Unpacking Inequality in Gendered Household Asset Ownership: The Case of Eastern Sri Lanka

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Introduction

For almost three decades, Eastern Province has been the threat of a civil war of a; protracted and violent nature. In recent years the Province has been growing at an average of 6.1% (2009-2014) and by 2014 accounted for 5.9% of the total GDP of Sri Lanka. However, female headed in the post war region have been found to be more economically vulnerable when compared with male headed households (International Labour Organization, 2013; United Nations Sri Lanka & CEPA, 2015). This study probes whether there are any inequalities beyond income and expenditure based assessments across diverse groups of male and female headed households and presents empirical evidence to household assets based welfare outcomes in the post war region.

The study is unique because it moves away from traditional utility maximizing explanations of income and expenditure and situates the analysis of gendered household inequality within broader social divisions such age and ethnicity allowing an in-depth understanding of the inter sectionality of gendered inequality and social divisions.

Methodology

Data on family ownership of assets representing multiple dimensions of tangible and intangible assets linked to education, land, household physical capital assets, financial assets and social capital assets were collected from 351 households in eight Grama Niradhari divisions in the Eastern Province districts of Trincomalee, Batticoloa and Ampara. The sample is a random selection of households proportionate to the ethnic compositions of the Province and disproportionate across gendered household headship. Disproportionality across gendered headship was necessary to prevent under representation of lone mother households in the sample.

Applying procedures proposed by L.M. Asselin (2009, 2002) and Asselin and Anh (2008) by way of Multiple Correspondence Analysis, assets were aggregated into indices to reflect overall individual and household wellbeing.

Using the asset index as the dependent variable an OLS regression was established with a ten (10) row vector of determinants in linear form.

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$$\ln(A_i^{Male}) = \beta_0 + \beta_{1i}X_{1i} + \beta_{2i}X_{2i} \ldots . + \beta_{10i}X_{10i} + \varepsilon \quad (1)$$

$$ln\ (A_i^{Female}) = \beta_0 + \beta_{1i}X_{1i} + \beta_{2i}X_{2i} \ldots . + \beta_{10i}X_{10i} + \varepsilon \quad (2)$$

A: log of Asset index of household i , M: male headed F:female headed.

Where, X_{1i} :household heads age in log form, X_{2i} : dummy indicating ethnicity, X_{3i}: dummy for number of girl children in family (more than 2 or not), X_{4i}: : dummy for number of boy children in family (more than 2 or not), X_{5i}: dummy for cohabitation,X_{6i}: dummy for household in a military controlled area during war or not, X_{7i}: dummy for district , X_{8i}:dummy for household unemployment X_{9i} :the log of access to public services index (depicting satisfactory access to health, transportation, livelihood extension service and communication).
The identification of potential welfare differentials between male and female headed households was carried out by applying the Oaxaca-Blinder (Oaxaca 1973) decomposition. Asset gap equation in terms of the mean (average) between the two household types was indicated in the form,

$$\bar{A}^{Male} - \bar{A}^{Female} = \beta^{Male}\bar{x}^{Male} - \beta^{Female}\bar{x}^{Female} + \varepsilon^{Male} - \varepsilon^{Female} \quad (3)$$

Going beyond the mean decomposition, the asset based welfare differentials were decomposed between male and female headship along different points of the asset based welfare distribution. For this, the paper followed Firpor et al.'s (2009, 2011) method, relying on re-centered influence function (RIF) regressions implemented within a quantile regression approach.

The generalised form of the counter factual treatment in the RIF regression is $A_\tau^C = \hat{\beta}_\tau^C \bar{x}^C$, where $\bar{x}^C$is the matrix of reweighted covariates and $\hat{\beta}_\tau^C$ is the estimate of the RIF regression. The counter fractal assets shows female headed household's assets if they had equal characteristics of the male headed households and can be written as,

$$A_\tau^{Male} - A_\tau^{Female} = (\hat{\beta}_\tau^{Male}\bar{x}^{Male} - \hat{\beta}_\tau^C\bar{x}^C) + (\hat{\beta}_\tau^C\bar{x}^C - \hat{\beta}_\tau^{Female}\bar{x}^{Female}) \quad (4)$$

The overall gap ($A_\tau^{Male} - A_\tau^{Female}$) could then be decomposed using the classical Oaxaca (1973) decomposition to depict the effects of the composition and the effects of the structure.

Results

The distribution of the composite asset index across the household population indicates first order stochastic dominance[2] of the distributions of assets among male headed households over female headed households. Therefore, it is evident that there is a notable asset based welfare gap across household headship. (See Graph 1) (Graph 1 about here)

The mean overall gap between the male and female household asset welfare (computed from equation 3) stands at 38.9% disfavoring female headed households over male headed households. The OB decomposition into the differences of the coefficients and the endowments explains covariates explain bulk of the gap. From the mean decomposition results it is clear that the status of cohabitation (de jure or facto) contributes to most of the explained differences in the endowments. Being Sinhalese reduces the gendered asset gap (negative composition effect and structural effect), meaning the asset gaps between male and female headed households of Sinhalese will report the least asset gap in comparison to other ethnicities. Increase in the number of girl children in the household also reduces the gap yet from the main regression results it was clear that girl children as opposed to male children reduce the asset accumulation. This result can be partially explained by the prevalence male child labor practices which in term is a source of resource accumulation to households in the region.

Decomposing across quintiles, the paper finds that the household asset gaps are greater among the asset poor (lower quintiles) groups. Detailed decompositions reveal that the pronounced asset gap composition effects at the lower tail (20^{th}) of the distribution stems largely from differences in age, and lack of access to satisfactory levels of public goods and service. In higher quintiles the gap is largely driven by status of cohabitation (80^{th} quintile). (See Graph 2) (Graph 2 about here)

Conclusion

In conclusion, this paper finds that regardless of notable economy wide increases in asset ownership, post war transformations have thus far failed to remove deep rooted gender inequalities in household asset ownership, which stem from household structures, regional factors and the general lack of capabilities. The extent of structural biases are extensive to the effect that presence of male children or a male partner within the household positively influences increases in asset based welfare, even in higher asset quintiles of the distribution. Unless policy directions are corrected to take into considerations the existing gendered household disparities,

Tested using a two sample Kolmogorov-Smirnov test. The null hypothesis of a greater asset distribution among female headed households had to be rejected.

females and lone mother/single women households will continue to be marginalised in the post war economy of the Eastern province of Sri Lanka.

Key terms: Post conflict development, Sri Lanka, Assets, Gender asset gaps, Gender

Reference

Asselin, Louis-Marie. 2002. "Composite Indicator of Multidimensional Poverty." *Multidimensional Poverty Theory*. 2009. *Analysis of Multidimensional Poverty: Theory and Case Studies*. Vol. 7. Springer Science & Business Media.

Asselin, Louis-Marie, and Vu Tuan Anh. 2008. "Multidimensional Poverty and Multiple Correspondence Analysis." *Quantitative Approaches to Multidimensional Poverty Measurement. London: Palgrave Macmillan*, 80–103.

Blinder A ,1973, "Wage discrimination: reduced forms and structural estimates" The Journal of Human Resources , 8 (4), 436-55

Firpo, Sergio, Nicole M. Fortin, and Thomas Lemieux. 2009. "Unconditional Quantile Regressions." *Econometrica* 77 (3): 953–73.

Fortin, Nicole, Thomas Lemieux, and Sergio Firpo. 2011. "Decomposition Methods in Economics." *Handbook of Labor Economics* 4: 1–102.

International Labour Organization. "Local Empowerment through Economic Development (LEED) Project," 2013. http://www.ilo.org/colombo/whatwedo/projects/WCMS_146166/lang--en/index.htm.

United Nations Sri Lanka, and CEPA. "Mapping of Socio-Economic Support Services to Female-Headed Households in the Northern Province of Sri Lanka," 2015. http://countryoffice.unfpa.org/srilanka/?reports=13645.