

Poverty Profiles *6 Social Economics & Public Policies

- Bivariate Analysis - *The objective of the bivariate analysis is to draw a simple profile of the variables indicative of the studied universe in relation to the main socio-demographic attributes observable in the survey (i.e. sex, race, age, schooling, immigration status etc) or region, as below:*

POVERTY PROFILE								
Indigence Line								
Sub-Groups	P0	Standard	P1	P2	Pop.	Contribution to P		
	(%)	Error	(%)	(%)		P0	P1	P2
	(%)		(%)	(%)	(%)	(%)	(%)	(%)
Total	28,72	0,12	13,28	8,40	100	100	100	100
North	37,30	0,45	15,80	9,19	5,74	7,46	6,83	6,28
Northeast	52,61	0,28	25,60	16,00	28,61	52,42	55,13	54,47
Center-West	22,53	0,32	9,11	5,51	7,05	5,53	4,84	4,62
Southeast	17,18	0,15	7,86	5,31	43,53	26,05	25,75	27,52
South	16,29	0,20	6,57	3,96	15,06	8,54	7,45	7,11

Social Economics & Public Policies Course – Marcelo Neri – www.fgv.br/cps

Incidence rate versus contribution

- Two types of statistics: the contribution (or participation) of a given group (or attribute) in the poor population and the poverty incidence rate in this group (Pi). The former concept refers to the latter concept divided by poverty (P) in total population times its respective share in the population (Ni/N).
- **Contribution of group i to total poverty = $P_i \cdot N_i / P \cdot N = (P_i/P) \cdot (N_i/N)$** = Relative to Mean Poverty * Population Share
- The poverty incidence rate indicates which groups are the most vulnerable, regardless of the relative size of this group. If a given minority, which by definition represents a small portion of the total population, register the highest rate of extreme poverty, then preventive measures in this group will be more efficient than when applied to society as a whole. However, such targeted policy measures will not have a relevant impact on total poverty.

Poverty Profiles*

- Modalities
 - Individual characteristics
 - Reference individual characteristics (head of the household or reference person)
 - Main income provider characteristics

Poverty Rates: Female Headed X Female Maintained Households

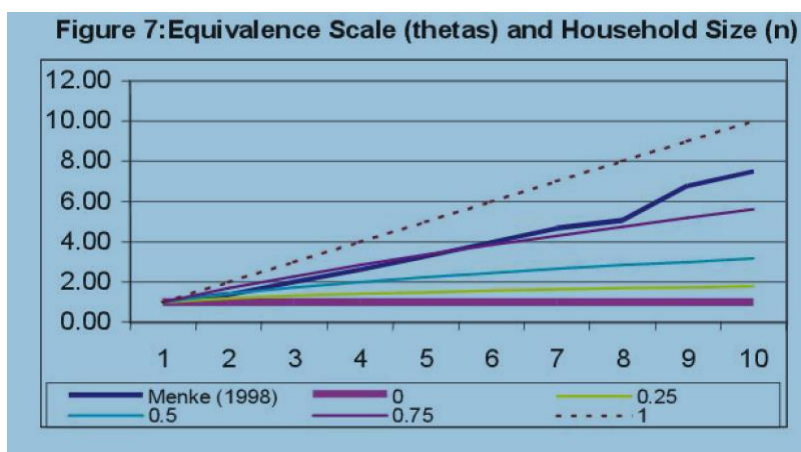
	headed by women	women as main income provider
Urbana		
Total	0.31	0.36
Pobres (US\$60 ppa)	0.32	0.37
Pobres: Canasta familiar	0.34	0.39
Extremadamente pobres: Canasta familiar	0.36	0.43

Equivalence Scales

The basic welfare indicator used for constructing the poverty profile is a transformation of the total household scale variable (income or consumption) (Y) reported

in Indest 1993 (!). It is given by $y_i = \frac{Y_j}{n_i^\theta}$, where household i lives in j , n is the number of household members, $\theta \in (0,1)$ is the Buhmann et. al. (1988) equivalence scale parameter, and I_j is the price deflator for spatial area j . The recipient unit is the individual, which is to say that the distribution analyzed is a vector of y , where y_i is entered n_i times. The usefulness of this concept to check the sensitivity of poverty or inequality estimates to different assumptions about economies of scale is well established (see Coulter et. al., 1992, and Ferreira and Litchfield, 1996a).

The greater is equivalence scale parameter θ the greater are assumed economies of scale intensity. Figure 7 compares the value assumed by Menke (1998) equivalent scale parameter used in the basic poverty scenario by size of household and the ones found for different θ values found. At four household members Menke (1998) parameter equals the value assumed by θ equals 0.5. Similarly, at 10 household members θ is approximately equal to the value assumed by θ equals 0.75. Table below presents a sensitivity analysis of aggregate poverty measures with respect to the economies of scale parameter θ .



The so-called square root rule used in OECD countries applies a theta equals to 0,5.