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Why the Poor Have Many Children

Edita Abella Tan*
with Katrina Dinglasan ${ }^{* *}$


#### Abstract

This is a follow up note on the UP School of Economics Faculty paper on the population issue. The poor who belong to the lowest two deciles of the income distribution have much higher actual and desired number of children, respectively 5.2 and 3.5 . In contrast, the upper middle and higher income groups have less than 3 children which equal their desired number. It is argued that the poor who suffer serious deprivation in basic needs and see little opportunity for their children's education and other opportunities feel little interest in controlling their family size. For them it would not matter how many children they may bear since the intensity of their poverty as measured by average income to poverty ratio and food consumption to subsistence ratio marginally improve as the number of children falls. It is suggested that for a family planning program to succeed, it must be part of an anti poverty strategy.


[^1]Why the Poor Have Many Children<br>Edita Abella Tan ${ }^{*}$<br>with Katrina Dinglasan ${ }^{* *}$

The position paper issued by the UP School of Economics faculty led by Professor Ernesto Pernia entitled "Population, Poverty, Politics and the Reproductive Health Bill" shows a negative relationship between poverty and family size and that the poor have more children than the higher income families. It does not argue a causal relation between poverty and number of children but draws attention to the reality that the poor have a higher fertility rate as well as a higher desired number of children. The difference between realized and desired number of children implies failure to limit pregnancy for any number of reasons. The difference between realized and desired number of children implies failure to limit pregnancy. The difference is highest among all income classes; it approaches zero among middle and higher income families. The phenomenon begs some explanations. Why would the poor want more children when they have barely enough resources to feed, clothe and educate them? Why would not they raise just one child? This note tries to get some insights into how the poor live based on the level and allocation of their expenditures using data from the 2008 Annual Poverty Indicator Survey and the 2006 and 2009 Family Income and Expenditure Survey. We find that the poor's average expenditure is way below the poverty line. While they spend most of their income on which, about two-thirds, their food expenditure, is still well below the subsistence level. Even when they have only one child, their average expenditure is barely enough for basic needs with little left for the child's healthy and educational development. It may be argued that poor parents, especially the mothers, may have a weaker motivation to control family size when they see little relief from poverty and they foresee minimal future opportunities for their children, whatever their number may be. We find that their income is so low that reducing the number of children from four or five to two to three will not lift the family from poverty. They could not provide them even the barest nutritional needs or to complete basic education. The family's attention and effort possibly revolve around physical survival, principally food. Poverty itself may lead them to bear the number of children nature allows. At the same time poor families likely have less access to information and family planning services so that in retrospect when asked about desired family size, they give a relatively high number.

The UPSE faculty paper shows that the actual and desired number of children monotonically decreases as family income increases. Families at the third to the fifth quintile incomes have almost equal actual and desired number of children, about 3. Note that their realized number of children closely approximates their desired number of children. This seems to imply that on average, they practice family planning effectively. The data may mean that families have to be at a certain level of income before they are able to effectively plan the number of children. At the third quintile, families could already afford to invest in the education and health of one or two or three children, thus the

[^2]motivation to limit family size. It is concluded here that we need more than the RH Bill to help the poor reduce both the desired and realized number of children. Their income has to be raised first to allow them to feed their children adequately before they could plan on their education. The Conditional Cash Transfer program (CCT) is focused on children's education. The RH Law (assuming the bill will be passed) needs to be complemented with a conditional income support program for health and shelter in order to get the poor motivated to practice family planning. They need to see opportunities for their children and find that limiting their number would enhance their capacity to invest in their future.

We analyze the fertility and expenditure patterns of poor families to show that the severity of their poverty is such that they barely survive. If they feel in despair, they may just have as many children as nature allows. During a survey, they may see some advantage to having fewer children and give a smaller desired number than the actual. The following section looks at severity of their poverty and the allocation of expenditures to basic needs. Definitely, large family size worsens poverty but limiting it does not lift income of most people to the poverty line. The consumption deprivation has its expected impact on children's nutrition and education.

## Section 2. The Face of the Poor

In 2008, the poorest $20 \%$ of families had on average 5.2 children even if they wanted only 3.5 (Table 1). Both the realized and wanted numbers of children decrease as we go up the quintile distribution. The difference between the realized and desired numbers goes down as income increases. By 2008, the middle and higher income groups appear to have succeeded to limit the number of children to what they wanted for the difference between actual and desired number of children is close to zero. They were less successful in earlier years. Table 2 compliments Table 1 which gives the distribution of families by number of children across income deciles. Only $21.7 \%$ of families in the lowest decile have only 1-2 children, $31.9 \%$ in the second decile and $47.6 \%$ in the top decile. Among the poorest $10 \%$ of families, $25.5 \%$ have 5 or more children as compared to $12 \%$ of the 3 rd decile and $1.4 \%$ of the top decile. Moreover, very much fewer poor families have no children as compared to $35.3 \%$ the richest families.

Table 1: Actual and wanted number of children by asset quintile

|  | Wealth Quintile |  |  |  |  | Total | Poorest/ Richest Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Poorest | Lower middle | Middle | Upper middle | Richest |  |  |
| 2008 |  |  |  |  |  |  |  |
| TFR | 5.2 | 4.2 | 3.3 | 2.7 | 1.9 | 3.3 | 2.7 |
| Wanted | 3.5 | 3.0 | 2.8 | 2.7 | 2.6 | 2.8 | 1.3 |
| Difference | 1.7 | 1.2 | 0.5 | 0.0 | -0.7 | 0.5 | 1.4 |
| 2003 |  |  |  |  |  |  |  |
| TFR | 5.9 | 4.6 | 3.5 | 2.8 | 2.0 | 3.5 | 3.0 |
| Wanted | 3.8 | 3.1 | 2.6 | 2.2 | 1.7 | 2.5 | 2.2 |
| Difference | 2.1 | 1.5 | 0.9 | 0.6 | 0.3 | 1.0 | 0.7 |
| 1998 |  |  |  |  |  |  |  |
| TFR | 6.5 | 4.7 | 3.6 | 2.9 | 2.2 | 3.7 | 3.0 |
| Wanted | 4.3 | 3.3 | 2.7 | 2.3 | 1.8 | 2.7 | 2.4 |
| Difference | 2.2 | 1.4 | 0.9 | 0.5 | 0.3 | 1.0 | 0.6 |
| 1993 |  |  |  |  |  |  |  |
| TFR | 6.6 | 5.4 | 4.2 | 3.1 | 2.3 | 4.1 | 2.9 |
| Wanted | 4.5 | 3.5 | 3.0 | 2.4 | 1.9 | 2.9 | 2.4 |
| Difference | 2.0 | 1.9 | 1.2 | 0.7 | 0.4 | 1.2 | 0.5 |

Source: NDHS 2008
Reprinted from "Population, Poverty, Politics and the Reproductive Health Bill [position paper]", by Pernia et al., 2012

Table 2: Percent distribution of households by the number of children

|  | Number of Children |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 |  |  |  |  |  | 1 to 2 | 3 to 4 |  | 5 to 6 | more |
| First Decile | 6.2 | 21.7 | 36.9 | 25.5 | 9.7 |  |  |  |  |  |  |
| Second Decile | 8.7 | 31.9 | 37.5 | 17.0 | 4.9 |  |  |  |  |  |  |
| Third Decile | 10.3 | 36.1 | 38.6 | 11.5 | 3.5 |  |  |  |  |  |  |
| Fourth Decile | 12.5 | 42.2 | 32.9 | 10.4 | 2.1 |  |  |  |  |  |  |
| Fifth Decile | 15.9 | 44.3 | 30.3 | 7.9 | 1.6 |  |  |  |  |  |  |
| Sixth Decile | 17.9 | 48.8 | 26.6 | 5.8 | 0.8 |  |  |  |  |  |  |
| Seventh Decile | 18.7 | 50.0 | 26.1 | 4.7 | 0.5 |  |  |  |  |  |  |
| Eighth Decile | 22.2 | 50.3 | 23.7 | 3.4 | 0.4 |  |  |  |  |  |  |
| Ninth Decile | 25.9 | 50.9 | 20.8 | 2.3 | 0.2 |  |  |  |  |  |  |
| Tenth Decile | 35.3 | 47.6 | 15.6 | 1.4 | 0.1 |  |  |  |  |  |  |
| All households | 17.2 | 42.2 | 29.0 | 9.1 | 2.4 |  |  |  |  |  |  |

Source: APIS 2008
Table 3 gives the severity of poverty among families in the lowest two deciles of the income distribution. The poor are able to obtain extra resources, possibly from transfers and credit, that allowed them to increase their total consumption above their income. Nationwide, the expenditures/income ratio was $109.3 \%$ for the first decile and $102.2 \%$ for the second decile. The ratio decreases as income rises starting at 109.3\% for the first decile and $102.2 \%$ for the second decile. Those in the $3^{\text {rd }}$ decile could fully finance their expenditure from income and those at higher deciles could save some of their income. The severity of their poverty is indicated by expenditure/poverty line ratio: $63.5 \%$ and $88.5 \%$ for the lowest two deciles. The ratio reaches $100 \%$
or higher for families in the $3^{\text {rd }}$ and higher deciles. Definitely, the expenditure levels of the poor could not meet the basic need for food, fuel and shelter. While the poorest two deciles allocated as much $65.0 \%$ and $61.9 \%$ of total expenditures to food, they failed to meet nutritional requirements as defined by subsistence threshold. Their respective food consumption to subsistence threshold ratios were respectively only $59.5 \%$ and $78.9 \%$. Shelter, fuel and transport were $16.4 \%$ and $18.4 \%$ of total consumption of these deciles, but education was only $1.4 \%$ and $1.5 \%$. The absolute peso spending was less than P10.0 a day which could barely pay for paper, pencil or public transport.

Table 3: Percentage distribution of expenditure across consumption by income decile

| National Per Capita Income Deciles |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Expenditure items | $1^{\text {st }}$ | $2^{\text {nd }}$ | $3^{\text {rd }}$ | $4^{\text {th }}$ | $5^{\text {th }}$ | $6^{\text {th }}$ | $7^{\text {th }}$ | $8^{\text {th }}$ | $9^{\text {th }}$ | $10^{\text {th }}$ |
| Food | 65.0 | 61.9 | 58.8 | 56.2 | 53.6 | 50.3 | 47.0 | 42.8 | 37.0 | 26.5 |
| Fuel | 6.3 | 6.4 | 6.7 | 7.1 | 7.2 | 7.6 | 7.7 | 7.9 | 7.6 | 6.6 |
| Transportation | 3.2 | 4.0 | 4.6 | 5.3 | 5.8 | 6.3 | 6.8 | 7.4 | 8.0 | 10.0 |
| Shelter | 6.9 | 8.0 | 8.8 | 9.9 | 10.7 | 11.8 | 12.5 | 13.8 | 15.1 | 18.9 |
| Educ | 1.4 | 1.5 | 1.8 | 2.0 | 2.2 | 2.6 | 3.2 | 3.9 | 4.9 | 4.9 |
| Clothing | 1.7 | 1.9 | 2.0 | 2.0 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.2 |
| Expenditure/Income | 109.3 | 102.2 | 99.6 | 97.0 | 94.9 | 92.7 | 90.2 | 87.4 | 84.2 | 74.0 |
| Food/Threshold | 59.5 | 78.9 | 93.0 | 107.3 | 123.2 | 140.0 | 161.0 | 187.2 | 223.7 | 328.3 |
| Expenditure/Poverty Line | 63.5 | 88.5 | 109.8 | 132.5 | 159.4 | 193.2 | 237.5 | 303.4 | 419.6 | 859.9 |
| Income / Poverty Line | 58.1 | 86.6 | 110.3 | 136.6 | 168.0 | 208.3 | 263.3 | 347.3 | 498.2 | 1161.5 |

Source: FIES 2009

Table 4: Share of specific expenditure to total expenditure in Metro Manila (in percent)

| Regional Per Capita Income Deciles |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Expenditures | $1^{\text {st }}$ | $2^{\text {nd }}$ | $3^{\text {rd }}$ | $4^{\text {th }}$ | $5^{\text {th }}$ | $6^{\text {th }}$ | $7^{\text {th }}$ | $8^{\text {th }}$ | $9^{\text {th }}$ | $10^{\text {th }}$ |
| Food | 55.9 | 52.1 | 48.7 | 47.6 | 45.3 | 42.3 | 38.4 | 35.0 | 30.8 | 21.1 |
| Fuel | 9.5 | 9.1 | 9.3 | 9.1 | 8.9 | 8.8 | 8.1 | 8.2 | 7.5 | 7.0 |
| Transportation | 5.4 | 6.3 | 6.3 | 6.9 | 7.7 | 7.6 | 8.0 | 8.5 | 9.3 | 10.9 |
| Shelter | 13.5 | 14.8 | 15.6 | 15.0 | 15.7 | 17.3 | 17.5 | 19.2 | 20.7 | 28.0 |
| Educ | 1.0 | 1.3 | 1.5 | 2.3 | 2.8 | 3.4 | 3.9 | 4.6 | 5.3 | 3.5 |
| Clothing | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 | 2.1 | 2.1 | 1.8 |
| Expenditure/Income | 100.5 | 97.7 | 96.2 | 94.1 | 92.7 | 89.6 | 90.2 | 87.8 | 87.7 | 78.7 |
| Food/Threshold | 89.0 | 114.7 | 132.6 | 152.7 | 170.9 | 186.2 | 209.0 | 239.1 | 283.6 | 398.1 |
| Expenditure/Poverty Line | 111.1 | 153.7 | 190.1 | 223.9 | 263.8 | 307.4 | 380.0 | 476.6 | 644.0 | 1315.7 |
| Income / Poverty Line | 110.6 | 157.2 | 197.6 | 238.1 | 284.6 | 343.3 | 421.3 | 542.8 | 734.8 | 1671.0 |

Source: FIES 2009

The reported poverty incidence in Metro Manila is much lower than in all other regions and provinces, $4 \%$ in 2009. However, their food consumption is below the subsistence level or food threshold. We look at the expenditure pattern of families in the first decile which comprise much of the Metropolis' poor. City folks likely spend more on non-food items such as shelter and transport.

Rental costs are likely higher in the cities than in other areas. More city folks have to buy their fuel while those in rural areas may get free firewood. In Table 4, the consumption of the first decile on food was $55.9 \%$ and on shelter, fuel and transport, 28.4\%. The corresponding figures at the national level were $65.0 \%$ and $16.4 \%$. The ratio of food expenditure to subsistence level of Manila's poor was very different from the nation as a whole, $89.0 \%$ and $59.5 \%$, respectively. That the city families at all income deciles spent proportionately less on education might be explained by their greater physical access to schools. Urban families as a whole spent proportionately less on food than rural families in all deciles.

Tables 5 and 6 give the distribution of families by size and income range and the effect of family size on poverty gap as indicated by the ratio of actual expenditure to poverty line. Family size ranges from 1 to 10 or more. In 2006, no individual who lived alone was poor as they earned above the poverty line. They, however, comprised only $1.0 \%$ of total families. The poor or those whose per capita expenditures were less than the poverty line occurred among all large families in all income ranges below P100,000. See all families below the dark line. At each income range below this level, the incidence and severity of poverty rise with family size. The most extreme poverty was experienced by families of 10 or more members earning P20,000-29,999 with the expenditure/poverty line ratio of only $20 \%$. Even those in $\mathrm{P} 80,000-99,999$ income ranges experienced poverty for having more than 5 members. In 2009, the incidence of poverty increased in almost all income classes. The only exception was for families earning between P30,000-39,999, where share of those in poverty dropped by $23 \%$.

In 2009, the per capita subsistence or food threshold was P11,686 and poverty line, P16,841. Table 7 shows the average per capita expenditures on food and other items and the ratio of food to food threshold and that of the total average expenditures to poverty line. At best for families with no children, the food gap was $60.1 \%$. The gap increases monotonically as number of children increases, reaching 54.1\%. The poorest families with 7 or more children could meet the required food intake by only $57.5 \%$, in other words, they could not meet $42.5 \%$ of the food required. Families in the second decile had higher food expenditure/threshold ratio starting at $81.4 \%$ and falling down to $73.7 \%$. These are still very large gaps from what are required. Note, however, that the figures are averages and are but rough indicators of poverty in food ${ }^{1}$.

[^3]Table 5: Distribution of families by family size and income class and average expenditure to poverty line ratio, 2006

|  | Income Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <20,000 |  | 20,000-29,999 |  | 30,000-39,999 |  | 40,000-49,999 |  | 50,000-59,999 |  | 60,000-79,999 |  | 80,000-99,999 |  | 100,000-249,999 |  | >250,000 |  |
| Family <br> Size | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | $\%$ of <br> total <br> fam. | PCE/PL | $\%$ of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | $\%$ of <br> total <br> fam. | PCE/PL |
| 1 | 50.6 | 1.21 | 25.0 | 1.84 | 10.3 | 2.45 | 5.8 | 3.11 | 3.4 | 3.82 | 3.3 | 4.55 | 2.5 | 5.60 | 2.0 | 9.51 | 1.4 | 24.12 |
| 2 | 27.8 | 0.64 | 27.8 | 1.01 | 19.4 | 1.28 | 14.5 | 1.64 | 10.6 | 2.11 | 8.2 | 2.44 | 7.6 | 3.11 | 6.1 | 4.57 | 5.2 | 11.71 |
| 3 | 10.4 | 0.49 | 17.8 | 0.67 | 18.9 | 0.89 | 18.0 | 1.09 | 16.3 | 1.29 | 13.3 | 1.57 | 13.1 | 1.57 | 13.9 | 3.26 | 11.2 | 8.61 |
| 4 | 4.9 | 0.44 | 11.3 | 0.56 | 18.4 | 0.70 | 18.8 | 0.87 | 20.1 | 1.03 | 19.4 | 1.26 | 19.3 | 1.60 | 20.2 | 2.55 | 19.0 | 6.16 |
| 5 | 2.5 | 0.34 | 8.4 | 0.49 | 14.8 | 0.60 | 17.3 | 0.72 | 18.3 | 0.84 | 19.3 | 1.04 | 19.2 | 1.29 | 20.1 | 2.12 | 20.1 | 5.17 |
| 6 | 3.1 | 0.27 | 5.0 | 0.42 | 9.7 | 0.52 | 12.7 | 0.61 | 13.7 | 0.72 | 14.8 | 0.88 | 15.8 | 1.09 | 14.5 | 1.78 | 16.5 | 4.48 |
| 7 | 0.6 | 0.32 | 2.7 | 0.35 | 4.4 | 0.46 | 7.5 | 0.54 | 8.7 | 0.62 | 10.1 | 0.76 | 10.4 | 0.92 | 9.8 | 1.54 | 10.9 | 3.89 |
| 8 | 0.2 | 0.22 | 0.9 | 0.30 | 2.5 | 0.40 | 3.3 | 0.47 | 4.6 | 0.55 | 5.9 | 0.66 | 6.1 | 0.83 | 6.2 | 1.34 | 6.5 | 3.57 |
| 9 | 0.0 | 0.26 | 0.7 | 0.28 | 0.9 | 0.37 | 1.1 | 0.44 | 2.7 | 0.51 | 3.3 | 0.61 | 3.6 | 0.74 | 3.3 | 1.19 | 3.7 | 3.18 |
| 10 | - | - | 0.4 | 0.26 | 0.6 | 0.31 | 1.0 | 0.35 | 1.6 | 0.41 | 2.4 | 0.51 | 2.4 | 0.62 | 3.8 | 1.01 | 5.5 | 2.63 |
| \% in |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| poverty Column | 49.5 |  | 47.2 |  | 70.2 |  | 61.7 |  | 49.6 |  | 36.5 |  | 22.5 |  | 0.0 |  | 0.0 |  |
| total | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  |
| Row <br> total | 1.0 |  | 2.6 |  | 4.5 |  | 6.4 |  | 7.1 |  | 13.2 |  | 10.5 |  | 36.0 |  | 18.8 |  |

Source: FIES 2006
Note: PCE/PL is the ratio of per capita expenditure to the poverty line. The annual per capita poverty threshold in 2006 was P13,348

Table 6: Distribution of families by family size and income class and average expenditure to poverty line ratio, 2009

|  | Income Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <20,000 |  | 20,000-29,999 |  | 30,000-39,999 |  | 40,000-49,999 |  | 50,000-59,999 |  | 60,000-79,999 |  | 80,000-99,999 |  | 100,000-249,999 |  | >250,000 |  |
| Family <br> Size | $\%$ of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | $\%$ of <br> total <br> fam. | PCE/PL | $\%$ of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | \% of <br> total <br> fam. | PCE/PL | $\%$ of <br> total <br> fam. | PCE/PL |
| 1 | 61.1 | 0.98 | 44.6 | 1.50 | 22.7 | 2.09 | 11.6 | 2.43 | 6.1 | 3.12 | 4.0 | 3.66 | 3.2 | 4.71 | 2.2 | 7.70 | 1.3 | 23.49 |
| 2 | 27.9 | 0.55 | 28.9 | 0.80 | 29.9 | 1.08 | 22.6 | 1.36 | 16.8 | 1.58 | 11.3 | 1.92 | 8.1 | 2.42 | 7.0 | 4.09 | 5.5 | 10.25 |
| 3 | 5.6 | 0.47 | 11.5 | 0.60 | 17.8 | 0.77 | 19.9 | 0.94 | 18.9 | 1.12 | 17.0 | 1.38 | 13.7 | 1.71 | 14.0 | 2.81 | 13.1 | 6.95 |
| 4 | 4.9 | 0.36 | 5.6 | 0.50 | 13.1 | 0.60 | 16.9 | 0.75 | 19.6 | 0.87 | 20.1 | 1.06 | 19.8 | 1.31 | 19.2 | 2.19 | 19.1 | 5.70 |
| 5 | 0.5 | 0.27 | 4.7 | 0.38 | 7.2 | 0.50 | 13.3 | 0.61 | 15.1 | 0.72 | 18.7 | 0.86 | 19.7 | 1.07 | 20.0 | 1.76 | 20.3 | 4.64 |
| 6 | - | - | 2.9 | 0.35 | 5.9 | 0.42 | 8.2 | 0.52 | 12.1 | 0.61 | 12.9 | 0.75 | 15.9 | 0.90 | 14.8 | 1.49 | 15.5 | 3.88 |
| 7 | - | - | 1.4 | 0.31 | 1.8 | 0.35 | 3.9 | 0.44 | 6.8 | 0.54 | 8.7 | 0.65 | 9.3 | 0.77 | 10.0 | 1.27 | 10.5 | 3.42 |
| 8 | - | - | - | - | 0.8 | 0.34 | 2.2 | 0.39 | 2.9 | 0.47 | 4.0 | 0.58 | 4.9 | 0.69 | 5.7 | 1.10 | 6.4 | 2.83 |
| 9 | - | - | 0.3 | 0.23 | 0.4 | 0.41 | 0.9 | 0.35 | 1.1 | 0.41 | 1.8 | 0.50 | 2.9 | 0.63 | 3.5 | 1.00 | 3.5 | 2.48 |
| 10 | - | - | 0.2 | 0.20 | 0.3 | 0.22 | 0.5 | 0.28 | 0.5 | 0.36 | 1.6 | 0.43 | 2.3 | 0.53 | 3.5 | 0.86 | 4.8 | 2.23 |
| \% in |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| poverty Column | 100 |  | 55.4 |  | 47.5 |  | 65.8 |  | 58.2 |  | 47.6 |  | 35.4 |  | 3.5 |  | 0.0 |  |
| total | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  | 100 |  |
| Row |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| total | 0.4 |  | 1.2 |  | 2.5 |  | 3.9 |  | 4.8 |  | 11.4 |  | 10.9 |  | 41.0 | 23.9 |  |  |

Source: FIES 2009
Note: PCE/PL is the ratio of per capita expenditure to the poverty line. The annual per capita poverty threshold in 2009 was P16,418.

Table 7: Annual per capita expenditure by the number of children

|  | Number of Children in the Family |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | no child | 1 to 2 | 3 to 4 | 5 to 6 | 7 and above |
| Panel A: First Decile |  |  |  |  |  |
| Food | 7,024 | 7,201 | 7,118 | 6,718 | 6,324 |
| Rice | 2,475 | 2,439 | 2,567 | 2,604 | 2,443 |
| Milk | 120 | 156 | 123 | 118 | 132 |
| Fuel | 897 | 762 | 679 | 602 | 527 |
| Transpo \& Communication | 305 | 346 | 366 | 324 | 309 |
| Shelter | 1,064 | 853 | 742 | 620 | 564 |
| Clothing | 158 | 184 | 193 | 182 | 169 |
| Education | 214 | 315 | 320 | 321 | 262 |
| Total Per Capita Expenditure | 11,112 | 11,284 | 10,960 | 10,176 | 9,518 |
| Total Income | 10,027 | 10,218 | 9,912 | 9,483 | 9,039 |
| Food/Threshold | 60.1 | 61.6 | 60.9 | 57.5 | 54.1 |
| Expenditure/Poverty Line | 66.0 | 67.0 | 65.1 | 60.4 | 56.5 |
| Panel B: Second Decile |  |  |  |  |  |
| Food | 9,507 | 9,289 | 9,241 | 9,064 | 8,607 |
| Rice | 2,989 | 3,147 | 3,154 | 3,228 | 3,090 |
| Milk | 206 | 221 | 209 | 196 | 194 |
| Fuel | 1,106 | 1,022 | 929 | 815 | 793 |
| Transpo \& Communication | 489 | 589 | 622 | 617 | 674 |
| Shelter | 1,529 | 1,283 | 1,130 | 1,010 | 899 |
| Clothing | 245 | 276 | 301 | 287 | 266 |
| Education | 304 | 456 | 513 | 557 | 518 |
| Total Expenditure | 15,256 | 15,242 | 14,877 | 14,391 | 13,796 |
| Total Income | 14,655 | 14,660 | 14,562 | 14,475 | 14,401 |
| Food/Threshold | 81.4 | 79.5 | 79.1 | 77.6 | 73.7 |
| Expenditure/Poverty Line | 90.6 | 90.5 | 88.3 | 85.5 | 81.9 |
| Source: FIIS 2009 |  |  |  |  |  |

Source: FIES 2009

The dire statistics on the severity of poverty and deprivation of the poorest $20 \%$ of families have the expected consequence on the health and education of their children. The extremely low ratio of food expenditure to subsistence threshold among the poorest families means extreme under-nutrition, possibly combined with malnutrition. They cannot possibly choose their best menu from the low food budget. The 2008 National Nutrition Survey finds that as much as $27.9 \%$ of children, 5 years old and below are stunted and $26.2 \%$ are underweight. The undernourished poor children likely comprise the bulk of the stunted and underweight children. Their physical underdevelopment is expected to lead to weak mental and social development. Children who go to school hungry are less alert and possibly have shorter attention span, possibly less confident to socialize and less able to participate in physical activities. Lack of financial resources and weak learning and social capacities are expected reasons for the lower enrollment rate and education attainment of poor children. Expectedly, the enrollment rate of children of poor families is very much lower than that of children in the higher deciles (Table 8). Much fewer children were enrolled in school among the poor at all levels of education. Enrollment rate for each age group corresponding roughly to elementary, high school and tertiary education monotonically increases as
income increases. Among families in the first decile, almost 10\% of children aged 6-11 and 20\% of those aged 12-15 were not enrolled. Compare these figures to $1.2 \%$ and $1 \%$ for children in the highest decile. Differences in enrollment rate are wider for the youngest and oldest school-age groups - the pre-schoolers and the tertiary bound. Until the adoption of the K-12 program, preschooling was more the privilege of affluent families and college has remained too costly for poorer families. In an earlier study (Tan et al., 2011), completion of high school and college by the youth was very much lower among the poorest youth (aged 16-24). Of those from the first decile, only 19\% completed high school and $1.4 \%$ college. In the second decile, the figures were respectively, $22 \%$ and 1.7\%. The proportion completing high school and college rises with income with as much as $42 \%$ of the youth from the highest decile having completed college. Note the contrast of $1.7 \%$ and $42 \%$ college completion rate for the poorest and richest children. Apparently, there is an education trap. Poor parents have low education and could not afford their children better education than they have attained. Needless to say, there are exceptions such as that special circumstance and unique traits open education opportunities for some poor children. National policy, rather than special circumstances, should create opportunities for the poor.

Table 8: Share of children currently attending school

National Per Capita Income Deciles

| Age Groups | All Deciles | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 3 to 5 | 34.6 | 20.8 | 24.7 | 30.4 | 31.5 | 39.1 | 39.1 | 44.9 | 49.0 | 55.1 | 65.6 |
| 6 to 11 | 95.2 | 90.8 | 93.3 | 93.8 | 96.5 | 97.0 | 97.9 | 98.5 | 98.8 | 99.0 | 98.8 |
| 12 to 15 | 89.6 | 79.8 | 85.1 | 87.4 | 90.7 | 92.1 | 94.2 | 95.9 | 96.2 | 98.1 | 99.0 |
| 16 to 24 | 34.4 | 25.9 | 28.3 | 28.2 | 29.2 | 31.9 | 32.5 | 38.3 | 40.1 | 47.6 | 53.0 |

Source: APIS 2008

## Concluding remarks

The poor are the appropriate target of the forthcoming population law (RH Bill) for they have the largest number of children and the largest unmet demand for family planning services as reflected in the big difference between the realized and desired number of children. The poorest $20 \%$ of families have 5.2 number of children but 3.5 desired number, and of families in the second quintile, respective numbers of 4.2 and 3.0. At upper middle income levels, the families were able to bear the number they desired to have which is about 2.7. It is noted that the desired number for all income quintile is higher than what has prevailed in advanced economies including our industrialized neighbors. The government has not yet set a target population rate or fertility rate. The desired number among the majority of families is still quite high, almost 3 which is above the replacement rate of 2 . But even if we target it at 2 , the population growth would still be positive and continue to grow and reach 200 Million by 2080 (Bag-ao, Baguilat, Bello, \& Cojuangco, 2012). The RH bill is focused on information and access to family planning services, not on promoting smaller families. The measures are focused on education/information and providing family planning materials and
services. These could be implemented quite easily. But promoting small family sizes is a more challenging task and would entail changing taste.

There is a clear basis for targeting the poor in the family planning program because they have both large desired number of children and large unmet demand for family planning services (and materials). It is argued here that their income must be raised to a level that allows them to begin seeing opportunities for their children. The CCT program may indirectly create this motivation for they could foresee government assistance for the education of their children. But they need assistance to raise their infants and pre-school children so that they survive in good health to be able to be motivated to enroll and achieve good education. The CCT is futuristic but the poor's basic needs are immediate. A complementary income support program conditional on fertility levels is suggested so that young child-bearing mothers would be encouraged to bear fewer children who will be assisted to be healthy and provided support for schooling. The CCT program substantially increases the current resources of families with school children. The CCT program may be used to encourage small families by giving the full grant of $\mathrm{P} 14,000$ to all poor families irrespective of number of school age children ${ }^{2}$. Those with few children will enjoy a higher per capita grant. A uniform grant based on the income-poverty gap for families with 1-2 children may be an incentive to limit fertility.

[^4]Bag-ao, K., Bagiulat, T., Bello, W., \& Cojuangco, K. (2012, October 14). Overwhelming case for the RH bill. The Philippine Daily Inquirer, p. A16.

National Statistics Office (2008). Annual Poverty Indicator Survey 2008 [Data file and codebook]. Manila: NSO.

National Statistics Office (2009a). Family Income and Expenditure Survey 2009 (Vol. 2). [Data file and codebook]. Manila: NSO.

National Statistics Office (2009b). Family Income and Expenditure Survey-LFS 2009 . [Data file and codebook]. Manila: NSO.

National Statistical Coordination Board (2011). 2011 Philippine Statistical Yearbook. Manila: NSCB.
Pernia, E.M., Alabastro-Quimbo, S., Abrenica M.V ., Alonzo, R., Arcenas, R.L., Balisacan, A., ... Tan, A.E, 2011. "Population, poverty, politics and the reproductive health bill [Position paper]". Retrieved from http://www.econ.upd.edu.ph/perse/?p=1282

Tan, E. A., Canales, K. S., Cruz, K. G., \& Punongbayan, J. B., 2011. Why are boys falling behind girls in schooling [Discussion paper]. Retrieved from http://www.econ.upd.edu.ph/dp/index.php/dp/article/view/680/145


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[^3]:    ${ }^{1}$ The food threshold is derived from the cost of commonly consumed or available foods that meet nutritional requirements. The actual expenditures may differ from the recommended nutritional intake.

[^4]:    ${ }^{2}$ Ten monthly grants of P500 are given to mothers and P300 for each enrolled child up to 3 children aged 6-15. The maximum grant per family is $\mathrm{P} 1,400$ per month of $\mathrm{P} 14,000$ per year. This is a substantial addition to poor families' resources. The grant may encourage smaller families if the total grant of P900 is given per family of school age children irrespective of their number. Every poor family would gain P1,400.

