

Competition in Agricultural Lending Markets: The Effect of Including the Farm Credit System

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September 30, 2015

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Motivation

- Bank merger applications in rural markets, which tend to be highly concentrated, are often challenged for antitrust/competitive concerns.
- The tradeoff from not approving some of these applications can be a loss of local banking services.
- The initial screen for the competitiveness of a market is based on bank deposit shares, which may not fully account for significant competitors.
- This paper investigates the effect of Farm Credit Associations (FCAs) on competition in rural markets where agriculture is an important economic activity.



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Presentation Summary

- U.S. antitrust laws and structure-conduct-performance paradigm
- Federal banking agencies' role in enforcing the anti-trust laws with a focus on the Federal Reserve
- Empirical methodology and results



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Primary Results

- Bank and FCA data on agricultural loans are used to estimate local market, loan-based HHIs.
- HHIs often decline significantly when FCAs are included in the market.
- Effect is stronger and more prevalent in markets more reliant on agriculture.
- Suggests that excluding FCAs may understate market competitiveness in rural markets where agriculture is important.



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U.S. Antitrust Laws and S-C-P Paradigm

- Goal of antitrust policy is “good” performance by firms and industries, i.e., maximize consumer welfare.
- Federal banking agencies required to deny mergers and acquisitions that are anti-competitive unless they would on net meet the “convenience and needs of the community”.
- Performance depends on firm conduct, which is often affected by market structure.



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Federal Banking Agencies' Role in Antitrust Enforcement

- Assess competitive effects of M&As – initial screen based on post-merger HHI (1,800) and change in HHI (200).
- Product market – “cluster” of commercial banking products and services, proxied by deposits.
- Geographic market – local, often counties or MSAs.
- Additional analysis if proposed merger fails initial screen – “mitigating” factors to determine if the market is more competitive or merger is less anticompetitive.

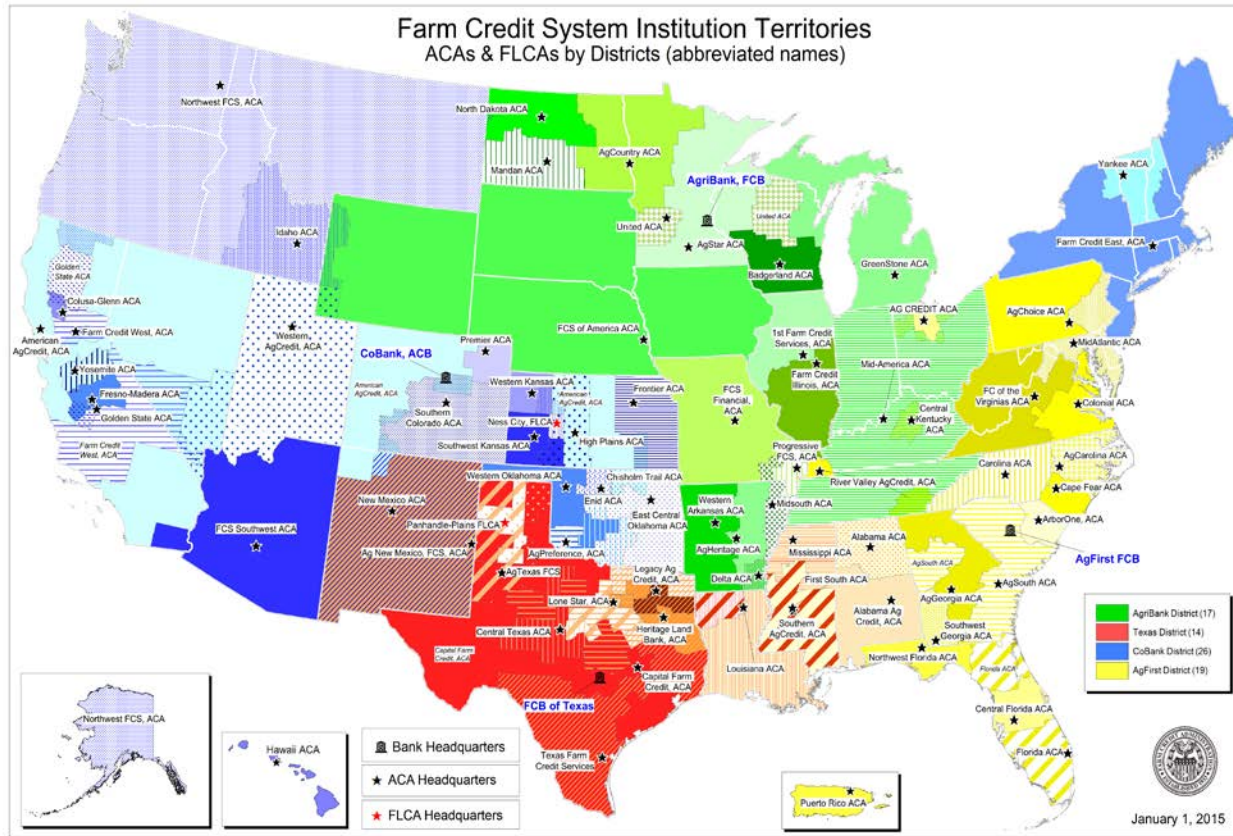


Farm Credit System

- GSE established in 1916 to provide affordable long-term financing to farmers, current structure set in 1971.
- Structure – 4 regional wholesale banks and 76 Farm Credit Associations (FCAs).
- FCAs are cooperatives with specific, often overlapping, territories.
- Loans – real estate, production, agribusiness, small-town residential mortgages.



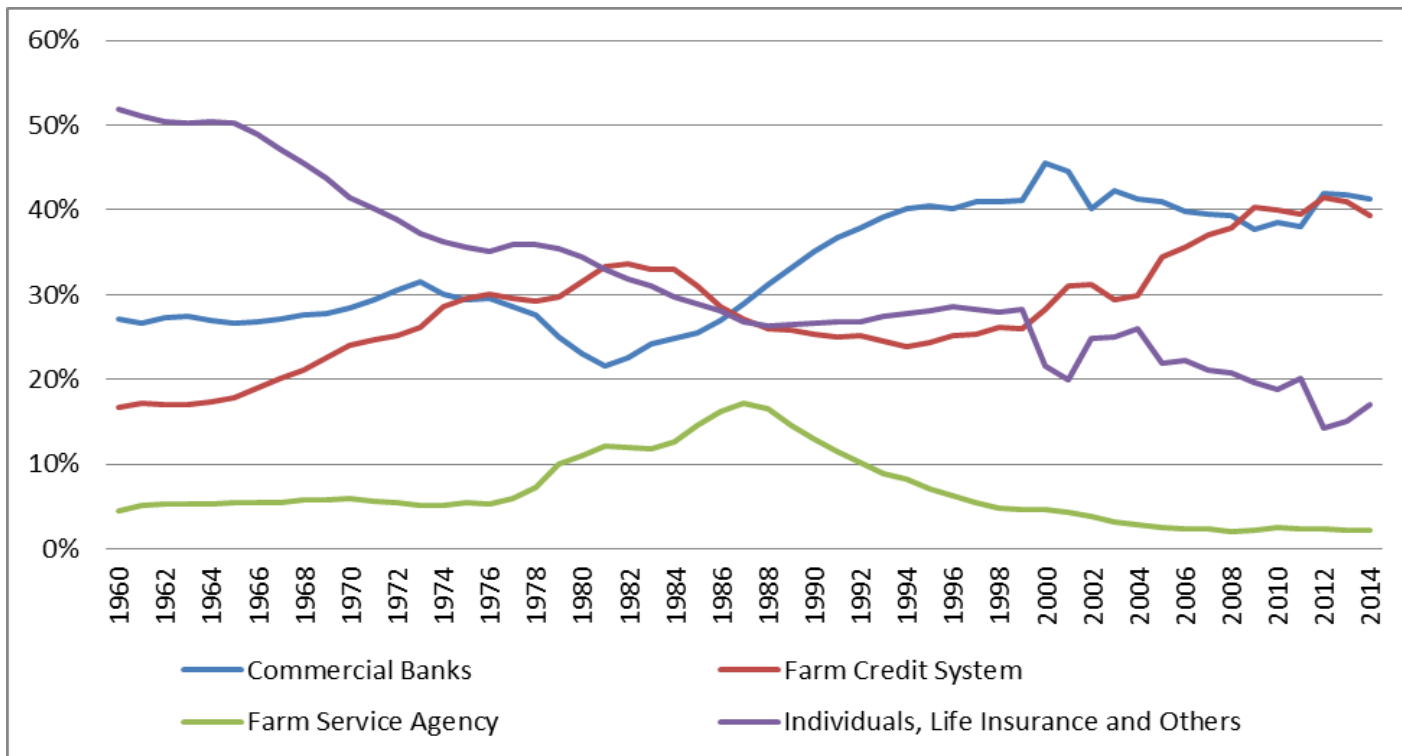
Farm Credit System Institution Territories





FCAs and Banks are Largest Farm Lenders

Market Share

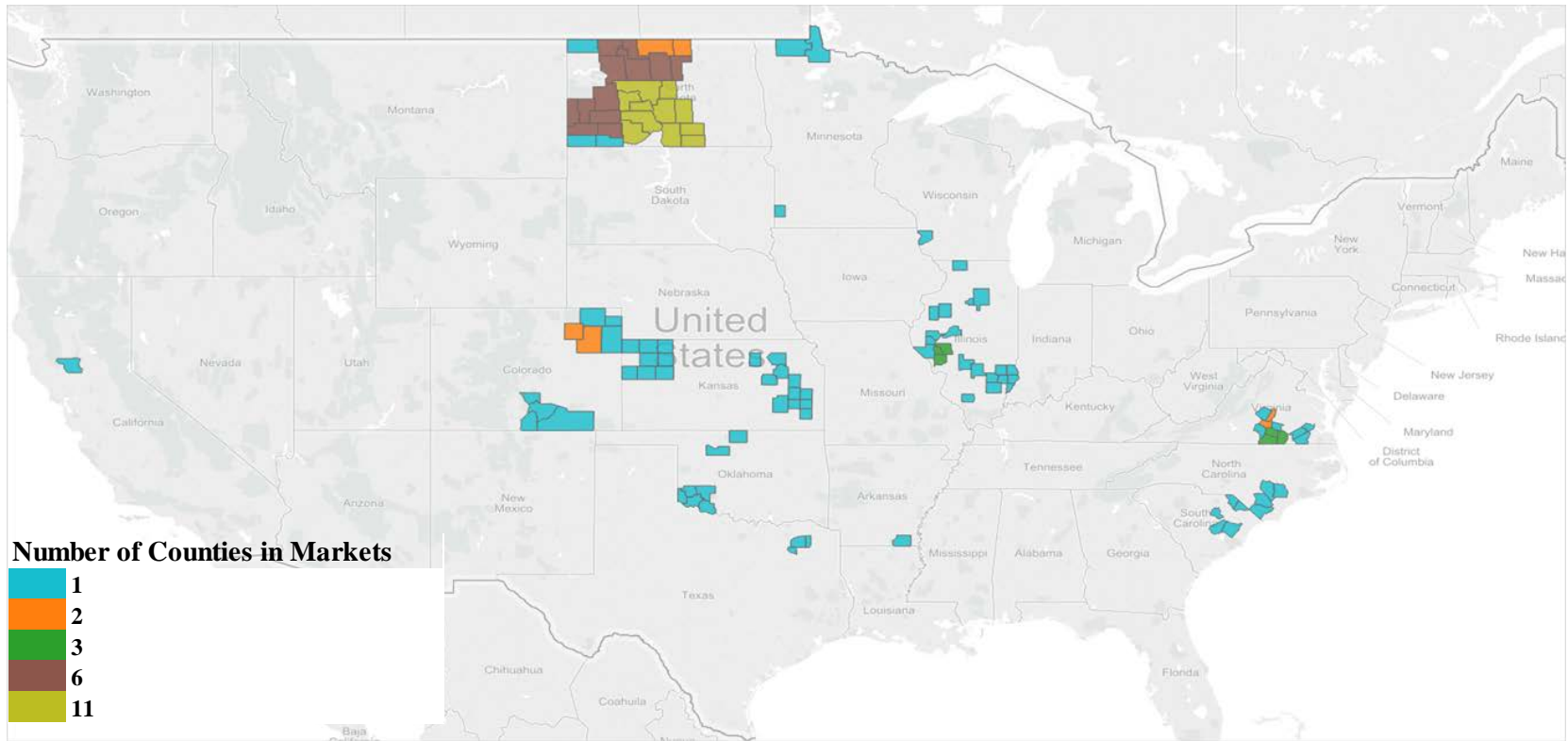


Agricultural Loan Local Market Share Estimates for HHIs

- Local markets based on Federal Reserve CASSIDI™ definitions.
- Agricultural loan data at FCA and bank level.
- Estimate county level loans, and aggregate to market for multiple-county markets.
- FCAs – allocate ag loans based on county-level crop and livestock marketing proceeds.
- Banks – allocate ag loans based on “rural area” deposits.
- Generally focus on markets that are comprised of complete counties where agriculture is important part of economy.



Agriculture-Important Banking Markets



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Local Banking Market Summary Statistics

	Agriculture-Important Markets ¹		Agriculture-Dependent Markets ¹		"Agricultural-Bank" Markets ²	
	2005	2014	2005	2014	2005	2014
Number of Markets	86	86	48	48	56	62
Number of Banks (median)	5	5	5	5	6	5
FCA Market Share of Agricultural Loans (median)	37%	45%	39%	44%	34%	39%
HHI: Deposits, Banks (median)	2,934	2,970	3,050	2,976	2,515	2,948
Markets <1800	14 (16%)	11 (13%)	5 (10%)	5 (10%)	12 (21%)	10 (16%)
HHI: Agricultural Loans, Banks (median)	3,457	3,690	3,549	3,807	2,833	3,534
ΔHHI: Agr. Loans - Dep., Banks (median)	434	672	265	639	254	639
Markets <1800	11 (13%)	7 (8%)	5 (10%)	2 (4%)	11 (20%)	7 (11%)
HHI: Agricultural Loans, Banks & FCAs (median)	3,343	3,688	3,343	3,634	2,684	3,082
ΔHHI: Agr. Loans, Banks & FCAs - Banks (median)	-413	-419	-554	-612	-413	-653
Markets <1800	9 (10%)	4 (5%)	3 (6%)	1 (2%)	9 (16%)	4 (6%)

¹ Based on earnings and employment criteria as of 2013.

² Agricultural banks are banks with a ratio of agricultural loans to total loans of 25 percent or more. An "Agricultural-Bank" market denotes a market in which 20 percent or more of the banks are agricultural banks.

Sources: Farm Credit Administration, Reports of Condition and Income (Call Reports), FDIC Summary of Deposits, www.bea.gov, and www.census.gov.

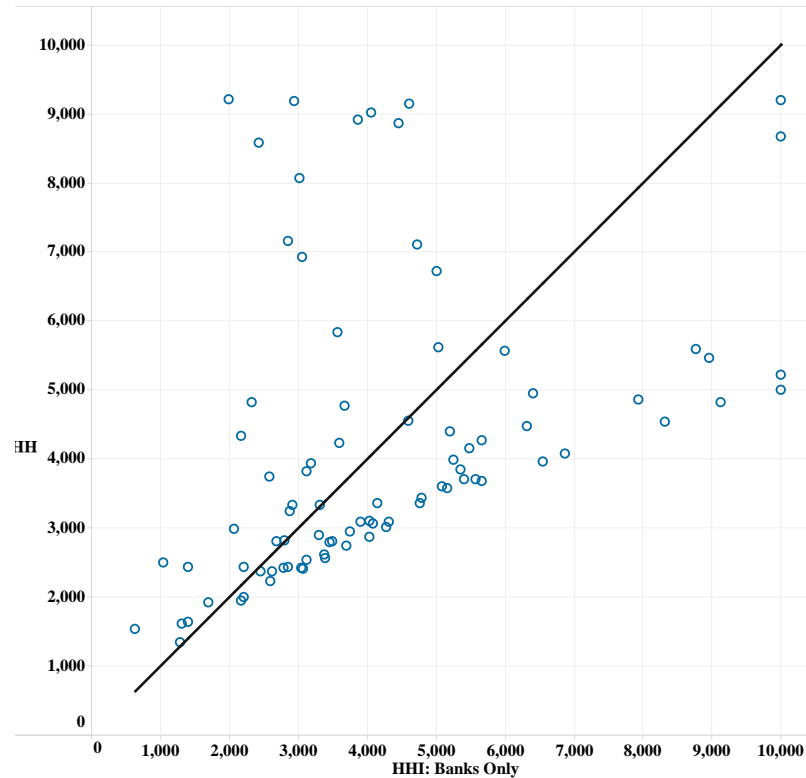


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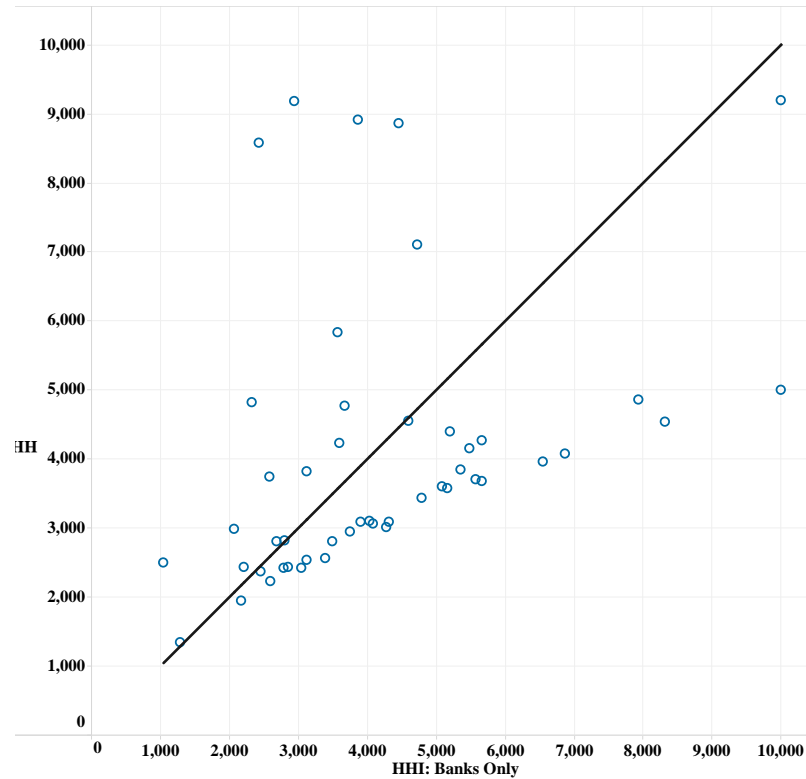
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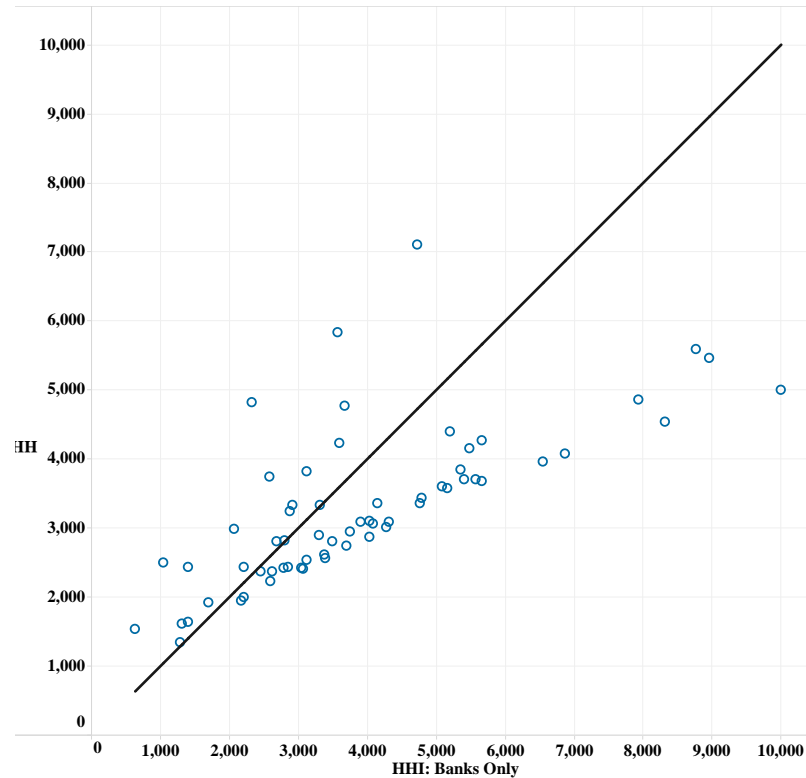
Agricultural Loan HHIs: Agriculture-Important Markets



Agricultural Loan HHIs: Agriculture-Dependent Markets



Agricultural Loan HHIs: Agricultural-Bank Markets





Conclusions

- Including FCAs as a competitor can significantly affect local banking market concentration.
- HHIs often decline significantly when FCAs are included in the market.
- Effect is stronger and more prevalent in markets more reliant on agriculture.
- Suggests that excluding FCAs may understate market competitiveness in rural markets where agriculture is important.



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