

Time use: the economic contribution of Mexican women

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Time use survey in Mexico

2002 subsample of the National Income and Expenditure Survey (ENIGH-2002)

- ✓ Household members
- ✓ Market work, domestic work, personal care and leisure
- ✓ Socioeconomic information (income distribution, poverty)
- ✓ Social programs transfers

Objective

- Time use gender / poverty approach

Fixed effects regression

Some policy design and results: Oportunidades Related policy

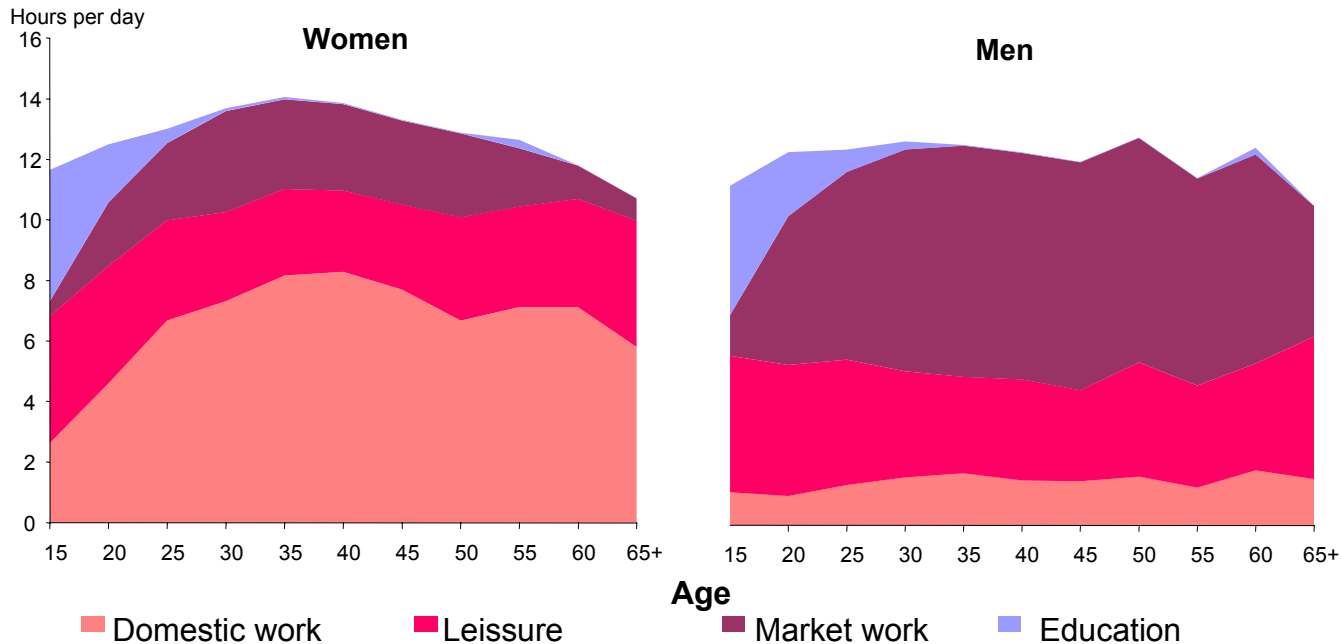
- Domestic unpaid work “value”

1. observed salary approach and,

2. Heckman model (Market price for unpaid work

-- Opportunity cost)

Women invest most of the day on domestic work; men invest in labor market. (Different retribution: economic; training; social security; solidarity relationships; emotional; socializing; other)



Domestic work (hours a week)

Variable (women)	Coefficient
Factory employee	-15.13*
Self employment	-3.58
Married or consensual union	16.52*
Divorced or widow	2.64
Children under 5	5.92*
Children 6 - 12	4.87*
Housekeeper	-17.7*
Rural	6.07*
Nuclear (Parents and children HH)	8.98*

Presence of children increases time in household activities for women

In a household with 3 children under 12 a woman requires 11 additional hours a week



24%

In the same household:

It does **not** increase the invested time of the man in household activities!

Time for food preparation increases mainly with tasks related to: corn or firewood

Food preparation

Non-poor women 12 hrs

Poor women (rural) 24 hrs

- 6 hrs smash corn
- 2 hrs do firewood
- 1 hrs collect firewood

 **100% time**

* Poverty is 20% of hh

Women conception of wellbeing includes basic services and dwelling improvement*

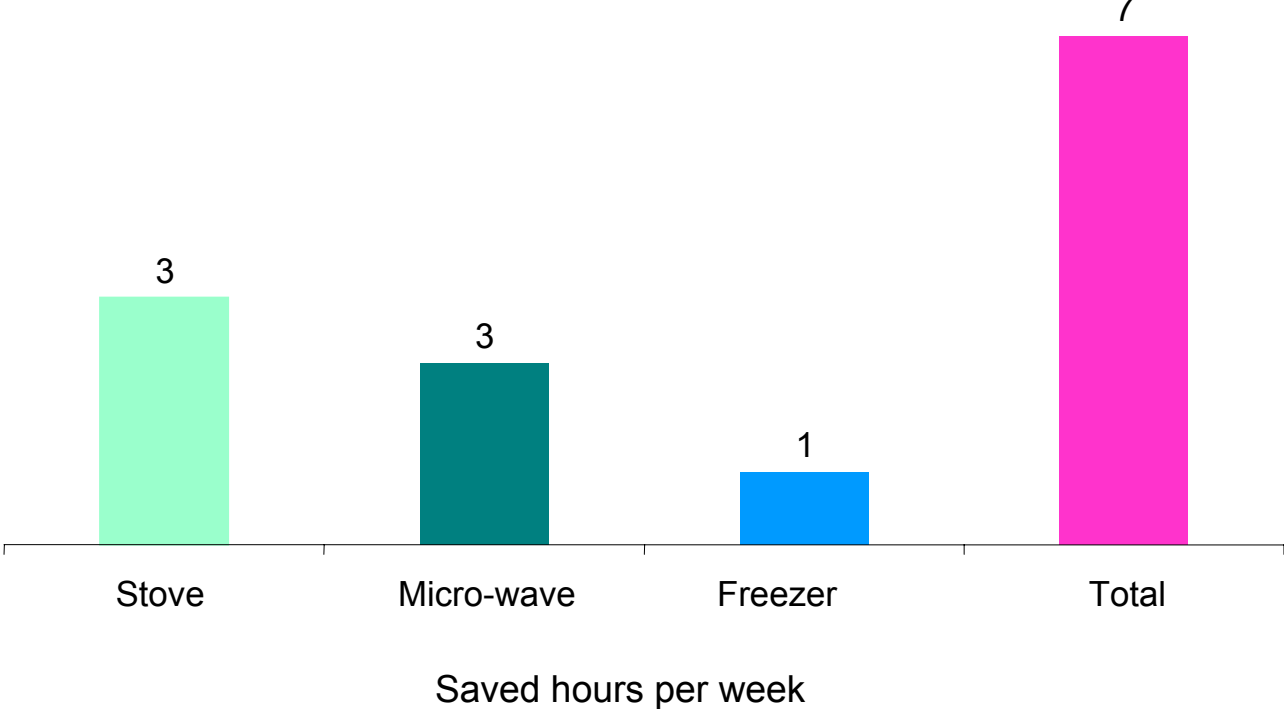
Effort has a lot to do when there is no infrastructure, goods and services in the hoisehold



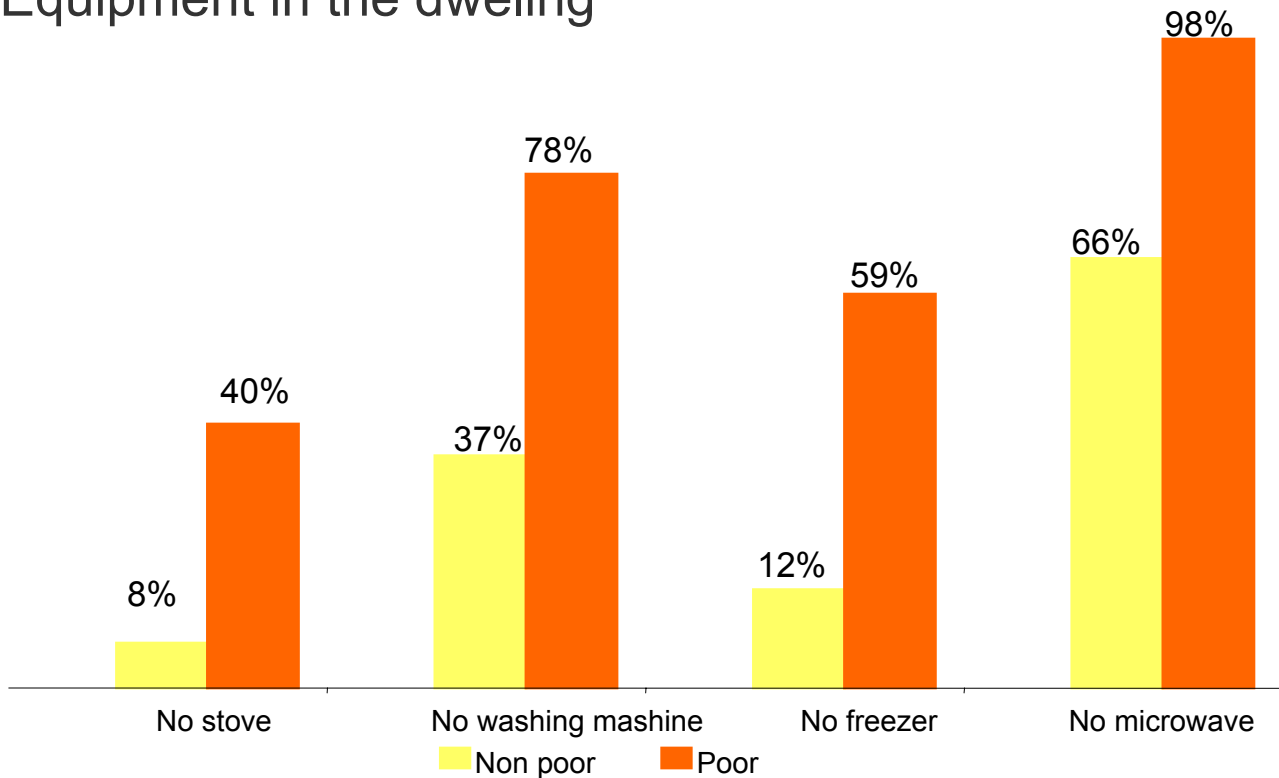
3 hrs if no water availability

* Survey: "Lo que dicen los pobres" (2003)

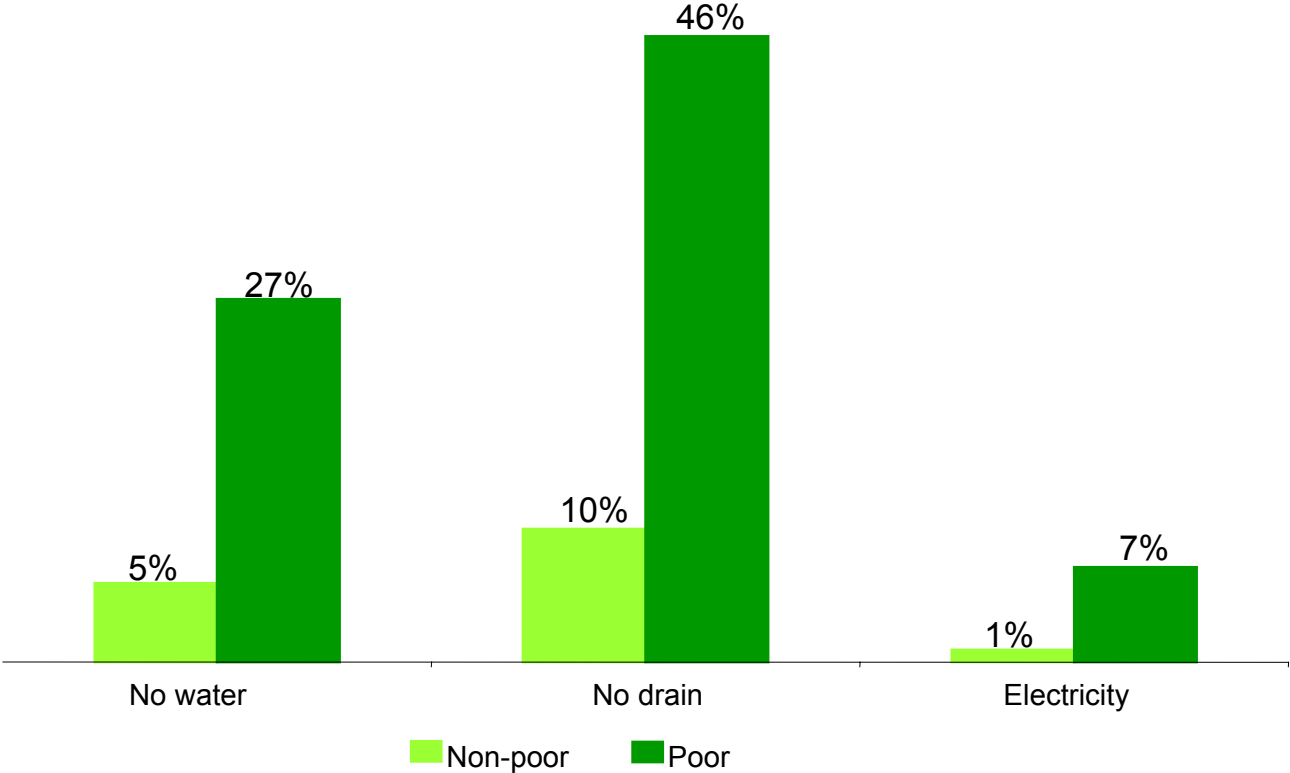
Household infrastructure helps to save time... and effort



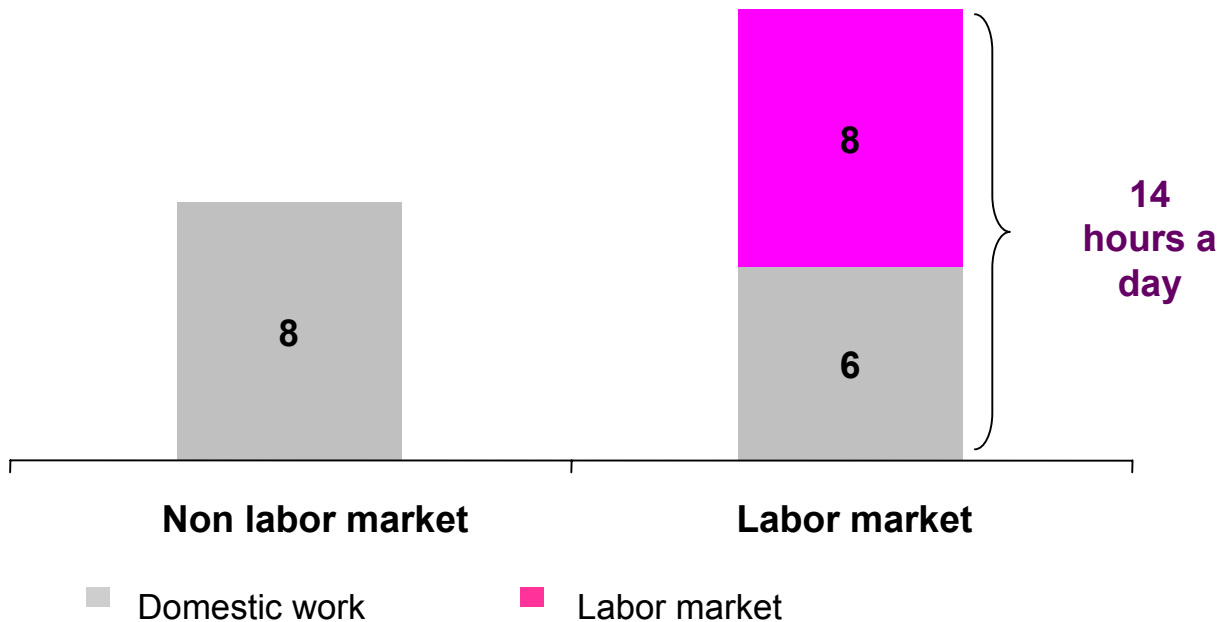
Equipment in the dwelling



Infrastructure services



Women at labor market still do significant unpaid domestic work



* Ages 18 and over

As a result of the actual time allocation men enjoy 4 additional hours a week for leissure than women do. They use these ours in:

Watch TV

Sports

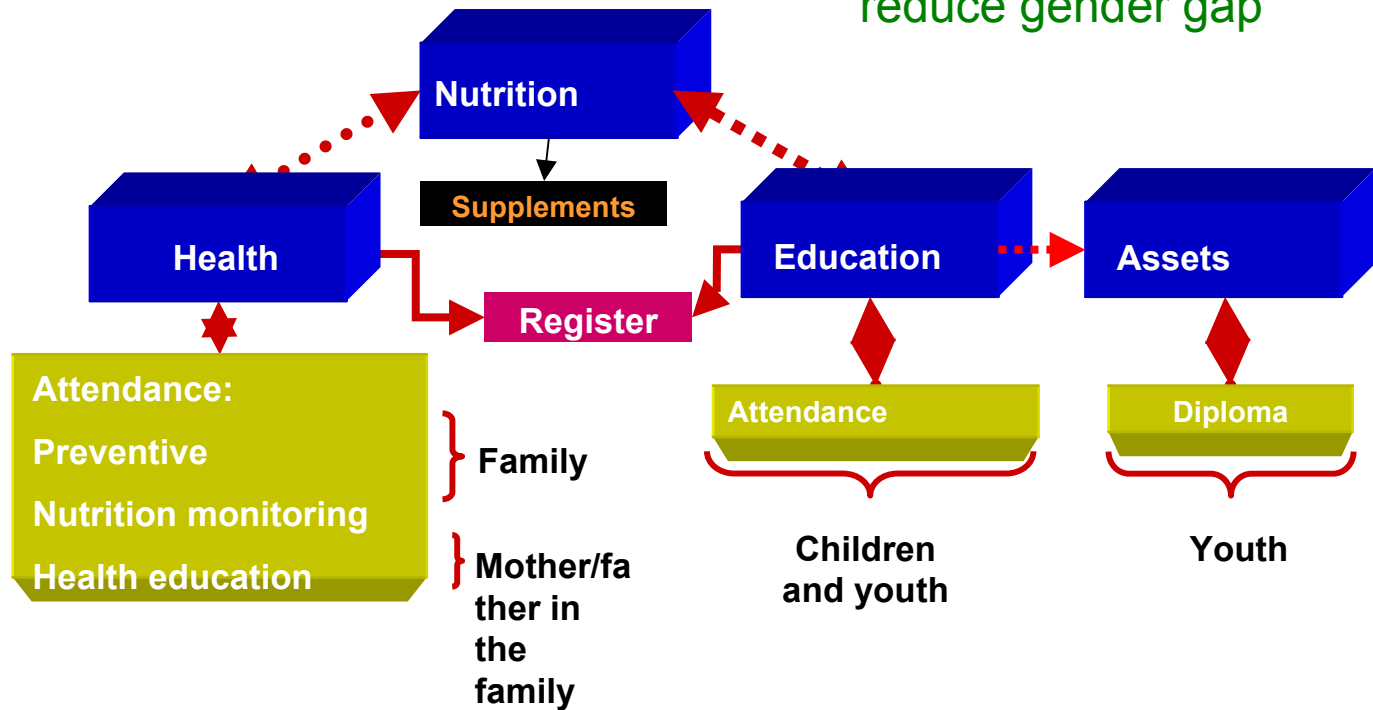
Read a book or magazine

Use the computer

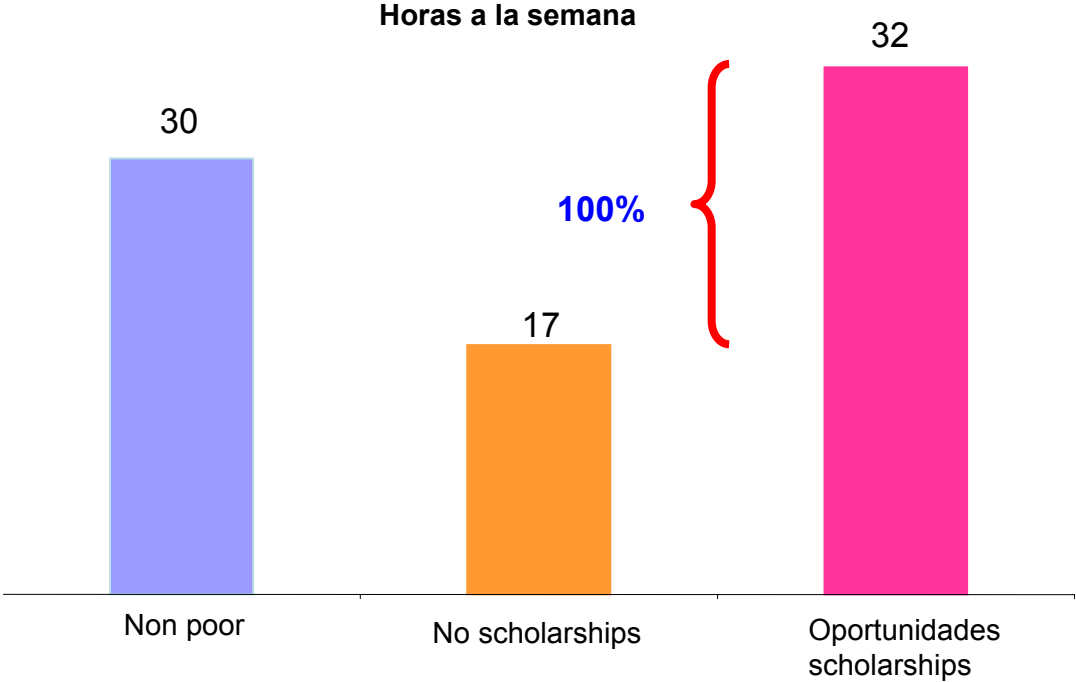
Some policy design and results: Oportunidades

Co-responsibility

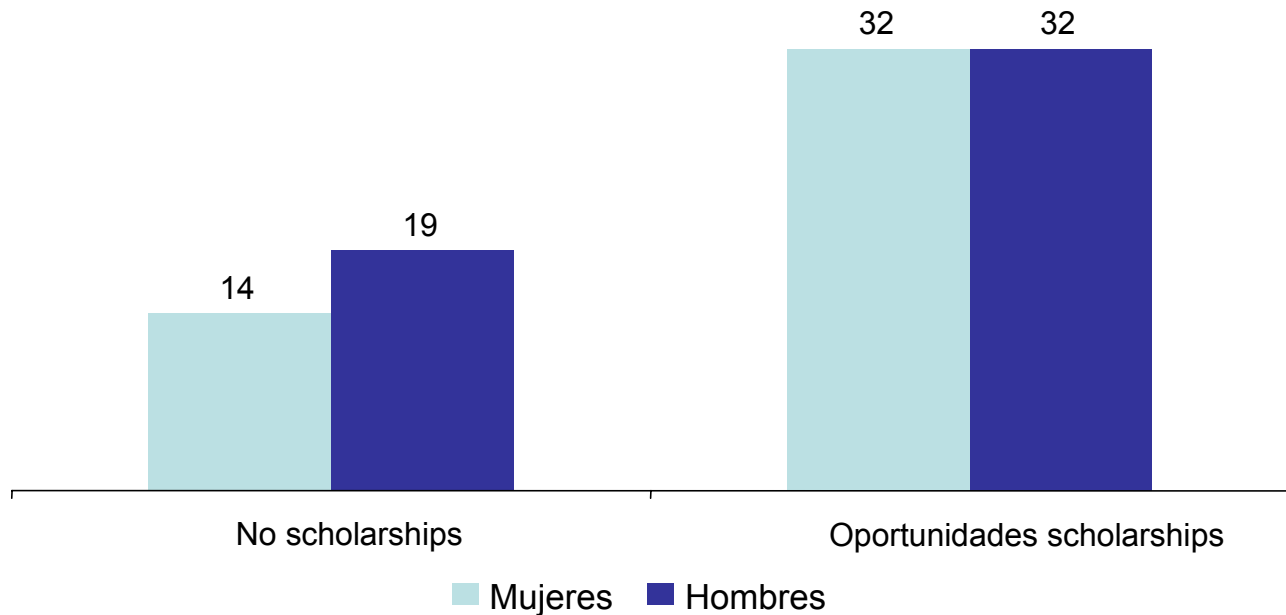
Objective: increase school participation and reduce gender gap



Among poor: ages 12 to 18 receiving scholarships from Oportunidades invested 100% more time studying than those poor not receiving

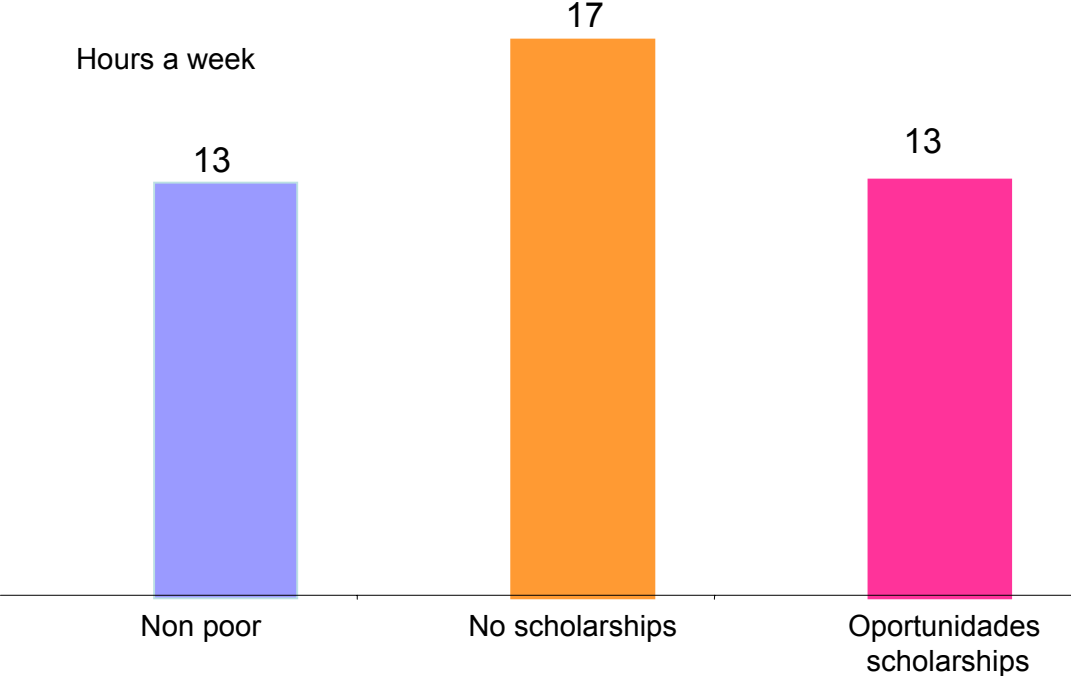


The gap in hours of study between boys and girls among poor with no scholarships is 5 percentage points; with Oportunidades scholarships has been disappeared*

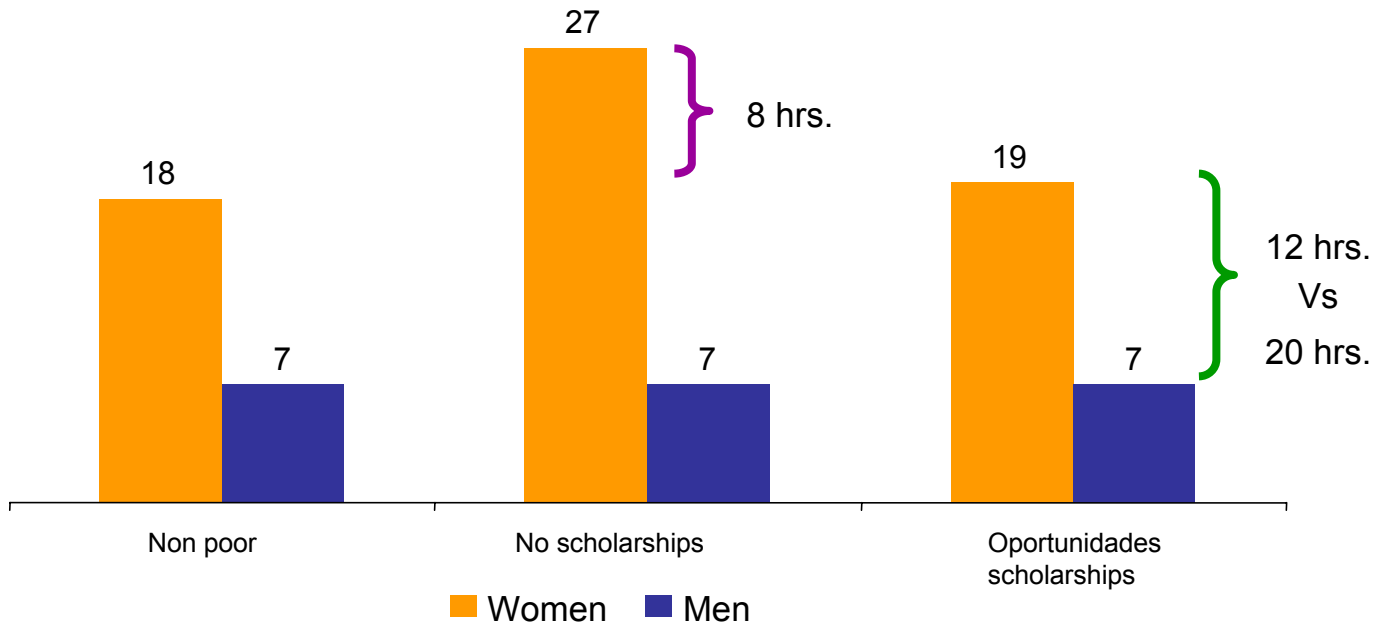


* Ages 12 to 18

Children and youth under 18 years are doing less household activities



Girls are the ones reducing substantially household activities: 8 hours on average, closing the gender gap from 20 to 12 hours a week, and completely closing the poverty gap



Value of domestic work

Methodology

ENUT, 2002

Time distribution



ENE, 2002

Average observed
salary for each activity



Value of household activities

ENIGH, 2002



Selection bias,
Heckman (1976)

Heckman specification

Log-wage $w_i = X_i \beta + \varepsilon_{1i}$

$$T_i = 1(Z_i \gamma + \varepsilon_{0i} > 0)$$

$$E[w_i | X_i, T_i = 1] = X_i \beta + E[\varepsilon_{1i} | \varepsilon_{0i} > -Z_i \gamma]$$

$$\varepsilon_{1i} = \frac{\sigma_{0,1}}{\sigma_0^2} \varepsilon_{0i} + v_i$$

Selection equation: probability of labor market

Variable	Women	Men
Age	0.136*	0.105*
Age squared	-0.002*	-0.001*
Rural area	-0.346*	-0.057
Education (years)	0.067*	0.021*
Number of children under 5 years	-0.076*	0.008
Married, consensual union	-0.385*	0.452*
Divorced, separated, widow	0.053	0.18*

Log-wage estimation

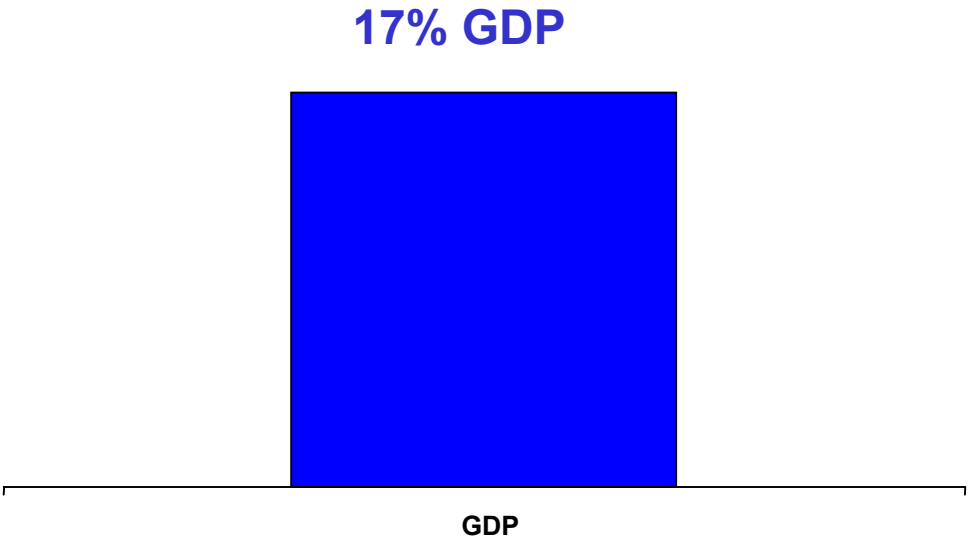
Variable	Women	Men
Age	-0.019	0.028*
Age squared	4.14E-04*	0.0001*
Rural area	-0.131	-0.348*
Education (years)	0.058*	0.080*
Income (other members in the household)	2.9E-05*	2.3E-05*

Monthly opportunity cost (12 years and over)

Estimation	Women (dlls)
Heckman	\$179
ENE	\$370

Average observed income in Mexico \$348 (ENIGH 2002)

The annual value of unpaid domestic activities of women is about:



* Time use survey (ENUT 2002), ENE (2002), ENIGH (2002).

Looking further:

Caring for children and diseased

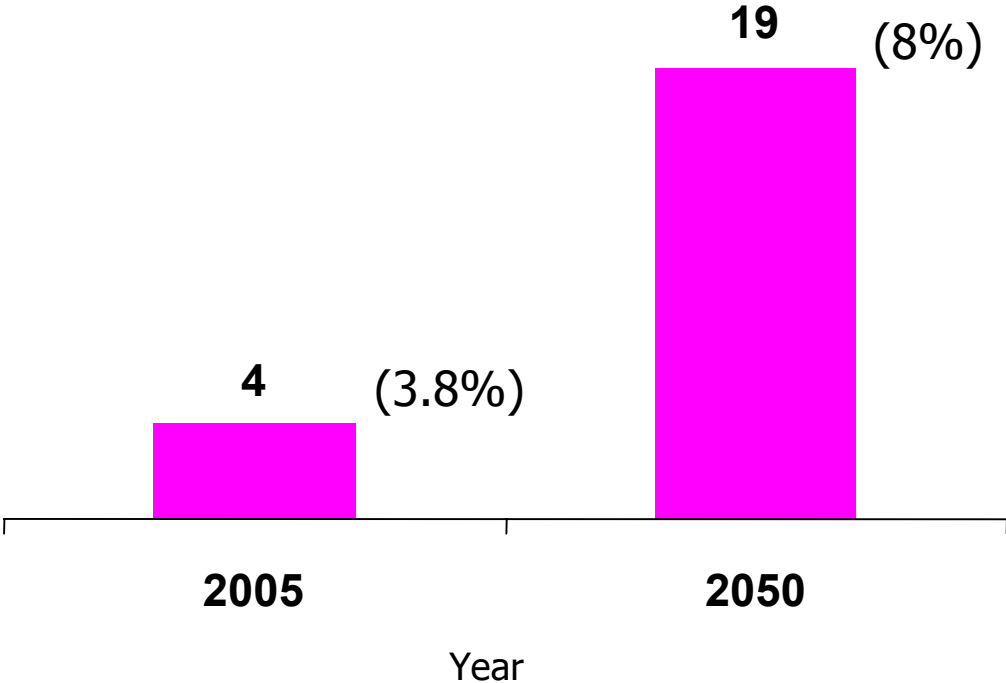
	Men	Women	Total
Annual \$ (dollar millions)	12	38	50
% GDP	2%	5%	7%

Sickness incidence is not age sensitive, but recovery period highly increases with age

Under age 10	4 days
From 10-19	8 days
From 20-69	16 days
70 and over	21 days

ENSA 2000; (2005 survey now being collected)

Population ages 70 and over in Mexico



Concluding remarks

Good policy design, with good incentives and good implementation works

Lack of infrastructure has significant effects on women domestic work, but not on men's (almost certain: policy makers are not aware)

Labor market participation now requires support on child care, in the following years will require support for elder care

Social security for those out of the formal sector (life expectancy; demographic transition)