0	1886.9	2.0
Guinea	1981	85.3	46.8	1.0	0.4		3.1
Guinea	1984	86.6	46.8	2.0	0.4		3.1
Guinea	1987	91.9	46.8	5.5	7.5		3.1
Guinea	1990	92.3	46.8	11.2	11.5	647.8	3.1
Guinea	1993	74.0	39.5	16.8	16.7	681.8	3.1
Guinea	1996	63.7	40.4	19.0	17.5	748.9	3.1
Guinea	1999	60.2	42.9	21.3	24.2	840.4	3.1
Guinea	2002	56.4	39.6	24.7	34.5	937.6	3.1
Guinea	2005	53.6	39.6	42.2	63.6	952.0	3.1
Guinea	2008	42.3	39.6	82.7	80.4	1054.0	3.1
Guinea	2010	38.3	39.6	100.0	100.0	1040.1	3.1
Guinea-Bissau	1981	47.5	47.8	0.1	0.1	665.8	1.8
Guinea-Bissau	1984	46.1	47.8	0.2	0.3	759.4	1.8
Guinea-Bissau	1987	45.9	47.8	1.2	1.7	840.0	1.8
Guinea-Bissau	1990	42.3	47.8	4.7	6.8	965.7	1.8
Guinea-Bissau	1993	52.1	47.8	18.7	31.3	1066.0	1.8
Guinea-Bissau	1996	40.1	47.8	47.1	81.9	1200.1	1.8
Guinea-Bissau	1999	49.8	47.8	74.3	124.3	983.7	1.8
Guinea-Bissau	2002	48.9	35.5	86.0	140.7	979.9	1.8
Guinea-Bissau	2005	49.5	35.5	86.4	106.5	1016.7	1.8

Guinea-Bissau	2008	48.0	35.5	100.6	90.4	1122.7	1.8
Guinea-Bissau	2010	46.5	35.5	100.0	100.0	1170.8	1.8
Haiti	1981	45.2	59.2	2.6	12.6	907.1	1.0
Haiti	1984	51.4	59.2	3.3	12.6	943.1	1.0
Haiti	1987	52.6	59.2	3.3	12.6	970.8	1.0
Haiti	1990	49.0	59.2	4.5	12.6	1016.8	1.0
Haiti	1993	59.3	59.2	7.6	32.2	976.9	1.0
Haiti	1996	61.2	59.2	17.1	39.5	989.0	1.0
Haiti	1999	60.4	59.2	24.2	42.6	1052.9	1.0
Haiti	2002	62.3	59.2	34.4	73.5	1059.9	1.0
Haiti	2005	64.4	59.2	65.2	101.6	1075.8	1.0
Haiti	2008	63.6	59.2	92.8	98.3	1188.3	1.0
Haiti	2010	65.3	59.2	100.0	100.0	1149.8	1.0
Kenya	1981	39.2	57.3	4.4	11.4	702.2	2.2
Kenya	1984	40.9	57.3	6.7	18.2	783.0	2.2
Kenya	1987	37.6	57.3	9.3	20.8	896.2	2.2
Kenya	1990	36.2	57.3	11.6	28.9	1044.6	2.2
Kenya	1993	34.2	57.2	25.7	73.2	1038.9	2.2
Kenya	1996	20.4	42.1	36.6	72.1	1143.0	2.2
Kenya	1999	24.1	44.4	46.3	88.8	1183.6	2.2
Kenya	2002	34.6	47.1	55.0	99.4	1230.6	2.2
Kenya	2005	43.4	29.9	68.1	95.4	1340.1	2.2
Kenya	2008	40.6	29.9	86.7	87.3	1541.0	2.2
Kenya	2010	39.9	29.9	100.0	100.0	1619.1	2.2
Liberia	1981	8.6	38.1		1.4		9.9
Liberia	1984	12.4	38.1		1.4		9.9
Liberia	1987	13.8	38.1		1.4		9.9
Liberia	1990	68.5	38.1		1.4		9.9
Liberia	1993	96.6	38.1		1.4		9.9
Liberia	1996	98.2	38.1		1.4		9.9
Liberia	1999	80.0	38.1	36.8	58.7		9.9
Liberia	2002	69.7	38.1	49.5	86.5	529.3	9.9
Liberia	2005	86.5	38.1	60.5	80.0	446.6	9.9
Liberia	2008	83.1	38.1	86.8	88.5	545.9	9.9
Liberia	2010	82.6	38.1	100.0	100.0	571.1	9.9
Madagascar	1981	87.3	46.1	2.2	2.6	609.2	3.0

Madagascar	1984	82.4	46.1	3.7	5.5	619.5	3.0
Madagascar	1987	78.7	46.1	5.5	10.2	641.1	3.0
Madagascar	1990	74.1	46.1	8.4	14.3	728.3	3.0
Madagascar	1993	72.5	46.1	11.5	18.3	698.5	3.0
Madagascar	1996	73.4	46.1	28.6	38.9	703.9	3.0
Madagascar	1999	82.3	41.8	34.3	60.1	757.2	3.0
Madagascar	2002	75.3	41.8	47.2	65.4	712.5	3.0
Madagascar	2005	67.8	47.2	62.9	95.8	849.6	3.0
Madagascar	2008	71.6	47.2	84.0	81.7	1011.5	3.0
Madagascar	2010	81.3	44.1	100.0	100.0	942.2	3.0
Malawi	1981	83.6	43.9	0.6	0.6	324.0	0.5
Malawi	1984	84.1	43.9	0.8	0.9	380.0	0.5
Malawi	1987	90.5	43.9	1.3	1.5	370.7	0.5
Malawi	1990	89.0	43.9	2.2	1.8	393.5	0.5
Malawi	1993	83.7	43.9	3.6	2.9	451.5	0.5
Malawi	1996	80.7	43.9	12.2	10.2	517.6	0.5
Malawi	1999	80.5	43.9	25.0	29.3	556.2	0.5
Malawi	2002	80.0	43.9	45.6	51.0	533.3	0.5
Malawi	2005	74.0	43.9	64.2	78.7	605.6	0.5
Malawi	2008	67.3	43.9	85.9	93.4	727.4	0.5
Malawi	2010	64.4	43.9	100.0	100.0	814.2	0.5
Mali	1981	83.4	33.0	41.8	54.9	359.5	2.1
Mali	1984	82.7	33.0	53.1	88.2	384.2	2.1
Mali	1987	86.9	33.0	48.6	60.7	412.3	2.1
Mali	1990	85.4	33.0	53.7	55.0	502.3	2.1
Mali	1993	86.3	33.0	51.0	57.2	545.0	2.1
Mali	1996	76.4	33.0	75.4	103.3	602.3	2.1
Mali	1999	73.6	33.0	77.0	124.3	677.4	2.1
Mali	2002	59.2	33.0	84.3	140.7	747.1	2.1
Mali	2005	48.9	33.0	85.9	106.5	914.7	2.1
Mali	2008	51.0	33.0	96.6	90.4	1036.2	2.1
Mali	2010	50.4	33.0	100.0	100.0	1099.1	2.1
Mozambique	1981	72.8	44.5	0.1	0.2	215.1	0.9
Mozambique	1984	84.7	44.5	0.2	0.2	168.2	0.9
Mozambique	1987	82.6	44.5	0.9	0.9	198.0	0.9
Mozambique	1990	81.3	44.5	3.0	3.0	251.2	0.9

Mozambique	1993	83.1	44.5	8.1	12.2	281.6	0.9
Mozambique	1996	80.6	44.5	29.1	35.6	344.3	0.9
Mozambique	1999	67.6	44.5	32.6	40.3	453.4	0.9
Mozambique	2002	76.7	46.4	46.8	74.6	554.7	0.9
Mozambique	2005	66.7	41.3	63.6	72.7	661.9	0.9
Mozambique	2008	59.6	45.6	85.9	76.6	820.9	0.9
Mozambique	2010	61.2	45.6	100.0	100.0	905.4	0.9
Nepal	1981	81.4	30.1	9.6	16.9	326.4	6.1
Nepal	1984	80.0	30.1	12.8	22.5	384.7	6.1
Nepal	1987	78.3	30.1	17.5	29.8	438.0	6.1
Nepal	1990	74.5	30.1	22.9	40.1	535.4	6.1
Nepal	1993	72.1	30.1	32.6	66.4	617.1	6.1
Nepal	1996	68.0	43.8	41.0	77.5	715.5	6.1
Nepal	1999	58.9	43.8	53.4	93.3	786.2	6.1
Nepal	2002	54.5	43.2	58.2	106.5	882.2	6.1
Nepal	2005	46.3	43.2	66.3	97.6	1028.8	6.1
Nepal	2008	33.9	43.2	81.1	95.4	1212.9	6.1
Nepal	2010	24.8	32.8	100.0	100.0	1325.2	6.1
Niger	1981	47.7	43.9	45.0	54.9	482.2	0.9
Niger	1984	68.2	43.9	54.8	88.2	406.8	0.9
Niger	1987	64.8	43.9	49.0	60.7	457.5	0.9
Niger	1990	66.4	43.9	47.9	55.0	494.7	0.9
Niger	1993	75.7	43.9	45.6	57.2	470.7	0.9
Niger	1996	76.5	43.9	72.1	103.3	460.3	0.9
Niger	1999	72.0	43.9	75.8	124.3	497.2	0.9
Niger	2002	57.9	43.9	83.3	140.7	534.2	0.9
Niger	2005	50.2	43.9	88.5	106.5	612.9	0.9
Niger	2008	43.6	43.9	98.6	90.4	712.9	0.9
Niger	2010	43.5	43.9	100.0	100.0	733.2	0.9
Rwanda	1981	59.1	28.9	7.2	14.9	402.6	1.9
Rwanda	1984	63.8	28.9	9.1	17.2	487.6	1.9
Rwanda	1987	65.2	25.9	9.6	13.6	522.3	1.9
Rwanda	1990	67.4	25.9	10.4	14.4	504.7	1.9
Rwanda	1993	63.1	25.9	15.6	24.7	469.5	1.9
Rwanda	1996	76.2	25.9	38.6	52.6	496.7	1.9
Rwanda	1999	73.9	51.5	45.0	57.3	590.4	1.9

Rwanda	2002	73.7	51.5	49.2	81.5	674.1	1.9
Rwanda	2005	72.8	53.1	64.6	95.7	855.7	1.9
Rwanda	2008	67.7	53.1	88.6	93.8	1136.8	1.9
Rwanda	2010	63.2	50.8	100.0	100.0	1266.9	1.9
Sierra Leone	1981	59.2	38.1	0.0	0.0	927.8	1.5
Sierra Leone	1984	59.2	38.1	0.1	0.1	1028.2	1.5
Sierra Leone	1987	60.5	38.1	0.5	0.9	996.1	1.5
Sierra Leone	1990	62.2	38.1	2.5	4.1	1130.3	1.5
Sierra Leone	1993	63.8	38.1	10.2	15.4	946.2	1.5
Sierra Leone	1996	62.7	38.1	19.7	24.9	701.4	1.5
Sierra Leone	1999	73.3	38.1	41.1	48.9	507.0	1.5
Sierra Leone	2002	56.4	38.1	40.2	56.9	750.0	1.5
Sierra Leone	2005	50.3	42.2	55.3	78.3	867.2	1.5
Sierra Leone	2008	44.7	42.2	77.7	80.8	1026.2	1.5
Sierra Leone	2010	51.7	42.2	100.0	100.0	1094.4	1.5
Tajikistan	1981	55.9	29.0				20.9
Tajikistan	1984	52.9	29.0				20.9
Tajikistan	1987	48.3	29.0				20.9
Tajikistan	1990	49.3	29.0				20.9
Tajikistan	1993	15.7	29.0	0.0	0.2	1106.7	20.9
Tajikistan	1996	54.9	29.0	6.2	6.7	751.0	20.9
Tajikistan	1999	49.4	29.0	21.3	28.3	814.1	20.9
Tajikistan	2002	38.9	29.0	44.0	63.1	1060.3	20.9
Tajikistan	2005	17.7	29.0	58.8	71.2	1398.0	20.9
Tajikistan	2008	10.7	29.0	88.2	78.3	1761.5	20.9
Tajikistan	2010	6.6	29.0	100.0	100.0	1924.6	20.9
Tanzania	1981	66.5	59.0	0.8	0.6	445.0	0.6
Tanzania	1984	64.3	59.0	1.7	1.1	461.3	0.6
Tanzania	1987	66.6	59.0	4.1	4.6	527.0	0.6
Tanzania	1990	69.8	59.0	8.9	13.8	630.2	0.6
Tanzania	1993	75.8	36.3	17.3	28.8	645.8	0.6
Tanzania	1996	80.3	36.3	35.4	41.2	691.0	0.6
Tanzania	1999	80.1	34.6	50.4	52.8	751.4	0.6
Tanzania	2002	81.9	34.4	57.9	68.6	878.4	0.6
Tanzania	2005	74.2	34.4	65.7	80.1	1073.6	0.6
Tanzania	2008	66.8	37.6	83.2	84.9	1313.1	0.6

Tanzania	2010	62.5	37.6	100.0	100.0	1445.5	0.6
Togo	1981	26.8	34.2	34.4	54.9	698.8	3.1
Togo	1984	35.3	34.2	40.3	88.2	615.6	3.1
Togo	1987	36.8	34.2	41.3	60.7	622.5	3.1
Togo	1990	35.6	34.2	41.3	55.0	766.5	3.1
Togo	1993	53.6	34.2	42.0	57.2	624.1	3.1
Togo	1996	38.8	34.2	68.8	103.3	794.5	3.1
Togo	1999	36.5	34.2	73.1	124.3	774.7	3.1
Togo	2002	39.8	34.2	79.8	140.7	725.4	3.1
Togo	2005	39.8	34.2	84.7	106.5	834.5	3.1
Togo	2008	38.5	34.2	95.0	90.4	910.1	3.1
Togo	2010	29.5	34.2	100.0	100.0	949.3	3.1
Uganda	1981	68.9	43.1	0.0	0.0	337.4	2.0
Uganda	1984	67.1	43.1	0.1	0.2	387.1	2.0
Uganda	1987	72.0	43.1	1.7	2.0	383.1	2.0
Uganda	1990	68.7	43.1	14.9	19.7	469.9	2.0
Uganda	1993	69.4	43.1	37.0	54.9	519.7	2.0
Uganda	1996	64.4	43.1	45.1	48.0	647.9	2.0
Uganda	1999	60.5	43.1	51.9	66.8	730.2	2.0
Uganda	2002	57.4	45.8	54.5	82.5	866.6	2.0
Uganda	2005	54.8	45.8	66.8	81.8	1014.8	2.0
Uganda	2008	44.4	45.8	85.1	79.0	1268.7	2.0
Uganda	2010	34.0	45.8	100.0	100.0	1341.6	2.0

Table 47.Data Series for Lower Middle Income Economies

Country	Year	POVERTY	Gini	Inf	E Rate	GDPC	Av. SET
Armenia	1981	9.2	44.4				31.1
Armenia	1984	7.9	44.4				31.1
Armenia	1987	8.8	44.4				31.1
Armenia	1990	4.7	44.4				31.1
Armenia	1993	27.4	44.4	0.3	2.4	1032.2	31.1
Armenia	1996	17.5	44.4	52.8	110.8	1353.0	31.1
Armenia	1999	18.0	44.4	65.8	143.2	1708.8	31.1
Armenia	2002	15.0	35.7	68.1	153.4	2525.4	31.1
Armenia	2005	4.0	36.2	76.7	122.5	3903.5	31.1

Armenia	2008	1.3	30.9	90.0	81.9	5768.8	31.1
Armenia	2010	2.5	31.3	100.0	100.0	5117.3	31.1
Bhutan	1981	81.2	46.3	13.1	18.9	494.6	4.8
Bhutan	1984	76.2	46.3	18.5	24.8	656.0	4.8
Bhutan	1987	67.7	46.3	22.1	28.3	872.7	4.8
Bhutan	1990	57.2	46.3	28.6	38.3	1217.6	4.8
Bhutan	1993	49.9	46.3	38.1	66.7	1522.8	4.8
Bhutan	1996	40.8	46.3	47.7	77.5	1932.7	4.8
Bhutan	1999	35.3	46.3	61.1	94.2	2246.2	4.8
Bhutan	2002	28.7	46.3	68.0	106.3	2721.5	4.8
Bhutan	2005	18.9	46.3	75.9	96.4	3274.6	4.8
Bhutan	2008	9.3	38.1	89.0	95.1	4429.0	4.8
Bhutan	2010	4.4	38.1	100.0	100.0	5044.3	4.8
Bolivia	1981	3.2	53.6	0.0	0.0	1973.3	33.3
Bolivia	1984	5.2	53.6	0.0	0.0	1950.4	33.3
Bolivia	1987	4.1	53.6	17.0	29.3	1942.7	33.3
Bolivia	1990	4.2	53.6	26.6	45.2	2275.4	33.3
Bolivia	1993	8.5	53.6	39.6	60.8	2562.4	33.3
Bolivia	1996	15.3	53.6	53.0	72.3	2858.3	33.3
Bolivia	1999	23.3	57.9	61.0	82.8	3045.5	33.3
Bolivia	2002	22.0	59.9	65.4	102.2	3224.4	33.3
Bolivia	2005	18.2	57.8	74.4	115.0	3664.3	33.3
Bolivia	2008	15.6	56.3	94.4	103.2	4322.6	33.3
Bolivia	2010	13.4	56.3	100.0	100.0	4563.3	33.3
Cameroon	1981	11.7	40.7	26.5	54.9	1271.5	4.5
Cameroon	1984	7.5	40.7	41.2	88.2	1655.1	4.5
Cameroon	1987	6.5	40.7	46.1	60.7	1860.4	4.5
Cameroon	1990	15.3	40.7	48.3	55.0	1611.0	4.5
Cameroon	1993	23.9	40.7	47.1	57.2	1439.3	4.5
Cameroon	1996	24.9	40.7	69.2	103.3	1485.0	4.5
Cameroon	1999	14.9	40.7	77.0	124.3	1643.0	4.5
Cameroon	2002	10.4	40.7	83.3	140.7	1818.8	4.5
Cameroon	2005	10.0	40.7	85.7	106.5	1953.7	4.5
Cameroon	2008	9.3	40.7	95.8	90.4	2134.0	4.5
Cameroon	2010	9.3	40.7	100.0	100.0	2174.5	4.5
Cape Verde	1981	53.8	72.4	19.0	58.5	629.1	7.5

Cape Verde	1984	44.8	72.4	30.3	101.9	787.8	7.5
Cape Verde	1987	40.7	72.4	36.9	87.0	950.1	7.5
Cape Verde	1990	36.8	72.4	44.5	84.1	1151.0	7.5
Cape Verde	1993	35.0	72.4	57.5	96.6	1296.5	7.5
Cape Verde	1996	30.5	72.4	68.3	99.2	1565.4	7.5
Cape Verde	1999	24.5	72.4	80.7	124.3	2006.3	7.5
Cape Verde	2002	21.0	73.5	83.2	140.7	2415.6	7.5
Cape Verde	2005	16.8	73.5	83.0	106.5	2912.4	7.5
Cape Verde	2008	10.6	73.5	97.0	90.4	3943.9	7.5
Cape Verde	2010	8.7	73.5	100.0	100.0	4005.1	7.5
Congo, Rep.	1981	54.3	47.3	36.4	54.9	1529.3	5.2
Congo, Rep.	1984	42.4	47.3	40.3	88.2	1713.1	5.2
Congo, Rep.	1987	50.3	47.3	44.7	60.7	1809.8	5.2
Congo, Rep.	1990	51.7	47.3	35.3	55.0	2668.1	5.2
Congo, Rep.	1993	53.6	47.3	35.8	57.2	2744.1	5.2
Congo, Rep.	1996	56.4	47.3	59.9	103.3	2816.2	5.2
Congo, Rep.	1999	60.1	47.3	71.1	124.3	2707.0	5.2
Congo, Rep.	2002	56.3	47.3	74.2	140.7	3082.1	5.2
Congo, Rep.	2005	54.1	47.3	80.2	106.5	3566.1	5.2
Congo, Rep.	2008	53.4	47.3	91.3	90.4	3897.4	5.2
Congo, Rep.	2010	48.4	47.3	100.0	100.0	4387.1	5.2
Côte d'Ivoire	1981	6.3	40.4	28.3	54.9	1267.8	4.8
Côte d'Ivoire	1984	9.6	40.4	33.6	88.2	1236.7	4.8
Côte d'Ivoire	1987	8.7	40.4	39.0	60.7	1286.3	4.8
Côte d'Ivoire	1990	17.0	40.4	41.9	55.0	1351.1	4.8
Côte d'Ivoire	1993	17.8	36.9	45.3	57.2	1387.6	4.8
Côte d'Ivoire	1996	22.0	36.9	66.8	103.3	1545.6	4.8
Côte d'Ivoire	1999	23.7	36.9	75.4	124.3	1678.5	4.8
Côte d'Ivoire	2002	23.3	48.4	80.8	140.7	1581.9	4.8
Côte d'Ivoire	2005	25.9	48.4	88.0	106.5	1580.2	4.8
Côte d'Ivoire	2008	23.8	41.5	97.7	90.4	1633.4	4.8
Côte d'Ivoire	2010	22.7	41.5	100.0	100.0	1669.1	4.8
Djibouti	1981	26.7	40.0		100.0		1.2
Djibouti	1984	20.3	40.0		100.0		1.2
Djibouti	1987	22.1	40.0		100.0		1.2
Djibouti	1990	21.4	40.0		100.0		1.2

Djibouti	1993	20.5	40.0	56.9	100.0	2054.2	1.2
Djibouti	1996	22.4	40.0	65.8	100.0	1840.2	1.2
Djibouti	1999	21.6	40.0	68.7	100.0	1807.7	1.2
Djibouti	2002	18.8	40.0	71.8	100.0	1865.1	1.2
Djibouti	2005	17.1	40.0	77.8	100.0	2030.0	1.2
Djibouti	2008	13.8	40.0	94.6	100.0	2347.8	1.2
Djibouti	2010	12.8	40.0	100.0	100.0	2462.9	1.2
Egypt, Arab Rep.	1981	13.3	32.0	4.5	12.4	1418.0	24.2
Egypt, Arab Rep.	1984	9.9	32.0	7.0	12.4	1885.8	24.2
Egypt, Arab Rep.	1987	7.9	32.0	12.2	12.4	2214.8	24.2
Egypt, Arab Rep.	1990	5.2	32.0	20.4	27.4	2572.2	24.2
Egypt, Arab Rep.	1993	3.8	32.0	31.5	59.3	2757.9	24.2
Egypt, Arab Rep.	1996	2.5	30.1	40.3	60.0	3136.9	24.2
Egypt, Arab Rep.	1999	2.2	35.0	46.6	60.1	3711.6	24.2
Egypt, Arab Rep.	2002	1.9	32.8	50.7	79.6	4169.2	24.2
Egypt, Arab Rep.	2005	2.0	31.8	59.6	102.3	4762.1	24.2
Egypt, Arab Rep.	2008	1.7	30.8	77.0	96.7	5862.9	24.2
Egypt, Arab Rep.	2010	1.1	33.0	100.0	100.0	6288.5	24.2
El Salvador	1981	13.7	51.2	6.3	28.6	1999.8	18.9
El Salvador	1984	15.0	51.2	8.8	28.6	2160.3	18.9
El Salvador	1987	15.3	51.2	17.8	57.1	2338.8	18.9
El Salvador	1990	16.4	51.2	32.2	78.3	2683.2	18.9
El Salvador	1993	13.5	51.2	50.2	99.5	3401.3	18.9
El Salvador	1996	11.5	51.2	64.8	100.1	4059.1	18.9
El Salvador	1999	13.8	52.2	69.8	100.1	4639.3	18.9
El Salvador	2002	14.8	53.1	75.4	100.0	5170.2	18.9
El Salvador	2005	11.6	50.3	84.2	100.0	5950.6	18.9
El Salvador	2008	5.4	46.8	98.3	100.0	6923.5	18.9
El Salvador	2010	8.5	46.8	100.0	100.0	6855.4	18.9
Georgia	1981		37.1				37.9
Georgia	1984		37.1				37.9
Georgia	1987		37.1				37.9
Georgia	1990		37.1				37.9
Georgia	1993	6.0	37.1				37.9
Georgia	1996	4.7	37.1	38.5	70.9	1664.5	37.9
Georgia	1999	17.9	41.1	50.8	113.6	2125.9	37.9

Georgia	2002	15.7	40.3	58.4	123.2	2599.9	37.9
Georgia	2005	16.0	41.1	70.0	101.7	3643.8	37.9
Georgia	2008	15.3	41.3	91.8	83.6	4873.6	37.9
Georgia	2010	18.0	42.1	100.0	100.0	5019.8	37.9
Ghana	1981	47.0	34.4	0.1	0.0	702.2	4.1
Ghana	1984	56.3	34.4	0.5	0.3	683.4	4.1
Ghana	1987	52.5	34.4	0.9	1.1	799.6	4.1
Ghana	1990	50.5	36.0	2.1	2.3	977.3	4.1
Ghana	1993	48.1	34.0	3.5	4.5	1121.7	4.1
Ghana	1996	43.1	38.1	10.0	11.4	1242.6	4.1
Ghana	1999	38.0	33.0	16.7	18.6	1390.9	4.1
Ghana	2002	35.3	32.7	31.8	55.4	1560.7	4.1
Ghana	2005	30.2	40.5	52.3	63.4	2030.0	4.1
Ghana	2008	24.6	42.4	74.3	74.7	2487.0	4.1
Ghana	2010	22.2	42.8	100.0	100.0	2708.7	4.1
Guatemala	1981	47.0	58.3	5.0	12.4	2441.7	8.6
Guatemala	1984	51.2	58.3	5.8	12.4	2445.5	8.6
Guatemala	1987	52.3	58.3	10.2	31.0	2522.4	8.6
Guatemala	1990	37.1	58.3	17.5	55.7	2908.3	8.6
Guatemala	1993	28.7	58.3	29.5	69.9	3257.1	8.6
Guatemala	1996	20.8	58.3	39.9	75.1	3547.4	8.6
Guatemala	1999	14.0	58.3	48.9	91.7	3859.7	8.6
Guatemala	2002	25.8	59.2	60.2	97.1	3936.4	8.6
Guatemala	2005	19.0	59.2	74.6	94.7	4178.4	8.6
Guatemala	2008	13.2	59.2	94.5	93.8	4843.2	8.6
Guatemala	2010	4.4	59.2	100.0	100.0	4862.5	8.6
Guyana	1981	5.7	51.9	1.0	1.4	2299.5	7.5
Guyana	1984	9.8	51.9	1.7	1.9	2250.5	7.5
Guyana	1987	8.8	51.9	2.8	4.8	2429.8	7.5
Guyana	1990	10.8	51.9	12.1	19.4	2230.7	7.5
Guyana	1993	6.9	49.0	33.8	62.2	2998.5	7.5
Guyana	1996	7.4	44.5	45.7	68.9	3761.8	7.5
Guyana	1999	8.3	43.2	53.2	87.4	4197.7	7.5
Guyana	2002	8.2	43.2	61.0	93.6	4731.4	7.5
Guyana	2005	8.3	43.2	72.4	98.2	5213.6	7.5
Guyana	2008	7.9	43.2	93.6	100.0	6391.5	7.5

Guyana	2010	7.0	43.2	100.0	100.0	6923.7	7.5
Honduras	1981	14.2	57.4	4.7	10.6	1763.3	11.9
Honduras	1984	14.6	57.4	5.8	10.6	1875.1	11.9
Honduras	1987	29.1	57.4	6.4	10.6	2059.4	11.9
Honduras	1990	46.9	57.4	9.0	21.8	2300.1	11.9
Honduras	1993	23.5	53.5	14.6	34.3	2657.7	11.9
Honduras	1996	31.4	55.7	28.4	61.9	2790.2	11.9
Honduras	1999	25.4	55.4	43.3	75.2	2890.5	11.9
Honduras	2002	28.2	58.9	56.8	87.0	3253.6	11.9
Honduras	2005	26.4	59.7	72.0	99.7	3713.1	11.9
Honduras	2008	21.4	61.3	90.5	100.0	4451.3	11.9
Honduras	2010	18.4	61.3	100.0	100.0	4414.6	11.9
India*	1981	59.8	32.1	10.7	18.9	486.2	8.8
India*	1984	55.7	32.1	14.0	24.8	606.3	8.8
India*	1987	54.1	33.1	17.5	28.3	703.8	8.8
India*	1990	51.3	31.2	23.0	38.3	899.3	8.8
India*	1993	49.7	31.5	30.7	66.7	1021.9	8.8
India*	1996	47.2	37.8	40.7	77.5	1263.0	8.8
India*	1999	45.6	32.0	50.9	94.2	1497.5	8.8
India*	2002	44.5	32.4	57.3	106.3	1706.3	8.8
India*	2005	40.8	34.1	64.6	96.4	2260.2	8.8
India*	2008	37.4	33.5	80.0	95.1	2913.5	8.8
India*	2010	32.7	33.9	100.0	100.0	3457.1	8.8
Indonesia*	1981	70.9	33.9	6.2	6.9	849.0	12.2
Indonesia*	1984	62.8	31.3	8.4	11.3	1043.0	12.2
Indonesia*	1987	68.2	30.3	10.1	18.1	1208.7	12.2
Indonesia*	1990	54.3	30.6	12.6	20.3	1549.1	12.2
Indonesia*	1993	54.4	30.7	16.2	23.0	1961.8	12.2
Indonesia*	1996	43.4	32.6	20.9	25.8	2499.9	12.2
Indonesia*	1999	47.7	30.0	42.3	86.4	2309.0	12.2
Indonesia*	2002	29.3	30.4	54.7	102.4	2660.0	12.2
Indonesia*	2005	21.4	34.7	68.4	106.8	3185.0	12.2
Indonesia*	2008	22.6	33.3	90.5	106.7	3916.8	12.2
Indonesia*	2010	18.1	34.8	100.0	100.0	4315.8	12.2
Kyrgyz Republic	1981		53.7				32.9
Kyrgyz Republic	1984		53.7				32.9

Kyrgyz Republic	1987		53.7				32.9
Kyrgyz Republic	1990	7.0	53.7				32.9
Kyrgyz Republic	1993	18.6	53.7	4.2		1302.1	32.9
Kyrgyz Republic	1996	30.3	53.7	22.3	27.9	1081.4	32.9
Kyrgyz Republic	1999	32.6	53.7	41.3	84.9	1254.7	32.9
Kyrgyz Republic	2002	34.0	31.7	53.5	102.1	1438.0	32.9
Kyrgyz Republic	2005	22.9	39.5	60.0	89.2	1712.5	32.9
Kyrgyz Republic	2008	6.4	37.3	86.9	79.6	2157.6	32.9
Kyrgyz Republic	2010	6.7	36.5	100.0	100.0	2200.5	32.9
Lao PDR	1981	78.0	36.7	0.3	0.3	426.8	4.5
Lao PDR	1984	66.1	36.7	0.9	0.4	519.7	4.5
Lao PDR	1987	66.0	36.7	2.8	2.3	585.0	4.5
Lao PDR	1990	58.9	36.7	3.7	8.6	681.8	4.5
Lao PDR	1993	54.7	36.7	4.9	8.7	797.4	4.5
Lao PDR	1996	50.4	36.7	7.5	11.2	971.9	4.5
Lao PDR	1999	44.2	36.7	39.1	86.0	1108.5	4.5
Lao PDR	2002	44.0	36.7	57.4	121.8	1337.3	4.5
Lao PDR	2005	39.5	36.7	78.5	129.0	1672.8	4.5
Lao PDR	2008	33.9	36.7	94.3	105.9	2149.5	4.5
Lao PDR	2010	26.0	36.7	100.0	100.0	2446.2	4.5
Lesotho	1981	41.3	57.9	5.9	12.0	405.9	2.0
Lesotho	1984	35.8	57.9	8.7	20.2	499.9	2.0
Lesotho	1987	44.4	57.9	13.0	27.8	541.4	2.0
Lesotho	1990	51.7	57.9	18.6	35.3	687.7	2.0
Lesotho	1993	56.4	57.9	29.1	44.6	782.4	2.0
Lesotho	1996	50.2	57.9	37.5	58.7	878.4	2.0
Lesotho	1999	54.2	57.9	47.6	83.4	965.3	2.0
Lesotho	2002	51.6	57.9	60.8	144.0	1114.3	2.0
Lesotho	2005	36.2	57.9	70.9	86.9	1330.3	2.0
Lesotho	2008	37.6	57.9	89.9	112.8	1647.8	2.0
Lesotho	2010	36.5	57.9	100.0	100.0	1844.8	2.0
Mauritania	1981	37.7	43.9		17.5		3.3
Mauritania	1984	42.4	43.9		23.1		3.3
Mauritania	1987	41.3	43.9		26.8		3.3
Mauritania	1990	43.2	43.9	29.6	29.2	1150.5	3.3
Mauritania	1993	42.8	50.1	37.7	43.8	1235.2	3.3

Mauritania	1996	23.4	50.1	43.8	49.7	1357.8	3.3
Mauritania	1999	21.7	50.1	51.5	75.9	1367.7	3.3
Mauritania	2002	24.9	50.1	57.8	98.5	1411.3	3.3
Mauritania	2005	24.8	50.1	75.3	96.2	1637.9	3.3
Mauritania	2008	23.4	40.5	92.1	86.3	1904.4	3.3
Mauritania	2010	24.0	40.5	100.0	100.0	1906.2	3.3
Micronesia, Fed. Sts.--Urban	1981	48.0			100.0		20.4
Micronesia, Fed. Sts.--Urban	1984	45.7			100.0		20.4
Micronesia, Fed. Sts.--Urban	1987	35.2			100.0		20.4
Micronesia, Fed. Sts.--Urban	1990	34.4			100.0		20.4
Micronesia, Fed. Sts.--Urban	1993	31.3			100.0		20.4
Micronesia, Fed. Sts.--Urban	1996	31.8			100.0	4923.9	20.4
Micronesia, Fed. Sts.--Urban	1999	32.4		70.7	100.0	4999.1	20.4
Micronesia, Fed. Sts.--Urban	2002	30.6		72.5	100.0	5700.9	20.4
Micronesia, Fed. Sts.--Urban	2005	30.6		77.4	100.0	6071.3	20.4
Micronesia, Fed. Sts.--Urban	2008	32.1		90.7	100.0	6337.9	20.4
Micronesia, Fed. Sts.--Urban	2010	32.0		100.0	100.0	6761.9	20.4
Moldova, Rep.	1981	25.1	39.4				34.1
Moldova, Rep.	1984	16.1	39.4				34.1
Moldova, Rep.	1987	15.7	39.4				34.1
Moldova, Rep.	1990	22.2	39.4				34.1
Moldova, Rep.	1993	16.1	39.4	2.7		1798.6	34.1
Moldova, Rep.	1996	16.1	39.4	18.3	37.2	1243.4	34.1
Moldova, Rep.	1999	39.0	39.4	30.7	85.0	1412.7	34.1
Moldova, Rep.	2002	17.5	36.9	46.5	109.7	1764.0	34.1
Moldova, Rep.	2005	12.5	36.3	65.2	101.9	2358.5	34.1
Moldova, Rep.	2008	1.1	35.3	93.1	84.0	2983.1	34.1
Moldova, Rep.	2010	0.4	33.0	100.0	100.0	3070.5	34.1
Morocco	1981	11.9	39.2	31.7	61.4	1199.3	10.0
Morocco	1984	10.6	39.2	41.8	104.5	1450.0	10.0
Morocco	1987	8.8	39.2	50.3	99.2	1637.6	10.0
Morocco	1990	4.1	31.9	56.3	97.8	2043.6	10.0
Morocco	1993	5.9	39.2	68.2	110.3	2119.7	10.0
Morocco	1996	4.9	39.2	78.4	103.4	2469.8	10.0
Morocco	1999	8.9	39.5	82.0	116.3	2591.6	10.0
Morocco	2002	5.6	40.3	86.4	130.8	3006.9	10.0

Morocco	2005	3.5	40.7	89.6	105.2	3585.1	10.0
Morocco	2008	2.1	40.7	98.1	92.0	4373.9	10.0
Morocco	2010	1.6	40.7	100.0	100.0	4740.9	10.0
Nicaragua	1981	7.9	50.4		0.0		10.3
Nicaragua	1984	15.9	50.4		0.0		10.3
Nicaragua	1987	24.7	50.4		0.0		10.3
Nicaragua	1990	25.5	50.4	8.1	0.7		10.3
Nicaragua	1993	18.3	50.4	24.2	26.3		10.3
Nicaragua	1996	15.0	50.4	31.1	39.5	2398.5	10.3
Nicaragua	1999	13.1	50.4	42.7	55.3	2660.5	10.3
Nicaragua	2002	13.7	50.4	50.3	66.7	2872.1	10.3
Nicaragua	2005	11.9	40.5	62.9	78.4	3256.0	10.3
Nicaragua	2008	8.1	40.5	91.5	90.7	3906.7	10.3
Nicaragua	2010	7.7	40.5	100.0	100.0	3869.5	10.3
Nigeria	1981	47.8	35.2	0.5	0.4	899.5	5.0
Nigeria	1984	57.5	36.1	0.9	0.5	873.2	5.0
Nigeria	1987	58.9	37.4	1.1	2.7	764.1	5.0
Nigeria	1990	60.4	38.7	2.4	5.3	1008.8	5.0
Nigeria	1993	63.1	45.0	6.2	14.7	1024.0	5.0
Nigeria	1996	68.5	44.2	21.7	14.6	1058.4	5.0
Nigeria	1999	70.0	45.0	27.7	61.4	1079.4	5.0
Nigeria	2002	65.4	51.1	39.7	80.2	1458.9	5.0
Nigeria	2005	64.1	41.8	61.4	87.3	1795.5	5.0
Nigeria	2008	66.5	40.9	78.1	78.9	2150.0	5.0
Nigeria	2010	68.0	46.8	100.0	100.0	2398.7	5.0
Pakistan	1981	77.0	33.4	11.4	11.6	702.9	3.9
Pakistan	1984	72.7	33.4	13.6	16.5	882.1	3.9
Pakistan	1987	66.5	33.4	15.6	20.4	1062.4	3.9
Pakistan	1990	61.9	33.4	19.9	25.5	1290.6	3.9
Pakistan	1993	57.9	33.4	25.8	33.0	1497.6	3.9
Pakistan	1996	49.5	33.4	36.0	42.3	1726.0	3.9
Pakistan	1999	29.7	33.4	46.0	58.1	1840.5	3.9
Pakistan	2002	35.9	33.4	51.0	70.1	2015.8	3.9
Pakistan	2005	22.3	33.4	59.8	69.9	2404.6	3.9
Pakistan	2008	21.0	33.4	77.2	82.6	2817.3	3.9
Pakistan	2010	13.5	33.4	100.0	100.0	2836.4	3.9

Papua New Guinea	1981	29.7	50.9	13.1	24.7	945.2	2.1
Papua New Guinea	1984	33.2	50.9	16.1	33.0	1043.8	2.1
Papua New Guinea	1987	32.9	50.9	18.1	33.4	1229.5	2.1
Papua New Guinea	1990	43.1	50.9	21.4	35.1	1202.5	2.1
Papua New Guinea	1993	37.3	50.9	25.0	36.0	1680.7	2.1
Papua New Guinea	1996	35.8	50.9	33.7	48.5	1798.3	2.1
Papua New Guinea	1999	35.0	50.9	45.8	94.5	1735.8	2.1
Papua New Guinea	2002	48.2	50.9	64.6	143.2	1704.9	2.1
Papua New Guinea	2005	46.6	50.9	77.1	114.1	1770.9	2.1
Papua New Guinea	2008	42.5	50.9	88.2	99.3	2082.9	2.1
Papua New Guinea	2010	38.6	50.9	100.0	100.0	2315.4	2.1
Paraguay	1981	0.8	40.8	1.5	2.7	2587.1	16.6
Paraguay	1984	1.0	40.8	3.0	4.2	2660.7	16.6
Paraguay	1987	1.0	40.8	6.1	11.6	2840.0	16.6
Paraguay	1990	1.0	40.8	13.4	26.0	3429.4	16.6
Paraguay	1993	7.4	40.8	22.7	36.8	3633.2	16.6
Paraguay	1996	12.0	40.8	34.1	43.4	4119.8	16.6
Paraguay	1999	14.2	57.0	43.4	65.9	4420.4	16.6
Paraguay	2002	15.8	56.7	56.1	120.7	3992.5	16.6
Paraguay	2005	7.2	52.5	71.4	130.5	4563.9	16.6
Paraguay	2008	5.6	52.1	93.1	92.1	5478.4	16.6
Paraguay	2010	7.2	52.4	100.0	100.0	5860.5	16.6
Philippines	1981	30.6	41.0	9.1	17.5	1483.6	27.2
Philippines	1984	32.8	41.0	15.4	37.0	1540.7	27.2
Philippines	1987	33.4	40.5	19.5	45.6	1546.0	27.2
Philippines	1990	29.7	43.8	27.6	53.9	1879.6	27.2
Philippines	1993	29.2	42.6	38.1	60.1	1933.3	27.2
Philippines	1996	24.2	45.7	48.7	58.1	2234.5	27.2
Philippines	1999	22.6	41.6	59.7	86.7	2290.6	27.2
Philippines	2002	22.4	44.5	68.9	114.4	2595.0	27.2
Philippines	2005	22.2	44.1	78.7	122.1	3061.0	27.2
Philippines	2008	19.4	39.2	92.5	98.6	3635.6	27.2
Philippines	2010	18.4	39.2	100.0	100.0	3945.2	27.2
São Tomé and Príncipe	1981	13.9	55.2	0.2	0.2	955.4	4.0
São Tomé and Príncipe	1984	17.7	55.2	0.3	0.2	948.1	4.0
São Tomé and Príncipe	1987	20.4	55.2	0.4	0.3	943.3	4.0

São Tomé and Príncipe	1990	20.7	55.2	1.0	0.8	994.2	4.0
São Tomé and Príncipe	1993	27.7	55.2	2.6	2.3	1034.2	4.0
São Tomé and Príncipe	1996	25.9	55.2	7.5	11.9	1098.4	4.0
São Tomé and Príncipe	1999	26.1	55.2	20.1	38.5	1150.8	4.0
São Tomé and Príncipe	2002	28.3	50.8	26.9	49.1	1221.3	4.0
São Tomé and Príncipe	2005	24.2	50.8	39.2	57.1	1571.7	4.0
São Tomé and Príncipe	2008	19.9	50.8	75.4	79.4	2005.3	4.0
São Tomé and Príncipe	2010	19.9	50.8	100.0	100.0	2142.8	4.0
Senegal	1981	68.3	39.2	32.8	54.9	805.4	4.5
Senegal	1984	66.5	39.2	48.0	88.2	895.1	4.5
Senegal	1987	64.3	39.2	55.2	60.7	997.9	4.5
Senegal	1990	65.5	39.2	54.6	55.0	1045.1	4.5
Senegal	1993	55.6	39.2	53.3	57.2	1096.0	4.5
Senegal	1996	53.3	39.2	78.1	103.3	1156.9	4.5
Senegal	1999	47.3	39.2	80.9	124.3	1299.2	4.5
Senegal	2002	40.7	39.2	86.0	140.7	1388.3	4.5
Senegal	2005	33.5	39.2	87.9	106.5	1619.1	4.5
Senegal	2008	25.2	39.2	100.5	90.4	1793.3	4.5
Senegal	2010	30.3	39.2	100.0	100.0	1845.9	4.5
Sri Lanka	1981	27.5	41.1	5.2	17.0	861.2	5.4
Sri Lanka	1984	21.9	41.1	7.7	22.5	1103.3	5.4
Sri Lanka	1987	18.6	41.1	9.1	26.0	1284.2	5.4
Sri Lanka	1990	16.7	41.1	14.1	35.4	1549.0	5.4
Sri Lanka	1993	16.1	41.1	19.6	42.7	1898.4	5.4
Sri Lanka	1996	16.9	41.1	26.6	48.9	2313.0	5.4
Sri Lanka	1999	13.4	41.1	33.3	62.5	2691.2	5.4
Sri Lanka	2002	14.0	41.1	44.2	84.6	2867.0	5.4
Sri Lanka	2005	10.1	41.1	58.3	88.9	3554.6	5.4
Sri Lanka	2008	5.6	41.1	91.0	95.8	4563.3	5.4
Sri Lanka	2010	4.1	41.1	100.0	100.0	5124.3	5.4
Sudan	1981	51.6	34.4	0.0	0.0	278.2	
Sudan	1984	56.2	34.4	0.0	0.1	277.9	
Sudan	1987	53.4	34.4	0.1	0.1	321.2	
Sudan	1990	56.2	34.4	0.2	0.2	335.1	
Sudan	1993	49.4	34.4	2.3	6.9	371.9	
Sudan	1996	46.4	34.4	19.4	54.2	434.0	

Sudan	1999	40.3	34.4	38.7	109.5	1036.3	
Sudan	2002	33.3	34.4	47.5	114.2	1444.5	
Sudan	2005	29.5	34.4	60.1	105.6	1699.9	
Sudan	2008	20.4	34.4	79.5	90.6	2067.4	
Sudan	2010	19.0	34.4	100.0	100.0	2159.9	
Swaziland	1981	74.0	60.7	7.0	12.0	1385.3	4.4
Swaziland	1984	73.2	50.7	9.7	20.2	1578.4	4.4
Swaziland	1987	84.2	46.3	15.1	27.8	2059.2	4.4
Swaziland	1990	83.9	51.5	22.1	35.3	2750.9	4.4
Swaziland	1993	80.1	51.5	29.0	44.6	2991.5	4.4
Swaziland	1996	75.6	51.5	39.4	58.7	3281.1	4.4
Swaziland	1999	72.1	51.5	48.4	83.4	3601.9	4.4
Swaziland	2002	42.6	50.7	61.6	144.0	3935.9	4.4
Swaziland	2005	47.1	50.7	69.5	86.9	4517.5	4.4
Swaziland	2008	47.1	46.3	89.1	112.8	5713.6	4.4
Swaziland	2010	40.6	51.5	100.0	100.0	5880.2	4.4
Syrian Arab Republic	1981	2.3	37.0	5.5	35.0	1850.3	17.9
Syrian Arab Republic	1984	11.1	37.0	7.3	35.0	1868.4	17.9
Syrian Arab Republic	1987	4.2	37.0	19.9	35.0	1889.3	17.9
Syrian Arab Republic	1990	2.8	37.0	33.2	100.0	2227.4	17.9
Syrian Arab Republic	1993	1.7	37.0	45.5	100.0	2978.2	17.9
Syrian Arab Republic	1996	1.3	37.0	61.5	100.0	3353.8	17.9
Syrian Arab Republic	1999	2.3	37.0	59.8	100.0	3291.8	17.9
Syrian Arab Republic	2002	3.6	37.0	59.1	100.0	3623.7	17.9
Syrian Arab Republic	2005	0.8	35.8	70.0	100.0	3998.8	17.9
Syrian Arab Republic	2008	0.3	35.8	93.2	100.0	4648.1	17.9
Syrian Arab Republic	2010	0.4	35.8	100.0	100.0	4996.5	17.9
Timor-Leste	1981	82.2	36.4		100.0		14.3
Timor-Leste	1984	79.7	36.4		100.0		14.3
Timor-Leste	1987	78.6	36.4		100.0		14.3
Timor-Leste	1990	71.4	36.4		100.0		14.3
Timor-Leste	1993	64.9	36.4		100.0		14.3
Timor-Leste	1996	54.6	36.4		100.0		14.3
Timor-Leste	1999	55.9	36.4		100.0		14.3
Timor-Leste	2002	49.4	36.4	69.6	100.0	3061.8	14.3
Timor-Leste	2005	42.0	36.4	78.2	100.0	11296.5	14.3

Timor-Leste	2008	34.7	31.9	95.6	100.0	14155.6	14.3
Timor-Leste	2010	34.7	31.9	100.0	100.0	16925.4	14.3
Ukraine	1981	3.0	35.1				53.5
Ukraine	1984	2.0	35.1				53.5
Ukraine	1987	1.9	35.1				53.5
Ukraine	1990	1.2	35.1				53.5
Ukraine	1993	0.2	35.1	0.2	0.6	4489.8	53.5
Ukraine	1996	1.9	35.1	17.3	23.1	2972.9	53.5
Ukraine	1999	2.0	29.0	27.2	52.0	3020.2	53.5
Ukraine	2002	0.5	28.3	39.3	67.1	4010.6	53.5
Ukraine	2005	0.1	28.2	51.2	64.6	5584.0	53.5
Ukraine	2008	0.0	27.5	78.9	66.4	7261.3	53.5
Ukraine	2010	0.0	25.6	100.0	100.0	6627.2	53.5
Vietnam	1981	83.5	37.6	0.0		342.3	8.7
Vietnam	1984	79.5	37.6	0.0		463.9	8.7
Vietnam	1987	78.1	37.6	0.9	0.4	527.1	8.7
Vietnam	1990	73.1	37.6	11.4	34.8	660.2	8.7
Vietnam	1993	63.7	37.6	31.0	57.2	841.6	8.7
Vietnam	1996	54.6	37.6	41.9	59.3	1108.8	8.7
Vietnam	1999	46.5	37.6	48.6	74.9	1323.5	8.7
Vietnam	2002	40.1	37.6	49.5	82.1	1651.0	8.7
Vietnam	2005	24.9	37.6	59.8	85.2	2353.9	8.7
Vietnam	2008	16.9	35.6	85.8	87.6	2976.4	8.7
Vietnam	2010	14.0	35.6	100.0	100.0	3334.0	8.7
Yemen, Rep.	1981	26.9	37.7				9.4
Yemen, Rep.	1984	29.1	37.7				9.4
Yemen, Rep.	1987	14.1	37.7				9.4
Yemen, Rep.	1990	18.5	37.7	1.8	5.5	1411.7	9.4
Yemen, Rep.	1993	11.4	37.7	6.5	5.5	1583.2	9.4
Yemen, Rep.	1996	16.4	37.7	25.4	42.9	1751.3	9.4
Yemen, Rep.	1999	14.1	37.7	31.9	70.9	1920.3	9.4
Yemen, Rep.	2002	15.9	37.7	44.5	80.0	2128.2	9.4
Yemen, Rep.	2005	17.5	37.7	61.0	87.2	2203.0	9.4
Yemen, Rep.	2008	17.1	37.7	86.8	91.0	2397.2	9.4
Yemen, Rep.	2010	16.8	37.7	100.0	100.0	2575.9	9.4
Zambia	1981	44.5	52.6	0.0	0.0	962.1	1.9

Zambia	1984	48.8	52.6	0.0	0.0	945.5	1.9
Zambia	1987	44.8	52.6	0.0	0.2	976.0	1.9
Zambia	1990	54.4	52.6	0.2	0.6	1040.0	1.9
Zambia	1993	65.3	52.6	3.2	9.4	1043.7	1.9
Zambia	1996	62.1	49.8	9.6	25.2	898.3	1.9
Zambia	1999	53.7	49.8	18.9	49.8	899.4	1.9
Zambia	2002	63.5	49.8	35.4	91.7	1009.6	1.9
Zambia	2005	66.0	49.8	59.9	93.0	1156.8	1.9
Zambia	2008	66.3	49.8	81.3	78.1	1369.8	1.9
Zambia	2010	74.5	57.5	100.0	100.0	1507.8	1.9

Table 48.Data Series for Upper Middle Income Economies

Country	Year	POVERTY	Gini	Inf	E Rate	GDPC	Av. SET
Albania	1981	0.1	28.6			2110.4	14.7
Albania	1984	0.1	28.6			2407.1	14.7
Albania	1987	0.1	28.6			2525.2	14.7
Albania	1990	0.1	28.6	3.8		2639.9	14.7
Albania	1993	63.7	28.6	30.9	98.2	2160.4	14.7
Albania	1996	14.4	28.6	46.0	100.5	3012.5	14.7
Albania	1999	0.3	29.4	74.1	132.5	3458.6	14.7
Albania	2002	0.6	31.1	80.4	134.8	4492.3	14.7
Albania	2005	0.9	31.7	86.7	96.1	5622.7	14.7
Albania	2008	0.6	30.4	94.4	80.7	7474.9	14.7
Albania	2010	0.3	30.4	100.0	100.0	8336.7	14.7
Algeria	1981	3.5	38.8	7.6	5.8	2711.4	15.5
Algeria	1984	2.8	38.8	9.2	6.7	3336.3	15.5
Algeria	1987	4.7	38.8	12.3	6.6	3411.2	15.5
Algeria	1990	6.2	38.8	15.5	12.1	3702.7	15.5
Algeria	1993	7.5	34.6	31.0	31.6	3662.9	15.5
Algeria	1996	7.8	34.6	61.7	74.0	3910.9	15.5
Algeria	1999	8.2	34.6	70.2	90.0	4263.3	15.5
Algeria	2002	5.3	34.6	74.5	107.7	4877.0	15.5
Algeria	2005	3.6	34.6	81.8	99.0	6068.0	15.5
Algeria	2008	2.7	34.6	91.0	87.3	6689.6	15.5
Algeria	2010	2.1	34.6	100.0	100.0	6907.9	15.5
Angola	1981	43.0	40.2	0.0	0.0	1739.2	1.4

Angola	1984	46.3	40.2	0.0	0.0	2031.1	1.4
Angola	1987	45.9	40.2	0.0	0.0	2045.0	1.4
Angola	1990	46.7	40.2	0.0	0.0	2157.4	1.4
Angola	1993	62.6	40.2	0.0	0.0	1553.3	1.4
Angola	1996	57.5	40.2	0.0	0.1	2106.2	1.4
Angola	1999	54.3	58.1	0.7	3.0	2195.7	1.4
Angola	2002	55.3	58.1	15.3	47.4	2602.6	1.4
Angola	2005	55.6	58.1	53.7	94.8	3328.6	1.4
Angola	2008	55.9	58.1	76.8	81.6	5578.2	1.4
Angola	2010	43.7	58.1	100.0	100.0	5698.7	1.4
Argentina	1981		45.3	0.0	0.0	4997.5	50.0
Argentina	1984		45.3	0.0	0.0	5581.7	50.0
Argentina	1987		45.3	0.0	0.0	5912.4	50.0
Argentina	1990	0.6	45.3	9.3	12.5	5667.7	50.0
Argentina	1993	2.1	44.9	37.5	25.6	7616.4	50.0
Argentina	1996	4.3	49.5	40.5	25.7	8530.9	50.0
Argentina	1999	4.2	49.8	40.6	25.7	9383.5	50.0
Argentina	2002	12.6	53.8	50.1	78.6	8174.8	50.0
Argentina	2005	4.6	49.3	65.0	74.5	11051.1	50.0
Argentina	2008	1.9	46.3	85.2	80.7	14502.3	50.0
Argentina	2010	0.9	44.5	100.0	100.0	15921.6	50.0
Azerbaijan	1981		33.7				21.1
Azerbaijan	1984		33.7				21.1
Azerbaijan	1987		33.7				21.1
Azerbaijan	1990		33.7				21.1
Azerbaijan	1993	6.7	33.7	0.4	2.5	2362.2	21.1
Azerbaijan	1996	15.0	33.7	51.0	107.2	1732.5	21.1
Azerbaijan	1999	9.0	33.7	48.0	102.7	2249.7	21.1
Azerbaijan	2002	2.1	33.7	51.0	121.1	2823.2	21.1
Azerbaijan	2005	1.5	33.7	61.0	117.8	4542.9	21.1
Azerbaijan	2008	0.4	33.7	93.2	102.4	8783.4	21.1
Azerbaijan	2010	0.3	33.7	100.0	100.0	10028.3	21.1
Belarus	1981	0.1	21.6				52.3
Belarus	1984	0.1	21.6				52.3
Belarus	1987	0.1	21.6				52.3
Belarus	1990	0.1	21.6				52.3

Belarus	1993	0.0	21.6	0.0		4128.0	52.3
Belarus	1996	1.0	30.0	0.5	0.4	3566.8	52.3
Belarus	1999	0.7	30.0	6.0	8.4	4700.8	52.3
Belarus	2002	0.6	30.0	36.9	60.1	5876.7	52.3
Belarus	2005	0.2	27.9	61.7	72.3	8610.0	52.3
Belarus	2008	0.1	27.2	82.2	71.7	12444.8	52.3
Belarus	2010	0.1	27.7	100.0	100.0	13755.0	52.3
Belize	1981	12.5	59.9	48.7	100.0	1599.4	17.9
Belize	1984	17.4	59.9	56.4	100.0	1855.5	17.9
Belize	1987	16.9	59.9	60.4	100.0	2381.3	17.9
Belize	1990	11.4	59.9	65.0	100.0	3510.1	17.9
Belize	1993	9.1	59.9	69.7	100.0	4647.0	17.9
Belize	1996	9.7	56.9	78.3	100.0	4658.5	17.9
Belize	1999	12.2	53.1	77.4	100.0	5184.8	17.9
Belize	2002	9.9	53.1	80.5	100.0	6297.6	17.9
Belize	2005	11.7	53.1	88.3	100.0	7320.7	17.9
Belize	2008	13.3	53.1	100.2	100.0	7883.7	17.9
Belize	2010	9.6	53.1	100.0	100.0	8066.4	17.9
Bosnia and Herzegovina	1981	0.2	26.8				29.4
Bosnia and Herzegovina	1984	0.2	26.8				29.4
Bosnia and Herzegovina	1987	0.1	26.8				29.4
Bosnia and Herzegovina	1990	0.2	26.8				29.4
Bosnia and Herzegovina	1993	0.2	26.8				29.4
Bosnia and Herzegovina	1996	0.3	26.8				29.4
Bosnia and Herzegovina	1999	0.1	26.8	73.9	124.3	4241.5	29.4
Bosnia and Herzegovina	2002	0.1	26.8	81.3	140.7	4923.9	29.4
Bosnia and Herzegovina	2005	0.1	30.2	84.9	106.5	6037.1	29.4
Bosnia and Herzegovina	2008	0.0	35.6	98.3	90.4	7719.5	29.4
Bosnia and Herzegovina	2010	0.0	35.6	100.0	100.0	7751.2	29.4
Botswana	1981	36.0	54.2	6.8	12.3	1941.2	4.5
Botswana	1984	42.0	54.2	9.1	19.1	2721.6	4.5
Botswana	1987	38.4	54.2	11.9	24.7	3543.3	4.5
Botswana	1990	25.9	63.0	16.1	27.4	4982.5	4.5
Botswana	1993	30.2	61.0	24.1	35.7	5478.0	4.5
Botswana	1996	32.3	61.0	32.4	48.9	6043.0	4.5
Botswana	1999	26.4	61.0	40.6	68.1	7727.4	4.5

Botswana	2002	20.6	61.0	50.7	93.1	8884.3	4.5
Botswana	2005	15.9	61.0	64.3	75.2	11177.2	4.5
Botswana	2008	11.9	61.0	86.5	100.5	14104.1	4.5
Botswana	2010	13.4	61.0	100.0	100.0	14022.3	4.5
Brazil	1981	13.6	57.9	0.0	0.0	3872.7	10.9
Brazil	1984	15.5	58.4	0.0	0.0	4227.3	10.9
Brazil	1987	13.6	59.7	0.0	0.0	5150.2	10.9
Brazil	1990	17.2	61.0	0.0	0.0	5383.4	10.9
Brazil	1993	17.0	60.8	1.0	1.8	5836.3	10.9
Brazil	1996	12.4	60.6	42.4	57.1	6644.6	10.9
Brazil	1999	11.4	59.8	49.1	103.2	6867.6	10.9
Brazil	2002	10.6	59.4	60.9	166.0	7574.9	10.9
Brazil	2005	8.5	57.4	79.5	138.4	8641.0	10.9
Brazil	2008	6.0	55.1	90.8	104.2	10457.1	10.9
Brazil	2010	5.4	55.1	100.0	100.0	11215.7	10.9
Bulgaria	1981	0.1	24.4	0.0	0.0	4396.6	34.8
Bulgaria	1984	0.1	23.5	0.0	0.1	5597.4	34.8
Bulgaria	1987	0.1	20.8	0.0	0.1	6828.2	34.8
Bulgaria	1990	0.1	22.6	0.0	0.1	7200.9	34.8
Bulgaria	1993	0.2	33.3	0.5	1.9	5796.7	34.8
Bulgaria	1996	0.1	36.0	3.6	12.0	5519.4	34.8
Bulgaria	1999	2.2	33.0	50.7	124.3	5884.6	34.8
Bulgaria	2002	1.2	35.1	63.6	140.6	7383.0	34.8
Bulgaria	2005		29.4	73.2	106.5	9940.8	34.8
Bulgaria	2008		36.2	94.7	90.5	13101.6	34.8
Bulgaria	2010		36.2	100.0	100.0	12851.9	34.8
China*	1981	84.0	29.1		25.2	287.1	8.8
China*	1984	69.4	27.7		34.3	438.6	8.8
China*	1987	54.0	31.7		55.0	623.1	8.8
China*	1990	60.2	32.7	40.4	70.6	799.1	8.8
China*	1993	53.7	38.0	50.9	85.1	1185.7	8.8
China*	1996	36.4	34.9	80.2	122.8	1681.9	8.8
China*	1999	35.6	38.9	80.6	122.3	2164.7	8.8
China*	2002	28.4	53.6	80.9	122.3	2884.2	8.8
China*	2005	16.3	39.8	86.6	121.0	4102.5	8.8
China*	2008	13.1	47.8	97.4	102.6	6145.2	8.8

China*	2010	11.6	47.8	100.0	100.0	7487.4	8.8
Colombia	1981	14.8	56.9	1.4	2.9	2694.9	20.5
Colombia	1984	13.5	56.9	2.5	5.3	3062.1	20.5
Colombia	1987	11.5	56.9	4.5	12.8	3672.2	20.5
Colombia	1990	8.1	56.9	9.4	26.5	4321.4	20.5
Colombia	1993	7.6	56.9	19.1	45.5	4976.4	20.5
Colombia	1996	13.0	56.9	34.2	54.6	5668.0	20.5
Colombia	1999	16.2	58.7	53.3	92.5	5652.5	20.5
Colombia	2002	20.3	60.7	66.8	131.9	6187.2	20.5
Colombia	2005	12.7	56.1	79.7	122.2	7339.5	20.5
Colombia	2008	11.3	57.2	93.8	103.6	9022.6	20.5
Colombia	2010	8.2	55.9	100.0	100.0	9498.9	20.5
Costa Rica	1981	21.4	47.5	1.2	4.1		24.0
Costa Rica	1984	15.2	47.5	3.4	8.5		24.0
Costa Rica	1987	11.2	47.5	5.1	11.9		24.0
Costa Rica	1990	8.5	45.3	8.6	17.4		24.0
Costa Rica	1993	6.9	46.0	14.7	27.0		24.0
Costa Rica	1996	7.0	46.5	24.2	39.5		24.0
Costa Rica	1999	5.4	47.7	33.7	54.3		24.0
Costa Rica	2002	6.0	50.7	45.4	68.4	7317.4	24.0
Costa Rica	2005	3.9	47.6	63.5	90.9	8844.7	24.0
Costa Rica	2008	2.4	48.9	87.8	100.1	11015.1	24.0
Costa Rica	2010	2.6	48.9	100.0	100.0	11337.0	24.0
Dominican Republic	1981	16.5	47.4	1.6	2.7	2171.1	24.8
Dominican Republic	1984	15.9	47.4	2.2	2.7	2492.5	24.8
Dominican Republic	1987	14.3	47.4	3.9	10.4	2792.4	24.8
Dominican Republic	1990	12.4	47.4	11.8	23.1	2941.6	24.8
Dominican Republic	1993	4.5	47.4	19.0	34.4	3575.1	24.8
Dominican Republic	1996	4.7	47.4	24.5	37.4	4159.5	24.8
Dominican Republic	1999	4.9	47.4	29.6	43.5	5071.2	24.8
Dominican Republic	2002	5.7	50.1	36.5	50.5	5810.5	24.8
Dominican Republic	2005	6.1	51.1	73.4	82.5	6196.6	24.8
Dominican Republic	2008	3.3	49.0	92.7	93.9	8007.0	24.8
Dominican Republic	2010	2.2	47.2	100.0	100.0	8785.2	24.8
Ecuador	1981	10.9	50.5	0.1	0.1	3325.0	27.6
Ecuador	1984	12.6	50.5	0.2	0.3	3587.3	27.6

Ecuador	1987	12.9	50.5	0.3	0.7	3628.5	27.6
Ecuador	1990	13.8	50.5	1.3	3.1	4290.5	27.6
Ecuador	1993	14.3	50.5	4.4	7.7	4824.1	27.6
Ecuador	1996	14.6	50.5	8.6	12.8	5249.1	27.6
Ecuador	1999	23.9	60.1	23.3	47.1	5368.3	27.6
Ecuador	2002	13.7	60.1	70.8	100.0	5971.7	27.6
Ecuador	2005	9.1	54.1	80.2	100.0	7166.5	27.6
Ecuador	2008	6.5	50.6	91.8	100.0	8316.9	27.6
Ecuador	2010	4.6	49.3	100.0	100.0	8513.9	27.6
Fiji	1981	34.5	46.8	28.6	44.6	1530.7	7.9
Fiji	1984	38.4	46.8	34.4	56.4	1698.2	7.9
Fiji	1987	41.4	46.8	38.7	64.8	1695.8	7.9
Fiji	1990	36.0	46.8	49.7	77.2	2324.2	7.9
Fiji	1993	35.3	46.8	58.4	80.4	2569.9	7.9
Fiji	1996	32.1	46.8	61.9	73.2	3031.4	7.9
Fiji	1999	30.3	46.8	69.1	102.7	3321.7	7.9
Fiji	2002	29.5	46.8	73.3	114.0	3603.4	7.9
Fiji	2005	17.9	46.8	80.4	88.1	4196.0	7.9
Fiji	2008	5.0	42.8	93.0	83.1	4501.0	7.9
Fiji	2010	6.1	42.8	100.0	100.0	4570.2	7.9
Gabon	1981	1.2	41.5	40.4	54.9	8804.5	6.4
Gabon	1984	1.8	41.5	55.1	88.2	10502.4	6.4
Gabon	1987	3.0	41.5	62.3	60.7	9308.1	6.4
Gabon	1990	2.4	41.5	69.3	55.0	12214.1	6.4
Gabon	1993	4.5	41.5	56.8	57.2	12957.9	6.4
Gabon	1996	11.8	41.5	85.4	103.3	14411.6	6.4
Gabon	1999	7.1	41.5	88.3	124.3	13904.3	6.4
Gabon	2002	3.9	41.5	90.8	140.7	13653.2	6.4
Gabon	2005	4.8	41.5	94.2	106.5	14638.6	6.4
Gabon	2008	2.5	41.5	96.7	90.4	15717.8	6.4
Gabon	2010	0.5	41.5	100.0	100.0	16167.0	6.4
Hungary	1981	0.1	21.0	3.5	16.6	6042.6	32.3
Hungary	1984	0.1	21.0	4.4	23.3	7390.5	32.3
Hungary	1987	0.1	21.0	5.3	22.7	8513.6	32.3
Hungary	1990	0.1	21.0	9.3	30.6	9341.7	32.3
Hungary	1993	0.2	27.9	18.8	44.9	8591.1	32.3

Hungary	1996	0.2	27.9	35.5	74.4	9684.8	32.3
Hungary	1999	0.2	27.8	52.7	115.5	11260.6	32.3
Hungary	2002	0.1	26.8	66.5	122.0	13615.6	32.3
Hungary	2005	0.1	26.8	76.9	95.9	16967.5	32.3
Hungary	2008	0.2	26.8	91.5	82.8	19308.9	32.3
Hungary	2010	0.2	26.8	100.0	100.0	18611.4	32.3
Iran, Islamic Rep.	1981	3.9	43.6	0.7	0.8	3359.5	24.8
Iran, Islamic Rep.	1984	2.4	43.6	1.1	0.9	4450.4	24.8
Iran, Islamic Rep.	1987	5.1	43.6	1.8	0.7	4027.6	24.8
Iran, Islamic Rep.	1990	3.9	43.6	3.0	0.7	4557.1	24.8
Iran, Islamic Rep.	1993	1.8	43.6	5.5	12.4	5089.6	24.8
Iran, Islamic Rep.	1996	1.7	43.6	13.6	17.1	5776.7	24.8
Iran, Islamic Rep.	1999	1.8	43.6	22.6	17.1	6490.5	24.8
Iran, Islamic Rep.	2002	1.7	43.6	32.9	67.4	7776.5	24.8
Iran, Islamic Rep.	2005	1.5	38.3	48.4	87.4	9869.2	24.8
Iran, Islamic Rep.	2008	0.9	38.3	80.3	91.9	11629.5	24.8
Iran, Islamic Rep.	2010	0.7	38.3	100.0	100.0	12677.4	24.8
Iraq	1981	14.8	30.9		0.0		11.6
Iraq	1984	8.2	30.9		0.0		11.6
Iraq	1987	10.0	30.9		0.0		11.6
Iraq	1990	9.3	30.9		0.0		11.6
Iraq	1993	8.4	30.9		0.0		11.6
Iraq	1996	10.3	30.9		0.0		11.6
Iraq	1999	9.5	30.9		0.0		11.6
Iraq	2002	7.0	30.9		0.0		11.6
Iraq	2005	4.8	30.9	48.5	125.8	4718.9	11.6
Iraq	2008	2.2	36.0	99.8	102.0	5562.5	11.6
Iraq	2010	2.2	36.0	100.0	100.0	6083.4	11.6
Jamaica	1981	4.5	42.2	0.8	2.0	3418.0	15.9
Jamaica	1984	4.9	42.2	1.3	4.5	4073.1	15.9
Jamaica	1987	4.4	42.2	2.4	6.3	4867.6	15.9
Jamaica	1990	1.3	42.2	3.7	8.2	5578.9	15.9
Jamaica	1993	6.5	35.7	12.2	28.6	6240.8	15.9
Jamaica	1996	1.8	40.5	24.9	42.6	6722.6	15.9
Jamaica	1999	1.3	44.2	31.5	44.8	6681.7	15.9
Jamaica	2002	0.3	48.3	39.0	55.5	7103.9	15.9

Jamaica	2005	0.2	48.3	55.9	71.4	8107.8	15.9
Jamaica	2008	0.1	48.3	81.0	83.5	8930.6	15.9
Jamaica	2010	0.2	48.3	100.0	100.0	8600.7	15.9
Jordan	1981		33.8	25.3	46.5	2446.0	27.0
Jordan	1984		33.8	29.8	54.2	2723.0	27.0
Jordan	1987		33.8	30.6	47.7	2754.2	27.0
Jordan	1990	1.5	33.8	47.6	93.5	2330.6	27.0
Jordan	1993	3.2	33.8	55.3	97.6	2659.1	27.0
Jordan	1996	2.1	33.8	62.4	99.9	2926.4	27.0
Jordan	1999	1.6	33.8	66.7	99.9	3106.4	27.0
Jordan	2002	1.0	33.8	69.6	99.9	3560.2	27.0
Jordan	2005	0.4	33.8	75.7	99.9	4289.1	27.0
Jordan	2008	0.1	33.8	95.9	100.0	5427.7	27.0
Jordan	2010	0.1	35.4	100.0	100.0	5716.9	27.0
Kazakhstan	1981	0.0	32.7				40.1
Kazakhstan	1984	0.0	32.7				40.1
Kazakhstan	1987	0.0	32.7				40.1
Kazakhstan	1990	0.0	32.7				40.1
Kazakhstan	1993	4.2	32.7	0.5		4137.5	40.1
Kazakhstan	1996	5.0	35.3	28.4	45.7	3867.5	40.1
Kazakhstan	1999	9.7	35.3	38.8	81.1	4293.0	40.1
Kazakhstan	2002	5.2	35.0	50.5	104.0	6254.5	40.1
Kazakhstan	2005	0.8	35.0	61.7	90.2	8657.8	40.1
Kazakhstan	2008	0.1	29.3	87.0	81.6	11218.8	40.1
Kazakhstan	2010	0.3	29.3	100.0	100.0	11928.9	40.1
Macedonia, FYR	1981		38.8				24.3
Macedonia, FYR	1984		38.8				24.3
Macedonia, FYR	1987		38.8				24.3
Macedonia, FYR	1990		38.8				24.3
Macedonia, FYR	1993	0.1	38.8	27.0		5179.4	24.3
Macedonia, FYR	1996		38.8	72.5	86.0	5308.2	24.3
Macedonia, FYR	1999	2.7	38.8	74.8	122.4	5977.6	24.3
Macedonia, FYR	2002	0.6	38.8	85.8	138.4	6328.4	24.3
Macedonia, FYR	2005	0.3	39.1	86.9	106.0	7599.8	24.3
Macedonia, FYR	2008	0.3	44.2	99.3	90.1	9537.8	24.3
Macedonia, FYR	2010		43.6	100.0	100.0	9875.3	24.3

Malaysia	1981	3.8	48.6	45.3	71.5	2682.6	17.7
Malaysia	1984	3.2	48.6	51.6	72.8	3452.9	17.7
Malaysia	1987	2.4	47.0	53.5	78.2	3620.0	17.7
Malaysia	1990	1.7	47.0	56.7	84.0	4817.2	17.7
Malaysia	1993	1.2	47.0	64.2	79.9	6367.4	17.7
Malaysia	1996	0.8	47.0	71.3	78.1	8237.9	17.7
Malaysia	1999	2.0	47.0	79.2	118.0	8398.0	17.7
Malaysia	2002	1.2	47.0	83.0	118.0	9515.5	17.7
Malaysia	2005	0.4	47.0	87.7	117.6	11840.3	17.7
Malaysia	2008		47.0	97.7	103.6	14416.7	17.7
Malaysia	2010		47.0	100.0	100.0	15018.4	17.7
Maldives	1981	32.2	62.7	21.3	59.0	984.8	8.2
Maldives	1984	31.3	62.7	23.5	55.1	1339.5	8.2
Maldives	1987	30.7	62.7	26.0	72.1	1756.7	8.2
Maldives	1990	28.8	62.7	34.2	74.6	2041.9	8.2
Maldives	1993	28.2	62.7	54.1	85.6	2396.1	8.2
Maldives	1996	29.1	62.7	62.7	92.0	2996.6	8.2
Maldives	1999	21.4	62.7	68.4	92.0	3818.3	8.2
Maldives	2002	10.0	37.4	68.7	100.0	4423.7	8.2
Maldives	2005	2.3	37.4	72.8	100.0	5317.1	8.2
Maldives	2008	0.2	37.4	90.1	100.0	8073.4	8.2
Maldives	2010	0.2	37.4	100.0	100.0	8216.7	8.2
Mexico	1981	10.0	46.3	0.1	0.2	5974.6	18.2
Mexico	1984	12.8	46.3	0.5	1.3	6347.5	18.2
Mexico	1987	8.2	46.3	3.6	10.9	6493.0	18.2
Mexico	1990	4.5	46.3	11.8	22.3	7579.0	18.2
Mexico	1993	4.5	46.3	18.3	24.7	8588.9	18.2
Mexico	1996	7.9	48.5	35.5	60.1	9052.8	18.2
Mexico	1999	7.5	48.5	57.8	75.7	10403.6	18.2
Mexico	2002	3.9	49.7	70.7	76.4	11083.4	18.2
Mexico	2005	1.1	49.7	80.5	86.2	12514.4	18.2
Mexico	2008	1.2	48.3	91.2	88.1	14157.8	18.2
Mexico	2010	0.7	47.2	100.0	100.0	14021.2	18.2
Montenegro	1981	0.4	30.1				30.3
Montenegro	1984	0.4	30.1				30.3
Montenegro	1987	0.3	30.1				30.3

Montenegro	1990	0.3	30.1				30.3
Montenegro	1993	0.4	30.1				30.3
Montenegro	1996	0.4	30.1				30.3
Montenegro	1999	0.2	30.1	25.2	124.3		30.3
Montenegro	2002	0.2	30.1	72.6	140.7	6812.5	30.3
Montenegro	2005	0.1	30.1	83.2	106.5	8059.9	30.3
Montenegro	2008	0.1	30.0	95.9	90.4	11147.7	30.3
Montenegro	2010		28.6	100.0	100.0	10942.0	30.3
Namibia	1981	36.7	74.3		12.0		6.3
Namibia	1984	38.7	74.3		20.2		6.3
Namibia	1987	39.3	74.3		27.8		6.3
Namibia	1990	50.0	74.3	19.9	35.3	3086.4	6.3
Namibia	1993	49.1	74.3	28.4	44.6	3383.5	6.3
Namibia	1996	44.2	74.3	37.4	58.7	3649.6	6.3
Namibia	1999	40.8	74.3	46.9	83.4	3872.8	6.3
Namibia	2002	36.0	74.3	62.3	144.0	4405.2	6.3
Namibia	2005	32.3	74.3	71.1	86.9	5532.2	6.3
Namibia	2008	23.1	74.3	88.0	112.8	6596.7	6.3
Namibia	2010	28.7	74.3	100.0	100.0	6887.1	6.3
Panama	1981	9.7	56.6	61.7	100.0	3235.0	31.6
Panama	1984	14.2	56.6	66.8	100.0	3580.7	31.6
Panama	1987	18.1	56.6	68.1	100.0	3871.5	31.6
Panama	1990	22.3	56.6	68.9	100.0	3899.7	31.6
Panama	1993	17.0	56.6	71.5	100.0	4975.6	31.6
Panama	1996	15.1	56.6	74.1	100.0	5625.8	31.6
Panama	1999	15.1	56.6	76.5	100.0	6626.5	31.6
Panama	2002	11.0	56.6	78.6	100.0	6830.6	31.6
Panama	2005	9.5	54.0	81.3	100.0	8354.0	31.6
Panama	2008	7.5	54.0	94.4	100.0	11453.5	31.6
Panama	2010	6.6	51.9	100.0	100.0	12579.0	31.6
Peru	1981	11.7	56.7	0.0	0.0	3364.1	28.4
Peru	1984	13.7	56.7	0.0	0.0	3359.2	28.4
Peru	1987	9.6	56.7	0.0	0.0	4178.3	28.4
Peru	1990	14.0	56.7	3.1	6.7	3254.2	28.4
Peru	1993	5.4	56.7	41.3	70.4	3603.6	28.4
Peru	1996	2.4	56.7	63.3	86.8	4589.6	28.4

Peru	1999	15.8	56.7	76.3	119.8	4896.7	28.4
Peru	2002	12.4	55.6	80.9	124.5	5381.9	28.4
Peru	2005	8.6	51.1	87.1	116.7	6474.7	28.4
Peru	2008	6.2	49.0	95.7	103.5	8547.2	28.4
Peru	2010	4.9	48.1	100.0	100.0	9273.4	28.4
Romania	1981	0.3	31.5	0.0	0.0	3987.2	24.9
Romania	1984	0.2	31.5	0.0	0.1	5253.2	24.9
Romania	1987	0.2	31.5	0.0	0.0	5758.6	24.9
Romania	1990	0.3	31.5	0.0	0.1	5623.8	24.9
Romania	1993	2.9	31.5	0.9	2.4	4961.2	24.9
Romania	1996	2.0	31.5	3.7	9.7	6204.9	24.9
Romania	1999	2.7	31.5	22.0	48.2	5806.6	24.9
Romania	2002	2.9	31.5	52.7	104.0	7089.0	24.9
Romania	2005	1.2	31.6	74.1	91.7	9409.6	24.9
Romania	2008	0.5	31.2	89.3	79.3	12551.1	24.9
Romania	2010	0.5	24.2	100.0	100.0	11860.1	24.9
Serbia	1981	0.3	32.7				48.9
Serbia	1984	0.3	32.7				48.9
Serbia	1987	0.3	32.7				48.9
Serbia	1990	0.3	32.7				48.9
Serbia	1993	0.4	32.7				48.9
Serbia	1996	0.3	32.7				48.9
Serbia	1999	0.4	32.7	14.8	15.0		48.9
Serbia	2002	0.2	32.7	49.5	82.8	6474.1	48.9
Serbia	2005		33.4	65.5	85.8	8315.2	48.9
Serbia	2008	0.1	28.2	87.1	71.7	10288.1	48.9
Serbia	2010	0.2	29.6	100.0	100.0	10309.4	48.9
Seychelles	1981		47.0	36.1	52.3	4595.4	
Seychelles	1984		47.0	39.6	58.5	5301.4	
Seychelles	1987		47.0	41.0	46.4	6302.8	
Seychelles	1990		47.0	44.1	44.2	8644.8	
Seychelles	1993		47.0	47.0	42.9	10633.5	
Seychelles	1996		47.0	47.2	41.2	11510.3	
Seychelles	1999		42.7	51.9	44.3	13359.6	
Seychelles	2002	0.5	42.7	58.6	45.4	14224.6	
Seychelles	2005	0.5	42.7	63.3	45.6	18014.8	

Seychelles	2008	0.3	65.8	77.8	78.4	21889.7	
Seychelles	2010	0.2	65.8	100.0	100.0	22657.5	
South Africa	1981	21.6	59.3	7.0	12.0	4538.2	12.6
South Africa	1984	20.9	59.3	10.0	20.1	4944.3	12.6
South Africa	1987	23.5	59.3	16.1	27.8	5025.5	12.6
South Africa	1990	22.1	59.3	23.7	35.3	5583.8	12.6
South Africa	1993	24.3	59.3	34.2	44.6	5548.7	12.6
South Africa	1996	21.8	59.3	43.5	58.7	6153.3	12.6
South Africa	1999	25.6	59.3	53.1	83.4	6449.6	12.6
South Africa	2002	24.9	59.3	64.5	143.9	7188.0	12.6
South Africa	2005	20.2	59.3	71.6	86.8	8517.1	12.6
South Africa	2008	13.6	59.3	89.5	112.8	10200.7	12.6
South Africa	2010	13.8	59.3	100.0	100.0	10289.5	12.6
St. Lucia	1981	47.5	42.6	43.2	100.0	2440.8	8.6
St. Lucia	1984	42.6	42.6	46.8	100.0	3056.8	8.6
St. Lucia	1987	39.8	42.6	51.4	100.0	4134.3	8.6
St. Lucia	1990	23.9	42.6	56.5	100.0	6107.0	8.6
St. Lucia	1993	21.2	42.6	63.5	100.0	7016.6	8.6
St. Lucia	1996	19.6	42.6	69.6	100.0	7480.4	8.6
St. Lucia	1999	18.2	42.6	73.6	100.0	8079.5	8.6
St. Lucia	2002	20.0	42.6	81.0	100.0	8240.8	8.6
St. Lucia	2005	17.4	42.6	86.3	100.0	10350.1	8.6
St. Lucia	2008	15.8	42.6	97.0	100.0	12494.0	8.6
St. Lucia	2010	18.5	42.6	100.0	100.0	12493.8	8.6
Suriname	1981	10.7	52.9	0.0	0.1		8.1
Suriname	1984	12.4	52.9	0.0	0.1		8.1
Suriname	1987	17.0	52.9	0.1	0.1		8.1
Suriname	1990	14.4	52.9	0.1	0.1		8.1
Suriname	1993	16.3	52.9	0.5	0.1		8.1
Suriname	1996	16.0	52.9	7.2	14.6		8.1
Suriname	1999	15.5	52.9	18.2	30.4	5938.6	8.1
Suriname	2002	14.6	52.9	44.9	85.5	6598.2	8.1
Suriname	2005	11.9	52.9	68.7	99.5	8655.7	8.1
Suriname	2008	10.2	52.9	93.6	100.0	10423.2	8.1
Suriname	2010	9.9	52.9	100.0	100.0	11109.4	8.1
Thailand	1981	21.9	45.2	36.5	68.9	1236.5	30.6

Thailand	1984	20.1	45.2	40.2	74.6	1574.1	30.6
Thailand	1987	18.2	45.2	42.9	81.2	1929.9	30.6
Thailand	1990	11.6	45.3	49.8	80.7	2921.1	30.6
Thailand	1993	6.1	45.3	56.6	79.9	3858.6	30.6
Thailand	1996	2.5	42.9	66.6	80.0	5011.8	30.6
Thailand	1999	3.2	43.1	76.1	119.3	4697.4	30.6
Thailand	2002	1.6	42.0	79.1	135.6	5464.6	30.6
Thailand	2005	1.0	42.0	86.6	126.9	6835.0	30.6
Thailand	2008	0.4	40.5	97.7	105.1	8192.8	30.6
Thailand	2010	0.4	39.4	100.0	100.0	8673.7	30.6
Tunisia	1981	9.7	40.2	22.9	34.5	2138.4	16.1
Tunisia	1984	8.4	40.2	30.7	54.3	2537.8	16.1
Tunisia	1987	8.1	40.2	38.0	57.9	2777.5	16.1
Tunisia	1990	5.9	40.2	46.7	61.4	3189.3	16.1
Tunisia	1993	6.2	40.2	55.2	70.1	3757.5	16.1
Tunisia	1996	5.7	40.2	64.2	68.0	4256.9	16.1
Tunisia	1999	3.2	40.2	70.4	82.9	5006.8	16.1
Tunisia	2002	2.0	40.2	75.8	99.3	5737.1	16.1
Tunisia	2005	1.4	41.4	81.9	90.6	7182.4	16.1
Tunisia	2008	0.8	41.4	92.5	86.1	8827.8	16.1
Tunisia	2010	1.1	36.1	100.0	100.0	9356.2	16.1
Turkey	1981	3.1	43.6	0.0	0.0	3104.0	21.7
Turkey	1984	2.3	43.6	0.0	0.0	3684.0	21.7
Turkey	1987	1.3	43.6	0.0	0.1	4565.9	21.7
Turkey	1990	1.6	43.6	0.1	0.2	5579.0	21.7
Turkey	1993	1.5	43.6	0.3	0.7	6596.4	21.7
Turkey	1996	1.6	43.6	2.3	5.3	7194.7	21.7
Turkey	1999	1.9	43.6	12.9	27.9	7424.5	21.7
Turkey	2002	2.0	42.7	44.7	100.3	8092.8	21.7
Turkey	2005	2.0	42.6	65.9	89.4	10899.4	21.7
Turkey	2008		39.0	86.7	86.6	12770.7	21.7
Turkey	2010	1.3	40.0	100.0	100.0	13177.8	21.7
Turkmenistan	1981	13.8	35.4				17.1
Turkmenistan	1984	11.7	35.4				17.1
Turkmenistan	1987	19.6	35.4				17.1
Turkmenistan	1990	30.4	35.4				17.1

Turkmenistan	1993	63.5	35.4	0.0		2144.8	17.1
Turkmenistan	1996	46.0	35.4	17.4		1513.9	17.1
Turkmenistan	1999	18.8	35.4	46.0		1601.9	17.1
Turkmenistan	2002	4.5	35.4	60.4		2677.4	17.1
Turkmenistan	2005	0.5	35.4	74.7		4051.0	17.1
Turkmenistan	2008	0.1	35.4	98.4		5892.3	17.1
Turkmenistan	2010	0.1	35.4	100.0		6744.8	17.1
Venezuela, RB	1981	3.3	55.6	0.1	0.2	6075.3	32.9
Venezuela, RB	1984	4.0	55.6	0.1	0.3	6212.0	32.9
Venezuela, RB	1987	3.1	53.5	0.1	0.6	7052.2	32.9
Venezuela, RB	1990	6.0	53.5	0.4	1.8	7073.5	32.9
Venezuela, RB	1993	5.8	53.5	0.9	3.5	8329.4	32.9
Venezuela, RB	1996	10.6	53.5	4.7	16.1	8392.5	32.9
Venezuela, RB	1999	11.4	47.8	11.8	23.4	8268.1	32.9
Venezuela, RB	2002	15.9	49.0	18.9	44.9	8092.8	32.9
Venezuela, RB	2005	13.4	49.5	34.9	80.8	9973.2	32.9
Venezuela, RB	2008	5.1	49.5	61.4	83.0	12922.5	32.9
Venezuela, RB	2010	5.7	49.5	100.0	100.0	12173.4	32.9

Table 49.Data Series for High Income Economies

Country	Year	POVERTY	Gini	Inf	E Rate	GDP	Av. SET
Chile	1981	5.1	56.2	5.6	7.6	3366.1	33.1
Chile	1984	8.3	56.2	9.4	19.3	3262.3	33.1
Chile	1987	7.5	56.2	17.5	43.0	3843.3	33.1
Chile	1990	5.1	55.3	29.7	59.8	5013.5	33.1
Chile	1993	3.1	55.3	47.0	79.2	6657.0	33.1
Chile	1996	2.2	54.9	60.9	80.8	8440.9	33.1
Chile	1999	2.4	54.9	70.2	99.7	9240.9	33.1
Chile	2002	2.1	54.9	77.3	135.0	10450.1	33.1
Chile	2005	1.4	54.9	82.8	109.8	12705.8	33.1
Chile	2008	1.2	54.9	97.2	102.4	15277.1	33.1
							Av.
Country	Year	POVERTY	Gini	Inf	E Rate	GDP	SET
Chile	2010	1.4	54.9	100.0	100.0	16002.1	33.1
Croatia	1981	0.0	27.7				33.0

Croatia	1984	0.0	27.7				33.0
Croatia	1987	0.0	27.7				33.0
Croatia	1990	0.0	27.7				33.0
Croatia	1993	0.1	27.7	30.2	65.1	6996.2	33.0
Croatia	1996	0.1	27.7	63.0	98.8	9134.0	33.0
Croatia	1999	0.2	27.7	72.5	129.4	10066.3	33.0
Croatia	2002	0.1	27.7	80.0	143.2	12810.5	33.0
Croatia	2005	0.1	27.7	85.8	108.2	15714.1	33.0
Croatia	2008	0.1	33.7	96.7	89.8	19086.7	33.0
Croatia	2010	0.1	33.7	100.0	100.0	17785.2	33.0
Czech Republic	1981		26.6				28.6
Czech Republic	1984		26.6				28.6
Czech Republic	1987		26.6				28.6
Czech Republic	1990		26.6				28.6
Czech Republic	1993		26.6		152.6		28.6
Czech Republic	1996	0.1	25.8	61.1	142.1	13790.6	28.6
Czech Republic	1999	0.1	25.8	75.0	181.0	14508.6	28.6
Czech Republic	2002	0.1	25.8	83.0	171.4	17056.1	28.6
Czech Republic	2005	0.1	25.8	87.0	125.4	21224.6	28.6
Czech Republic	2008	0.1	25.8	97.5	89.4	26338.6	28.6
Czech Republic	2010	0.1	25.8	100.0	100.0	25987.3	28.6
Estonia	1981	0.1	39.5				45.9
Estonia	1984	0.1	39.5				45.9
Estonia	1987	0.1	39.5				45.9
Estonia	1990	0.2	39.5				45.9
Estonia	1993	0.8	39.5	21.8	112.0	5863.8	45.9
Estonia	1996	0.2	36.8	51.2	102.0	7010.2	45.9
Estonia	1999	0.4	36.8	63.6	124.3	8981.3	45.9
Estonia	2002	0.5	36.8	72.4	140.7	12039.4	45.9
Estonia	2005	0.4	36.8	78.8	106.6	16618.4	45.9
Estonia	2008	0.3	36.8	97.1	90.6	20435.2	45.9
Estonia	2010	0.2	36.8	100.0	100.0	18373.8	45.9
Latvia	1981	0.0	27.0				43.7
Latvia	1984	0.0	27.0				43.7
Latvia	1987	0.0	27.0				43.7
Latvia	1990	0.0	27.0				43.7

Latvia	1993		27.0	25.2	127.3	4591.4	43.7
Latvia	1996	0.4	31.7	50.3	103.8	5480.7	43.7
Latvia	1999		31.7	57.8	110.3	7009.4	43.7
Latvia	2002		35.9	62.1	116.5	9354.6	43.7
Latvia	2005	0.3	35.9	72.5	106.5	13426.0	43.7
Latvia	2008	0.1	36.6	98.0	90.6	17644.6	43.7
Latvia	2010	0.2	36.6	100.0	100.0	15108.6	43.7
Lithuania	1981	0.1	33.6				49.7
Lithuania	1984	0.1	33.6				49.7
Lithuania	1987	0.1	33.6				49.7
Lithuania	1990	0.0	33.6				49.7
Lithuania	1993	2.2	33.6		166.7		49.7
Lithuania	1996		32.3		153.5		49.7
Lithuania	1999	0.3	32.3	73.5	153.5	7962.1	49.7
Lithuania	2002	0.4	32.3	75.7	141.1	10149.0	49.7
Lithuania	2005	0.3	32.3	77.8	106.4	14285.5	49.7
Lithuania	2008	0.2	37.6	94.9	90.4	20041.4	49.7
Lithuania	2010	0.3	37.6	100.0	100.0	18259.4	49.7
Poland	1981	0.1	25.5	0.0	0.2	4140.2	38.7
Poland	1984	0.2	25.5	0.1	0.4	4589.7	38.7
Poland	1987	0.1	25.5	0.2	0.9	5347.9	38.7
Poland	1990	1.4	25.5	7.5	31.5	5867.6	38.7
Poland	1993	4.2	25.5	24.8	61.7	6230.8	38.7
Poland	1996	1.4	32.7	50.2	90.6	7871.0	38.7
Poland	1999	0.1	33.1	69.2	133.1	9630.8	38.7
Poland	2002	0.1	34.1	82.0	134.7	11071.8	38.7
Poland	2005	0.1	34.9	87.3	107.3	13568.4	38.7
Poland	2008	0.1	34.2	94.2	79.9	17481.4	38.7
Poland	2010	0.1	33.8	100.0	100.0	18796.2	38.7
Russian Federation	1981	0.7	48.4		0.0		56.3
Russian Federation	1984	0.5	48.4		0.0		56.3
Russian Federation	1987	0.5	48.4		0.0		56.3
Russian Federation	1990	0.7	48.4		0.1		56.3
Russian Federation	1993	1.5	48.4	0.5	3.3	7371.4	56.3
Russian Federation	1996	2.8	46.1	9.4	17.0	6319.6	56.3
Russian Federation	1999	2.3	37.5	25.5	81.1	6790.0	56.3

Russian Federation	2002	0.3	35.7	43.3	103.2	8839.1	56.3
Russian Federation	2005	0.2	37.5	61.4	93.1	11799.2	56.3
Russian Federation	2008		42.3	83.8	81.8	15835.5	56.3
Russian Federation	2010		42.3	100.0	100.0	15550.1	56.3
Slovak Republic	1981		25.8				33.5
Slovak Republic	1984		25.8				33.5
Slovak Republic	1987		25.8				33.5
Slovak Republic	1990		25.8				33.5
Slovak Republic	1993	0.2	25.8	36.3	135.3	7470.6	33.5
Slovak Republic	1996	0.3	25.8	47.9	134.8	9588.8	33.5
Slovak Republic	1999	0.1	25.8	59.8	181.8	10923.5	33.5
Slovak Republic	2002	0.2	25.8	74.4	199.3	12693.6	33.5
Slovak Republic	2005	0.2	29.8	89.1	136.4	16060.2	33.5
Slovak Republic	2008	0.1	26.9	98.4	93.9	21866.9	33.5
Slovak Republic	2010	0.1	26.9	100.0	100.0	22033.5	33.5
Slovenia	1981	0.0	23.6				44.4
Slovenia	1984	0.0	23.6				44.4
Slovenia	1987	0.0	23.6				44.4
Slovenia	1990	0.0	23.6				44.4
Slovenia	1993	0.0	29.2	32.6	62.6	11443.2	44.4
Slovenia	1996	0.0	29.2	49.2	74.8	13817.3	44.4
Slovenia	1999	0.0	29.2	61.1	100.5	16560.8	44.4
Slovenia	2002	0.1	29.2	77.4	132.8	19449.1	44.4
Slovenia	2005	0.1	29.2	86.8	106.5	23434.2	44.4
Slovenia	2008	0.1	29.2	97.4	90.4	29402.8	44.4
Slovenia	2010	0.1	29.2	100.0	100.0	27452.1	44.4
Trinidad and Tobago	1981		41.7	12.3	37.6		6.3
Trinidad and Tobago	1984		41.7	17.9	37.6		6.3
Trinidad and Tobago	1987	1.4	42.3	23.0	56.5		6.3
Trinidad and Tobago	1990	4.4	42.3	30.7	66.7		6.3
Trinidad and Tobago	1993	5.2	41.1	38.4	83.9		6.3
Trinidad and Tobago	1996	7.6	41.1	43.3	94.2		6.3
Trinidad and Tobago	1999	3.8	41.1	49.0	98.8		6.3
Trinidad and Tobago	2002	1.7	41.1	55.8	98.0	11911.6	6.3
Trinidad and Tobago	2005	0.5	41.1	64.2	98.8	15525.1	6.3
Trinidad and Tobago	2008	0.4	41.1	84.1	98.6	20230.2	6.3

Trinidad and Tobago	2010	0.4	41.1	100.0	100.0	19595.2	6.3
Uruguay	1981		43.7	0.0	0.1	3831.0	39.0
Uruguay	1984	0.5	42.7	0.1	0.3	3725.7	39.0
Uruguay	1987	0.3	42.7	0.3	1.1	4712.3	39.0
Uruguay	1990	0.5	42.7	2.1	5.8	5315.5	39.0
Uruguay	1993	0.7	42.7	11.2	19.6	6481.7	39.0
Uruguay	1996	0.7	42.7	29.6	39.7	7515.2	39.0
Uruguay	1999	0.6	42.7	41.5	56.5	8153.7	39.0
Uruguay	2002	0.8	46.7	51.7	106.0	7588.3	39.0
Uruguay	2005	1.4	45.9	70.5	122.0	9694.8	39.0
Uruguay	2008	0.3	46.3	87.5	104.4	12325.9	39.0
Uruguay	2010	0.2	45.3	100.0	100.0	13909.5	39.0

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