



The Emergence of Information Sharing in Credit Markets

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Information sharing and credit

- Theory

- selection effect
- incentive effect

Pagano & Jappelli *JF* 2003

Padilla & Pagano *EER* 2000

- Evidence

- aggregate credit
- firm-level credit access

Djankov, McLiesh, Shleifer *JFE* 2007

Love & Mylenko *WB* 2003

Brown, Jappelli, Pagano *JFI*



Emergence of information sharing

- Participation in a credit bureau

- adverse selection 😊

Pagano & Jappelli *JF* 1993

- moral hazard ☹️

Klein *Econ. & Pol.* 1992

- lender competition ☹️

... and there is a coordination problem !



Empirical questions

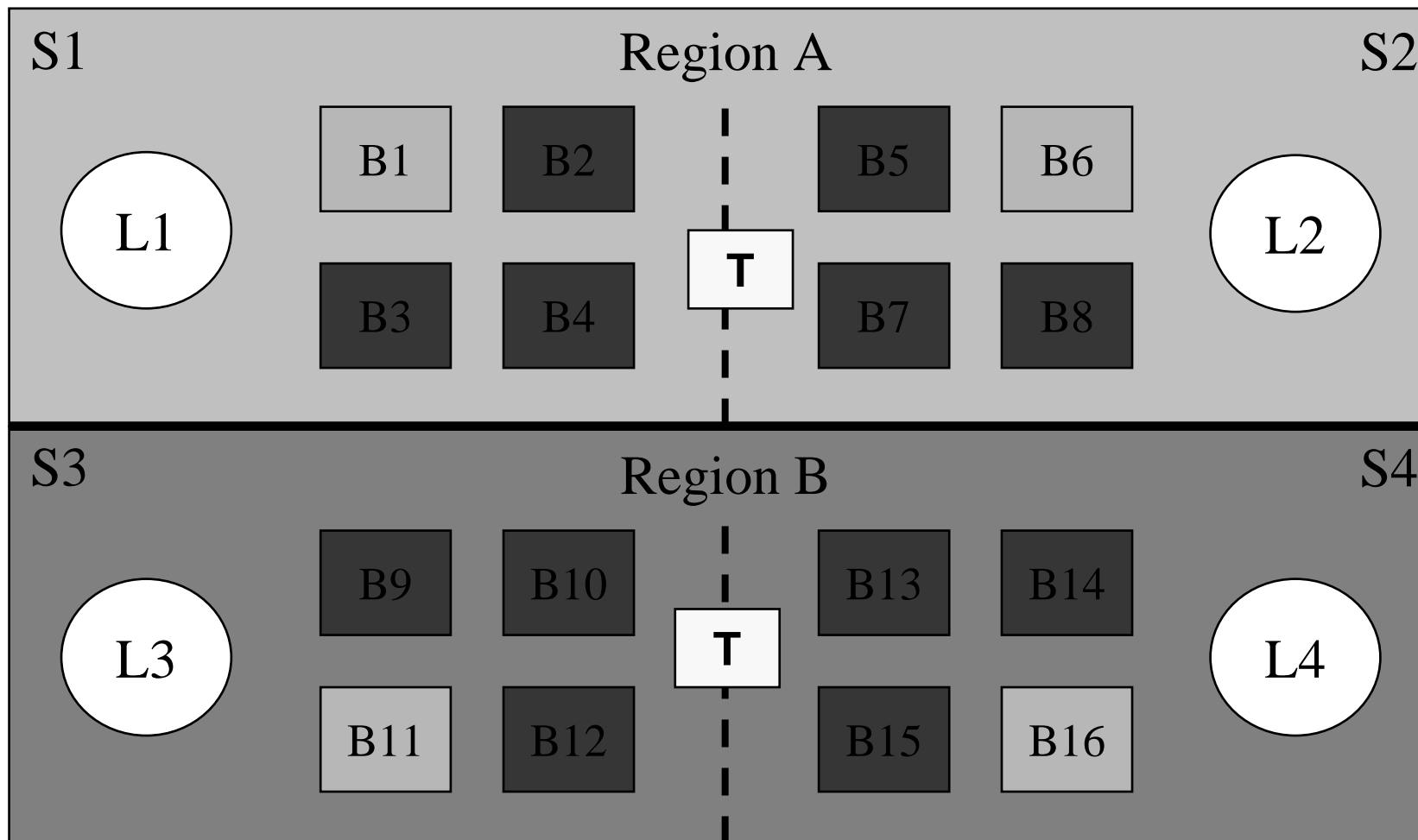
- Does potential adverse selection encourage credit bureau participation ?
- Does lender competition discourage credit bureau participation ?
- Which effect is stronger ?
 - ... can strong competition prevent valuable information exchange ?



Methodology: Laboratory experiment

- Identification is difficult with field data
 - data availability
 - reverse causation
- Experiment enables identification
 - vary information conditions exogenously
 - vary lender competition exogenously

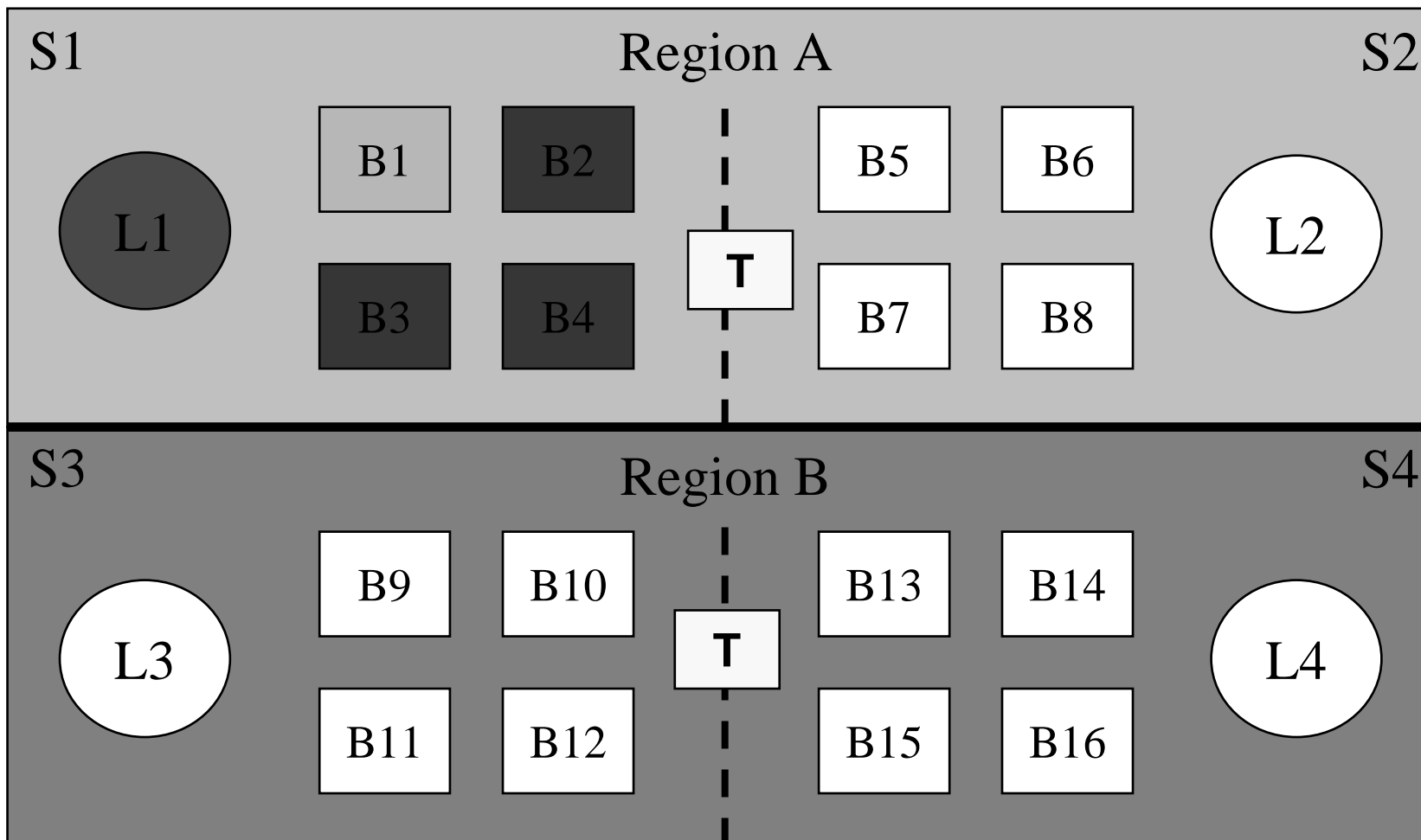
Experimental Credit Market



Loan Size: 100, Payoff good: 300, Payoff bad: 0



Information conditions





Decision schedule of lenders

1. Learn type of each borrower in own sector
2. Decide whether to join credit bureau
3. Reciprocal information exchange among bureau members
4. Nature determines whether borrowers switch location
5. Make credit offers
6. Informed about credit market outcome and payoffs



Incentives to join the credit bureau

- ☺ Probability of borrowers switching location
- ☺ Lenders from other region join the bureau
- ☹ Lender in same region joins the bureau
- ☹ Intra-regional competition (low T)



Treatments & predictions

	High mobility (prob. switching =.75)	Low mobility (prob. switching =.25)
Low competition (T=160)	full sharing (2 lenders per region)	full sharing / partial sharing
High competition (T=60)	full sharing / partial sharing	partial sharing (1 lender / region)

* In all treatments „no sharing“ is also an equilibrium



Participants

- 300 market observations per treatment
 - 5 sessions per treatment
 - 20 periods per session
 - 12 participants (students) per session
- Incentives
 - show up fee: 10 US\$
 - additional earnings possible: 0 - 80 US\$
 - average additional earnings: 45 US\$



Results: credit bureau participation

	High mobility (prob. switching =.75)	Low mobility (prob. switching =.25)
Low competition (T=160)	90% (2 lenders / region: 82%)	
High competition (T=60)		43% (1 lender / region: 67%)



Results: credit bureau participation

	High mobility (prob. switching =.75)	Low mobility (prob. switching =.25)
Low competition (T=160)	90%	56% (2 lenders / region: 24%) (1 lender / region: 64%)
High competition (T=60)	86% (2 lenders / region: 72%) (1 lender /region: 26%)	43%

Results: Repayments by good borrowers

	High mobility (prob. switching =.75)	Low mobility (prob. switching =.25)
Low competition (T=160)	238 (287)	234 (296)
High competition (T=60)	176 (281)	182 (293)

2 lenders know borrower type: prediction = $100+T$
(1 lender knows type: prediction = 300)



Summary & conclusion

- Potential adverse selection encourages information sharing
- Lender competition discourages information sharing

.... the impact of adverse selection is stronger!

Our results support a policy of facilitating private credit bureaus, rather than setting up public registries



extra slides

Results: Repayments

Repayments paid by good entrepreneurs

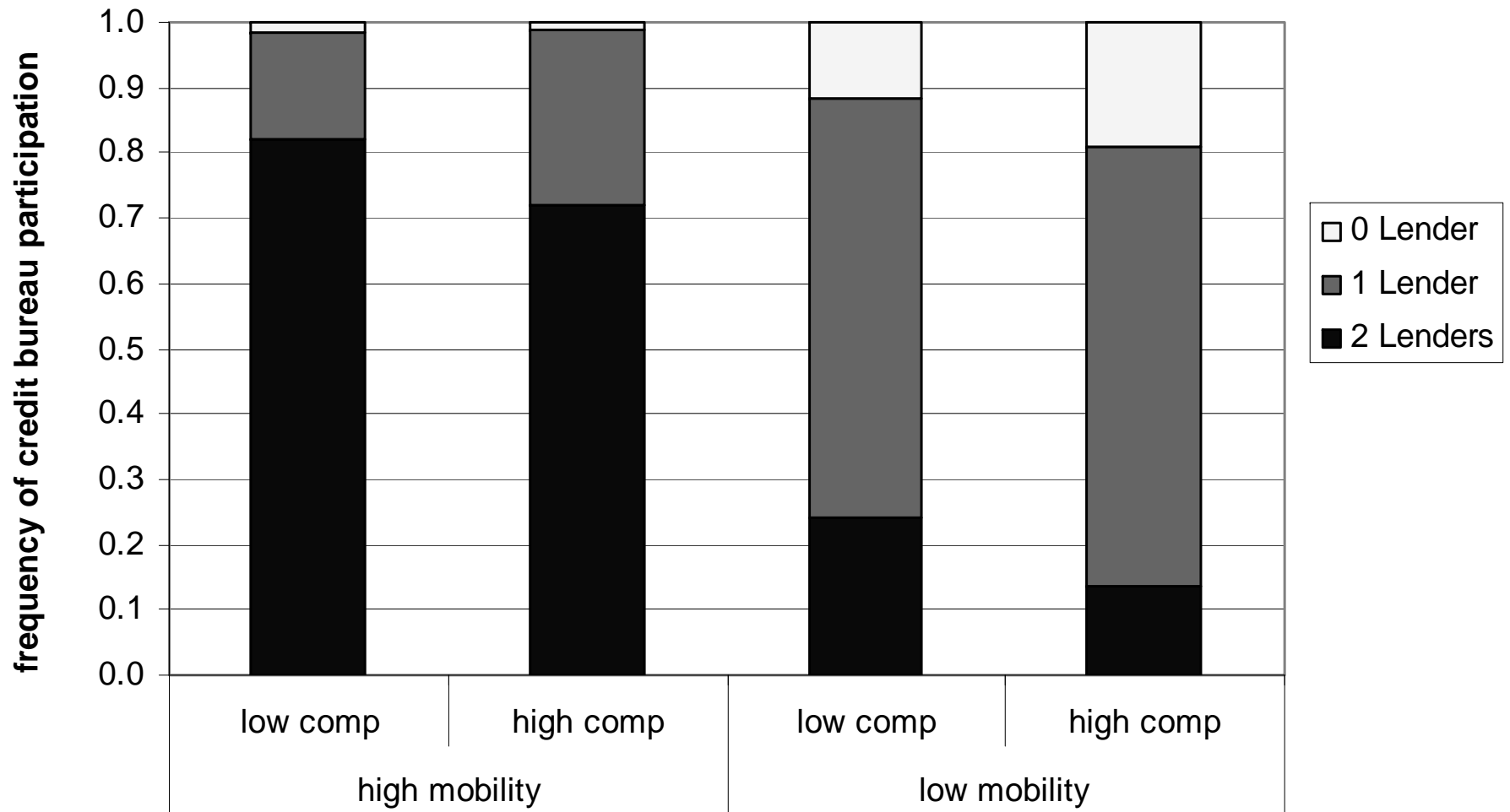
Treatment	T	Lenders who know type	
		1	2
LowMobility -HighCompetition	60	293	182
LowMobility -LowCompetition	160	296	234
HighMobility -HighCompetition	60	281	176
HighMobility -LowCompetition	160	287	238

Predictions:

1 lender knows entrepreneur type: 300

2 lenders know entrepreneur type: $100+T$

Results: Information sharing



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Results: Credit offers

Probability of a lender offering credit to an entrepreneur

Treatment	Information on entrepreneur		
	none	bad	good
LowMobility -HighCompetition	0.02	0.02	0.99
LowMobility -LowCompetition	0.01	0.01	0.97
HighMobility -HighCompetition	0.05	0.05	0.97
HighMobility -LowCompetition	0.03	0.03	0.94
Total	0.03	0.03	0.97

Information sharing outcomes

