

# Journal of Rural and Community Development

## Small Business Lending and Economic Well-Being in Texas Counties: A Test with Community Reinvestment Act Data

**Authors:** F. Carson Mencken, & Charles M. Tolbert

**Citation:**

Mencken, F. C., & Tolbert, C. M. (2018). Small business lending and economic well-being in Texas counties: A test with community reinvestment act data. *The Journal of Rural and Community Development*, 13(1), 47–66.



**Publisher:**

Rural Development Institute, Brandon University.

**Editor:**

Dr. Doug Ramsey

**Open Access Policy:**

This journal provides open access to all of its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. Such access is associated with increased readership and increased citation of an author's work.



# **Small Business Lending and Economic Well-Being in Texas Counties: A Test with Community Reinvestment Act Data**

**F. Carson Mencken**

Baylor University  
Waco, Texas, USA

[Carson\\_Mencken@Baylor.edu](mailto:Carson_Mencken@Baylor.edu)

**Charles M. Tolbert**

Baylor University  
Waco, Texas, USA

[Charlie\\_Tolbert@baylor.edu](mailto:Charlie_Tolbert@baylor.edu)

## **Abstract**

Utilizing the Community Capitals framework we examine the impact of Community Reinvestment Act (CRA) reported small business lending on the economic well-being of Texas counties in 1999–2000. We combine data from multiple data sources, including the County Federal Financial Institutions Examination Council (FFIEC) annual county Aggregate and Disclosure data—collected under directive of the 1977 Community Reinvestment Act—and use GeoDa to model the impact of small business lending in each Texas county from 1996–1999 on the 1999 county poverty rate, median family income, Gini income inequality coefficient, 2000 per capita income and 2000 nonfarm earnings per worker. Controlling for other dimensions of the Community Capitals Framework, the results show positive effects of small business lending on two income measures—per worker nonfarm earnings, and per capita income. Furthermore, we find the small business lending from 1996–1999 reduced poverty and income inequality in the most rural Texas counties. Implications for theory, policy, and research are discussed.

**Keywords:** community development; small business; financing; rural

---

## **1.0 Introduction**

Over the last 40 years the financial sector in the United States has gone through a major transformation from local and regional banks to multistate firms. The restructuring is a result of technological improvements in banking, changes in interstate banking laws, and increased competition for market concentration (Berger, Demsetz, & Strahan, 1999; Cetorelli & Strahan 2006; Hughes, Lang, Mester, & Moon, 1999; Wheelock & Wilson, 2000). One concern raised by this transformation is that small businesses in rural locations may lose access to lending (Elyasiani & Goldberg, 2004; DeYoung, Glennon, & Nigro, 2008; Shaffer & Collender, 2008). In this paper we examine the implications this financial sector transformation presents for local economies and their small businesses. More specifically, we test the impact of small business lending on county level measures of economic development, with a focus on the impact in rural counties. We use the

254 counties in the state of Texas (USA) as a case study. We begin with a review of the Community Capitals framework, which informs our analysis.

## 2.0 Community Capitals

According to the Community Capitals framework (Flora & Flora, 2013), rural communities with healthy levels of built capital, human capital, social capital, financial capital, natural amenities and cultural capital are able to identify and resolve local problems that resulted from the decades-long macro-level changes in farming (Ginder, Stone, & Otto, 1985; Lobao & Meyer, 2001) agriculture commodification (Guptill & Welsh, 2014; Lyson, 2004), manufacturing (Fitchen, 1991; Slack, 2014) and retail trade (Vias, 2004). Community-based research has documented the impact of many of the various forms of community capital, such as the built environment, local amenities, and social capital (c.f. Agnitsch, Flora, & Ryan, 2006; Besser & Miller, 2013a, 2013b; Besser, Miller, & Malik, 2012; Coffè, 2009; Lyson & Tolbert, 1996; Portes, 1998; Tolbert, Irwin, Lyson, & Nucci, 2002). Research on banking and finance is critical to understanding the effects of global and national processes on nonmetropolitan communities. Sociologists have not done as much research on this form of capital (Flora & Flora 2013).<sup>1</sup> That which is emerging indicates a positive relationship between local bank ownership and conventional business loans to small businesses in nonmetropolitan economies (Mencken & Tolbert, In Press; Mencken & Tolbert, 2016). Other research has concluded that the consolidation of the banking industry has meant, on average, fewer locally owned banks in nonmetropolitan America (Tolbert, Mencken, Riggs, & Li, 2014), and a greater reliance on multi-market (i.e. absentee-owned) banks for business lending (see Collender & Shaffer 2009).

We focus on one aspect of community capital- small business financial lending. In 1977, the 95th United States Congress enacted the Community Reinvestment Act to combat ‘redlining,’ or the practice of bank discrimination against lending in lower income neighborhoods (Fishbein, 1992; Friedman & Squires, 2005; Squires, 2011). Over time the CRA was recognized as an effective tool to bring economic development through an expansion of CRA scoring to include loans to small businesses and small business government loan programs (Abromowitz, 1993). It is the primary federal regulatory action to bring needed credit to underserved communities, urban and rural. Two responsibilities of the CRA regulators are to score lending institutions on their practices of extending credit to small businesses and to government business loan programs—such as the Small Business Association. Over the last 25 years the CRA has been used to increase financial capital in local communities, especially those in historically underserved areas. We use the CRA data on small business lending in Texas counties in an attempt to understand how small business lending affects traditional measures of place well-being from the Community Capitals framework.

Previous findings from research informed by the Community Capital framework—broadly defined—indicate that communities with a greater proportion of locally-owned and locally-oriented businesses are more civically engaged and have higher levels of economic well-being—less poverty, inequality, crime, chronic unemployment, community health issues—than those communities in which

---

<sup>1</sup> For exceptions see Green (1987; 1986; 1984) Bird and Sapp (2004), and in Australia, see Shaffer and Collender (2008).

employment is concentrated in a few absentee-owned firms (see Blanchard, Tolbert, & Mencken 2012; Irwin, Tolbert, & Lyson, 1999; Lee & Berthelot, 2010; Lee & Thomas, 2010; Lyson, Torres, & Welsh, 2001; Mencken, Bader, & Polson, 2006; Tolbert et al. 2002; Tolbert, Lyson, & Irwin, 1998;). The local entrepreneur and community leader are central agents of development in their communities. Local business owners who depend on local clients—customers for their livelihood will take a greater interest in the civic welfare of their communities. By working with local leaders to plan carefully the use of space—shops, cafes, services—, local entrepreneurs help to save downtowns of rural communities, thus keeping them from becoming a blight of shuttered buildings, replaced by big-box retailers along the highway bypass (Hall & Porterfield, 2001).

Local business owners are the foundation of the civically-engaged, independent middle class. Their entrepreneurial nature means that they are likely to be effective leaders and facilitators of community integration. The local entrepreneurs become important agents for organizing and managing local civic engagement (Blanchard et al., 2012; Blanchard & Matthews, 2006). In contrast, managers and professionals who are employed locally by absentee-owned firms are more likely to advocate for corporate interests over local interests. Those corporate workers who rotate geographical assignments every three to five years are not likely to invest in local community issues when they will be moving on in a few years—unless these issues directly affect their employer. Yet the Community Capitals framework provides that lack of financial capital for local entrepreneurs will limit the abilities of communities to provide self-direction.

### **3.0 Small Business Financing**

According to the Survey of Business Owners, seventy-eight percent of all business start-ups in the United States are supported by the assets of the individual(s) starting the company (Mencken & Tolbert, 2016). Many small-business ventures also involve significant asset investment from family and friends (Avery, Bostic, & Samolyk, 1998; Loscocco & Robinson, 1991). Qualitative interviews with small business owners in rural Texas (see Tolbert et al., 2014) reveal cases of self-financed businesses that did not survive more than a year. One young woman interviewed in fall 2012 had convinced her father to cash in part of his 401K plan to finance her specialty cake baking business after being turned down by banks. Another person interviewed with extensive experience owning small businesses opened a restaurant—events venue with personal savings. It closed in 12 months.

This raises an important question: does the source of small business finance have long-term implications for businesses and the communities in which they are embedded? The answer appears to be ‘yes.’ Small business start-ups that receive bank loans are more likely to be ‘fully capitalized.’ Full capitalization allows businesses to be more flexible, to weather downturns in sales, and to diversify (Bolton & Rosenthal, 2005; Fairlie & Robb, 2007; Robb & Fairlie, 2007). Those small-businesses that are financed through bank loans have been found to have, on average, higher gross sales (Bird & Sapp, 2004). Bank loans are essentially required for businesses to be successful in more capital-intensive industries, such as construction, transportation, or light manufacturing (Loscocco & Robinson, 1991: p. 524). Those industries which lack ‘hard assets’ such as plant equipment lack the physical collateral banks prefer to back business loans. Those start-ups that are undercapitalized, on the other hand, have much higher rates of failure (Avery et al., 1998; Bates, 2005).

#### 4.0 Restructuring of the Finance Industry

Complicating matters for small businesses and creating significant challenges for local nonmetropolitan communities is the ongoing restructuring of the financial services sector, which has eliminated many locally owned banks. Current estimates put the percentage of locally owned financial services at no greater than 25% for any given county in the nation (see Tolbert et al., 2014). The banking industry has been one of the most regulated industries in the United States. The McFadden Act of 1927 and the 1956 Bank Holding Company Act put severe restrictions on interstate banking (Omarova & Tahyar, 2011).<sup>2</sup> The latter was intended to limit the spatial expansion of large banking groups and their monopolization of local credit markets. Despite these regulations, since 1976 the financial sector has consolidated into fewer and fewer firms.

This process was accelerated by the passage and implementation of the 1994 Riegle-Neal Interstate Banking Act, which led to a flurry of mergers and acquisitions (Berger et al., 1999; Cetorelli & Strahan, 2006). This consolidation was followed by a proliferation of establishments at the local level, many of which were former independent and regional banks that serviced local businesses (Berger & Black, 2011; Berger & Udell, 1996; Boot, 2011; Collender & Shafer, 2003; 2009; Devaney & Weber, 1995)<sup>3</sup> In 2014, over half of all branch establishments in the United States were owned by a bank or bank holding company in another state. The consolidation is also reflected in the deposits controlled by the largest national banks. In Texas the top three banks in 1994 controlled 30.4% of total big bank deposits. In 2014, the top three banks held 47.8% of total big bank deposits.<sup>4</sup>

This consolidation raises the fear of the emergence of ‘credit deserts,’ particularly in rural economies. Historically, in small towns throughout rural America local businesses and community banks formed symbiotic relationships. Moreover there were three interrelated routes through which entrepreneurs could secure loans: good credit, good collateral, and community reputation (Elyasiani and Goldberg 2004; Flora and Flora 2013; Kilkenny 2002). Small businesses, and particularly those in rural economies, have tended to rely upon small, locally owned depository institutions (vs. larger, non-local institutions) and their practices of relational (aka. judgment or ‘soft’ data) lending for financing (Berger, Miller, Petersen, Rajan, & Stein, 2005; Berger & Udell, 1995, 1996, 2002; Collender & Frizell, 2002).

Restructuring of the financial sector, however, has increased the social and spatial distance between borrower and lender (Brevoort & Hannan, 2004; DeYoung et al., 2008; Kilkenny, 2002; Shaffer & Collender, 2008). The headquarters of financial services where lending policies and practices are determined, which increasingly rely on hard-data lending, are set in locales far removed from the small businesses that need access to the capital. This distance threatens to undermine the well-being

---

<sup>2</sup> The Bank Holding Company Act allowed for some flexibility in interstate banking through BHCs, each state had, and significantly enforced, their own regulations which set very strict rules on out-of-state acquisitions. Only a handful of multi-state bank holding companies were in existence in the early 1980s.

<sup>3</sup> Between 1984 and 2011, the number of FDIC reported bank firms declined from 14,496 to 6,291, while the number of banking establishments increased from 42,717 to 83,209 (see Tolbert et al, 2014).

<sup>4</sup> In 1994 the top three Texas banks were Nationsbank of Texas, NA; Texas Commerce Bank, NA; and Bank One, Texas, NA. In 2014 the top three banks were Bank of America, NA; Wells Fargo, NA/Wells Fargo Southcentral, NA; and JP Morgan Chase, NA ([www2.fdic.gov](http://www2.fdic.gov)). Big bank deposits refers to total deposits in the 50 largest banks in the state for any given year.

of small town economies, as access to necessary financial capital is becoming more difficult to secure. Most importantly, a small business sector in rural communities needs access to traditional and affordable sources of financial capital to launch new businesses, and to sustain and expand existing enterprises (Black & Strahan, 2002; Davis, Haltiwanger, & Jarmin, 2008; Mencken & Tolbert, 2016). Flora and Flora (2013) summarize the situation thusly:

for rural communities and businesses alike, there is a crisis of capital availability. As savers and investors are lured by higher profits outside the local area and are facilitated by new laws making it easier to move from one place to another, financial capital is becoming more and more mobile. As capital becomes more mobile, rural communities lose control of it. (p. 175)

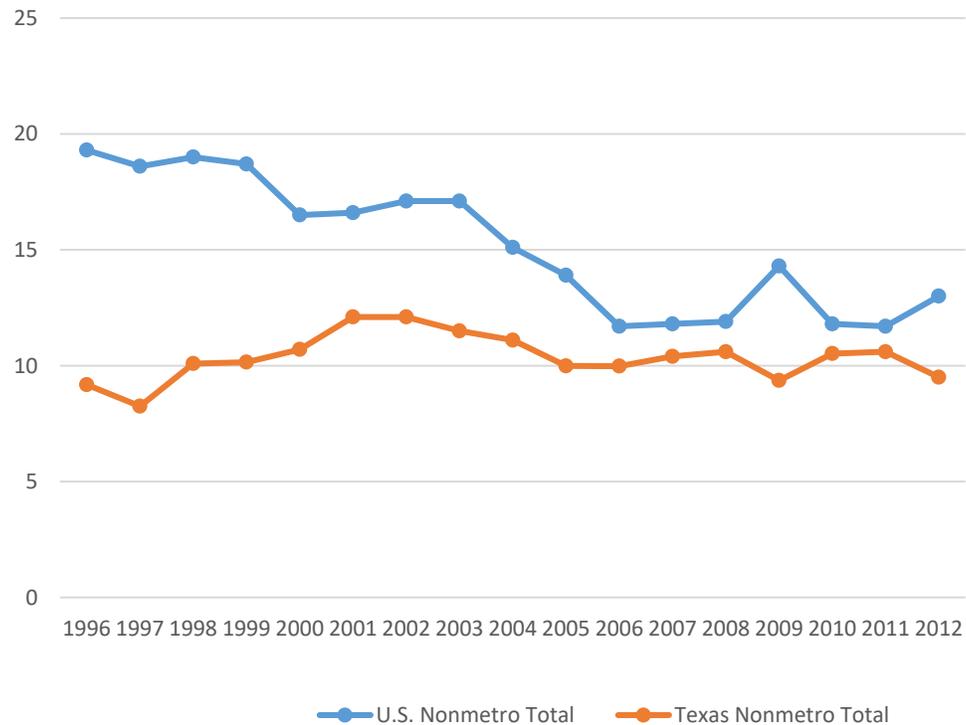
Mencken and Tolbert (2016) find that bank loans have historically been a more prevalent source of business start-up and business expansion capital, and that nonmetropolitan business owners were more likely to report using conventional loans to start and/or expand their business than metropolitan business owners. They also find that the rate of loan use has declined over time, while home equity loans and personal credit cards have increased as a source of start-ups and expansions in both metropolitan and nonmetropolitan businesses. The shift from traditional bank loans to credit cards and home equity loans is attributed to the decline in small business lending. This decline can be further verified in Figure 1, which shows that, at the national level, the proportion of small business lending to nonmetropolitan counties has declined since 1996.<sup>5</sup> However, these data also show very little change across time in the proportion of small business loans going to Texas nonmetropolitan counties. In fact, these Texas data show that nonmetropolitan small business lending received a greater share of all Texas lending between 1996 and 1999. Moreover, in 1996 Texas nonmetropolitan counties received 20,110 small business loans. In 1999, Texas nonmetropolitan counties received 52,635 small business loans, an increase of 161%. Texas nonmetropolitan counties were counter to national nonmetropolitan counties for the time period in question.

In order to better understand what the potential changes in financial restructuring mean for the effectiveness of community capital, we propose to examine the impact of small business lending, as reported to the federal regulator under the guidelines of the Community Reinvestment Act, on measures of local development in each Texas county for the 1999–2000 timeframe. The analysis is informed by the Community Capitals framework. We predict that counties with a greater volume of small business loans, representing more financial capital flowing to small businesses in the community, will have higher levels of well-being. We also test for differences in the effects of small business lending across the urban-rural continuum.

---

<sup>5</sup> County Federal Financial Institutions Examination Council (FFIEC) annual county Aggregate and Disclosure data. The data were downloaded from <https://www.ffiec.gov/cra/> on 7/7/2015.

Figure 1: Percent of All Small Business Loans Going to Nonmetropolitan US and Nonmetropolitan Texas Counties.



## 5.0 Data and Methods

In the analysis we examine the effects of per capita small business lending on five measures of economic well-being for Texas counties. The analysis is limited to the end of the 1990s because of the damage done to the financial industry during the Great Recession, 2007–2009. During the Great Recession small business and farm loans were only 55% of their inflation adjusted value for the 1996–1999 time period (see Mencken & Tolbert, 2016). We fear that trying to benchmark the impact of small business lending would grossly misrepresent historical trends by focusing on this Great Recession time period. We also limit the analysis to the counties in Texas, for four reasons.<sup>6</sup> First, Riegle-Neal was not implemented uniformly in each state following its passage in 1994. Some states delayed implementation until 1997, the impact of which would not be relevant until 1998—at the earliest. Texas was an early adapter. Second, Texas is the second largest economy in the United States, and 12th largest in the world. It has five of the top 10 largest cities in the United States, and it also has extremely rural areas (e.g. Loving County, population 82). Third, Texas has a history of large bank presence. As reported above, in 1994 30% of total deposits in Texas were concentrated in three banks. That rate of concentration is twice the national rate for the same time period. The diverse mixture of counties allows us to assess the impact of CRA small business lending on county development while controlling for state-level differences in Riegle-Neal adaptation

<sup>6</sup> Three counties are removed due to their very small populations. These are Kenedy County (population 461), Loving County (population 82), and Borden County (population 641).

and idiosyncratic banking structures. Fourth, the data in Figure 1 show that lending to Texas nonmetropolitan counties does not fit the same pattern as national nonmetropolitan trends during this time frame.

### **5.1 Dependent Variables**

The dependent variables in the analysis are taken from the Decennial Census of Housing and Population. There are four measures we use, three of which are standard in the volume of research on community capital and civic society (see Lyson et al., 2001; Tolbert, Mencken, Blanchard, & Li, 2016). The standard measures include 1999 Gini income coefficient; 1999 county poverty rate; 2000 per capita income and 1999 median family income. Because median family and personal income measures include all source income—earnings, transfer payments, and so forth—we also include a measure of per worker nonfarm earnings (2000), which gives us an understanding of how small business lending trends affect earnings across Texas counties.

### **5.2 Independent Variables**

The primary variable of interest is financial capital, and in particular small business lending. The Community Capitals framework identifies financial capital for local and small businesses as a needed asset for community well-being. We utilize the publicly available County Federal Financial Institutions Examination Council (FFIEC) annual county Aggregate and Disclosure data. The 1977 Community Reinvestment Act requires that lending institutions report the number of loans and the value of all loans to small businesses, delineated by assets. We examine the effects of the amount of small business lending with a measure of total small business loan amounts to businesses with less than \$250,000 in assets per capita for the 1996–1999 time period in each county. We do not know if the loans for these small businesses come from locally owned banks, a weakness of the study’s ability to directly test the Community Capitals model. To our knowledge, no such data are available for all counties over time. We do have data on how much county  $x$  received in total small business lending for each year between 1996 and 2015.

We calculate this measure for the 1996–1999 time period. Measures of central tendency are presented in Table 1. The mean amount of small business lending per capita in Texas was \$1,074.77 (\$975 standard deviation), with a median value of \$778.2. The variable has a skewness score of 2.62, and a kurtosis factor of 9.35—indicating significant skewness in the distribution. Due to this we take the natural log of the measure for the analysis.

### **5.3 Community Capital Controls**

There are a variety of other county-level measures of community capital that we control in this analysis. We first utilized several measures from previous research (Lyson & Tolbert, 1996; Mencken & Tolbert, 2005; Tolbert et al. 2002; Tolbert et al., 1998). These include percent of total manufacturing that is ‘small manufacturing’ (i.e. less than 20 employees), per capita third places—such as pubs, barber shops, coffee houses—, per capita national civic associations, proportion of

the adult population with at least a high school diploma, and proportion of the voting age population who voted in the most recent presidential election. We also included a measure of what percentage of religious adherents attend civically engaged denominations from the 2000 Census of Churches.<sup>7</sup>

Table 1. *Descriptive Statistics*

	<b>Mean</b>	<b>Std. Dev.</b>
Total Small Business Lending 1996–1999 dollars per Capita	\$1,074.78	\$975
<i>Dependent Variables</i>		
Per Capita Income 2000	\$22,645	\$5,840
Gini Income Inequality 1999	0.45663	0.03186
Median Family Income 1999	\$38,608	\$8,479
County Poverty Rate 1999	16.537	6.534
Nonfarm Earnings per Worker 2000	\$17,996.75	\$7,068
<i>Community Capitals</i>		
Percent High School Grads 2000	62.87	8.65
Percent Small Manufacturing 2000	0.65801	0.28331
Percent in Civically Engaged Congregations	23.06521	15.79705
Percent Total Population Voting in Presidential 2000	20.05	58.89
Third Places Per Capita 2000	11.67582	39.19078
National Associations Per Capita 2000	1.6181	4.76707
<i>Demographic Controls</i>		
Percent Foreign Born 2000	7.17515	6.37291
Percent White 2000	65.67771	21.30656
Percent Retail 2000	32.7544	7.4786
Population Density 2000	86.17047	254.5064
Metro Counties	30.3	46.1

<sup>7</sup> These denominations include African Methodist Episcopal Zion, American Baptist, Church of Christ, Congregational Christian, Disciples of Christ, Episcopal, Jewish, Latter-Day Saints, Lutheran, Methodist, Presbyterian, and Unitarian.

### 5.4 Demographics

Past research indicates that the well-being of counties is also affected by the demographic composition of the county. Poverty rates are not uniform across the spatial landscape. Counties with a greater proportion of foreign migrants, and racial–ethnic minorities tend, on average, to have lower levels of well-being (Sherman, 2014; Tickamyer, White, Tadlock, & Henderson, 2007). We control for percent of the county white, non-Hispanic in 1999; percent of the county foreign born in 1999; population density 1999; and percent employed in retail trade. In order to control for the possibility that higher income counties are more likely to attract higher levels of small business lending, we add a time lagged dependent variable to each model. The effects of small business lending are net of previous levels of the five income, poverty and inequality measures.

The Community Capitals framework is a rural community-based model. We test to what extent small business lending has the same impact in urban and rural settings. We interact the measure of small business lending by the 2003 OMB metropolitan–nonmetropolitan continuum. This will show whether or not the impact of small business lending has the same effect in different types of metropolitan and nonmetropolitan Texas counties. We estimate a least squares solution, weighting the analysis by 2000 county population.

## 6.0 Results

Table 2 presents simple zero-order correlations for the primary independent variable, total small business lending in the county for the 1996–99 time period and each dependent variable. These results show significant correlations with each county income measure. The strongest correlation is with 2000 nonfarm earnings. These two variables share 17.9% variance. The correlations with 2000 per capita income ( $r=0.402$ ) and 1999 median family income ( $r=0.325$ ) are also highly significant ( $p<=0.001$ ). Small business spending has a modest negative correlation with the county 1999 poverty rate ( $r=-0.166$ ) and no correlation with the county 1999 Gini coefficient of income inequality.

Table 2: *Correlations Between Small Business Lending and Dependent Variable, Texas Counties*

	Small Business Lending 1996–1999		
	<i>r</i>	<i>r</i> <sup>2</sup>	<i>p</i>
Per Worker Nonfarm Earnings 2000	0.42326	0.179	***
Per Capita Income 2000	0.40225	0.162	***
Median family income 1999	0.32514	0.106	***
Gini Coefficient 1999	-0.11528	0	
Poverty Rate 1999	-0.1663	0.028	**
* $p<.05$ ; ** $p<.01$ ; *** $p<.001$	$n=251$		

Table 3 shows the least squares solution regression results for each dependent variable. The models show that small business lending is an important predictor of each county's well-being measure, with one inconsistency. For each percent increase in total small business lending for the 1996–1999 period, 2000 per capita income is predicted to increase by \$460 dollars. A similar effect is found for nonfarm earnings. For each percent increase in small business lending, 2000 nonfarm earnings per worker are predicted to increase by \$1,312 dollars. However, the interactions are not significant. The effects of small business lending are the same for all county types. The findings for 1999 median family income are inconsistent. The analysis shows that small business lending actually has a negative effect on median family income, net of other factors.<sup>8</sup> This negative effect is the same in all county types along the urban-rural continuum. See figures 2 and 3 for graph of interactions.

The models for 1999 income inequality and 1999 poverty rate show that CRA reported small business lending has different effects across the urban-rural continuum. In the most urban Texas counties, small business lending has a significant positive effect on inequality and poverty ( $b=0.019$ ;  $b=0.018$  respectively). However, the interaction effect is negative. Among rural counties there is a negative effect of small business lending on the 1999 poverty rate and the 1999 Gini coefficient of income inequality. Figures 2 and 3 show the logarithmic impact of small business lending at different levels of rurality—among completely rural counties, and nonmetropolitan counties with a metropolitan area of 20,000 or more. In nonmetropolitan counties, small business lending is inversely correlated with both income inequality and poverty, even after controlling for a variety of county characteristics. The more rural the county, the stronger the effects. These results are consistent with previous research on county-level measures of well-being in rural America, which show that measures of political and social capital predict lower levels of poverty and income inequality in nonmetropolitan counties (see Blanchard et al., 2012; Tolbert et al. 2002; Tolbert et al., 1998).

---

<sup>8</sup> In previous models in which a median family income time lag was not included, the interaction between small business lending and urban-rural continuum was significant.

Table 3. *Least Squares Regression: The Effects of Small Business Lending on Economic Well-Being Measures in Texas Counties (n=251)*

	1999 Median Family Income			2000 Nonfarm Earnings			2000 Per Capital Income			1999 Gini Coefficient			1999 Poverty Rate		
	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>Se</i>	<i>p</i>
<i>Log Total Loans 1996–1999</i>	-1,490	666.9	**	1.312	0.33	***	460.38	228.1	*	0.019	0.01	***	0.02	0.01	**
<i>Community Capitals</i>															
% Small Manuf. 2000	1,463	789.9		-1.31	0.91		991.5	709.4		-0.01	0.01		0.01	0.01	
% in Civic Eng. Denom. 2000	4.612	2.26	*	0.02	0.01	*	5.27	1.98	**	-0.001	0.001		-0.06	0.3	
% of Adults Voting in 2000 Pres.	4,174	4,628		-7.52	5.38		8,494	4,162	*	0.07	0.04		0.10	0.04	*
Third Places Per Cap 2000	-310	335		1,489	390.9	***	358	302		-1.66	2.51		-2.36	3.01	
% HS Grad+ 2000	2.79	0.55	***	-0.25	0.6		1.68	0.5	***	-0.14	0.05	**	-0.02	0.005	***
Associations Per Cap 2000	2,108,	1,140,		-823.6	1,327		1,036	1,026		18.55	8.41	*	22.77	10.1	*

Table 3. Least Squares Regression: The Effects of Small Business Lending on Economic Well-Being Measures in Texas Counties (n=251) (continued)

	1999 Median Family Income			2000 Nonfarm Earnings			2000 Per Capital Income			1999 Gini Coefficient			1999 Poverty Rate		
	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>se</i>	<i>p</i>	<i>b</i>	<i>Se</i>	<i>p</i>	<i>b</i>	<i>Se</i>	<i>p</i>
<i>Demographics</i>															
Population Density 2000	-2.13	0.89	*	0.01	0.00	***	1.59	0.79	*	0.01	0.006	*	0.02	0.7	
% Retail 2000	-110	331		-0.73	0.38		-975.3	299.2	**	-0.01	0.01		0.01	0.00	*
% Foreign Born 2000	83.4	43.1		0.02	0.06		108.2	38.8	**	-.01	0.00	**	0.3	005	**
% White 2000	2.59	17.58		0.01	0.02		6.04	15.8		0.01	0.13		-0.01	0.02	
Urban-Rural 03	-508.1	132.8	***	0.41	0.15		180.8	116.9		0.01	0.01		0.03	0.1	
Time Lag	0.96	0.06	***	0.17	0.07	*	0.33	0.05	***	0.36	0.05	***	0.45	0.04	***
Interaction	Not Significant			Not Significant			Not Significant			-0.003	0.001	***	-0.002	0.001	*
Intercept	0.39	0.03		3.96	4.25		1730.7	2796.7		0.39	0.03	*	0.20	0.03	***
<i>N</i>													251	251	
<i>R</i> <sup>2</sup>	0.897	***		0.641	***		0.747	***		0.505	***		0.847	***	

\**p*< .05; \*\**p*< .01; \*\*\**p*< .001

Figure 2: The Effect of Small Business Lending on 1999 Gini Income Inequality in Texas Nonmetropolitan and Rural Counties.

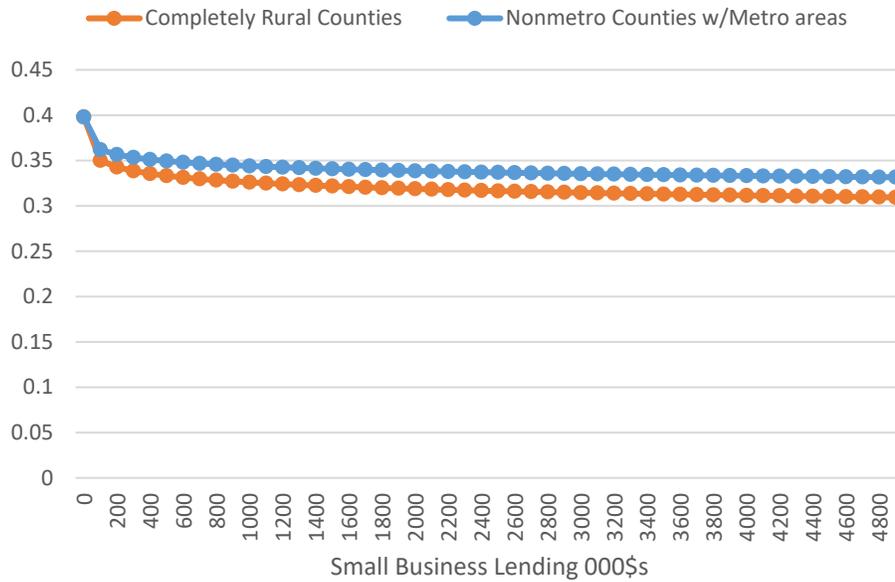
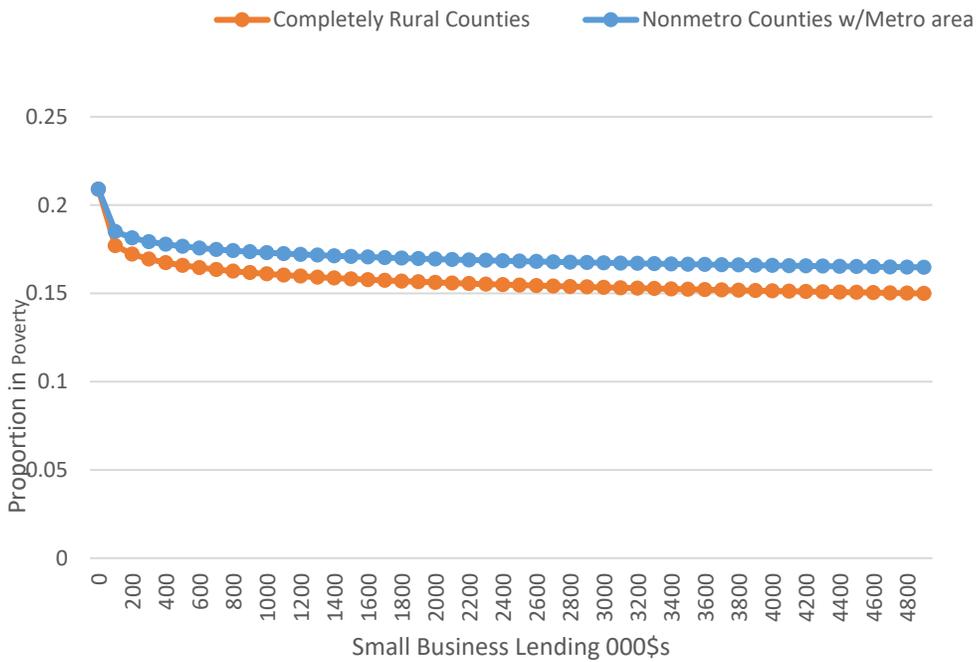


Figure 3: The Effect of Small Business Lending on 1999 County Poverty Rates in Texas Nonmetropolitan and Rural Counties.



The other Community Capitals variables have limited effects. Percent in civically engaged denominations has positive effects on each measure of income-earnings.

The measure for human capital—percent of adults 25+ with at least a high school education—has a positive effect on 1999 median family and 2000 personal income. However, only human capital has the expected effect on 1999 Gini coefficient of income inequality and county 1999 poverty rate. Counties with higher levels of adults with a high school or greater education have net lower levels of income inequality and poverty in Texas.

## **7.0 Discussion**

The primary purpose of this paper is to examine the impact of CRA reported small business lending on county level measures of economic well-being. We are particularly interested in how this type of lending affects economic well-being in rural communities. Small business lending has positive effects on per capita and per worker earnings. Small business lending also helps to reduce poverty and inequality in nonmetropolitan Texas counties with the greatest impact in the most rural areas.

Our research makes unique contributions to the Community Capital framework in two important ways. First, it extends this tradition empirically by integrating financial capital into a model which predicts county economic well-being, while controlling for other forms of community capital. Empirical tests on the role of local finances has been lacking from this framework (Flora & Flora, 2013). The overall findings support the notion that financial capital is important for economic development. This capital helps to create more earnings, personal income, and less income inequality and lowered the poverty rate in rural Texas counties. These three findings are consistent with other studies (Bird & Sapp, 2004; Mencken & Tolbert, 2016; Tolbert et al., 2014), which document the importance of small business financing.

Second, this research is also important to help frame the impact of long-term restructuring in the financial services industries. The 1994 Riegle-Neal Interstate Banking and Branching Efficiency Act sought to remove the inefficiencies and to ease awkward interstate banking restrictions. Critics of the legislation, namely small, local community banks, feared an oligopoly in the national banking market (DeYoung et al., 2008). This was deemed particularly problematic for small businesses and farms in rural communities which have relied on local banks and relationship lending for access to credit (Tolbert et al., 2014). The financial sector transformation joins a long list of barriers to development in rural America. Local community leaders were concerned that local deposits would be transferred out of the communities, creating rural ‘credit deserts,’ akin to what has historically been an inner-city problem. Proponents of restructuring point to industry safeguards, such as anti-trust laws, state and federal regulatory oversight of all mergers, and most importantly, the Community Reinvestment Act which directs banks to make funds available to the entire community they serve (Friedman & Squires, 2005; Johnson & Sarkar, 1996).

In 1977 the Community Reinvestment Act was passed to encourage banks to meet the credit needs of the communities in which they operated. Much of the focus of the CRA was to eliminate the practice of ‘redlining’ in which geographic units became ‘credit deserts’ due to a cluster of circumstances deemed ‘high risk.’ These were typically inner-city poor neighborhoods with high concentrations of minority populations (Ross & Tootell, 2004; Squires, 2011). Yet recent research on the sources of funding for small business start-ups and expansions in rural economies shows that, over time, the proportion of rural based enterprises that utilize traditional bank financing has been declining, while the proportion that uses less conventional services (e.g. home equity loans, credit cards) has grown (see Mencken & Tolbert 2016).

One reason cited for the decline is that multi-site bank operations use hard-data lending practices, whereas local and community banks have a long history of relationship lending.

Our research indicates that bank lending to small businesses was a vital economic practice in all Texas counties in the years following the implementation of Riegel-Neal. Small business lending helps urban and rural communities to increase income and earnings, and nonmetropolitan communities to reduce poverty and inequality. If relationship lending in rural economies has become a ‘thing of the past’ following the restructuring of the financial services industries, then it is vitally important that government entities continue to ensure that credit deserts do not materialize in rural America. Post-Riegel-Neal, critics of the Community Reinvestment Act have been calling for its repeal. In response to the ongoing concern that bank consolidation may take deposits from local communities and put them elsewhere, Lawrence J. White (2009), Arthur E. Imperatore Professor of Economics at New York University, testifying before the Financial Services Committee of the U.S. House of Representatives asked “why should a bank have a special obligation to lend to a specific local geographic area?...The local orientation of the CRA is an anachronism...[we should] place more trust in competition” (p. 185). We, on the other hand, are concerned that erosion of the CRA powers could lead to less money being invested in small businesses in urban and rural communities, as greater profits could be found for these banks by investing in large multinational corporations. One way to prevent this is aggressive oversight of the Community Reinvestment Act to make sure that the money continues to be available to small businesses in urban and rural America.

There are weaknesses to this study. First, the Community Capitals framework identifies financial capital as local capital that is loaned by local banks to local entrepreneurs. Publicly available CRA data do not allow us to determine the geography of the banks making the loan, only that the loan was given to a small business in county *x*. It is possible and likely that banks in Dallas are lending money to small businesses 450 miles away in Del Rio, TX. A second weakness of these data is business credit cards. The CRA allows credit cards issued by banks to small businesses to satisfy part of the CRA lending guidelines. The publicly available CRA data do not allow us to determine if the loan in question is a credit card or conventional bank loan. Third, it is natural to assume that financial capital will flow to places with the greatest potential for returns. The CRA is designed to prevent the flow of investment capital strictly to wealthy places. We have added a time lag to each of our models in an attempt to control for this possibility.

This paper is part of an emerging agenda that will examine the importance of financial capital for small businesses and the rural communities in which they are located. This analysis is limited, for good reason, in both time and space. In order to understand how small business financing affects local economic development it was important to examine this relationship in a time context that was not tainted by the worst economic downturn since the Great Depression. Because until the mid to late 1990s banking laws were, to an extent, state specific, it was important to do this analysis in a geographical context which was both large enough to perform a robust analysis while not having to worry about state-specific idiosyncrasies affect the comparability of the results. Future analyses will expand to include all rural counties, and in the time frame (2007–2010) that allows us to examine the impact of the Great Recession of small business lending, and the resultant relationship with economic development.

## References

- Abromowitz, David M. (1993). Economic development and the Community Reinvestment Act. *ABA Journal of Affordable Housing and Community Development Law*, 2, 8–10.
- Agnitsch, Kerry, Flora, J., & Ryan, V. (2006). Bonding and bridging social capital: The interactive effects on community action. *Community Development*, 37(1), 36–51.
- Avery, R. B., Bostic, R. W. & Samolyk, K. A. (1998). The role of personal wealth in small business finance. *Journal of Banking and Finance*, 22(6–8), 1019–1061.
- Bates, T. (2005). Financing disadvantaged firms. In P. Bolton & H. Rosenthal (Eds.), *Credit markets for the poor* (pp. 149–178). New York, NY: Russell Sage Foundation.
- Berger, A. N. & Black, L. K. (2011). Bank size, lending technologies, and small business finance. *Journal of Banking & Finance*, 35(3), 724–735.
- Berger, A. N., Demsetz, R. S., & Strahan, P. E. (1999). The consolidation of the financial services industry: Causes, consequences, and implications for the future. *Journal of Banking & Finance*, 23(2–4) 135–194.
- Berger, A. N., Miller, N. H., Petersen, M. A., Rajan, R. G., & Stein, J. C. (2005). Does function follow organizational form? Evidence from the lending practices of large and small banks. *Journal of Financial Economics*, 76(2), 237–269.
- Berger, A. N., & Udell, G. F (2002). Small business credit availability and relationship lending: The importance of bank organisational structure. *The Economic Journal*, 112(477), F32–F53.
- Berger, A. N., & Udell, G. F. (1996). Universal banking and the future of small business lending. In A. Saunders & I. Walter (Eds.), *Universal banking: Financial system design reconsidered* (pp. 559–627). Burr Ridge, IL: Irwin Professional.
- Berger, A. N., & Udell, G. F. (1995). Relationship lending and lines of credit in small firm finance. *The Journal of Business*, 68(3), 351–382.
- Besser, T. L., & Miller, N. J. (2013a). Community matters: Successful entrepreneurship in remote rural US locations. *The International Journal of Entrepreneurship and Innovation*, 14(1), 15–27.
- Besser, T. L., & Miller, N. J. (2013b). Social capital, local businesses, and amenities in U.S. rural prairie communities. *Journal of Rural Studies*, 32, 186–195.
- Besser, T. L., Miller, N. J., & Malik, R. (2012). Community amenity measurement for the great fly-over zone. *Social Indicators Research*, 106(2), 393–405.
- Blanchard, T. C., Tolbert, C., & Mencken, C. (2012). The health and wealth of US counties: How the small business environment impacts alternative measures of development. *Cambridge Journal of Regions, Economy, and Society*, 5(1), 149–162.

- Blanchard, T., & Matthews, T. L. (2006). The configuration of local economic power and civic participation in the global economy. *Social Forces*, 84(4), 2241–2257.
- Bird, S. R., & Sapp, S. G. (2004). Understanding the gender gap in small business success: Urban and rural comparisons. *Gender and Society*, 18 (1), 5–28.
- Black, S. E., & Strahan, P. E. (2002). Entrepreneurship and bank credit availability. *The Journal of Finance*, 57(6), 2807–2833.
- Bolton, P., & Rosenthal, H. (Eds.). (2005). *Credit markets for the poor*. New York, NY: Russell Sage Foundation.
- Boot, A. W. A. (2011). Banking at the crossroads: How to deal with marketability and complexity? *Review of Development Finance*, 1(3–4), 167–183.
- Brevoort, K. P., & Hannan, T. H. (2004). *Commercial lending and distance: evidence from Community Reinvestment Act data* (FEDS Working Paper No. 2004–24). Board of Governors of the Federal Reserve System.
- Cetorelli, N., & Strahan, P. E. (2006). Finance as a barrier to entry: Bank competition and industry structure in local U.S. markets. *The Journal of Finance*, 61(1), 437–461.
- Coffè, H. (2009). Social capital and community heterogeneity. *Social Indicators Research*, 91(2), 155–170.
- Collender, R. N., & Frizell, J. A. (2002). Small commercial banks and the Federal Home Loan Bank system. *International Regional Science Review*, 25(3), 279–303.
- Collender, R. N., & Shaffer, S. (2009). Banking structure and employment growth. *Applied Economics*, 41(19), 2403–2417.
- Collender, R. N., & Shaffer, S. (2003). Local bank office ownership, deposit control, market structure, and economic growth. *Journal of Banking and Finance*, 27(1), 27–57.
- Davis, S. J., Haltiwanger, J., & Jarmin, R. S. (2008). *Turmoil and growth: Young businesses, economic churning, and productivity gains*. Kansas City, MO: Ewing Marion Kauffman Foundation.
- DeYoung, R., Glennon, D., & Nigro, P. (2008). Borrower-lender distance, credit scoring, and loan performance: Evidence from informational-opaque small business borrowers. *Journal of Financial Intermediation*, 17(1), 113–143.
- Devaney, M., & Weber, B. (1995). Local characteristics, contestability, and the dynamic structure of rural banking: A market study. *The Quarterly Review of Economics and Finance*, 35(3), 271–287.
- Elyasiani, E., & Goldberg, L. G. (2004). Relationship lending: A survey of the literature. *Journal of Economics and Business*, 56(4), 315–330.
- Fairlie, R. W., & Robb, A. M. (2007). Why are black-owned businesses less successful than white-owned businesses: The role of families, inheritance, and business human capital. *Journal of Labor Economics*, 25(2), 289–323.

- Fishbein, A. J. (1992). The Community Reinvestment Act after fifteen years: It works, but strengthened federal enforcement is needed. *Fordham Urban Law Journal*, 20, 293.
- Fitchen, J. M. (1991). *Endangered spaces, enduring places: Change, identity, and survival in Rural America*. Boulder, CO: Westview Press.
- Flora, C. B., & Flora, J. L. (2013). *Rural Communities: Legacy and Change* (4th Edition). Boulder, CO: Westview Press.
- Friedman, S., & Squires, G. D. (2005). Does the Community Reinvestment Act help minorities access credit in their neighborhoods? *Social Problems*, 52(2), 209–231.
- Ginder, R. G., Stone, K. E., & Otto, D. (1985). Impact of the farm financial crisis on agribusiness firms and rural communities. *American Journal of Agricultural Economics*, 67(5) 1184–1190.
- Green, G. P. (1984). Credit and agriculture: Some consequences of the centralization of the banking system. *Rural Sociology*, 49(4), 568–579.
- Green, G. P. (1986). Capital flows in rural areas: An analysis of the impact of banking centralization on lending policies. *Social Science Quarterly*, 67(2), 366–378.
- Green, G. P. (1987). *Finance capital and uneven development*. Boulder, CO: Westview Press.
- Guptill, A., & Welsh, R. (2014). The declining idle of American agriculture: A spatial phenomenon. In C. Bailey, L. Jensen, & E. Ransom (Eds.). *Rural America in a globalizing world: Problems and prospects for the 2010s* (pp. 36–50). Morgantown: West Virginia University Press.
- Hall, K. B., & Porterfield, G. A. (2001). *Community by design: New urbanism for suburbs and small communities*. New York, NY: McGraw-Hill.
- Hughes, J. P., Lang, W. W., Mester, L. J., & Moon, C.-G. (1999). The dollars and sense of bank consolidation. *Journal of Banking and Finance*, 23(2–4), 291–324.
- Irwin M. D., Tolbert, C. M., & Lyson T. A. (1999). There's no place like home: Nonmigration and civic engagement. *Environment and Planning A: Economy and Space*, 31(12), 2223–2238.
- Johnson, S. A., & Sarkar, S. K. (1996). The valuation effects of the 1977 Community Reinvestment Act and its enforcement. *Journal of Banking & Finance*, 20(5), 783–803.
- Kilkenny, M. (2002). Community credit. *International Regional Science Review*, 25(3), 247–251.
- Lee, M. R., & Berthelot, E. R. (2010). Community covariates of malnutrition based mortality among older adults. *Annals of Epidemiology*, 20(5), 371–379.
- Lee, M. R., & Thomas, S. A. (2010). Civic community, population change, and violent crime in rural communities. *Journal of Research in Crime and Delinquency*, 47(1), 118–147.
- Lobao, L., & Meyer, K., (2001). The agricultural transition: Crisis, change and social consequences of twentieth century US farming. *Annual Review of Sociology*, 27, 103–124.

- Loscocco, K. A., & Robinson, J. (1991). Barriers to women's small-business success in the United States. *Gender and Society*, 5(4): 511–532.
- Lyson, T. A. (2004). *Civic agriculture: Reconnecting farm, food, and community*. Medford, MA: Tufts University Press.
- Lyson, T. A., & Tolbert, C. M. (1996). Small manufacturing and nonmetropolitan socioeconomic well-being. *Environment and Planning A: Economy and Space*, 28(10), 1779–1794.
- Lyson, T. A., Torres, R. J., & Welsh, R. (2001). Scale of agricultural production, civic engagement, and community welfare. *Social Forces*, 80(1), 311–327.
- Mencken, F. C., Bader, C., & Polson, E. C. (2006). Integrating civil society and economic growth in Appalachia. *Growth and Change*, 37(1), 107–127.
- Mencken, F. C. & Tolbert II, C. (in Press). Community banks and loans for nonmetropolitan businesses: A multilevel analysis from the 2007 Survey of Business Owners. *Rural Sociology*.
- Mencken, F. C., & Tolbert, C. M. (2005) Federal public investment spending and economic development in Appalachia. *Rural Sociology*, 70(4), 514–539.
- Mencken, F. C., & Tolbert, C. M. (2016). Restructuring of the financial industry and implications for sources of start-up capital for new businesses in nonmetropolitan counties. *Journal of Rural Social Sciences*, 31(1), 71–82.
- Omarova, S. T., & Tahyar, M. E. (2011). That which we call a bank: Revisiting the history of bank holding company regulations. *Review of Banking and Financial Law*, 31, 113–198.
- Portes, A. (1998). Social capital: Its origins and applications in modern society. *Annual Review of Sociology*, 24, 1–24.
- Robb, A. M., & Fairlee, R. W. (2007). Access to financial capital among U.S. businesses: The case of African American firms. *Annals of the American Academy of Political and Social Sciences*, 613(1), 47–72.
- Ross, S. L., & Tootell, G. M. B (2004) Redlining, the Community Reinvestment Act, and private mortgage insurance. *Journal of Urban Economics*, 55(2), 278–297.
- Shaffer, S. & Collender, R. N. (2008). *Rural economic performance and federal credit programs* (CAMA Working Paper 26). Canberra, ACT, Australia: Centre for Applied Macroeconomic Analysis, The Australian National University.
- Sherman, J. (2014). Rural poverty: The Great Recession, rising unemployment, and the under-utilized safety net. In C. Bailey, L. Jensen, & E. Ransom (Eds.) *Rural America in a globalizing world: Problems and Prospects for the 2010s* (Rural Studies Series, Vol. 1, pp. 525–542). Morgantown: West Virginia University Press.
- Slack, Tim. 2014. Work in rural America in the era of globalization. In C. Bailey, L. Jensen, & E. Ransom (Eds.). *Rural America in a globalizing world: Problems and prospects for the 2010s*. (Rural Studies Series, Vol. 1, pp. 573–590). Morgantown, West Virginia University Press.
- Squires, G. D. (Ed.) (2011). *From redlining to reinvestment: Community responses to urban disinvestment*. Philadelphia, PA: Temple University Press.

- Tickamyer, A. R., White, J. A., Tadlock, B. L., & Henderson, D. A. (2007). The spatial politics of public policy: Devolution, development, and welfare reform. In L. M. Lobao, G. Hooks, & A. R. Tickamyer (Eds.) *The sociology of spatial inequality* (pp. 113–140). Albany: State University of New York Press.
- Tolbert, C. M., Irwin, M. D., Lyson, T. A., & Nucci, A. R. (2002). Civic community in small-town America: How civic welfare is influenced by local capitalism and civic engagement. *Rural Sociology*, 67(1), 90–113.
- Tolbert, C. M., Lyson, T. A., & Irwin, M. D. (1998). Local capitalism, civic engagement, and socioeconomic well-being. *Social Forces*, 77(2), 401–427.
- Tolbert, C. M., Mencken, F. C., Blanchard, T. C., & Li, J. (2016). American civic community over space and time. In F. Howell, J. Porter, & S. Matthews (Eds.) *Recapturing space: New middle range theory in spatial demography* (Spatial Demography Book Series, Vol. 1., pp. 235–252). Cham, Switzerland: Springer.
- Tolbert, C. M., Mencken, F. C., Riggs, T. L., & Li, J. (2014). Restructuring of the financial industry: The disappearance of locally owned traditional financial services in rural America. *Rural Sociology*, 79(3), 355–379.
- Vias, A. C. (2004). Bigger stores, more stores, or no stores: Paths of retail restructuring in rural America. *Journal of Rural Studies*, 20(3), 303–318.
- Wheelock, D. C., & Wilson, P. W. (2000). Why do banks disappear? The determinants of U.S. bank failures and acquisitions. *The Review of Economic and Statistics*, 82(1), 127–138.