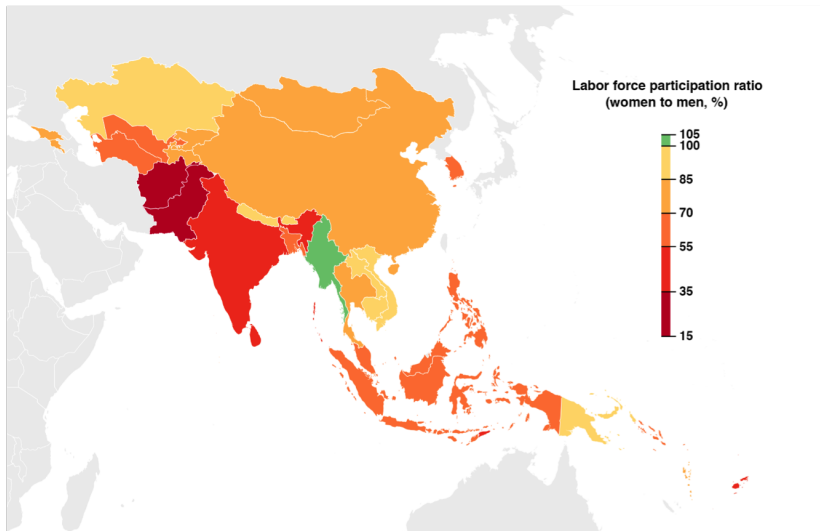


# **Norms and Female Entrepreneurship: Learnings from Field Experiments in India**

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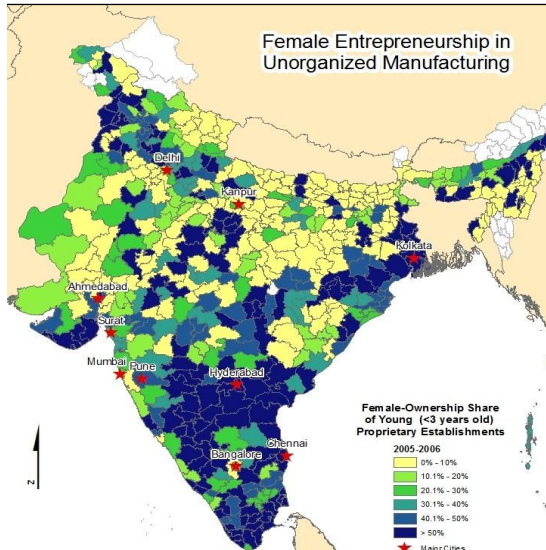
# Large gender gaps in female labor force participation in South Asia



# Informalization of non-agricultural female labor

- Non-agricultural employment in South Asia concentrated in informal sector
- Among women, informal self-employment concentrated in own-account and unpaid workers.
- In contrast, large gender gap in female entrepreneurship
- IFC estimates women own 10% of Indian MSM enterprises and contribute 3% of India's industrial output
  - Alongside significant regional variation in female entrepreneurship – existing levels of female entrepreneurship positively predicts entry (Ghani et al)

# Significant variation across India (NSS data, Ghani et al)



# Introduction

- Constraints on informal enterprises, which may affect women more
  - Limited access to financing and business development services
  - Large suite of policy interventions seek to address this
- However, design of these policies largely ignore other often-cited constraints for women
  - Limited property rights
  - Norms of modesty: restrictions on physical mobility and interactions with strangers

# Introduction

- Evidence on whether policies can *or* should promote female entrepreneurship largely discouraging
  - Low marginal returns to capital for female enterprises (both absolute and relative to male enterprises - De Mel et al 2008, De Mel et al 2009, Fafchamps 2011, Berge, Bjorvatn and Tungodden 2012, Fiala 2003 )
    - “Microfinance programs that focus primarily on women may be ignoring a large group of enterprises with a need for more capital.” Fafchamps et al (2011)
  - Limited responsiveness to business training programs (McKenzie and Woodruff 2013)
  - Typically no empowerment effects associated with micro finance programs

# Today's talk

Implications of norms for measuring returns to female entrepreneurship *and* design of public policy.

## ❶ Household matters (with Erica Field and Natalia Rigol)

- Existing studies survey and evaluate returns to capital at enterprise-level
- However, female and male enterprises often co-exist in same household.
- Resource allocation may reflect maximization of household profits *not* enterprise-specific returns

## ❷ Learning with Friends (with Field, Jayachandran and Rigol)

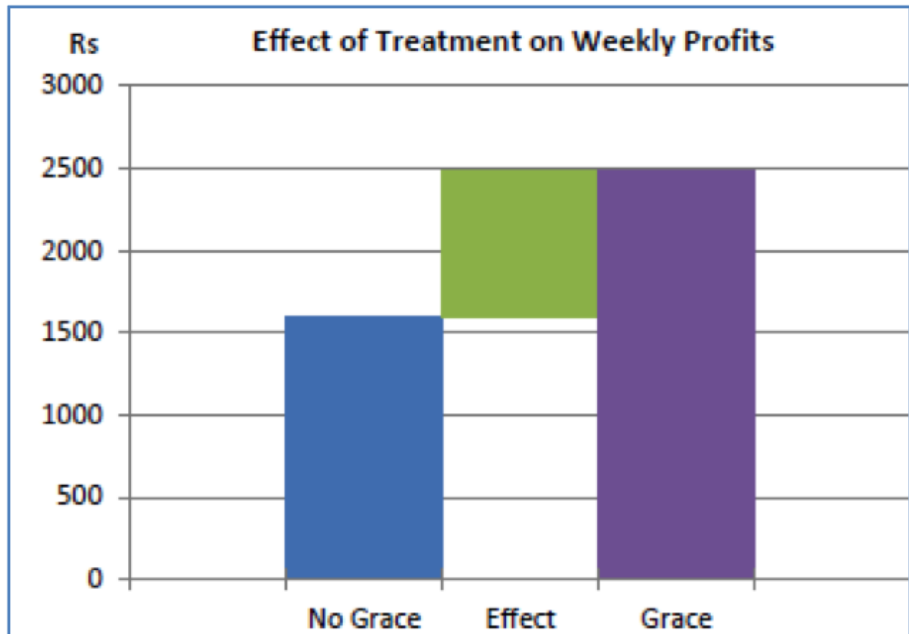
- Women make bolder entrepreneurial choices when trained with a friend

# Grace Period Experiment

- In 2007 we conducted a field experiment which varied contract flexibility for micro finance clients in Kolkata (*AER* 2013)
- Random sample of clients received a (two-month) grace period before repayment began
- Key findings
  - Treatment clients undertook higher risk, high return activities
  - Relaxing credit constraints led to a big increase in micro enterprise profits in 2010 (3 years later)
  - Average returns to capital similar to those found in cash drop experiments



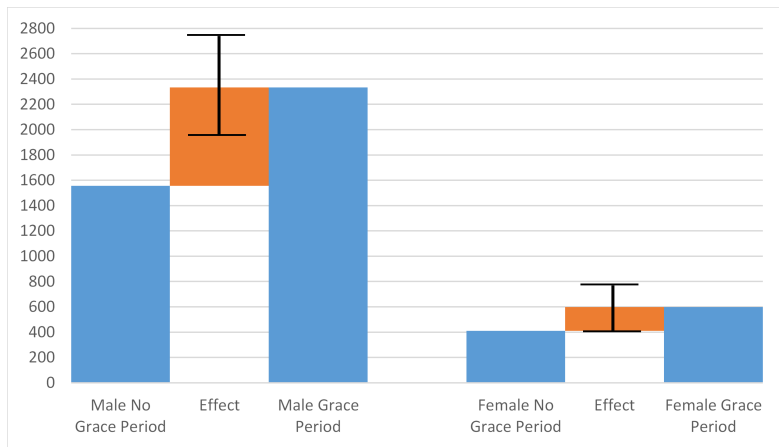
# Impact of Grace period: Three year estimates



# Household Matters: Decomposing the Grace Period Effect

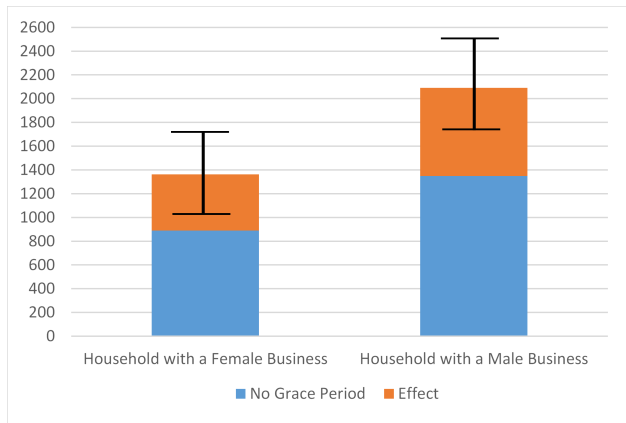
- We surveyed all household enterprises and identified whether a man or a woman operated each enterprise
  - The average household has 1.7 enterprises
  - 34% of households report both a male and female enterprise (mixed). 36% had only female enterprise and 29% only male enterprise
- Implications of grace period contract for returns to ‘male’ v/s ‘female’ enterprise depend on how we decompose profits
  - Follow existing literature and run regression at enterprise-level
  - Aggregate unto household level and distinguish by whether at least one female enterprise in household
  - Profits for all enterprises owned by same gender in different household categories

# Enterprise-level estimates: Sharp difference for male v/s female enterprises



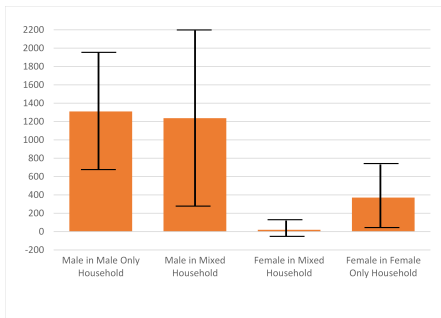
Regression estimated at the enterprise level, comparing by enterprise owner

# Household-level: profit gains independent of presence of female enterprise at household-level



Define female (male) household as a household that has at least one female (male) enterprise Insignificant difference in profit gains

# Household-enterprise disaggregation: More variation in treatment effect for female v/s male enterprise

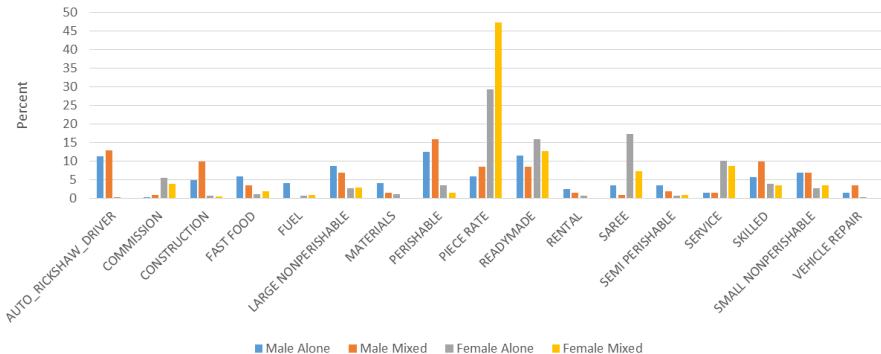


## Choices *not* ability varies across female entrepreneurs in mixed and female only enterprise households..

- Entrepreneurial ability: No difference (as measured by digispan test) or risk attitudes
- Empowerment: Relative to mixed households, women in female only enterprise households more empowered
  - The number of times that the client took the bus in the past 7 days
  - Owns a separate bank account from husband
  - Could help a close relative in case of an emergency
  - Percent of household money she controls
  - Does not need permission for household expenditures
  - Is responsible for keeping money safe in the house
- Female enterprises in mixed households more likely to be home-based (piece rate work)

# Business composition by household type

Business Composition by Gender Across Household Types



# Overall

- In our experiment women received the loan so likely had some control over use.
  - Choice to invest in male enterprise consistent with (household-level) profit maximization
- Open question: Do differences in female entrepreneurial choices (sector of work) across mixed and female-only households (*not* loan investment choices) reflect differences in level of empowerment and constraints on mobility ?
- One way of examine this: Are business counselling programs that are sensitive to gender norms are more successful in affecting women's own entrepreneurship behaviour?
- Our approach: Examine differences in borrowing and business behaviour across women who (randomly) vary in whether they attended business training with a friend



# Can Peer Support Enable Entrepreneurship

- 636 SEWA Bank clients (active savers or borrowers) randomized into three groups. whether not offered business counselling or
  - Control group not offered training (201).  
First training group: Invited alone (216).  
Second training group: Invited with a friend (209)
- The two day program (in groups of upto 12) focussed on
  - Teach account-keeping
  - Elicit business goals
  - Create step-by-step plan for meeting those goals
  - Watch inspirational videos on successful SEWA Bank entrepreneurs
- Compare outcomes four months later



# Peer Training

- Take-up of the program was relatively high at 70% and those invited with a friend attended with a friend
- We use a combination of administrative data and household surveys to evaluate impact of training
  - Client base included enterprise owners (25%) or piece-rate workers (50%)
  - Average age 35 years
  - Significant fraction of clients from castes/religion which placed restrictions on mobility.
    - We define an index of norm- restrictions which include whether the caste has social norms restricting socializing alone, veiling, talking to elder family members, access to education/educational opportunities and mobility

# Peer trained are more likely to .. borrow

	SEWA Loan <sup>§</sup>	Business Loan <sup>§</sup>	Home Repair Loan <sup>§</sup>
	(1)	(2)	(3)
<i>Panel A: Peer Effect</i>			
Treated	0.022 (0.024)	-0.014 (0.015)	0.018 (0.011)
Treated with Friend	0.071** (0.028)	0.049*** (0.017)	0.021 (0.018)
Controls Used	No	No	No
Observations	628	628	628
Mean for Control Group	0.057	0.029	0.010
Standard Dev for Control	0.233	0.167	0.097

# ..Change business behaviour

	Total Hours Worked in Last Week	Quantity Sold- Increased or Remained the Same	PCA - Plan for New Business Activity to Increase Revenues
	(1)	(2)	(3)
<i>Panel A: Peer Effect</i>			
Treated	3.611 (2.504)	-0.078 (0.063)	-0.034 (0.102)
Treated with Friend	1.427 (2.365)	0.108** (0.047)	0.175** (0.078)
Controls Used	No	No	No
Observations	597	402	604
Mean for Control Group	25.025	0.726	-0.028
Standard Dev for Control	21.396	0.448	1.296

# ..Report higher incomes

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	Log Household Income	Log Expenditures	Client Earns Own Income	Client is a Housewife
	(1)	(2)	(3)	(4)
<i>Panel A: Peer Effect</i>				
Treated	-0.036 (0.063)	-0.031 (0.081)	0.047 (0.048)	0.002 (0.028)
Treated with Friend	0.113* (0.059)	0.150* (0.082)	0.021 (0.039)	-0.037* (0.021)
Controls Used	No	No	No	No
Observations	575	603	604	585
Mean for Control Group	8.538	6.650	0.744	0.095
Standard Dev for Control	0.615	0.871	0.438	0.294

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# Strong effects for women from social groups with norms that restrict mobility

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	Trained	SEWA Loan <sup>5</sup>	Total Hours Worked in Past Week
	(1)	(2)	(3)
<i>Panel A: Peer Effect</i>			
Treated * Restricted Caste	0.070 (0.064)	-0.103 (0.070)	-10.446** (4.575)
Treated with Friend * Restricted Caste	0.020 (0.087)	0.166** (0.071)	14.043*** (4.106)
Treated	0.650*** (0.039)	0.053 (0.032)	6.405** (2.946)
Treated with Friend	0.061 (0.052)	0.025 (0.033)	-2.300 (2.901)

# ..these women are more likely to enter labor force

	Log Household Income	Dummy Client Earned Income	Client is a Housewife
	(1)	(2)	(3)
<i>Panel A: Peer Effect</i>			
Treated * Restricted Caste	0.041 (0.116)	-0.138 (0.088)	0.035 (0.061)
Treated with Friend * Restricted Caste	0.130 (0.131)	0.109 (0.088)	-0.100* (0.055)
Treated	-0.055 (0.075)	0.084 (0.055)	-0.004 (0.033)
Treated with Friend	0.083 (0.063)	-0.005 (0.041)	-0.012 (0.025)
Restricted Caste	0.022 (0.022)	0.052 (0.022)	0.011 (0.022)

# What are the Channels of Influence

- A key element of the business counselling was identifying a financial goal to be achieved over next six months
- The two most common goals were home repair and expansion of goals
- We have the reported goals for a subset of women – we see (noisy) evidence that peer-treated women are willing to commit to more expensive (riskier) goals
- These women were also more likely to report plans to increase revenue in the end line survey



# Conclusions

- Low Female labor force participation in South Asia, and often takes form of self-employment in informal sector
  - Experimental research evidence on whether improvements in access to finance can achieve high returns to female enterprises discouraging
- Our research demonstrates importance of recognising that women's financing decisions will reflect optimization at household (not enterprise) level
  - Grace Period results: Female enterprises only fail to realise profit gains from relaxing credit constraints when another male-operated business in household – but household profits do rise substantially (just that women are investing in male businesses)
- To increase female presence in high-return enterprises then business counselling/financing policies should be sensitive to norms
  - Creating counselling or learning platforms that strengthen female networks may be a powerful approach t