

# Cultural Norms and the Gendered Impact of Entrepreneurship Policy in Mexico

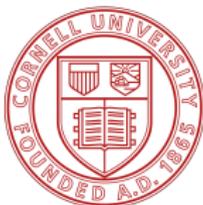
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<sup>1</sup>Cornell University

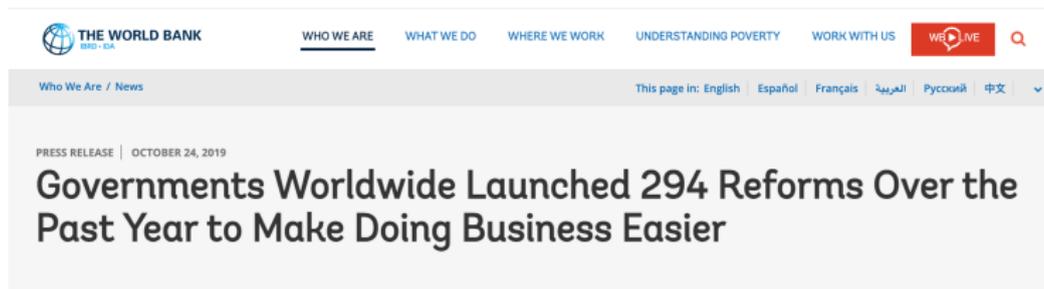
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January 14, 2025



- Policy changes that lower entry barriers often increase entrepreneurship (Eesley, 2016; Eberhart, 2023)

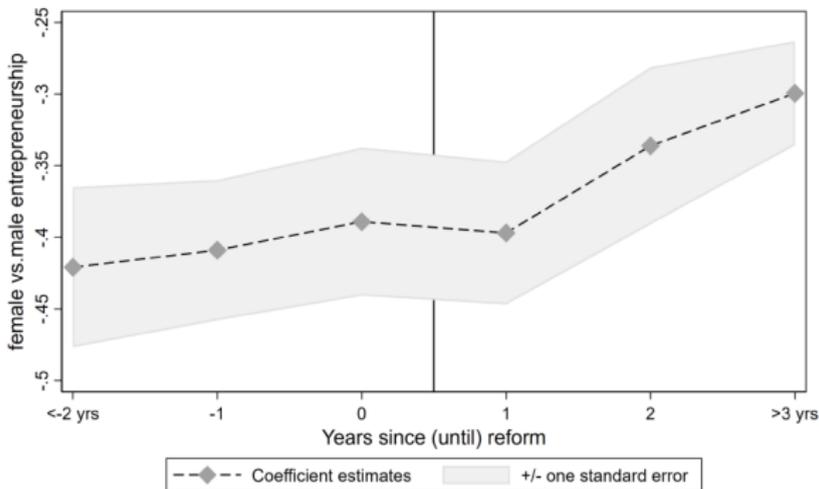


The screenshot shows the top portion of a World Bank website page. At the top left is the World Bank logo with the text 'THE WORLD BANK' and 'INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT' below it. To the right of the logo is a navigation menu with links: 'WHO WE ARE', 'WHAT WE DO', 'WHERE WE WORK', 'UNDERSTANDING POVERTY', and 'WORK WITH US'. Further right is a red 'WE LIVE' button with a play icon and a search icon. Below the navigation is a grey bar with the text 'Who We Are / News' on the left and a language selection menu on the right that says 'This page in: English | Español | Français | العربية | Русский | 中文'. The main content area has a light grey background and contains the text 'PRESS RELEASE | OCTOBER 24, 2019' followed by the headline 'Governments Worldwide Launched 294 Reforms Over the Past Year to Make Doing Business Easier' in a large, bold, black font.

# Motivation

- Government often lower entry barriers to try to increase entrepreneurship (Eesley, 2016; Eberhart, 2023)
- Previous research shows strong evidence that underrepresented groups, like women, often benefit more from these policies (Castellaneta, Conti and Kacperczyk, 2020)

**Figure 3. Effect on aggregate female–male entrepreneurship gap**



# Motivation

- Policy changes that lower entry barriers often increase entrepreneurship (Eesley, 2016; Eberhart, 2023)
- Previous research argues that underrepresented groups benefit more from these policies (Castellaneta, Conti and Kacperczyk, 2020)
- However, policy effects vary significantly across institutional contexts



# Sistema de Apertura Rápida de Empresas (SARE)



How would lowering entry barriers impact the gender gap in entrepreneurship in Mexico?

# The policy increased the number of new businesses founded by men but not women

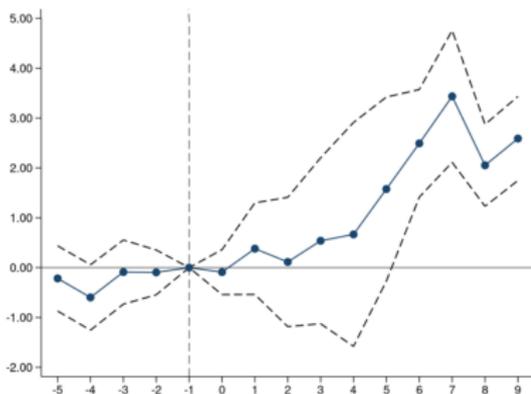


Figure: (A) Men

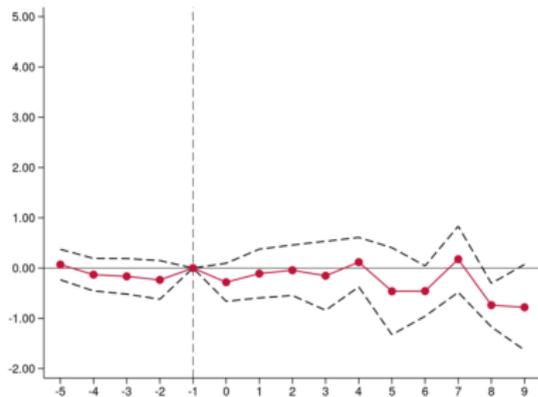
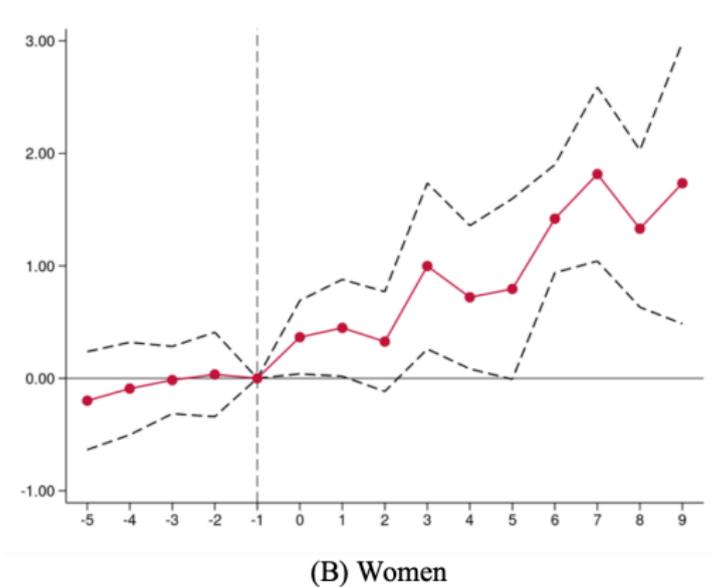


Figure: (B) Women

**Note:** This figure illustrates dynamic difference in differences with the Callaway and Sant'anna estimator. Each point represents the estimates for each period relative to the the quarter preceding a municipality's implementation of the SARE policy.

Women did become engaged in alternative roles within new ventures, such as unpaid work

**Outcome Variable:** unpaid work in a family business.



# This paper..

- Explores why policies designed to boost entrepreneurship sometimes can have such different effects on men than women

# Female Entrepreneurship and the Patriarchy Logic

- **Patriarchy Logic:** norms, values, beliefs, and practices that prescribe gender-appropriate roles and behaviors for men and women in society (Bendroth, 1999).
  - an informal institution that discourages female-led entrepreneurship and encourages other roles such as unpaid work.
- **Cognitive Mechanisms:** gender stereotypes and biases (Thebaud, 2010).
- **Normative Mechanisms:** gender norms and roles (Zhao and Wry, 2016)

# How Patriarchy and Policy Interact to Shape Female Entrepreneurship

- **Opportunity Recognition:**
  - Impact how policy changes are perceived as opportunities.
  - Gender stereotypes and norms skew perceptions of who is capable for what roles within a firm and what is appropriate.
  - **Example:** Women should be joiners not founders.
- **Opportunity Exploitation:**
  - Stereotypes and biases raise costs for women (greater external bias and discrimination).
  - The social cost of deviating from gender norms.
- **Hypothesis:**
  - In contexts where the patriarchy logic is strong, gender disparities in entrepreneurship will increase after entry barriers for entrepreneurs are lowered, as more men than women register new ventures.

# Empirical Context: Simplifying Business Registration in Mexico

- **SARE Policy**
  - Reduced registration time, office visits and procedures
- **Scope of Policy**
  - Affected **55%** of all sectors and **80%** of active companies.
  - Rolled out overtime across municipalities
- **Empirical Approach**
  - Staggered Diff in Diff
  - Identifying assumption:
    - Timing of the roll out of SARE was **exogenous** to entrepreneurship and its gender gap.

## Data Source

- Utilizes the National Survey of Employment (ENE) individual level survey data.
- Representative panel survey, similar to the CPS, tracking individuals for 5 quarters.

## Timeframe

- Data spans from 2000 to the end of 2004, before the survey was discontinued.

## Sample

- Focuses on municipalities that adopted the policy within our study period for comparability.
- 1,636,250 individual by quarter observations.

# Difference-in-Difference (1)

- **Outcome Variable:** registered ownership in industries where the registration requirements were changed by sare.
- **Treatment Variable:** Timing of the adoption of SARE

$$y_{imq} = \alpha + \pi \text{SARE}_{mq} + \delta \text{CV}_{imq} + \varepsilon_{imq}$$

## Triple Differences (2)

$$y_{imq} = \alpha + \beta \text{Female}_{imq} + \pi \text{SARE}_{mq} + \gamma (\text{Female}_{imq} \times \text{SARE}_{mq}) + \delta \text{CV}_{imq} + \varepsilon_{imq}$$

# The policy increased registration for men but not for women

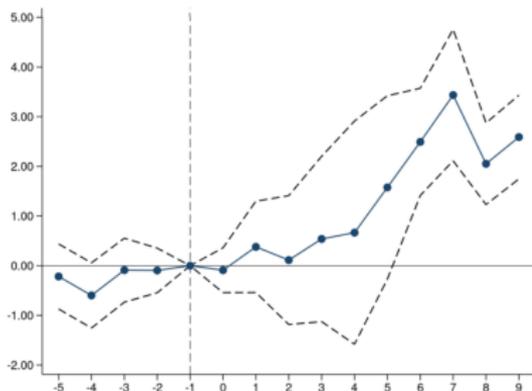


Figure: (A) Men

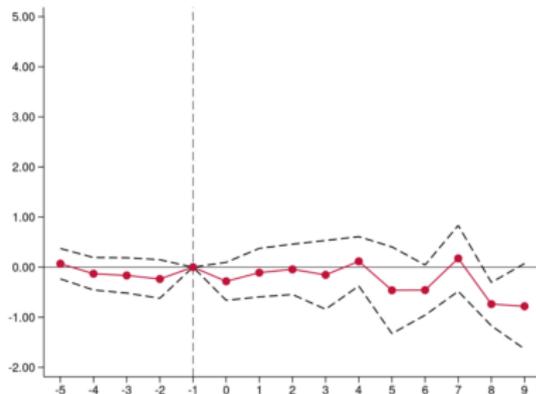
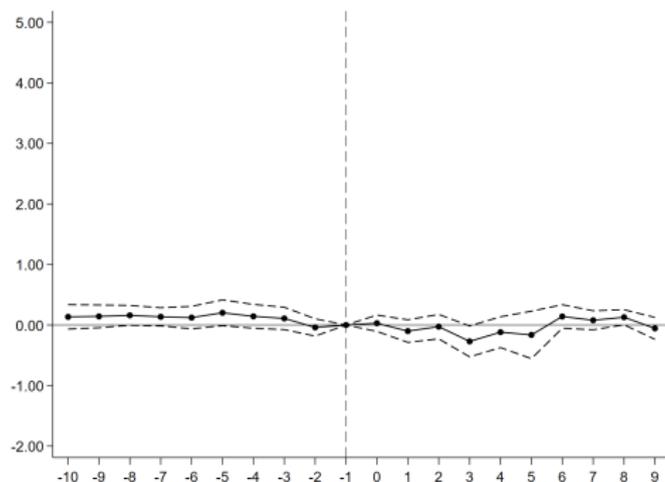


Figure: (B) Women

**Note:** This figure illustrates dynamic difference in differences with the Callaway and Sant'anna estimator. Each point represents the estimates for each period relative to the the quarter preceding a municipality's implementation of the SARE policy.

# No changes in industries NOT associated with Reform

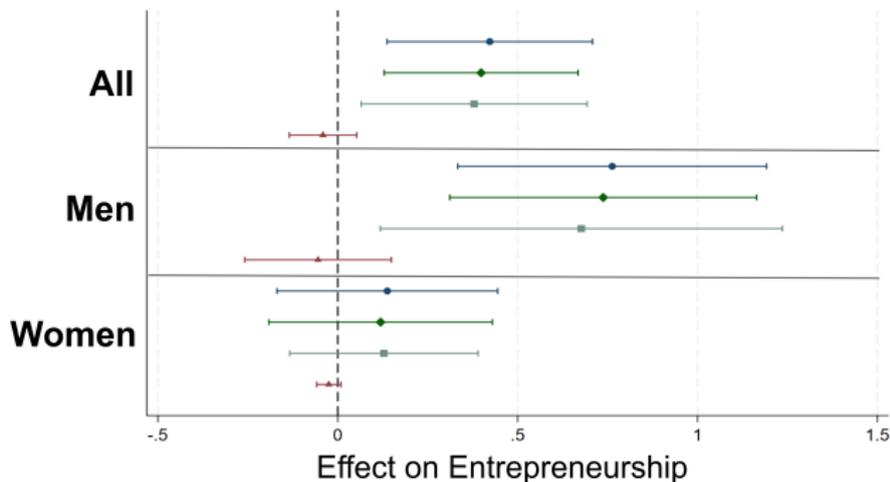


**Figure:** (C) Industries NOT Associated with Reform

**Note:** This figure illustrates dynamic difference in differences with the Callaway and Sant'anna estimator. Each point represents the estimates for each period relative to the the quarter preceding a municipality's implementation of the SARE policy.

# SARE Policy -> more entrepreneurship (for men)

$$y_{imq} = \alpha + \pi \text{SARE}_{mq} + \delta \text{CV}_{imq} + \varepsilon_{imq}$$



- Quarter and Muni FE
- ◆ W/ Individual Controls
- W/ Muni Controls
- ▲ Placebo Industries

# Validity and Robustness

- **Parallel trends**
  - Dynamic differences in differences models (and DDD) suggest no discernible pre-trends prior to treatment.
- **Exogeneity of policy**
  - Important municipality characteristics (including outcome vars) are not predictive of the timing of adoption.
- **Heterogeneous treatment effects and bias due to TWFE**
  - Replicated the analysis with Borusyak et al., (2021), Sun and Abraham, (2021), and Callaway and Sant'Anna, (2021) estimators.
  - Replicated analysis using each wave as a non staggered DD.
- **Mixed Models**
  - Results are consistent with main models when using mixed models with a household random effect.
- **Simultaneous shocks**
  - Results are consistent while adding controls for simultaneous policy changes and events.
- **No significant changes for placebo outcome**
  - Rates of entrepreneurship in industries unchanged by the policy remain constant.

# Is it really because of patriarchy?

- **Geographic Variation in the Intensity of the Institutional Logic of Patriarchy:**
  - The increase in the gender gap increase should be most pronounced in areas with higher patriarchy levels.
    - Use established measures at the municipality level.

## NOT ALL INEQUALITY IS EQUAL: DECONSTRUCTING THE SOCIETAL LOGIC OF PATRIARCHY TO UNDERSTAND MICROFINANCE LENDING TO WOMEN

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University of Pennsylvania

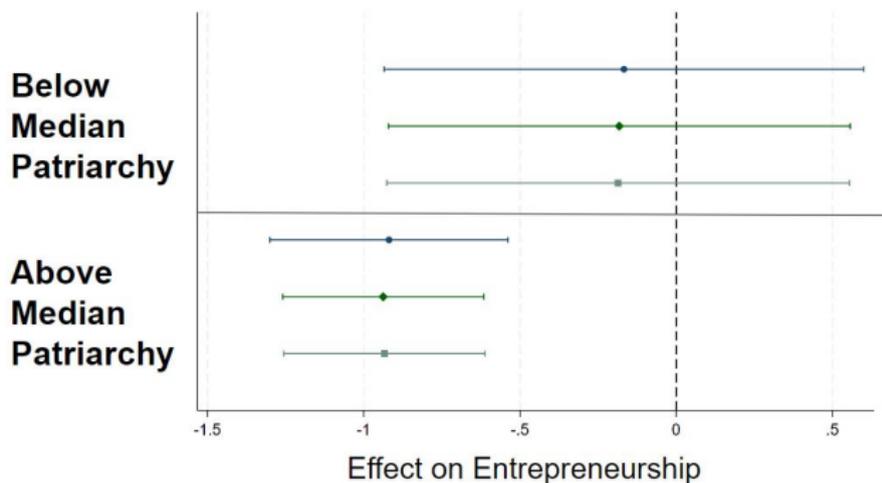
Many social problems reflect sets of beliefs and practices—or “institutional logics”—that operate at the societal level and rationalize the marginalization of certain categories of people. Studies have examined the consequences this has for individuals, but have largely overlooked how organizations that address such issues are affected. To understand this, we apply and extend the institutional logics perspective. Our approach recognizes that practices within different sectors of a society may be shaped by different organizing principles. However, we suggest practices are also likely to reflect—to varying degrees—broader societal logics. Based on this, we argue that societal logics may work through multiple influence channels and affect organizations in non-obvious ways, depending on how, where, and with what intensity they manifest in society. We test our theory by analyzing how patriarchy, as a societal-level logic, affects outreach to women by microfinance organizations in 115 nations. We find that patriarchy supports practices in the family, religion, professions, and state that suppress this outreach. Yet, in some nations, patriarchy is differently evident across sectors. The resulting contrasts draw attention to women’s issues, motivate redress efforts, and catalyze resource flows to microfinance organizations. The greatest outreach to women is in these nations.

# Exploring geographic heterogeneity

- rates of fertility
- male to female labor market participation
- female-headed households (inverse)
- legislation for younger female marriage
- mandates for women to wait to remarry after divorce
- laws on marital rape
- laws granting judges the authority to remove abusers from the household
- domestic violence as grounds for divorce, and laws on abortion and sexual harassment.

# Impact on Gender Gap is stronger in areas with higher levels of patriarchy

$$y_{imq} = \alpha + \beta \text{Female}_{imq} + \pi \text{SARE}_{mq} + \gamma (\text{Female}_{imq} \times \text{SARE}_{mq}) + \delta \text{CV}_{imq} + \varepsilon_{imq}$$



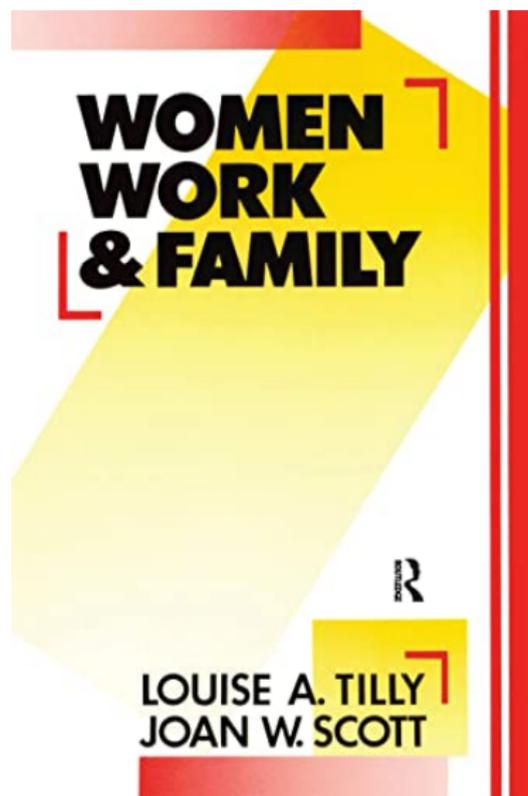
- Quarter and Muni FE
- W/ Muni Controls

◆ W/ Individual Controls

# Is it really because of patriarchy?

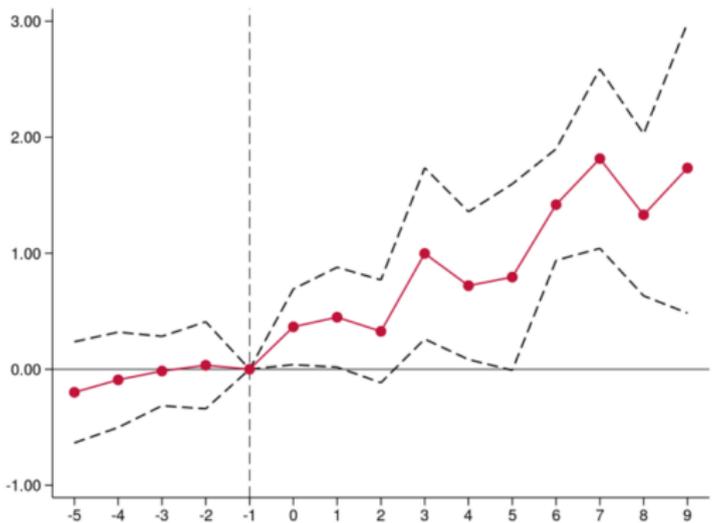
- **Geographic Variation in the Intensity of the Institutional Logic of Patriarchy:**
  - The increase in the gender gap increase should be most pronounced in areas with higher patriarchy levels.
    - Use established measures at the municipality level.
- **Unpaid Work In Family Businesses:**
  - If the increase in the gender gap in entrepreneurship after entry barrier reduction was due to gender norms and beliefs then...
    - Women may be more likely to enter unpaid work in a family business following the reform.

# Examining the mechanism: Unpaid Work



# The policy increased unpaid work in family businesses for women

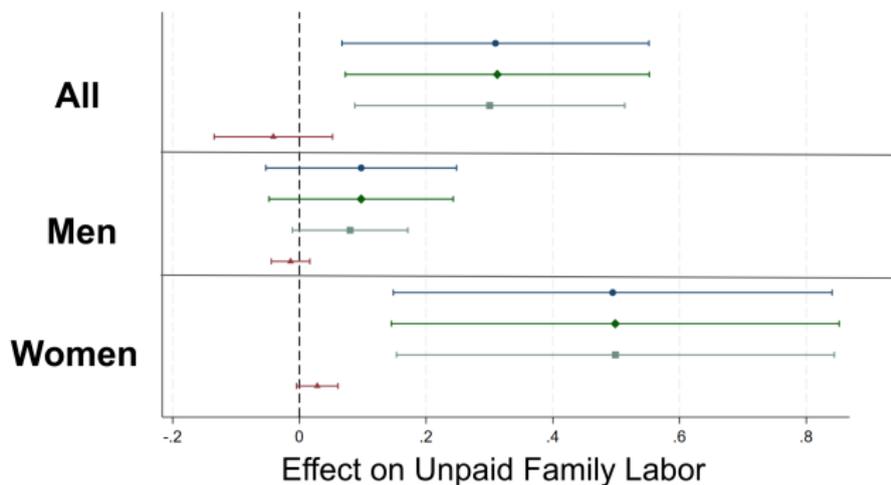
**Outcome Variable:** unpaid work in a family business.



(B) Women

# SARE Policy -> more unpaid work in family businesses (for women)

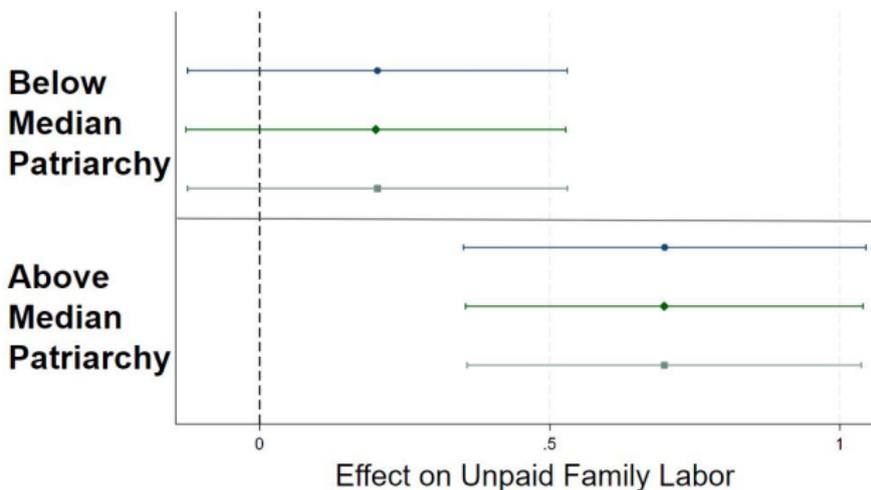
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- Quarter and Muni FE
- ◆ W/ Individual Controls
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# Effect is strongest in areas with higher levels of patriarchy

$$y_{imq} = \alpha + \beta \text{Female}_{imq} + \pi \text{SARE}_{mq} + \gamma (\text{Female}_{imq} \times \text{SARE}_{mq}) + \delta \text{CV}_{imq} + \varepsilon_{imq}$$



● Quarter and Muni FE

◆ W/ Individual Controls

■ W/ Muni Controls

# Female Entry into Unpaid Work Corresponds with a Male Household Member Starting a Business

**Table A21: The impact of SARE on unpaid family labor with control for household entrepreneurial concurrence**

	Dependent Variable = Unpaid Family Labor		
	Female Sample (1)	Female Sample (2)	Female Sample (3)
Sare	0.527** (0.178)	0.251 (0.173)	0.262 (0.173)
Household entrepreneur and SARE		5.476*** (0.444)	
Household male entrepreneur and SARE			8.499*** (0.560)
Household female entrepreneur and SARE			0.784 (0.476)
Observations	877,703	877,703	877,703
Quarter FE	Yes	Yes	Yes
Muni FE	Yes	Yes	Yes
Individual controls	Yes	Yes	Yes
Municipality controls	Yes	Yes	Yes

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

*Note: This table shows difference-in-differences estimates based on linear regressions. Observations are at the individual-quarter level. SARE equals 1 for quarters after the implementation of the SARE reform in a given municipality. Household entrepreneur and SARE is a dummy variable equal to one if an individual lives in a household where another household member started a firm in a SARE quarter in one of the SARE impacted industries. Household male entrepreneur and SARE and Household female entrepreneur and SARE are the same but for male and female founders respectively. For legibility, the outcome measure is scaled by 100. Standard errors in parentheses are clustered at the municipality level.*

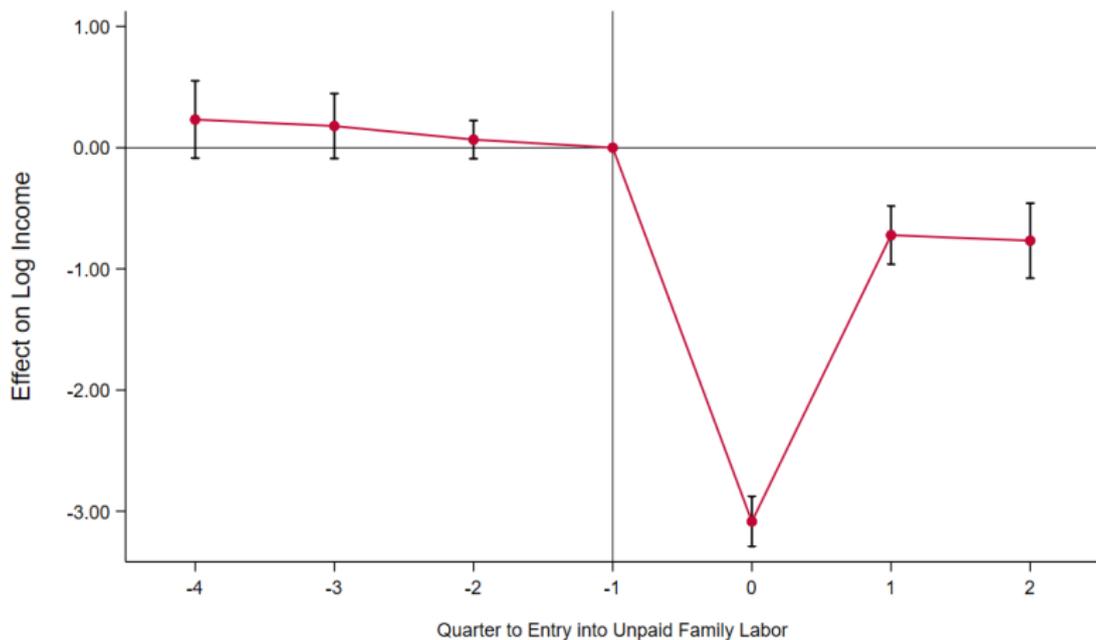
# Women who were *employed* prior to the reform were more likely to enter unpaid work in a family business

		Dependent Variable = Unpaid Work in a Family Member's Business		
		(1)	(2)	(3)
<i>Panel A: Working prior to the policy</i>				
	SARE	0.907**	0.907**	0.972***
		(0.271)	(0.271)	(0.257)
Observations		272,100	272,100	272,100
<i>Panel B: Not working or out of labor force prior to the policy</i>				
	SARE	0.309	0.313	0.120
		(0.196)	(0.194)	(0.214)
Observations		294,629	294,629	294,629
Quarter FE		Yes	Yes	Yes
Muni FE		Yes	Yes	Yes
Individual controls		No	Yes	Yes
Municipality controls		No	No	Yes

*\*p < .05; \*\*p < .01; \*\*\*p < .001*

□

# Women who enter unpaid work in a family business have lower income persistently



# Is it really because of patriarchy?

- **Geographic Variation in the Intensity of the Institutional Logic of Patriarchy:**
  - The increase in the gender gap increase should be most pronounced in areas with higher patriarchy levels.
    - Use established measures at the municipality level.
- **Unpaid Work In Family Businesses:**
  - If the increase in the gender gap in entrepreneurship after entry barrier reduction was due to gender norms and beliefs then...
    - Women may be more likely to enter unpaid work in a family business following the reform.
- **Marriage:**
  - The patriarchal impact is expected to be greater among married individuals, where traditional gender roles are often more entrenched.

## Examining the mechanism: Marriage

- In patriarchal contexts, marriage tends to amplify traditional gender roles and expectations (Lorber, 1994; Ridgeway, 2011).
- If our results were driven by normative and cognitive mechanisms related to the patriarchy logic, we would expect that the increase in the gender gap in entrepreneurship would be especially pronounced for married women.
- We find pronounced results for both outcomes among married women

# Alternative Explanations

## 1 Risk aversion

- The effect primarily stemmed from a higher risk aversion among women.
  - Evidence Against: Geographic variation and women leaving wage work for unpaid work

## 2 Competition

- The effect reflected increased competition following the reduction in entry barriers which hurt incumbents and required women to forgo their own entrepreneurship to support family enterprises.
  - Evidence Against: Sare had no impact on entrepreneurial exits and the increase in female unpaid family labor corresponded with male household members starting new firms (not supporting old firms)

# Summary of Results

- 1 In Mexico, a policy that lowered entry barriers increased the gender gap in entrepreneurship
  - The effect was larger:
    - in areas with stronger patriarchy
    - for married women
- 2 After the policy, women were more likely to begin working unpaid in new family businesses started due to the reform
  - this effect was driven by women who were working for income prior to the reform **not** those out of the labor force
    - persistent negative impact on labor market outcomes
  - Important Caveat
    - While women were no more likely to become founders after the policy, they did become more involved in entrepreneurship (as unpaid workers)
    - Social norms and stereotypes shape what role individuals take in a new venture.

- 1 **Social norms** and **cultural beliefs** about gender roles shape the impact of a public policy aimed at increasing entrepreneurship.
- 2 Policies aimed at increasing entrepreneurship should not only address accessing resources, but also recognize norms and expectations that discourage some groups from becoming founders.

# Limitations

- 1 One country context
  - Future research could do cross country analyses and leverage exogenous variation in gender norms like historical rates of plough agriculture.
  - Explore contexts where patriarchy is more formally connected with the law
- 2 We focus only on entry
  - Recent research suggest that female entrepreneurs are both less likely to differentiate and benefit less from differentiating when they do so (Carlson, 2023). What is the role of informal institutions?