Bank Consolidation and Small Business Lending: The Role of Community Banks

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This paper

- Studies the effects of consolidation on small business lending at the local market level
- Focuses on the role of community banks in determining these effects
- Looks at merger activity during the mid-1990s: 1993-1997

- Here we discuss:
  - Conjectures and related studies
  - Our empirical approach
  - Our findings

Conjectures about consolidation

- Small business lending is still “special”
  - Heterogenous credit needs/credit worthiness
  - Information intensive relative to size of loan
  - Risks related to local economic conditions

- Small banks important as small business lenders
  - Have local information and expertise
  - Comparative advantage in underwriting small business loans
  - Also have legal limit on the size of loans they can make

Conjectures about consolidation

- Different from other small loans: consumer credit and home mortgage lending
  - Product-specific risks require product-specific expertise
  - But increasingly standardized products
  - Increasingly national markets---not requiring a significant local presence
  - Increasingly concentrated in large banks, while small business loans still concentrated in small banks

Table 1: Distribution of Bank Assets and Deposits

By bank asset size class[1]

Asset size:	All	<$300M	$300M-$1B	$1B-$10B	>$10B
Organizations (number)					
1993	10,962	10,149	530	224	59
1997	9,057	8,185	587	226	59
Assets (percent)					
1993	100.0	20.1	7.6	18.3	54.0
1997	100.0	18.1	7.1	15.3	59.5
Small business loans (percent)					
1993	100.0	35.1	11.4	19.9	33.5
1997	100.0	30.7	12.5	18.4	38.4
Large business loans (percent)					
1993	100.0	7.2	3.8	15.2	73.8
1997	100.0	5.3	3.8	13.9	77.0
Other Loans (percent)					
1993	100.0	16.2	7.8	19.7	56.3
1997	100.0	12.7	7.2	15.8	64.3

1 Assets size classes are measured in 1993 dollars.
Data are for banking organizations (data for holding company affiliates are consolidated).

Conjectured Effects of Consolidation

- As mergers reduce the numbers of banks—particularly community banks-- small business credit availability conjectured to be reduced
- But some evidence that mergers of community banks increase small business lending (economies of scale)
- Also evidence that other banks "offset" mergers-related changes in small business lending by consolidating organizations

Implications for Community Banks

- Consolidation represents an opportunity for community banks:
- To grow to a more efficient scale by merging
- To pick up business when other banks shift their focus

Previous Studies

- Use Call Report data---bank-level focus
  - Concerns about bank credit cultures and bank scale
  - Compare small business loan-to-assets ratios of banks involved in mergers to those of other banks
  - Mixed evidence depending on the period studied and how consolidation is defined

- More recent focus on credit availability at the market-level
  - The role of other lenders (community banks, de novo institutions) in offsetting merger-related effects
  - Anti-competitive effects of mergers

Our Focus

- Small business lending is “local”—and so are community banks
- Hence dynamics of how consolidation affects small business lending is local
  - Amount and types of local merger activity
  - Local markets conditions
  - Local market characteristics

    --The importance of community banks

What Do We Do?

- Test how local small business loan growth is related to merger activity within the market
- Look at 2 two-year study period: 1993-1995 and 1995-1997
- Control for local market characteristics and local economic conditions

Overview of Methodology

- Use geographic deposit data to come up with estimates of the geographic distribution of small business loans reported by each bank on its June Call Report

- Use these data to quantify
  - The merger activity affecting a given market
  - The growth of small business lending in a given market
  - The importance of community banks to a given market

Overview of Methodology

- Not perfect data—but available for all banks
- Validated these estimates using 1997 CRA data on small business loans reported by larger banks

Defining Local Markets

- Metropolitan Statistical Areas (MSAs) for urban areas and counties for rural areas
- Conduct separate analyses of urban and rural markets
- Drop some markets so that the statistical tests on the remaining samples are “cleaner ”
  - The largest 20 deposit markets
  - Very small rural counties

Measuring Local Merger Activity

- Measured as the share of the local small business loan market held by banks acquired during the subsequent 18 months by previously unaffiliated organizations
- Only counts mergers of *unaffiliated* banks, so consolidations of holding company affiliates are not counted
- Counts the lending of *acquired* organizations in the market.

  --acquisitions that do little local business lending are given little weight.

Measuring the “Nature” of Local Merger Activity

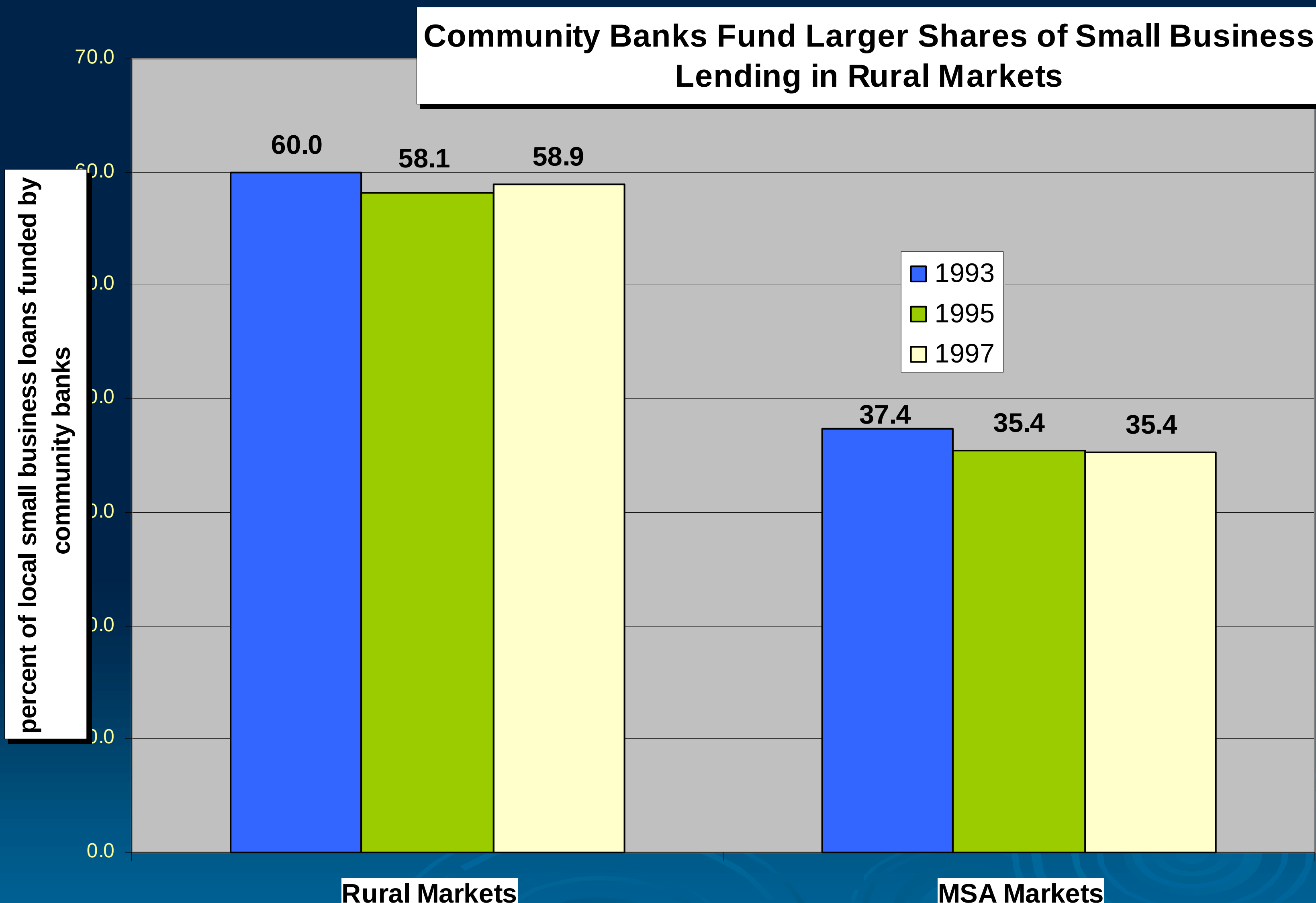
The percent of merger activity:

- Involving “within-market” acquisitions (acquiring organizations operated there prior to the acquisitions)

Measuring the “Nature” of Local Merger Activity

- In terms of the respective sizes of the acquired and acquiring organizations
- Percent of merger activity:
  - Community bank merger: both parties have assets <$1 billion
  - Big bank acquires community bank: Acquirer has assets >$1billion and acquisition has assets <$1 billion
  - Big bank merger: both parties have assets >$1 billion ($1993 dollars)

Patterns in the Data:



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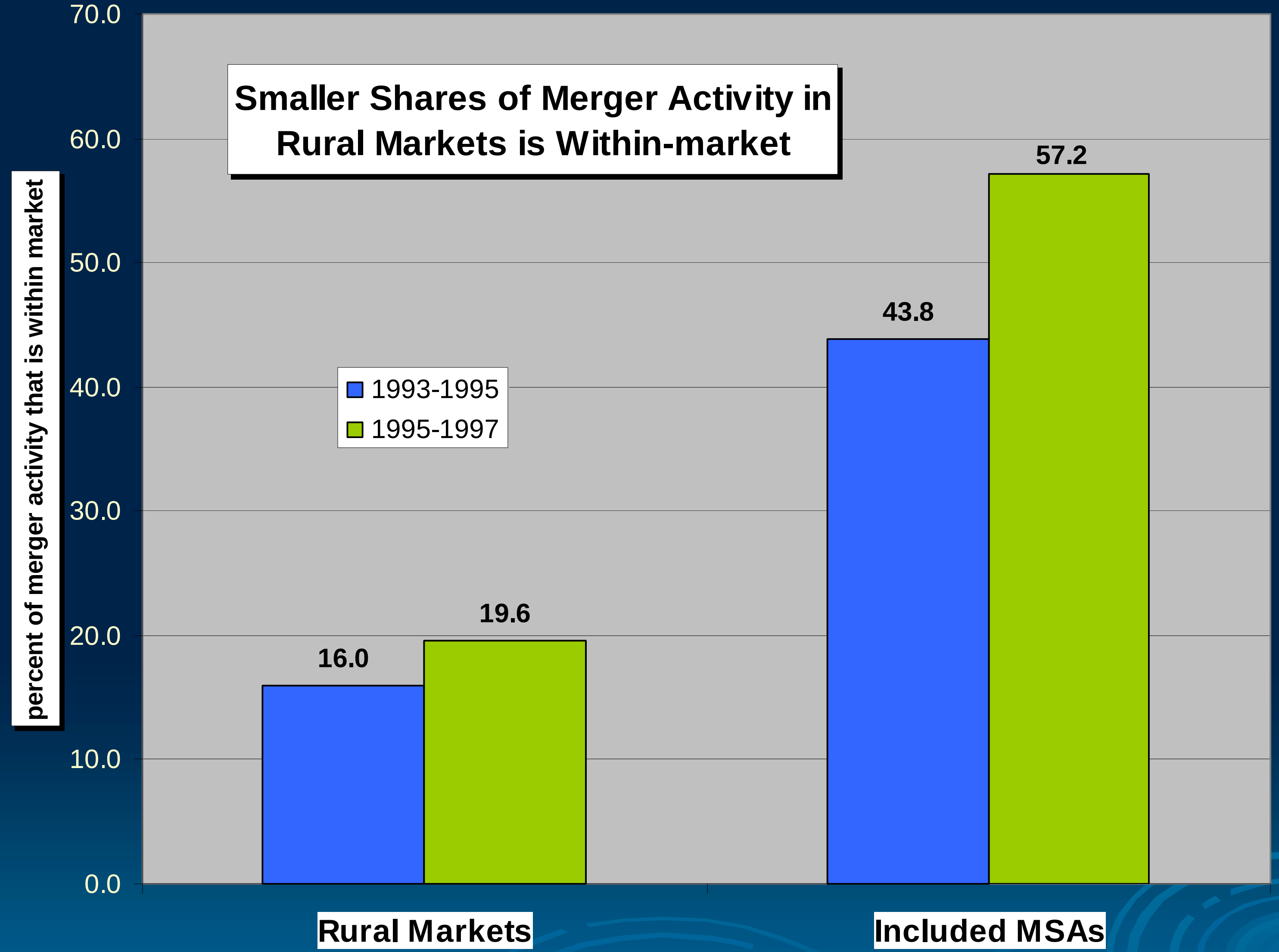
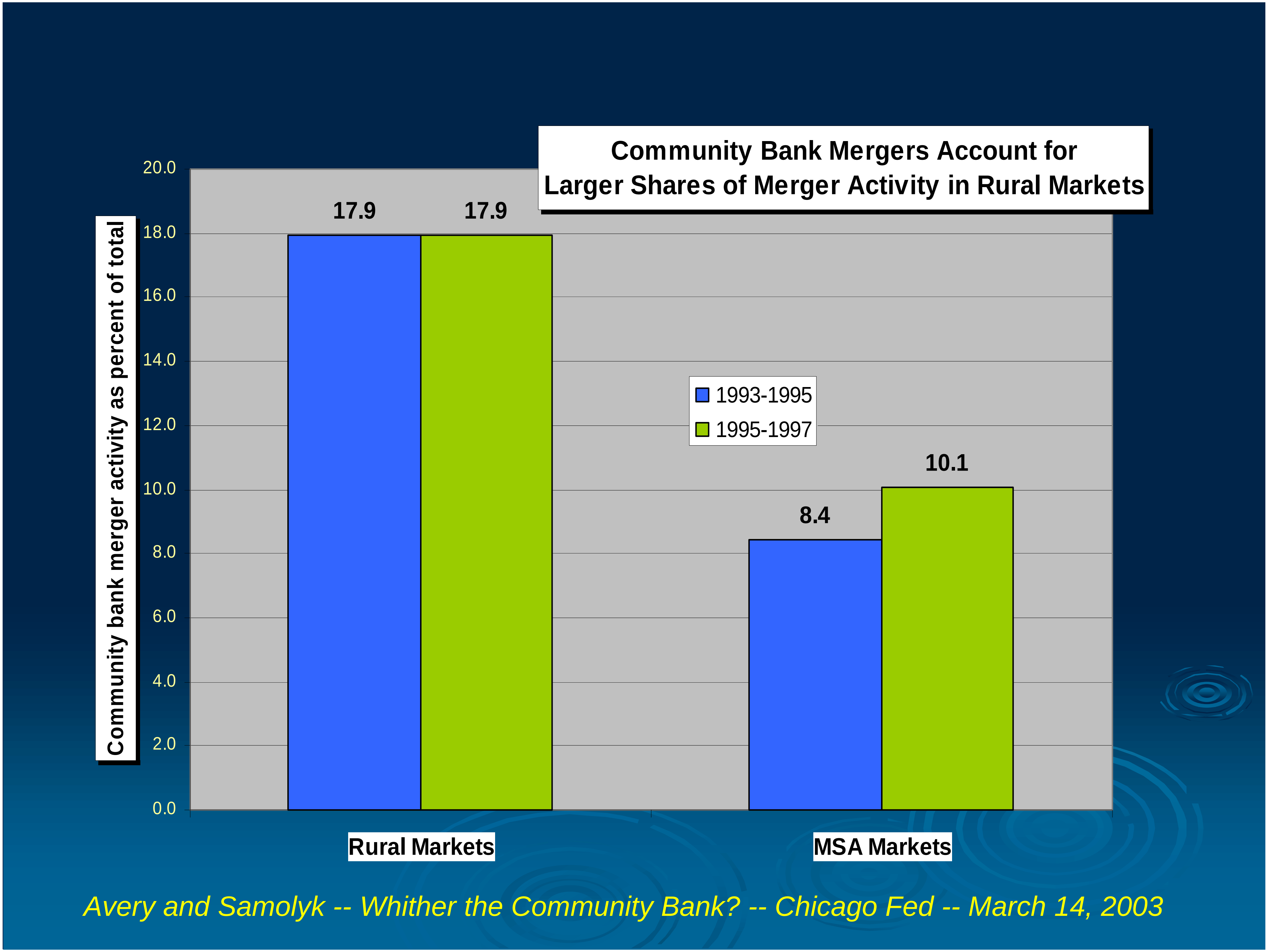

Smaller Shares of Merger Activity in Rural Markets is Within-market
percent of merger activity that is within market
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1993-1995
1995-1997
16.0
19.6
43.8
57.2
Rural Markets
Included MSAs


Community Bank Mergers Account for
Larger Shares of Merger Activity in Rural Markets
Community bank merger activity as percent of total
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
17.9
17.9
8.4
10.1
1993-1995
1995-1997
Rural Markets
MSA Markets
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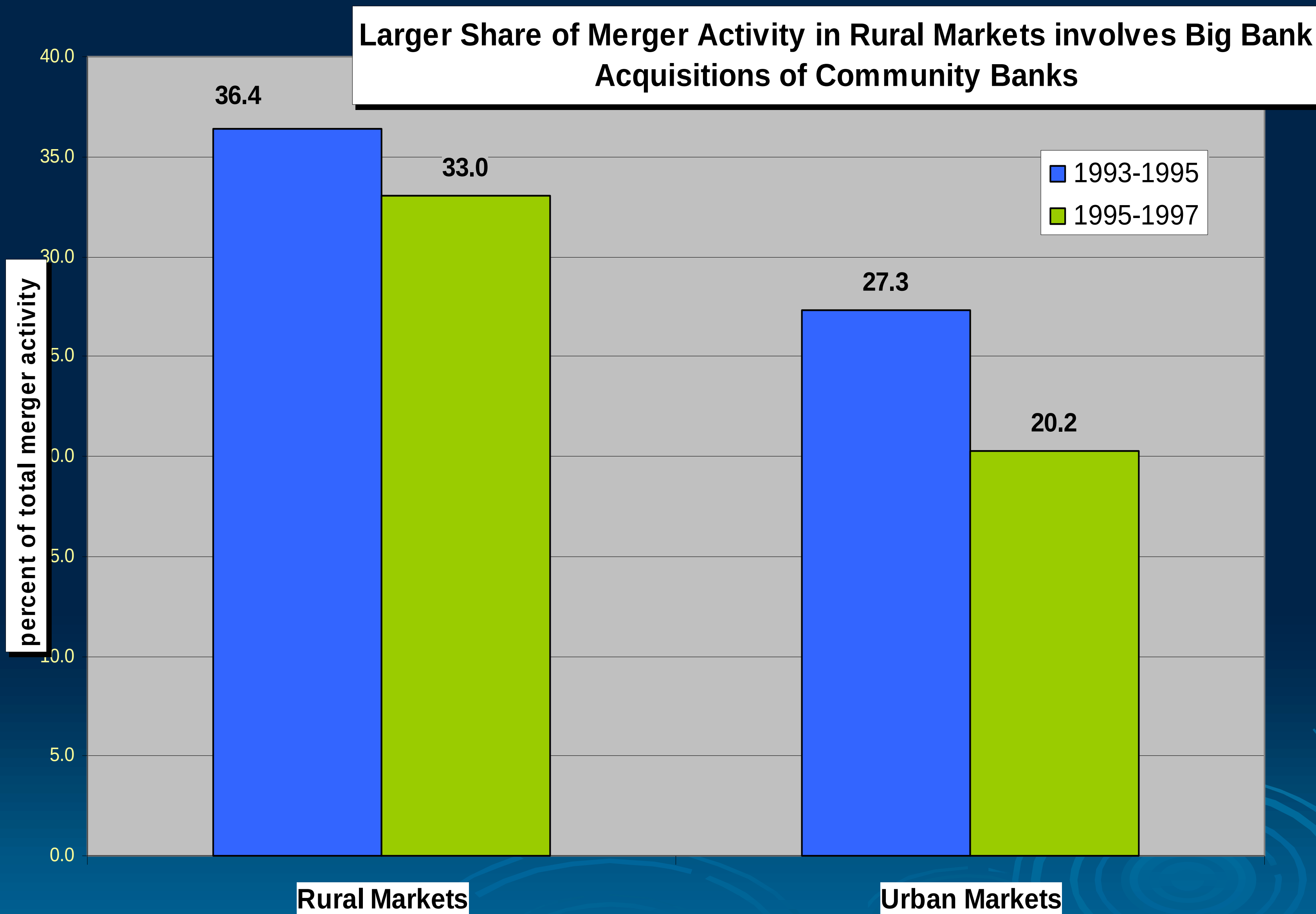

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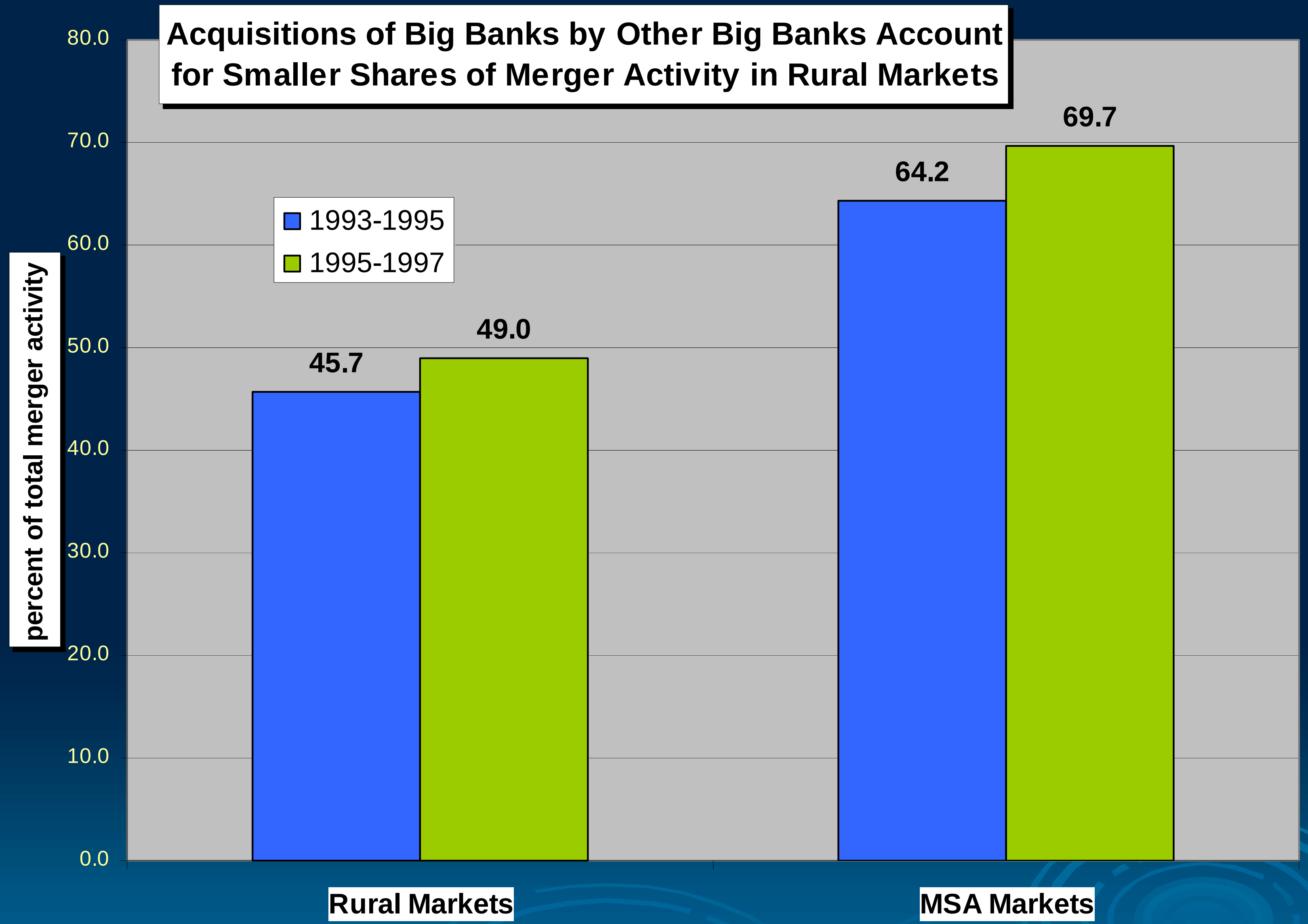

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Our Tests

- Relate small business loan (SBL) growth to the level and characteristics of local of merger activity
- Control for structural characteristics of the local banking market:
  - The share of small business lending by community banks
- Control for local economic conditions:
  - Including the growth in local deposits reported in Summary of Deposit data

Conjectured 'Local' Effects

- Big bank mergers or within-market mergers have negative effects on SBL growth
  - Shifting focus
  - Increasing the concentration of the local market
- Community banks have positive effects on SBL growth
  - Mergers among community banks to realize scale economies
  - Strong community bank local presence can offset negative merger-related effects

Results for Baseline Tests: Low, Medium, or High levels of (but not type of) Merger Activity

Tables 7.A and 7.B : All MSAs and All Rural Counties

	MSAs		Rural counties	
	1993-1995	1995-1997	1993-1995	1995-1997
Intercept	38.33	-42.25 *	126.15 ***	37.32
	(24.99)	(22.87)	(23.40)	(22.77)
Low Merger Activity:	3.67	-1.91	-3.17	-1.35
	(3.33)	(2.51)	(2.14)	(2.23)
Medium Merger Activity	2.38	0.61	**-2.96 ***	0.60
	(3.09)	(2.50)	(1.70)	(1.69)
High Merger Activity:	-3.53	-5.26	**-4.49 ****	-3.02
	(3.46)	(3.34)	(2.21)	(2.23)
Community Bank Share	0.03	**0.12 ****	**0.06 ****	**0.06**
of local market	(0.05)	(0.05)	(0.03)	(0.03)
R-squared	0.18	0.32	0.18	0.15
mean dep var	6.35	9.39	12.33	12.27

Results for Baseline Tests:
Low, Medium, or High levels of (but not type of) merger activity

- Find mixed patterns when looking at just the level of merger activity in certain sub-samples of markets

- Baseline tests not controlling for the type of merger activity—such as, big bank mergers versus community bank mergers

Controlling for "Nature" of Merger Activity

- Second set of tests controls for both the level and type of merger activity
- Also studied whether the importance of community banks depended on level of merger activity
- Tables group likely negative effects at the top of the table and likely positive effects at the bottom

Results: Tests controlling for Level and Type of Merger Activity

Tables 8.A: MSAs samples

	1993-1995	1995-1997
Intercept	35.49	-41.77 *
	(25.11)	(21.68)
Low Merger Activity:	11.02	-5.82
	(6.99)	(4.66)
Medium Merger Activity	-0.59	-5.74
	(4.40)	(4.66)
High Merger Activity:	-3.15	-11.75 *
	(6.45)	(6.49)
In-Mkt*Low MA	-0.04	-0.04
	(0.05)	(0.03)
In-Mkt*Medium MA	-0.03	-0.05
	(0.04)	(0.04)
In-Mkt*High MA	-0.06	-0.16 **
	(0.07)	(0.07)
Big/CB MA*Low MA	-0.03	0.07 *
	(0.05)	(0.04)
Big/CB MA*Medium MA	0.08 **	-0.02
	(0.04)	(0.04)
Big/CB MA*High MA	0.03	-0.08
	(0.08)	(0.11)
CB MA*Low MA	-0.04	0.00
	(0.06)	(0.04)
CB MA*Medium MA	0.03	0.10 **
	(0.05)	(0.05)
CB MA*High MA	0.04	0.00
	(0.16)	(0.33)
Cbshare*LowMA	-0.09	0.05
	(0.10)	(0.08)
Cbshare*MedMA	0.02	0.14 *
	(0.07)	(0.08)
Cbshare*HighMA	0.00	0.31 **
	(0.14)	(0.15)

Tables 8.B: Rural Sampless

	1993-1995	1995-1997
Intercept	116.97 ***	35.43
	(23.12)	(21.60)
Low Merger Activity:	-10.93 **	-8.73
	(5.33)	(6.09)
Medium Merger Activity	-11.95 ***	-8.79 **
	(3.39)	(3.97)
High Merger Activity:	3.80	-15.62 ***
	(5.31)	(5.56)
In-Mkt*Low MA	-0.01	-0.03
	(0.04)	(0.05)
In-Mkt*Medium MA	0.06	-0.07 *
	(0.04)	(0.04)
In-Mkt*High MA	-0.05	-0.06
	(0.07)	(0.07)
Big/CB MA*Low MA	0.03	0.01
	(0.05)	(0.05)
Big/CB MA*Medium MA	-0.03	0.00
	(0.03)	(0.03)
Big/CB MA*High MA	0.00	-0.12 *
	(0.06)	(0.07)
CB MA*Low MA	0.02	0.00
	(0.05)	(0.05)
CB MA*Medium MA	-0.02	0.11 ***
	(0.04)	(0.04)
CB MA*High MA	0.19 **	-0.01
	(0.08)	(0.07)
Cbshare*LowMA	0.09	0.13
	(0.06)	(0.08)
Cbshare*MedMA	0.16 ***	0.13 **
	(0.05)	(0.06)
Cbshare*HighMA	-0.19 *	0.27 **
	(0.11)	(0.11)

General results

- General patterns consistent with conjectures and related evidence:
- Big bank merger activity and/or within-market merger activity have negative impact on SBL growth
- Community bank merger activity and/or presence of community banks in the market have positive impact on SBL growth.

Descriptive Results: Decomposition of local loan growth

- Consolidating institutions *reduced* their small business lending *in absolute terms* in the markets where they acquire institutions
- But find a significant offset in the same markets by existing lenders
- Find relatively limited amounts of additional growth from new entrants

Conclusions

- Our market-based approach yields evidence consistent with conjectures that community banks play an increasingly important role as small business lenders as the industry consolidates.

- Currently studying more recent periods and more detail decompositions of local lending by particular market segments—including community banks.