

# **The Value of Time**

# **Analysis of Household Production in Costa Rica**

**Pamela Jiménez-Fontana**

**University of California, Berkeley**

**Universidad de Costa Rica**

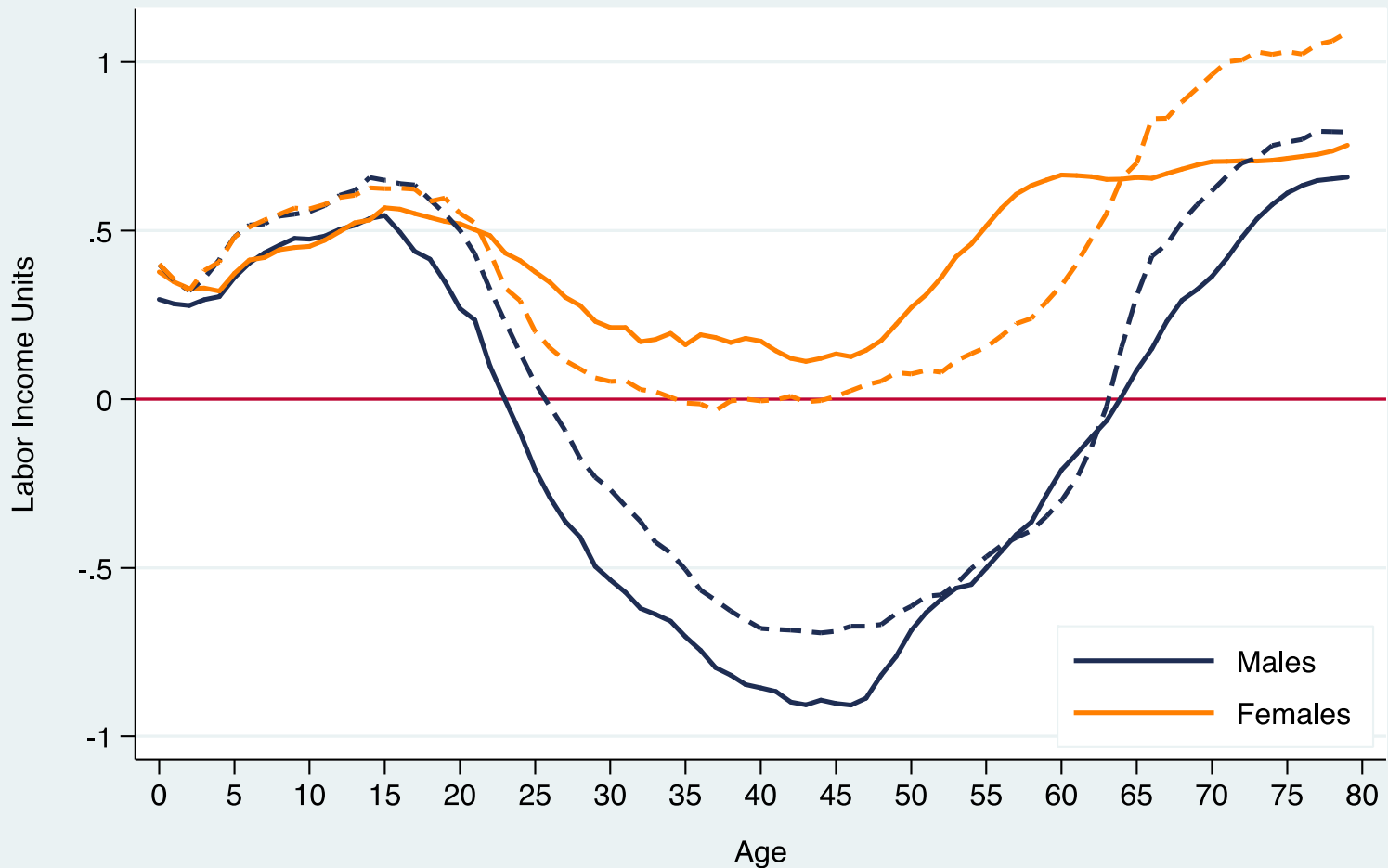
[pamela.jimenezf@berkeley.edu](mailto:pamela.jimenezf@berkeley.edu)



# Why should we analyze time use?

- Gross Domestic Product (GDP): measures domestic production
  - By sex: men's contribution to the economy is significantly higher than women's

FIGURE 1: Life cycle deficit by gender in Costa Rica 2004 and United States 2009



Dotted lines represent United States.

Life cycle deficit is equal to consumption minus labor income

Labor income units: Costa Rica \$4,720 and United States \$51,700.

# Why should we analyze time use?

- Gross Domestic Product (GDP): measures domestic production
  - By sex: men's contribution to the economy is significantly higher than women's
  - Excludes home production
  - Is it home production important?

# Goal

Home production + Market production =  
Real Production

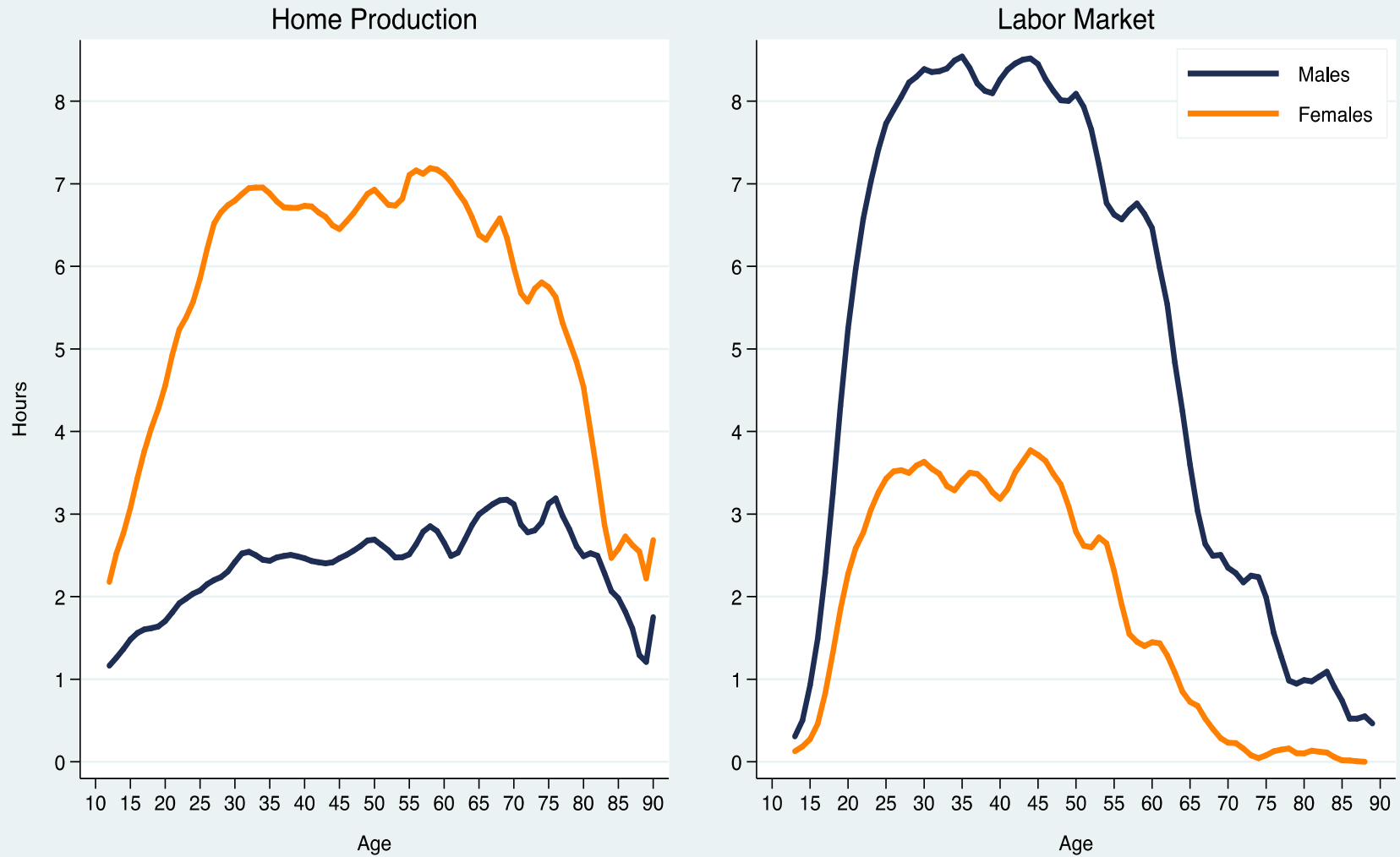
- Contribution by sex

# Methods

- Data:
  - Costa Rican Household Income Survey 2004
  - Costa Rican Time Use Survey 2004
    - 12 years or more
    - No consumption-targets
- Methodology:
  - National Transfer Project (NTA)
  - National Transfer Time Project (NTTA)
    - Which activities? Third party criterion
    - Time units → Monetary units: impute a wage
    - Disaggregate by education

# Results

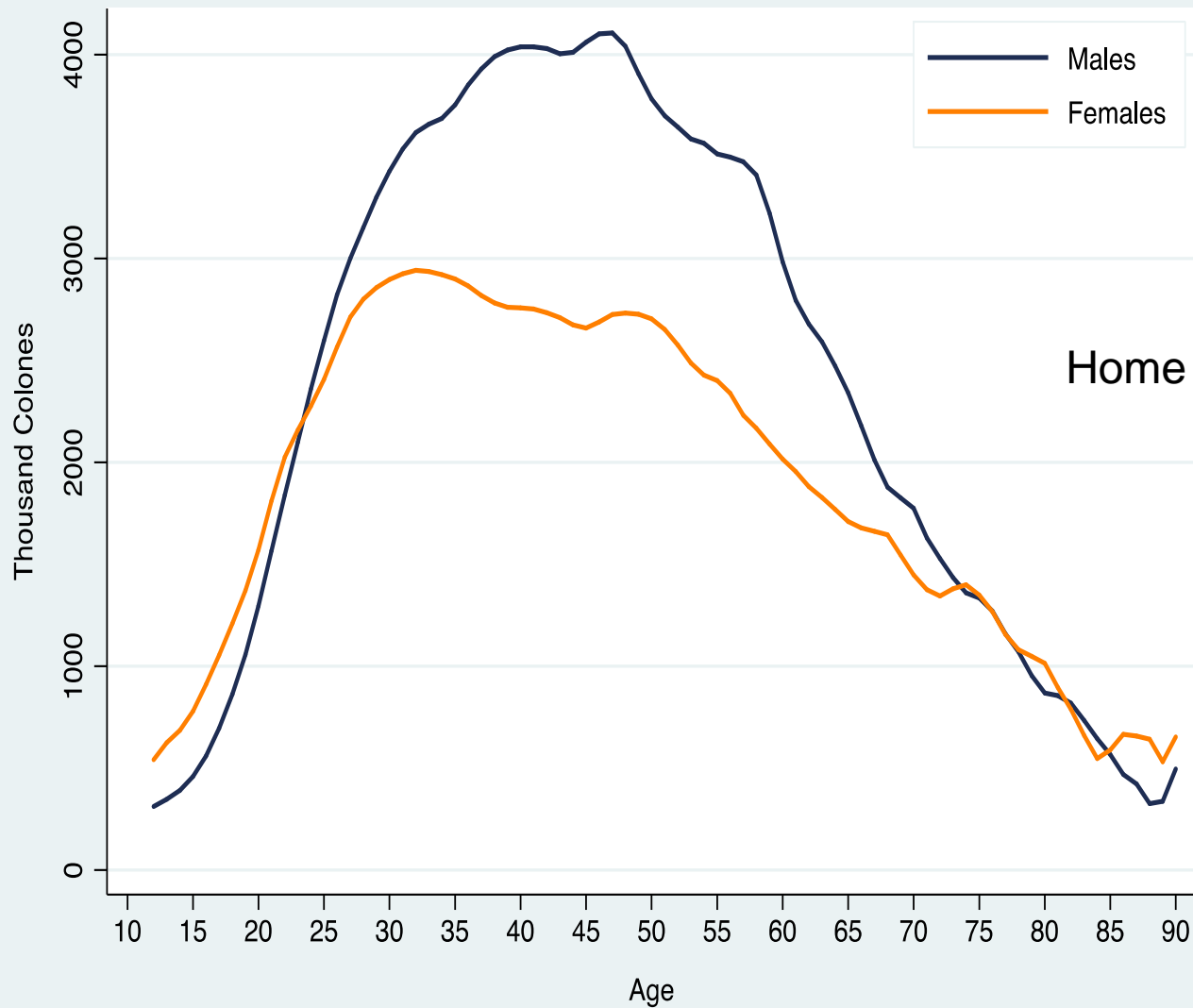
FIGURE 2: Number of hours spent on home and market production, by age and gender



Source: Author's calculations using Costa Rica Household Survey 2004 and Costa Rican Income Survey 2004



FIGURE 3: Combined market and household production by gender and age



Home production 40% GDP

FIGURE 4: Cooking and cleaning production by education



FIGURE 5: Childcare, eldercare, and care of others production by education

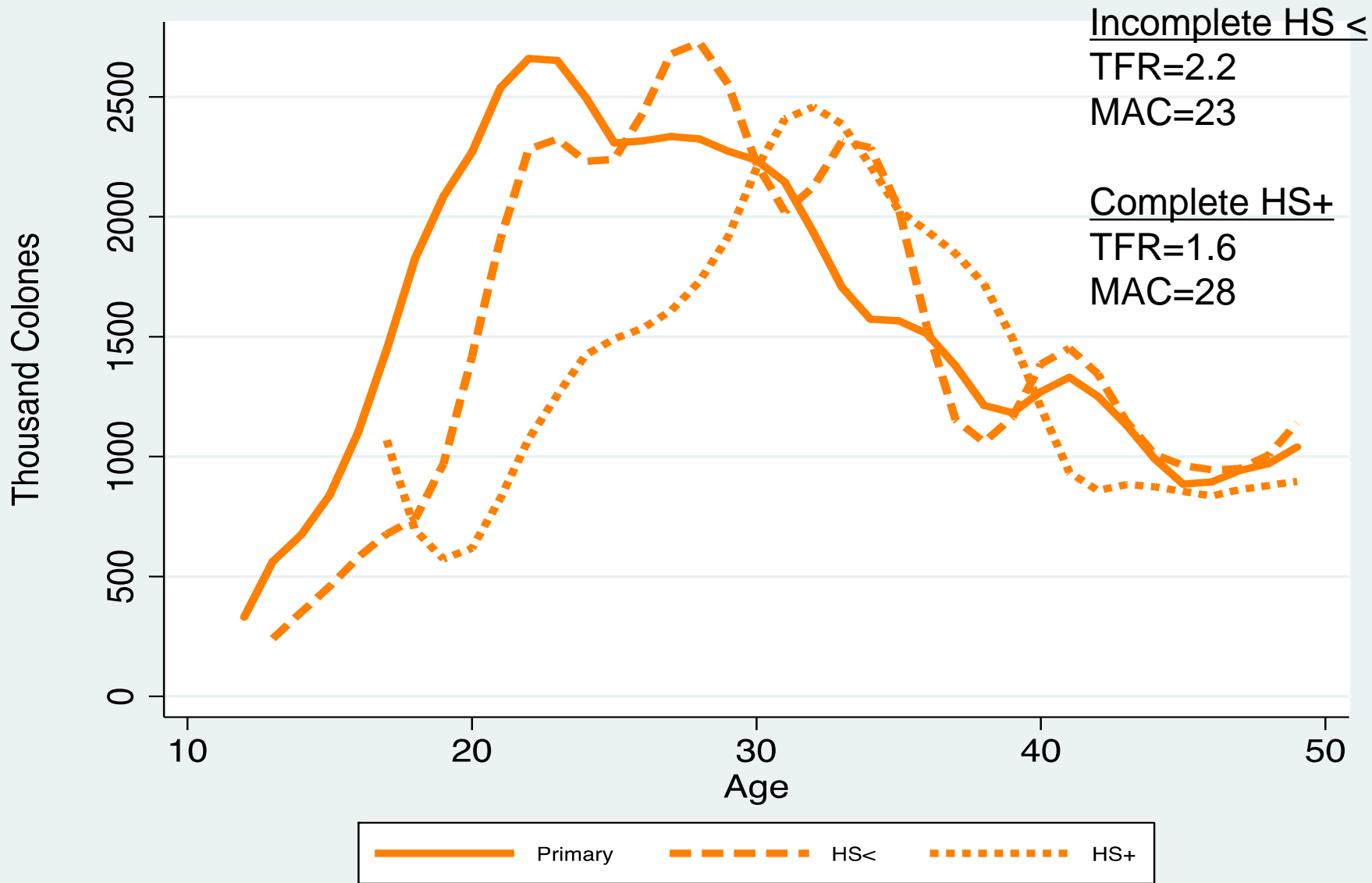
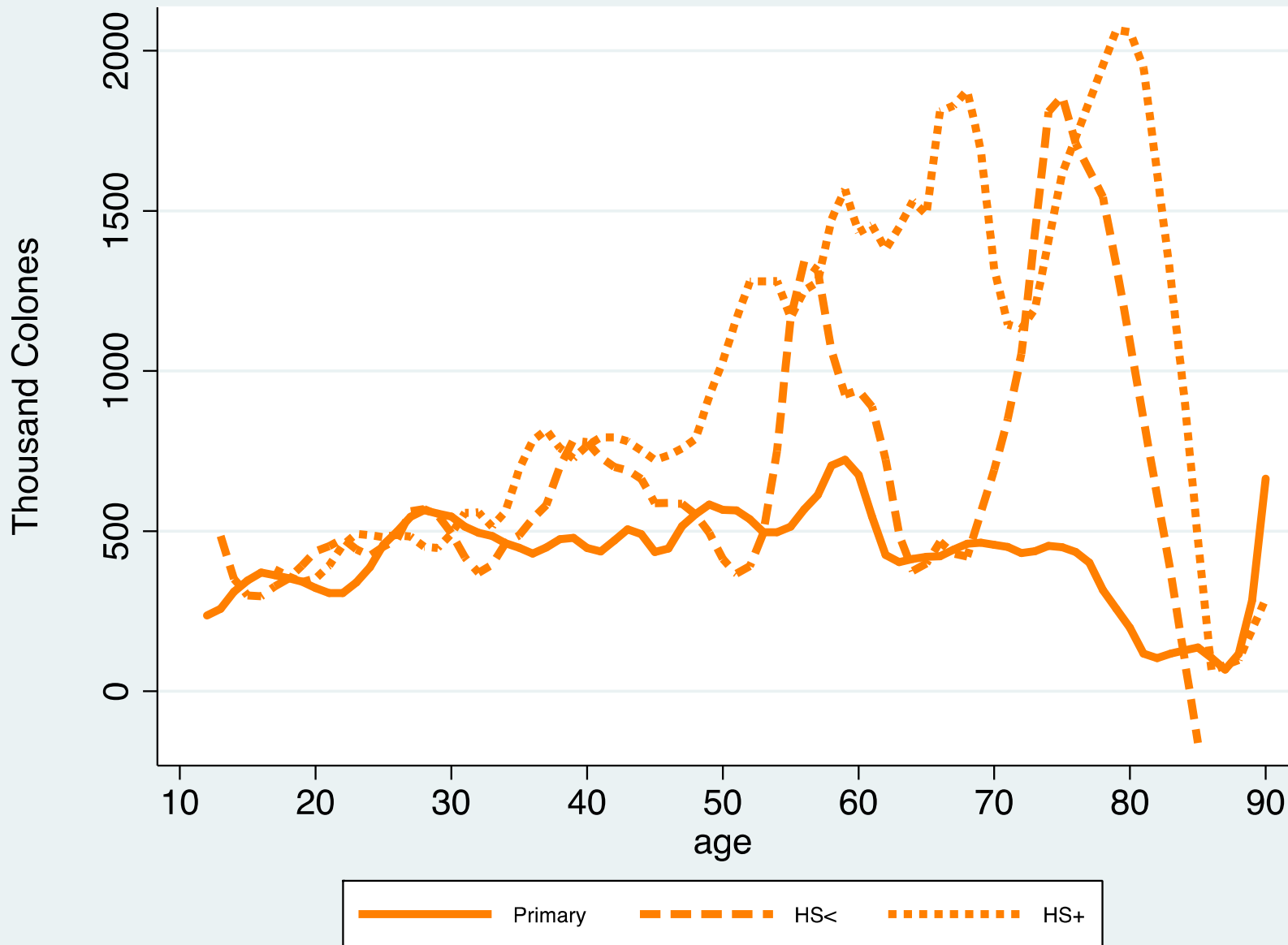


FIGURE 6: Household management production by education



# Limitations

- Home production measured only the share of labor, capital is missing: underestimate results
- Age-specific consumers not in the survey
- No correction by productivity

# Conclusions

- Gender specialization:
  - Men specialize in labor market, women in home production
  - Men specialize in car, HH, transportation, and garden maintenance, while women specialize in care to others, cooking, and cleaning
- Women's contribution to the economy is undervalued measuring production with the GDP

# Conclusions

- ↑ women's education ↑ FLFP:
  - household arrangements to adapt household needs to a new role of women in the labor market
  - Share responsibilities
- Early retirement (specially women) not an option for future generations
- Future: ↓ women contribution home production, but ↑ women's share to household management.