Who Wears the Pants? Gender Identity Norms and Intra-Household Financial Decision Making

Da Ke

UNIVERSITY OF
SOUTH CAROLINA

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A Letter from the 19th Century

"**A difference with your husband ought to be considered as the greatest calamity** – as one that is to be most studiously guarded against; it is a demon which must never be permitted to enter a habitation where all should be peace, unimpaired confidence, and heartfelt affection."

A President of the College of William and Mary

Southern Literary Messenger 1(2): 187-188

December 1834

USA Today

- Fernández (2013, AER): married women's labor force participation has surged from 2% in 1880 to 73% in 2000.

- The American Time Use Survey (2003−2015): working wives spend an average of 26 hrs/wk on housework and child care, whereas their husbands spend only 13 hrs/wk.

- Bertrand, Kamenica, and Pan (2015, QJE): the social norm "a man should earn more than his wife" plays important roles in the distribution of relative income within households, the patterns of marriage and divorce, the female labor supply, and the division of home production between spouses.

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My Research Question

- Do gender norms shape household financial decisions?

- The existing literature: the traditional "unitary" approach.

- Household financial decisions are often made **jointly** by spouses who may frequently disagree with each other.

- An obvious challenge: the financial decision-making process within the household is almost by definition **unobservable**.

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My Approach

- Without gender norms: **it should not matter** whether the husband or the wife has more knowledge that is relevant to their financial decisions.

- With strong gender norms: the wife's influence may be constrained even if she is more financially sophisticated.

- Testing ground: household stock market participation (SMP).

- Data: two major U.S. household surveys.

- Financial knowledge: a career in finance.

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# Career in Finance and Household SMP
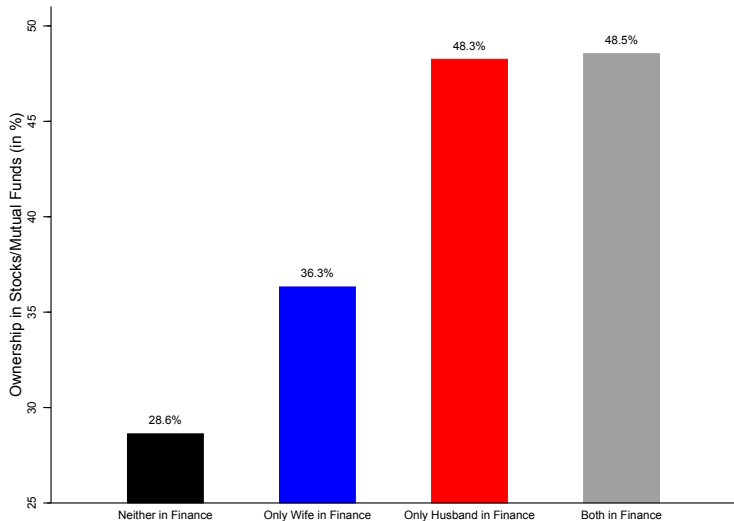
Roadmap

1. The baseline effect documentation.

2. Evidence in favor of the gender identity norm hypothesis.

3. A controlled experiment that reveals potential mechanisms.

4. An aggregate perspective.

Data

- Primary data sources:

  1. The Annual Social and Economic Supplement (ASEC) of the Current Population Survey (CPS) for 1988 through 2017.

  2. The 5% sample of the census (1980, 1990, and 2000) pooled with the 2006−2015 American Community Survey (ACS).

- Variable of interest:

  1. The ASEC sample: A dummy equal to one if the household owns any shares of stock or any mutual fund shares.

  2. The Census sample: A dummy equal to one if the household reports investment losses or investment income $>$ \$500, following Cole, Paulson, and Shastry (2014, RFS).

Sample Construction
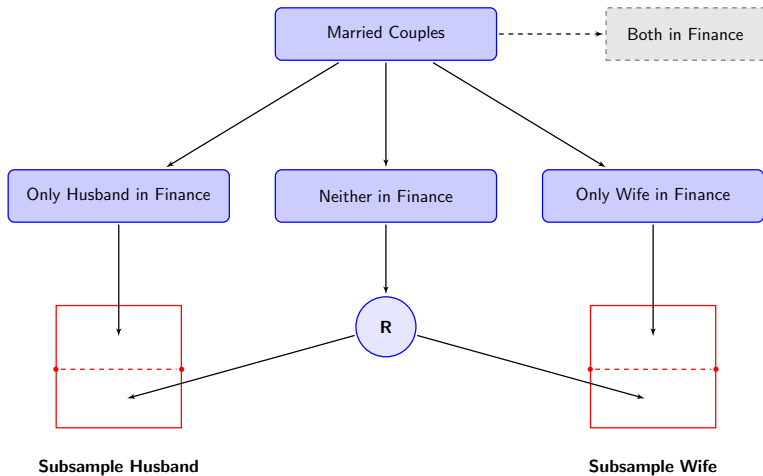
Empirical Methodology

- I run LPM (s.e. clustered at the state level)

$$y_i = \alpha + \beta_1 \text{Husband}_i + \beta_2 \text{Finance}_i$$
$$+ \boxed{\beta_3 \text{Husband}_i \times \text{Finance}_i} + \gamma' \mathbf{X}_i + \varepsilon_i,$$

- y_i: whether household i participates in the stock market.

- Husband: whether the household is in Subsample Husband.

- Finance: whether anyone in the household works in finance.

- $\mathbf{X}$: age group, cohort of birth, race, education of both spouses, family income, relative income, home ownership, number of children, occupation, industry affiliation of the spouse, and state-by-year fixed effects.

Baseline Regressions

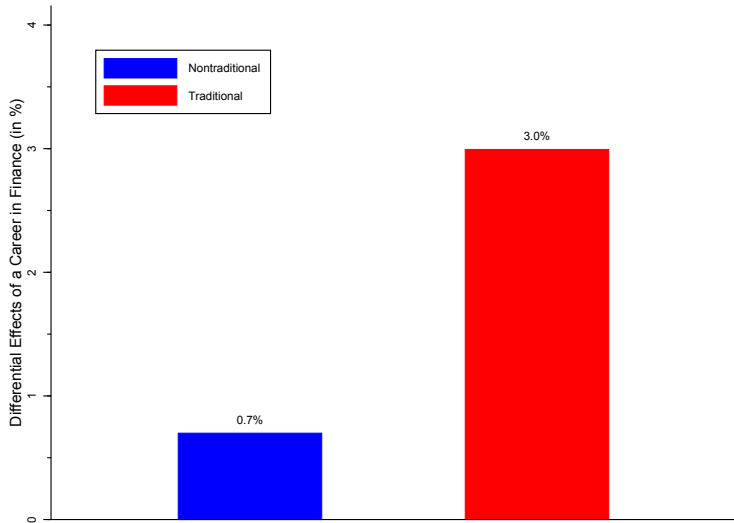|	ASEC	Census
	(1)	(2)
Finance × Husband	0.025***	0.016***
	(0.006)	(0.001)
Finance	0.029***	0.006***
	(0.003)	(0.001)
Husband	0.016***	0.008***
	(0.001)	(0.001)
Controls	Yes	Yes
Observations	543,173	5,591,610
Adj. R^2	0.209	0.166

- 35% of the impact of family income on household SMP.

Additional Analysis

- Is risk preference the driving force?

  ▶ Women in finance are more risk seeking in placing bets.

- Omitted variable (e.g., trust)? Measurement error (e.g., retirement-account assets)?

  ▶ A placebo analysis on single individuals.

  ▶ No differential effects of a career in finance observed.

#1: Influence of Working Mother

- Cavalli-Sforza and Feldman (1981, Princeton University Press): two types of intergenerational transmission.

  - ▶ Vertical: Fernández, Fogli, and Olivetti (2004, QJE).

  - ▶ Oblique: Olivetti, Patacchini, and Zenou (2016, WP).

- ▶ Employment ratio: # of working to nonworking women aged $30-35$ in the birth state of the husband when he was born.

  - ▶ High ratio $\Rightarrow$ more likely that the husband was brought up by a working mother & his teenage friends had a working mother $\Rightarrow$ less traditional gender role attitude.
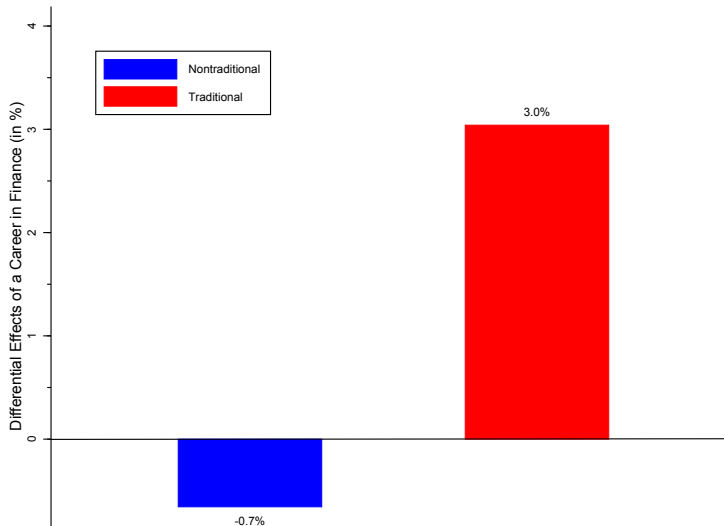
#2: Origins of Gender Roles

- Alesina, Giuliano, and Nunn (2013, QJE): descendants of societies that traditionally practiced plough cultivation (e.g., Egypt and India) have less equal gender role attitudes today.

#3: Southern Husband
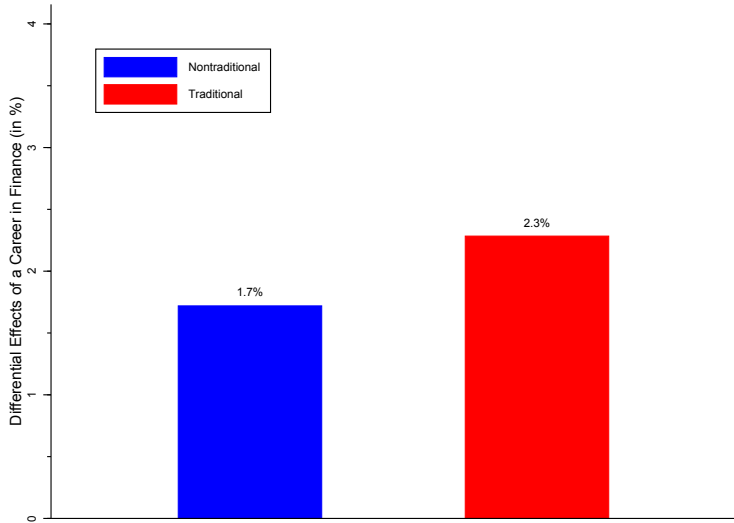
Mechanisms

- Gender norms do shape household financial decisions. How?

- Economics literature on group decision making:
    1. Information contribution stage.
    2. Information aggregation stage.

- Consider gender identity norms as a friction. At which stage?

- The specific hypotheses:
    1. Female identity hinders idea contribution by the wife.
    2. Male identity causes men to listen to their wife less.

Female Identity Hypothesis

1. Women who could have made optimal financial decisions.

2. Randomly prime the salience of female identity among them.

3. Create a scenario in which their husband is not going to make the optimal financial decision.

4. Ask them what they would do if they have the final say.

5. Check whether those primed with female identity are less likely to contradict their husband.

Male Identity Hypothesis

1. Men who would not make optimal financial decisions.

2. Randomly prime the salience of male identity among them.

3. Create a scenario in which their wife suggests the optimal financial decision with the correct reasoning.

4. Ask them what they would do after knowing their wife's opinion.

5. Check whether those primed with male identity are less likely to follow the advice.

Employee Stock Purchase Plan (ESPP)

- Nonparticipation could be justified by large participation costs.

- Need something unambiguous & closely related to SMP.

- ESPPs are company-run programs that allow participating employees to buy company stock at a discount from the market price and resell it immediately for a sure profit.

- Babenko and Sen (2014, RFS): although an average employee stands to gain \$3,079 annually, only 30% of individuals take advantage of this risk-free opportunity.

Summary of the Controlled Experiment

- Platform: Amazon Mechanical's Turk.

  - ▶ Recruit 978 married U.S. residents aged between 24 and 64.
  - ▶ 15-min, $0.5 for participation and 20% chance of a $1 bonus.

- Identification: shock the salience of gender identity.

  - ▶ Prime gender identity via a writing task (detailed next).

- Testing: subsequent decision making (primed vs. control).

  - ▶ Who would have made the optimal decision: contribute?
  - ▶ Who would not: open to advice?

- Result: friction at both stages.

Priming

- Priming is a well-established method in psychology and refers to mental activation of the primed concepts.

- Read a short text, then recall and describe an experience in line with the text.
  - ▶ Primed: masculine and feminine characteristics.
  - ▶ Control: gender-neutral text about default American lifestyle.

- How effective is this priming technique?

Text in the Control Condition

The default American lifestyle has three core elements:

1) **Displacing human energy with mechanical energy**......

2) **Displacing household food production with industrial food production**......

3) **Displacing health maintenance with medical dependency**......

Each of these represents a long and relentless trend with little sign of abating......

Sample Essay (Control Condition)

Recall a time when you actively <u>resisted</u> the default American lifestyle as presented in the text. Describe the situation, your thoughts and feelings in a short essay (5 to 10 sentences).

I used to actively walk to the store every day instead of driving. This saved gas used driving to get groceries and it allowed me to get physical exercise. Also my husband and I have made efforts to grow some of our own food. This hasn't been very successful yet but hopefully it will improve in the future. Additionally, we resist taking any medications and pharmaceuticals. We think that these drugs are unsafe and often unnecessary. Instead we strive to eat healthily and get a lot of rest and live life without much stress. We feel like these measures help better than taking a bunch of drugs.

Text in the Primed Condition

There are two broad classes of content universally present in the perception of the self, other persons, and social groups......

Agentic characteristics, which are ascribed more strongly to men, describe primarily an assertive, controlling, and confident tendency – for example, aggressive, ambitious, dominant, forceful, independent, self-sufficient, self-confident, and prone to act as a leader.

In contrast, communal characteristics, which are ascribed more strongly to women, describe primarily a concern with the welfare of other people – for example, affectionate, helpful, kind, sympathetic, interpersonally sensitive, nurturant, and gentle.

Sample Essay (Men Primed)

Recall a situation when you behaved in line with "agentic" as presented in the text <u>in the presence of your wife</u>. Describe the situation, your thoughts and feelings in a short essay (5 to 10 sentences).

In a recent minor bicycle accident involving my daughter, I displayed my agentic character. While my wife was worried about my daughter, crying and not sure what to do, I gave her specific tasks to assert my control of the situation. I had her retrieve bandages and antiseptic ointment. I had her hand the items to me, and had her retrieve other items. This allowed me to take control of the situation, and provide the best possible care for my daughter.

Sample Essay (Women Primed)

Recall a situation when you behaved in line with "communal" as presented in the text in the presence of your husband. Describe the situation, your thoughts and feelings in a short essay (5 to 10 sentences).

We were on a hiking trip. The trail was not clearly marked and the map wasn't in a lot of detail. My husband thought that we should go on way to the left and I thought that we should keep going straight. He was certain his way was right so I said ok let's do it. After about a mile it was clear that we were on a path and not the designated trail and needed to go back to where we were. I was supportive of my husband's decision even though I didn't think that it was right.

Experimental Design
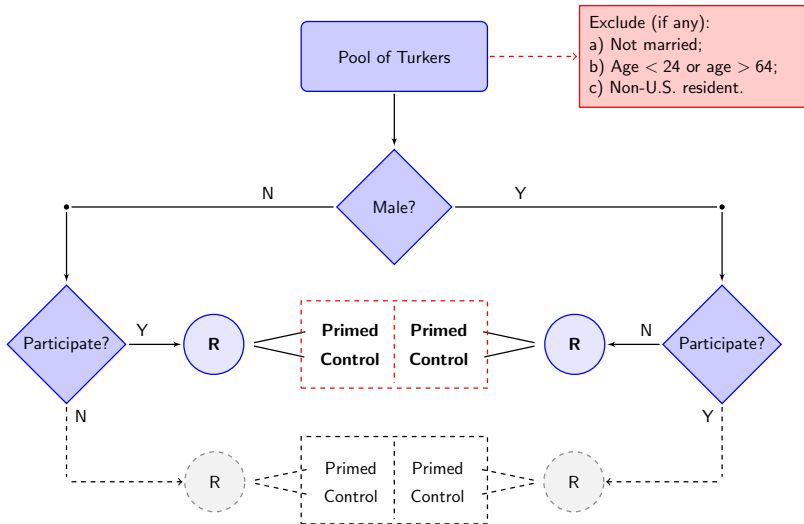
Male Subject Characteristics

	Participants (N = 229)		Nonparticipants (N = 74)	
	Mean	SD	Mean	SD
Age	38.65	9.65	36.22	8.38
White	88.65%	31.79%	78.38%	41.45%
College graduate	73.36%	44.30%	66.22%	47.62%
Full-time employed	78.17%	41.40%	77.03%	42.35%
Log family income	10.55	0.57	10.54	0.57
Having child	69.00%	46.35%	59.46%	49.43%
Trading experience	79.48%	40.48%	70.27%	46.02%
Financial literacy	58.08%	49.45%	52.70%	50.27%
Risk aversion	48.47%	50.09%	66.22%	47.62%
Trust	44.54%	49.81%	43.24%	49.88%

Female Subject Characteristics

| | Participants (N = 492) | | Nonparticipants (N = 183) | |
	Mean	SD	Mean	SD
Age	39.35	10.00	37.50	10.35
White	84.55%	36.18%	84.70%	36.10%
College graduate	67.48%	46.89%	65.57%	47.64%
Full-time employed	45.12%	49.81%	32.79%	47.07%
Log family income	10.49	0.67	10.38	0.62
Having child	73.58%	44.14%	68.85%	46.44%
Trading experience	69.11%	46.25%	44.26%	49.81%
Financial literacy	41.06%	49.24%	34.43%	47.64%
Risk aversion	64.23%	47.98%	85.79%	35.01%
Trust	41.67%	49.35%	36.07%	48.15%

Causal Impact of Gender Identity

(A) Information Contribution
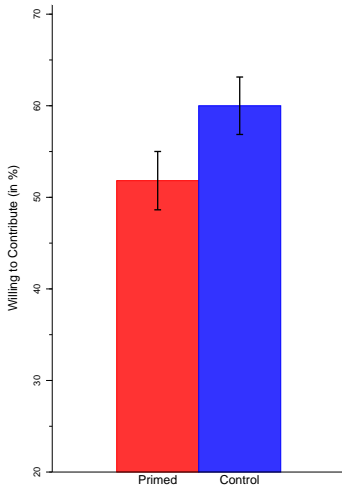
(B) Information Aggregation
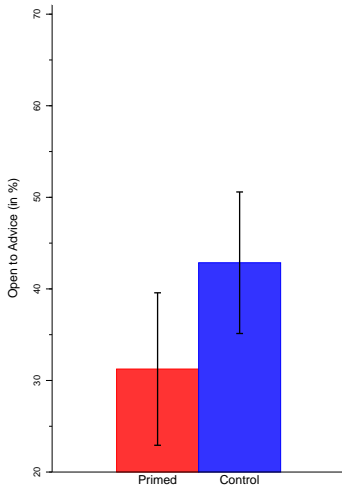
Female Identity and Idea Contribution

|	(1)	(2)	(3)
Gender identity	−0.082*	−0.081*	−0.111**
	(0.045)	(0.045)	(0.046)
Age		0.004*	0.003
		(0.002)	(0.002)
White		−0.070	−0.029
		(0.062)	(0.065)
College graduate		0.101**	0.064
		(0.051)	(0.052)
Full-time employed		0.142***	0.112**
		(0.046)	(0.047)
Log family income		−0.005	−0.032
		(0.037)	(0.038)
Having child		0.066	0.040
		(0.054)	(0.054)
Trading experience			0.205***
			(0.053)
Financial literacy			0.084*
			(0.049)
Risk aversion			−0.127**
			(0.050)
Trust			−0.025
			(0.049)
Observations	492	492	492
Pseudo R^2	0.005	0.033	0.083

Male Identity and Openness to Advice

	(1)	(2)	(3)
Gender identity	−0.116	−0.289**	−0.324**
	(0.113)	(0.114)	(0.146)
Age		−0.009	−0.010
		(0.008)	(0.009)
White		0.155	0.163
		(0.137)	(0.120)
College graduate		0.274**	0.315***
		(0.111)	(0.113)
Full-time employed		0.225*	0.356***
		(0.121)	(0.100)
Log family income		−0.162	−0.033
		(0.108)	(0.112)
Having child		−0.209	−0.295*
		(0.128)	(0.171)
Trading experience			−0.437**
			(0.171)
Financial literacy			0.161
			(0.165)
Risk aversion			0.231*
			(0.124)
Trust			−0.145
			(0.132)
Observations	74	74	74
Pseudo R^2	0.011	0.136	0.284

Cross-Country Analysis
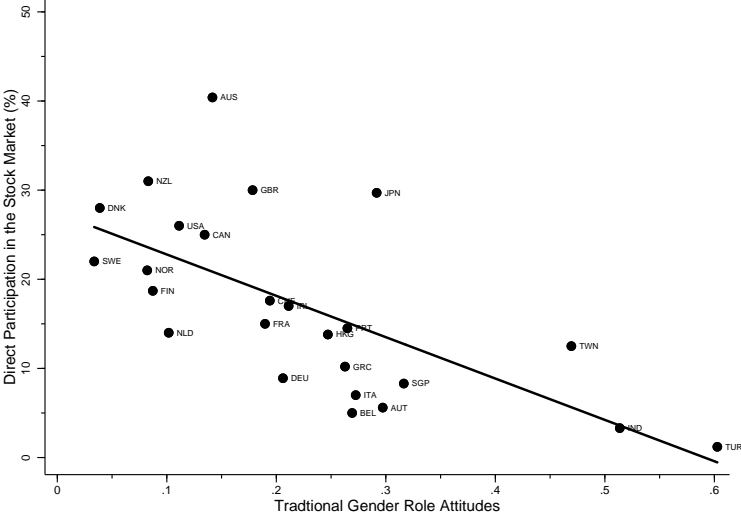
Conclusion

- This paper provides both empirical and experimental evidence that gender identity norms constrain women's influence over intra-household financial decision making.

- As financial decisions become more complex and as women become more educated, gender identity norms can have real consequences for household financial well-being.