Intra-Household Resource Allocations and Economies of Size: Evidence from Papua New Guinea

This paper uses household survey data from Papua New Guinea to test the nature of intra-household allocations with particular reference to gender related issues. The statistical evidence supports the hypotheses of (1) Pareto efficiency in the allocation of household income accrued by its female and male adult members and (2) that the household income is pooled so that ownership of income does not matter in the allocation mechanism. Further statistical results indicate that the pooling model is rejected when female and male expenditures replace income in the allocation decision process. Women are found to be more likely to purchase goods that are generally regarded as enhancing the household’s overall welfare or are socially desirable. The policy implication of this result is that government interventions should target specifically women’s expenditure rather than income. Household and community wide socio-economic indicators are used to identify factors that contribute to the differences in intra-household allocations and ways by which policy interventions will become more effective. Estimates of household size economies are also provided. The results show that Engel curve estimates of size economies are large when household expenditures are obtained by respondent recall but small when expenditures are obtained by daily recording in diaries. These differences cause uncertainty about the relationship between household size and the poverty of the persons living in those households. Estimates of adult equivalence scales with these data suggest that children in the 0-6 year age group are equivalent to 0.5 adults, other children are equivalent to adults, and economies of household size appear absent.