



Social Capital and Mortgage Delinquency

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Summary of the Paper

The paper tests the effect of social capital on mortgage delinquency.

Data:

County-Year level data from 1999 to 2011 for 2220 counties in the U.S.

- Social Capital Index from Rupasingha et al. (2006): 1997, 2005, 2009
- Mortgage delinquency, and various county-level characteristics

Findings:

- The increase in Social Capital lowers the likelihood of mortgage delinquency, controlling for other factors.
- The effect is more pronounced during post-crisis period than pre-crisis period.

Conclusion: Social capital matters for mortgage default risk.

Comment 1. Research Design

A. Social Capital Index is very persistent

The index is the **principal component** of the **county-level variables** such as 1) % of voters in presidential elections, 2) response rate to decennial Census, 3) # of tax exempt non-profit organization, and 4) the associational density using # of bowling centers, golf clubs, fitness centers, and # of civic/sport/religious/political/labor/business/professional organizations.

	SCI 1997	SCI 2005	SCI 2009
Social Capital Index 1997	1		
Social Capital Index 2005	0.94	1	
Social Capital Index 2009	0.89	0.93	1

2005-2009: 4 years	Low Social Capital 09	High Social Capital 09
Low Social Capital 05	87.01	12.99
High Social Capital 05	12.94	87.06
1997-2005: 8 years	Low Social Capital 05	High Social Capital 05
Low Social Capital 97	90.8	9.2
High Social Capital 97	9.27	90.73
1997-2009: 12 years	Low Social Capital 09	High Social Capital 09
Low Social Capital 97	84.75	15.25
High Social Capital 97	15.25	84.75

- Variations are mostly in C-X.
- Interpolation makes the persistency worse.
- Suggestion: a C-X of Social Capital=> How does affect in future outcomes?

Comment 1. Research Design

B. Main Research Question

Given the strategic default option, how does social capital affect on delinquency by reducing opportunistic behavior?

=> Key is the interaction term: **Social Capital x Strategic Default Option**

What are the factors affecting the strategic default option?

- a. Negative equity
- b. Ghent and Kudlyak (2011) : recourse vs non-recourse state
 - Amplified for homes with high appraisal value/ Private securitized loans
- c. Guiso, Sapienza, and Zingales (2013)
 - Cost of leaving (length of stay), older/black or Hispanic population
- d. Other types of credits
 - i.e. Auto Loan and Credit Card Loan / subprime credit
- e. Change in Unemployment, Change in Income, Change in Home Price

Comment 2. Endogeneity / Reverse Causality

Social Capital Index is a function of many different factors.

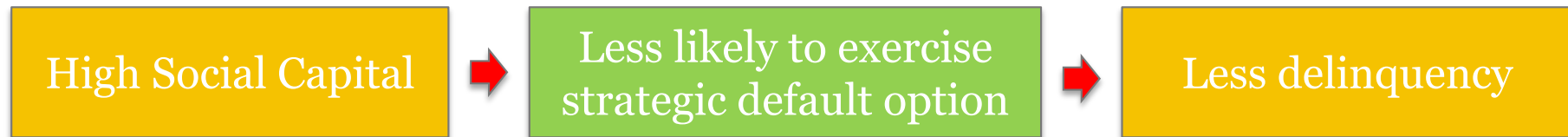
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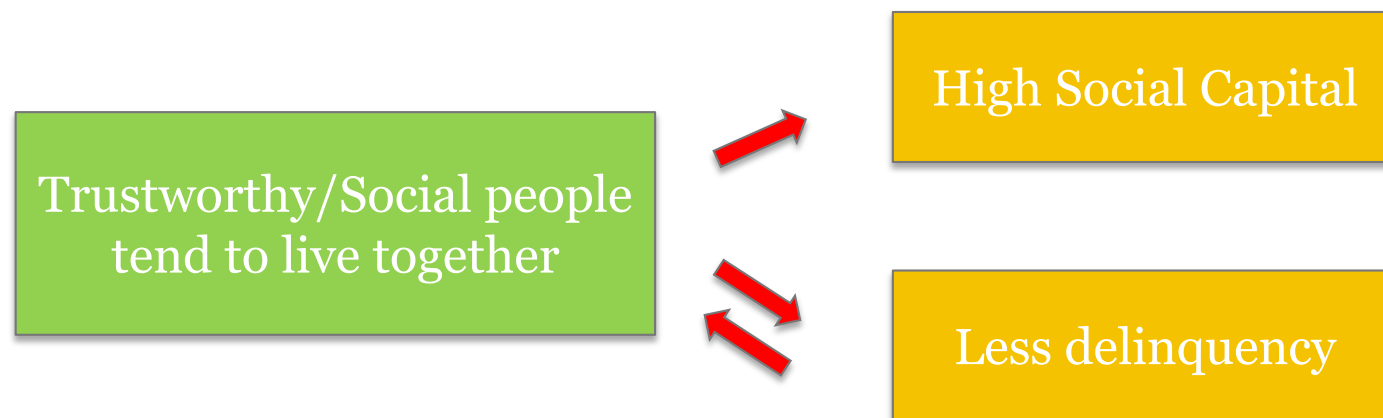
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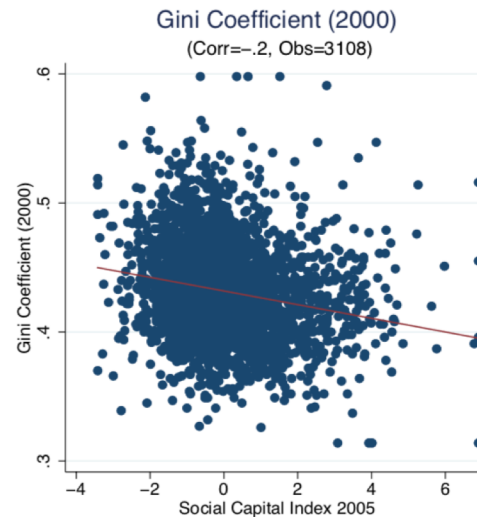
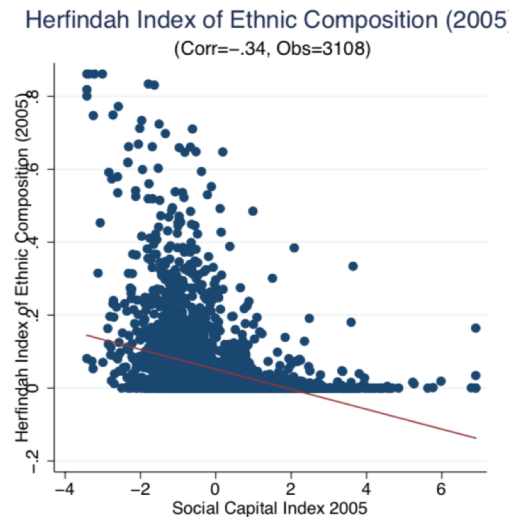
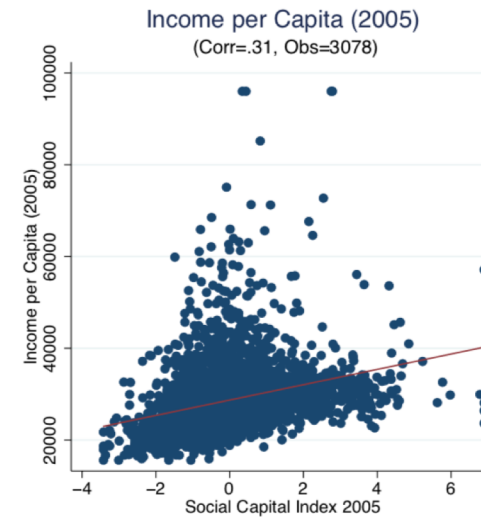
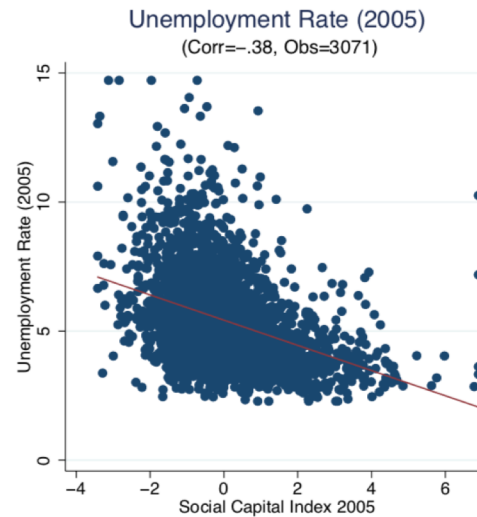
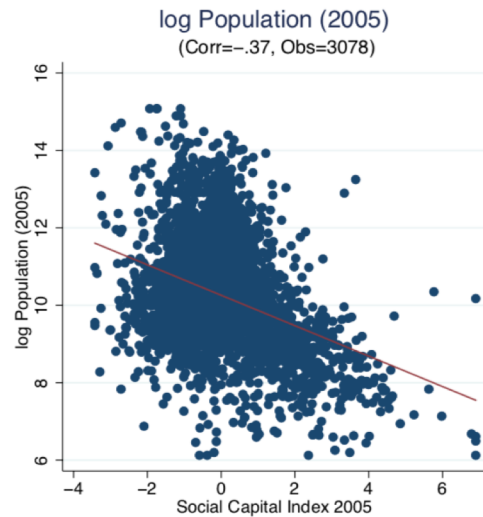
This paper claims:



But why not



Comment 2. Endogeneity / Reverse Causality

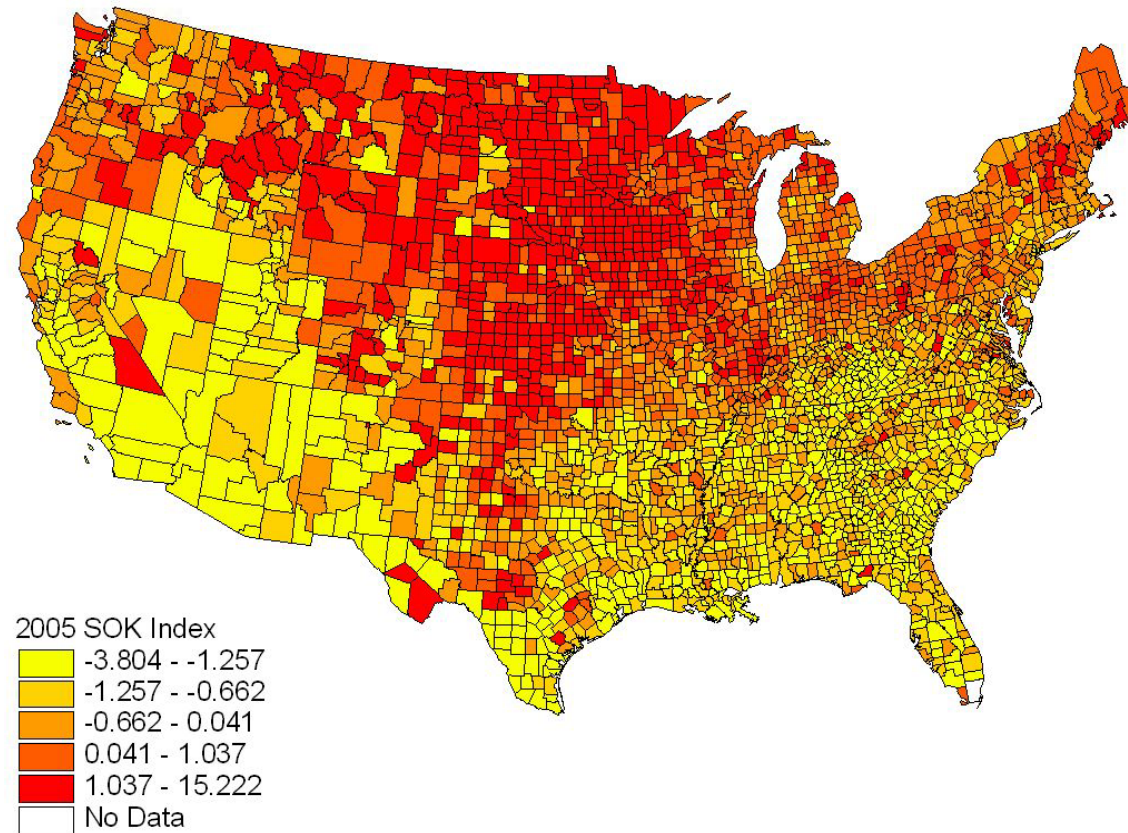


High Social Capital Counties

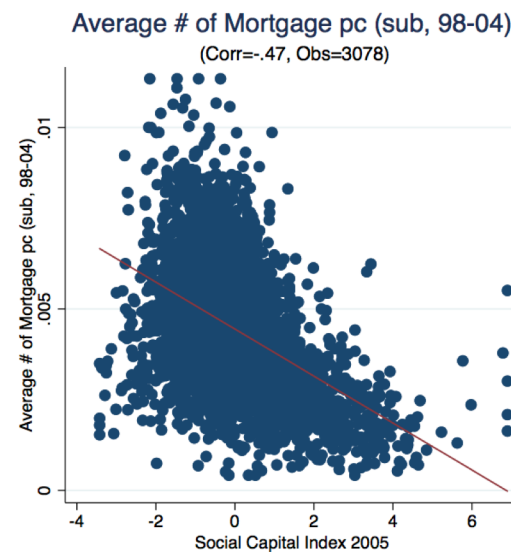
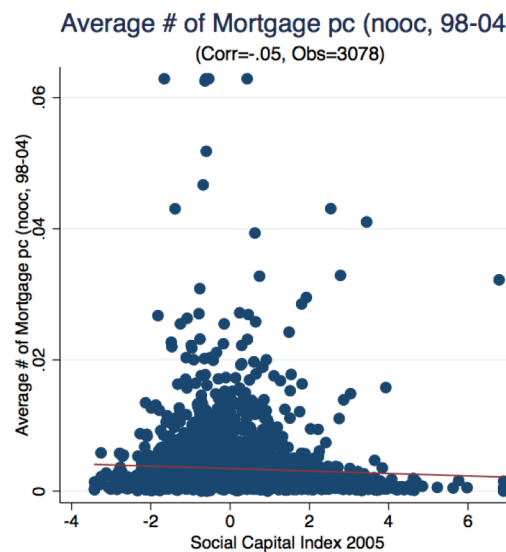
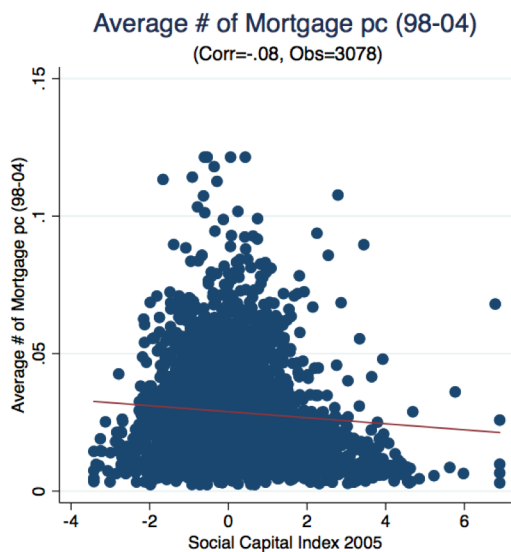
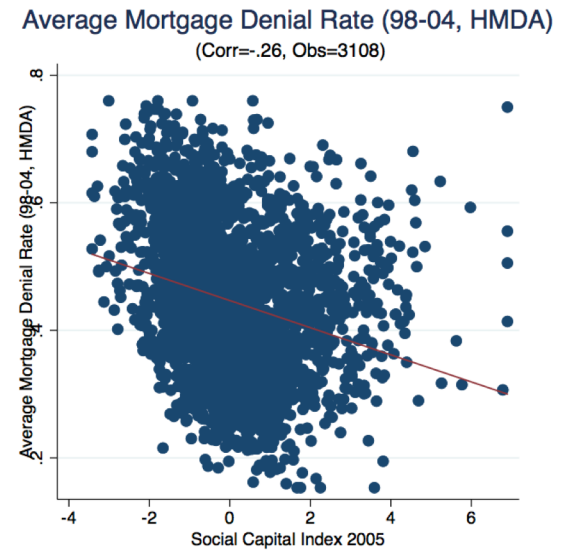
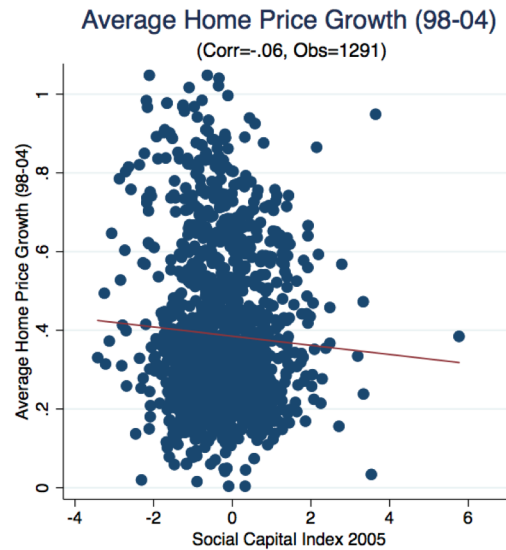
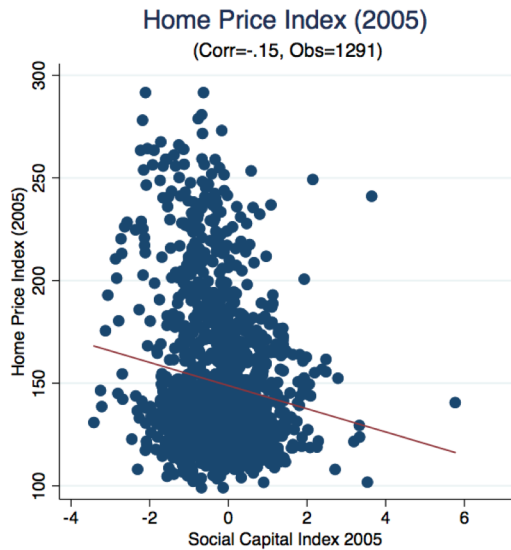
Small but rich counties
with low unemployment,
homogenous ethnicity, less
income inequality!

Comment 2. Endogeneity / Reverse Causality

County-level social capital levels, 2005



Comment 2. Endogeneity / Reverse Causality



Comment 2. Endogeneity / Reverse Causality

VARIABLES	No Fixed Effects					State Fixed Effects				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
		Social Capital Index (2005)					Social Capital Index (2005)			
log Population (2005)	-0.187*** (-7.300)	-0.247*** (-9.555)	-0.183*** (-7.069)	-0.204*** (-7.874)	-0.117*** (-4.555)	-0.180*** (-9.027)	-0.209*** (-10.23)	-0.171*** (-8.457)	-0.189*** (-9.393)	-0.155*** (-7.438)
Unemployment Rate (2005)	-0.0547*** (-3.213)	-0.0197 (-1.186)	-0.0533*** (-3.100)	-0.0527*** (-3.088)	-0.0190 (-1.074)	-0.0962*** (-5.476)	-0.0692*** (-3.858)	-0.0986*** (-5.599)	-0.0964*** (-5.506)	-0.0843*** (-4.745)
Income per Capita (2005)	4.25e-05*** (10.70)	2.23e-05*** (6.068)	4.41e-05*** (9.412)	4.37e-05*** (10.92)	3.93e-05*** (9.906)	3.16e-05*** (9.748)	2.42e-05*** (7.181)	3.46e-05*** (8.718)	3.23e-05*** (9.875)	3.10e-05*** (9.671)
Herfindahl Index of Ethnic Composition (2005)	-3.154*** (-10.23)	-2.126*** (-7.080)	-3.205*** (-10.24)	-3.250*** (-10.48)	-3.089*** (-9.536)	-1.815*** (-6.744)	-1.404*** (-4.911)	-1.910*** (-7.045)	-1.861*** (-6.882)	-1.860*** (-6.642)
Gini Coefficient (2000)	-0.330 (-0.451)	1.315* (1.783)	-0.556 (-0.697)	0.00532 (0.00714)	-2.355*** (-3.097)	4.478*** (7.687)	4.664*** (8.081)	4.029*** (6.157)	4.624*** (7.825)	3.564*** (5.247)
Home Price Index (2005)	-0.0140*** (-8.903)	-0.0121*** (-8.167)	-0.0140*** (-8.941)	-0.0131*** (-8.386)	-0.0131*** (-8.633)	-0.00549*** (-3.289)	-0.00613*** (-3.723)	-0.00526*** (-3.109)	-0.00484*** (-2.817)	-0.00558*** (-3.330)
Average Home Price Growth (98-04)	1.759*** (5.813)	1.294*** (4.521)	1.779*** (5.870)	1.726*** (5.818)	1.685*** (5.773)	-0.147 (-0.526)	-0.125 (-0.455)	-0.116 (-0.420)	-0.164 (-0.591)	-0.0484 (-0.172)
Average Mortgage Denial Rate (98-04)		-4.172*** (-13.47)					-1.847*** (-5.451)			
# of Origination per Capita (98-04)										
Total			-1.456 (-0.737)					-3.082* (-1.729)		
Nonowner occupied				-14.95*** (-3.183)					-7.093* (-1.791)	
Subprime					-152.7*** (-11.13)					-46.19*** (-3.395)
Observations	1,276	1,276	1,276	1,276	1,276	1,275	1,275	1,275	1,275	1,275
R-squared	0.329	0.408	0.329	0.335	0.394	0.689	0.698	0.690	0.690	0.693

Comment 2. Endogeneity / Reverse Causality

IV approach?

1. (3 or 5 years) Lagged Social Capital Index: Persistent
2. Organ donation per capita: Similar problem to the Social Capital Index
3. Distance to Canadian border: Exclusion restriction?
4. Average Social Capital Index in 100 miles: Is this state-level effect?

Suggestions

1. “Change in Social Capital Index” on “Change in Delinquency Rate”
 - County Fixed effect and Social Capital interacted with the measures of strategic default option.
2. Random shock to the Trust in Society
 - Similar to Boston Terror in Kumar et al. (2015)
 - Major gun accidents using the distance to the accident.

Concluding Remarks

- Enjoyed reading the paper.
- It is interesting to find the role of social capital on delinquency behavior.
- Further effort to pin down the causality will significantly enhance the paper.