The Winning Couple: Formal Wife and Informal Husband

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Motivation

• Using the NTA methodology we wanted to spot gender differences in the standard patterns provided by NTA: consumption, transfers and savings.

• We noticed, however, that the differences between sexes may correspond to early life decisions that link: educational achievement, labor market outcomes, and the marriage market.
Motivation

• Some Demographers and Economists propose that the demand for children is jointly taken between spouses, in order to coordinate market and domestic labor.
• By doing so, labor market supply and reserve wages are also jointly decided with the final number of kids (Schultz, 1997).
Motivation

• This may not be happening in Colombia

• Segmentation between formal (48%) and informal market (52%) may be leading the investments parents do on their kids human capital by gender, as well as leading young adults’ decisions

• Those investments in female education are probably not fully reflected in labor income but in the access they get to the formality of their jobs, namely social security
Data

• Microdata: 2008-Living Standards National Survey (Encuesta Nacional de Calidad de Vida-ECV), DANE.

• Includes income-expenses per individual and household in all topics of our concern: education, health, consumption and some transfer programs

• Macrodata: The standard combination for NTA: SNA, IMF, Ministries and Central Bank
NTA-Profiles

• The following Figures are presented in monthly Colombian pesos (COP$)

• Age profiles are taken from UN population estimation for 2008, as it smoothes sampling frame problems that under-estimated the number of the youngest from the survey

• Colombia is beginning its “demographic bonus” stage
Stylized Facts

• Colombia has steadily increased the average number of years of education, since 1970 (Ribero & García, 1996)

• Accompanying several social changes, this increment has been more notorious for women than for men (Flórez, 2000)

• Women, since the late 1990’s, have on average more years of education than men. Particularly true for cohorts born since 1956 (Herrera, 2010)
Average years of Education

Following ECV-08 men older than 15 reach on average 6.5 years of education and women 6.68

- For those with tertiary education the average numbers of years approved in the category is 4.37 for men and 4.03** for women

**Diff- is stat. significant
**Average years of Education**

*People not currently studying and over 15 years old*

- **Generational differences are large:** the proportion is 3 times larger for women with secondary education compared to their mothers, and 10 points higher in tertiary education (for older than 15 years old)
Stylized Facts

• The female educational attainment is linked to overall fertility reduction and massive incursion of women in the labor market (Flórez, 2000)

• On the other hand, child labor is increasing in Colombia (9.2% rate in 2009 from 6.9% in 2007) and boys work more in labor market jobs (Urueña et al., 2009; Flórez & Méndez, 1997) related to larger educational desertion rates of boys (Sánchez et al., 2011)
Other Descriptive

• The combination of educational attainment and child labor trends is probably leading the larger numbers of males working, later in life, in the informal sector: 62% of men are informal workers.

Average years of Education by Age and Sex

<table>
<thead>
<tr>
<th>Age</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>7.34</td>
<td>8.03</td>
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<tr>
<td>16</td>
<td>7.9</td>
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<td>7.2</td>
</tr>
<tr>
<td>20</td>
<td>6.7</td>
<td>6.9</td>
</tr>
</tbody>
</table>
Other Descriptive

- Men work 4** more hours on average than women per week and women expend more hours with their kids (ECV-08)
- More women are affiliated in the formal pension system: 34.91% vs. 25.13% of working men
- A significant generational shift: those in 2008 receiving a pension add up to almost 3% in the case of women and 3.63% for men

**Diff is statistically significant**
NTA-by gender

• There are differences in the profiles of those working for a paid job and the general population. We analyze the former

• The differences point out towards the fact that labor market choices (formal/informal) is the result of early life investments in education, which also affects fertility preferences
Interest Group

Labor Income by Gender

Labor Income by Gender for Paid Workers

Source: DANE – ECV08. Own Calculations.
Labor Income by Education

**Labor Income by Gender for Paid Workers Completed Primary**

![Graph showing labor income by gender for paid workers completed primary education.]

**Labor Income by Gender for Paid Workers Tertiary**

![Graph showing labor income by gender for paid workers tertiary education.]

Source: DANE – ECV08. Own Calculations.
Earnings and Self-Employed

Earnings by Gender for Paid Workers

Self-Employment Labor Income by Gender for Paid Workers

Source: DANE – ECV08. Own Calculations.
Earnings and Self-Employed

Earnings by Gender for Paid Workers
Tertiary

Self-Employment Labor Income by Gender
for Paid Workers - Tertiary

Source: DANE – ECV08. Own Calculations.
Health Consumption by Gender

Source: DANE – ECV08. Own Calculations.
Private Intra-Transfers by Gender

Intra Private Transfers by Gender

Source: DANE – ECV08. Own Calculations.
NTA-by gender

- Contrasting workers is the most appropriate for this research question
- Women have increased the number of years of education and incorporated massively in the labor market in Colombia
- There is still an important wage gap, but it closes for the most educated women, particularly those working in the formal sector
NTA-by gender

• In particular, the income peak is shifted to older ages for women in the case of the most educated and/or for those in the formal market

• This just may be reflecting the childbearing years invested by women, that latter catch up and even overpass men’s income for a few years
NTA-by gender

- Men have the income advantage in the informal market, even controlling for education
- It may be the case that couples make rational decisions independently, based on their educational level
- Women (who plan or have kids) benefit more from the formal sector as the health system in Colombia covers all family members with just one working in the formal sector
NTA-by gender

• Women consume more health at almost all ages than men, and less on “adult”
• Thus the possibility of being covered by the health system and having a pension by the end of their working years is the rational choice by women, independently of their marital/parity status, given that families invest more in women as their young
Gracias!!!

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Adult Consumption by Gender (Ever Married*)

Source: DANE – ECV08. Own Calculations.
*Plus Single with Children