

Social Networks as Information Conduits for Online Credit Supply and Demand

Internet Appendix

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IA1 LendingClub Institutional Details

LendingClub is an online lending platform that facilitates small loans for various purposes, including credit card refinancing, debt consolidation, home improvement, short-term bridge financing, vehicle purchases, and others. Loan amounts range from \$500 to \$35,000 for individual borrowers and up to \$300,000 for businesses, with terms of either three or five years.

To apply for a loan, applicants begin by completing a short application with basic information about their identity, employment, and income. LendingClub then evaluates the application and credit report data using its proprietary credit decision and scoring algorithm to determine pre-approval. The algorithm incorporates minimum credit requirements, such as a FICO score of at least 660, a satisfactory debt-to-income ratio, a credit history of at least 36 months, and a limited number of credit inquiries in the preceding six months. Pre-approved applicants receive a list of loan options detailing the amount, term, and interest rate. Upon selecting a loan option, applicants complete the full application by providing additional personal details, including their home and work addresses, employer or business name, length of employment, and social security number. The loan request is then listed on the platform to attract lenders. Figure [IA1](#) shows a screenshot of a loan listing. Within 30 days, LendingClub informs the applicant of the funding status or, for some applications, conducts more intensive identity checks to verify reported income or employment details.

We drop the following observations from our sample: (i) pre-2010 loans, which account for less than 0.5% of total loans originated by LendingClub; (ii) joint applications; (iii) for supply-side analysis, applications whose borrower credit score is missing or lower than 660 because the platform automatically rejects these applications; (iv) applications with incorrect or missing borrower ZIP Code.

Build a Portfolio

Per Loan:

Filter Loans [Save](#) | [Open](#)

[More Filters »](#)

Update Results

[Minimize All](#)
[Reset All](#)

☐ Investment	Rate	Term	FICO®	Amount	Purpose	% Funded	Amount / Time Left
☐ \$0	D 3 22.50%	36	680-684	\$20,000	Other	86%	\$2,650 22 days

LOAN ID: 150692172 (Joint Application¹) [✕](#)

Loan Submitted: 5/7/19 12:06 PM

Monthly Payment: \$769.00 (36)

Review Status: **Approved**

Member Loan#: 150692172 [Prospectus](#)

Profile

(all information unverified unless otherwise denoted)

Home Ownership: **RENT**

Length of Employment: **4 years**

Individual Gross Income: **\$2,417 / month**

Joint Gross Income: **\$5,083 / month**

Job Title: **C.N.A.**

Location: **855xxAZ**

Individual Debt-to-Income: **39.9%**

Joint Debt-to-Income: **27.62%**

Credit History

(as reported by credit bureau on 4/23/19)

Credit Score Range: **680-684**

Earliest Credit Line: **11/2014**

Open Credit Lines: **4**

Total Credit Lines: **8**

Revolving Credit Balance: **\$11,090.00**

Revolving Line Utilization: **74.90%**

Inquiries in Last 6 Months: **0**

Accounts Now Delinquent: **0**

Delinquent Amount: **\$0.00**

Delinquencies (last 2 yrs): **0**

Months Since Last Delinquency: **n/a**

Public Records on File: **0**

Months Since Last Record: **n/a**

Months Since Last Major Derogatory: **n/a**

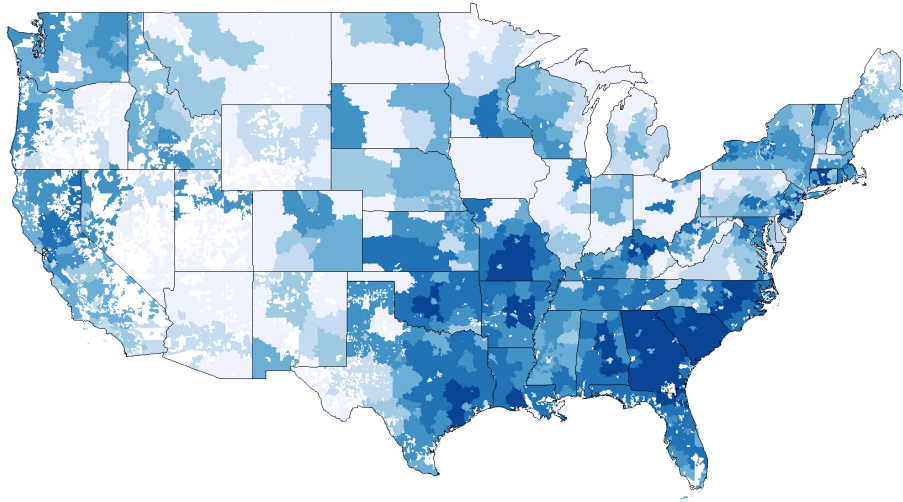
Collections Excluding Medical: **0**

Please view the [complete listing here](#).

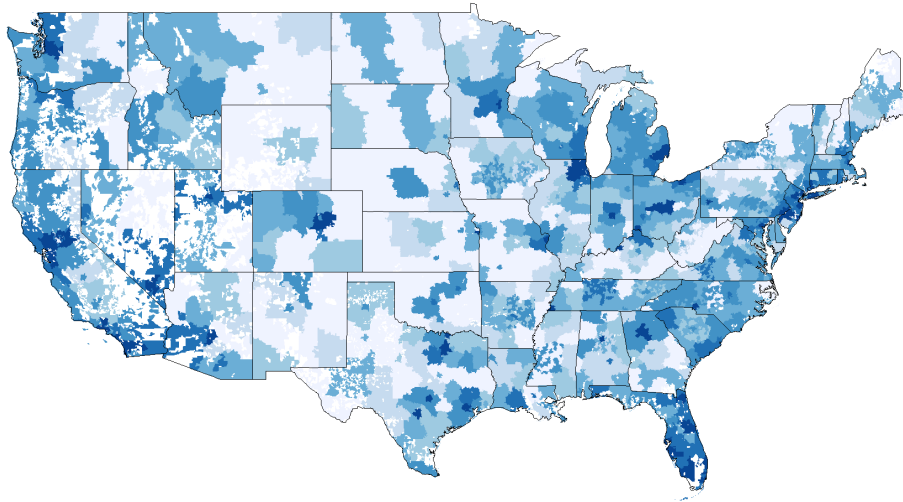
¹ Joint applications are approved based on the credit characteristics of either or both co-borrowers. Learn more about [Joint Applications](#).

Figure IA1: A Loan Listing on LendingClub

IA.3



Panel A. Occurrence of Natural Disasters



Panel B. Disclosure of Financial Adviser Misconduct Incidents

Figure IA2: Heat Maps of Natural Disasters and Financial Adviser Misconduct Incidents

This figure presents heat maps illustrating the occurrence of natural disasters and disclosures of financial adviser misconduct incidents from 2010 to 2017. For the demand-side analysis, we focus on disaster-affected areas with sufficient LendingClub activities.

Table IA1: Top LendingClub Loan Application and Origination Areas

This table lists the areas with the highest number of LendingClub loan applications and originations per 1,000 residents. Panel A reports the top 10 ZIP Codes by annual applications, and Panel B reports the top 10 by annual originations. LendingClub reports the borrower location at the state and 3-digit ZIP Code level, which may span multiple counties.

Panel A. Top ZIP Codes by Number of Applications (Per 1,000 Population)			
ZIP Code	State	Corresponding Counties	Average Annual Applications
588	ND	Williams, Divide, McKenzie, Dunn, Mountrail	4.30
059	VT	Essex	4.01
111	NY	Queens	3.53
114	NY	Queens, Kings	3.14
586	ND	Stark, Hettinger, McKenzie, Golden Valley, Billings, Adams, Mercer, Slope, Dunn, Bowman, Morton, Grant	2.97
890	NV	Clark, Nye, Esmeralda, Lincoln	2.93
107	NY	Bronx, Westchester	2.89
104	NY	Bronx, Westchester, New York	2.89
898	NV	Elko, Eureka, Lander	2.86
836	ID	Washington, Owyhee, Gem, Canyon, Valley, Payette, Boise, Elmore, Ada, Adams, Idaho	2.82
Panel B. Top ZIP Codes by Number of Loan Originations (Per 1,000 Population)			
ZIP Code	State	Corresponding Counties	Average Annual Originations
588	ND	Williams, Divide, McKenzie, Dunn, Mountrail	1.97
111	NY	Queens	1.57
059	VT	Essex	1.35
898	NV	Elko, Eureka, Lander	1.33
586	ND	Stark, Hettinger, McKenzie, Golden Valley, Billings, Adams, Mercer, Slope, Dunn, Bowman, Morton, Grant	1.22
890	NV	Clark, Nye, Esmeralda, Lincoln	1.20
107	NY	Bronx, Westchester	1.19
957	CA	Placer, El Dorado, Sacramento, Yolo, Nevada	1.17
100	NY	New York	1.16
114	NY	Queens, Kings	1.14

Table IA2: Correlation Matrix

This table presents the correlation matrices for the main variables used in the demand-side analysis (Panel A) and supply-side analysis (Panel B).

Panel A. Demand Variables		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1)	<i>FocalDemand</i>																		
(2)	<i>SPLCB</i>	0.23																	
(3)	<i>SPDisaster</i>	0.17	0.66																
(4)	<i>DWLCB</i>	0.09	0.45	0.25															
(5)	<i>DWDDisaster</i>	0.01	0.27	0.54	0.57														
(6)	<i>BankDisasterExpo</i>	0.05	0.00	-0.01	-0.12	-0.08													
(7)	<i>Population</i>	-0.02	-0.05	-0.03	-0.13	-0.06	0.05												
(8)	<i>Branch</i>	-0.16	0.21	0.18	0.32	0.28	-0.10	-0.27											
(9)	<i>DepositsPerCapita</i>	-0.03	0.25	0.21	0.06	0.08	0.00	0.14	0.20										
(10)	<i>HHI</i>	0.02	0.12	0.06	-0.04	-0.04	0.04	0.01	-0.19	0.60									
(11)	<i>White</i>	-0.23	-0.19	-0.15	0.09	0.02	-0.07	-0.29	0.38	-0.23	-0.25								
(12)	<i>Female</i>	0.12	0.24	0.17	0.38	0.24	0.01	0.10	0.06	0.11	0.01	-0.27							
(13)	<i>Education</i>	0.00	0.23	0.12	0.03	0.00	0.08	0.15	0.19	0.44	0.14	-0.14	0.08						
(14)	<i>IncomePerCapita</i>	0.00	0.17	0.08	0.07	0.03	0.07	0.11	0.24	0.45	0.10	-0.04	0.02	0.89					
(15)	<i>Unemployment</i>	0.10	-0.06	-0.01	-0.04	0.00	0.11	0.11	-0.37	-0.10	0.09	-0.40	0.22	-0.42	-0.44				
(16)	<i>AgeDisadv</i>	-0.17	-0.33	-0.23	-0.06	-0.07	-0.04	-0.20	0.00	-0.47	-0.23	0.39	0.02	-0.60	-0.51	0.13			
(17)	<i>ManufLabor</i>	-0.29	-0.26	-0.20	0.09	0.11	-0.09	-0.03	0.12	-0.21	-0.19	0.26	-0.06	-0.19	-0.13	-0.05	0.17		
(18)	<i>InfoLabor</i>	0.14	0.19	0.15	-0.02	-0.03	0.04	0.16	0.01	0.33	0.05	-0.21	0.13	0.62	0.56	-0.14	-0.53	-0.21	
(19)	<i>Internet</i>	-0.06	-0.07	-0.05	-0.17	-0.09	0.06	0.14	-0.11	0.13	0.08	-0.04	-0.12	0.32	0.29	-0.15	-0.19	0.01	0.23

Panel B. Supply Variables		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
(1)	<i>Funded</i>																					
(2)	<i>SPD</i>	0.05																				
(3)	<i>SPMisc</i>	-0.01	0.74																			
(4)	<i>DWD</i>	0.04	-0.28	-0.24																		
(5)	<i>SPC</i>	0.08	0.00	-0.04	0.50																	
(6)	<i>log(Amount)</i>	-0.02	-0.01	-0.02	0.01	0.00																
(7)	<i>FICO</i>	0.08	-0.02	-0.01	0.00	0.01	0.08															
(8)	<i>DTI</i>	-0.25	0.00	0.00	-0.04	-0.09	0.08	-0.02														
(9)	<i>EmployLength</i>	0.62	0.00	0.01	0.03	0.05	0.02	0.09	-0.25													
(10)	<i>Population</i>	0.04	0.03	-0.02	-0.06	0.29	0.00	0.01	-0.06	0.03												
(11)	<i>Branch</i>	-0.03	0.02	0.06	0.26	-0.13	0.01	0.01	0.02	-0.01	-0.40											
(12)	<i>DepositsPerCapita</i>	0.04	0.13	0.09	0.12	0.42	0.00	0.02	-0.04	0.02	0.19	0.15										
(13)	<i>HHI</i>	0.01	0.11	0.07	-0.05	0.16	-0.01	0.00	-0.01	0.00	-0.18	0.58	-0.21									
(14)	<i>White</i>	-0.02	0.01	-0.04	-0.06	-0.45	0.01	0.00	0.05	-0.02	-0.42	0.47	-0.22	-0.21								
(15)	<i>Female</i>	0.01	-0.05	0.02	0.35	0.45	-0.02	0.00	-0.04	0.01	0.18	-0.02	0.14	0.05	-0.35							
(16)	<i>Education</i>	0.08	0.16	0.08	0.24	0.53	0.03	0.03	-0.08	0.06	0.24	0.09	0.50	0.14	-0.16	0.16						
(17)	<i>IncomePerCapita</i>	0.08	0.04	-0.04	0.33	0.50	0.04	0.04	-0.07	0.05	0.15	0.19	0.49	0.07	-0.05	0.09	0.90					
(18)	<i>Unemployment</i>	-0.09	-0.19	0.01	-0.12	0.01	-0.03	-0.02	-0.01	-0.03	0.13	-0.33	-0.12	0.05	-0.38	0.21	-0.41	-0.46				
(19)	<i>AgeDisadv</i>	-0.05	-0.12	-0.12	-0.17	-0.53	0.00	-0.02	0.07	-0.04	-0.33	0.13	-0.48	-0.20	0.45	-0.07	-0.58	-0.48	0.06			
(20)	<i>ManufLabor</i>	-0.02	-0.15	-0.17	0.00	-0.31	0.00	-0.01	0.03	-0.01	-0.19	0.22	-0.22	-0.18	0.38	-0.10	-0.27	-0.20	-0.09	0.22		
(21)	<i>InfoLabor</i>	0.04	0.04	0.05	0.14	0.50	0.01	0.03	-0.07	0.04	0.33	-0.06	0.41	0.06	-0.30	0.18	0.63	0.58	-0.07	-0.59	-0.27	
(22)	<i>Internet</i>	0.03	0.09	0.00	-0.14	0.09	0.00	0.01	-0.02	0.02	0.23	-0.16	0.08	-0.04	-0.04	-0.10	0.21	0.16	-0.02	-0.16	0.01	0.24

Table IA3: Summary Statistics of Additional Loan- and ZIP-Code-Level Variables

This table provides descriptive statistics for other variables used in both the demand- and supply-side analyses. The following variables are measured at the borrower ZIP Code-year level: *Population* is the local population size. *Branch* is the number of bank branches per thousand residents. *DepositsPerCapita* is deposits per capita. *HHI* is the Herfindahl-Hirschmann index of deposits of all local bank branches. *White* is the share of white residents. *Female* is the share of females. *Education* represents the share of the population aged 25 and older with a bachelor's degree or higher. *IncomePerCapita* is the income per capita. *Unemployment* is the unemployment rate. *AgeDisadv* represents the share of the population that is either under 21 years old or over 65 years old. *ManufLabor* is the share of labor working in the manufacturing industry. *InfoLabor* is the share of labor working in the information industry. *Internet* is the share of local households with residential fixed high-speed connections over 200kbps in at least one direction. The following variables are measured at the loan level: *DebtConso*, *CreditCard*, *HomeImpr*, and *OtherPurpose* are loan-purpose indicators for debt consolidation, credit card refinancing, home improvement, and other loan purposes, respectively.

Panel A. Variables for Demand-side Analysis

	Obs.	Mean	Median	S.D.	Skewness	Kurtosis
<i>Population</i>	31,790	0.494	0.333	0.461	2.001	8.055
<i>Branch</i>	31,790	0.316	0.304	0.116	1.080	5.670
<i>DepositsPerCapita</i>	31,790	25.809	17.874	26.899	3.998	21.104
<i>HHI</i>	31,790	0.153	0.126	0.107	3.332	18.220
<i>White</i>	31,790	0.762	0.798	0.162	-0.965	3.653
<i>Female</i>	31,790	0.507	0.507	0.011	-1.134	8.056
<i>Education</i>	31,790	0.281	0.263	0.103	1.183	4.896
<i>IncomePerCapita</i>	31,790	28.475	26.688	7.560	1.805	7.783
<i>Unemployment</i>	31,790	0.082	0.079	0.026	0.823	4.995
<i>AgeDisadv</i>	31,790	0.421	0.422	0.028	-0.747	6.258
<i>ManufLabor</i>	31,790	0.107	0.101	0.052	0.756	3.558
<i>InfoLabor</i>	31,790	0.020	0.017	0.011	4.543	38.326
<i>Internet</i>	31,790	0.631	0.665	0.172	-1.634	6.375

Panel B. Variables for Supply-side Analysis

	Obs.	Mean	Median	S.D.	Skewness	Kurtosis
<i>Population</i>	3,572,588	0.832	0.667	0.637	1.243	4.279
<i>Branch</i>	3,572,588	0.282	0.274	0.098	1.024	5.845
<i>DepositsPerCapita</i>	3,572,588	28.636	18.848	29.145	3.438	16.372
<i>HHI</i>	3,572,588	0.146	0.122	0.101	3.374	18.529
<i>White</i>	3,572,588	0.722	0.752	0.164	-0.808	3.443
<i>Female</i>	3,572,588	0.508	0.508	0.010	-0.773	7.436
<i>Education</i>	3,572,588	0.304	0.294	0.100	0.791	3.770
<i>IncomePerCapita</i>	3,572,588	30.077	28.436	7.837	1.546	6.708
<i>Unemployment</i>	3,572,588	0.081	0.078	0.024	0.897	4.987
<i>AgeDisadv</i>	3,572,588	0.415	0.416	0.028	-0.500	5.734
<i>ManufLabor</i>	3,572,588	0.099	0.094	0.047	0.835	4.012
<i>InfoLabor</i>	3,572,588	0.022	0.019	0.010	3.011	20.554
<i>Internet</i>	3,572,588	0.650	0.704	0.182	-1.794	6.433
<i>DebtConso</i>	3,572,588	0.530	1.000	0.499	-0.121	1.015
<i>CreditCard</i>	3,572,588	0.186	0.000	0.389	1.616	3.610
<i>HomeImpr</i>	3,572,588	0.062	0.000	0.241	3.630	14.178
<i>OtherPurpose</i>	3,572,588	0.222	0.000	0.415	1.339	2.793

Table IA4: Summary Statistics of Natural Disasters

This table presents the summary statistics for the natural disasters included in our analysis during the sample period from 2010 to 2017.

Disaster Type	Frequency	Average Affected Counties per Incident	Total Affected Counties
Severe Storm	116	13	1,456
Hurricane	70	22	1,510
Flood	59	15	888
Severe Ice Storm	14	25	351
Snowstorm	13	15	192
Tornado	8	9	72
Earthquake	3	2	5
Mud/Landslide	3	1	3
Tsunami	2	2	4
Coastal Storm	1	1	1
Volcanic Eruption	1	1	1
Total	290		4,483

Table IA5: The Effects of Natural Disasters on Local Wages

This table examines the effect of natural disasters on worker wages. The observations are at the three-digit ZIP Code-year-quarter level. $\Delta WagePerWorker$ is the quarterly percentage growth in average wage per worker. $\Delta AggregateWage$ is the quarterly percentage growth in aggregate wage. *Disaster* is an indicator variable that equals one if the area experienced a natural disaster over the past two quarters, and zero otherwise. *SPDisaster* is the *SCI*-weighted sum of disaster occurrences in peer areas. The vector of control variables, denoted as *Area Controls*, includes *Population*, *Branch*, *DepositsPerCapita*, *HHI*, *White*, *Female*, *Education*, *IncomePerCapita*, *Unemployment*, *AgeDisadv*, *ManufLabor*, *InfoLabor*, and *Internet*. A detailed definition of these variables can be found in Table A1. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Dependent variable:	$\Delta WagePerWorker_{i,t}$		$\Delta AggregateWage_{i,t}$	
	(1)	(2)	(3)	(4)
$Disaster_{i,t-2:t}$	-0.235*** (0.049)	-0.222*** (0.057)	-0.173*** (0.061)	-0.159** (0.069)
$SPDisaster_{i,t-2:t}$		-0.454 (0.684)		-0.702 (0.798)
Area Controls	Yes	Yes	Yes	Yes
ZIP Code FE	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes
Observations	29,152	28,241	29,152	28,241
Adjusted R^2	0.597	0.574	0.590	0.557

Table IA6: Peer Influences on Loan Demand: Full Tables

This table presents the full results for Table 2, which examines the effect of prior loan demand in peer ZIP Codes on loan demand in the focal ZIP Code. Panel A reports the first-stage regression results, while Panel B provides the second-stage regression outcomes. Variable definitions are described in Table A1. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Panel A. First-stage Regression				
Dependent Variable:	$SPLCB_{i,t-1}$			
	(1)	(2)	(3)	(4)
$SPDisaster_{i,t-1}$	1.912*** (0.162)	1.713*** (0.141)	1.408*** (0.144)	1.418*** (0.145)
$DWLCB_{i,t-1}$			0.224*** (0.025)	0.223*** (0.025)
$DWDisaster_{i,t-1}$			-0.008*** (0.003)	-0.008*** (0.003)
$BankDisasterExpo_{i,t-1}$				0.093*** (0.018)
$FocalDemand_{i,t-1}$		0.031*** (0.006)	0.018*** (0.006)	0.018*** (0.006)
$Population_{i,t}$		0.332** (0.151)	0.305* (0.159)	0.301* (0.159)
$Branch_{i,t}$		-0.598*** (0.206)	-0.488*** (0.175)	-0.487*** (0.175)
$DepositsPerCapita_{i,t}$		-0.001 (0.001)	-0.001** (0.000)	-0.001** (0.000)
$HHI_{i,t}$		-0.082 (0.106)	-0.088 (0.097)	-0.086 (0.097)
$White_{i,t}$		0.721** (0.289)	0.509* (0.269)	0.510* (0.268)
$Female_{i,t}$		-2.025** (1.024)	-2.280** (0.958)	-2.270** (0.956)
$Education_{i,t}$		0.201 (0.500)	0.216 (0.444)	0.218 (0.443)
$IncomePerCapita_{i,t}$		-0.011*** (0.004)	-0.011** (0.004)	-0.011** (0.004)
$Unemployment_{i,t}$		-0.108 (0.332)	0.129 (0.324)	0.129 (0.324)
$AgeDisadv_{i,t}$		5.016*** (0.624)	4.646*** (0.598)	4.645*** (0.598)
$ManufLabor_{i,t}$		1.389*** (0.417)	0.983*** (0.378)	0.983*** (0.378)
$InfoLabor_{i,t}$		-2.200* (1.131)	-2.024* (1.068)	-2.001* (1.066)
$Internet_{i,t}$		0.026 (0.020)	0.012 (0.016)	0.013 (0.016)
ZIP Code FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	31,790	31,790	31,790	31,790
Kleibergen-Paap rk LM statistic	106.814	105.613	69.686	69.959
P-value	0.000	0.000	0.000	0.000
Kleibergen-Paap Wald rk F statistic	140.032	146.661	95.354	95.924

Panel B. Second-stage Regressions

Dependent Variable:	<i>FocalDemand_{i,t}</i>			
	(1)	(2)	(3)	(4)
$\widehat{SPLCB}_{i,t-1}$	0.273*** (0.096)	0.233*** (0.080)	0.240*** (0.083)	0.236*** (0.082)
$DWLCB_{i,t-1}$			-0.012 (0.021)	-0.011 (0.020)
$DWDisaster_{i,t-1}$			0.001 (0.007)	0.001 (0.007)
$BankDisasterExpo_{i,t-1}$				-0.053 (0.032)
$FocalDemand_{i,t-1}$		0.365*** (0.071)	0.366*** (0.070)	0.366*** (0.070)
$Population_{i,t}$		-0.216** (0.105)	-0.217** (0.107)	-0.214** (0.106)
$Branch_{i,t}$		0.076 (0.124)	0.075 (0.122)	0.072 (0.122)
$DepositsPerCapita_{i,t}$		-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
$HHI_{i,t}$		0.075 (0.063)	0.076 (0.063)	0.074 (0.062)
$White_{i,t}$		0.435*** (0.143)	0.441*** (0.145)	0.443*** (0.145)
$Female_{i,t}$		-0.013 (0.688)	0.016 (0.696)	0.001 (0.696)
$Education_{i,t}$		-0.076 (0.259)	-0.079 (0.260)	-0.080 (0.259)
$IncomePerCapita_{i,t}$		-0.018*** (0.003)	-0.018*** (0.003)	-0.018*** (0.003)
$Unemployment_{i,t}$		-1.864*** (0.229)	-1.876*** (0.236)	-1.876*** (0.235)
$AgeDisadv_{i,t}$		-1.592*** (0.590)	-1.611*** (0.576)	-1.590*** (0.575)
$ManufLabor_{i,t}$		0.654** (0.290)	0.665** (0.282)	0.669** (0.282)
$InfoLabor_{i,t}$		-0.303 (0.893)	-0.296 (0.912)	-0.318 (0.911)
$Internet_{i,t}$		-0.011 (0.013)	-0.011 (0.013)	-0.011 (0.013)
ZIP Code FE	Yes	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes	Yes
Observations	31,790	31,790	31,790	31,790
Adjusted R^2	0.002	0.154	0.154	0.154

Table IA7: Peer Influences on Loan Demand: Robustness Checks

This table reports the robustness checks for Table 2, which examines the effect of prior loan demand in peer ZIP Codes on loan demand in the focal ZIP Code. Panel A reports the first-stage regression results, while Panel B provides the second-stage regression outcomes. In column 1, $SPLCB$ and $DWLCB$ are defined as the natural logarithm of one plus the SCI -weighted and inverse geographic distance-weighted sums of *total applications* in peer areas, respectively. In column 2, $SPLCB$ and $DWLCB$ are defined as the natural logarithm of one plus the SCI -weighted and inverse geographic distance-weighted sums of *loan originations* per million residents in peer areas, respectively. In column 3, we apply an alternative filter for selecting peer and focal areas in our analysis, excluding areas with fewer than 100 total loan applications over the past three months. All other variables are the same as in Table 2. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Panel A. First-stage Regression

Dependent Variable:	$SPLCB_{i,t-1}$		
	(1)	(2)	(3)
$SPDisaster_{i,t-1}$	1.013*** (0.114)	2.078*** (0.191)	1.432*** (0.124)
$DWLCB_{i,t-1}$	0.154*** (0.030)	0.161*** (0.025)	0.236*** (0.023)
$DWDisaster_{i,t-1}$	-0.004** (0.001)	-0.014*** (0.003)	-0.006*** (0.002)
$BankDisasterExpo_{i,t-1}$	0.058*** (0.010)	0.097*** (0.019)	0.062*** (0.015)
Area Controls	Yes	Yes	Yes
ZIP Code FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes
Observations	31,790	31,790	35,533
Kleibergen-Paap rk LM statistic	56.309	78.232	95.655
P-value	0.000	0.000	0.000
Kleibergen-Paap Wald rk F statistic	78.666	118.228	133.786

Panel B. Second-stage Regressions

Dependent Variable:	$FocalDemand_{i,t}$		
	(1)	(2)	(3)
$\widehat{SPLCB}_{i,t-1}$	0.421*** (0.117)	0.176*** (0.058)	0.177** (0.074)
$DWLCB_{i,t-1}$	-0.001 (0.028)	-0.003 (0.013)	0.003 (0.020)
$DWDisaster_{i,t-1}$	0.001 (0.006)	0.002 (0.007)	-0.004 (0.006)
$BankDisasterExpo_{i,t-1}$	-0.040 (0.032)	-0.046 (0.032)	-0.055* (0.033)
Area Controls	Yes	Yes	Yes
ZIP Code FE	Yes	Yes	Yes
Year-month FE	Yes	Yes	Yes
Observations	31,790	31,790	35,533
Adjusted R^2	0.146	0.153	0.145

Table IA8: Social Proximity to Deposits and Loan Supply: Full Tables

This table presents the full table for Table 3, which examines the influence of social proximity to deposits on credit supply in the focal ZIP Code. Panel A reports the first-stage regression results, while Panel B provides the second-stage regression outcomes. A detailed definition of variables can be found in Table A1. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Panel A. First-stage Regressions				
Dependent Variable:	$SPD_{i,t-1}$			
	(1)	(2)	(3)	(4)
$SPMisc_{i,t-2}$	1.386*** (0.186)	1.565*** (0.205)	1.290*** (0.196)	0.959*** (0.201)
$DWD_{i,t-1}$			0.110*** (0.041)	0.098** (0.039)
$SPC_{i,t-1}$				-0.147*** (0.018)
$\log(Amount)_{i,k,t}$	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)
$FICO_{i,k,t}$	-0.000 (0.000)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
$DTI_{i,k,t}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.000 (0.000)
$EmployLength_{i,k,t}$	0.000** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000** (0.000)
$DebtConso_{i,k,t}$	-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)	-0.000*** (0.000)
$CreditCard_{i,k,t}$	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)
$HomeImpr_{i,k,t}$	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
$Population_{i,t}$		0.115** (0.049)	0.118** (0.046)	0.105** (0.041)
$Branch_{i,t}$		0.029 (0.084)	0.032 (0.086)	0.040 (0.081)
$DepositsPerCapita_{i,t}$		-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)
$HHI_{i,t}$		0.019 (0.050)	0.027 (0.051)	0.026 (0.049)
$White_{i,t}$		0.102 (0.092)	0.139 (0.089)	0.108 (0.080)
$Female_{i,t}$		-0.052 (0.473)	-0.202 (0.472)	-0.051 (0.442)
$Education_{i,t}$		-0.158 (0.186)	-0.024 (0.201)	0.079 (0.185)
$IncomePerCapita_{i,t}$		0.003** (0.002)	0.002 (0.001)	0.001 (0.001)
$Unemployment_{i,t}$		-0.255** (0.111)	-0.214** (0.109)	-0.292*** (0.108)
$AgeDisadv_{i,t}$		0.463* (0.276)	0.607** (0.294)	0.623** (0.273)
$ManufLabor_{i,t}$		0.358** (0.166)	0.415** (0.166)	0.421** (0.164)
$InfoLabor_{i,t}$		-0.596 (0.478)	-0.505 (0.471)	-0.352 (0.430)
$Internet_{i,t}$		0.004 (0.007)	0.006 (0.007)	0.009 (0.007)
ZIP Code FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	3,572,588	3,572,588	3,572,588	3,572,588
Kleibergen-Paap rk LM statistic	53.727	46.080	32.718	18.859
P-value	0.000	0.000	0.000	0.000
Kleibergen-Paap Wald rk F statistic:	55.321	58.154	43.239	22.835

Panel B. Second-stage Regressions

Dependent Variable:	$100 \times Funded_{i,k,t}$			
	(1)	(2)	(3)	(4)
$\widehat{SPD}_{i,t-1}$	36.308** (17.768)	36.049** (15.950)	44.144** (18.903)	52.760** (25.728)
$DWD_{i,t-1}$			-5.066* (2.859)	-5.601* (3.366)
$SPC_{i,t-1}$				4.955 (3.943)
$\log(Amount)_{i,k,t}$	-4.280*** (0.062)	-4.279*** (0.062)	-4.278*** (0.062)	-4.278*** (0.062)
$FICO_{i,k,t}$	0.070*** (0.001)	0.070*** (0.001)	0.070*** (0.001)	0.070*** (0.001)
$DTI_{i,k,t}$	-0.173*** (0.002)	-0.173*** (0.002)	-0.173*** (0.002)	-0.173*** (0.002)
$EmployLength_{i,k,t}$	54.625*** (0.172)	54.621*** (0.172)	54.620*** (0.173)	54.620*** (0.173)
$DebtConso_{i,k,t}$	18.545*** (0.126)	18.544*** (0.126)	18.545*** (0.126)	18.547*** (0.126)
$CreditCard_{i,k,t}$	21.110*** (0.124)	21.109*** (0.124)	21.110*** (0.124)	21.113*** (0.125)
$HomeImpr_{i,k,t}$	13.700*** (0.111)	13.698*** (0.111)	13.698*** (0.111)	13.701*** (0.111)
$Population_{i,t}$		-11.010*** (3.668)	-12.111*** (3.849)	-12.671*** (4.134)
$Branch_{i,t}$		-20.854*** (5.058)	-21.222*** (5.378)	-21.759*** (5.822)
$DepositsPerCapita_{i,t}$		-0.025 (0.016)	-0.021 (0.017)	-0.019 (0.018)
$HHI_{i,t}$		2.985 (3.066)	2.486 (3.280)	2.288 (3.542)
$White_{i,t}$		-5.796 (6.233)	-8.308 (7.041)	-8.480 (7.393)
$Female_{i,t}$		27.361 (29.742)	34.681 (32.514)	31.356 (34.341)
$Education_{i,t}$		5.056 (13.413)	0.176 (13.690)	-3.078 (14.307)
$IncomePerCapita_{i,t}$		0.051 (0.177)	0.071 (0.170)	0.089 (0.164)
$Unemployment_{i,t}$		2.588 (8.085)	2.788 (8.538)	7.232 (10.753)
$AgeDisadv_{i,t}$		-13.287 (19.245)	-23.706 (22.015)	-29.450 (24.903)
$ManufLabor_{i,t}$		-25.344* (13.646)	-30.856** (15.282)	-34.646* (17.780)
$InfoLabor_{i,t}$		-43.410 (37.213)	-42.747 (38.957)	-43.554 (40.283)
$Internet_{i,t}$		-0.577 (0.523)	-0.708 (0.557)	-0.870 (0.627)
ZIP Code FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	3,572,588	3,572,588	3,572,588	3,572,588
Adjusted R^2	0.406	0.406	0.406	0.406

Table IA9: Social Proximity to Deposits and Loan Supply: Alternative Definitions of *SPD* and *DWD*

This table reports robustness checks for Table 3, which examines how social proximity to deposits affects credit supply in the focal ZIP Code. The robustness checks use alternative definitions of *SPD* and *DWD*. Specifically, *SPD* and *DWD* are constructed as the natural logarithm of the *SCI*-weighted and inverse-geographic-distance-weighted sums of *total deposits* in peer areas, respectively. Column 1 reports the first-stage results, and column 2 reports the second-stage results. All other controls follow Table 3. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Stage:	First Stage	Second Stage
Dependent Variable:	$SPD_{i,t-1}$	$100 \times Funded_{i,k,t}$
	(1)	(2)
$SPMisc_{i,t-2}$	1.861*** (0.222)	
$\widehat{SPD}_{i,t-1}$		26.375* (14.069)
Area Controls	Yes	Yes
Borrower Controls	Yes	Yes
ZIP Code FE	Yes	Yes
Year FE	Yes	Yes
Observations	3,572,588	3,572,588
Kleibergen-Paap rk LM statistic	79.263	
P-value	0.000	
Kleibergen-Paap Wald rk F statistic	70.189	

Table IA10: Social Proximity to Deposits and Loan Performance: Full Table

This table presents the full results for Table 4, which presents the loan-level second-stage results of an SSIV analysis examining the influence of social proximity to deposits on loan performance in the focal ZIP Code. A detailed definition of the variables can be found in Table A1. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Dependent Variable:	$100 \times Delinq_{i,k,t}$			
	(1)	(2)	(3)	(4)
$\widehat{SPD}_{i,t-1}$	-5.429** (2.172)	-7.406** (3.193)	-6.776** (2.763)	-6.669** (2.697)
$DWD_{i,t-1}$			3.133 (2.571)	2.891 (2.483)
$SPC_{i,t-1}$				-1.904 (1.329)
$\log(\#Investors)_{i,k,t}$	0.126*** (0.015)	0.125*** (0.015)	0.125*** (0.015)	0.125*** (0.015)
$InterestRate_{i,k,t}$	1.639*** (0.012)	1.639*** (0.012)	1.639*** (0.012)	1.639*** (0.012)
$\log(Income)_{i,k,t}$	-1.419*** (0.090)	-1.418*** (0.090)	-1.418*** (0.090)	-1.418*** (0.090)
$ShortTerm_{i,k,t}$	2.670*** (0.095)	2.669*** (0.095)	2.670*** (0.095)	2.671*** (0.095)
$\log(Amount)_{i,k,t}$	2.295*** (0.064)	2.292*** (0.064)	2.292*** (0.064)	2.292*** (0.064)
$FICO_{i,k,t}$	-0.037*** (0.001)	-0.037*** (0.001)	-0.037*** (0.001)	-0.037*** (0.001)
$DTI_{i,k,t}$	0.131*** (0.005)	0.131*** (0.005)	0.131*** (0.005)	0.131*** (0.005)
$EmployLength_{i,k,t}$	-1.839*** (0.100)	-1.843*** (0.100)	-1.842*** (0.100)	-1.842*** (0.100)
$DebtConso_{i,k,t}$	-0.464*** (0.102)	-0.463*** (0.102)	-0.463*** (0.102)	-0.464*** (0.102)
$CreditCard_{i,k,t}$	-1.163*** (0.120)	-1.164*** (0.120)	-1.164*** (0.120)	-1.164*** (0.120)
$HomeImpr_{i,k,t}$	0.462*** (0.152)	0.462*** (0.152)	0.462*** (0.152)	0.461*** (0.152)
$Own_{i,k,t}$	2.006 (1.303)	2.025 (1.304)	2.033 (1.304)	2.035 (1.304)
$Mortgage_{i,k,t}$	0.659 (1.305)	0.677 (1.305)	0.685 (1.305)	0.686 (1.305)
$Rent_{i,k,t}$	3.523*** (1.314)	3.539*** (1.315)	3.547*** (1.315)	3.548*** (1.315)
$Population_{i,t}$		19.408*** (6.433)	19.359*** (6.325)	19.203*** (6.300)
$Branch_{i,t}$		-7.473 (8.660)	-7.452 (8.570)	-6.960 (8.498)
$DepositsPerCapita_{i,t}$		-0.011 (0.018)	-0.011 (0.018)	-0.011 (0.018)
$HHI_{i,t}$		-3.618 (3.664)	-3.440 (3.653)	-3.383 (3.654)
$White_{i,t}$		4.184 (8.754)	4.413 (8.569)	4.445 (8.543)
$Female_{i,t}$		-12.578 (41.571)	-17.487 (41.283)	-15.295 (41.156)
$Education_{i,t}$		-18.832 (16.696)	-13.066 (16.882)	-12.232 (16.849)
$IncomePerCapita_{i,t}$		-0.097 (0.122)	-0.118 (0.121)	-0.126 (0.121)
$Unemployment_{i,t}$		23.426* (13.863)	25.495* (14.189)	24.147* (13.941)
$AgeDisadv_{i,t}$		19.256 (28.515)	17.629 (27.181)	16.846 (26.648)
$ManufLabor_{i,t}$		-7.705 (19.778)	-8.002 (19.284)	-8.122 (19.158)
$InfoLabor_{i,t}$		-14.074 (45.713)	-9.347 (43.368)	-6.827 (42.752)

$Internet_{i,t}$		-0.108 (0.650)	-0.118 (0.636)	-0.071 (0.640)
ZIP Code FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	1,405,473	1,405,473	1,405,473	1,405,473
Adjusted R^2	0.055	0.055	0.055	0.055

Table IA11: Social Proximity to Deposits and Loan Performance: Excluding Single-investor Loans

This table reports robustness checks for Table 4, which presents loan-level second-stage results from an SSIV analysis examining how social proximity to deposits affects loan performance in the focal ZIP Code. The robustness checks use an alternative sample that excludes loans funded by only one investor. All variables and fixed effects are the same as in Table 4. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Dependent Variable:	$100 \times Delinq_{i,k,t}$
	(1)
$\widehat{SPD}_{i,t-1}$	-5.989** (2.915)
$DWD_{i,t-1}$	2.290 (3.024)
$SPC_{i,t-1}$	-1.597 (1.608)
Area Controls	Yes
Borrower Controls	Yes
ZIP Code FE	Yes
Year FE	Yes
Observations	949,624
Adjusted R^2	0.054

Table IA12: Social Transmission of Information and Funding Decisions

This table presents the full results for Table 5, which reports the second-stage regressions of an SSIV analysis examining how social proximity to deposits affects the sensitivity of funding decisions to borrower ZIP Code delinquency rates. A detailed definition of the variables can be found in Table A1. Standard errors, clustered at the three-digit ZIP Code level, are shown in parentheses. Statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

Dependent Variable:	$100 \times Funded_{i,k,t}$	
	(1)	(2)
$AreaDelinq_{i,t}$	-23.279*** (4.142)	-26.548*** (4.794)
$SPD_{i,t-1} \times AreaDelinq_{i,t}$		-30.453** (15.507)
$\widehat{SPD}_{i,t-1}$	48.920** (23.912)	36.666* (19.379)
$DWD_{i,t-1}$	-7.945* (4.197)	-6.261* (3.361)
$SPC_{i,t-1}$	2.779 (2.849)	1.353 (2.344)
$\log(Amount)_{i,k,t}$	-4.058*** (0.064)	-4.060*** (0.064)
$FICO_{i,k,t}$	0.067*** (0.001)	0.067*** (0.001)
$DTI_{i,k,t}$	-0.169*** (0.002)	-0.169*** (0.002)
$EmployLength_{i,k,t}$	55.519*** (0.174)	55.519*** (0.174)
$DebtConso_{i,k,t}$	18.178*** (0.119)	18.177*** (0.119)
$CreditCard_{i,k,t}$	20.706*** (0.121)	20.704*** (0.121)
$HomeImpr_{i,k,t}$	13.214*** (0.111)	13.213*** (0.111)
$Population_{i,t}$	-12.619*** (3.672)	-10.525*** (3.235)
$Branch_{i,t}$	-13.846** (5.746)	-14.033*** (5.165)
$DepositsPerCapita_{i,t}$	0.002 (0.016)	-0.004 (0.013)
$HHI_{i,t}$	2.447 (3.471)	2.348 (2.942)
$White_{i,t}$	-6.715 (7.041)	-5.324 (6.105)
$Female_{i,t}$	35.746 (33.444)	34.133 (29.716)
$Education_{i,t}$	0.721 (14.226)	2.678 (12.938)
$IncomePerCapita_{i,t}$	0.132 (0.136)	0.131 (0.135)
$Unemployment_{i,t}$	4.320 (8.872)	3.472 (8.030)
$AgeDisadv_{i,t}$	-40.959 (25.365)	-31.153 (21.786)
$ManufLabor_{i,t}$	-29.487* (16.664)	-23.028 (14.530)
$InfoLabor_{i,t}$	-21.960 (41.394)	-32.320 (36.856)
$Internet_{i,t}$	-0.179 (0.506)	-0.206 (0.474)
ZIP Code FE	Yes	Yes
Year FE	Yes	Yes
Observations	3,441,658	3,441,658
Adjusted R^2	0.413	0.413