

Measuring Social Capital in Peruvian Shantytowns

Dean Karlan
Yale University

Markus Mobius
Harvard University

Tanya Rosenblat
Iowa State University

Adam Szeidl
UC-Berkeley

July 2010

Introduction

Introduction

● Introduction

Overview

Field experiment

Results

Conclusion

- Trust and social capital created by networks may be important:
 - Loans between friends and relatives.
 - Informal consumption insurance (Townsend, 1994) and microfinance (Banerjee-Duflo, 2010).
- We know many transactions take place in networks, but how valuable is the network?
- **This paper:** measure relative importance of social links and prices for borrowing in a field experiment in Peru.
 - What is the value of a relationship for borrowing?
 - How quickly does value fall with social distance?
 - Why do connections help?
- Lessons about microfinance design and measurement of social capital.

Huaraz, Peru - Borrowing and Lending of Money and Tools

Introduction

● Introduction

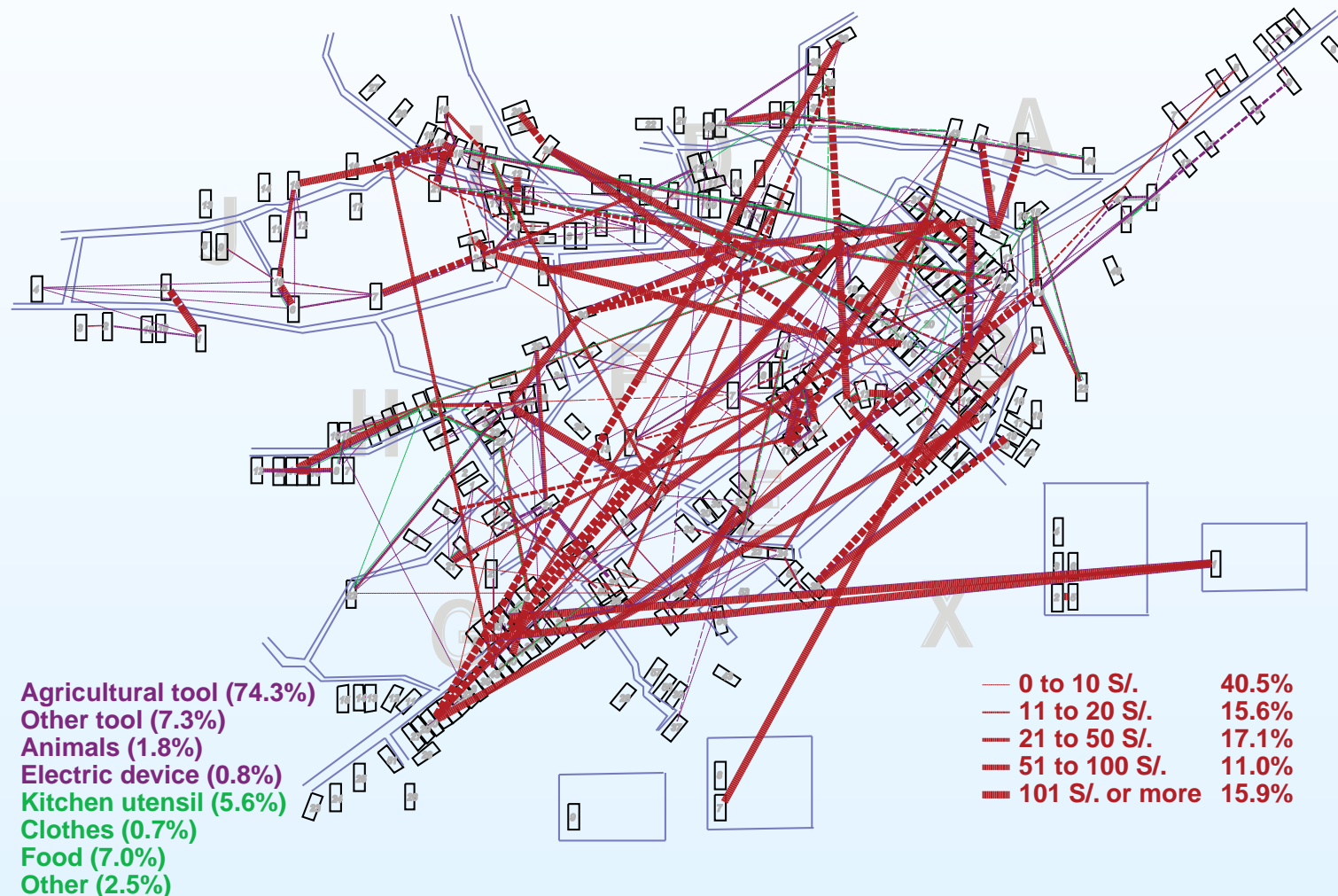
Overview

Field experiment

Results

Conclusion

Huaraz Community



Introduction

Overview

- Experimental design
- Model framework

Field experiment

Results

Conclusion

Overview

Experimental design: basic idea

Introduction

Overview

● Experimental design

● Model framework

Field experiment

Results

Conclusion

- Setting: borrower needs a co-signer to obtain loan from micro-finance agency.
 - Borrower must convince co-signer to come on board.
- Treatment A: Choose from following options to borrow \$1000:
 - Co-signer is a friend, interest rate is 20%;
 - Co-signer is a non-friend, interest rate is 20%.
- Treatment B: Choose from following options to borrow \$1000:
 - Co-signer is a friend, interest rate is 20%;
 - Co-signer is a non-friend, interest rate is 0%.
- **Trade-off:** borrowing through a friend may be easier, but financially more costly.
 - Design measures interest differential where borrowers switch.

Conceptual framework

Introduction

Overview

● Experimental design

● Model framework

Field experiment

Results

Conclusion

- Project creates net surplus for the two parties

$$L \cdot [S(\text{social distance}_{ij}) - R_{ij} + \varepsilon_{ij}]$$

- Key assumption: parties are matched to maximize net surplus.
 - Holds with costless transfers or if cosigners get outside option.
- Why might borrowing through a friend be easier?
 1. Limits moral hazard through monitoring or enforcement;
 2. Creates selection based on borrower type;
 3. Altruism directed to friends;
 4. Interaction between moral hazard and type.
- Baseline experiment measures the sum of these mechanisms.
 - Second randomization helps distinguish between channels.

Introduction

Overview

Field experiment

- Overview
- Sponsors and Cards
- Randomization

Results

Conclusion

Field experiment

Field experiment: overview

Introduction

Overview

Field experiment

● **Overview**

● Sponsors and Cards

● Randomization

Results

Conclusion

1. Baseline survey (household level)
2. Social network survey (individual level)
3. “Sponsors” are invited.
4. Microfinance program starts.

Baseline data

Introduction

Overview

Field experiment

● Overview

● Sponsors and Cards

● Randomization

Results

Conclusion

- 2005 survey in two Lima communities: 299 households
- social network survey for household head and spouse
- 8.6 links on average (41 meters apart); distance between two random houses was about 120 meters
- 59 % neighbors, 39 percent as “amigo”, 2 percent relatives
- 90 percent of friends met in the neighborhood
- for each link we also asked whether transfers occurred in the past: 254 informal loans (167 borrowers in 138 households and 76 S/. loan size on average, 173 lenders); mean age of borrower and lender is 39 years and they live 36 meters apart

	Mean	Standard Dev.		Mean	Standard Dev.
<i>Demographic Variables</i>			<i>Social Network Variables</i>		
Female	0.50	0.50	Number of contacts	8.60	4.15
Age	35.84	14.37	Share of “neighbors”	0.59	0.49
Secondary Ed.	0.71	0.21	Share of “friends”	0.39	0.49
Household Inc.(S/.)	887.39	1,215.74	Share of “relatives”	0.02	0.15
Business-owner	0.20	0.40	Avg. size of loan (S/.)	75.88	121.20
			Geographic dist.	41.16	49.17

Sponsors

Introduction

Overview

Field experiment

● Overview

● **Sponsors and Cards**

● Randomization

Results

Conclusion

- Invite 25 members of community to become “sponsors”.
- Clients can only get a loan if a sponsor cosigns the loan.
- A sponsor receives a “credit line” which depends on his income and wealth.
- 30 percent of the credit line can be used by the sponsor. The rest can only be used for sponsoring loans of other people in the community.
- 70 percent of the credit line is therefore an asset which is potentially valuable to other community members but not to the sponsor.
- In case of default, both borrower and sponsor are reported to the credit bureau.

Sponsors

Introduction

Overview

Field experiment

- Overview
- Sponsors and Cards
- Randomization

Results

Conclusion

Manos Juntas

!Felicitaciones!

Usted ha sido elegido como un garante comunitario.

Cada garante elegido de la comunidad puede manejar una línea de crédito.

Del total del crédito, un treinta por ciento está reservado para uso del garante.

El garante ofrece a otros miembros de la comunidad con el resto de su línea del crédito.

Características del crédito

El crédito es de libre disponibilidad.

Los intereses del crédito varían entre:
1.5 % y 2.5 % en dólares y
3 % y 5 % en nuevos soles.

El crédito tiene un plazo de hasta seis meses.

La línea de crédito para cada garante es entre **S/. 500 y S/. 2,000** nuevos soles.

Lotería Comunitaria

Cada dos meses del programa se realiza un sorteo. Cada sorteo ofrece los siguientes premios:

Sorteo del Quinto Mes:
Un Equipo de DVD



Sorteo del Tercer Mes:
Una Cámara Fotográfica

Sorteo del Primer Mes:



Dos Cenas Familiares Especiales en el Pardo's Chicken de MegaPlaza
(Para una familia de 6 personas)

Sponsors can also win prizes at a lottery (once a month) when they sponsor people.

Los ganadores de la lotería

se basan en un sistema de puntaje. El garante que recibe más puntos recibe. Los premios serán proporcionales a la

cantidad de dinero que el garante utiliza del monto utilizado de su línea de crédito. El uso completo de la línea de crédito le otorga 20 puntos. Pero por ejemplo, si tiene una línea de 2000 y usa sólo 1500, entonces tendrá 15 puntos. El garante recibe doble puntaje en el caso que avale a un nuevo prestatario, al cual no haya avalado antes.

Cards

Introduction

Overview

Field experiment

● Overview

● **Sponsors and Cards**

● Randomization

Results

Conclusion

- Each household receives a customized “card”.
- The card explains the rules of the lending program.
- To get a loan the client has to find a cosigner among the list of 25 sponsors.
- **For each sponsor-client pair a different, randomized interest rate is assigned!**

Cards

Introduction

Overview

Field experiment

● Overview

● Sponsors and Cards

● Randomization

Results

Conclusion

Each card is addressed to particular household.

Each sponsor gives client a particular interest rate.

Manos Juntas

Programa de Crédito

Manzana : L
Lote: 2

Estimado **Sr(a). JORGE VENTOCILLA GONERO** y **Sr(a).**

Alternativa los invita a participar de un nuevo servicio de crédito. El mismo, ofrece créditos flexibles, ágiles y personalizados, por intermedio de garantes comunitarios, a todos los vecinos de Los Olivos de Pro. El crédito es de libre disponibilidad.

PASO 1: ¿Qué es lo primero que necesita antes de iniciar el trámite?

Contar con un garante. Usted como residente de la comunidad Los Olivos de Pro, puede escoger un garante de la siguiente lista:

	<u>Tasa</u> <u>(soles)</u>		<u>Tasa</u> <u>(soles)</u>		<u>Tasa</u> <u>(soles)</u>
Jesus Gonzales Tiicla	4.25%	Elizabeth Sierra Chávez	4%	Claudia Catalán	4%
Martha Norma Castro Espinoza	3%	Luis Santos Barilles	4%	Rosa Pari Condori	3.5%
Rosa Edith Panduro Ramirez	3.25%	Aura Sandoval Valiente	4%	Andres Inca Cauti	3.5%
Julia Sabina Maguiña Toledo	3.75%	Julia Bustinza Choque	3.75%	Ivan Diaz Mallma	3.25%
Pedro Francisco Salazar Aquino	3%	Guisella Vargas Valdivia	3.25%	Leodina Diaz	4.5%
Delia Rodriguez Encarnación	3.5%	Balvina Alcalde Vizconde	3%	Jesus Lopez	3.25%
Gladys Selene Alvarado Saldaña	3.25%	Manuel Medrano Gómez	3.5%	Marisol Julca	4%
Aurelio Pedro Oscanoa Rosas	3%	Alfredo Fernando Castillo	3%		
Manuel Amador Chávez Lezama	4%	Melquiades Huayta Tafur	3%		

Nota: La tasa de interés que ofrece cada garante difiere para cada solicitante. La tasa se ha decidido por sorteo.

PASO 2: ¿Cómo iniciar el trámite y en dónde?

Una vez que elija un garante, debe presentar: número de DNI, nombre completo y dirección de usted y de su cónyuge. Lo puede hacer personalmente en la reunión semanal de los miércoles o mediante una llamada telefónica al promotor.

<u>Dirección</u>	Contáctese con el Sr. Carlos Carbajal , los días miércoles de 3 a 5 de la tarde en cualquiera de las siguientes direcciones: mz L2 lote 20, mz L1 lote 34, o mz L Lote 38.	<u>Teléfono</u>	481-5801, 481-5466
		<u>Celular</u>	9 652-4485

PASO 3: ¿Que documentación debe llevar la semana siguiente de iniciado el trámite?

Deberá asistir acompañado por su cónyuge a la reunión semanal para llenar y proveer los siguientes documentos:

<ul style="list-style-type: none"> Fotocopia de su DNI y el de su cónyuge Ficha de Información Económica Básica 	<ul style="list-style-type: none"> Contrato de Crédito Pagaré
---	---

Los montos del crédito van desde S/.50.00 a S/.2000.00 o \$15.00 a \$650.00 dólares. Los créditos se pagarán en cualquiera de las Sucursales del Banco Continental.

alternativa
Centro de Investigación Social y Educación Popular

Emeterio Pérez Nro. 348 Teléfono: (051)-481-5801
 Urb Ingenieria . Distrito de San Martin de Porres Lima - Perú

Cards

Introduction

Overview

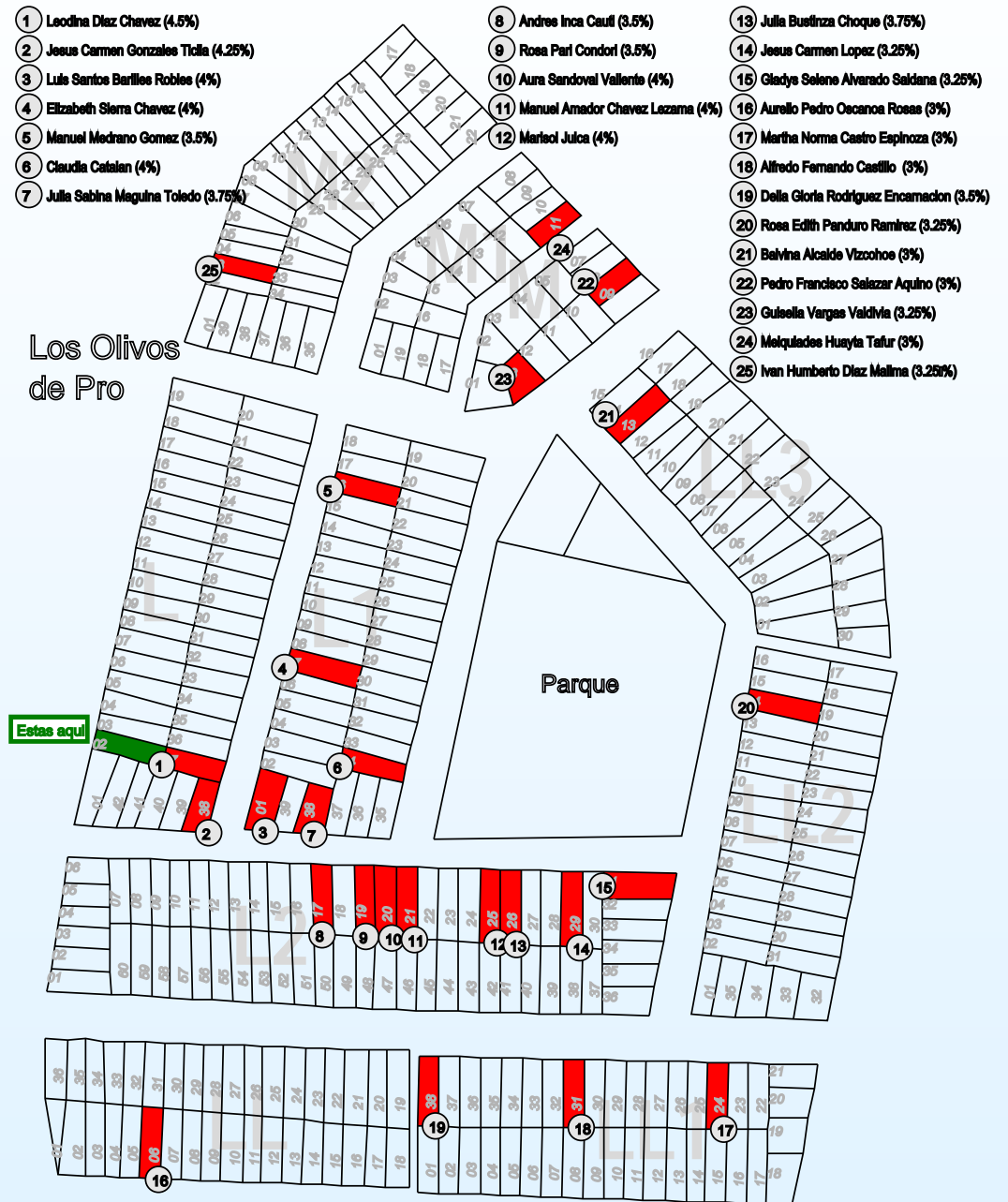
Field experiment

- Overview
- Sponsors and Cards
- Randomization

Results

Conclusion

Back of card shows map of community and location of sponsors (and interest rates).



Interest Randomization

Introduction

Overview

Field experiment

- Overview
- Sponsors and Cards
- **Randomization**

Results

Conclusion

- Each client has a “slope” of 1 to 4 assigned which determines the decrease in monthly interest rates depending on social distance (SD) to sponsor:

	SD=1	SD=2	SD=3	SD=4
SLOPE=1	4.500	4.375	4.250	4.125
SLOPE=2	4.500	4.250	4.000	3.750
SLOPE=3	4.500	4.000	3.500	3.000
SLOPE=4	4.500	3.750	3.000	2.250

- *Social distance* is length of shortest path in the network between the agents.
 - Equals 1 for direct friends, 2 for people who share a common friend, etc.
- We use any kind of link (friends, acquaintances) to construct social distance.

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- Unobservables

Conclusion

Results

Aggregate outcomes

Introduction

Overview

Field experiment

Results

● **Basic Results**

● Regression Analysis

● Unobservables

Conclusion

- 128 loans between clients and 51 sponsors in two Lima communities
- 53 percent of loans between direct friends
- 26 percent between friends of friends
- mean loan size 1228 S/. and median loan size 1000 S/. (about 330 US\$)
- 60 percent of loans to women
- 88 percent of average loan was repaid

Aggregate outcomes

Introduction

Overview

Field experiment

Results

- **Basic Results**
- Regression Analysis
- Unobservables

Conclusion

Distribution of loans by slope and social distance:

	SD=1	SD=2	SD=3	SD=4
SLOPE=1	24	5	2	1
SLOPE=2	20	12	3	4
SLOPE=3	17	9	5	3
SLOPE=4	18	14	7	6

Do interest rates affect choice of sponsor?

Introduction

Overview

Field experiment

Results

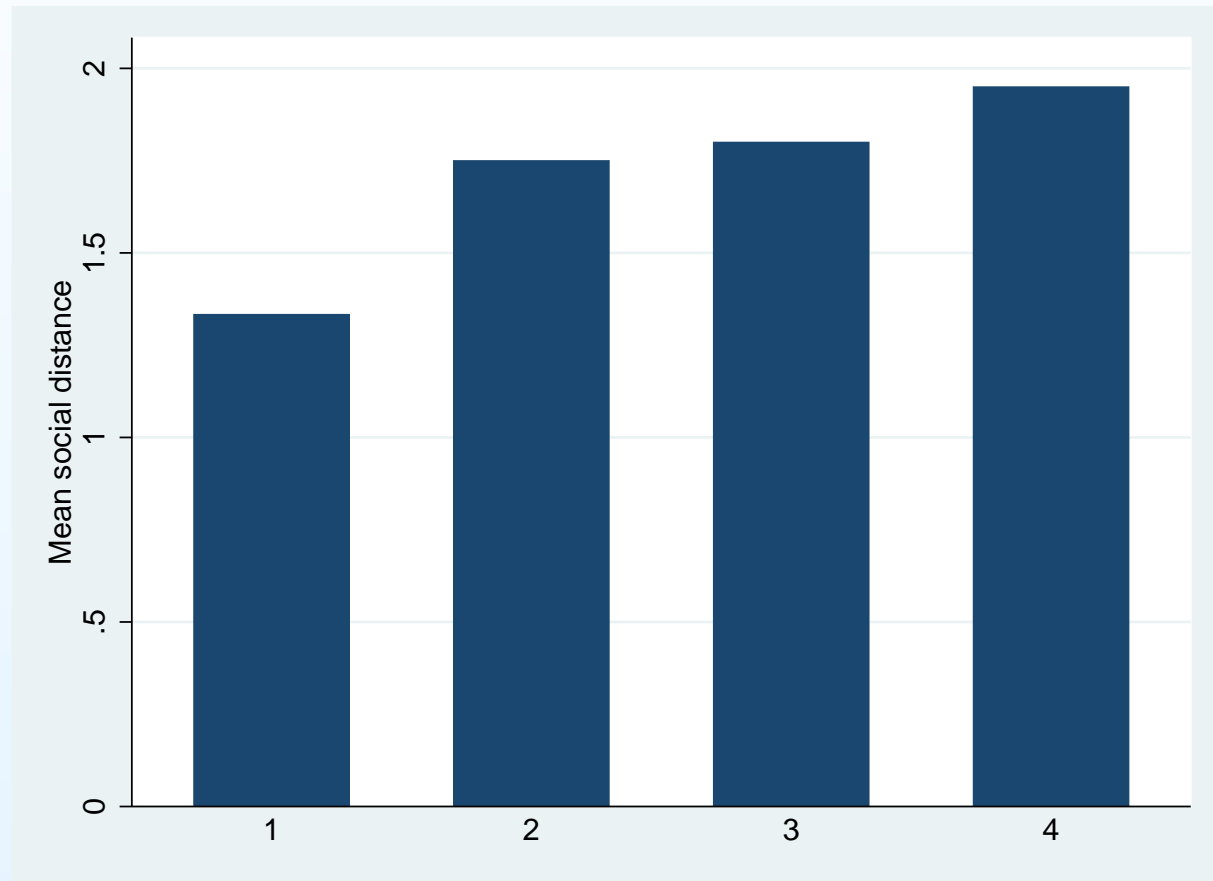
● Basic Results

● Regression Analysis

● Unobservables

Conclusion

Average social distance between client and sponsor by slope:



Clients who were assigned a greater slope are more likely to choose socially distant sponsors (tradeoff between interest rate and social distance).

Estimating equation

Introduction

Overview

Field experiment

Results

● Basic Results

● Regression Analysis

● Unobservables

Conclusion

- A simple model of monitoring and borrower type yields

$$S = \alpha \cdot \text{type} - \beta \cdot d + \gamma \cdot \text{type} \times d \times \text{obs} - \delta \cdot \text{type} \times d \times \text{unobs} - \theta \cdot R + \varepsilon$$

- Main modeling assumptions:

1. High types more likely to repay and need less monitoring;
2. Monitoring is costlier at higher social distance.

- Key predictions about effect of social distance on surplus:

- Social distance reduces surplus;
- For high type, effect mitigated when type is publicly observed, but amplified when type only known to close friends.

- Estimate as **discrete choice** conditional logit.

- Dep. var. is cosigner choice from pool of 25 possibilities.

Conditional Logit

Surplus of client i for being sponsored by j :

$$S_{ij} = \beta * \text{Soc Dist} + \theta * \text{Interest rate} + \kappa * \text{Geo. Dist} + \varepsilon$$

Interest	-0.802 (0.3)***	-0.801 (0.306)***	-0.800 (0.3)***	-0.884 (0.307)***	-0.785 (0.301)***	-0.804 (0.3)***
Relative		2.359 (0.871)***				
Friend			-0.232 (0.33)			
Neighbor				0.93 (0.325)***		
Lent to					0.701 (0.355)**	
Borrowed						0.248 (0.433)
SD=1	4.830 (0.897)***	4.624 (0.905)***	4.882 (0.9)***	4.510 (0.913)***	4.695 (0.9)***	4.813 (0.898)***
SD=2	2.534 (0.852)***	2.448 (0.854)***	2.518 (0.852)***	2.626 (0.856)***	2.544 (0.852)***	2.542 (0.852)***
SD=3	1.624 (0.785)**	1.607 (0.784)**	1.615 (0.785)**	1.672 (0.79)**	1.630 (0.784)**	1.626 (0.785)**
Distance	-0.006 (0.002)**	-0.007 (0.003)***	-0.006 (0.002)**	-0.006 (0.003)**	-0.006 (0.002)**	-0.006 (0.002)**
Obs.	3021	3021	3021	3021	3021	3021

Conditional Logit

Surplus of client i for being sponsored by j :

$$S_{ij} = \beta * \text{Soc Dist} + \theta * \text{Interest rate} + \kappa * \text{Geo. Dist} + \varepsilon$$

Interest	-0.802 (0.3)***	-0.801 (0.306)***	-0.800 (0.3)***	-0.884 (0.307)***	-0.785 (0.301)***	-0.804 (0.3)***
Relative		2.359 (0.871)***				
Friend			-0.232 (0.33)			
Neighbor				0.93 (0.325)***		
Lent to					0.701 (0.355)**	
Borrowed						0.248 (0.433)
SD=1	4.830 (0.897)***	4.624 (0.905)***	4.882 (0.9)***	4.510 (0.913)***	4.695 (0.9)***	4.813 (0.898)***
SD=2	2.534 (0.852)***	2.448 (0.854)***	2.518 (0.852)***	2.626 (0.856)***	2.544 (0.852)***	2.542 (0.852)***
SD=3	1.624 (0.785)**	1.607 (0.784)**	1.615 (0.785)**	1.672 (0.79)**	1.630 (0.784)**	1.626 (0.785)**

Borrowing through direct vs indirect friend equivalent to 2.9 percent decrease in the monthly interest rate, or 17 % of face value of 6 month loan. SD=2 vs SD=3 equivalent to additional 1.1 % in monthly interest.

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- Unobservables

Conclusion

Conditional Logit

Surplus of client i for being sponsored by j :

$$S_{ij} = \beta * \text{Soc Dist} + \theta * \text{Interest rate} + \kappa * \text{Geo. Dist} + \varepsilon$$

Interest	-0.802 (0.3)***	-0.801 (0.306)***	-0.800 (0.3)***	-0.884 (0.307)***	-0.785 (0.301)***	-0.804 (0.3)***
Relative		2.359 (0.871)***				
Friend			-0.232 (0.33)			
Neighbor				0.93 (0.325)***		
Lent to					0.701 (0.355)**	
Borrowed						0.248 (0.433)
SD=1	4.830 (0.897)***	4.624 (0.905)***	4.882 (0.9)***	4.510 (0.913)***	4.695 (0.9)***	4.813 (0.898)***
SD=2	2.534 (0.852)***	2.448 (0.854)***	2.518 (0.852)***	2.626 (0.856)***	2.544 (0.852)***	2.542 (0.852)***
SD=3	1.624 (0.785)**	1.607 (0.784)**	1.615 (0.785)**	1.672 (0.79)**	1.630 (0.784)**	1.626 (0.785)**

Within SD=1, sponsoring relatives, neighbors and previous creditors have particularly large effects.

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- Unobservables

Conclusion

Effect of Borrower Type

Introduction

Overview

Field experiment

Results

- Basic Results
- **Regression Analysis**
- Unobservables

Conclusion

Surplus of client i for being sponsored by j :

$$S_{ij} = \beta * \text{Close} + \gamma * \text{Type} * \text{Close} + \theta * \text{Interest} + \kappa * \text{Geo. Dist} + \varepsilon$$

Interest	-0.752 (0.223) ^{***}	-0.722 (0.253) ^{***}	-0.736 (0.223) ^{***}	-0.711 (0.241) ^{***}	-0.723 (0.222) ^{***}
Close	3.261 (0.365) ^{***}	3.322 (0.361) ^{***}	3.312 (0.475) ^{***}	3.419 (0.375) ^{***}	3.495 (0.401) ^{***}
Business*Close		-0.789 (0.554)	-0.789 (0.611)		-0.838 (0.562)
Female*Close		-0.844 (0.427) [*]	-0.841 (0.498)		-0.911 (0.438) ^{**}
Good Type*Close				-0.801 (0.421) [*]	-0.814 (0.427) [*]
Bad Type*Close				.0091 (0.400)	.0158 (0.400)
Distance	-0.006 (0.002) ^{**}	-0.007 (0.003) ^{***}	-0.006 (0.002) ^{**}	-0.006 (0.003) ^{**}	-0.006 (0.002) ^{**}
Sponsor FE	No	No	Yes	No	No
Obs.	3021	3021	3021	3021	3021

Effect of Borrower Type

Introduction

Overview

Field experiment

Results

- Basic Results
- **Regression Analysis**
- Unobservables

Conclusion

Surplus of client i for being sponsored by j :

$$S_{ij} = \beta * \text{Close} + \gamma * \text{Type} * \text{Close} + \theta * \text{Interest} + \kappa * \text{Geo. Dist} + \varepsilon$$

Interest	-0.752 (0.223) ^{***}	-0.722 (0.253) ^{***}	-0.736 (0.223) ^{***}	-0.711 (0.241) ^{***}	-0.723 (0.222) ^{***}
Close	3.261 (0.365) ^{***}	3.322 (0.361) ^{***}	3.312 (0.475) ^{***}	3.419 (0.375) ^{***}	3.495 (0.401) ^{***}
Business*Close		-0.789 (0.554)	-0.789 (0.611)		-0.838 (0.562)
Female*Close		-0.844 (0.427) [*]	-0.841 (0.498)		-0.911 (0.438) ^{**}
Good Type*Close				-0.801 (0.421) [*]	-0.814 (0.427) [*]
Bad Type*Close				.0091 (0.400)	.0158 (0.400)
Distance	-0.006 (0.002) ^{**}	-0.007 (0.003) ^{***}	-0.006 (0.002) ^{**}	-0.006 (0.003) ^{**}	-0.006 (0.002) ^{**}
Sponsor FE	No	No	Yes	No	No
Obs.	3021	3021	3021	3021	3021

Borrowing through a “close” link is equivalent to a 4.6 percent decrease in the monthly interest rate. For women the effect of closeness is equivalent to a 3.4 percent decrease in monthly interest.

Observing Unobservables

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- **Unobservables**

Conclusion

- Regressions only used observable proxies for borrower type.
- To measure borrower type **unobserved to econometrician**, we use a second **ex-post randomization**.
- After loans were taken out, half of all sponsors were randomly selected and their responsibility was reduced to 50% of loan value.
 - Both sponsor and client were informed about this.
- Idea: higher types are more likely to repay even when cosigner is not responsible.

Selection and repayment

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- **Unobservables**

Conclusion

- Second randomization helps distinguish between symmetric and asymmetric information.
- If residual type is *symmetric information*, model predicts

1. Low types more likely to choose friends:

$$\bar{t}(\text{close}) < \bar{t}(\text{far})$$

2. High types switch to non-friends at flatter slopes:

$$\bar{t}(\text{far, flat}) > \bar{t}(\text{far, steep})$$

- Opposite predictions with *asymmetric information*, when residual type only observed to friends.
- Can test using second randomization: high types repay even when cosigner is not responsible.

Second randomization: basic results

Introduction

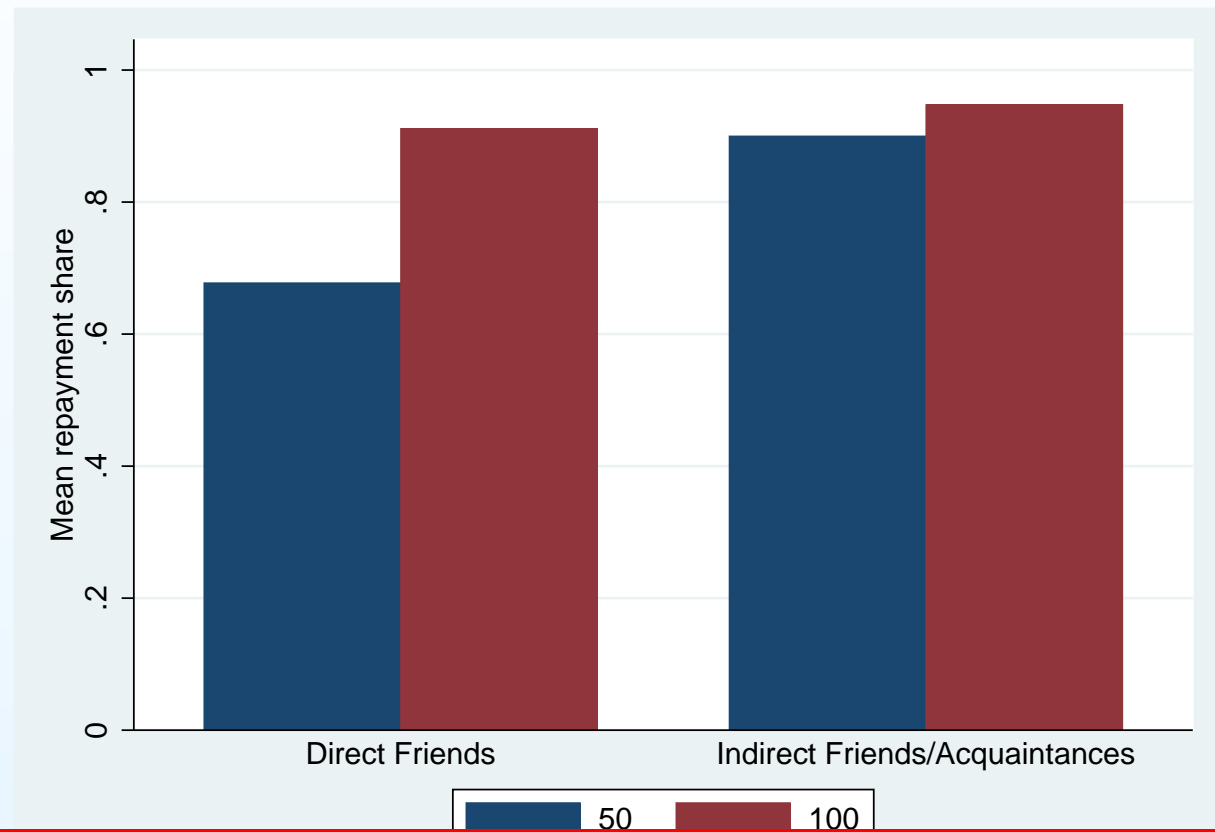
Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- Unobservables

Conclusion



Reducing the sponsor's responsibility affects repayment mostly for SD=1 links. Consistent with *symmetric information* view: high-types can switch to non-friends while low types are monitored by friends.

Repayment and borrower type

$$\text{Repayment} = \alpha * \text{Group} + \beta * \text{Group} * \text{2nd rand} + \varepsilon$$

Close	-0.086 (0.087)		
Close * Second Randomization	-0.175 (0.083)**		
Second Randomization	-0.089 (0.130)	-0.159 (0.155)	-0.179 (0.160)
Slope		-0.035 (0.101)	-0.045 (0.067)
Slope * Second Randomization		-0.107 (0.045)**	-0.095 (0.044)**
Female	-0.005 (0.090)		-0.184 (0.155)
Female * Second Randomization	0.341 (0.270)		0.549 (0.370)
Business	-0.072 (0.112)		-0.145 (0.150)
Business * Second Randomization	0.380 (0.227)*		1.009 (0.552)*
Obs.	128	68	68

(1) Subjects who borrow through non-friends reduce repayment by less. (2) Within this group, subject pool at steeper slope reduces repayment by more.

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- **Unobservables**

Conclusion

Money vs Social Distance for “Unobserved” High Type

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- **Unobservables**

Conclusion

- Repayment results suggest that borrower type is symmetrically observed in the community.
- Do agents revealed as high types ex post face different trade-off ex ante?
- Classify each borrower in second randomization as
 - Good type: repays even though sponsor is not responsible.
 - Bad type: fails to repay when sponsor is not responsible.
- Do “good types” switch to non-friends at flatter slopes?

Surplus for Unobserved Type

Introduction

Overview

Field experiment

Results

- Basic Results
- Regression Analysis
- **Unobservables**

Conclusion

Surplus of client i for being sponsored by j :

$$S_{ij} = \beta * \text{Close} + \gamma * \text{Type} * \text{Close} + \theta * \text{Interest} + \kappa * \text{Geo. Dist} + \varepsilon$$

Interest	-0.752 (0.223) ^{***}	-0.722 (0.253) ^{***}	-0.736 (0.223) ^{***}	-0.711 (0.241) ^{***}	-0.723 (0.222) ^{***}
Close	3.261 (0.365) ^{***}	3.322 (0.361) ^{***}	3.312 (0.475) ^{***}	3.419 (0.375) ^{***}	3.495 (0.401) ^{***}
Business*Close		-0.789 (0.554)	-0.789 (0.611)		-0.838 (0.562)
Female*Close		-0.844 (0.427) [*]	-0.841 (0.498)		-0.911 (0.438) ^{**}
Good Type*Close				-0.801 (0.421) [*]	-0.814 (0.427) [*]
Bad Type*Close				.0091 (0.400)	.0158 (0.400)
Distance	-0.006 (0.002) ^{**}	-0.007 (0.003) ^{***}	-0.006 (0.002) ^{**}	-0.006 (0.003) ^{**}	-0.006 (0.002) ^{**}
Sponsor FE	No	No	Yes	No	No
Obs.	3021	3021	3021	3021	3021

For “good type” effect of closeness is reduced by 1.1 percentage point in monthly interest. Supports symmetric information view.

Introduction

Overview

Field experiment

Results

Conclusion

● Conclusion

Conclusion

Conclusion

Introduction

Overview

Field experiment

Results

Conclusion

● Conclusion

- Connections have large value for borrowing in Peru communities.
 - Cosigning by a friend equivalent to 3 percent monthly interest.
 - Agents do trade off financial and social costs.
- Cosigner's joint liability improves repayment through ex post effort like monitoring.
- Terms of trade between money and friendship differ by type.
 - Joint liability may increase *access to finance* because friends effectively monitor low types.
 - Social capital and conventional banking may be complements.
- No asymmetric information within community, but evidence of information not spanned by demographics.
- Broader lesson: field experiments can measure social capital embedded in networks.