From Patriarchy to Partnership: Gender Equality and Household Finance

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Finance as Men's Business

<u>Table 1: Typical household 'to-do' lists based on most popular response for each category of money chore, according to the YouGov survey:</u>

TO-DO LIST: MALE	TO-DO LIST: FEMALE	JOINT
Car insurance	Day-to-day spending	Current account
Investments	Short term savings	Long-term planning
Pensions		
Credit cards		
Personal loans		
Savings accounts		
Mortgage		
Home insurance		
Life insurance		

Finance as Men's Business

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Finance as Men's Business

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- Optimal specialization (Becker (1974)) vs gender roles

Gender Norms and Household Finance

Can gender norms can have material consequences on households welfare? Yes, if the decision making process systematically excludes women <u>regardless of their abilities,</u> the overall efficiency may be compromised

$\rightarrow$ **What are the effects of different gender norms on household finance?**
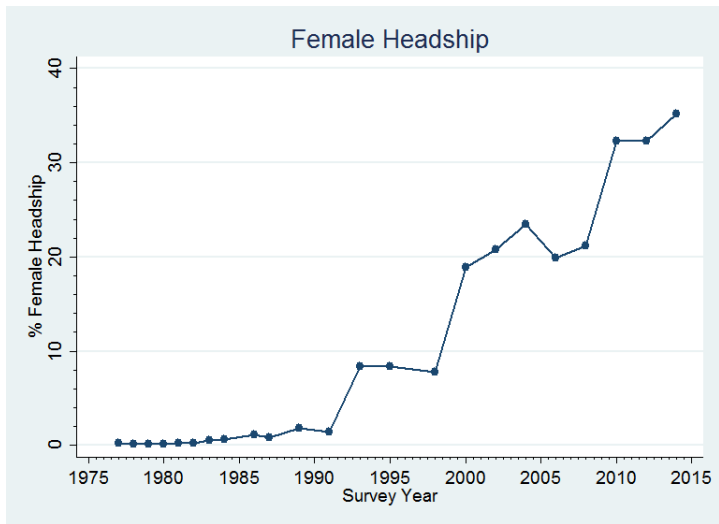**Outcomes: investment/returns in financial assets**

Gender Norms and Household Finance

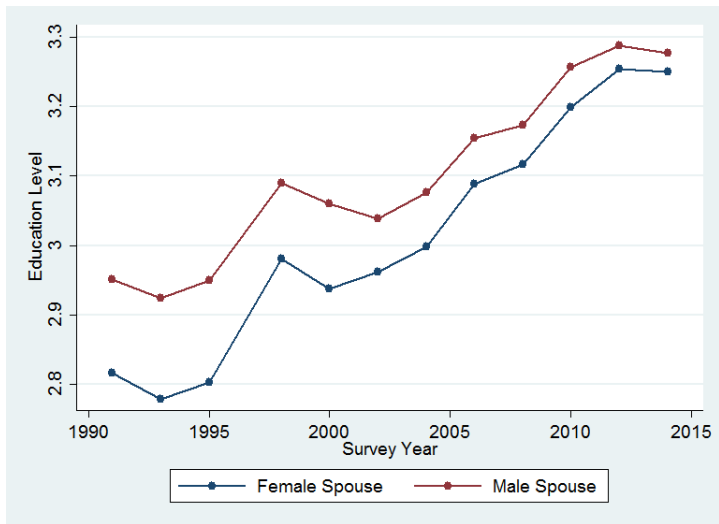- How to **measure** gender norms?

Our starting point: <u>Household Headship</u> in the Italian Household Survey of Income and Wealth

Household Head: "The person in charge or more knowledgeable of family's **economic matters**"
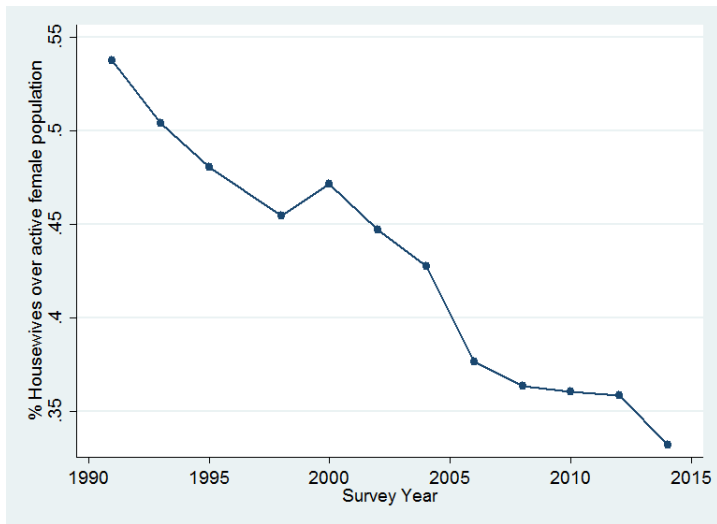
Female Headship

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

Two Spouses Households: Income Ratio
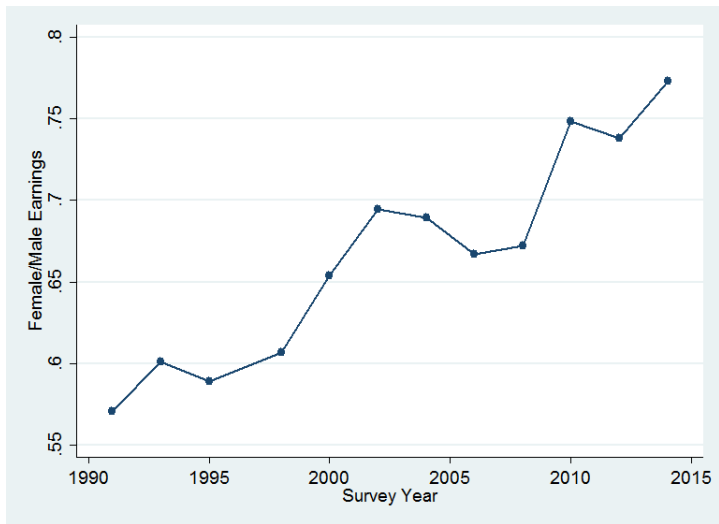
Exploring the Headship Trend

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

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- However, these variables have different effects *across different cohorts and regions..*

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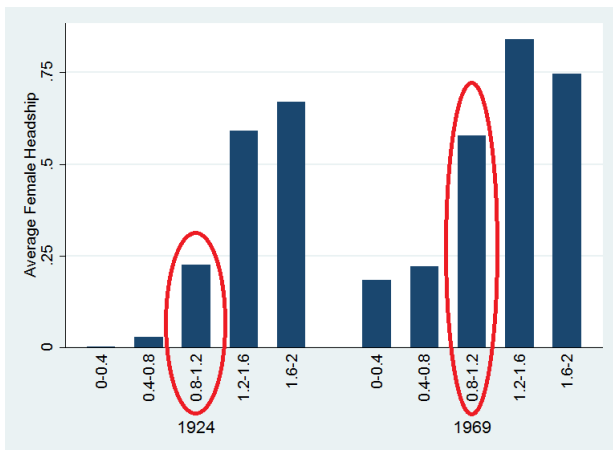
On the x-axis: wife-to-husband earnings ratio

Income Ratio and Headship
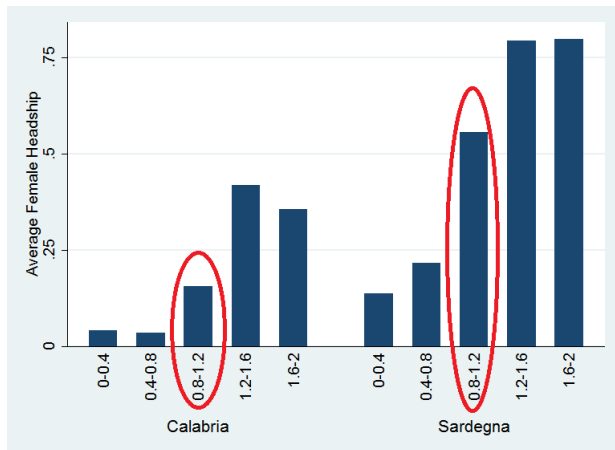
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Headship Allocation Rule

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

- **Comparative advantage** (*i*)
- **Environmental Factors** (*cohort* × *region*)

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→ 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

$$(1 - \beta) \, \boldsymbol{U} \left(\boldsymbol{X_{i,G}} \right) - \beta \left(G - \bar{\boldsymbol{G}}_{\boldsymbol{z}} \right)^2$$

- ▶ $\boldsymbol{U} \left(\boldsymbol{X_{i,G}} \right) = \boldsymbol{X_{i,G}} \lambda$ 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**, $\bar{\boldsymbol{G}}_{\boldsymbol{z}} \in \left[\boldsymbol{0}; \frac{\boldsymbol{1}}{\boldsymbol{2}} \right]$, that prevails in community z.
- ▶ $\boldsymbol{\beta} \in [0, 1]$ 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 $\mathbf{\Delta X_i \lambda} + \mathbf{\epsilon_i}$ where $\epsilon_i \backsim N(0, 1)$ we have

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

- Environmental Factors C_z ($z = cohort \times region$):
    - *Inherited Social Norm ($\bar{G}_z$)*
    - *Importance of Tradition (β)*

A Simple Conceptual Framework

The model provides

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

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2. Rationale for cultural change: changes in β 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: <u>Husband-Wife differences</u> 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

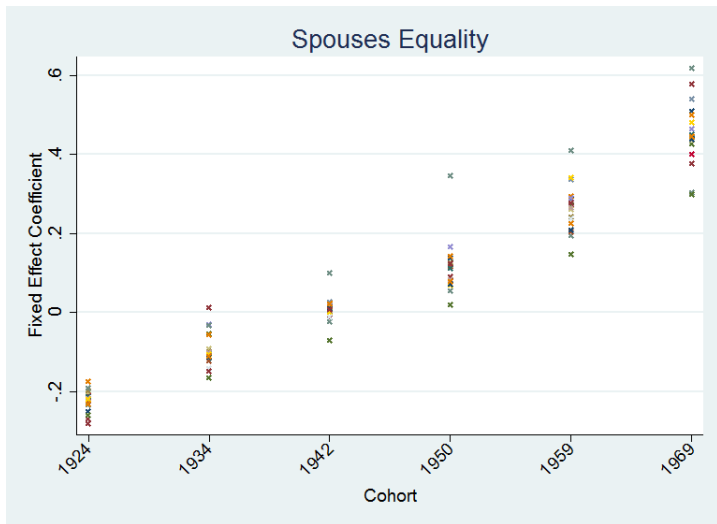- We use $\hat{C}_z$ as **explanatory variable for financial outcomes**, e.g. stock market participation

Measuring Equality

Spouses Equality

Measuring Equality

Spouses Equality

Milan, 1970

Rome, 1942

Fixed Effect Coefficient

Cohort
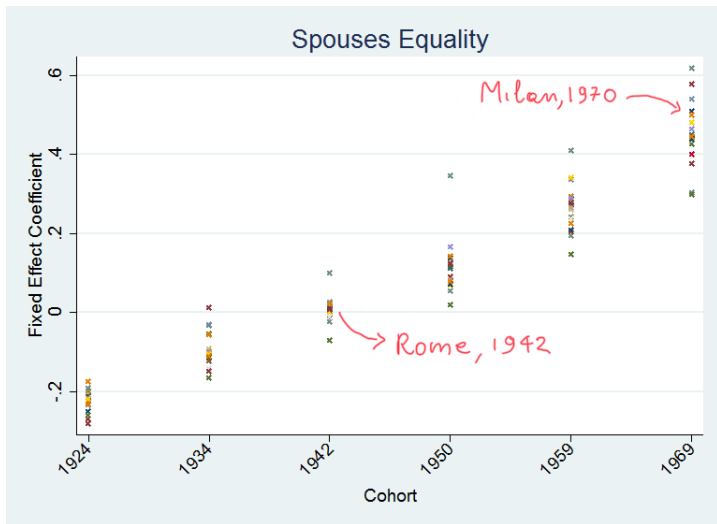
Effects of Equality on Financial Investments

Do gender norms affect financial decision making?

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

- $Y_{i,z}$: Participation, Diversification, Returns
- Estimation: Two-Stage Bootstrapping

Effects of Equality on Financial Investments

	(1)	(2)	(3)
Equality	0.126***	0.133***	0.126***
	(0.0263)	(0.0319)	(0.0262)
Adults	-0.0400***	-0.0404***	-0.0400***
	(0.00412)	(0.00488)	(0.00412)
Children	-0.0233***	-0.0222***	-0.0233***
	(0.00177)	(0.00195)	(0.00177)
Education	0.0417***	0.0396***	0.0417***
	(0.00216)	(0.00273)	(0.00216)
Age	0.00864***	0.0123***	0.00864***
	(0.000888)	(0.00177)	(0.000888)
Age^2	-0.0000658***	-0.000105***	-0.0000659***
	(0.00000701)	(0.0000200)	(0.00000701)
Wealth dec.	0.0463***	0.0464***	0.0463***
	(0.000953)	(0.00106)	(0.000952)
Income dec.	0.0315***	0.0299***	0.0315***
	(0.000876)	(0.000988)	(0.000877)
Home Owner	-0.141***	-0.138***	-0.141***
	(0.00474)	(0.00532)	(0.00474)
Female Head			-0.00225
			(0.00559)
Other Controls	Yes	Yes	Yes
Region#Year FE	Yes	Yes	Yes
adj. R^2	0.275	0.271	0.275
Observations	63457	47268	63457

Bootstrapped standard errors in parentheses

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

Effects of Equality on Financial Investments

Does Equality improve financial management?
Effects on **financial returns**

	Full Sample		Panel Sample	
	(1) Financial Income/ Financial Assets	(2) Net Capital Income/ Total Assets	(3) Financial Income/ Financial Assets	(4) Net Capital Income/ Total Assets
Equality	0.319***	0.527***	0.706***	0.680**
	(0.0859)	(0.0899)	(0.148)	(0.242)
Other Controls	Yes	Yes	Yes	Yes
Region#Year FE	Yes	Yes	Yes	Yes
Occupation M and F FE	Yes	Yes	Yes	Yes
Sector HH FE	Yes	Yes	Yes	Yes
adj. R^2	0.716	0.308	0.665	0.291
Observations	54775	62604	10832	11560

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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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?

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- $\rightarrow$An economic shock (e.g. a drop in future expected income) may increase the **relative importance of efficiency over tradition** (β). This may induce households to abandon "old" norms
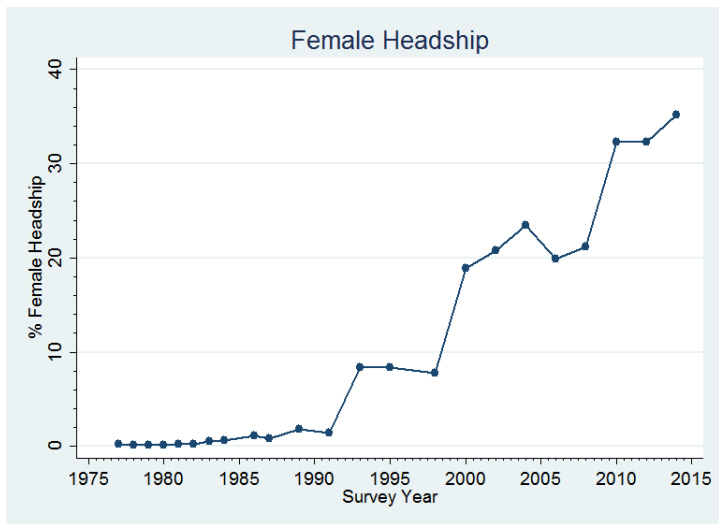
Dynamics: What Triggers the Female Headship Trend?

- ▶ 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** (β). 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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Female Headship

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

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- **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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	(1) F Headship	(2) Savings	(3) Hours Worked (F)	(4) Hours Worked (M)	(5) Income Ratio F-t-M
Post X Treated	**0.0210*****	0.0574**	1.030*	0.686*	0.0266*
	(0.00686)	(0.0253)	(0.534)	(0.355)	(0.0136)
Post	0.0146***	-0.0950***	-0.731**	0.151	-0.00539
	(0.00417)	(0.0145)	(0.355)	(0.237)	(0.00856)
Treated	-0.0312***	0.0609***	0.457	-2.651***	-0.00388
	(0.00492)	(0.0167)	(0.458)	(0.285)	(0.0111)
Other Controls	Yes	Yes	Yes	Yes	Yes
Cohort (HH Head) FE	Yes	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
N	15461	15393	15331	15413	15375
adj. R^2	0.098	0.131	0.227	0.654	0.114

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!
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