Discussion of Financial Inclusion, Human Capital, and Wealth Accumulation: Evidence from the Freedman's Savings Bank

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Overview

- Does access to financial services make people better off? Theory: yes, because it allows them to
 - Borrow to invest in positive NPV projects
 - Smooth consumption
 - Deposits lower storage cost of precautionary saving
 - Credit lines & term loans enable consumption smoothing
 - Better risk sharing → lower risk aversion → more investment in risky projects e.g. form businesses, study, etc.
 - Use transaction services
 - Easier to pool money for big joint projects
 - Easier to risk share within family by sending money to relatives





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- This paper: access to deposits





Setting: Post Civil War United States

- Freedman's Savings Bank created in 1865 to serve African Americans (mostly recently freed slaves)
- Staggered opening of branches across the American South
- Being able to deposit in the FSB increases
 - Literacy & (adult) school attendance
 - Labor force participation, property ownership, income



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 - …Until the bank collapses in 1873… ☺







Empirical Strategy

- Match surviving bank account holder data with de-anonymized 1870 Census data!
- OLS: $y_i = \beta a_i^* + Ctrls + \epsilon_i$
 - But measurement error: $a_i = a_i^* + u_i$
 - Endogeneity: account holders unobservably different from non-holders, and those are the traits that make them do better $E[a_i\epsilon_i] \neq 0$





Empirical Strategy: 2SLS kills two birds with one stone

(1) $a_{ic} = \gamma d_c + Ctrls + v_{ic}$ (2) $y_{ic} = \beta \hat{a}_{ic}^* + Ctrls + \epsilon_{ic}$

- Instrument: distance to nearest branch (~Huber 18)
- But what if branches are not randomly placed?
 - Limit sample only to people living close to open or planned branches
 - Instrument: distance to nearest branch opened before 1870
- Identification assumptions:
 - $E[d_c \epsilon_{ic}] = 0$: order of branch openings uncorrelated with outcomes (weaker than random placement)
 - $E[d_c u_{ic}] = 0$: order of branch openings uncorrelated with account status measurement error
 - if error comes from matching Census to bank records, areas far from a branch (large d_c) have smaller error; $E[d_c u_{ic}] = 0$ only if $E[u_{ic}|d_c] = 0$





Living close to an open branch makes one more likely to have an account (than living next to a planned branch)



Figure III: Freedman's Savings Bank Account Status by Branch Distance This figure shows the fraction of Blacks with a Freedman's Savings Bank account, by distance from the nearest branch. The solid line shows the fraction, while the dashed line shows a 95% confidence band around the mean.

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Living close to an open branch makes one more likely to do well (than living next to a planned branch)







While living next to a planned branch doesn't seem to do much







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1. Measurement Error & Distance

Is $E[u_{ic}|d_c] = 0$?

State	Mean Distance	Over/Under Sampled rel to Hist Data
Louisiana	17.2	Over
Maryland	23.3	Over
Virginia	32.6	Over
Alabama	45.3	Under
Georgia	52.9	Under
Tennessee	40.3	Under



(a) Freedman's Savings Bank Deposits



(b) Freedman's Savings Bank Deposits: Linked Data





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2. How similar are counties next to open vs. planned branches?



Figure I: Freedman's Savings Bank Branch locations

This map presents the location of proposed and implemented Freedman's Savings Bank branches. The red dots indicate pre-1870 branches, while the blue dots indicate planned branches (including those opened in 1870). Southern slave states that seceed during the American Civil War are shaded light gray, while border states that allowed slavery prior to 1865 but did not seceed from the Union are shaded dark gray.



2. How similar are counties next to open vs. planned branches? Let's look at 1860 Census

		< 50mi to	> 50mi to open,			
1860 Census Characteristics	Total	open	< 50mi to planned	Other	Open - Planned	t-stat
Ν	998	254	182	562		
% Slave	35.3%	44.6%	32.7%	29.7%	11.9%	6.225
% Slaveholder	3.4%	3.8%	3.7%	3.0%	0.1%	0.792
of those % Owning >30 slaves	6.5%	9.1%	4.8%	5.4%	4.3%	6.757
% farms > 100 acres	38.8%	46.0%	40.2%	32.8%	5.7%	3.307
% free black	2.0%	3.3%	1.2%	1.5%	2.2%	6.375
Has Water Transport	44.3%	65.3%	35.7%	32.7%	29.6%	7.012
Has Rail Transport	42.3%	60.7%	43.8%	28.0%	16.9%	4.005
% Improved Land	36.4%	39.2%	46.4%	29.8%	-7.2%	-4.909
% Urban	7.2%	13.9%	8.4%	1.8%	5.5%	3.169
% Men in Manufacturing	1.3%	1.7%	1.5%	1.0%	0.2%	1.117
Mfg Establishments / capita	0.3%	0.3%	0.3%	0.2%	0.0%	0.355
Agg Value of Farms / capita	216.8	226.1	243.2	198.2	-17.1	-1.459
Agg Ag Output / capita	67.8	69.9	70.8	64.9	-0.8	-0.230
of which % Cotton	24.8%	26.7%	22.7%	24.4%	4.0%	1.620
Male Pop Growth Rate 1860-70	0.6%	0.5%	4.0%	-0.9%	-3.5%	-1.677
White Pop Growth Rate 1860-70	4.1%	4.8%	5.6%	2.9%	-0.7%	-0.326
# of Mfg Est Growth Rate 1860-70	48.6%	47.1%	42.5%	53.0%	4.7%	0.477

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2. Can we control at least for the observables? My one-stage regression

 $y_{ic} = \beta_1 1_c + \beta_2 d_c + F E_{ic} + Demo_{ic} + \delta X_{1860,c} + \epsilon_{ic}$

	Simple	With FE	With FE & Demographics	With FE, Demographics, and 1860 Census Controls
Is Literate	0.0931	0.0484	0.0346	0.0318
	18.4614	4.8058	2.6198	1.9743
Attended School	0.0312	0.0228	0.0186	0.0126
	7.3050	7.8165	5.3744	6.3377
Is in Labor Force	0.0666	0.0198	0.0108	0.0092
	8.3957	4.6372	4.6622	2.1076
ln(1+Income)	0.1405	0.0443	0.0534	0.0474
	5.1378	5.8764	9.0602	7.3695

- Good news: everything is still significant.
- Bad news: every coefficient declined. Could they be pushed down further by
 - Non-linear interactions? Solution: matching?
 - Related unobservables? [Ideal] solution: maybe in 1869 board was debating between opening two branches, picked one to open first in a close vote, other opened in 1870 or later



3. Mechanism: Individual vs Community

- 2SLS is nice because it computes the LATE for account holders
- My one-stage results measure effect on everyone in the county
 - Still large b/c there are many account holders in treated counties
 - Or because local bank presence benefits nonaccount holders too?





3. Mechanism: Individual vs Community

- Lots of organizations held account at banks
- Strong results are for education – "money pooling channel"?
- Still really interesting and important finding, but different interpretation
- How non-linear are effects in # of account holders per county?

1870–June, 1871				
Aget No. Organization				
FOR	Veterans Republican Brotherhood			
5030	Daughters of Jerusalem (sickness and death benefits)			
5087	Lincoln Branch (charitable society)			
5007	Union Lodge No. 1			
5000 E112	Daughters of Emanuel Watchman (sickness and death benefits)			
5113	Young Calvary Union No. 2 (sickness and death benefits)			
5165	Zion's Watchman Society			
5183	Emanuel Sabbath School			
5200	St. Theresa Charitable Association			
5010	Israel Branch Society (charitable society)			
5001	Benevolent Sociable Society (charitable society)			
5931	United Fire Company			
5310	Angel March Branch No. 2			
5326	Good Hope Society (charitable society)			
5346	Bantist Faith Society			
5354	Young Watchman of Charleston Neck No. 2			
5381	Christian Professor Society			
5301	Faith Hope and Love (sickness and death benefits)			
5456	Benford and Masyck "Ethiopia Troop"			
5460	Young Centenary Branch No. 2 (sickness and death benefits)			
5463	United Benevolent Compact and Sisters			
5466	Emanuel Branch (sickness and death benefits)			
5496	Charitable Home Association			
5497	Club of the Sons of Jacob			
5551	Young Interested Branch No. 2			
5581	Liberia Branch Society (sickness and death benefits)			
5610	Leaders Board of the Methodist Protestant Church			
5635	Union Society No. 1 of the AME Church (sickness and death benefits)			
5666	Lincoln Republican Guard			
5670	Delany Rifles-Military Company of the City of Charleston			
5672	Sons and Daughters of Daniel			
5685	Class Union No. 19 (sickness and death henefite)			
5708	Class Union No. 8 of Emanual Church			
5710	Ladies Historical Association			
5716	Ladres Instonear Association			
5804	Class Union No. 17			
5843	Sone and Doughtons of Warman J			
5852	Ladias Banavalant Serieta			
5880	Zion Dresbuterion Union Nr. 0			
5909	Lincoln Tabamada No. 1			
5911	Laboring Union No. 1			
5922	Young Wesley Breech No. 2			
5933	Ladica Companies			
5943	Young Mone Chaire 412			
6051	The Emerged D			
A COMPANY OF THE OWNER OWNE				

087 Charleston Branch Joint Stock Company



4. Easy way to increase sample size

- "Our main analysis sample is restricted to individuals classified as Black who live in the South, and within 50 miles of a branch or planned branch. The census sample includes 34,187 such individuals."
 - Measuring distance between county centroids
- My result: 51,946 individuals
 - Measuring distance between county largest city and actual city where the bank branch is located







Conclusion

- I really liked the paper!
 - History: teaches us about profound impact of Reconstruction Era racial equality policies
 - Theory: positive effects of access to savings instruments (rather than credit, fairly clean big shock)
- Next steps
 - Sharpen ID by comparing counties near opened vs. planned branches
 - Individual vs. community treatment



