

Poverty Decomposition Based on Iranian Households' Socioeconomic Characteristics: Integrated Micro and Macro Approach

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ABSTRACT

Comparison of the private consumption extracted from the Household Budget Survey and the National Accounts in Iran reveals that not only the latter always exceeds the former, but also the gap between them has increased over time. In this paper we propose a method to eliminate the discrepancy between these two sources. We integrate the micro and macro data and compare the poverty indicators in Iran for 1991-2007. Then we decompose the poverty changes over time according to socioeconomic characteristics of Iranian households into the exact sum of three independent components, i.e. growth, inequality and population effect. Results show that the total poverty changes in Iran in the previous years have been most affected by the growth effect and least affected by the population effect. The growth and overall effects have always had the same direction in the previous years in Iran.

Keywords: *Poverty Decomposition, Integration of Micro and Macro Data, Growth Effect, Inequality Effect, Population Effect.*

JEL Classification: *I32*

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1. Introduction

Given a poverty line, majority of poverty analyses in Iranian studies identify the poor using the Household Budget Survey data and then aggregate them into a single index like head count ratio. But comparing the mean per household consumption, calculated from this method with the one extracted from the national accounts, one can see the latter exceeds the former with an increasing gap between them over time.

There are two sources of data for mean private consumption in different countries: one is prepared by the households' expenditures survey (micro) results, and one is produced by the national income (macro) data. In Iran, the former is produced by the Statistical Center, and the latter by the Central Bank, and not surprisingly, like every other country they do not match.

In this paper, first we try to illustrate the reasons for this inconsistency in the data, and then introduce a method to integrate (or substitute) them, for measuring the poverty. The results from the first studies in this field, done in India, are of great help for our purpose here.

Afterwards, in the next sections we try to use this method for the poverty decomposition in Iran. We decompose the poverty in Iran into separate exact elements of growth and inequality (redistribution) effects together, to show its changes over time. For this purpose, we introduce the new method of Son (2003) which distinguishes between different socioeconomic groups and also enters the population effect in his model.

Finally, in the last section, we represent the results from the decomposition of poverty in Iran, using integrated micro and macro data during 1991-2007 (with two years intervals). As a result, we understand which elements have had the most and the least important effects on poverty alleviation in the previous years in Iran as a whole and in its different socioeconomic groups.

2. Integration of Micro and Macro Data

There are two sources of data for private consumption on commodities in various countries. One is the average households' expenditure obtained

from the national sample survey of households, and the other is the level of private consumption expenditure per capita obtained from the national accounts. In addition to measurement errors in both data sources, a common problem in survey data is underreporting of income and consumption, which makes the long-standing tradition of using survey data for poverty measurement inappropriate.

The Case of India is of importance to our discussion. India has the highest national poverty rate in the world. It has about one-third of the world's poor, in a way that more than half of its people live under the international poverty lines of 1 or \$2/day for each person.

In the early 1990s, a sequence of growth-oriented reforms (recommended by the World Bank) caused this country to experience a rapid growth rate. The data published afterward, showed that unexpectedly the growth had apparently no effect on the poor. As a result, many initially skeptics to the reforms complained that the growth strategy has favored the rich and the poor rarely had benefitted from the income increase in India.

Later studies showed if one substitutes the mean macro consumption data with micro data, the poverty reduction rate in India would decrease more rapidly. This decrease in poverty stems from the fact that the ratio of micro to macro mean consumption in India has always decreased over time, in a way that, it has fallen from 1 in 1950 to about 0.5 in late 1990s; suggesting that the high economic growth rate of India can only be traceable in the macro data, and the micro data underestimates the poverty reduction rate.

According to Deaton (2000), majority of the poor in the world live in countries, i.e. Eastern Asia, India and Sub-Sahara where consumption growth rate in micro data grows slower than the national accounts consumption data.

2-1. World-wide Difference between Micro and Macro Consumption Data

There are differences between two sources of consumption data in terms of coverage, definitions and methods. For example, in many developing countries, private consumption in the national accounts includes spending by nonprofit organizations as well as households, or in some countries, e.g. India, the survey-based consumption measure does not

include imputed rents for owner-occupied housing. In some other countries, the national consumption is measured as a residual term in the national income identity (Ravallion 2001).

Table 1 shows the ratio of micro to macro mean consumption calculated by Bhalla (2000) for some countries from 1977 to 1997. Although the ratio significantly varies (from 0.2 to more than 2.0) for different countries, if we eliminate the extreme outliers, the median is 0.9.

Table 1: Micro to Macro Consumption Ratios for Different Countries, 1977-97 (Bhalla 2000)

Country	Year	Ratio	Country	Year	Ratio
Algeria	1995	1.15	Malaysia	1995	0.81
Belarus	1993	0.42	Mauritania	1988	0.76
Botswana	1985	0.97	Mexico	1992	0.39
Brazil	1995	0.57	Moldova	1992	2.86
Bulgaria	1992	0.21	Morocco	1990	0.97
Chile	1992	0.34	Nepal	1995	0.82
China	1995	0.99	Nicaragua	1993	0.66
Colombia	1991	0.96	Niger	1992	0.80
Costa Rica	1989	0.39	Nigeria	1992	2.33
Cote d'Ivoire	1988	0.90	Pakistan	1991	1.20
Czech Republic	1993	0.24	Panama	1989	0.46
Ecuador	1994	0.36	Philippines	1994	0.44
Egypt	1990	0.65	Poland	1993	0.48
Estonia	1993	0.79	Russian Federation	1993	0.91
Ethiopia	1981	1.75	Rwanda	1984	0.84
Guatemala	1989	0.29	Senegal	1991	0.57
Guinea	1991	1.09	Slovak Republic	1992	0.24
Honduras	1992	0.59	Slovenia	1993	0.24
Hungary	1993	0.29	South Africa	1993	0.52
India	1994	0.68	Sri Lanka	1990	0.94
Indonesia	1996	0.63	Thailand	1992	0.74
Jamaica	1993	0.90	Tunisia	1990	0.83
Jordan	1992	0.77	Turkmenistan	1993	1.03
Kazakhstan	1993	0.57	Uganda	1989	0.58
Kenya	1992	1.16	Ukraine	1992	0.49
Kyrgyz Republic	1993	0.56	Venezuela	1991	0.50
Latvia	1993	0.70	Zambia	1993	0.34
Lesotho	1986	0.66	Zimbabwe	1990	0.79

2-2. Reasons to Substitute the Mean National Accounts Consumption with the Mean Households' Survey Data

Approaches that rely solely on micro data have some shortcomings. For example, some respondent forget (or even hide) a fraction of their income/expenditures. Moreover, questionnaires are usually so comprehensive that sometimes interviewers omit questions about the goods and services which are less likely to be consumed by households. As a result, micro data usually underestimate the consumption, and overestimate the poverty.

One can notice that micro-rooted data on consumptions are calculated in different methods with respect to macro data. Furthermore researchers acknowledge that none of these methods is errorless. According to Deaton (2000), when two erroneous sources of statistics are available, combination of them can lead to better results.

In other words, though we can find the relative distribution of income/expenditures from the household's micro data, it is advised to replace its mean by the one calculated from the macro data. Doing this, one can shift the distribution curve to the right, but do not change the inequality indices¹. This is exactly the same method which is used and recommended by Ruggles (1986), Bhalla (2000), Banerjee (2005), Sala-i-Martin (2006) and Ravallion (2007).

Apart from the mean, the distribution curve obtained from sample survey data is not errorless either. One may therefore argue that, due to high opportunity cost of participating in the interviews, the frequency of rich households in these samples is usually low². The opposing argument is that, though the frequency of the rich is low, but also the very poor households (especially those who do not have any shelter) are also very unlikely to participate in these interviews. Thus, when there is no other data for the distribution except sample survey data, there is no other way except using it.

1- By doing this, we have implicitly assumed that all income groups underreport proportionally. Deaton (2000) asserts when there is no other exact statistics to help us, it is better to accept the distribution neutrality assumption.

2- It is sometimes called "refusal or non-compliance problem".

3. Poverty Decomposition

Ravallion and Chen (1996) in their previous works tried to find a linear relation between changes in poverty, income growth and other variables. But, having noticed that every researcher can discretionally enter any seemingly related variable, e.g. the Gini coefficient or any other inequality index, into these models, one may conclude that these studies suffer from the specification problem

We will show in this section that we can decompose the poverty changes into the sum of three exact independent components over time:

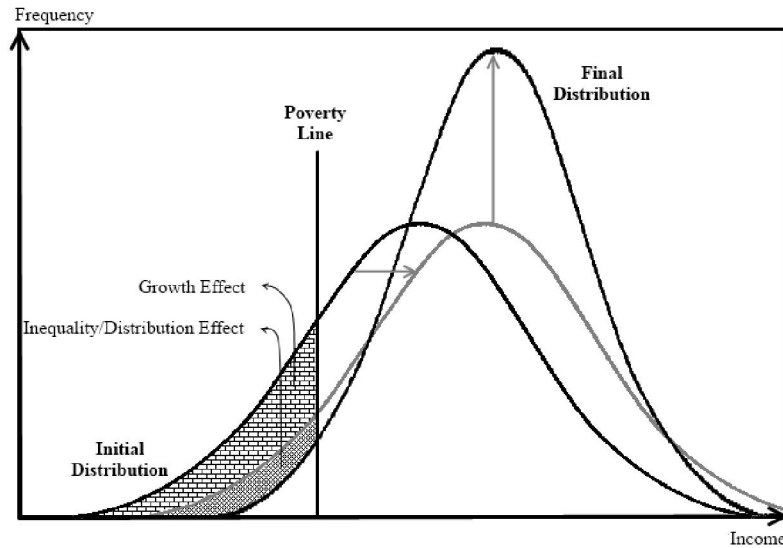
- **Growth Effect**, which shows proportional changes in the mean expenditures of all households without any change in the distribution
- **Inequality (or Distribution) Effect**, which shows changes in the distribution, without any change in the mean
- **Population Effect**, which captures the effect of changes in the population share of different socioeconomic groups caused by change in the total population or mobility of different groups.

Consequently one can attribute a fall in poverty in a special group, to the sum of these components accordingly, i.e. fall in the income, deterioration of the inequality and migration of households from richer groups to the poor ones. More importantly, we can exactly measure the share of each component in this method. As a result, it can be inferred which component has the greatest impact on poverty alleviation. This latter analysis can be used for the policy prescription, especially when there is a trade-off between growth-oriented and redistribution-oriented decisions.

Figure 1 illustrates the decomposition of poverty into growth and inequality effects. The left curve shows the initial and the right one shows the final distribution of income over time. We can distinguish between the two before-mentioned effects by using an intermediate distribution, which is drawn by using the initial distribution shifted to the right until its mean corresponds to the final distribution mean. In addition, once one assumes a 3rd dimension for this diagram for one of

the households' socioeconomic characteristics, the population effect can also be measured by the mobility of households between different groups and its effect on poverty¹.

Figure 1: Poverty Decomposition into Growth and Distribution Effects



Every poverty index can be shown by:

$$P = P(Z, \mu, L) \quad (1)$$

where P , Z , μ and L stand for the poverty index, poverty line, mean income (expenditures) and Lorenz curve (distribution) respectively.

Now if we assume that all population of a country belong to a single socioeconomic group and therefore suppress the population effect, we can show the whole procedure described earlier as:

$$\Delta P = \Delta P_G + \Delta P_I \quad (2)$$

$$P(Z, \mu_2, L_2) - P(Z, \mu_1, L_1) = [P(Z, \mu_2, L_1) - P(Z, \mu_1, L_1)] + [P(Z, \mu_1, L_2) - P(Z, \mu_1, L_1)] \quad (3)$$

1- Another form of visual presentation of the decomposition is using cumulative distribution curve. The advantage of this new form of presentation is that we can show the head count ratio index directly in the vertical axis.

In which the indices 1 and 2 indicate the 1st and 2nd curves respectively. The indices G and I also stands for Growth and Inequality, and ΔP shows the change in poverty index.

3-1. Path Dependency Problem

A common problem in the decomposition depicted in Figure 1, stems from the fact that the results are not the same if one swaps the initial and final curves. In other words, if we consider the curve at the right as the reference curve and move it horizontally to the left until their mean match, the results for the decomposition differs from those obtained by using the left curve as the reference curve¹.

One solution to this path dependency problem is to use the Kakwani's exact decomposition method. Actually there is no reason to use the left curve as the reference curve where it has no priority to the right one. Therefore, the exact decomposition uses the arithmetic mean of the growth and inequality effects, obtained from each reference curve:

$$\Delta P = \Delta P_G + \Delta P_I \quad (4)$$

$$P(Z, \mu_2, L_2) - P(Z, \mu_1, L_1) = \frac{1}{2} [P(Z, \mu_2, L_1) - P(Z, \mu_1, L_1) + P(Z, \mu_2, L_2) - P(Z, \mu_1, L_2)] \quad (5)$$

$$+ \frac{1}{2} [P(Z, \mu_1, L_2) - P(Z, \mu_1, L_1) + P(Z, \mu_2, L_2) - P(Z, \mu_2, L_1)]$$

The equation above is called "exact decomposition" because it constructs a mathematical identity, that is to say, the equation in left hand side is exactly equal to its right hand side.

3-2. Early Models

Early approach of Kakwani (1990) and other similar studies for decomposition had been focused on finding a parametric shape for the distribution of income (Lorenz) curve. For example, a common approximation for the distribution curve was log-normal (or elliptical Lorenz) curve. Ravallion and Datt (1991) state that the R^2 of all these kinds of approximations are usually between 0.995 and 1.000, which are acceptable numbers for the goodness of fit criterion.

1- They are not the same except for infinitesimal changes.

Apart from the approximation limitations, another problem of these models stems from summarizing all the inequality features into a sole index, e.g. the Gini coefficient or the standard deviation. As a result, these models had never been exact, and in order to be able to completely specify the poverty changes, they always had residual (though small) term in addition to the decomposition components.

Due to limitations raised from approximation of the shape and choosing an appropriate inequality index, other models tried to use whole distribution representing all households' data itself and never summarized it into the 1st and 2nd moments. In addition, using the exact decomposition method always allows us to eliminate the residual term.

3-3. Son's Model

Son (2003)'s method to eliminate the residual term is also based on Kakwani's exact decomposition and therefore has no residual term. The main idea that distinguishes his method of decomposition from the others is therefore introduction of the population effect, or the distinction between several socioeconomic groups in his model. To illustrate his work, let's show the change in the poverty index over time by:

$$\Delta P = P_2 - P_1 \quad (6)$$

Then if we categorize households into K mutually exclusive groups based on their socioeconomic characteristics, we can write any additively decomposable poverty index¹ as below:

$$P_1 = \sum_{i=1}^K f_{1i} P_{1i} \quad (7)$$

$$P_2 = \sum_{i=1}^K f_{2i} P_{2i} \quad (8)$$

In which, P_{1i} and P_{2i} indicate the poverty index in the i^{th} group in the initial and final year, and f_{1i} and f_{2i} shows the population share of the

1- It can be proved that, all the widespread FGT poverty indices introduced by Foster, Greer and Thorbecke (1984) are additively decomposable.

respective group in these two years. Now we can write the change in the poverty as below¹:

$$\Delta P = \frac{1}{2} \left[\sum_i f_{1i} (P_{2i} - P_{1i}) + \sum_i f_{2i} (P_{2i} - P_{1i}) \right] + \frac{1}{2} \left[\sum_i P_{1i} (f_{2i} - f_{1i}) + \sum_i P_{2i} (f_{2i} - f_{1i}) \right] \quad (9)$$

$$\Delta P = \sum_i \bar{f}_i \Delta P_i + \sum_i \bar{P}_i \Delta f_i \quad (10)$$

in which,

$$\bar{f}_i = \frac{f_{1i} + f_{2i}}{2} \quad (11)$$

$$\bar{P}_i = \frac{P_{1i} + P_{2i}}{2} \quad (12)$$

$$\Delta P_i = P_{2i} - P_{1i} \quad (13)$$

$$\Delta f_i = f_{2i} - f_{1i} \quad (14)$$

By definition, the population shift is called pro-poor if the 2nd term in the right hand side of the equation (9) or (10) is negative and therefore reduces the poverty index. This happens when the population flow is from poor groups to the rich, e.g. from rural to the urban areas.

Now, in a society consisted of K mutually exclusive groups, we can write the 1st term in the right hand side of the equation (10) as below:

$$\Delta P_i = (\Delta P_i)_G + (\Delta P_i)_1 \quad i = 1, 2, 3, \dots, K \quad (15)$$

in which, according to the Kakwani's exact decomposition we have:

$$(\Delta P_i)_G = \frac{1}{2} \left[P(Z, \mu_{2i}, L_{1i}) - P(Z, \mu_{1i}, L_{1i}) + P(Z, \mu_{2i}, L_{2i}) - P(Z, \mu_{1i}, L_{2i}) \right] \quad (16)$$

$$(\Delta P_i)_1 = \frac{1}{2} \left[P(Z, \mu_{1i}, L_{2i}) - P(Z, \mu_{1i}, L_{1i}) + P(Z, \mu_{2i}, L_{2i}) - P(Z, \mu_{2i}, L_{1i}) \right] \quad (17)$$

1- To prove that, it is sufficient to add to and subtract from the end of both side of the equation $\Delta P = P_2 - P_1 = \sum_{i=1}^K f_{2i} P_{2i} - P_2 = \sum_{i=1}^K f_{2i} P_{2i}$, the term $+\frac{1}{2} \sum_i f_{1i} P_{2i} + \frac{1}{2} \sum_i f_{2i} P_{1i}$ once.

In the equations above, μ_{it} shows the i^{th} group's mean income in year t , L_{it} shows the i^{th} group's Lorenz curve in year t and $t=1, 2$. Now, substituting equations (16) and (17) into the equation (10) leads to the Son's model:

$$\Delta P = (\Delta P)_G + (\Delta P)_I + (\Delta P)_P \quad (18)$$

$$P(Z, \mu_2, L_2) - P(Z, \mu_1, L_1) = \frac{1}{2} \left[P(Z, \mu_{2i}, L_{1i}) - P(Z, \mu_{1i}, L_{1i}) + P(Z, \mu_{2i}, L_{2i}) - P(Z, \mu_{1i}, L_{2i}) \right] \quad (19)$$

$$+ \frac{1}{2} \left[P(Z, \mu_{1i}, L_{2i}) - P(Z, \mu_{1i}, L_{1i}) + P(Z, \mu_{2i}, L_{2i}) - P(Z, \mu_{2i}, L_{1i}) \right]$$

$$+ \frac{1}{2} \left[\sum_i P_{1i} (f_{2i} - f_{1i}) + \sum_i P_{2i} (f_{2i} - f_{1i}) \right]$$

The 1st term in the right hand side of the Son's model shows the growth effect, assuming all households have the same proportional income increase, i.e. the inequality remains unchanged¹. It is clear that this term is positive whenever the economy is growing. The 2nd term in the equation above, calculates the effect of change in inequality of each group, assuming their mean remained unchanged over time. Finally, the 3rd component measures the effect of population mobility among different groups. It is clear, if the population share of one group is increased during the period, the population effect causes the poverty in that group to increase.

Empirically, population effect has the smallest share in the poverty change, unless a large amount of migration occurs between different groups. It should be notified, if $K=1$, i.e. all households belong to a single (national) group, the population effect is zero, and the Son's model converts to the Kakwani's exact decomposition model.

3-4. Poverty Decomposition in Iran

The most important published paper about the poverty decomposition in Iran relates to Mahmoudi (2003)'s work. Though he criticizes the Kakwani (1990) approach to estimate a parametric shape for the

1- Son (2003) distinguishes between overall and within-group (sub-group) total effect in his model either, and therefore decomposes the poverty change into four separate components. But we combine the two growth effects into a single growth effect in our model.

distribution and believes there is no need to complicate the calculations, but to solve the residual problem; he does not use the mean results from the initial and final curves. He only uses the initial curve as the reference curve and believes the residual term is in fact a part of the distribution effect, because the growth effect is previously measured accurately and there is no reason to enter another term except growth and distribution to the model. So he considers the sum of the distribution and residual term as the distribution term in his model. He has decomposed the poverty change in Iran by this method, during 1989-1994.

Mahmoudi's model does not enter the population effect between various socioeconomic groups, so he does not need to calculate the distribution effect independently and estimates that by finding the difference between the overall poverty change and the calculated growth effect. But in Son's model, if the same reasoning cannot be used, because the residual term can be attributed to both the distribution and population effects here, and there is no reason to merge that only in the distribution effect. So, it is better to solve the path dependency problem by using both initial and final curves as the reference curve, and calculate each of the decomposition effects exactly, though it is more time-consuming.

4. Data and the Model

The main idea of this study is firstly to measure the poverty index in Iran during 1991-2007 by integrating micro and macro data, and then decomposing the changes in poverty into three separate components of growth, inequality and population effects when we take time interval for all the decompositions equal to two years.

We use the micro data prepared annually by the Statistical Center of Iran, together with the macro data prepared by the Central Bank of Iran, and then aggregate them to calculate the appropriate poverty index. It should be noted that in our decomposition, every P_{α} index, which is introduced by Foster, Greer and Thorbecke (1984) and is shown in the equation (20), can be used discretionarily.

$$P_{\alpha} = \frac{1}{n} \sum_{X_i < Z} \left[\frac{Z - X_i}{Z} \right]^{\alpha} \quad (20)$$

In the equation above, n , Z , X_i and α denote the number of households, poverty line, each household's income/expenditure and inequality (poverty) aversion parameter respectively. When $\alpha = 0$, the FGT¹ index transforms into the head count ratio, which measures the percent of the poor among the sample. When $\alpha = 1$, it measures the normalized poverty gap (poverty intensity) and when $\alpha = 2$, it transforms to an index which gives more weight (more importance) to the very poor households than less ones in poverty measurement.

In our model, except for the decomposition in the national level, we only consider $\alpha = 0$ (head count ratio). The poverty lines we use in our model are the ones calculated by Souri² for Iranian urban and rural households in 2007³ separately. The base year we use is 2003, and it is necessary to convert all the poverty lines and household expenditures into that year's fixed price.

We replicate the Son (2003)'s model introduced in equation (19), with slightly difference that enables us to distinguish two separate poverty lines, i.e. urban and rural areas in every decomposition for both the national level and in different socioeconomic groups. For example, for the case when $K=2$ in which every household is either urban or rural (denoted by U and R indices respectively), the equation (19) which shows the change in the national poverty, converts to the model in equation (21).

1- Foster, J., Green J., & Thorbecke E., (FGT).

2- Extracted from Souri's manuscript, forthcoming as "Geographical Distribution of Poverty, an Instrument for Targeting Subsidies in Iran"

3- We have also calculated the decomposition results for four other poverty lines of 1 and \$2 /Day and also 2100 and 2300 Calories per day per person. According to the 1 and \$2/Day per person poverty lines, the current extent of poverty in Iran is zero and according to 2100 and 2300 poverty lines, the decomposition results have the same direction as that of Souri, with different magnitude.

Apart from urbanity (which exists in all of our decompositions), the other households' socioeconomic characteristics we use in our model are head of households' literacy, gender, marital status and activity.

$$\begin{aligned}
 \Delta P &= \Delta P_G + \Delta P_I + \Delta P_P \quad (21) \\
 \Delta P &= [f_{2U}P(Z_U, \mu_{2U}, L_{2U}) + f_{2R}P(Z_R, \mu_{2R}, L_{2R})] - [f_{1U}P(Z_U, \mu_{1U}, L_{1U}) + f_{1R}P(Z_R, \mu_{1R}, L_{1R})] \\
 \Delta P_G &= \frac{f_{1U} + f_{2U}}{2} \cdot \frac{1}{2} [P(Z_U, \mu_{2U}, L_{1U}) - P(Z_U, \mu_{1U}, L_{1U}) + P(Z_U, \mu_{2U}, L_{2U}) - P(Z_U, \mu_{1U}, L_{2U})] \\
 &\quad + \frac{f_{1R} + f_{2R}}{2} \cdot \frac{1}{2} [P(Z_R, \mu_{2R}, L_{1R}) - P(Z_R, \mu_{1R}, L_{1R}) + P(Z_R, \mu_{2R}, L_{2R}) - P(Z_R, \mu_{1R}, L_{2R})] \\
 \Delta P_I &= \frac{f_{1U} + f_{2U}}{2} \cdot \frac{1}{2} [P(Z_U, \mu_{1U}, L_{2U}) - P(Z_U, \mu_{1U}, L_{1U}) + P(Z_U, \mu_{2U}, L_{2U}) - P(Z_U, \mu_{2U}, L_{1U})] \\
 &\quad + \frac{f_{1R} + f_{2R}}{2} \cdot \frac{1}{2} [P(Z_R, \mu_{1R}, L_{2R}) - P(Z_R, \mu_{1R}, L_{1R}) + P(Z_R, \mu_{2R}, L_{2R}) - P(Z_R, \mu_{2R}, L_{1R})] \\
 \Delta P_P &= \frac{P(Z_U, \mu_{1U}, L_{1U}) + P(Z_U, \mu_{2U}, L_{2U})}{2} [f_{2U} - f_{1U}] \\
 &\quad + \frac{P(Z_R, \mu_{1R}, L_{1R}) + P(Z_R, \mu_{2R}, L_{2R})}{2} [f_{2R} - f_{1R}]
 \end{aligned}$$

5. Results

5-1. Difference between Micro and Macro data in Iran

Table 2 shows the mean households' expenditures calculated from both micro and macro data in Iran. It can be seen that, like many other countries, mean micro data are less than mean macro data in Iran where the ratio of former to the latter in different years varies around 0.9. As a result, micro-based measures of poverty underestimate the poverty rate in Iran.

Table 2: Comparison of mean households' real expenditures from micro and macro data

Year	1991	1993	1995	1997	1999	2001	2003	2005	2007
Mean Households' Expenditures (Micro)	27,778,672	27,522,602	27,973,632	28,158,872	28,963,344	30,043,352	33,543,184	37,046,964	34,971,284
Mean Households' Expenditures (Macro)	30,319,833	29,511,250	29,140,010	29,196,291	31,012,937	32,044,306	35,128,143	40,319,355	42,133,278
Micro-Macro Difference	2,541,161	1,988,648	1,166,378	1,037,419	2,049,593	2,000,954	1,584,959	3,272,391	7,161,994
Micro/Macro Ratio	0.92	0.93	0.96	0.96	0.93	0.94	0.95	0.92	0.83

5-2. Changes in the Head Count Ratio

Table 3 shows the difference between head count ratio calculated using solely micro data and also integrating them with macro data for the period 1991-2007. It can be seen that the poverty has been reduced in Iran over time. Furthermore, the integrated data always measures the poverty index lesser than what micro data reveals, though the extent of their difference varies in different years.

Table 3: The head count ratio index, calculated from micro and integrated data in Iran

Data	Micro Data	Integrated Data
1991	40.37	33.06
1993	39.73	34.16
1995	41.10	37.95
1997	37.29	33.98
1999	34.92	28.87
2001	33.03	27.04
2003	26.33	22.31
2005	24.39	16.83
2007	26.47	10.09

5-3. Decomposition of Poverty at the National Level

Figure 2 depicts the results of decomposition of poverty in Iran at the national level during 1991-2007, using micro data and head count ratio index for measuring poverty and its changes over time. Figure 3 replicates this pattern using integrated data. Real GDP Growth is depicted in both figures to make the consumption growth at macro or micro levels comparable.

Figure 2: Poverty Decomposition in Iran in the National Level, Using only Micro Data

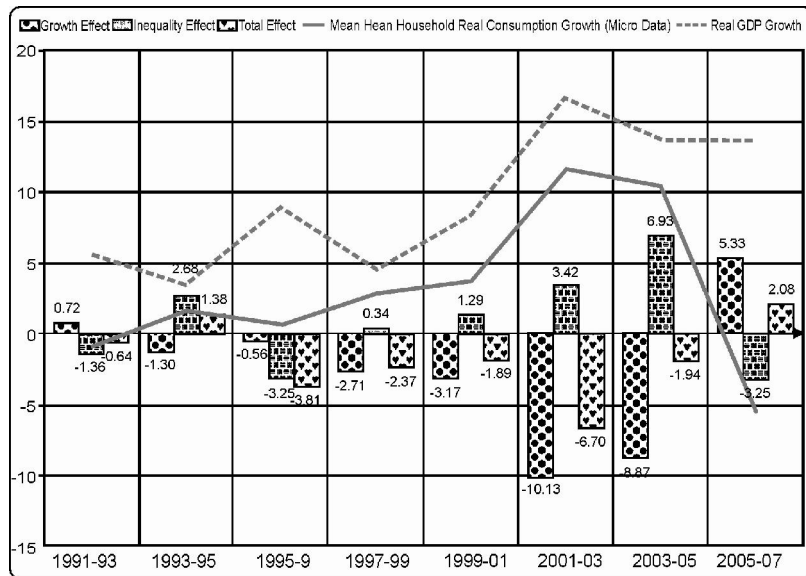
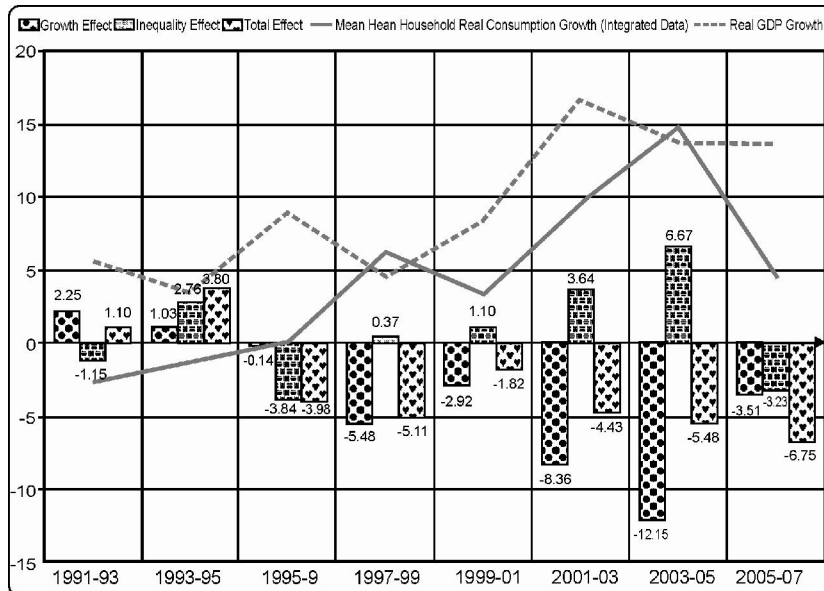


Figure 3: Poverty Decomposition in Iran in the National Level, Using Integrated Data



National level in this analysis refers to the case where there is only one group in the country, which brings the population effect down to zero. By comparing figures 2 and 3, one can detect episodes where two methods demonstrate completely different results. For example, during 2005-2007, the micro data show an increase in the poverty due to unfavorable growth effect, while the integrated data show a decrease in the poverty (with greater magnitude) due to favorable growth effect.

According to figure 2, it seems that the greatest fall in poverty has occurred in the period 2005-07, while surprisingly, the micro data in figure 1 shows an increase in the poverty in this period. According to both micro and integrated data, even though the poverty has decreased during 1991-2007, but in the period 1993-95, poverty has risen.

From now on (especially in the appendices), we only show the results from the integrated data. In appendix 1, it can be seen that for those years where the macro-based consumption growth rate has increased, reduction in the poverty had also been larger. But regarding the inequality effect, it seems this effect generally has boosted poverty in Iran, except for the periods 1991-93, 1995-97 and 2005-07.

5-4. Decomposition of Poverty in Iran, based on Households' Socio-economic characteristics

5-4-1. Urbanity

Decomposition of poverty in the urban and rural areas is shown in the appendix 2. One may see that, in most years, the growth and inequality effects had the greatest impact on rural areas, i.e. poverty reduction in rural area has been more severe in comparison with the urban areas. In addition, every year the growth and inequality effects have the same sign in both urban and rural areas.

Population effect is smaller than the other two effects with a negligible impact on poverty changes. In addition, it can be seen that, in recent years, the population effect in the rural areas has been pro-poor, which indirectly reflects the increase of urbanization in Iran.

5-4-2. Head of Household's Literacy

Appendix 3 shows the result of decomposition according to the head of households' (hereinafter HoH) literacy situation. According to these tables, the largest poverty rate in Iran belongs to the households with illiterate HoH (in both urban and rural areas). In addition, growth effect had the greatest impact on households with literate head especially in urban area. Among the three effects, the population effect has the least impact on the poor in Iran.

5-4-3. Head of Household's Gender

Appendix 4 Tables show the results of decomposition according to the HoHs' gender. Generally, the maximum poverty rate in Iran belongs to the households with female HoH in both urban and rural areas. In addition, the growth effect has been more effective on the households with male HoHs rather than females. Since the share of households with female HoHs has been increased over time, the population effect has acted unfavorably for them. In sum, the total poverty change in Iran in the previous years, has been most affected by the growth rate, and consequently by the male HoHs (which affect greater in comparison with the growth rate).

5-4-4. Head of Household's Marital Status

The results of decomposition according to the HoHs' marital status are shown in the tables of Appendix 5. In almost every year, the poverty rates in both urban and rural areas ordered from the highest to lowest belonged to the households with divorced, widow, never-married and married HoHs respectively. As tables show, the growth and inequality effects had the greatest impact on households with married HoH. In addition, population effect seems to have had the greatest influence on the household with widow HoH, in the previous years. In sum, the total effect has had the greatest effect on the households with divorced and widow HoHs.

5-4-5. Head of Household' Activity

Appendix 6 shows the results of decomposition according to the HoHs' activity. If we sort households with the highest to the lowest poverty rates in Iran, they arrange in turn of homemaker, retired, in school, unemployed and employed) HoHs respectively. The pattern is similar in both in urban and rural areas. The growth and inequality effects have the most influential impact on employed HoHs, and far from that, retired HoH stay at the 2nd rank. The population effect in the previous years has caused a decrease in poverty among employed HoHs. The total effect also shows the highest poverty decrease in employed HoHs, which confirms the important impact of growth effect on poverty reduction in Iran.

6. Conclusion

This study reveals the dominance of the growth effect with respect to two other components of the poverty decomposition in Iran. If one wishes to rank the most important effects on poverty changes in Iran in the previous years, the growth and inequality effects stay at 1st and 2nd places respectively. The population effect has always had the least important effect.

Results show that the growth and inequality effects have had every 4 combination of signs (+ or -) together in the previous years in Iran. But one thing is clear and that is the same sign of growth and overall effects in every decomposed period in Iran.

The national consumption growth rate has been high in every period whenever the poverty has decreased largely in Iran. In contrast, there were periods, e.g. 1993-95, where the national consumption growth rate was negative and unfavorable inequality changes have increased the poverty furthermore. There was also one period, e.g. 1995-97, in which the most ameliorative effect on poverty has been caused by the distribution changes.

The results of decomposition based on the Iranian households' socioeconomic characteristics show that the growth and inequality

effects have often been more effective and influential on the households with rural, literate, male, married and employed head. In addition, since in the previous years the share of households with urban, literate and female head have been increased in Iran, the population effect has not been pro-poor for them.

In sum, the total poverty changes in Iran in the previous years have been most affected by the growth effect and least affected by the population effect. The growth effect has always determined the direction of the overall effect on poverty changes in Iran.

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Appendices

Tables in this section present the results of poverty decomposition in Iran, using integrated data from 1991 to 2007. They are categorized according to different households' socioeconomic characteristics. In all cells of all tables, the upper bold numbers (which vary from -1 to 1) show the change in the poverty index in that period, and the italic numbers below, show the percentage point share of that cell (effect) to the overall change in the poverty. Except for the decomposition in the national level, in which the tables show the changes in three FGT poverty indices, for the others we only consider the head count ratio index. The numbers in cells with dark background, show the summation of the relevant column or row.

Appendix 1: Decomposition of Poverty in Iran: the National Level

ΔP	1991-1993			1993-1995		
	P ₀	P ₁	P ₂	P ₀	P ₁	P ₂
Growth Effect	0.0225 205	0.0148 290	0.0102 342	0.0103 27	0.0072 35	0.0052 40
Inequality Effect	-0.0115 -105	-0.0097 -190	-0.0072 -242	0.0276 73	0.0133 65	0.0079 60
Population Effect						
Total	0.0110 100	0.0051 100	0.0030 100	0.0380 100	0.0205 100	0.0131 100

ΔP	1995-1997			1997-1999			1999-2001		
	P ₀	P ₁	P ₂	P ₀	P ₁	P ₂	P ₀	P ₁	P ₂
Growth Effect	-0.0014 3	-0.0011 5	-0.0008 6	-0.0548 107	-0.0327 122	-0.0217 130	-0.0292 160	-0.0168 236	-0.0104 298
Inequality Effect	-0.0384 97	-0.0207 95	-0.0122 94	0.0037 -7	0.0060 -22	0.0050 -30	0.0110 -60	0.0097 -136	0.0069 -198
Population Effect									
Total	-0.0398 100	-0.0219 100	-0.0130 100	-0.0511 100	-0.0267 100	-0.0167 100	-0.0182 100	-0.0071 100	-0.0035 100

ΔP	2001-2003			2003-2005			2005-2007		
	P ₀	P ₁	P ₂	P ₀	P ₁	P ₂	P ₀	P ₁	P ₂
Growth Effect	-0.0836 177	-0.0434 217	-0.0266 267	-0.1215 222	-0.0557 269	-0.0329 299	-0.0351 52	-0.0119 52	-0.0053 52
Inequality Effect	0.0364 -77	0.0234 -117	0.0166 -167	0.0667 -122	0.0350 -169	0.0219 -199	-0.0323 48	-0.0110 48	-0.0049 48
Population Effect									
Total	-0.0473 100	-0.0200 100	-0.0100 100	-0.0548 100	-0.0207 100	-0.0110 100	-0.0675 100	-0.0229 100	-0.0102 100

*Appendix 2: Decomposition of Poverty in Iran, based on
Urbanity*

ΔP		1991-1993			1993-1995		
		Urban	Rural	National	Urban	Rural	National
P_0	Growth Effect	0.0101 92	0.0124 113	0.0225 205	0.0052 14	0.0051 47	0.0103 27
	Inequality Effect	-0.0136 -124	-0.0105 -96	-0.0241 -220	0.0088 23	0.0125 114	0.0213 56
	Population Effect	0.0197 180	-0.0071 -65	0.0126 115	0.0104 27	-0.0041 -11	0.0063 17
	Total	0.0162 147	-0.0052 -47	0.0110 100	0.0244 64	0.0135 36	0.0380 100

ΔP		1995-1997			1997-1999			1999-2001		
		Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
P_0	Growth Effect	-0.0004 1	-0.0009 2	-0.0014 3	-0.0221 43	-0.0326 64	-0.0548 107	-0.0099 54	-0.0193 106	-0.0292 160
	Inequality Effect	-0.0195 49	-0.0042 11	-0.0237 60	-0.0006 1	0.0138 -27	0.0133 -26	-0.0029 16	0.0154 -84	0.0124 -68
	Population Effect	-0.0257 65	0.0110 -28	-0.0147 37	-0.0164 32	0.0068 -13	-0.0096 19	-0.0025 14	0.0010 -5	-0.0015 8
	Total	-0.0456 115	0.0058 -15	-0.0398 100	-0.0391 77	-0.0120 23	-0.0511 100	-0.0153 84	-0.0029 16	-0.0182 100

ΔP		2001-2003			2003-2005			2005-2007		
		Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
P_0	Growth Effect	-0.0346 73	-0.0490 104	-0.0837 177	-0.0585 107	-0.0632 115	-0.1216 222	-0.0193 29	-0.0158 23	-0.0351 52
	Inequality Effect	0.0048 -10	0.0280 -59	0.0328 -69	0.0286 -52	0.0368 -67	0.0654 -119	-0.0184 27	-0.0138 21	-0.0322 48
	Population Effect	0.0059 -12	-0.0023 5	0.0036 -8	0.0021 -4	-0.0007 1	0.0014 -3	-0.0001 0	0.0000 0	-0.0001 0
	Total	-0.0240 51	-0.0233 49	-0.0473 100	-0.0278 51	-0.0270 49	-0.0548 100	-0.0378 56	-0.0297 44	-0.0675 100

Appendix 3: Decomposition of Poverty in Iran, based on HoHs' Literacy

ΔP	1993-1995											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	0.0040	0.0016	0.0056	0.0088	0.0047	0.0136	0.008	0.000	0.0084	0.0211	0.0065	0.0275
	10.58	4.12	15	23.24	12.49	36	21.74	0.39	22	55.56	17.01	73
Illiterate	0.0012	0.0035	0.0048	0.0010	0.0094	0.0104	0.001	-0.006	-0.0049	0.0033	0.0070	0.0103
	3.19	9.34	13	2.66	24.81	27	2.80	-15.59	-13	8.65	18.56	27
Total	0.0052	0.0051	0.0103	0.0088	0.0125	0.0213	0.0104	-0.0041	0.0063	0.0244	0.0135	0.0380
	14	47	27	23	114	56	27	-11	17	64	36	100

ΔP	1995-1997											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	-0.0003	-0.0004	-0.0007	-0.0106	0.0020	-0.0086	-0.009	0.007	-0.0024	-0.0200	0.0084	-0.0117
	0.87	0.96	2	26.67	-5.10	22	22.82	-16.88	6	50.36	-21.02	29
Illiterate	-0.0001	-0.0005	-0.0006	-0.0045	-0.0011	-0.0055	-0.021	-0.001	-0.0219	-0.0255	-0.0025	-0.0280
	0.25	1.33	2	11.22	2.66	14	52.65	2.32	55	64.12	6.31	70
Total	-0.0004	-0.0009	-0.0014	-0.0195	-0.0042	-0.0237	-0.0257	0.0110	-0.0147	-0.0456	0.0058	-0.0398
	1	2	3	49	11	60	65	-28	37	115	-15	100

ΔP	1997-1999											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	-0.0169	-0.0128	-0.0297	-0.0034	0.0033	-0.0001	-0.014	0.002	-0.0117	-0.0340	-0.0075	-0.0415
	33.15	25.03	58	6.60	-6.50	0	26.75	-3.85	23	66.49	14.67	81
Illiterate	-0.0052	-0.0198	-0.0250	0.0008	0.0106	0.0114	-0.001	0.005	0.0040	-0.0051	-0.0045	-0.0096
	10.15	38.83	49	-1.51	-20.77	-22	1.43	-9.29	-8	10.07	8.76	19
Total	-0.0221	-0.0326	-0.0548	-0.0006	0.0138	0.0133	-0.0164	0.0068	-0.0096	-0.0391	-0.0120	-0.0511
	43	64	107	1	-27	-26	32	-13	19	77	23	100

ΔP	1999-2001											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	-0.0075	-0.0078	-0.0153	-0.0006	0.0046	0.0040	0.003	0.000	0.0032	-0.0050	-0.0031	-0.0081
	41.33	42.66	84	3.04	-25.23	-22	-16.84	-0.61	-17	27.53	16.82	44
Illiterate	-0.0024	-0.0115	-0.0139	0.0013	0.0105	0.0118	-0.009	0.001	-0.0081	-0.0103	0.0001	-0.0101
	12.91	63.14	76	-6.97	-57.62	-65	50.51	-6.31	44	56.44	-0.79	56
Total	-0.0099	-0.0193	-0.0292	-0.0029	0.0154	0.0124	-0.0025	0.0010	-0.0015	-0.0153	-0.0029	-0.0182
	54	106	160	16	-84	-68	14	-5	8	84	16	100

ΔP	2001-2003											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	-0.0277	-0.0183	-0.0460	0.0065	0.0139	0.0203	0.006	0.002	0.0082	-0.0152	-0.0022	-0.0175
	58.57	38.63	97	-13.67	-29.31	-43	-12.66	-4.61	-17	32.24	4.70	37
Illiterate	-0.0069	-0.0304	-0.0374	0.0003	0.0201	0.0204	-0.002	-0.011	-0.0128	-0.0088	-0.0211	-0.0298
	14.68	64.37	79	-0.55	-42.58	-43	4.38	22.74	27	18.51	44.54	63
Total	-0.0346	-0.0490	-0.0837	0.0048	0.0280	0.0328	0.0059	-0.0023	0.0036	-0.0240	-0.0233	-0.0473
	73	104	177	-10	-59	-69	-12	5	-8	51	49	100

ΔP	2003-2005											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	-0.0452	-0.0239	-0.0691	0.0226	0.0136	0.0362	0.003	0.000	0.0025	-0.0198	-0.0106	-0.0305
	82.55	43.55	126	-41.16	-24.83	-66	-5.20	0.67	-5	36.20	19.40	56
Illiterate	-0.0132	-0.0393	-0.0525	0.0077	0.0226	0.0303	-0.002	0.000	-0.0021	-0.0079	-0.0164	-0.0243
	24.11	71.78	96	-14.00	-41.32	-55	4.38	-0.53	4	14.49	29.94	44
Total	-0.0585	-0.0632	-0.1216	0.0286	0.0368	0.0654	0.0021	-0.0007	0.0014	-0.0278	-0.0270	-0.0548
	107	115	222	-52	-67	-119	-4	1	-3	51	49	100

ΔP	2005-2007											
	Growth Effect			Inequality Effect			Population Effect			Literary Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Literate	-0.0145	-0.0034	-0.0178	-0.0138	-0.0033	-0.0171	0.000	0.000	-0.0002	-0.0285	-0.0067	-0.0351
	21.44	5.01	26	20.43	4.93	25	0.33	-0.05	0	42.20	9.89	52
Illiterate	-0.0048	-0.0125	-0.0173	-0.0049	-0.0103	-0.0152	0.000	0.000	0.0002	-0.0093	-0.0230	-0.0323
	7.17	18.47	26	7.20	15.33	23	-0.52	0.27	0	13.84	34.07	48
Total	-0.0193	-0.0158	-0.0351	-0.0184	-0.0138	-0.0322	-0.0001	0.0000	-0.0001	-0.0378	-0.0297	-0.0675
	29	23	52	27	21	48	0	0	0	56	44	100

Appendix 4: Decomposition of Poverty in Iran, based on HoHs' Gender

ΔP	1991-1993											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	0.0095	0.0112	0.0207	-0.0119	-0.0090	-0.0209	0.017	-0.005	0.0127	0.0149	-0.0024	0.0125
	86.52	102.37	189	-108.75	-82.09	-191	158.68	-42.34	116	136.45	-22.06	114
Female	0.0006	0.0012	0.0018	-0.0014	-0.0003	-0.0016	0.002	-0.004	-0.0017	0.0012	-0.0028	-0.0016
	5.46	10.70	16	-12.58	-2.40	-15	18.10	-33.67	-16	10.98	-25.36	-14
Total	0.0101	0.0124	0.0225	-0.0136	-0.0105	-0.0241	0.0197	-0.0071	0.0126	0.0162	-0.0052	0.0110
	92	113	205	-124	-96	-220	180	-65	115	147	-47	100

ΔP	1993-1995											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	0.0049	0.0045	0.0094	0.0101	0.0118	0.0220	0.011	-0.004	0.0069	0.0256	0.0127	0.0383
	12.88	11.81	25	26.70	31.21	58	27.77	-9.48	18	67.36	33.53	101
Female	0.0003	0.0006	0.0010	-0.0006	-0.0008	-0.0014	-0.001	0.001	0.0001	-0.0011	0.0008	-0.0003
	0.88	1.70	3	-1.51	-2.19	-4	-2.33	2.56	0	-2.96	2.07	-1
Total	0.0052	0.0051	0.0103	0.0088	0.0125	0.0213	0.0104	-0.0041	0.0063	0.0244	0.0135	0.0380
	14	47	27	23	114	56	27	-11	17	64	36	100

ΔP	1995-1997											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	-0.0004	-0.0009	-0.0013	-0.0167	-0.0025	-0.0191	-0.021	0.010	-0.0116	-0.0382	0.0062	-0.0320
	1.09	2.21	3	41.89	6.21	48	53.09	-23.93	29	96.07	-15.51	81
Female	0.0000	0.0000	0.0000	-0.0021	0.0010	-0.0011	-0.005	-0.001	-0.0066	-0.0074	-0.0003	-0.0077
	0.03	0.07	0	5.39	-2.53	3	13.16	3.31	16	18.59	0.85	19
Total	-0.0004	-0.0009	-0.0014	-0.0195	-0.0042	-0.0237	-0.0257	0.0110	-0.0147	-0.0456	0.0058	-0.0398
	1	2	3	49	11	60	65	-28	37	115	-15	100

ΔP	1997-1999											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	-0.0211	-0.0294	-0.0505	-0.0023	0.0130	0.0106	-0.015	0.005	-0.0102	-0.0384	-0.0117	-0.0501
	41.29	57.50	99	4.58	-25.39	-21	29.18	-9.19	20	75.05	22.92	98
Female	-0.0010	-0.0032	-0.0043	0.0015	-0.0004	0.0011	-0.001	0.003	0.0022	-0.0008	-0.0003	-0.0010
	2.03	6.35	8	-2.85	0.72	-2	2.33	-6.56	-4	1.51	0.51	2
Total	-0.0221	-0.0326	-0.0548	-0.0006	0.0138	0.0133	-0.0164	0.0068	-0.0096	-0.0391	-0.0120	-0.0511
	43	64	107	1	-27	-26	32	-13	19	77	23	100

ΔP	1999-2001											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	-0.0093	-0.0165	-0.0258	-0.0024	0.0110	0.0086	-0.003	0.000	-0.0029	-0.0143	-0.0059	-0.0202
	50.94	90.70	142	13.04	-60.16	-47	14.39	1.74	16	78.38	32.29	111
Female	-0.0006	-0.0027	-0.0033	-0.0009	0.0014	0.0006	0.000	0.004	0.0047	-0.0010	0.0030	0.0019
	3.34	15.04	18	4.82	-7.86	-3	-2.53	-23.45	-26	5.62	-16.28	-11
Total	-0.0099	-0.0193	-0.0292	-0.0029	0.0154	0.0124	-0.0025	0.0010	-0.0015	-0.0153	-0.0029	-0.0182
	54	106	160	16	-84	-68	14	-5	8	84	16	100

ΔP	2001-2003											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	-0.0321	-0.0417	-0.0738	0.0054	0.0267	0.0320	0.005	0.000	0.0052	-0.0214	-0.0152	-0.0366
	68.00	88.16	156	-11.36	-56.39	-68	-11.41	0.31	-11	45.22	32.08	77
Female	-0.0025	-0.0072	-0.0097	-0.0003	0.0061	0.0058	0.000	-0.007	-0.0068	-0.0026	-0.0081	-0.0107
	5.24	15.20	20	0.64	-12.87	-12	-0.37	14.84	14	5.52	17.17	23
Total	-0.0346	-0.0490	-0.0837	0.0048	0.0280	0.0328	0.0059	-0.0023	0.0036	-0.0240	-0.0233	-0.0473
	73	104	177	-10	-59	-69	-12	5	-8	51	49	100

ΔP	2003-2005											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	-0.0534	-0.0515	-0.1049	0.0259	0.0285	0.0544	0.001	-0.001	0.0006	-0.0260	-0.0240	-0.0499
	97.39	94.00	191	-47.28	-51.96	-99	-2.74	1.72	-1	-47.37	43.76	91
Female	-0.0051	-0.0119	-0.0170	0.0024	0.0063	0.0087	0.001	0.003	0.0035	-0.0018	-0.0030	-0.0049
	9.30	21.72	31	-4.43	-11.41	-16	-1.55	-4.75	-6	3.32	5.56	9
Total	-0.0585	-0.0632	-0.1216	0.0286	0.0368	0.0654	0.0021	-0.0007	0.0014	-0.0278	-0.0270	-0.0548
	107	115	222	-52	-67	-119	-4	1	-3	51	49	100

ΔP	2005-2007											
	Growth Effect			Inequality Effect			Population Effect			Gender Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Male	-0.0173	-0.0101	-0.0274	-0.0174	-0.0092	-0.0266	-0.001	0.000	-0.0009	-0.0354	-0.0194	-0.0549
	25.64	14.90	41	25.74	13.68	39	1.14	0.22	1	52.52	28.79	81
Female	-0.0020	-0.0057	-0.0077	-0.0019	-0.0058	-0.0077	0.002	0.001	0.0028	-0.0024	-0.0102	-0.0126
	2.95	8.46	11	2.81	8.62	11	-2.24	-1.92	-4	3.52	15.16	19
Total	-0.0193	-0.0158	-0.0351	-0.0184	-0.0138	-0.0322	-0.0001	0.0000	-0.0001	-0.0378	-0.0297	-0.0675
	29	23	52	27	21	48	0	0	0	56	44	100

Appendix 5: Decomposition of Poverty in Iran based on HoHs' Marital Status

ΔP	1991-1993											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	0.0092	0.0109	0.0201	-0.0132	-0.0087	-0.0219	0.016	-0.004	0.0122	0.0123	-0.0020	0.0104
	83.70	99.74	183	-120.12	-79.78	-200	149.08	-37.96	111	112.65	-18.00	95
Widow	0.0007	0.0011	0.0018	-0.0008	0.0004	-0.0004	0.003	-0.004	-0.0015	0.0024	-0.0026	-0.0002
	5.94	10.09	16	-7.32	3.24	-4	23.35	-36.83	-13	21.97	-23.50	-2
Divorced	0.0001	0.0000	0.0001	0.0000	-0.0001	-0.0001	0.001	0.000	0.0004	0.0009	-0.0005	0.0004
	0.90	0.20	1	0.38	-1.34	-1	7.14	-3.16	4	8.41	-4.31	4
Never-Married	0.0002	0.0003	0.0005	0.0002	-0.0002	0.0001	0.000	0.000	-0.0002	0.0005	-0.0002	0.0003
	1.46	2.99	4	2.23	-1.72	1	0.71	-2.92	-2	4	-2	3
Total	0.0101	0.0124	0.0225	-0.0136	-0.0105	-0.0241	0.0197	-0.0071	0.0126	0.0162	-0.0052	0.0110
	92	113	205	-124	-96	-220	180	-65	115	147	-47	100

ΔP	1993-1995											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	0.0047	0.0045	0.0092	0.0105	0.0123	0.0228	0.010	-0.003	0.0067	0.0250	0.0137	0.0387
	12.49	11.78	24	27.78	32.30	60	25.56	-7.99	18	65.83	36.10	102
Widow	0.0003	0.0005	0.0009	-0.0005	-0.0001	-0.0006	0.000	-0.002	-0.0018	-0.0004	-0.0012	-0.0015
	0.89	1.36	2	-1.25	-0.25	-2	-0.63	-4.15	-5	-0.99	-3.03	-4
Divorced	0.0000	0.0000	0.0000	0.0000	0.0003	0.0003	0.000	0.000	0.0001	-0.0004	0.0008	0.0005
	0.04	0.06	0	0.03	0.87	1	-1.01	1.24	0	-0.95	2.17	1
Never-Married	0.0001	0.0001	0.0002	-0.0007	-0.0002	-0.0010	0.001	0.000	0.0011	0.0002	0.0001	0.0003
	0.35	0.25	1	-1.96	-0.56	-3	2.11	0.68	3	1	0	1
Total	0.0052	0.0051	0.0103	0.0088	0.0125	0.0213	0.0104	-0.0041	0.0063	0.0244	0.0135	0.0380
	14	47	27	23	114	56	27	-11	17	64	36	100

ΔP	1995-1997											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	-0.0004	-0.0008	-0.0012	-0.0163	-0.0017	-0.0180	-0.021	0.009	-0.0122	-0.0379	0.0064	-0.0315
	1.02	2.06	3	41.11	4.27	45	53.30	-22.54	31	95.43	-16.21	79
Widow	0.0000	-0.0001	-0.0001	-0.0028	-0.0005	-0.0033	-0.004	0.000	-0.0039	-0.0066	-0.0007	-0.0073
	0.03	0.13	0	7.06	1.37	8	9.47	0.32	10	16.56	1.82	18
Divorced	0.0000	0.0000	0.0000	0.0000	-0.0001	-0.0001	0.000	0.000	-0.0004	-0.0001	-0.0004	-0.0005
	0.00	0.00	0	0.05	0.13	0	0.27	0.79	1	0.33	0.92	1
Never-Married	0.0000	0.0000	-0.0001	0.0000	0.0004	0.0004	-0.001	0.000	-0.0008	-0.0009	0.0005	-0.0005
	0.06	0.09	0	0.03	-1.08	-1	2.24	-0.20	2	2	-1	1
Total	-0.0004	-0.0009	-0.0014	-0.0195	-0.0042	-0.0237	-0.0257	0.0110	-0.0147	-0.0456	0.0058	-0.0398
	1	2	3	49	11	60	65	-28	37	115	-15	100

ΔP	1997-1999											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	-0.0206	-0.0288	-0.0494	-0.0024	0.0128	0.0105	-0.014	0.004	-0.0103	-0.0374	-0.0119	-0.0493
	40.33	56.41	97	4.67	-25.14	-20	28.20	-8.03	20	73.20	23.25	96
Widow	-0.0012	-0.0031	-0.0044	0.0017	-0.0011	0.0006	-0.001	0.005	0.0040	-0.0002	0.0005	0.0002
	2.43	6.12	9	-3.42	2.21	-1	1.43	-9.22	-8	0.43	-0.89	0
Divorced	-0.0001	-0.0001	-0.0002	-0.0003	-0.0001	-0.0004	0.000	0.000	-0.0004	-0.0009	-0.0001	-0.0010
	0.16	0.28	0	0.54	0.25	1	0.98	-0.27	1	1.67	0.26	2
Never-Married	-0.0002	-0.0005	-0.0007	0.0000	-0.0001	0.0000	0.000	0.000	-0.0003	-0.0006	-0.0004	-0.0011
	0.40	1.04	1	-0.07	0.15	0	0.94	-0.37	1	1	1	2
Total	-0.0221	-0.0326	-0.0548	-0.0006	0.0138	0.0133	-0.0164	0.0068	-0.0096	-0.0391	-0.0120	-0.0511
	43	64	107	1	-27	-26	32	-13	19	77	23	100

ΔP	1999-2001											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	-0.0091	-0.0164	-0.0255	-0.0022	0.0108	0.0086	-0.002	0.000	-0.0023	-0.0133	-0.0059	-0.0192
	49.84	89.81	140	11.80	-59.03	-47	11.42	1.40	13	73.05	32.18	105
Widow	-0.0006	-0.0024	-0.0031	-0.0004	0.0019	0.0015	0.000	0.004	0.0035	-0.0011	0.0031	0.0020
	3.44	13.35	17	2.25	-10.35	-8	0.62	-20.08	-19	6.30	-17.08	-11
Divorced	-0.0001	-0.0002	-0.0003	-0.0003	0.0000	-0.0004	0.000	0.000	0.0004	-0.0003	0.0001	-0.0002
	0.50	0.92	1	1.84	0.24	2	-0.46	-1.86	-2	1.88	-0.70	1
Never-Married	-0.0001	-0.0003	-0.0004	0.0000	0.0000	0.0000	0.000	0.000	-0.0004	-0.0005	-0.0003	-0.0008
	0.49	1.72	2	0.16	-0.08	0	2.09	-0.01	2	3	2	4
Total	-0.0099	-0.0193	-0.0292	-0.0029	0.0154	0.0124	-0.0025	0.0010	-0.0015	-0.0153	-0.0029	-0.0182
	54	106	160	16	-84	-68	14	-5	8	84	16	100

ΔP	2001-2003											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	-0.0316	-0.0408	-0.0723	0.0046	0.0250	0.0296	0.004	-0.001	0.0039	-0.0225	-0.0163	-0.0389
	66.79	86.19	153	-9.69	-52.90	-63	-9.43	1.29	-8	47.67	34.57	82
Widow	-0.0024	-0.0070	-0.0094	0.0000	0.0059	0.0059	0.000	-0.006	-0.0054	-0.0019	-0.0069	-0.0088
	5.07	14.73	20	-0.04	-12.53	-13	-0.95	12.31	11	4.08	14.50	19
Divorced	-0.0001	-0.0003	-0.0004	0.0006	0.0004	0.0009	0.000	0.000	0.0001	0.0008	-0.0001	0.0007
	0.22	0.63	1	-1.19	-0.81	-2	-0.64	0.38	0	-1.61	0.20	-1
Never-Married	-0.0006	-0.0009	-0.0014	-0.0005	0.0003	-0.0002	0.001	0.001	0.0013	-0.0003	0.0000	-0.0003
	1.20	1.83	3	1.12	-0.74	0	-1.70	-1.13	-3	1	0	1
Total	-0.0346	-0.0490	-0.0837	0.0048	0.0280	0.0328	0.0059	-0.0023	0.0036	-0.0240	-0.0233	-0.0473
	73	104	177	-10	-59	-69	-12	5	-8	51	49	100

ΔP	2003-2005											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	-0.0523	-0.0491	-0.1014	0.0267	0.0272	0.0539	0.002	-0.001	0.0013	-0.0235	-0.0227	-0.0462
	95.48	89.62	185	-48.79	-49.62	-98	-3.72	1.41	-2	42.97	41.41	84
Widow	-0.0047	-0.0121	-0.0167	0.0016	0.0068	0.0083	0.000	0.002	0.0024	-0.0028	-0.0033	-0.0060
	8.49	22.05	31	-2.85	-12.36	-15	-0.60	-3.73	-4	5.04	5.96	11
Divorced	-0.0005	-0.0006	-0.0011	0.0002	0.0002	0.0005	0.000	0.000	0.0000	-0.0005	-0.0002	-0.0007
	0.85	1.11	2	-0.44	-0.38	-1	0.44	-0.36	0	0.84	0.37	1
Never-Married	-0.0010	-0.0016	-0.0026	0.0003	0.0008	0.0011	0.000	0.000	-0.0004	-0.0010	-0.0009	-0.0019
	1.86	2.95	5	-0.52	-1.53	-2	0.50	0.17	1	2	2	3
Total	-0.0585	-0.0632	-0.1216	0.0286	0.0368	0.0654	0.0021	-0.0007	0.0014	-0.0278	-0.0270	-0.0548
	107	115	222	-52	-67	-119	-4	1	-3	51	49	100

AP	2005-2007											
	Growth Effect			Inequality Effect			Population Effect			Marital Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Married	-0.0168 24.84	-0.0090 13.36	-0.0258 38	-0.0168 24.92	-0.0086 12.75	-0.0254 38	-0.001 1.23	0.000 0.15	-0.0009 1	-0.0344 50.99	-0.0177 26.25	-0.0521 77
Widow	-0.0020 2.93	-0.0063 9.31	-0.0083 12	-0.0013 1.88	-0.0061 9.02	-0.0074 11	0.001 -1.48	0.002 -2.47	0.0027 -4	-0.0022 3.33	-0.0107 15.86	-0.0129 19
Divorced	-0.0001 0.17	-0.0002 0.23	-0.0003 0	-0.0003 0.52	-0.0003 0.38	-0.0006 1	0.000 -0.37	0.000 0.20	0.0001 0	-0.0002 0.32	-0.0005 0.81	-0.0008 1
Never-Married	-0.0004 0.65	-0.0003 0.44	-0.0007 1	-0.0008 1.18	-0.0003 0.42	-0.0011 2	0.000 -0.43	0.000 0.18	0.000 0	-0.0009 1	-0.0007 1	-0.0016 2
Total	-0.0193 29	-0.0158 23	-0.0351 52	-0.0184 27	-0.0138 21	-0.0322 48	-0.0001 0	0.0000 0	-0.0001 0	-0.0378 56	-0.0297 44	-0.0675 100

Appendix 6: Decomposition of Poverty in Iran, based on HoHs' Activity

AP	1991-1993											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	0.0085 77.30	0.0101 92.54	0.0186 170	-0.0112 -102.34	-0.0105 -95.73	-0.0217 -198	0.015 140.61	-0.004 -32.84	0.0118 108	0.0127 115.57	-0.0039 -36.03	0.0087 80
Unemployed	0.0002 1.70	0.0003 3.11	0.0005 5	-0.0007 -6.04	0.0001 1.33	-0.0005 -5	-0.002 -20.09	-0.001 -7.73	-0.0030 -28	-0.0027 -24.43	-0.0004 -3.29	-0.0030 -28
Retired	0.0010 9.04	0.0011 9.81	0.0021 19	0.0011 10.30	0.0000 -0.03	0.0011 10	0.007 68.13	0.001 5.70	0.0081 74	0.0096 87.48	0.0017 15.47	0.0113 103
In School	0.0000 0.32	0.0000 0.00	0.0000 0	-0.0002 -2.04	0.0002 1.65	0.0000 0	0.000 2.66	0.000 -0.70	0.0002 2	0.0001 0.95	0.0001 0.95	0.0002 2
Homemaker	0.0001 1.32	0.0003 2.88	0.0005 4	-0.0010 -9.53	0.0007 6.71	-0.0003 -3	-0.001 -9.33	-0.003 -29.37	-0.0042 -39	-0.0019 -17.54	-0.0022 -19.78	-0.0041 -37
Other	0.0002 1.85	0.0006 5.08	0.0008 7	-0.0006 -5.65	0.0004 3.40	-0.0002 -2	-0.001 -11.73	-0.001 -12.25	-0.0026 -24	-0.0017 -15.54	-0.0004 -3.77	-0.0021 -19
Total	0.0101 92	0.0124 113	0.0225 205	-0.0136 -124	-0.0105 -96	-0.0241 -220	0.0197 180	-0.0071 -65	0.0126 115	0.0162 147	-0.0052 -47	0.0110 100

AP	1993-1995											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	0.0045 11.83	0.0044 11.46	0.0088 23	0.0111 29.27	0.0135 35.55	0.0246 65	0.006 16.85	-0.003 -8.79	0.0031 8	0.0220 57.95	0.0145 38.23	0.0365 96
Unemployed	0.0001 0.21	0.0001 0.35	0.0002 1	0.0002 0.57	-0.0001 -0.38	0.0001 0	0.001 2.64	0.000 0.27	0.0011 3	0.0013 3.42	0.0001 0.25	0.0014 4
Retired	0.0005 1.24	0.0004 0.99	0.0009 2	-0.0031 -8.08	0.0000 -0.11	-0.0031 -8	0.004 9.58	0.003 8.07	0.0067 18	0.0011 2.84	0.0034 8.94	0.0045 12
In School	0.0000 0.00	0.0000 0.00	0.0000 0	0.0002 0.61	-0.0001 -0.31	0.0001 0	0.000 0.62	0.000 0.11	0.0003 1	0.0005 1.23	-0.0001 -0.20	0.0004 1
Homemaker	0.0001 0.17	0.0002 0.49	0.0003 1	0.0001 0.34	-0.0018 -4.65	-0.0016 -4	-0.001 -2.61	0.000 0.21	-0.0009 -2	-0.0008 -2.10	-0.0015 -3.95	-0.0023 -6
Other	0.0001 0.21	0.0001 0.18	0.0001 0	0.0000 -0.10	-0.0012 -3.04	-0.0012 -3	0.000 1.13	-0.002 -4.88	-0.0014 -4	0.0005 1.25	-0.0029 -7.74	-0.0025 -6
Total	0.0052 14	0.0051 47	0.0103 27	0.0088 23	0.0125 114	0.0213 56	0.0104 27	-0.0041 -11	0.0063 17	0.0244 64	0.0135 36	0.0380 100

AP	1995-1997											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	-0.0004 1.04	-0.0007 1.86	-0.0012 3	-0.0153 38.41	-0.0032 7.94	-0.0184 46	-0.023 58.22	0.008 -19.70	-0.0153 39	-0.0388 97.67	0.0039 -9.90	-0.0349 88
Unemployed	0.0000 0.04	0.0000 0.05	0.0000 0	0.0004 -1.04	0.0003 -0.74	0.0007 -2	0.001 -2.81	0.001 -1.73	0.0018 -5	0.0015 -3.81	0.0010 -2.41	0.0025 -6
Retired	0.0000 0.00	-0.0001 0.36	-0.0001 0	-0.0035 8.81	-0.0010 2.49	-0.0045 11	0.002 -5.99	0.003 -8.13	0.0056 -14	-0.0011 2.82	0.0021 -5.27	0.0010 -2
In School	0.0000 0.00	0.0000 0.00	0.0000 0	0.0000 0.07	0.0001 -0.25	0.0001 0	0.000 0.16	0.000 0.11	-0.0001 0	-0.0001 0.23	0.0001 -0.14	0.0000 0
Homemaker	0.0000 0.03	0.0000 0.00	0.0000 0	-0.0007 1.70	0.0008 -1.94	0.0001 0	-0.004 9.55	-0.001 1.76	-0.0045 11	-0.0045 11.27	0.0001 -0.18	-0.0044 11
Other	0.0000 0.00	0.0000 0.00	0.0000 0	-0.0009 2.25	-0.0004 1.12	-0.0013 3	-0.002 4.26	-0.001 2.06	-0.0025 6	-0.0026 6.51	-0.0013 3.18	-0.0039 10
Total	-0.0004 1	-0.0009 2	-0.0014 3	-0.0195 49	-0.0042 11	-0.0237 60	-0.0257 65	0.0110 -28	-0.0147 37	-0.0456 115	0.0058 -15	-0.0398 100

ΔP	1997-1999											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	-0.0180 35.20	-0.0265 51.85	-0.0445 87	-0.0037 7.29	0.0097 -18.01	0.0060 -12	-0.012 23.75	0.003 -5.30	-0.0094 18	-0.0339 66.23	-0.0141 27.54	-0.0479 94
Unemployed	-0.0004 0.84	-0.0007 1.29	-0.0011 2	0.0004 -0.70	0.0002 -0.46	0.0006 -1	-0.002 4.15	0.001 -1.14	-0.0015 3	-0.0022 4.30	0.0002 -0.31	-0.0020 4
Retired	-0.0031 6.13	-0.0046 9.00	-0.0077 15	0.0026 -5.10	-0.0005 0.95	0.0021 -4	0.000 -0.87	0.009 -17.31	0.0093 -18	-0.0001 0.16	0.0038 -7.36	0.0037 -7
In School	-0.0001 0.12	0.0000 0.05	-0.0001 0	-0.0002 0.43	-0.0001 0.12	-0.0003 1	-0.001 1.21	0.000 -0.19	-0.0005 1	-0.0009 1.75	0.0000 -0.02	-0.0009 2
Homemaker	-0.0001 0.29	-0.0005 1.01	-0.0007 1	0.0009 -1.83	-0.0003 0.67	0.0006 -1	-0.002 3.17	-0.001 2.11	-0.0027 5	-0.0008 1.62	-0.0019 3.79	-0.0028 5
Other	-0.0004 0.77	-0.0004 0.72	-0.0008 1	0.0001 -0.23	0.0001 -0.23	0.0001 0	-0.001 1.96	0.000 -0.71	-0.0006 1	-0.0013 2.50	0.0001 -0.22	-0.0012 2
Total	-0.0221 43	-0.0326 64	-0.0548 107	-0.0023 1	0.0138 -27	0.0133 -26	-0.0164 32	0.0068 -13	-0.0096 19	-0.0391 77	-0.0120 23	-0.0511 100

ΔP	1999-2001											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	-0.0080 44.09	-0.0146 79.97	-0.0226 124	-0.0023 12.85	0.0059 -32.37	0.0036 -20	-0.004 23.17	-0.001 5.88	-0.0053 29	-0.0146 80.11	-0.0098 53.48	-0.0244 134
Unemployed	-0.0002 0.92	-0.0006 3.19	-0.0008 4	0.0003 -2.32	0.0003 -1.47	0.0007 -4	0.001 -2.90	0.000 1.88	0.0002 -1	0.0008 -4.30	-0.0007 3.61	0.0001 -1
Retired	-0.0015 8.08	-0.0033 18.10	-0.0048 26	-0.0014 7.90	0.0028 -15.31	0.0014 -7	0.001 -4.72	0.006 -35.01	0.0072 -40	-0.0021 11.26	0.0059 -32.22	0.0038 -21
In School	0.0000 0.08	0.0000 0.13	0.0000 0	-0.0001 0.54	0.0000 -0.13	-0.0001 0	0.000 -2.73	0.000 0.60	0.0004 -2	0.0004 -2.11	-0.0001 0.60	0.0003 -2
Homemaker	-0.0001 0.39	-0.0003 1.65	-0.0004 2	-0.0008 4.39	0.0003 -1.80	-0.0005 3	0.001 -5.45	0.001 -5.38	0.0020 -11	0.0001 -0.67	0.0010 -5.53	0.0011 -6
Other	-0.0001 0.71	-0.0005 2.55	-0.0006 3	-0.0001 0.55	0.0005 -2.82	0.0004 -2	0.000 -1.57	0.001 -3.64	0.0010 -5	0.0001 -0.31	0.0007 -3.92	0.0008 -4
Total	-0.0099 54	-0.0193 106	-0.0292 160	-0.0029 16	0.0154 -84	0.0124 -68	-0.0025 14	0.0010 -5	-0.0015 8	-0.0153 84	-0.0029 16	-0.0182 100

ΔP	2001-2003											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	-0.0275 58.20	-0.0358 75.65	-0.0633 134	0.0065 -13.70	0.0248 -52.41	0.0313 -66	0.007 -15.18	0.000 -6.67	0.0075 -16	-0.0139 29.32	-0.0107 22.57	-0.0245 52
Unemployed	-0.0008 1.64	-0.0010 2.19	-0.0007 4	0.0000 1.51	-0.0007 -2.04	0.0002 -1	-0.001 2.23	-0.001 1.36	-0.0017 4	-0.0025 5.39	-0.0007 1.51	-0.0093 7
Retired	-0.0053 11.17	-0.0101 21.36	-0.0154 33	0.0011 -2.28	0.0062 -13.20	0.0073 -15	0.001 -1.84	-0.006 11.90	-0.0048 10	-0.0033 7.05	-0.0095 20.06	-0.0128 27
In School	-0.0001 0.13	0.0000 0.00	-0.0001 0	0.0002 -0.48	0.0000 0.04	0.0002 0	-0.001 1.09	0.000 -0.14	-0.0004 1	-0.0003 0.74	0.0000 -0.10	-0.0003 1
Homemaker	-0.0005 0.99	-0.0009 1.90	-0.0014 3	-0.0003 0.55	0.0006 -1.34	0.0004 -1	-0.001 2.62	-0.001 2.71	-0.0025 5	-0.0020 4.16	-0.0015 3.27	-0.0035 7
Other	0.0014 -2.86	-0.0010 2.11	0.0004 -1	-0.0018 3.73	0.0004 -0.91	-0.0013 3	-0.002 3.23	0.000 0.73	-0.0019 4	-0.0019 4.09	-0.0009 1.93	-0.0028 6
Total	-0.0346 73	-0.0490 104	-0.0837 177	0.0048 -10	0.0280 -59	0.0328 -69	0.0059 -12	-0.0023 5	0.0036 -8	-0.0240 51	-0.0233 49	-0.0473 100

ΔP	2003-2005											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	-0.0454 82.89	-0.0427 77.87	-0.0881 161	0.0230 -41.91	0.0237 -43.25	0.0467 -85	-0.001 2.33	-0.001 1.97	-0.0024 4	-0.0237 43.31	-0.0201 36.59	-0.0438 80
Unemployed	-0.0015 2.75	-0.0013 2.43	-0.0028 5	0.0009 -1.59	0.0004 -0.73	0.0013 -2	0.000 -0.80	0.000 -0.49	0.0007 -1	-0.0002 0.36	-0.0007 1.20	-0.0009 2
Retired	-0.0099 18.15	-0.0172 31.33	-0.0271 49	0.0033 -5.94	0.0082 -15.05	0.0115 -21	0.004 -7.05	0.004 -7.26	0.0078 -14	-0.0028 5.15	-0.0049 9.03	-0.0078 14
In School	-0.0003 0.52	-0.0001 0.15	-0.0004 1	-0.0001 0.26	0.0000 0.01	-0.0001 0	0.001 -0.95	0.000 0.00	0.0005 -1	0.0001 -0.16	-0.0001 0.16	0.0000 0
Homemaker	-0.0008 1.53	-0.0011 1.96	-0.0019 3	0.0004 -0.72	0.0007 -1.22	0.0011 -2	0.000 -0.81	0.000 0.03	0.0004 -1	0.0000 0.00	-0.0004 0.77	-0.0004 1
Other	-0.0005 0.95	-0.0013 2.28	-0.0018 3	-0.0003 0.47	0.0005 -0.99	0.0003 -1	0.000 0.61	0.000 0.30	-0.0005 1	-0.0011 2.02	-0.0009 1.59	-0.0020 4
Total	-0.0585 107	-0.0632 115	-0.1216 222	0.0286 -52	0.0368 -67	0.0654 -119	0.0021 -4	-0.0007 1	0.0014 -3	-0.0278 51	-0.0270 49	-0.0548 100

ΔP	2005-2007											
	Growth Effect			Inequality Effect			Population Effect			Activity Total Effect		
	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National	Urban	Rural	National
Employed	-0.0140	-0.0064	-0.0204	-0.0149	-0.0070	-0.0219	-0.003	0.000	-0.0034	-0.0318	-0.0138	-0.0456
	20.69	9.50	30	22.08	10.34	32	4.36	0.66	5	47.13	20.50	68
Unemployed	-0.0005	-0.0005	-0.0010	-0.0005	-0.0002	-0.0007	0.000	0.000	0.0002	-0.0010	-0.0006	-0.0015
	0.81	0.79	2	0.74	0.31	1	-0.11	-0.18	0	1.44	0.84	2
Retired	-0.0042	-0.0079	-0.0121	-0.0046	-0.0091	-0.0138	0.005	0.004	0.0090	-0.0035	-0.0133	-0.0168
	6.18	11.72	18	6.88	13.50	20	-7.89	-5.44	-13	5.18	19.79	25
In School	-0.0001	0.0000	-0.0001	-0.0003	0.0000	-0.0003	0.000	0.000	-0.0001	-0.0004	0.0000	-0.0004
	0.15	0.00	0	0.39	0.00	0	0.10	0.00	0	0.64	0.00	1
Homemaker	-0.0002	-0.0004	-0.0006	-0.0002	-0.0004	-0.0006	-0.001	0.000	-0.0010	-0.0012	-0.0009	-0.0021
	0.24	0.59	1	0.25	0.61	1	1.25	0.16	1	1.74	1.35	3
Other	-0.0003	-0.0005	-0.0008	0.0004	-0.0007	-0.0003	0.000	0.000	0.0002	0.0001	-0.0010	-0.0009
	0.51	0.70	1	-0.58	1.00	0	-0.04	-0.23	0	-0.09	1.47	1
Total	-0.0193	-0.0158	-0.0351	-0.0184	-0.0138	-0.0322	-0.0001	0.0000	-0.0001	-0.0378	-0.0297	-0.0675
	29	23	52	27	21	48	0	0	0	56	44	100