



Are Women Really Better Borrowers in Microfinance?

Evidence from Matrilineal and Patrilineal Societies
in India

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Why Microfinance?

- Over 2.5 billion people - more than $\frac{1}{3}^{rd}$ of world's population live on less than \$2 per day and remain unbanked (Karlan and Appel 2011)
- Under this background microfinance has emerged as an alternative way to rethink banking for the poor
 - Number of microfinance clients had increased from 7.6 million in 1997 to 137.5 million in 2010 (Banerjee et al. 2015)
- Two popular lending innovations in microfinance: *group liability* and *gender targeting*

Why Women?

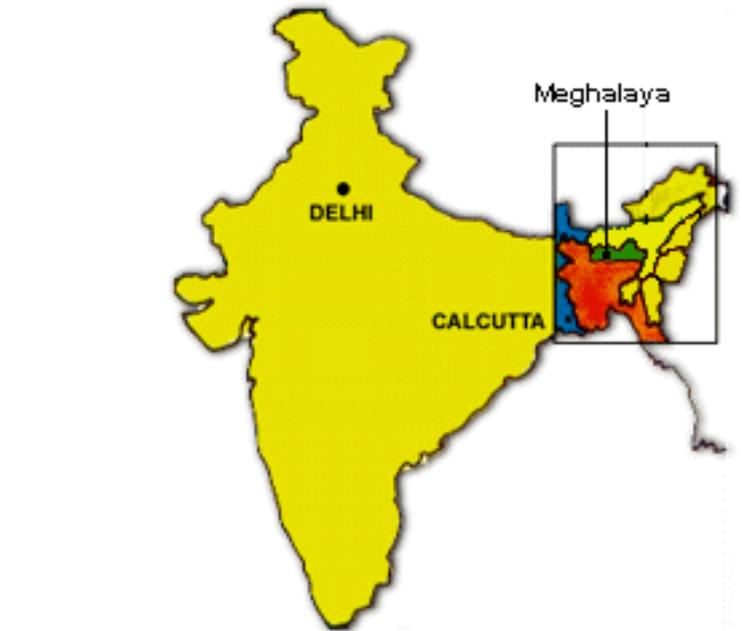
- More than 80% of all microfinance clients worldwide are women (D'Espallier et al. 2011).
- *Double dividend* of gender targeting of women in microfinance
 1. *Social dividend*: women empowerment, investment in child schooling and healthcare
 2. *Economic dividend*: higher repayment rates for the lenders
- Conventional wisdom in microfinance (World Bank Report, 2008):
Women are better credit risks than men.

Research Questions

- Are women really better borrowers in microfinance?
 - Does gender targeting generate higher repayment rates for the Microfinance Institutions (MFIs)?

- What drives gender differences in repayment among borrowers?
 - Do social context and norms lead to gender differences in behavior among microfinance borrowers?

The Answer Lies Here



The Two Societies- Karbi and Khasi

- The Khasis and the Karbis share a genetic background and appear to be close kin based on genetic analysis of six polymorphic loci (Roychoudhury 1992)
- They are neighboring societies in the north-eastern region of India
- Both are either Christians or follow their indigenous religion (nature worship)
- Both are indigenous agricultural societies
- But the two societies are very different in terms of gender relations
 - Karbis are a *patrilineal* society while the Khasis are a *matrilineal* society

Patrilineal Karbi

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- Men inherit and control property
 - Eldest son gets family property
 - Wife moves to husband's house
 - But do not own property
 - Women have *very little* bargaining and decision-making power

Matrilineal Khasi

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- Men do not inherit property, *women do*
 - Youngest daughter gets family property
 - Husband moves to wife's house
 - But do not own property
 - Women have *a lot of* bargaining and decision-making power

An illustration featuring a purple world map background. Several hands are shown interacting with financial symbols: one hand points to a gold coin, another points to a banknote, and a third points to a calculator. There are also several gold coins and banknotes scattered around. The text 'Microfinance' is written in white, with a gold coin acting as the letter 'o'.

Microfinance

Experiment

Project Choice

- Subjects receive a loan and decides independently to invest between the following *projects*:

Project	Success		Failure
	Prob	Return	Return
X	5/6	60	0
Y	1/2	160	0

Repayment Choice

- If project fails then individual subjects cannot repay loan
 - Involuntary or non-strategic default

- If project is successful, individual subjects decide independently between the following:
 - Repay loan
 - Default strategically

Microfinance Games

- 368 subjects in total (184 male, 184 female) participated in the experiment
- Each subject is randomly assigned to one of the 2 microfinance games:
 - Individual game and Group liability game
- For group liability loans, two subjects of the same gender and society are randomly matched and make the same decisions in the experiment
- Group debt is split equally among the two randomly matched group members
 - If one group member defaults, the other must repay the entire group loan to continue receiving loans in future rounds in the experiment

What Else can Matter?

Individual Characteristics

- ✓ Age
- ✓ Religion
- ✓ Household members
- ✓ Whether head of household
- ✓ Type of dwelling
- ✓ Whether holds a bank account

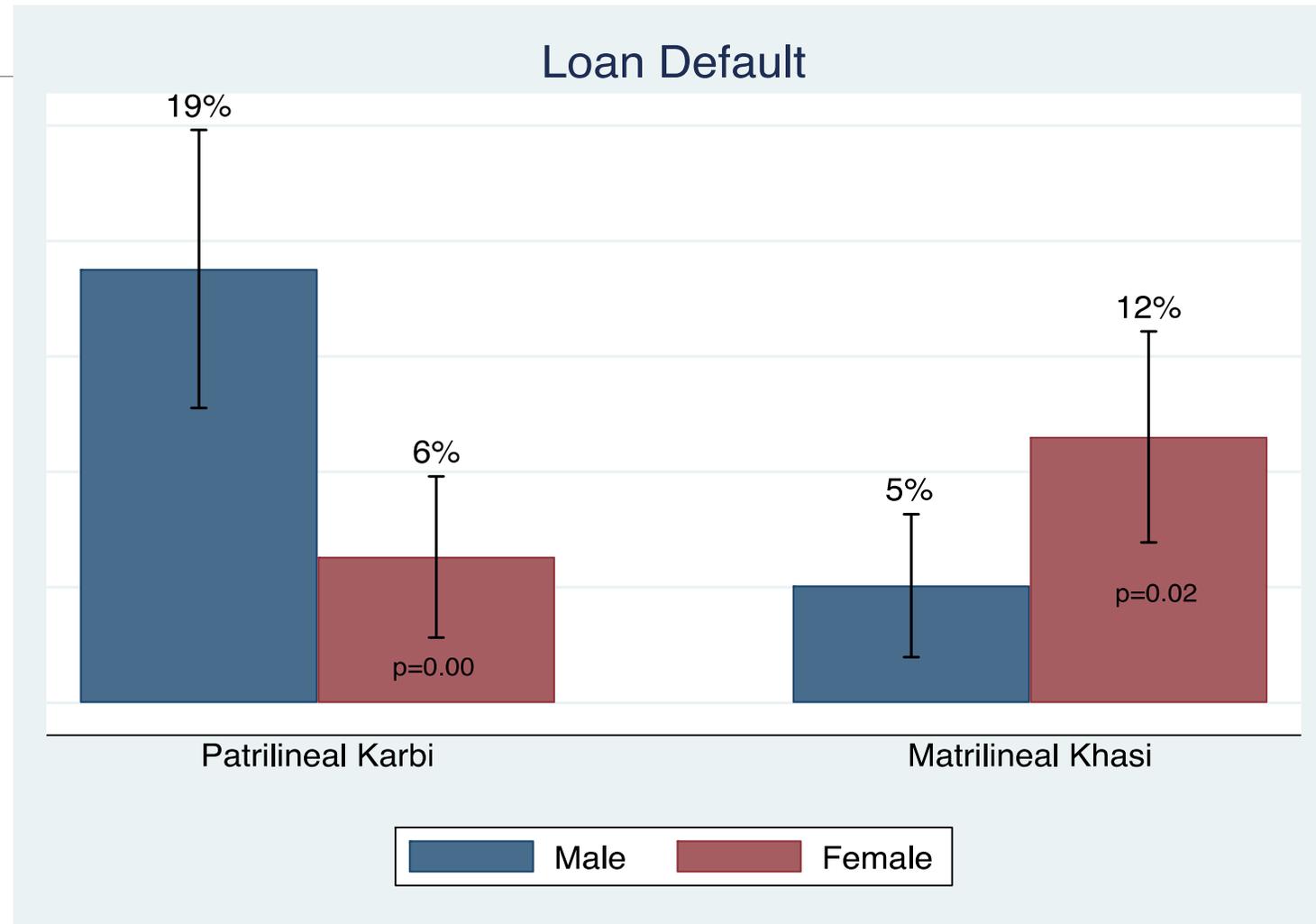
Risk Attitudes

- Implemented incentivized **Investment Risk Task**
- Subjects choose how much of a fixed endowment to invest in a risky lottery that yields a return of 3 times the amount invested with 50% chance and zero otherwise
- The lower the amount invested, the more risk averse subjects are

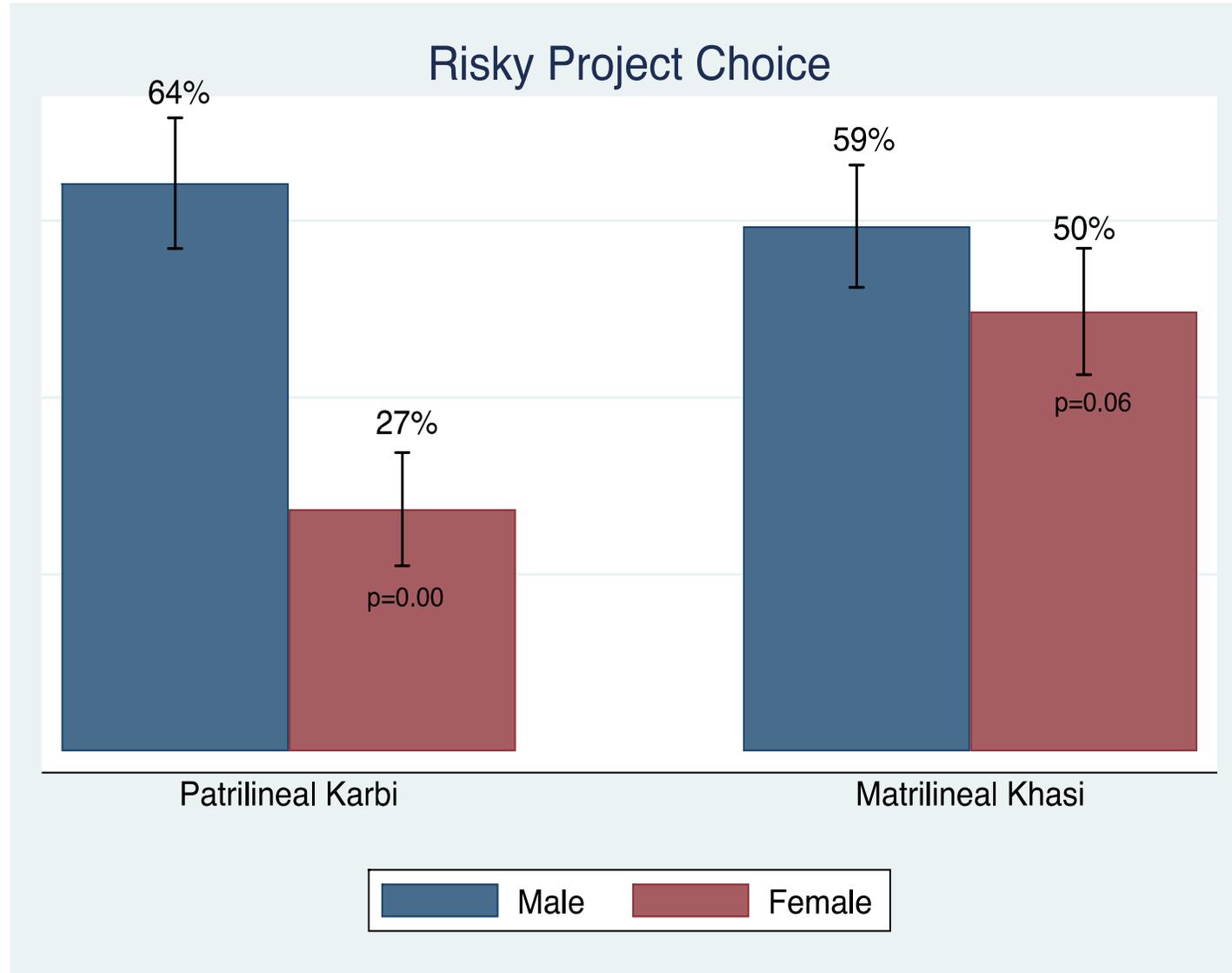


What Do I Find?

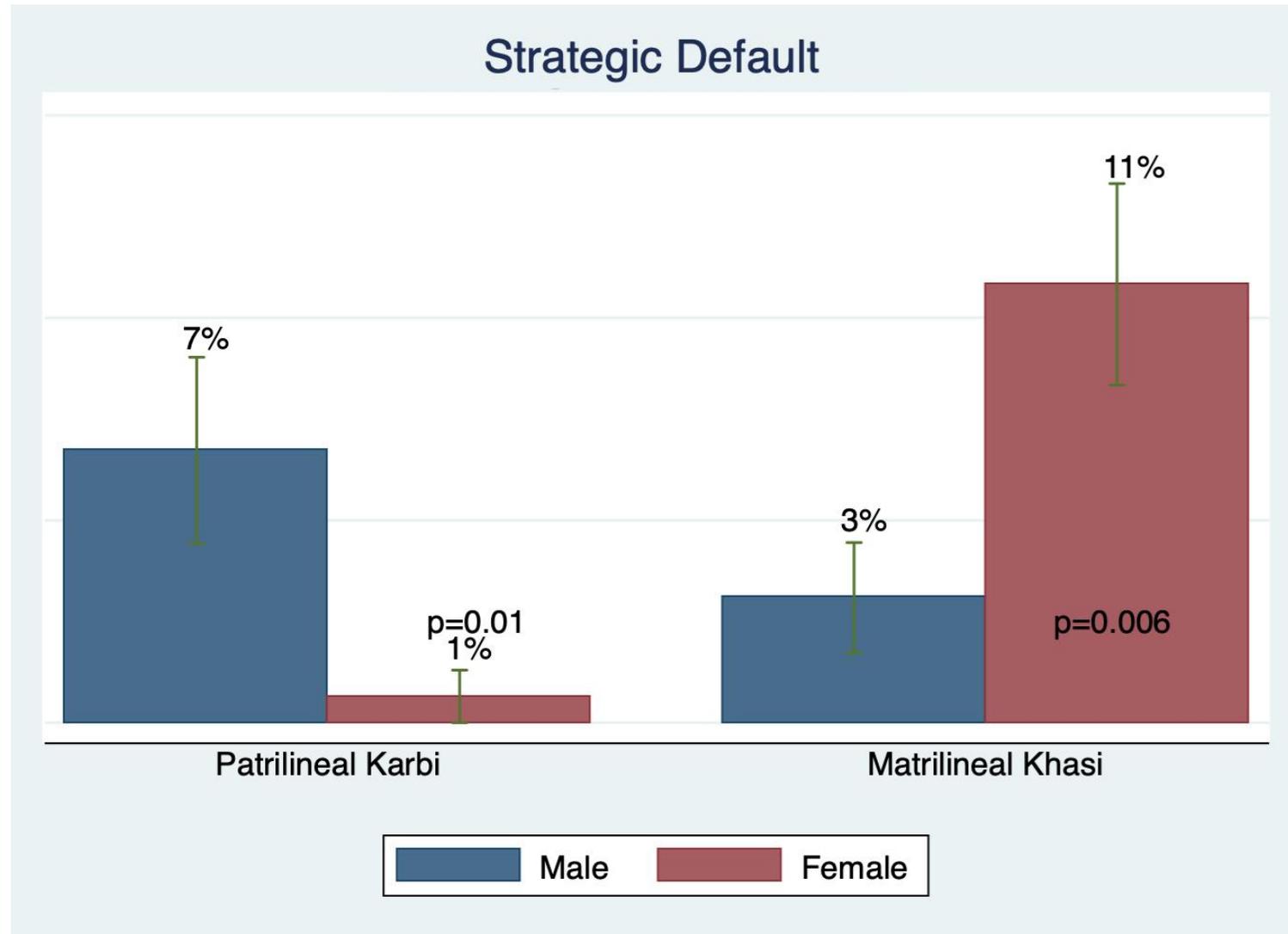
Reversal of Gender Effect in Loan Default



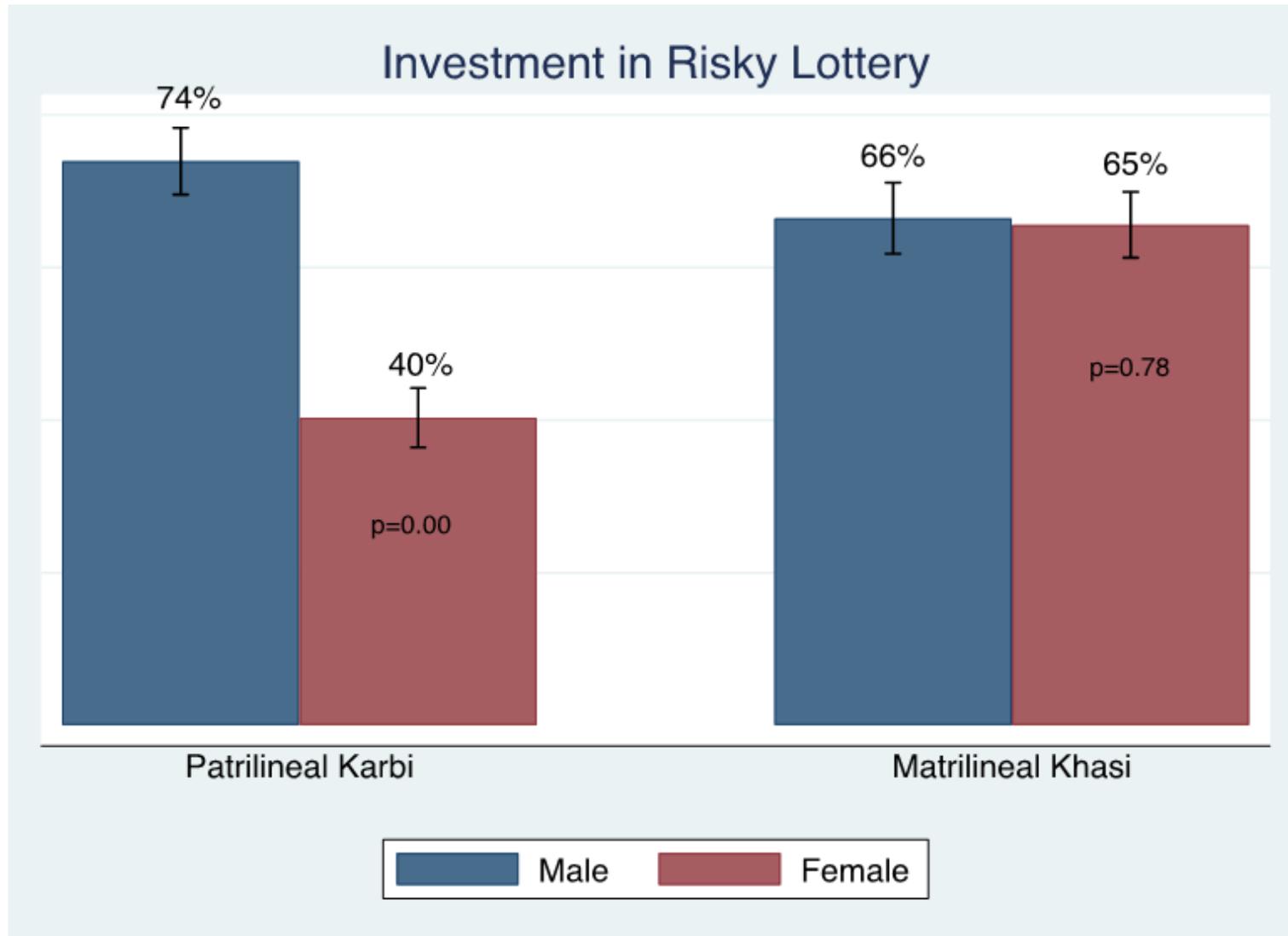
Risky Project Choice: Matrilineal Khasi vs. Patrilineal Karbi



Strategic Default: Matrilineal Khasi vs. Patrilineal Karbi



Risk Attitude: Matrilineal Khasi vs. Patrilineal Karbi



Outcome Variables	(1) <i>Risky Project Choice</i> ⁺	(2) <i>Strategic Default</i> ⁺
Female	-0.23*** (0.07)	-0.10** (0.04)
Matrilineal Khasi	-0.01 (0.07)	-0.05 (0.03)
Female*Matrilineal	0.15* (0.09)	0.16*** (0.05)
Group Liability	0.22*** (0.05)	0.10** (0.04)
Investment Risk	0.32*** (0.06)	0.003 (0.03)
Individual Controls	Yes	Yes
Round Fixed Effects	Yes	Yes
Observations	743	592
Pseudo R-Squared	0.13	0.20

Robust standard errors, clustered at group level, in parentheses.

⁺ Marginal effects from Probit estimation *** p<0.01, ** p<0.05, * p<0.1

Key Findings

- Reversal of gender effect across societies
 - In patrilineal society women are better credit risks (conventional wisdom)
 - But the pattern reverses in matrilineal society (new insight)
- Matrilineal women are more likely to invest in risky projects and default strategically more than patrilineal women
- Patrilineal women are significantly more risk-averse than patrilineal men, but this gender gap disappears in the matrilineal society

Policy Implications

➤ *Microfinance Policy*

- Although women have lower default on average, a universal gender targeting policy might be suboptimal in presence of heterogeneity across societies

➤ *Development Policies in general - importance of social context*

- One should be careful about generalizing a policy simply because it has worked in a particular context
- Policymakers should take into consideration the heterogeneity and the social context to design better targeted policies

A black and white photograph of a group of children, likely in a rural or developing area, wearing winter clothing like hats and jackets. They are all smiling and looking towards the camera. The background shows a dirt path and some simple structures.

Thank you 😊

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