From Patriarchy to Partnership:
Gender Equality and Household Finance

Luigi Guiso (EIEF) and Luana Zaccaria (EIEF)
Table 1: Typical household ‘to-do’ lists based on most popular response for each category of money chore, according to the YouGov survey:

<table>
<thead>
<tr>
<th>TO-DO LIST: MALE</th>
<th>TO-DO LIST: FEMALE</th>
<th>JOINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car insurance</td>
<td>Day-to-day spending</td>
<td>Current account</td>
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<tr>
<td>Investments</td>
<td>Short term savings</td>
<td>Long-term planning</td>
</tr>
<tr>
<td>Pensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit cards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal loans</td>
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<td></td>
</tr>
<tr>
<td>Savings accounts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mortgage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home insurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life insurance</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

YouGov Plc survey for Royal London. Total sample size was 1,323 adults who live with a partner. Fieldwork was undertaken between 5th - 6th March 2019. The survey was carried out online. The figures have been weighted and are representative of all GB adults (aged 18+). See https://www.royallondon.com/media/press-releases/press-releases-2020/january2/how-men-and-women-divide-the-household-money-chores-revealed---royal-london-research/
Financial decision making is typically men’s task.
Finance as Men’s Business

- Financial decision making is typically men’s task
- Optimal specialization (Becker (1974)) vs gender roles
Can gender norms can have material consequences on households welfare? Yes, if the decision making process systematically excludes women regardless of their abilities, the overall efficiency may be compromised

→ What are the effects of different gender norms on household finance?
Outcomes: investment/returns in financial assets
Gender Norms and Household Finance

- How to measure gender norms?

Our starting point: Household Headship in the Italian Household Survey of Income and Wealth

**Household Head**: “The person in charge or more knowledgeable of family’s economic matters”
Two Spouses Households: Education

Education Level: 1=No Education; 2=Primary School; 3=Middle School; 4=High School; 5=Graduate; 6=Post-Graduate
Two Spouses Households: Female Occupation

% Housewives over active female population over time.
Two Spouses Households: Income Ratio

![Graph showing the income ratio for two spouses households from 1990 to 2015. The income ratio increases significantly from 1990 to 2015.]
Exploring the Headship Trend

▶ What’s behind the upward trend in female headship? Education, LFP, Income..
Exploring the Headship Trend

- What’s behind the upward trend in female headship? Education, LFP, Income..

- However, these variables have different effects across different cohorts and regions..
Income Ratio and Headship

On the x-axis: wife-to-husband earnings ratio
Income Ratio and Headship

On the x-axis: wife-to-husband earnings ratio

On the y-axis: average female headship
Within-household allocation of economic decision-making power depends on both
- **Comparative advantage** \((i)\)
- **Environmental Factors** \((\text{cohort} \times \text{region})\)
Headship Allocation Rule

Within-household allocation of economic decision-making power depends on both

- **Comparative advantage** \((i)\)
- **Environmental Factors** \((\text{cohort \times region})\)

→ Model of social conformism à la Akerlof (1997):

- Households decide who (husband/wife) is the decision maker
- Trade-off: comparative advantage vs tradition
- Local social norm: older cohorts in the region
A Simple Conceptual Framework

\[ G = 1 (= 0) \] denotes **female (male) spouse**. The household assigns headship to spouse \( G \) so as to maximize

\[
(1 - \beta) U (X_i, G) - \beta (G - \bar{G}_z)^2
\]

- \( U (X_i, G) = X_{i,G} \lambda \) is the "**intrinsic**" utility that depends only on spouse specific characteristics (e.g. personal inclinations, education, professional experience)

- The second term accounts for **household’s desire to conform to a certain social norm**, \( \bar{G}_z \in [0; \frac{1}{2}] \), that prevails in community \( z \).

- \( \beta \in [0, 1] \) measures the intensity of the discomfort caused by not conforming to predominant gender roles.
A Simple Conceptual Framework

Denoting the difference in intrinsic utility generated by a female versus a male head as $\Delta X_i \lambda + \epsilon_i$ where $\epsilon_i \sim N(0, 1)$ we have

$$\Pr(G_i = 1 \mid \Delta X_i) = \Phi (\Delta X_i \lambda + C_z)$$

- **Environmental Factors $C_z$ ($z = \text{cohort} \times \text{region}$):**
  - *Inherited Social Norm* ($\bar{G}_z$)
  - *Importance of Tradition* ($\beta$)
A Simple Conceptual Framework

The model provides

1. Basis for identification of gender norms through cohort-region variation of headship:
   1.1 estimate $C_z$
   1.2 compute effects of $\hat{C}_z$ on financial investments
A Simple Conceptual Framework

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1. Basis for identification of gender norms through cohort-region variation of headship:
   1.1 estimate $C_z$
   1.2 compute effects of $\hat{C}_z$ on financial investments

2. Rationale for cultural change: changes in $\beta$ can affect current and future norms
Empirical Strategy

Empirics Step 1: Measuring Gender Norms

\[ G_{i,z} = \Delta X_i \lambda + C_z + \eta_{i,z} \]

- Controls: Husband-Wife differences in education, income, age, occupation, hours worked (+ household level controls)
- \( C_z \): Cohort \times Region FE (6 \times 20) \equiv Equality
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Empirics Step 2: Effects of Gender Norms

- We use \( \hat{C}_z \) as **explanatory variable for financial outcomes**, e.g. stock market participation
Measuring Equality

Spouses Equality

- Fixed Effect Coefficient
- Cohort

Graph showing the relationship between Fixed Effect Coefficient and Cohort.
Measuring Equality

Spouses Equality

Fixed Effect Coefficient

Cohort

Milan, 1970

Rome, 1942
Do gender norms affect financial decision making?

\[ Y_{i,z} = \alpha + X_i \gamma + \hat{C}_z \beta + \eta_{i,z} \]

- \( Y_{i,z} \): Participation, Diversification, Returns
- Estimation: Two-Stage Bootstrapping
## Effects of Equality on Financial Investments

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equality</strong></td>
<td><strong>0.126</strong>*</td>
<td><strong>0.133</strong>*</td>
<td><strong>0.126</strong>*</td>
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<tr>
<td></td>
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<td>(0.0319)</td>
<td>(0.0262)</td>
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<td>(0.00177)</td>
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<td><strong>0.0396</strong>*</td>
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<tr>
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<td>(0.00273)</td>
<td>(0.00216)</td>
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<td><strong>0.0123</strong>*</td>
<td><strong>0.00864</strong>*</td>
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<tr>
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<td><strong>Age²</strong></td>
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<td>-0.0000659***</td>
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<td>(0.00000701)</td>
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<td><strong>0.0464</strong>*</td>
<td><strong>0.0463</strong>*</td>
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<td></td>
<td>(0.000953)</td>
<td>(0.00106)</td>
<td>(0.000952)</td>
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<td>Yes</td>
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<td><strong>Observations</strong></td>
<td>63457</td>
<td>47268</td>
<td>63457</td>
</tr>
</tbody>
</table>

Dependent variable: Investment in ANY FINANCIAL ASSET (binary)

Other Controls: Hours Worked, F-to-M ratios of income, education and age, Occupation FE, Sector FE

Column 2: HH< 65

Note: coefficient on Female Head is not significant (Column 3)

- Additionally, we find that Equality increases investment in stock markets and diversification
Does Equality improve financial management?

Effects on financial returns

<table>
<thead>
<tr>
<th></th>
<th>Full Sample</th>
<th>Panel Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
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<tr>
<td>Equality</td>
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<td>0.527***</td>
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<td>(0.0899)</td>
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<tr>
<td>Region#Year FE</td>
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<td>Yes</td>
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<tr>
<td>Occupation M and F FE</td>
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<td>Yes</td>
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<tr>
<td>Sector HH FE</td>
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</table>
Effects of Equality on Financial Investments

- More equality → **More efficient financial management**
  - Better allocation rule, i.e. the “best” spouse decides
  - More collaboration (information/cost sharing) (see Ke (2020))
Alternative Explanations?

- Spousal equality may be correlated with a general increase in **social trust** and **secularization** (Guiso et al. (2004), Kumar et al. (2011))

- Women’s emancipation is clearly intertwined with **female labor markets**. Better job opportunities for women may **attenuate background risk** (Viceira (2001)) by reducing female labor income uncertainty.
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- Women’s emancipation is clearly intertwined with **female labor markets**. Better job opportunities for women may **attenuate background risk** (Viceira (2001)) by reducing female labor income uncertainty.

But then, we should observe similar effects on **all households**, including those without a couple and, according to the background risk argument, **especially on non-couple households headed by women**, e.g. single mothers

- We perform placebo tests on households that with no couples. Evidence is not consistent with these alternative explanations.
Dynamics: What Triggers the Female Headship Trend?

- Headship decision: efficiency vs tradition

An economic shock (e.g. a drop in future expected income) may increase the relative importance of efficiency over tradition ($\beta$). This may induce households to abandon "old" norms. If shock involves entire generation it can have an impact on future gender norms.
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What pushed Italian families away from patriarchy and towards partnership in the 90s?
Dynamics: What Triggers the Female Headship Trend?

What pushed Italian families away from patriarchy and towards partnership in the 90s?

▶ **Focus: the 1992 Pension Reform.**
  ▶ Reduced future pension benefits for workers.
  ▶ Shifted the burden of financial planning from the government to private households. Increased importance of efficiency in financial decision making.

▶ **Hypothesis:** households abandon social norms when the cost of complying with them exceeds the comfort of conforming.
Dynamics: What Triggers the Female Headship Trend?

The 1992 Pension Reform (see Attanasio and Brugiavini (QJE, 2003))

- Difference-in-Difference analysis: households more affected by the reform are more likely to be female-headed after the reform.
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<table>
<thead>
<tr>
<th></th>
<th>(1) F Headship</th>
<th>(2) Savings</th>
<th>(3) Hours Worked (F)</th>
<th>(4) Hours Worked (M)</th>
<th>(5) Income Ratio F-t-M</th>
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</thead>
<tbody>
<tr>
<td>Post X Treated</td>
<td>0.0210***</td>
<td>0.0574***</td>
<td>1.030*</td>
<td>0.686*</td>
<td>0.0266*</td>
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<td>0.131</td>
<td>0.227</td>
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<td>0.114</td>
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</table>
Dynamics: What Triggers the Female Headship Trend?

- Smaller pension benefits caused future consumption to depend more heavily on current individual financial decisions.
- Assigning decisional power purely on the basis of traditional gender roles can be economically costly.

⇒ The reform increased the cost of “misallocating” decisional power and reduced incentives to comply with traditional norms.

- The new norm is transmitted to subsequent generations...
Conclusions

- We exploit variation in social norms across regions and cohorts to build a measure of gender equality in the allocation of financial management tasks among spouse.

- We document that equality positively affects household participation in financial markets, equity holdings and asset diversification. It also increases the share of household income generated by financial investment.

- Evidence from the 1992 Italian pension reform shows that households tend to abandon social norms when the cost of complying with them exceeds the comfort of conforming.
Thank you!

Comments and suggestions are very much appreciated! Please contact us

- Luana.Zaccaria@eief.it or Luigi.Guiso@eief.it


