Valuing unpaid work in the Philippines

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Women as untapped potential?

Females are better educated

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Share of Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Education</td>
<td>5</td>
</tr>
<tr>
<td>Some elementary</td>
<td>10</td>
</tr>
<tr>
<td>Completed elementary</td>
<td>15</td>
</tr>
<tr>
<td>Some highschool</td>
<td>20</td>
</tr>
<tr>
<td>Completed highschool</td>
<td>25</td>
</tr>
<tr>
<td>Post secondary</td>
<td>20</td>
</tr>
<tr>
<td>College or higher</td>
<td>30</td>
</tr>
</tbody>
</table>

But lower labor force participation

<table>
<thead>
<tr>
<th>Gender</th>
<th>Labor Force Participation (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>40</td>
</tr>
<tr>
<td>Men</td>
<td>60</td>
</tr>
</tbody>
</table>

Source: Philippine Statistics Authority
ASEAN+3 Comparison

Similar female labor force participation rate as Indonesia, Malaysia (Austronesian root?), and South Korea and Japan (definitely Philippines is not rich!)

Source: WDI database
What do women (and men) do in the Philippines?
How much do women (and men) contribute?
Pilot TUS 2000, Philippine SNA, Government Administrative Records

2015 Labor Force, and Family Income and Expenditure Surveys

NTA + NTTA
What do men and women do in market production?
Time in market production

Source: Philippine Statistics Authority
Who works where?

Employed women are likely more educated...

and in professional, technical or skilled occupations

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>12.6</td>
<td>21.9</td>
</tr>
<tr>
<td>Professionals</td>
<td>3.0</td>
<td>9.2</td>
</tr>
<tr>
<td>Technicians and associate professionals</td>
<td>3.2</td>
<td>4.9</td>
</tr>
<tr>
<td>Clerical support workers</td>
<td>3.7</td>
<td>8.8</td>
</tr>
<tr>
<td>Service and sales workers</td>
<td>11.8</td>
<td>20.5</td>
</tr>
<tr>
<td>Skilled agricultural, forestry, and fishery workers</td>
<td>18.0</td>
<td>6.1</td>
</tr>
<tr>
<td>Craft and related trades workers</td>
<td>10.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Plant and machine operators and assemblers</td>
<td>8.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Elementary occupations</td>
<td>27.7</td>
<td>23.5</td>
</tr>
<tr>
<td>Armed forces occupations</td>
<td>0.4</td>
<td>0.0</td>
</tr>
<tr>
<td>All occupations</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Philippine Statistics Authority
What do men and women do in home production?
Time Specialization

Specialization between men (mainly market production) and women (mainly home production) similar to other countries
Double burden?

But given the same time allotted to market production among husbands and wives, women contributes more hours to home production.
Time in home production

**Men**

- Child care
- Elder care
- House work

**Women**

- Child care
- Elder care
- House work
Women contribute more home production time at all ages.

Two humps for childcare over the lifecycle for men and women: Household strategy to allow prime-age adults to participate in market production?

Almost negligible time spent on eldercare.
How much do men and women contribute to the economy?
Lifecycle account, 2015

Highlights important lifecycle differences between men and women

1. Women have higher school enrollment rate especially in secondary and tertiary education
2. Women exit work for home care
3. Women continue to work in informal sector beyond retirement age
Labor income gender gap (relative)

Similar to Europe and the US with high gender parity around age 20

But more equal at old age compared to many other countries – role of self-employment is important
In per capita terms, gender gap is not as dramatic.

At peak gap, 8% of per capita GDP or 50% of poverty line.

Absolute gap is relatively small at either end of the lifecycle.
Market + non-market work, 2015

Market (NTA)

Non-market (NTTA)

Current PhP Thousands

Age

Male, Labor Income
Female, Labor Income
Consumption

Male, Unpaid housework
Female, Unpaid housework
Consumption
Market + non-market work, 2015

Unpaid home production comprises about one-fifth of all labor income if monetized.

More important for women (33%) than for men (10%).
Does incorporating unpaid home production close the gender gap?
Gender gaps

**Relative Gap**

<table>
<thead>
<tr>
<th>Age</th>
<th>Market only</th>
<th>Market + Non-market</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>1.4</td>
<td>1.2</td>
</tr>
<tr>
<td>35</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td>50</td>
<td>0.6</td>
<td>0.4</td>
</tr>
<tr>
<td>65</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>

**Absolute Gap**

<table>
<thead>
<tr>
<th>Age</th>
<th>USD per person per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>-2000</td>
</tr>
<tr>
<td>35</td>
<td>-1500</td>
</tr>
<tr>
<td>50</td>
<td>-1000</td>
</tr>
<tr>
<td>65</td>
<td>-500</td>
</tr>
</tbody>
</table>

**Female-to-Male Labor Income Ratio**

- Market only
- Market + Non-market
Can the gap be explained further? (Are we missing something else? Why would women choose to forego “labor income” whether paid or unpaid?)
Closing the gender gap

Market (NTA) + Non-market (NTTA)

Although there is a large decrease in the relative gender gap when unpaid home production is monetized, the gap is still substantial – about 35% at peak

The gap is more dramatic when measured in absolute terms – about US$1,800 per person per year at the peak, i.e., about 60% of per capita GDP
Human capital investments

- Estimate the association between non-market work and quality of children – proxy for quality of household (difficult to monetize)
  - Outcomes: (i) School participation, (ii) Age-for-grade z-score
  - Treatment: Female participation and time in market production
  - Identification: IV treatment by age of youngest child controlling for socio-economic status, family age distribution, child and parents characteristics
  - Focus on single family households
Time substitution

- Mother’s time in market production
  - Decreases time for house work (elasticity = -0.4)
  - Increases spouses’ time for house work (elasticity = 0.1)
- But men’s share in home production is lower than women’s
- Increase in spouse’ home production does not compensate for decrease associated with mother working outside the home
- Similar results for childcare time (elasticities: -0.10 v. 0.05)
- No change in mothers’ home production time when men change allocated time for market production
Quality of children

- **Mother’s labor force participation**
  - Lower school attendance probability by about 40% points
  - Later completion by age (>4 SD years ≈ >6 years) – includes both effects of non-participation and grade non-completion

- **Similar results when using mother’s time at market work**
  - School attendance decreases by 0.1% points for every hour worked
  - Delays completion by about 1-2 months for every hour worked

- **Modest to no association between quality of children and father’s labor force participation or time in market production**
Summary

- Unpaid home production is important
- Gender gap is not necessarily closed when unpaid home production is taken into account depending on measure
- While an improvement, we may still be undervaluing home production
- When women stay home, household quality improves, at least in the Philippines
Thank you

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