Counting Women's Work and National Time Transfer Accounts (NTTA)

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Measuring the Generational Economy

- Policy development and analysis requires data and measurement
- Example of National Transfer Accounts, measuring the generational economy to understand long-term trend of aging population
- Now want to include gender to measure how men and women, and girls and boys, participate in the generational economy
- Changing gender roles also long-term trend

But there is a problem…

Measured in national accounts/NTA?

	Goods	Services
Market	Yes	Yes
Non-Market	Yes	No

This work is included in national accounts:

This work is not:

The solution…

- National Time Transfer Accounts (NTTA)
  - Measure time spent producing unpaid care and housework services using time use surveys
  - Value that time by a replacement wage
  - Apply NTA methodology to estimate age profiles

	Goods	Services
Market	**NTA**	**NTA**
Non-Market	**NTA**	**NTTA**

- Efforts ongoing throughout the NTA network
  - Counting Women's Work
  - Agenta (European countries)
  - Individual country teams

COUNTING WOMEN'S WORK

Data Needs

1. NTA:
   - NTA data sources, with sex variable
2. NTTA:
   - Time use data
     - Best: 24-hour diary survey
     - Sufficient: questions on time spent in various activities
   - Wage data

Methodology

National Time Transfer Accounts

National Transfer Accounts

Identify household production activities in TU survey

Calculate single-sex NTA

Count time spent in those activities for each person with time use data

Calculate age profiles by sex using same NTA methodology

Use regression instead of consumer weights

Estimate per capita age profile of household production in time units

Change definition of household head

One-child household care imputation method

Impute consumption by regression for care, equally for general household activities

Adjust two-sex age profiles at each age to be consistent with single-sex profiles

Estimate transfers removing consumption of own-produced activities

Generalist replacement

Impute a market replacement wage to each type of activity (specialist replacement method)
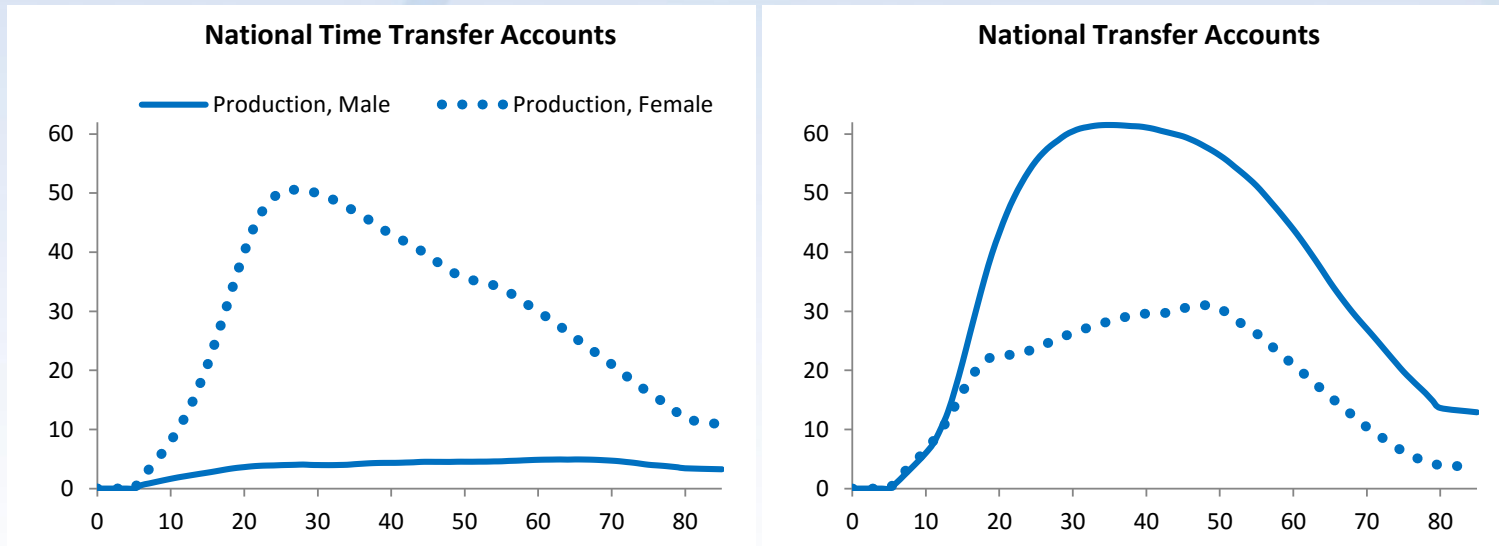
Adjust wages for relative productivity by age?

Main methodology steps in sequence are in the blue boxes.
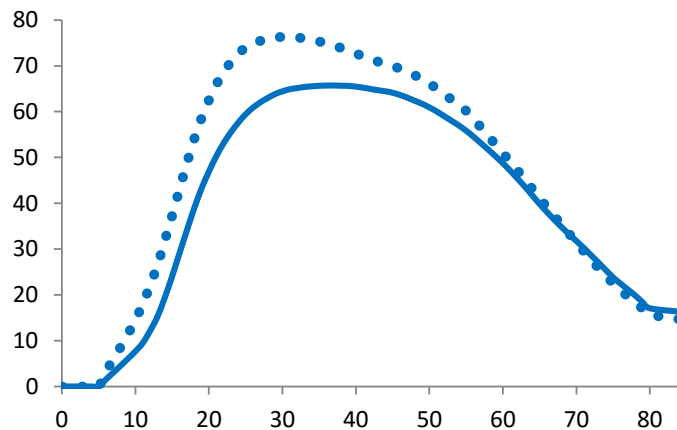
Sensitivity analyses are in green.

Results

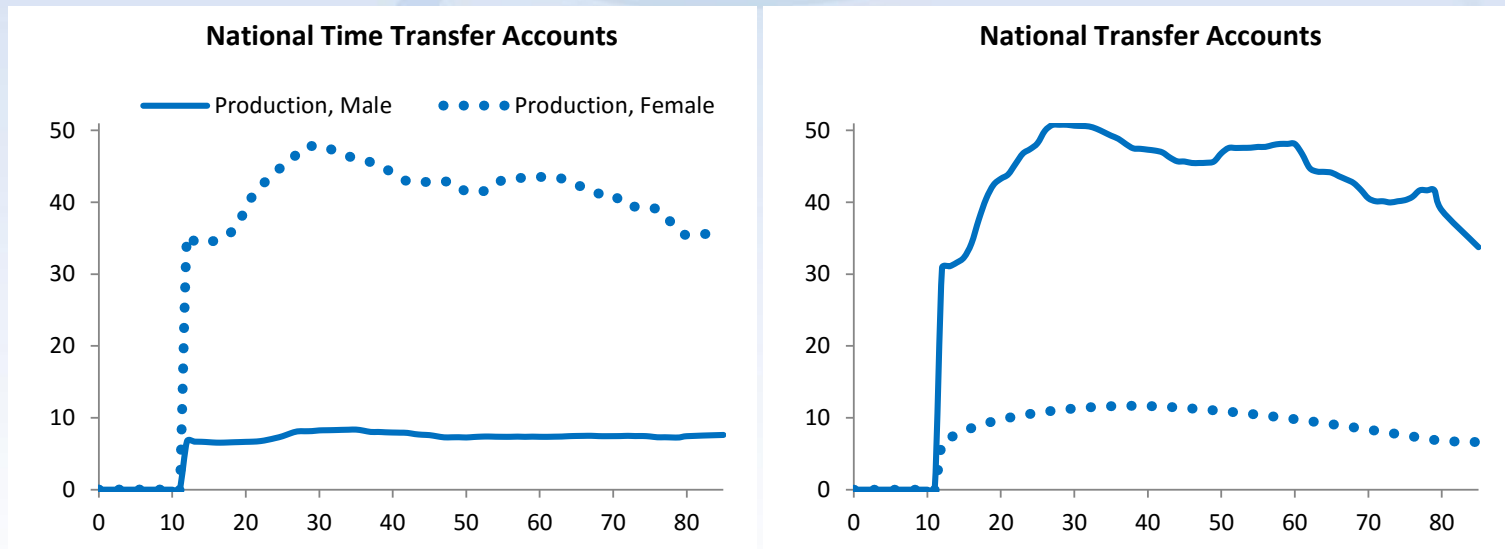## India, 1998/99, time (hours per week)

Results

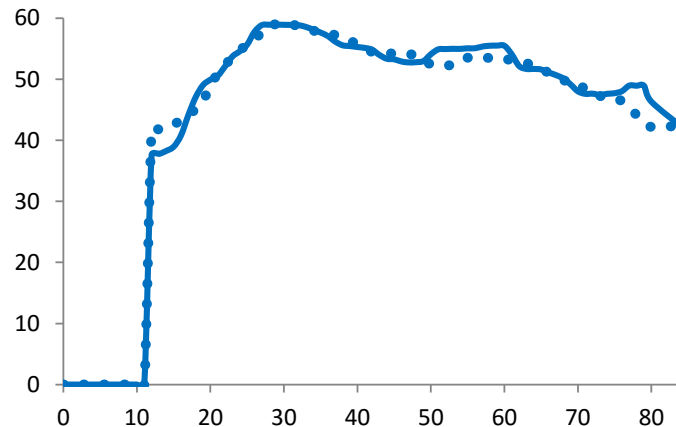## Mexico, 2005, time (hours per week)

Results

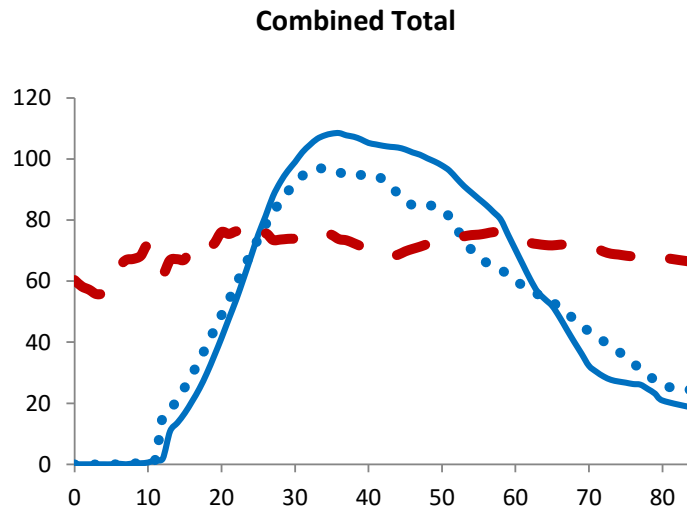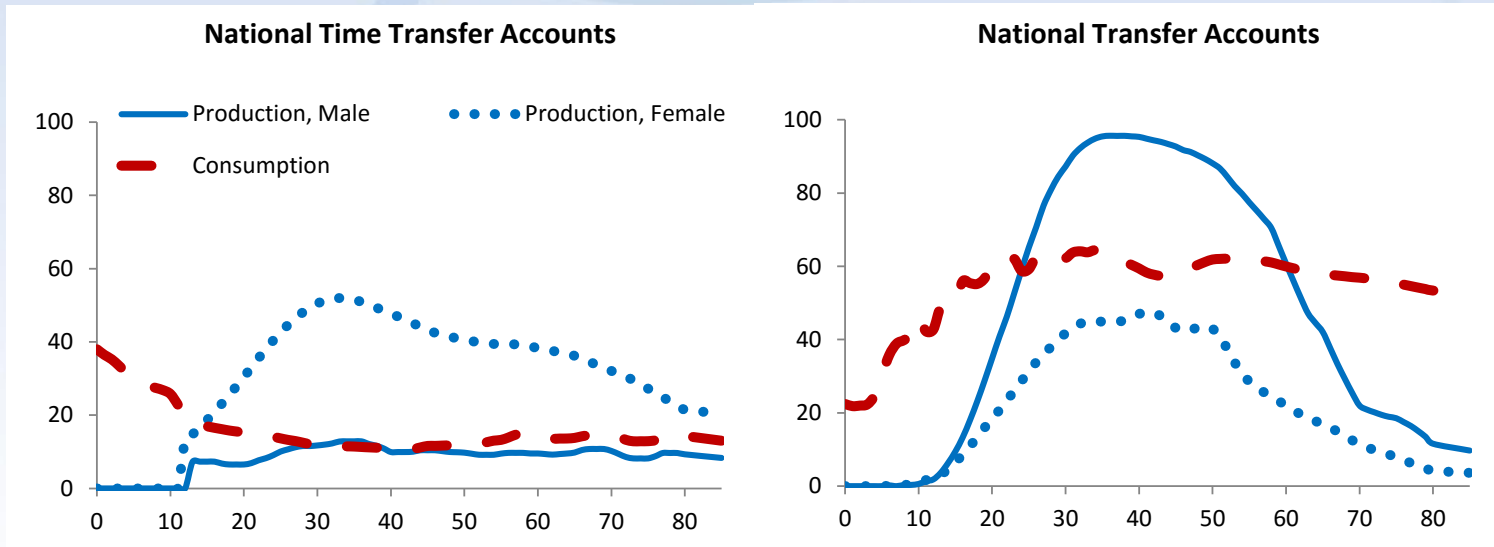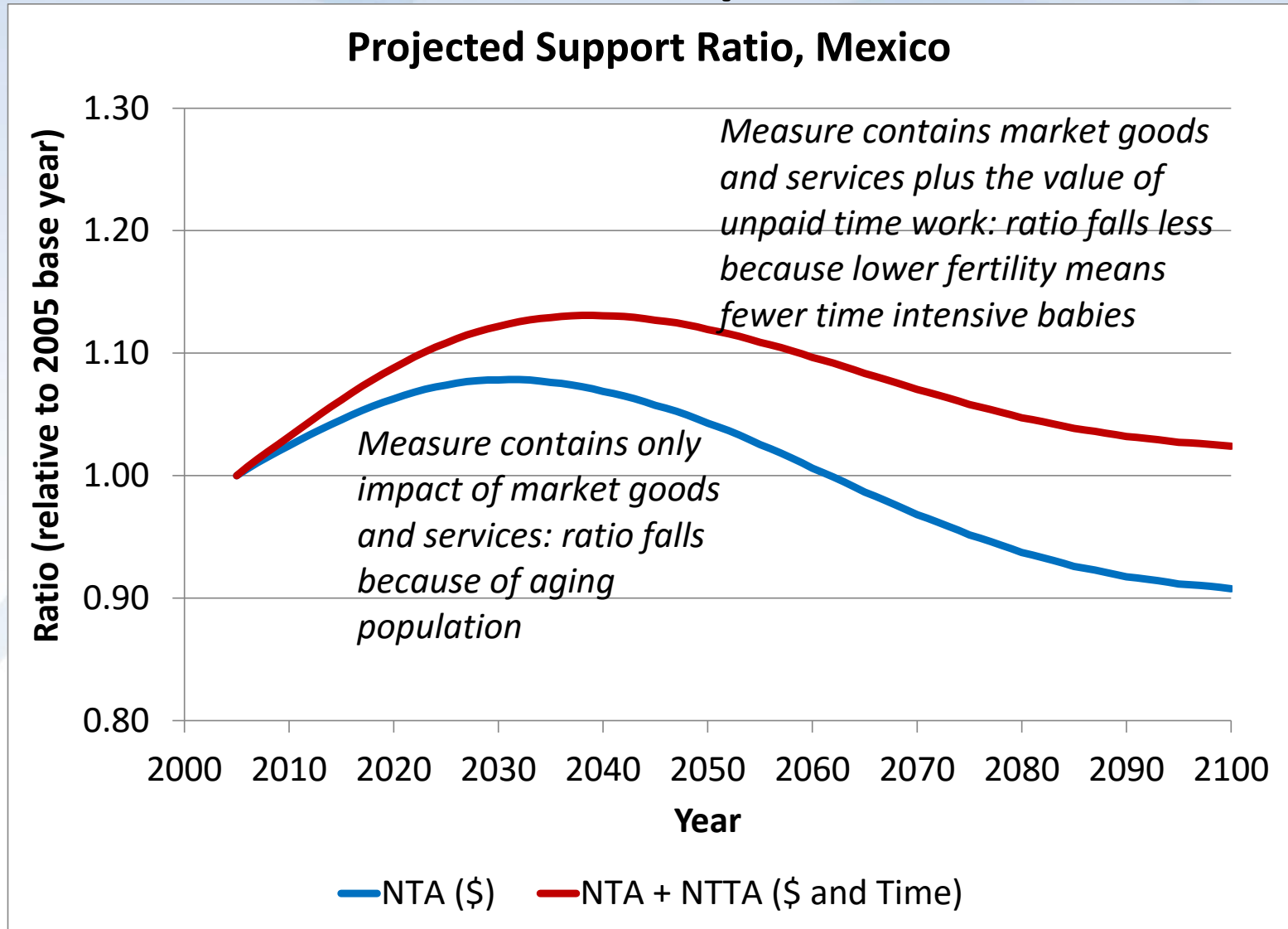## Mexico, 2005, money (1000s pesos/year)

What do we see?

- Gender specialization, but similar work time
  - less similarity in monetary units
- Unpaid care and housework creates a lot of value
  - Total NTTA production: 22% of GDP (compare to 42% for NTA labor income)
- Dependency looks different when you include cost of care
  - Youth dependency increases relative to old age

Why does it matter?
One example: DD

Projected Support Ratio, Mexico

Measure contains market goods and services plus the value of unpaid time work: ratio falls less because lower fertility means fewer time intensive babies

Measure contains only impact of market goods and services: ratio falls because of aging population

Y-axis: Ratio (relative to 2005 base year) — 0.80, 0.90, 1.00, 1.10, 1.20, 1.30

X-axis: Year — 2000, 2010, 2020, 2030, 2040, 2050, 2060, 2070, 2080, 2090, 2100

Legend: NTA ($) — NTA + NTTA ($ and Time)

What does it mean?

- Traditional demographic dividend is about "free money"

  – Policy message: consume it for only temporary gain, or invest it for permanent growth enhancement.

- Augmented demographic dividend is also about "free time"

  – Time could go to more intensive care, more market work, or more non-work

  – But what is the policy message?

Policy message depends on local context

If the country is concerned about…	then invest the time in…	which could be achieved by these types of policies:
low parental HK investment in children	increasing parental care time for each child	subsidizing family leave
low female labor force participation	more market work	subsidizing paid care, fight discrimination/bias against working mothers
"time poverty"	more leisure or self-care	subsidizing paid care, infrastructure to lessen time burden of other household tasks

Developing NTA/NTTA indicators of these to measure countries in relative regional and global context

www.countingwomenswork.org

Random info
for you technical folks...

- Stata now has an .ado file for Friedman's Super Smoother!

- > `search supsmooth`