

The Distributive Consequences of Machismo: A Simulation Analysis

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Quick Motivation

- Unitary Model underlies std per capita hh income poverty measurement
- Sociological, anthropological, ‘economic’ evidence against Unitary Model
- Yet intra-household allocations remain a ‘black box’
- How much are we missing of the welfare story by ignoring the intra-hh redistribution?

How do I proceed?

- Extend std unitary hh allocation models (Ashenfelter & Heckman 1974) to include non-cooperative bargaining
- Threat point associated with poverty (quasi-homoth fn)
- Gender-based sharing rules
- Empirical evidence stylized in 2 gender-based intrahh allocation rules
- Re-calculate poverty & inequality measures

What I don't do?

- Calculate effects other than first rounds (before hhs could potentially dissolve or members react)
- Differentiate gender discriminatory allocation rules across types of hhs ... simply don't know
- Consider some 'mild' form of discrimination: instead, max impacts
- Explore sensitivity of results to alternative threat points

Evidence of gender based allocations

- Mothers and fathers allocate differently resources among sons and daughters
- Not a conclusive pattern
- Chile, Ghana, US, Germany, Cote d'Ivoire
- Males and females retain different shares of incomes to satisfy their needs and hh needs
- Consistent ranges
- India, Mexico, Honduras, Ghana, Cameroon

“Machismo” Rule

“Male Dominant” Rule

Gender based sharing rules

Allocation Rule	Individual incomes pooled together?			Gender discrimination in the re-allocation of resources within the household?
	Factor incomes	Cash transfers	In-kind transfers	
Unitary	Yes	Yes	Yes	No
<i>Machismo</i> Bargaining	Yes, but only exceeding individual threat points	Yes, but only exceeding individual threat points	No	Yes: redistribution of excess incomes only to same sex individuals
Male dominant Bargaining	Yes, but only 75% of income exceeding individual threat points for males, and 100% of excess incomes for females	Yes, but only 75% of income exceeding individual threat points for males, and 100% of excess incomes for females	No	No

The intra household model with discrimination

- Non-assignability of in-kind transfers
- Max Problem
- Gender-based sharing rules in the max model [JOSECUESTA_2.doc](#)

Machismo Rule

		Household Net Generators	Household Net Recipients
First Stage	a) Intrahousehold Redistribution	$y_i^1 = \chi_i$ if $y_i^o \geq \chi_i$	$y_i^1 = \chi_i \quad \text{if} \quad \sum_{i=1}^{M_g} (y_i^0 - S_i^k) \geq M_g \cdot \chi_i$ $y_i^1 = y_i^o \quad \text{if} \quad \sum_{i=1}^M (y_i^0 - S_i^k) < M_g \cdot \chi_i$ <p>for g = male, female</p>
	b) No intrahousehold Redistribution	$y_i^1 = y_i^o$ if $y_i^o < \chi_i$	$y_i^1 = y_i^o$ if $y_i^o < \chi_i$
Second Stage	a) Intrahousehold redistribution		$y_i^R = \chi_i + \left[\sum_{i=1}^{M_g} (y_i^0 - S_i^k) - M_g \cdot \chi_i \right] \theta_i^g$ <p>for g = male, female</p>
	b) No Intrahousehold Redistribution		$y_i^R = y_i^o$

Simulations

	Poverty Incidence		Income Dispersion		
	Extreme	Total	Atkinson Index	Gini Index	Theil Index
Unitary:					
(a) Per capita household distribution of primary incomes and cash transfers	6.7%	24.9%	0.68880	0.51880	0.54775
(b) Per capita household distribution of primary incomes, cash transfers and in-kind transfers.	2.3%	16.0%	0.61908	0.47615	0.46720
Male Dominant	22.5%	37.6%	0.80969	0.60334	0.78263
<i>Machismo</i>	22.4%	34.0%	0.86344	0.58612	0.73108
<i>Machismo</i> Separated Distributions					
(a) <i>Machismo</i> , female distribution	23.5%	35.4%	---	---	---
(b) <i>Machismo</i> , male distribution	21.4%	32.4%	---	---	---

Conclusions

- Intra-household redistribution matters...
- ...more so with strong discrimination
- Policy implications:
 - Intrahh redn. could outdo extrahh redn. gains
 - Program design incorporating female-targeted cash transfers may not be enough
 - Std official poverty, inequality figures off-mark ... and biased if discrimination evolves