Understanding Gender Norms

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Over the past quarter century, women have joined the labor market in increasing numbers, partially closing the gender participation gap (see chapter 1). Between 1980 and 2009, the global rate of female labor force participation rose from 50.2 percent to 51.8 percent, while the male rate fell from 82.0 percent to 77.7 percent. Consequently, gender differentials in labor force participation rates declined from 32 percentage points in 1980 to 26 percentage points in 2009.a

Female labor force participation is lowest in the Middle East and North Africa (26 percent) and South Asia (35 percent) and highest in East Asia and Pacific (64 percent) and Sub-Saharan Africa (61 percent) (box map 5.1.1). Despite large cross-regional differences, participation rates have converged over time as countries and regions that started with very low rates (primarily Latin America and the Middle East and North Africa) experienced large increases and those with higher rates (primarily Europe and Central Asia and East Asia and Pacific) experienced small declines (box figure 5.1.1).

The combined effect of economic development, rising education among women, and declining fertility goes a long way in explaining changes in female participation rates over the past 25 years. Globally, economic development has been accompanied by growing economic opportunities for women (particularly in manufacturing and services). And greater trade openness and economic integration have, in many countries, led to significant growth of export-oriented sectors, with some, such as garments and light manufacturing, employing large numbers of women in recent decades (see chapter 6). Both developments have translated into stronger market incentives for women's labor force participation in the form of rising demand for female labor and, in some cases, higher absolute and relative wages.

In addition, economic development has been accompanied by improvements in infrastructure, including electricity, water, roads, and transport, which can alleviate time constraints and reduce the...
The role of women around the world

Over the past quarter century, women have joined the labor market in increasing numbers, partially closing the gender participation gap (see chapter 1). Between 1980 and 2009, the global rate of female labor force participation rose from 50.2 percent to 51.8 percent, while the male rate fell from 82.0 percent to 77.7 percent. Consequently, gender differentials in labor force participation rates declined from 32 percentage points in 1980 to 26 percentage points in 2009.

Female labor force participation is lowest in the Middle East and North Africa (26 percent) and South Asia (35 percent) and highest in East Asia and Pacific (64 percent) and Sub-Saharan Africa (61 percent). Despite large cross-regional differences, participation rates have converged over time as countries and regions that started with very low rates (primarily Latin America and the Middle East and North Africa) experienced large increases and those with higher rates (primarily Europe and Central Asia and East Asia and Pacific) experienced small declines.

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Female labor force participation rate, %

<table>
<thead>
<tr>
<th>Countries with the highest FLFPR</th>
<th>Burundi</th>
<th>Tanzania</th>
<th>Rwanda</th>
<th>Madagascar</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female labor force participation rate, %</td>
<td>92%</td>
<td>89%</td>
<td>88%</td>
<td>86%</td>
<td>86%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Countries with the lowest FLFPR</th>
<th>Pakistan</th>
<th>Saudi Arabia</th>
<th>Syrian Arab Republic</th>
<th>Yemen, Republic of</th>
<th>Iraq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female labor force participation rate, %</td>
<td>22%</td>
<td>22%</td>
<td>22%</td>
<td>21%</td>
<td>15%</td>
</tr>
</tbody>
</table>
These differences are strongly correlated with values and beliefs

“When jobs are scarce, men should have more right to a job than women” (from World Values Survey):

Proportion of the population that answers ‘yes’:

- Iceland 3.6%; Sweden 4.5%; Denmark 6.0%; Ethiopia 6.5%; Finland 10.7%; Norway 10.7%
- Iran 78.5%; Pakistan 78.8%; Iraq 81.0%; Jordan 88.9%; Saudi Arabia 89.7%; Egypt 94.9%
These differences are highly persistent.

\[ e(\text{FLFP} \mid X) \]

\[ e(\text{Historical female participation in agriculture} \mid X) \]

(coef = 4.69, s.e. = 1.38, N = 154)
But not that persistent: Gender norms at Çatalhöyük
Gender norms at Çatalhöyük

- Based on archaeological evidence (Ian Hodder, 2005).
- Men and women had similar diets: evidence from bones and teeth.
- No clear gender specialization of labor: evidence from carbon deposits in ribs.
- Similar social status: based on burial sites (location & head removal).
The question

Where do these cultural differences come from?
The question

- Where do these cultural differences come from?
- Potential answers:
The question

- Where do these cultural differences come from?
- Potential answers:
  1. Who knows...these differences cannot be explained.
The question

- Where do these cultural differences come from?
- Potential answers:
  1. Who knows... these differences cannot be explained.
  2. They are historically determined through an evolutionary process.
Esther Boserup’s hypothesis: The plough
Plough agriculture
Hoe agriculture
Hoe agriculture
Examining Boserup’s hypothesis

- Question 1: Is it true that historical adoption of the plough was associated with less female participation in agriculture?
Measuring the presence of plough agriculture

- The original information, from the *Ethnographic Atlas*, categorizes 1265 ethnic groups into the following four categories:
  1. Data missing (109)
  2. Plough absent (999)
  3. Plough exists but not aboriginal (18)
  4. Aboriginal plough use prior to contact (141)

- Using this, we construct a variable that equals one if an ethnic group engaged in plough agriculture.
Measuring historical female participation in agriculture

- Gender differences in agriculture (& other activities):
  1. Males only (70)
  2. Males appreciably more (161)
  3. Equal participation (230)
  4. Females appreciably more (227)
  5. Females only (32)

- We create a variable that takes on the values 1–5, and is increasing in female participation in agriculture.
Table: Was the plough associated with differences in the gender division of labor within agriculture?

<table>
<thead>
<tr>
<th></th>
<th>Dependent variable: Traditional participation of females in agriculture, 1-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of dep. var.</td>
<td>3.04</td>
</tr>
<tr>
<td>Traditional plough agriculture</td>
<td>-0.883*** (0.225)</td>
</tr>
<tr>
<td>Ethnographic controls</td>
<td>yes</td>
</tr>
<tr>
<td>Observations</td>
<td>660</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.14</td>
</tr>
</tbody>
</table>
Distribution of historical female participation in agriculture
Examining Boserup’s hypothesis

- Question 2 (an aside): If women in plough societies worked less in agriculture, what did they do more of?
Table: Was the plough associated with differences in the gender division of labor within agriculture?

<table>
<thead>
<tr>
<th></th>
<th>Overall agriculture</th>
<th>Land clearance</th>
<th>Soil preparation</th>
<th>Planting</th>
<th>Crop tending</th>
<th>Harvesting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of dep. var.</td>
<td>2.83</td>
<td>1.45</td>
<td>2.15</td>
<td>2.86</td>
<td>3.16</td>
<td>3.23</td>
</tr>
<tr>
<td>Traditional plough agriculture</td>
<td>-1.136***</td>
<td>-0.434**</td>
<td>-1.182***</td>
<td>-1.290***</td>
<td>-1.188***</td>
<td>-0.954***</td>
</tr>
<tr>
<td>(0.240)</td>
<td>(0.197)</td>
<td>(0.320)</td>
<td>(0.306)</td>
<td>(0.351)</td>
<td>(0.271)</td>
<td></td>
</tr>
<tr>
<td>Ethnographic controls</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Observations</td>
<td>124</td>
<td>129</td>
<td>124</td>
<td>131</td>
<td>122</td>
<td>131</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.23</td>
<td>0.18</td>
<td>0.14</td>
<td>0.13</td>
<td>0.18</td>
<td>0.20</td>
</tr>
</tbody>
</table>
**Table:** Was the plough associated with differences in the gender division of labor in other activities?

<table>
<thead>
<tr>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caring for small animals</td>
<td>3.53</td>
<td>1.73</td>
<td>3.25</td>
<td>4.65</td>
<td>3.90</td>
<td>4.64</td>
<td>3.47</td>
<td>2.78</td>
</tr>
<tr>
<td>Caring for large animals</td>
<td>0.140</td>
<td>0.064</td>
<td>0.630</td>
<td>-0.019</td>
<td>-0.638</td>
<td>-0.052</td>
<td>-0.962**</td>
<td>-0.157</td>
</tr>
<tr>
<td>Milking</td>
<td>(0.517)</td>
<td>(0.254)</td>
<td>(0.697)</td>
<td>(0.108)</td>
<td>(0.403)</td>
<td>(0.205)</td>
<td>(0.378)</td>
<td>(0.274)</td>
</tr>
<tr>
<td>Cooking</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.04)</td>
<td>(0.04)</td>
</tr>
<tr>
<td>Fuel gathering</td>
<td>0.05</td>
<td>0.04</td>
<td>0.14</td>
<td>0.04</td>
<td>0.16</td>
<td>0.15</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Water fetching</td>
<td>0.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Burden carrying</td>
<td>0.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handicrafts</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Dependent variable: Traditional participation of females relative to males in the following tasks:

- Caring for small animals
- Caring for large animals
- Milking
- Cooking
- Fuel gathering
- Water fetching
- Burden carrying
- Handicrafts
- Trading

Mean of dep. var.

Traditional plough use

- Yes

Ethnographic controls

- Yes

Observations

- 88

R-squared

- 0.05
Question 3: Is ancestral plough use associated with less equal gender norms today?
Linking the past to the present
Linking the past to the present

Legend
Ethnologue languages
Plough not used
Plough used
Linking the past to the present
Linking the past to the present

Legend
Historic plough use
- 0.00-0.01
- 0.01-0.39
- 0.39-0.76
- 0.76-0.94
- 0.94-1.00
Ancestral plough use across language groups
Ancestral plough use across countries
Ancestral plough use across districts
Female labor force participation

(coef = −9.975, t = −4.33)
Female labor force participation, accounting for covariates

$$e(\text{Female labor force participation in 2000 | X})$$

$$e(\text{Traditional plough use | X})$$

(coef = -12.401, t-stat = -4.18)
Share of firms with female ownership, accounting for covariates

\( (\text{coef} = -15.241, \text{t-stat} = -3.75) \)
Share of national seats held by women, accounting for covariates

- **Traditional plough use** (X)

  - **(coef = -4.821, t-stat = -2.70)**

- **Share of political positions held by women in 2000 (Y)**

  - **(coef = 4.821, t-stat = 2.70)**
Zooming in to the micro level

Results are similar when one looks at:

1. Variation across countries within continents.
2. Variation across districts within countries.
3. Variation across ethnic groups within countries.
Examining Boserup’s hypothesis

- Question 4: Is this really about cultural norms?
To help identify a purely cultural channel, we examine the children of immigrants born and raised within the United States or Europe.

Benefit of this strategy:

- Children of immigrants face the same domestic institutions, markets, and policies (since they are all in the same country), but have different cultural backgrounds.
## Children of migrants to Europe

<table>
<thead>
<tr>
<th>Mean of dep. var.</th>
<th>Father's country</th>
<th>Mother's country</th>
<th>Parents same country</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable:</strong> &quot;When jobs are scarce…” survey response, 1-5 scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean of dep. var.</td>
<td>2.54</td>
<td>2.53</td>
<td>2.62</td>
</tr>
<tr>
<td>Traditional plough use</td>
<td>0.219**</td>
<td>0.214**</td>
<td>0.298***</td>
</tr>
<tr>
<td>(0.091)</td>
<td>(0.086)</td>
<td>(0.096)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>15,545</td>
<td>15,260</td>
<td>10,535</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.18</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Mean of dep. var.</td>
<td>0.63</td>
<td>0.63</td>
<td>0.60</td>
</tr>
<tr>
<td>Traditional plough use</td>
<td>-0.044***</td>
<td>-0.043**</td>
<td>-0.062***</td>
</tr>
<tr>
<td></td>
<td>(0.015)</td>
<td>(0.018)</td>
<td>(0.020)</td>
</tr>
<tr>
<td>Observations</td>
<td>57,138</td>
<td>55,341</td>
<td>32,776</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.23</td>
<td>0.23</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Dependent variable: Labor force participation indicator, 1994-2011

Children of migrants to the U.S.
So, what have we learned?

- Differences in cultural gender norms are explained, in part, by the history of our ancestors.
- More generally, there is accumulating evidence that current values and beliefs have been shaped by history.