Prevalence of Relative Poverty in Pakistan

TALAT ANWAR

I. INTRODUCTION

Much has been written[1] about poverty in Pakistan. A large number of attempts have been made by various authors/institutions to estimate the poverty in Pakistan over the last four decades. However, the conceptual basis of poverty remained limited to absolute concept of poverty. The concept of absolute poverty emphasises to estimate the cost of purchasing a minimum 'basket' of goods required for human survival. In Pakistan, the discussion has been centered on estimating poverty lines consistent with 2550 or 2350 calorie intake per adult per day as minimum requirement. Thus, absolute definitions of poverty tend to be minimalist and are based on subsistence and the attainment of physical efficiency. Subsistence is concerned with the minimum provision needed to maintain health and working capacity.

However, the concept of absolute poverty has been criticised[2] on the grounds that it minimises the range and depth of human needs. Human needs are interpreted as predominantly physical needs rather than social needs. People are relatively deprived if they cannot take part in the ordinary way of life of the community and cannot play their roles by virtue of their membership of the society. Furthermore, there have been difficulties in substantiating the absolute poverty approaches in robust empirical terms. This led analysts to a social formulation of the meaning of poverty—relative deprivation which some have defined as having income less than

[1]See Naseem (1973, 1979), Allaudin (1975), Mujahid (1978), Irfan and Amjad (1984), Malik. (1988), Malik (1991), Anwar (1996), FBS(2001), World Bank (2002), Arif (2002), Anwar and Qureshi (2003), Planning Commission (2003) and Anwar, Qureshi, and Ali (2005).

[2]See Rein (1970) and Townsend (1970).

half or two-third or three-fourth of average expenditure (or income) norm [Rein (1970) and Townsend (1970)]. The concept of relative poverty has gained more importance because of recent rising trends in inequality developing countries and its linkages with poverty. For a given mean income, the more unequal the income distribution, the larger the percentage of the population living in poverty. In this context, the objective of this paper is to broaden the discussion on poverty and poverty measurement by examining the prevalence of relative poverty in Pakistan using the most recent available household survey data—HIES, 2000-02.

   The organisation of the paper is follows: The next section provides a review of assessment of poverty. Section III discusses the methods of measurement of poverty. The data set of Household Integrated Economic Survey (HIES), 2001-02 that has been used to examine the prevalence of relative poverty is discussed in Section IV. Section V presents the results for the prevalence of relative poverty in Pakistan. Section VI analyses the trends in relative poverty over time. Section VII discusses trends in income inequality over time. Main conclusions and policy implications conclude the discussion in the final section.

II. REVIEW OF POVERTY ASSESSMENT IN PAKISTAN

   A large number of attempts have been made to estimate incidence of poverty in Pakistan during the last four decades. The earliest work on poverty was pioneered by Naseem (1973) by choosing an arbitrary poverty line to estimate the poverty incidence in Pakistan. Various attempts on poverty include, Naseem (1973, 1979), Alauddin (1975), Mujahid (1978), Amjad and Irfan (1984), Kruik and Leeuwen (1985), Malik (1988), Havinga, *et al.* (1989), Ahmad and Ludlow (1989), Ercelawn (1992), Malik (1992), Zaidi (1992) and Malik (1992), Anwar (1996, 1996a), Anwar (1998), FBS (2001), World Bank (2002, 2005), Arif (2002), Anwar and Quershi (2003), Planning Commission (2003), SPDC (2005) and Anwar, Qureshi, and Ali (2005). However, except few studies most of the work is based on the absolute concept of poverty. Various authors/institutions employed different methods, defined poverty in different ways and chose different poverty lines in absolute term, and thereby have reported divergent poverty trends.

   A general consensus emerging from the literature is that absolute poverty has declined during the 1970s and 1980s. The decline in absolute poverty was mainly attributable to the high economic growth as the economy witnessed an average growth rate at about 5 percent and 6 percent per annum respectively, in the 1970s and 1980s mainly due heavy capital inflows from abroad in the forms of foreign aid and overseas workers remittances. However, in contrast to the 1970s and 1980s, absolute poverty rose during the 1990s. Except the World Bank (2002) that concludes a stagnant level of absolute poverty, there is a general consensus in the literature of rising levels of absolute poverty in Pakistan during the 1990s [FBS

(2001), World Bank (2002, 2005), Anwar and Quershi (2003), Planning Commission (2003) and Anwar, Qureshi, and Ali (2005)].

A review of poverty assessment shows that while there has been a heated debated on the levels of absolute poverty during the 1990s, the levels of relative poverty from the viewpoint of policy reforms has not received adequate attention. There are, nonetheless, two studies, Zaidi (1992) and Anwar (1998) that examined the extent of relative poverty in Pakistan. While measuring relative poverty, Zaidi (1992) took 75 percent of the national average expenditure as relative poverty line using the HIES data for 1984-85. The monthly average expenditure was at Rs 340 implying that the poverty line was at Rs 255 per capita expenditure in 1984-85 prices. The author used equivalence scale recommended by OECD [OECD (1982)]. This scale assigns a weight of one to the first adult and, 0.7 to every other adult and 0.5 to children of age 13 years and younger. The poverty line was assumed to be identical across the four provinces and rural and urban regions. The author found that almost 39 percent of households are below the poverty line in Pakistan in 1984-85. The poverty headcount were found to be highly sensitive to the choice of percentage of the average to express poverty line. The headcount was only 15 percent when the poverty line was fixed at 50 percent of national average expenditure. Provincial estimates suggest that Sindh and the NWFP were the least poor whereas Punjab and Balochistan were the poorest provinces in Pakistan in 1984-85.

It may be pointed out that poverty ranking across provinces implied by Zaidi (1992) appears to be contrary to general the perception as well as the evidence supported by other authors. This contradictory ranking is due to the fact that the author used identical poverty lines for all the provinces which appear to be misleading because of the possible differences in the cost of living across provinces and regions. Thus, adequate differences in the cost of living between rural and urban should be taken into account to estimate the poverty across provinces.

Anwar (1998) chose three cut-off points at 50 percent, 66.6 percent and 75 percent of national adult equivalent consumption expenditure to define the relative poverty line in 1987-88. To correct the consumption expenditure data for household size composition, the author used his derived equivalence scales based on Engel's method. The scale suggests a first male child costing 86 percent of an adult, a second male child costing 78 percent of an adult, whereas first female child costing 75 percent and second female child costing 61 percent of an adult in Pakistan. The author derived relative poverty threshold as 50 percent, 66.6 percent and 75 percent of national adult equivalent expenditure which for overall Pakistan turned out to be at Rs 251, Rs 336 and Rs 380 adult equivalent expenditure, respectively. Using these cut-off points the author found that 14.7, 39.2 and 48.2 percent of all households were poor in 1987-88. The author used the region and province-specific relative poverty cut-off points to take an account of differences in the cost of living across provinces and regions while estimating the extent of relative poverty across regions

and provinces. This approach takes not only an account of food price differences but also of behavioural differences in cost of living across regions. While the average expenditure is much higher in urban areas than in rural areas, this approach is likely to derive significantly higher poverty line for urban areas compared to the rural areas leading to higher level of poverty in urban than in rural areas.

It is, therefore, pertinent to take an account of differences only in food prices in poverty line between rural and urban areas. This is because cost of living is higher in urban than in rural areas due to differences in food prices. For example, if two households have exactly the same standard of living but reside in different regions, then consistency requires that poverty line be adjusted accordingly to the food price differences. For this reason, the paper takes an account of differences in food prices between rural and urban and among provinces by using a regional price[3] index. It is turned out that on average food prices are 13 percent higher in urban areas than in rural areas. Thus, it is important to make an adjustment of about 13 percent in national poverty line between rural and urban areas across provinces to compute the poverty estimates.

III. MEASUREMENT OF POVERTY

The most commonly used measure of poverty is the Headcount ratio, measures the percentage of the population that falls below the poverty line. Consider q people are poor in a population of size n. The headcount ratio P_O can be defined as follows:

$$P_0 = q/n$$

The advantage of headcount index is that it is simple to construct and easy to understand. However, a major problem with the headcount is that it does not take the intensity of poverty into account since it is totally insensitive to differences in the depth of poverty. For example, if a poor person becomes poorer, headcount remains unchanged. In addition, headcount ratio violates the Dalton (1920) principle of transfer that states that transfers from a richer to poorer person should improve the measure of welfare.

A second popular measure of poverty is the poverty gap index, which gives a good indication of the depth of poverty, in that it depends on the shortfall of income from the poverty line. The poverty gap index adds up the extent to which individuals fall below the poverty line and expresses as percentage of poverty line.

$$P_1 = \frac{1}{n} \sum_{i=1}^{q} \left[\frac{Z - y_i}{Z} \right]$$

---

[3]See FBS (2001), Anwar and Qureshi (2003) and Anwar, Qureshi, and Ali (2005).

Where y_i= income of the poor

Z= poverty line

q=number of people below the poverty line

P_1 can be interpreted as mean proportionate poverty gap across the population (zero gap for the non poor). While poverty gap index has the advantage of depicting the depth of poverty, it does not capture the difference in the severity of poverty amongst the poor since it ignores inequality among the poor. To overcome this problem, the squared poverty gap index is used which is simply a weighted sum of poverty gaps (as a proportion of poverty line), where the weights are the proportionate poverty gaps themselves. Thus, by squaring the poverty gap index, the measure implicitly puts more weight on individuals that fall well below the poverty line.

$$P_2 = \frac{1}{n} \sum_{i=1}^{q} \left[\frac{Z - y_i}{Z} \right]^2$$

The above poverty measures have been derived from Foster, Greer, and Thorbecke (1984) the class of poverty measures, which does not only reflect the intensity of poverty but also capture the severity of poverty.

IV. THE HOUSEHOLD DATA

This paper uses primary data of Household Income and Expenditure Survey (HIES), 2001-02 to examine the poverty trends in Pakistan. The survey was conducted by the Federal Bureau of Statistics (FBS), Government of Pakistan, Islamabad for 2001-02. The universe consists of all urban and rural areas of the four provinces of Pakistan defined as such by the 1981 Population Census. These surveys provide complete information on quantity and expenditure of all food and non-food items.

The household is the basic unit for which the information has been collected. It is widely accepted that income components are less reliably reported to surveyors than are expenditure items. Furthermore, incomes of the poor often vary over time, particularly in rural areas where income depends on rain-fed agriculture. This observation implies that current consumption will be a better indicator than current income for measurement of living standard. Hence, current consumption expenditure is used for the measurement of relative poverty in this paper. However, one of the weaknesses of consumption expenditure is that it gives a short run status of household resources as it may be possible that consumption payments are made by dissaving or by borrowing—a process which cannot be sustained in the long run. On the other hand, income of an individual is the most important indicator that determines the current social and economic status of an individual in the society. Analyst using incomes are concerned with the right to a minimum level of resources

to attain an adequate living standard. Therefore, the paper also presents relative poverty estimates based on per capita income poverty lines.

V. PREVALENCE OF POVERTY

The concept of relative poverty specifies the poverty line as a point in the distribution of income or expenditure and, hence, the poverty line can be updated automatically over time for changes in living standards. The choice of the point as relative poverty line depends on the perception of the analyst. One may take a very strong view of social formulation of the meaning of poverty and define relative deprivation as having expenditure (or income) less than average expenditure (or income) norm prevailing in the society. The national average per capita per month expenditure was at Rs 1163 in 2001-02. Taking this view of relative poverty suggest that 76.4 percent were poor in the country in 2001-02; 63.5 percent of them were located in urban areas and 81.2 percent were in rural areas.

However, this is a very high perception of defining relative deprivation. Relative poverty in developing countries is usually defined as having per capita consumption or income less than three-fourth, two-third and half of national average income or consumption expenditure norm prevailing in the society. Following this convention, the relative poverty threshold is defined as a fixed proportion of average per capita expenditure of all households after adult equivalent adjustment. To define the relative poverty, three thresholds reflecting low, medium and high perception of relative deprivation in the society is chosen. These three cut-off points may be defined as 50 percent, 66.6 percent and 75 percent of national average per capita expenditures. For overall Pakistan, 50 percent, 66.6 percent and 75 percent of national per capita monthly expenditure turns out to be at Rs 581, Rs 775 and Rs 872 in 2001-02, respectively (see Table 1). Using these cut-off points suggests that 15.5 percent, 40.7 percent and 52.3 percent of all individuals were poor in the country in 2001-02. This suggests that prevalence of relative poverty is highly sensitive to the choice of the cut-off point and is crucial in determining the level of relative poverty.

While analysing the extent of relative poverty at regional and province level, the approach adopted here is consistent with the one followed in the analysis of absolute poverty. Hence, the region and province-specific relative poverty cut-off points have been derived by taking an account of regional differences only in food prices to estimate the extent of relative poverty across regions and provinces (see Table 1). Taking a moderate view of relative poverty, the medium cut-off point of two-third or 66.6 percent of national average per capita consumption expenditure has been chosen to present relative poverty estimates for 2001-02. However, the results based on 75 percent of national average per capita consumption expenditure are also reported in Table A1 at Annexure I for the interested readers. Since income of an individual is the most important indicator that determines the current social and economic status of an individual, poverty estimates based on income are also reported (see Table 2).

Table 1

Poverty Lines as 3/4 or 66.67 Percent of Per Capita Consumption Expenditure*
and Per Capita Income* based on HIES 2001-02

	Per Capita Consumption Poverty Lines*	Per Capita Consumption Expenditure*	Per Capita Income Poverty Lines*	Per Capita Income*
Pakistan				
Overall	775.1	1163	848.2	1272
Rural	751.8	976	822.8	1044
Urban	837.1	1612	916.1	1823
Rural				
Punjab	728.6	997	797.3	1078
Sindh	744.1	893	814.3	920
NWFP	813.9	980	890.6	1038
Balochistan	837.1	1029	916.1	1137
Urban				
Punjab	806.1	1471	882.1	1715
Sindh	883.6	1933	966.9	2053
NWFP	829.4	1310	907.6	1602
Balochistan	860.4	1345	941.5	1781
Overall				
Punjab	751.8	1132	822.8	1259
Sindh	806.1	1326	882.1	1391
NWFP	821.6	1029	899.1	1122
Balochistan	837.1	1082	916.1	1245

Source: Author's computation from primary data of HIES 2001-02.
  *After adult equivalent adjustment.

Table 2

*Relative Poverty based on 66.7 Percent of Per Capita Consumption Expenditure
and Per Capita Income Per Month in 2001-02*

Region	Consumption Headcount (P_0)	Income Headcount (P_0)	Consumption FGT Poverty Gap Index (P_1)	Income FGT Poverty Gap Index (P_1)	Consumption FGT Index (P_2)	Income FGT Index (P_2)
Pakistan						
Overall	40.7	49.9	8.8	15.4	2.8	7.0
Rural	46.7	57.5	10.2	18.4	3.2	8.1
Urban	31.1	37.3	6.7	10.3	2.1	5.1
Rural						
Punjab	40.3	49.5	9.1	15.4	3.0	6.8
Sindh	51.5	66.1	11.7	21.2	3.7	8.9
NWFP	50.0	65.4	10.4	23.4	3.1	11.0
Balochistan	46.8	51.3	9.5	13.9	2.7	5.4
Urban						
Punjab	29.0	33.9	6.9	9.5	2.4	6.4
Sindh	30.4	37.8	6.4	9.9	1.9	3.7
NWFP	35.8	46.7	7.2	14.9	2.1	6.5
Balochistan	34.2	36.9	6.8	8.4	2.0	2.7
Overall						
Punjab	35.7	43.1	8.2	13.0	2.7	6.7
Sindh	43.3	55.0	9.6	16.8	3.0	6.9
NWFP	45.6	59.1	9.4	20.7	2.7	9.6
Balochistan	42.7	46.6	8.6	12.1	2.4	4.5

Source: Author's computation from primary data of HIES 2001-02.

The use of 66.6 percent of national average consumption expenditure as relative poverty threshold suggests that the prevalence of relative poverty appears to be extensive in Pakistan. The results indicate that 40.8 percent of population was below relative poverty line in Pakistan in 2001-02 (see Table 2). Prevalence of relative poverty was far greater in rural areas than in urban poverty. The results suggest that 46.7 percent of population in rural areas and 31.1 percent of population in urban areas were poor in 2001-02. This implies that 60 million individuals out of 145 million were poor in Pakistan; of these, 46.1 and 14.4 million individuals were located in rural and urban areas, respectively. The intensity of poverty reflected by poverty gap measure (P_1) was 8.8 percent in 2001-02. The severity of poverty, captured by FGT P_2 measure, was 2.8 percent in 2001-02 among the poorest group in the country.

Prevalence of poverty is much higher for income based moderate poverty line (see Table 2 and Figure 1). Half of the populations were below this income based poverty line implying that 77.5 million individuals were poor in Pakistan. The differences in intensity of poverty and severity of poverty measures were very high between income and consumption based poverty lines. The high differences in relative poverty between income and consumption based poverty lines may be due to various reasons. Firstly, income is generally more unequally distributed than consumption. Secondly, income may be underestimated for the low-income households than the high-income household.

Fig. 1. Relative Poverty by Expenditure and Income, 2001-02
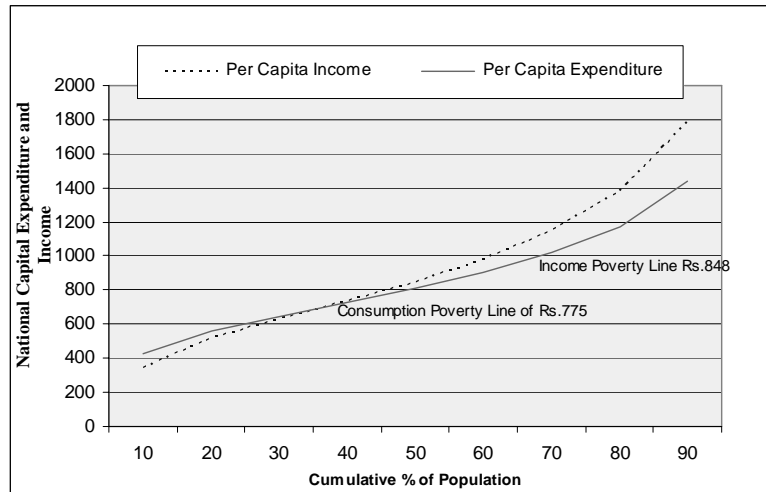
Finally, low-income household may be meeting their consumption requirement by dissaving and/or borrowing.
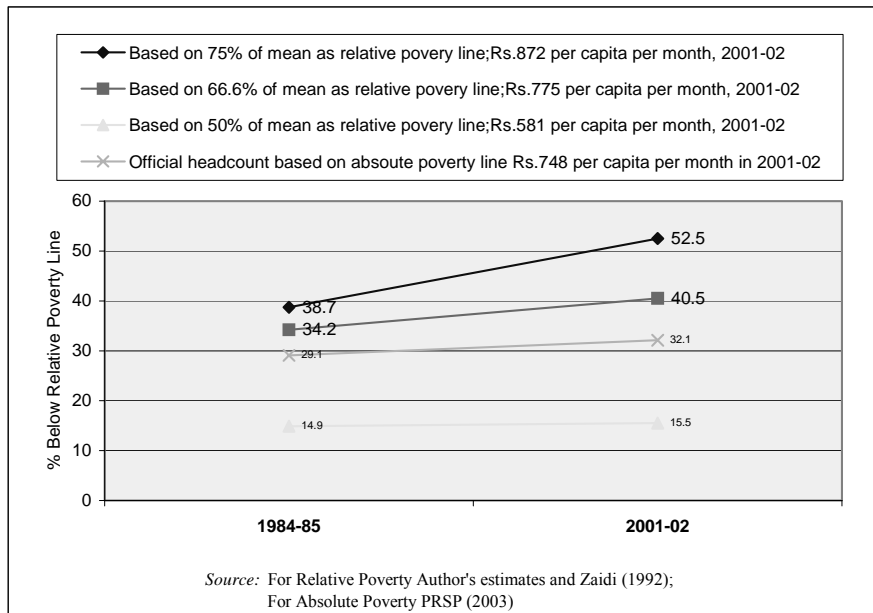
Prevalence of relative poverty at the province level suggests the highest incidence of rural poverty in Sindh at 53.5 percent followed by NWFP at 50.0 percent and Balochistan at 49 percent (see Table 2 and Figure 2). While rural poverty in Punjab was the lowest among the provinces in terms of ranking, the headcount was considerably high at 40.3 percent in 2001-02. The relative conception of poverty suggests that the highest incidence of urban poverty in NWFP followed by Balochistan and Sindh. It is noteworthy that this ranking of relative poverty is different from Zaidi (1992) whose results suggest Sindh and NWFP as the least poor whereas Punjab and Balochistan as the poorest provinces in Pakistan. This is because Zaidi (1992) did not take an account of differences in food prices between rural and urban regions and used an identical poverty line for rural and urban regions and thus arrived at misleading ranking across provinces.

Fig. 2. Relative Poverty Comparison at Province Level, 2001-02
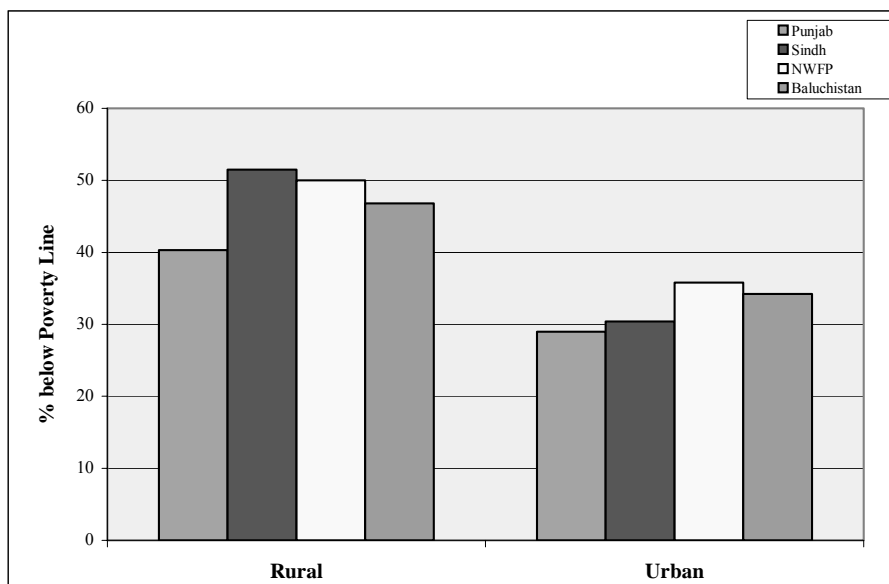
VI. TRENDS IN RELATIVE POVERTY BETWEEN
1984-85 AND 2001-02

The period of last one and half decade is regarded as an era of adjustment programs when a number of economic policy reforms have been undertaken by the government within the framework of the IMF and the World Bank to improve the efficiency and enhance economic growth rate over this period. In this situation, it would be interesting to examine how the trends are in relative poverty during the last decades? A before and after approach is adopted here to examine the trend in relative poverty between 1984-85 and 2001-02.

To evaluate the trends in relative poverty Zaidi's (1992) relative poverty estimates has been used as the base line headcount to make a comparison of the estimates for 2001-02 of this study. The trends implied by these studies give the rising trends in relative poverty in Pakistan between 1984-85 and 2001-02 (see Figure 3). However, the changes in the magnitude of relative poverty depend upon the choice of threshold used as percentage of mean expenditure. For low relative poverty perception threshold i.e. 50 percent of mean expenditure, the relative poverty remained stagnant at best and increased marginally at worst during the last 15 years. This may be due to the fact that threshold of 50 percent of mean expenditure or income reflects barely a level below which survival of an individual is threatened. Thus, a further decline in the living standard below this threshold was not possible otherwise individuals would have starved to death. However, for both medium and

Fig. 3. Relative and Absolute Poverty Trends

Legend:
- Based on 75% of mean as relative povery line;Rs.872 per capita per month, 2001-02
- Based on 66.6% of mean as relative povery line;Rs.775 per capita per month, 2001-02
- Based on 50% of mean as relative povery line;Rs.581 per capita per month, 2001-02
- Official headcount based on absoute poverty line Rs.748 per capita per month in 2001-02

Source: For Relative Poverty Author's estimates and Zaidi (1992);
For Absolute Poverty PRSP (2003)

high relative poverty perception threshold i.e. 66.6 percent and 75 percent of mean expenditure, the relative poverty increased substantially during the last 15 years. This implies that relative poverty increased more rapidly among the middle income groups compared to low income groups.

Figure 3 also reports the trends in absolute poverty over the last 15 years. In this situation, it would be interesting to make a comparison of poverty trends based on absolute and relative conception poverty. For such comparison, it is pertinent to use the medium relative poverty line since it comes close to the absolute poverty line notified officially. A comparison implied by both conception of poverty suggests that relative poverty increased much more rapidly than the absolute poverty during the last one and half decade. While absolute poverty increased by just 3 percentage points, the relative poverty increased by 6 percentage points during the above period. However, relative poverty increased substantially from 38.7 percent in 1984-85 to 52.5 percent in 2001-02, if one uses 75 percent of mean expenditure as relative poverty line suggesting a worsening of relative deprivation among middle income groups.

VII. TRENDS IN INCOME INEQUALITY BETWEEN
## 1984-85 AND 2001-02

The distribution of income is important since it affects the structure of the society and for any given level of GDP determines the poverty level. It would,

therefore, be important to examine what are the trends in income distribution in Pakistan during this period.   Changes in Gini coefficient suggest a worsening trend[4] in income distribution over time. Gini coefficient rose significantly from 0.3802 in 1984-85 to 0.4129 in 2001-02. However, Gini coefficient gives more weights to changes in middle parts of the income distribution. Thus, it may not capture the differences in changes in extreme parts of income distribution. It is, therefore, important to examine the changes in the whole income distribution. To evaluate the trends in whole distribution, figure 2 draws the Lorenz curves for 1984-85 and 2001-02.

The Lorenz curves which plot cumulative percentage of population and cumulative percentage of income in xy plane also corroborates the above changes in relative poverty.

The Lorenz curve of 2001-02 for Pakistan lies below the 1984-85 (see Figure 4). Thus, it can be concluded that income distribution worsened resulting in higher income inequality in 2001-02 relative to 1984-85. More changes in income distribution occurred in the higher part of income distribution than the middle and lower part of income distribution. Consequently, the Lorenz curve for 2001-02 became more skewed at upper part of income distribution implying a gain in income share to the richest 20 percent at the expense of the poorest 20 percent and middle

Fig. 4. Inequality Trends between 1984-85 and 2001-02
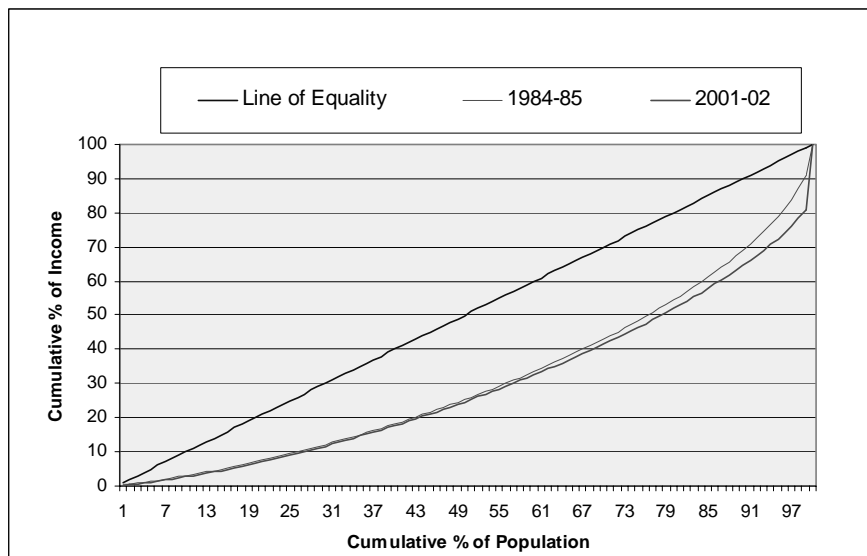
[4]See Anwar (2005).

60 percent resulting in increased hardship of these income groups during this period (also see Table A2 at Annexure II). Notably, the kink at upper part of income distribution is indicative of the fact that 1 percent richest who used to gets 10 percent of total income in 1984-85 now get almost 20 percent total income in Pakistan in 2001-02. Thus, economic policies pursued within IMF/World Bank adjustment programmes seems to have only benefited the richest whereas affected the living standards of the low and the middle income classes severely resulting in rapid increase in relative as well as the absolute[5] poverty during this period.

VIII. CONCLUSIONS AND POLICY IMPLICATIONS

The paper took the moderate view of defining relative deprivation by choosing two-third or 66.67 of national average per capita expenditure as relative poverty threshold. Accordingly, it is found that 40.3 percent of all individuals were poor in the country in 2001-02. The results suggest that 60 million individuals were poor in Pakistan; of which 46.1 and 14.4 million individuals were located in rural and urban areas, respectively. Trends in relative poverty suggest that poverty rose from 34 percent in 1984-85 to 40 percent in 2001-02. The trends implied by the relative poverty suggest a more rapidly increasing trend because of worsening of income distribution during this period. Thus, relative poverty increased more rapidly than the absolute poverty during the above period. Consequently, gains in income share accrued to the richest 20 percent at the expense of the poorest 20 percent and middle 60 percent implying rich get richer and the poor get poorer.

It is noteworthy that the above period of last 15 years has been characterised as an era of stabilisation and adjustment programmes, which were undertaken within the framework of "Washington Consensus" of IMF and the World Bank. The main objectives of these programmes were to improve the efficiency in resource use, enhance economic growth and remove macroeconomic imbalances to a sustainable level. It is important to note IMF adjustment programmes put too much emphasis on removing structural rigidity and macroeconomic imbalances and pay no attention to the equity and welfare of the poor and the vulnerable. The policy reforms pursued under these programmes were the wage and employment restraint policies,[6] cut in pro-poor subsidies, cut in development expenditure, increases in sales taxes and utility charges and frequent devaluations. Thus, worsening of distribution of income as well as the rise in both relative and absolute poverty was inevitable.

It may be noted that the adverse implications of adjustment reforms on poverty are suggestive and do not establish a causal link between policy reforms and poverty. To establish a causal link, one needs to develop a macro model. However, non-existence of time series data on poverty precludes establishing a causal link.

---

[5]For absolute poverty see FBS (2001), ADB (2002), Anwar and Qureshi (2003), and SPDC (2005).
[6]For further detail, see Anwar (2002), Kemal (2002) and Anwar (2004b).

While these reforms have adverse implications for the poverty, some of the policy implications are discussed here to formulate pro-poor policies. *First,* the country has been pursuing a Poverty Reduction Strategy Paper (PRSP) over the last five years. Like previous IMF/World Bank programmes, the PRSP also emphasises higher economic growth with macroeconomic stability along with some additional components of improving governance, investing in human capital and provision of social safety-nets. While the recent episode of high economic growth is originated primarily from a surge in aggregate demand arising due to expansion in private sector credit including personal consumption loans, the rising inflation because of easy monetary policy and persistent increases in petroleum prices is likely to affect the real income of the poor adversely. Moreover, despite devising a poverty reduction strategy, the pro-poor expenditure on education and health as percent of GDP which absorbs about 50 percent of total PRSP expenditures remained substantially low compared to the 1990s. For example, education expenditure was respectively at 1.7 percent and 1.5 percent of GDP in 2003-04 and 2004-05 compared to 2.3 percent of GDP during 1995-96 to 1998-99. Similarly, health expenditure was respectively at 0.7 percent and 0.5 percent of GDP in 2003-04 and 2004-05 compared to 0.8 percent of GDP in the 1990s. In addition, PRSP spending within education sector for higher education are likely to benefit the rich and thus should be reconsidered to be regarded as pro-poor. Similarly, considering expenditure on roads, highway, justice, law and orders which absorbs 27 percent of total PRSP expenditure will not directly benefit the poor. Thus, in order to pursue an effective poverty reduction strategy, it is essential not only to raise PRSP spending on education and health sectors but also reconsider PRSP spending whether or not it can be classified as pro-poor in some sectors.

Second, there is an increasing recognition[7] that economic growth alone is not enough for poverty reduction because of the existence of high inequalities inherent in the socio-economic structure of the country. Thus, a poverty reduction strategy should be devised to reduce existing high inequalities in the distribution[8] of physical as well as the human capital assets. Evidence shows that income distribution in recent time is turned out to be the most unequal in the history of the country [Anwar (2005a)]. Given the fact that poverty and income inequality are closely linked, there is a need to devise a new poverty reduction strategy with a focus on redistributive policies. While the country has also made commitment to attain Millennium Development Goals, economic policies need to be expansionary beside a focus on growth with equity. Fiscal policies should be focused on scaling up public investment, financial policies geared to channeling more resources to productive private investment and monetary policies to target real economic variables. *Third,* as part of its redistributive policies in poverty reduction strategy, the government may exempt the product used by the poor

---

[7]See Pakistan (2005).
[8]See Anwar, Qureshi, and Ali (2005) and SPDC (2005).

from the sales tax and recover the resulting revenue losses by increasing tax rates on the product used by the rich. *Fourth*, poverty reduction strategy should be based on the policies of building up the assets of the poor and increasing the demand for those assets. This implies, for example, expansion of health and education for the low income households (building up assets) and measures that increase the relative prices of agricultural commodities and the wages of unskilled labour (increasing demand). *Fifth*, focus on agrarian strategies, especially those also favouring rural industrialisation can lead to pro-poor growth. These include reducing macroeconomic biases against agriculture, initiating land and tenancy reform, improving access to extension services, developing rural infrastructure and promoting agricultural diversification and the non-farm rural sector.

Finally, a focus on employment-intensive strategies can lead to more egalitarian growth. Rapid expansion of labour-intensive exports may contribute to faster growth in employment. Policies to support this, should favour to labour intensive techniques e.g. by not subsidising capital and by securing more credit for small enterprises.

Annexure-I

Table A1

Relative Poverty Based on 75 Percent of Per Capita Consumption Expenditure*
and Per Capita Income* Per Month in 2001-02

Region	Consumption Headcount (P_0)	Income Headcount (P_0)	Consumption FGT Poverty Gap Index (P_1)	Income FGT Poverty Gap Index (P_1)	Consumption FGT Index (P_2)	Income FGT Index (P_2)
Pakistan						
Overall	52.3	59.0	13.1	19.9	4.5	9.3
Rural	59.1	66.3	14.9	23.2	5.1	10.8
Urban	41.0	46.7	10.0	13.8	3.4	6.6
Rural						
Punjab	51.7	57.8	13.2	19.6	4.7	9.1
Sindh	64.4	73.5	16.8	26.6	5.9	12.1
NWFP	63.6	72.4	15.6	28.5	5.1	14.2
Balochistan	61.1	64.8	14.4	18.9	4.6	7.7
Urban						
Punjab	37.6	41.7	9.8	12.7	3.6	7.4
Sindh	40.2	47.5	9.5	13.6	3.1	5.4
NWFP	46.9	53.5	11.0	18.2	3.6	8.3
Balochistan	47.2	49.9	10.6	12.3	3.4	4.3
Overall						
Punjab	45.9	51.2	11.8	16.8	4.2	8.4
Sindh	54.9	63.3	14.0	21.5	4.8	9.5
NWFP	58.5	65.9	14.2	25.3	4.7	12.4
Balochistan	56.5	60.0	13.2	16.7	4.2	6.6

*After adult equivalent adjustment.

Table A2

Changes in Income Share of Population in Pakistan, by Regions

	Poorest 20%	Middle 60%	Richest 20%	All
Pakistan				
1984-85	7.10	47.33	45.57	100
2001-02	6.66	45.26	48.08	100
Rural				
1984-85	7.66	49.03	43.31	100
2001-02	7.21	47.69	45.11	100
Urban				
1984-85	6.94	46.80	46.26	100
2001-02	6.77	40.42	52.81	100

Source: Anwar (2005) Long-term Changes in Income Distribution in Pakistan: Evidence Based on Consistent Series of Estimates, (Discussion Paper No.3) CRPRID, Islamabad.

REFERENCES

Ahmad, E., and S. Ludlow (1989) Poverty Inequality and Growth in Pakistan. *The Pakistan Development Review* 28:4, 831–850.

Alauddin, T. (1975) Mass Poverty in Pakistan: A Further Study. *The Pakistan Development Review* 14:4, 431–450.

Amjad, R., and A. R. Kemal (1997) Macroeconomic Policies and their Impact on Poverty Alleviation in Pakistan. *The Pakistan Development Review* 36:1.

Amjad, R., and M. Irfan (1984) Poverty in Rural Pakistan. In ILO-ARTEP (1984) (eds.) *Impact of Return Migration on Domestic Employment in Pakistan: A Preliminary Analysis*.

Anwar, Talat (1996) Changes in Poverty and Inequality in Pakistan during the Period of Structural Adjustment. PhD. Thesis submitted to the University of Sussex, UK.

Anwar, Talat (1996a) Structural Adjustment and Poverty: The Case of Pakistan. *The Pakistan Development Review* 35:4.

Anwar, Talat (1998) Incidence of Relative Poverty in Pakistan. *The Asian Economic Review, The Journal of the Indian Institute of Economics* 40:1, 95–107. Red Hills, Hyderabad, India.

Anwar, Talat (2002) The Impact of Globalisation and Liberalisation on Growth, Employment and Poverty: A Case Study of Pakistan. United Nations University/World Institute for Development Economic Research, Helsinki, Finland (WIDER Discussion Paper No. 2002/17.)

Anwar, Talat (2003) Trends in Income Inequality in Pakistan between 1998-99 and 2001. *The Pakistan Development Review* 42:4, 809–821.

Anwar, Talat (2004b) Recent Macroeconomic Developments and Implications for Poverty and Employment in Pakistan: The Cost of Foreign Exchange Reserves Holdings in South Asia. Australia South Asia Research Centre, Australian National University, Canberra. (Working Paper No.17.)

Anwar, Talat (2005) Long-term Changes in Income Distribution in Pakistan: Evidence Based on Consistent Series of Estimates. CRPRID, August, Islamabad. (Discussion Paper No. 3.)

Anwar, Talat, and Sarfraz Khan Qureshi (2002) Trends in Absolute Poverty in Pakistan: 1990-2001. *The Pakistan Development Review* 41:4, 859-878.

Anwar, Talat, Sarfraz Khan Qureshi, and Hammad Ali (2004) Landlessness and Rural Poverty in Pakistan *The Pakistan Development Review* 43:4, 855–874.

Arif, G. M. (2002) Measuring Poverty in Pakistan: A Critical Review of Recent Poverty Lines in Human Condition Report 2002, Centre for Research on Poverty Reduction and Income Distribution (CRPRID), Islamabad.

Asian Development Bank (2002) *Poverty in Pakistan, Issues, Causes and Institutional Responses.* Islamabad: Pakistan Resident Mission.

Cornia, G. A, R. Jolly, and F. Stewart (1987) *Adjustment with a Human Face.* Oxford: Oxford University Press.

Ercelawn, Aly (1990) Absolute Poverty in Pakistan. Applied Economics Research Centre, Karachi. (Mimeographed.)

Federal Bureau of Statistics (2001) *Poverty in the 1990s.* Islamabad: Statistics Division.

Federal Bureau of Statistics (Various Issues) *Household Income and Expenditure Survey (HIES).* Islamabad: Statistics Division.

Foster, James, J. Greer, and E. Thorbecke (1984) A Class of Decomposable Poverty Measures. *Econometrica* 52, 761–765.

Gazdar, Haris, Stephen Howes, and Salman Zaid (1994) Recent Trends in Poverty in Pakistan. STICERD, London School of Economics, Background Paper for the Pakistan Poverty Assessment. (Mimeographed.)

Greer, and Thorbecke (1986) A Methodology for Measuring Food Poverty Applied to Kenya. *Journal of Development Economics* 24, 59–74. North-Holland.

Irfan, and Amjad (1984) *Impact of Return Migration on Domestic Employment in Pakistan: A Preliminary Analysis.* ILO-ARTEP.

Jafri, S. M. Y. (1999) Assessing Poverty in Pakistan. In *A Poverty Profile of Poverty in Pakistan.* Islamabad: Mahbub ul Haq Centre for Human Development.

Kakwani, Nanak (1990) Testing for Significance of Poverty Differences with Application to Cote d Ivoire. The World Bank, Washington, D.C. (Living Standard Measurement Study Working Paper No. 62.)

Kemal, A. R. (2002) *Macro-economic Policy and Poverty in Pakistan in Human Condition.* Islamabad: Centre for Research on Poverty Reduction and Income Distribution (CRPRID), Planning Commission.

Kruik, and Leeuwen (1985) Changes in Poverty in Pakistan. *The Pakistan Development Review*.

Liption, Michael (1985) *Successes in Anti Poverty*. Geneva: International Labour Office.

Malik, Mohammad H. (1988) Existing Evidence on Poverty. *The Pakistan Development Review* 27:4, 509–516.

Malik, Sohalil J. (1991) Poverty in Pakistan 1984-85 and 1987-88. In M. Lipton and J.Van deer Gaag (eds.) *Including the Poor*. Washington, D.C.: World Bank.

Malik, Sohalil J. (1994) Poverty in Pakistan 1984-85, 1987-88, and 1990-91. IFPRI, Washington, D.C. (Mimeographed.)

Mujahid, G. B. (1978) Measurement of Poverty and Income Distribution. *The Pakistan Development Review* 17:3.

Naseem, S. M. (1973) Mass Poverty in Pakistan: Some Preliminary Findings *The Pakistan Development Review* 12:4, 312–360.

Naseem, S. M. (1979) *Underdevelopment, Poverty, and Inequality in Pakistan.* Islamabad: Vanguard.

Pakistan, Government of (1985) Energy and Protein Requirements. Report of a Joint FAO/WHO Ad-hoc Experts Committee, Geneva, Islamabad.

Pakistan, Government of (2002) *Economic Survey*, 2001-2002. Islamabad: Ministry of Finance.

Pakistan, Government of (2005) Pakistan Millennium Development Goals. Centre for Research on Poverty Reduction and Income Distribution (CRPRID), Planning Commission, Islamabad.

Qureshi, S. K., and G. M. Arif (1999) Profile of Poverty in Pakistan 1998-9. Pakistan Institute of Development Economics, Islamabad. (MIMAP Technical Paper Series No. 5.)

Rein, M. (1970) Problems in the Definition and Measurement of Poverty. In P. Townsend (ed.) *The Concept of Poverty*. London: Heinemann (Chapter 2).

Social Policy and Development Centre (2005) Social Development in Pakistan, 2004. *Annual Review* Karachi.

Townsend, P. (1970) *The Concept of Poverty*. London: Hienemann (Chapter 2,6,8, and 9).

Townsend, P. (1979) *Poverty in the United Kingdom: A Survey of Household Resources and Living Standards*. London: Allen Lane and Penguin Books (and University of California Press) (Chapter 2,3,4,5,6, and 10).

World Bank (1995) *Pakistan Poverty Assessment*. Washington, D. C.: The World Bank.

World Bank (2002) *Poverty in Pakistan: Vulnerabilities, Social Gaps, and Rural Dynamics*. Washington, D. C.: The World Bank.

Zaidi, Asghar (1992) Relative Poverty in Pakistan. *The Pakistan Development Review* 31:4, 955–974.

Comments

The author addresses the issue of relative poverty in Pakistan. He presents a picture of relative poverty for all provinces of Pakistan with rural and urban disaggregation using PIHS data for the year 2001-2.

The importance of relative poverty (RP) has long been debated in economics in welfare context especially with reference to developing countries. In the literature it is clearly stated that if we believe in relative concept of poverty, we challenge welfare-economic justifications for many current development policies and the use of this concept can produce very strange results. Therefore, welfare economists give high priority to absolute poverty concept.

The relative poverty concept is insensitive to economic growth. For instance if everyone becomes better off and relative share of the poor does not increase, then it will appear that there has been no improvement in the national poverty situation? Luttmer's (2005) and Sen (2005) found that an equal proportionate increase in all incomes (leaving relative inequality unchanged) have no impact on average happiness. This would lead one to question the emphasis currently placed on promoting economic growth. For these reasons, absolute poverty considerations have dominated development-policy discussions.

The relative concept of poverty may be a concern for comparatively well off countries. As author has also pointed out saying "... relative poverty analysis goes beyond basic needs and expands the set of needs." It is important to recognise that the definition of poverty should be socially defined. In a country like Pakistan, where more than one third population are still consuming less than their need, the relative poverty concept may be misleading. The definition of basic needs can change in cases where the overall standard of living has improved. As country get rich and poverty based on basic needs reduces very significantly, the poverty line may change by expanding the set of basic needs. In that context too the absolute poverty is more meaningful. The relative concept of poverty seems to me as a measure of inequality rather than poverty.

Another point is that author has estimated relative poverty by province and by region. But with the availability of micro data it is possible to carry out more meaningful/in depth analysis. For instance, Poverty profile could be generated with different attributes of households like education, occupation, employment status number of earners in a household. That analysis would help to identify different types of interventions to help the poor. An interesting extension of the present study

would be to locate households who are poor based on both approaches: income and expenditure.

In the literature, three steps can be distinguished in poverty measurement:

(1) selection of a variable by which resources are measured: income or expenditure.
(2) poverty line determination.
(3) poverty indicators-FGT.

The author discusses two methods, the OECD and Engles method. OECD is very limited as it distributes household members in three categories (1-0.7-0.5).

OECD scales is quite restrictive as adult equivalent scales can be worked out for more detailed age group of male and females separately, which may help to refine the work.

Why poverty line is adjusted for prices by taking into account only foods prices. The difference in price prevails in rural and urban economies for most of the goods. If the focus is on relative poverty then it becomes necessary to take into account the difference in prices of all goods.

The review of poverty dynamics is limited to a simple discussion of a two time period comparison. The review would be more interesting and effective if the author has discussed the results from a UNDP report for the year 1999 entitled 'A Profile of Poverty in Pakistan' They have estimated relative poverty for several years, 1986-87, 88, 1991,93,94 based on consumption and income. That would help to see the change over period of ten years. Focusing on the declining poverty period would help to find policies helpful to reduce poverty. .

Author has pointed out 'Washington consensus' (WC), but ignores post-Washington consensus. Since mid 1990s, the emphasis of policies has changed from Washington consensus to the post-Washington consensus: Under WC governments are encouraged to dismantle market controls. But post-Washington Consensus emphasised on the need for various institutions and recognised that intervention by the government can playa positive role. They emphasised on the need for delivery of social services by government to the poor such as education and health care.

Another issue is intra household allocation: Intra household resource allocation has an important impact on the estimation of the incidence and distribution of poverty especially for gender dimensions of poverty, if poverty incidence is estimated from household level data, and using the assumption that resources are equitably distributed within the household, then the number of individuals below the poverty line may be significantly underestimated.

It would also be useful to discuss other alternative ways to estimate trends in poverty (at the household, regional or national levels, or by gender) combining quantitative and qualitative approaches such as Recall, PRA and related participatory assessment methods, Key informants, not only absolute and relative poverty.

Another option is to use of easily observable indicators (such as the quality of house construction, modes of transport: walking, bicycles, use of public transport etc.). Finally, one of the most important areas in which the paper could be strengthened concerns the discussion of the policy implications of relative poverty analysis, what is a realistic approach or more relevant to poverty analysis for Pakistan. Is that absolute poverty, relative or human poverty. It would be helpful to discuss the limitations of the analysis.

Rizwana Siddiqui

Pakistan Institute of Development Economics,
Islamabad.