Economic Consequences of Structural Changes in the Financial Industry in North West Ohio

June 2003

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Table of Contents

Executive Summary

- Major changes in Federal Law have resulted in a reduced number of banks throughout the country and in Ohio. The liberalization of geographic restrictions raises important issues about market power, availability of funds, and price in local and regional markets.
- Market shares of large institutions in the Toledo MSA are up since 1994. With one exception, all are depository institutions headquartered outside the area but not outside the State of Ohio.
- Toledo-based financial institutions are few and small, indicating that the Toledo area is in a peripheral position in this industry, not only nationally but also within Ohio. This has increased during the last ten years as the area became more reliant on financing from financial institutions with headquarters outside the area.
- “Transaction-based” lending dominates as funds move toward highest potential returns. Community banks, practicing relationship-based lending, have declined in the more intensely competitive banking environment.
- While the loss of locally-owned banks may have adverse consequences for local economies, recent studies of liberalization in U.S. banking suggest mixed results: a greater share of the local market by out-of-market banks may actually yield more positive than negative impacts in some cases.
- Changes in federally mandated reporting reduced the amount of information banks provide about their activities in local markets. The current consolidated balance sheets lowered the cost of reporting for banks, but eliminated a significant source of regional banking information, especially with respect to lending activities.
- Ratings for compliance by banks with the Community Reinvestment Act show that out-of-market banks are meeting the credit needs of the Toledo area in terms of making capital available and meeting community investment needs.

Introduction

The financial environment has always been fluid, and it is now evolving rapidly. *De jure* removal of geographic limits followed from the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. Since June 1, 1997, bank holding companies (BHCs) have been able to unify interstate banks into branch networks. The Gramm-Leach-Bliley Financial Services Modernization Act of 1999 repealed provisions of the Glass-Steagall Act of 1933 that separated commercial and investment banking. Federal legislation, along with the wave of mergers and consolidations, changed the nature of market conditions in the financial industry. The ongoing and rapid evolution in the financial industry has national and regional economic implications.

The Research Questions

While there are important national efficiency considerations in a globalized financial system, there are also issues centering on local industrial structure, concentration, and differences between core and peripheral financial areas. Regional scientists identified money and credit as significant determinants of growth in regions, but specifying and measuring the processes remain as tough challenges. Nevertheless, financial institutions act as key intermediaries through which funds flow into and out of local markets. The supply of funds is an important, but multi-dimensional phenomenon from a regional perspective that is influenced by the behavior of financial intermediaries that lend inside and outside local areas. The elusiveness of financial processes contributes to difficulties in measuring impacts in local markets.

This research focused on structural change in depository institutions in the Toledo MSA. Evolution in the local banking structure was emphasized, especially trends in concentration since 1994. Characteristics of core and peripheral financial areas were also examined, and the Toledo market was compared to selected metropolitan areas in Ohio. Section I of this paper briefly summarizes important changes in U.S banking laws during the last decade. Section II examines the evolution of the financial structure in the Toledo MSA. Section III highlights key characteristics of core and peripheral financial areas. Section IV compares the Toledo MSA to the Akron and Dayton metropolitan areas and to the state's large financial-core area in Cleveland. The Implications of the Findings and possible economic impacts are described next, and finally the conclusions of this analysis are identified.

Major Findings

I. Important Banking Laws

Banking is a regulated business activity; U.S. laws influence behavior of depository institutions and shape the structure in the industry with respect to competition and geographic scope. Two recent laws contributed to major changes in the industry.

The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 basically phased out geographic restrictions imposed by the McFadden Act of 1927. This law allowed adequately capitalized and managed bank holding companies (BHCs) to acquire banks in any state. After June 1, 1997, it permitted interstate mergers between adequately capitalized and managed banks. Those mergers are subject to concentration limits, state laws, and evaluations under provisions of the Community Reinvestment Act (CRA) of 1977. Two sections of the Riegle-Neal Act directly affect changes in the industry nationwide and in local markets.

Section 102 -- Interstate Bank Mergers

(B) Statewide concentration limits. The responsible agency may not approve an application for an interstate merger transaction if . . .

(ii) the resulting bank, upon consummation of the transaction, would control 30 percent or more of the total amount of deposits of insured depository institutions in any such state.

Section 109 -- Prohibition against Deposit Production Offices

(A) Regulations. The appropriate Federal banking agency shall prescribe uniform regulation effective June 1, 1997, which prohibits any out-of-State bank from using any authority to engage in interstate branching pursuant to this title, or any amendment made by this title to any other provision of law primarily for the purpose of deposit production.

(B) Guidelines for Meeting Credit Needs. Regulations issued under subsection (a) shall include guidelines to ensure that interstate branches operated by an out-of-State bank in a host State are reasonably helping to meet credit needs of the communities which the branches serve.

(C) Limitations on Out-of-State Loans.

(1) Limitation. Regulation issued under subsection (a) shall require that, beginning no earlier than 1 year after establishment or acquisition of an interstate branch or branches in a host State by an out-of-State bank, if the appropriate Federal banking agency for the out-of-State bank determines that the bank's level of lending in the host State relative to the deposits from the host State (reasonably determinable from available information including the agency's sampling of the bank's loan files during an examination or such data as is otherwise available) is less than half the average of total loans in the host State relative to total deposits from the host State (as determinable from relevant sources) for all banks the home State of which is such State -

(a) The appropriate Federal banking agency for the out-of-state bank shall review the loan portfolio of the bank and determine whether the bank is reasonably helping to meet the credit needs of the communities served by the bank in the host State; and

(b) If the agency determines that the out-of-State bank is not reasonably helping to meet those needs

(i) The agency may order that an interstate branch or branches of such bank in the host state be closed unless the bank provides reasonable assurances . .

(ii) The out-of-State bank may not open a new interstate branch in the host State unless the bank provides reasonable assurances . . .

The Riegle-Neal Act was designed to enhance efficiency in banking. It allowed banks to move across state lines, consolidate functions, and lower costs by taking advantage of economies of scale. For local areas there is some evidence that weaker banks lost ground to larger, more efficient banks in the years following passage of this law (Jayaratne and Strahan 1997). In short, industrial changes should have resulted in lower costs and higher economic growth in local areas in general. These results need not be uniform across local areas, however.

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The Gramm-Leach-Bliley Financial Services Modernization Act of 1999 repealed the Glass Steagall Act of 1933, which separated commercial banking from investment banking, and allowed affiliations between banks and insurance underwriters. It also prohibits state actions that have the effect of preventing bank-affiliated firms from selling insurance on an equal basis with other insurance agents. New financial holding companies were authorized to underwrite and sell insurance and securities, engage in commercial and merchant banking, and to invest in and develop real estate and other complimentary activities. Banks with national charters were also permitted to underwrite municipal bonds. Gramm-Leach-Bliley also amended the Community Reinvestment Act of 1977 by specifying that financial holding companies cannot be formed before their insured depository institutions receive and maintain a satisfactory CRA rating. The result is greater movement toward homogenization in the financial services industry.

II. The Evolving Financial Structure In the Toledo MSA

The national landscape of banking changed rapidly during the 1990s, with a wave of “megamergers” the most notably observed phenomenon. Based on total assets nationwide banking giants include: 1. Bank of America, National Association (NA), the result of a 1998 merger between BankAmerica Corporation in San Francisco and Nations Bank Corporation in Charlotte, NC; 2. Citibank NA, the commercial banking unit of Citigroup, Inc., the largest bank holding company (BHC) in the nation. Bank of America’s geographic reach is extensive, with 3,800 branches located in 27 states. It has an asset base of more than $580 billion, which is about 1.5 times the asset base of Citibank. As a unit of the largest BHC, Citigroup, Inc., Citibank has extensive reach as well. Citigroup, Inc. resulted from the merger of Citigroup in New York City and Travelers Group in Connecticut. Citigroup is the largest financial services organization in the world, with operations in over 100 countries. Such large BHCs are “financial supermarkets” offering customers services ranging from traditional retail banking to brokerage services to insurance. These very large institutions are sometimes referred to as Large Complex Banking Organizations (LCBOs).

When banks throughout the country are ranked by size of the asset base, only one Ohio bank, Key Bank NA, with headquarters in Cleveland, is in the top 20; its rank is 12. For the top twenty BHCs, however, three have headquarters in Ohio: National City Corporation (13) and Keycorp (14) in Cleveland and Fifth Third Bancorp (19) in Cincinnati. These three large financial institutions have significant presence in the Toledo MSA market.

The wave of mergers in the 1980s and 1990s resulted in decreases in the number of banks and increases in branches both nationwide and in Ohio. This trend also contributed to a larger share of deposits by the largest banks. DeYoung (1999) shows

that during the 1980s and 1990s the share of deposits in the ten largest banks nearly doubled from about 19% to 37%. Nevertheless, he demonstrated that for the entire country concentration did not increase in local markets (MSAs) because about two-thirds of large mergers were the market-extension type, which is a combination of banks operating in different regions. Market-extension mergers change the ownership of acquired banks without reducing the number of banks in a local market.
In the last two decades, the number of banks decreased nationwide by 44%. In 2001, 8,062 commercial banks existed in the U.S.; 202, or 2.5%, were in Ohio, which is nearly the same share that existed in the state two decades earlier.

Figure 1 shows the drop in commercial banks and the increase in branches in Ohio. Since 1980, the number of commercial banks decreased 47% while the number of branches rose 39%. By 2001, Ohio had 202 institutions classified as commercial banks; 156 had branches and the remaining were unit banks. At the end of 2001, 3,100 branches of commercial banks served the state.

The bank-merger wave, which resulted in fewer banks and a larger share of deposits for large depository institutions, improved efficiency in the industry by allowing banks to capture economies of scale in the delivery of financial services. Figure 2 shows the relatively large number of mergers for FDIC-Insured commercial banks in the state in the early-1980s and late-1990s. Market-extension mergers improved efficiency, lowered cost, and enhanced investment of bank assets. DeYoung (2000) points out that while large banks hold a more prominent position nationwide compared to twenty years ago, concentration in local banking markets has not increased substantially. Nevertheless, the structural and competitive evolution in still underway, and local markets can and do vary from the national pattern.

The intense process of consolidation and the decline in the number of commercial banks nationwide from 12,329 in 1990 to 8,062 in 2001 raise concerns about market power and dominance by large financial institutions that may inflict higher prices and welfare costs in local and regional markets. The U.S. Department of Justice, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and the Federal Reserve System take charge in enforcing U.S. antitrust laws in the banking industry. These regulatory agencies are sensitive to dominant bank situations in which a large bank controls the market and smaller, competitive-fringe banks follow.

Application for merger is approved if the merger does not violate the 1800/200 rule used by the U.S. Department of Justice. This rule applies the Herfindahl-Hirschman Index (HHI) as a measure of concentration to assess bank-merger situations. The HHI formula is specified in (1).

$$(1) \qquad HHI_k = \Sigma MSD_i^2$$

where, MSD_i = market share of deposits for bank i;
k = market area.

Figure 1

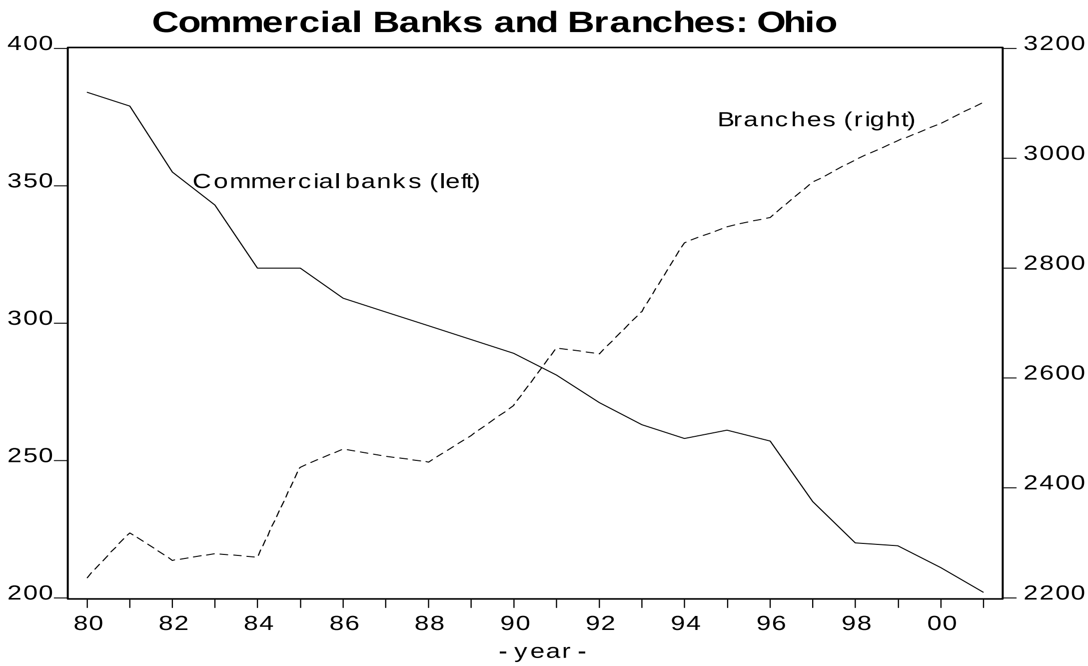
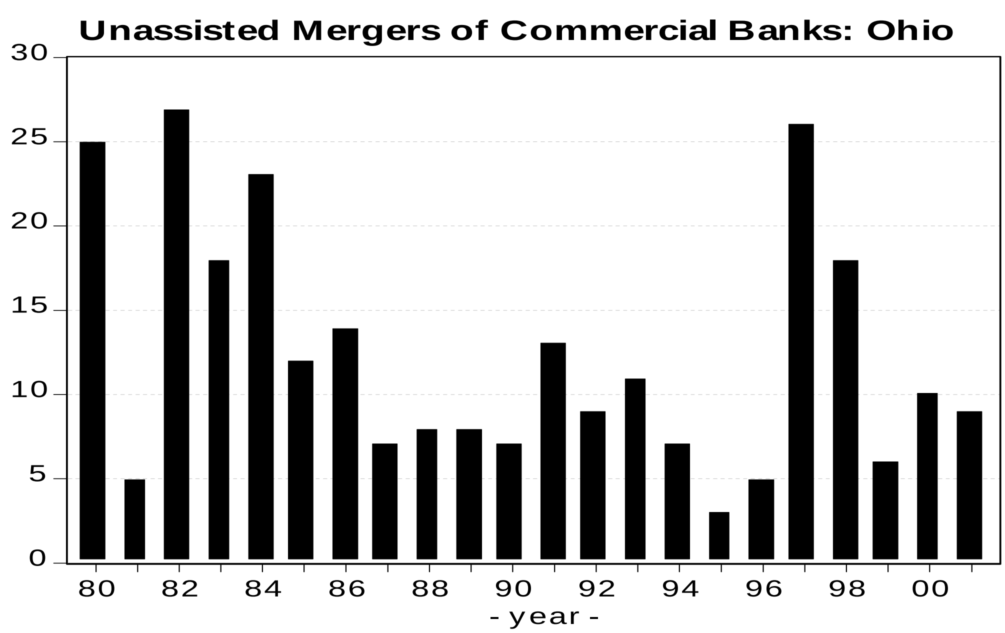


Figure 2



Source: FDIC, Historical Statistics on Banking.

The HHI accounts for the distribution of market share and the number of banks in the local market. Its high-end extreme – a monopoly bank controlling 100% of the local market – is 10,000; it moves down as the number of banks increases and market shares decline. In short, if a post-merger HHI is below 1800 and the increase in HHI pre- to post-merger is less than 200, then regulators conclude that the merger does not violate the working 1800/200 rule and that no significant anti-competitive impacts exist. HHI can also be used to compare concentration in local market areas over time.

Table 1 shows that the HHI for the Toledo MSA drifted upward in the period following the passage of the Interstate Banking and Branching Efficiency Act (Riegle-Neal) in 1994. The increase of 422 exceeds the 200 rule applied as a screening guideline for assessing competitive effects of acquisitions and mergers in a local market. U.S. Justice Department guidelines also suggest that an HHI between 1000 and 1800 reflects moderate concentration (Litan 1994 and DiSalvo 1997). The Toledo MSA has moved to the middle of that range since 1994. Despite this jump in HHI, its value in the Toledo MSA remained below the average for all metropolitan markets in the nation. That average of roughly 1950 remained relatively stable during the last two decades (DeYoung 1999).

Table 1
Deposits and HHI: Toledo MSA

Year	FDIC-insured Depository Institutions	Total Deposits (millions)	HHI
2001	20	$7,444	1447
1994	22	$6,030	1025

Source: FDIC/OTS, Summary of Deposits

An increase in HHI of 422, however, would raise concern by regulators if it were the likely outcome of a proposed merger or acquisition in the local banking industry; it was not. In fact, the jump in HHI resulted from a combination of mergers, acquisitions, and consolidations of depository institutions in the Toledo MSA over many years. Nevertheless, there is more banking concentration in the Toledo MSA, but that, by itself, is not sufficient to conclude that banks have increased market power now accompanied by adverse economic impacts on the local area.

Table 2 shows the market-share characteristics for the Toledo MSA for 1994 and 2001. The top eight depository institutions accounted for 92.1% of deposits in 2001 compared to 84.3% in 1994. The big change occurred with Fifth Third Bank, whose share rose to 27.5% in 2001. That is more than twice the share of deposits for Sky Bank-MidAm Region, which is the number two deposit-taker in the local market. Note the sizable gain in dollar deposits at Fifth Third Bank from $960 million in 1994 to over $2 billion in 2001, an increase of 113% in the metropolitan market. Fifth Third Bank's increased share of deposits is reflected in the fact that about 11.5% of that bank's total deposits originate in the Toledo MSA.

Table 2
Market Shares at the Top 8 FDIC-insured Depository Institutions: Toledo MSA

Institution	Number of Offices	- 2001 - Deposits (millions)	Market Share
Fifth Third Bank	34	$2,044	27.5%
Sky Bank-MidAm Region	34	$ 991	13.3%
Key Bank National Association	25	$ 972	13.1%
Charter One Bank, F.S.B.	20	$ 893	12.0%
Huntington National Bank	24	$ 685	9.2%
National City Bank	26	$ 632	8.5%
Farmers & Merchants State Bank	6	$ 350	4.7%
Standard Federal Bank	9	$ 285	3.8%
Sum	178	$6,852	92.1%

Institution	Number of Offices	- 1994 - Deposits (millions)	Market Share
Fifth Third Bank of NW Ohio	36	$960	15.9%
Charter One Bank, F.S.B.	19	$817	13.5%
Society National Bank	36	$793	13.2%
National City Bank, Northwest	26	$755	12.5%
Huntington National Bank	24	$583	9.7%
Mid American National Bank	29	$516	8.6%
Standard Federal Bank	9	$352	5.8%
Capital Bank National Association	1	$306	5.1%
Sum	180	$5,082	84.3%

Source: FDIC/OTS, Summary of Deposits, June 30, 1994 and 2001.

Fifth Third Bank is the banking unit of Fifth Third Bancorp, the bank holding company (BHC) with headquarters in Cincinnati. Fifth Third Bancorp reported domestic deposits over $44 billion and assets over $72 billion for 2001. This BHC represents a significant outside presence in the Toledo MSA. Despite its high market share, however, Fifth Third Bank faces strong competition from affiliates of other BHCs in the Toledo MSA.

Of the top six banks shown in Table 2, only Sky Bank-MidAm Region is a unit of a BHC with headquarters in the Toledo MSA. Sky Financial Group, Inc. has headquarters in Bowling Green, Ohio. Although it has the second-largest share of deposits in the local market, Sky Financial Group’s assets, which total about $8 billion, are only 11% of the asset base of Fifth Third Bancorp.

Table 2 reveals that the capital market in the Toledo MSA is dominated now by depository institutions with headquarters outside the area. Of the top six depository institutions listed in Table 2, only Sky Bank-MidAm Region has its headquarters in the local area and it is the smallest of the group in terms of both assets and deposits. The top six institutions account for about 84% of total deposits in the local market area.

Except for Sky Bank, all headquarters are outside the area: Keybank NA, Charter One Bank, F.S.B., and National City Bank in Cleveland; Fifth Third Bank in Cincinnati; Huntington National Bank in Columbus.

The Toledo MSA market has a more concentrated banking structure now. Banking units from four large BHCs from outside the area now account for over 70 percent of deposits within the local market. Only one large outside bank, Fifth Third Bank of Cincinnati, increased its presence in the local market during the 1990s, however. In short, there is significant out-of-market presence by large banks in the Toledo MSA, but they are not affiliates of out-of-state BHCs.

III. Core and Peripheral Financial Areas

Core and peripheral financial areas have different characteristics. Core financial areas can be defined as those where financial institutions and markets are concentrated. New York City, for example, is an obvious core financial center; with respect to financial markets, it is the financial center of the nation. Peripheral financial areas, on the other hand, are for the most part largely dependent on branches of core-based institutions for financial services (Porteous 1995). Within states, core and peripheral areas may not be obvious. Several measures highlight features of financial areas and help to identify the characteristics of the Toledo MSA. There are, however, no absolute levels indicating what constitutes a financial-core area.

For comparative purposes the Charlotte-Gastonia-Rockhill MSA at the border of North and South Carolina is used as a benchmark. In 2000, that metropolitan area had a population of 1,508,050, which was up 29% from 1990. The Toledo MSA is about two-fifths that size and its population increased just 0.6% from 1990 to 2000.

A crude measure is employment composition, the share of total employment accounted for by specific industries. Table 3 shows the employment composition of both MSAs. They are similar in manufacturing, services, and wholesale and retail trade. The Charlotte MSA, however, has much larger share of employment in the finance, insurance and real estate (F.I.R.E.) sector. Its 8.1% share in F.I.R.E. is not far from the 11.9% employment share in the large New York PMSA. Both metropolitan areas are financial-core areas.

Table 3
Employment Composition

Industry	Toledo MSA	Charlotte, NC
Manufacturing	17.5%	14.6%
Services	29.7%	27.4%
Trade	24.0%	23.9%
Finance, insurance and real estate	3.5%	8.1%

Source: U.S. Department of Labor, Bureau of Labor Statistics, www2.fdic.gov/recon.

Moreover, the Charlotte MSA is also a location for large bank headquarters with significant national status (LCBOs). Bank of America, the largest bank in terms of total assets and First Union National Bank, the fourth largest bank, are located there. The recent merger of First Union Corporation and Wachovia Corporation in December 2001 makes the new parent company, Wachovia Corporation, the fourth largest BHC in the nation with $187 billion in deposits, second in the nation. Like Bank of America, Wachovia has extensive geographic reach: 2,800 full-service financial service offices and nearly 4,700 ATMs located in eleven east-coast states from Connecticut to Florida. Wachovia also lists 600 retail brokerage offices in 49 states.

Bank of America and Wachovia are significant financial “supermarkets” with extensive interstate range. Moreover, they have large shares inside the Charlotte MSA: Bank of America with 53% and First Union National Bank with 28% of deposits. Together those two LCBOs account for 81% of deposits in the local market. The Charlotte MSA is, therefore, bigger and more concentrated in financial services than is the Toledo MSA.

A location quotient, LQ, provides more detailed information because it measures the share of employment in an industrial sector such as finance, insurance and real estate within a local area relative to the national benchmark as specified in (2).

(2) LQ_i = (% of area employment in industry i) / (% of national employment in i)

For any industry, LQ > 1 indicates an above-average concentration of employment in that industry in the local area. Financial core areas would be expected to have LQs greater than one for the F.I.R.E. sector. Where is the Toledo MSA?

Table 4 displays location quotients in the Toledo MSA. The LQ of 1.36 for manufacturing reveals that the Toledo MSA is 36% more concentrated in this industry than the nation as a whole. Note the high LQ for the stone, clay and glass products and transportation equipment industries. Those measures are not surprising. They simply reflect the traditional manufacturing base of the Toledo MSA.

Table 4
Location Quotients, Selected Industries: Toledo MSA

Industry	Location Quotient
Manufacturing	1.36
Fabricated metal products	1.83
Stone, clay and glass products	4.31
Transportation equipment	3.65
Finance, insurance and real estate	0.60
Business Services	0.89
Health Services	1.35

Source: U.S. Department of Labor, Bureau of Labor Statistics www2.fdic.gov/recon.

For the finance, insurance and real estate sector, on the other hand, the Toledo MSA has an LQ of only 0.60. Like the employment composition measures in Table 3, this low LQ reflects the area's relatively low concentration of employment in F.I.R.E. The Toledo MSA is 40% below the national benchmark. In contrast, the Charlotte MSA has an LQ for F.I.R.E. of 1.38, and the nation's financial center in New York posts an LQ of 2.04. Although New York represents the extreme high end for this financial core measurement, its LQ, along with that of the Charlotte MSA, indicate the direction and size of change that the Toledo MSA needs to achieve to attain status as a core area. Employment in F.I.R.E. has not moved in that direction locally in the last ten years.

Headquarters inside an MSA is another measure for assessing characteristics of local financial markets. Table 5 presents the top-8 FDIC-insured institutions for the Toledo and Charlotte MSAs. Bank of America and the merged First Union/Wachovia institution account for nearly 85 percent of total deposits inside the Charlotte market area. The dominance by these large depository institutions also shows up in total assets of the top-8 institutions in the area. The situation in the Toledo MSA is different. The two headquarters located inside the MSA, Sky Bank and Farmers & Merchants State Bank, account for only 18 percent of total deposits of the top-8, FDIC-insured institutions. The bulk of deposits in the Toledo MSA flow to banks with headquarters elsewhere. The three banks from Cleveland: Keybank, Charter One Bank, and National City Bank, absorb about one-third of deposits in the Toledo MSA through seventy-one offices. Moreover, the bank with the largest share of deposits, Fifth Third Bank, has headquarters in Cincinnati; it serves the Toledo MSA through thirty-four offices. With respect to assets, the three banks from Cleveland account for 62 percent of total assets for the top-8 institutions shown in Table 5. In terms of size, the two banks located inside the Toledo MSA account for only one percent of the total assets listed. They are small depository institutions in a market dominated by large institutions from outside the area.

An acceptable definition of a financial core area is a location in which financial markets and institutions are concentrated. Peripheral financial areas are largely dependent on branches of core-area financial institutions (Porteous, 1995). The information presented on employment composition, location quotients, and headquarters indicates clearly that the Toledo MSA is a peripheral financial area from a regional perspective. The largest depository institution with headquarters in the Toledo MSA is Sky Bank-MidAm Region, an affiliate of the BHC, Sky Financial Group, in Bowling Green. Although this BHC has aggressively acquired banks in Pittsburgh and may acquire financial institutions in Cleveland, if the acquisition clears the regulatory process, perhaps by mid-2003, Sky Financial Group is still small in terms of the size of financial institutions with extensive geographic reach. In 2001, its deposits amounted to about 11 percent of the deposits reported by National City Corporation in Cleveland, the largest BHC with affiliates in the Toledo MSA. Moreover, total assets of Sky Financial Group amounted to only 7.6 percent of assets reported by National City Corporation in 2001.

Table 5
Headquarters, Assets, and Shares of Deposits
Top-8 Depository Institutions

- Toledo MSA –

Institution	Headquarters	Total Assets (millions)	Share of Deposits
Fifth Third Bank	Cincinnati	$41,623	27.5%
Sky Bank-MidAm Region	Toledo	$ 2,106	13.3%
Keybank National Association	Cleveland	$72,640	13.1%
Charter One Bank, F.S.B.	Cleveland	$39,533	12.0%
Huntington National Bank	Columbus	$25,137	9.2%
National City Bank	Cleveland	$38,395	8.5%
Farmers & Merchants State Bank	Archbold	$ 690	4.7%
Standard Federal Bank	Troy, MI	$23,533	3.8%
		$243,659	92.1%

- Charlotte, NC MSA –

Institution	Headquarters	Total Assets (millions)	Share of Deposits
Bank of America	Charlotte	$562,166	53.0%
*First Union National Bank	Charlotte	$301,645	28.4%
Branch Banking & Trust Co.	Winston-Salem	$58,156	3.5%
*Wachovia Bank NA	Winston-Salem	$72,117	3.1%
First Charter Bank	Concord, NC	$ 3,464	2.7%
Central Carolina Bank & Trust Co.	Durham	$10,783	2.2%
First Citizens Bank & Trust Co.	Raleigh	$10,766	1.2%
**RBC Centura Bank	Rocky Mount, NC	$14,076	1.1%
		$1,033,123	95.2%

*Merger December 2001.
**Subsidiary of the Royal Bank of Canada Holding Company, headquarters in Montreal.
Source: FDIC/OTS Summary of Deposits.

Sky Financial Group's attempt to acquire Metropolitan Financial Corporation in Cleveland may move it to the $13 billion asset level, which is more than triple its size just four years ago (Brickey 2002). Although that will probably allow Sky Financial Group to maintain its position as the largest BHC in the Toledo MSA, it will not change the MSAs status as a peripheral financial area in a rapidly evolving interstate financial system.

IV. Intra-State Metropolitan Comparisons

Where does the Toledo MSA fit in the financial structure of the state of Ohio? If the Toledo MSA is a peripheral financial area, how does it compare to the key financial-core area of Cleveland and to other metropolitan areas of roughly the same size? Table 6 presents summary statistics for the Akron, Cleveland, Dayton, and Toledo metropolitan areas.

Table 6
Population, Employment, and Depository Institutions
- Metropolitan Areas -

	Akron	**Cleveland**	**Dayton**	**Toledo**
Population (2000)	695,781	2,250,096	950,177	618,111
Change from 1990	5.6%	2.1%	-0.2%	0.6%
Total Employment (2000)				
Full- and part-time	400,638	1,405,450	587,907	393,066
Change from 1990 . . .	18.1%	11.8%	8.1%	14.5%
Finance, Insurance & Real Estate	27,221	124,561	36,149	23,423
Change from 1990 . . .	39.2%	30.7%	23.5%	14.8%
Share of total	6.8%	8.9%	6.1%	6.0%
Number of FDIC-insured depository institutions	28	52	29	20
Number of Offices	221	731	290	209
Branching Density	3148	3078	3276	2957

Note: Branching density = population/number of offices.
Sources: U.S. Department of Commerce, Bureau of Economic Analysis*, Regional Economic Information System 1969-2000*, CA05.1 and CA25, May 2002.
FDIC/OTS, *Summary of Deposits*, June 30, 2001.

The Toledo MSA is considerably smaller than Cleveland, the main financial center in the state. During the 1990s the population of the Toledo MSA rose just 0.6%, well below increases in Akron and Cleveland. The increase in employment in Toledo exceeded gains in Cleveland and Dayton, however; but jobs in the finance, insurance and real estate sector expanded the least in Toledo. The result is that Toledo has the smallest share of employment in the F.I.R.E. sector. Jobs in depository institutions fall into the F.I.R.E. sector, but data are not available because of disclosure limitations. The summary data in Table 6 reveal that the Toledo MSA is not much different from Akron and Dayton in terms of employment concentration in the F.I.R.E. sector.

Table 6 also shows that the number of financial institutions and offices (branches) follow closely with population. As the smallest of the four metropolitan areas, Toledo has fewer FDIC-insured depository institutions and offices. However, the branching density measure reveals that the Toledo MSA is well serviced by financial institutions with density close to that of Cleveland. Keybank, National City Bank, and Fifth Third Bank have a significant presence in each of the four metropolitan areas (see, Table 7). Those three large institutions are affiliates of BHCs that are in the top 25 nationwide; they are major forces in the state's financial sector and in the Toledo MSA.

The Akron, Dayton and Toledo MSAs depend heavily on branches of depository institutions with headquarters in other areas, especially those located in the state's financial core area of Cleveland. Table 7 presents the top-8 financial institutions in each metropolitan area, with the group for Toledo reproduced from Table 2. Large banks dominate throughout the areas, and they have headquarters outside the Toledo MSA. Keybank, the twelfth largest bank in the country, has a significant presence in each area. With respect to deposits it ranks number one in Cleveland, four in Akron, four in Dayton, and three in Toledo.

Table 7
Deposit Shares, Top-8 FDIC-insured Depository Institutions:
Four Metropolitan Areas, 2001

- Akron -

Institution	Number of Offices	Deposits (millions)	Market Share
Firstmerit Bank NA	37	$2,561	29.7%
Bank One NA	21	1,080	12.5%
National City Bank	27	1,061	12.3%
Keybank NA	17	569	6.6%
Ohio Savings Bank, F.S.B.	6	492	5.7%
Charter One Bank, F.S.B.	16	486	5.6%
Fifth Third Bank	17	465	5.4%
Huntington National Bank	9	306	3.6%
Sum	150	$7,020	81.4%

- Cleveland -

Institution	Number of Offices	Deposits (millions)	Market Share
Keybank NA	72	$11,860	22.6%
National City Bank	84	10,776	20.6%
Third Federal Savings & Loan Association	25	4,594	8.8%
Key Bank, USA NA	1	3,380	6.5%
Charter One Bank, F.S.B.	56	3,255	6.2%
Firstmerit Bank NA	68	2,515	4.8%
Fifth Third Bank	58	2,136	4.1%
Firstar Bank NA	73	1,896	3.6%
Sum	437	40,412	77.2%

Table 7
Deposit Shares, Top-8 FDIC-insured Depository Institutions:
Four Metropolitan Areas, 2001 (continued)

- Dayton -

Institution	Number of Offices	Deposits (millions)	Market Share
Fifth Third Bank	57	$2,427	24.0%
Bank One NA	33	1,615	16.0%
National City Bank	42	1,381	13.6%
Keybank NA	26	842	8.3%
Firstar Bank NA	29	632	6.2%
Provident Bank	10	557	5.5%
Security National Bank & Trust Company	14	475	4.7%
Liberty Savings Bank, F.S.B.	13	323	3.2%
Sum	224	$8,252	81.5%

- Toledo -

Institution	Number of Offices	Deposits (millions)	Market Share
Fifth Third Bank	34	$2,044	27.5%
Sky Bank-MidAm Region	34	991	13.3%
Key Bank National Assoc.	25	972	13.1%
Charter One Bank, F.S.B.	20	893	12.0%
Huntington National Bank	24	685	9.2%
National City Bank	26	632	8.5%
Farmers & Merchants St. Bank	6	350	4.7%
Standard Federal Bank	9	285	3.8%
Sum	178	$6,852	92.1%

Note: NA is National Association.
Source: FDIC/OTS, Summary of Deposits, June 30, 2001.

National City Bank also has large shares of deposits: Cleveland (2), Akron (3), Dayton (3) and Toledo (6). Fifth Third Bank, with headquarters in Cincinnati, has a strong presence in western Ohio, ranking first in shares of deposits in Dayton and Toledo. The information from Table 7 supports the conclusion that the Akron, Dayton, and Toledo MSAs are peripheral financial areas within the state.

Fifth Third Bank, Keybank, and National City Bank account for 49.1 percent of deposits in the Toledo MSA, the largest share among the four metropolitan areas listed. That is also a larger share than in Cleveland (47.3 percent), where Keybank and National City Bank have headquarters. Moreover, the top-8 institutions account for more than 90 percent of deposits in the Toledo MSA, which is, by far, the biggest share by the top-8 among the four areas.

Table 8
Concentration Comparisons: Metropolitan Area

- HHI -

	Akron	Cleveland	Dayton	Toledo
2001	1374	1192	1216	1447
1994	1342	1023	1036	1025

- Share of Deposits, Top-3 Depository Institutions -

	Akron	Cleveland	Dayton	Toledo
2001	54.5%	52.0%	53.6%	53.9%
1994	55.6%	48.4%	48.8%	42.6%

Concentration in banking increased in each of the metropolitan areas after the passage of the Riegle-Neal Act of 1994. Table 8 shows that the Hirschman-Herfindahl Index (HHI) rose in all four areas from 1994 to 2001. The biggest increase in HHI occurred in Toledo, which points to movement toward greater concentration in deposits compared to the other three areas. In 2001, the Toledo MSA has the highest HHI, Cleveland the lowest.

The share of deposits in the top-3 institutions confirms the implication about movement toward concentration in Toledo. In 2001, the top-3 institutions accounted for more than one-half of total deposits in each area. The biggest increase, however, occurred in the Toledo MSA. Overall, the peripheral financial areas of Akron, Dayton, and Toledo have a greater concentration in deposits than does the financial-core area of Cleveland. For the Toledo MSA, this shift represents a significant structural change.

Location quotients also reveal characteristics of the financial sector for the four metropolitan areas. Table 9 gives the LQs for selected industries. Not surprisingly, there is little difference among the areas in terms of manufacturing. In short, the four Ohio metropolitan areas employ about 40 percent more in manufacturing industries than the nation as a whole. The LQ of 3.65 for the transportation equipment industry in Toledo reflects the heavy concentration on production of automobiles and parts in this area.

The LQs for the finance, insurance and real estate sector highlight again the distinction between a core and peripheral financial areas. The LQ of 1.23 for Cleveland indicates that the area employs about 23 percent more in the F.I.R.E. sector than the nation. That compares favorably with the LQ of 1.38 for Charlotte, NC. Both metropolitan areas are core financial areas. Akron, Dayton, and Toledo, on the other hand, have LQs less than one, with Toledo the lowest of the group at 0.60. Toledo's LQ shows that the area is only about half as reliant as Cleveland on the F.I.R.E. sector for employment. Compared Akron and Dayton, two other peripheral financial areas in the state, Toledo is less reliant on the financial sector for jobs.

Table 9
Location Quotients: Selected Industries, 2002.

- Metropolitan Area -

	Akron	**Cleveland**	**Dayton**	**Toledo**
Manufacturing	1.43	1.37	1.41	1.36
Fabricated metal products	2.33	2.92	1.29	1.83
Industrial machinery & equip.	2.05	1.85	3.32	0.99
Transportation equipment	0.79	1.44	3.14	3.65
Finance, insurance and real estate	0.81	1.23	0.66	0.60
Business services	0.79	0.89	1.12	0.89
Health services	1.14	1.26	1.28	1.35

Source: U.S. Department of Labor, Bureau of Labor Statistics, www2.fdic.gov/recon .

Implications of the Findings

Consequences of the evolving financial structure on local economies are not clear; the theoretical and empirical research point to a range of possible impacts. Key factors cited include the flow of funds, local financial concentration, in-market vs. out-of-market bank ownership, and possible funds drainage. Issues of concern center on the post-Riegle-Neal Act period of liberalization -- a period that includes waves of mergers, acquisitions, and consolidations of depository institutions. The previous sections showed that all of these factors are present in the Toledo MSA.

With fewer banks in the local area, and with larger banks accounting for higher shares of deposits, concerns arise about differences in the local market between “transaction-based” lending, dominant at large banks, and “relationship” lending, which is widespread at smaller banks. In processing loan applications, a transaction-based procedure relies on financial statements of borrowers that are easily obtained; larger banks with out-of-market headquarters find this approach more convenient and more efficient. Smaller banks with local headquarters may have better access to local information and may have a commitment to development in the local economy. Their relationship lending practices are more likely to be based on knowledge of local business conditions that seem imprecise and not measurable in a traditional economic sense. The more intense competitive environment following the Riegle-Neal Act of 1994 suggests that smaller banks’ relationship lending must be profitable, however. In short, all the factors identified in the earlier sections influence the flow of funds in a local economy, and that is a contributor to economic growth in the area.

The local flow of funds, captured in (3), was originally specified by Dow (1987).

(3) $LF_i = \mu(r, i_o, s_i)\beta(l_i, p_i, C_i)$

where, r = reserve requirement;
i_o = propensity of depository institutions to invest outside area i;
s_i = propensity of the public to spend in i;
l_i = liabilities of the national monetary authority;
p_i = exogenous component of the balance of payments for i;
C_i = demand for credit in i.

In essence, LF is multi-factor specification of a local supply of money, with μ and β as functions representing the multiplier and monetary base in a local area. Money within a local market is endogenously determined by local behavioral factors to some degree. The two factors of importance for examining impacts of local financial institutions are i_o and C_i, both of which depend on decisions made in those institutions.

A local increase in demand for credit, C_i, can be met by local financial institutions borrowing outside the area and then lending locally. This, of course, increases funds to the area. If local financial institutions increase investment outside the local area, i_o increases, then funds to the local area decline. A change in i_o depends on behavior in financial institutions. Expectations of higher returns outside an area, for example, lead to an increase i_o and a drop in LF inside the area. Post-1994 liberalization followed by a more competitive situation expands the search for higher rates of return

Total deposits (TD), therefore, can be used to satisfy local credit demand (C_i) or for investment outside a local market (I_o). A private, profit-seeking financial institution, with multi-area, multi-state affiliates will search for the highest returns. In an unregulated environment, funds can be moved out of local markets to areas with higher returns; this is a problem of funds drainage from local markets. In peripheral financial areas, the propensity to invest outside the area may be higher because the commitment to the local economy may be lower than in the core area where headquarters are located and key decisions are made. Funds drainage may be optimal for financial institutions with large inter-area branch networks, but it is certainly not optimal for a local area with below average rates of return. This, of course, was not a problem in the geographically restricted period before liberalization.

Measurement of key factors is far from straightforward in a regional setting. The theoretical concept of propensity to invest outside the area (i_o) cannot be measured directly. It represents expectations and private financial business decisions. The nature of the process underlying such decisions is nebulous at best in the rapidly evolving financial industry. Nevertheless, a local loan-to-deposit ratio may capture such effects, and it is specified in (4).

(4) $LN_i / TD_i = LN_i / (C_i + I_o) = C_i / (C_i + I_o)$

A lower loan-to-deposit ratio in area i would represent a crude proxy for relatively lower confidence in the local market and more investment of local funds outside the area (I_o). Unfortunately, consolidation of financial institutions and their balance sheets after 1997, according to provisions of the Riegle-Neal Act of 1994, removed the geographic designation from loan data reported on the asset side of balance sheets in the Report of Conditions (Call Reports) filed by depository institutions. Consolidated reports come from headquarters now and they include assets and liabilities for the entire institution. Therefore, a bank's branches in Akron, Cleveland, Dayton, and Toledo are not required to report publicly loan information by specific geographic areas. A regional paradox exists: less financial information is available for local market areas in the information age (Kozlowski 1999). This is a direct consequence of the Riegle-Neal Interstate Branching and Banking Efficiency Act of 1994, which removed geographic restrictions in the banking industry. The economic results include more competition and lower costs in the industry nationwide, but less information about specific market areas.

Although it is difficult to measure impacts of the evolving financial structure directly, recent research by Collender and Shaffer (2001) captures possible effects of concentration in metropolitan areas throughout the country. Their long-run growth analysis is summarized in (5), which includes factors cited above for the Toledo MSA.

$$(5)\quad gY_{0,T} = \alpha + \beta_1 NIB_0 + \beta_2 NXB_0 + \beta_3 XTB_0 + \beta_4 DIB_{T,0} + \beta_5 DXB_{T,0} + \beta_6 DDEP_{T,0} + \gamma_1 DCP_0 + \gamma_2 LEDU_0 + \gamma_3 LPOP_0 + \gamma_4 LRPCI_0 + \gamma_5 HHI_0 + e$$

where, $gY_{0,T}$ = geometric mean of annual growth rates of real per capital income from the initial time 0 to the end of the period T;

NIB_0 = number of offices of banks headquartered in the market at the start of the sample period;

NXB_0 = number of local branches of banks headquartered outside the market at the start of the sample period;

XTB_0 = ratio of the out-of-market to in-market owned bank offices at the start of the sample period;

$DIB_{T,0}$ = ratio of the number of in-market owned bank offices at 0 to the number at T;

$DXB_{T,0}$ = ratio of the number of out-of-market owned bank offices at 0 to the number at T;

$DDEP_{T,0}$ = change in share of local deposits accounted for by out-of-market owned banks from time 0 to T;

$LEDU_0$ = logarithm of the percentage of total adult population having at least 4 years of college (a proxy for the quality of human capital);

$LPOP_0$ = logarithm of the population in the local market;

$LRPCPI_0$ = logarithm of real per capita personal income in the local market;

HHI_0 = Herfindahl-Hirschman Index of deposits in the local market.

Regression estimates for 269 MSAs in the United States include structural characteristics for areas' financial sectors identified in the previous sections; the statistical estimates are adjusted for size of the MSAs. Their results reject the hypothesis that long-run growth of real per capita income is independent of local banking structure, which is consistent with the theoretical consensus in regional finance. There is also greater significance in the 1984-1996 period than in the earlier 1973-1984 period.

Other findings for MSAs include:

(1) The change in the ratio of bank offices owned-in-market is not significant for 1984-1996.

(2) The change in the ratio of bank offices owned out-of-market has a negative and statistically significant effect for 1984-1996.

(3) The share of deposits controlled by out-of-market owned banks has a statistically significant negative effect for 1984-1996.

(4) The combined effect of bank offices owned in-market vs. out-of-market shows a decrease in growth of real per capita income associated with out-of-market owned bank offices in MSAs. The quantitative impact is small, however.

(5) Bank deposit market concentration, captured by HHI, shows a significantly positive association with growth of real per capita income for 1984-1996.

Collender and Shaffer (2001) conclude that liberalization in the banking industry, which resulted in out-of-market bank mergers and/or acquisitions, does not necessarily impede economic growth in MSAs. Out-of-market owned banks do seem to be more negatively associated with growth in MSA compared to non-MSA markets, however.

For the Toledo MSA, findings 1 to 5 suggest that the increased concentration measured in 2001 compared to 1994 (Table 1) does not indicate, per se, adverse economic consequences for the local market. A greater share of out-of-market bank offices does increase the potential for negative effects, however; such consequences would be more significant if the propensity to invest outside the local area (i_0) rose. There is no statistical evidence suggesting that this is the case for the Toledo MSA. Nevertheless, the probability of such negative effects is now greater for all peripheral financial areas.

Another method of assessing economic consequences on local markets is to check compliance with the Community Reinvestment Act (CRA) of 1977. The U.S. Congress enacted the (CRA) to encourage federally insured banks and thrift institutions to address the credit needs of their communities, including low- and moderate-income residents. The CRA requires individual FDIC-regulated banks and savings associations to undergo CRA compliance examinations and performance evaluations. Depository institutions, which undergo performance evaluations, receive ratings that are public information

Sections 2901 and 2903 highlight important provisions of the CRA.

Sec. 2901 **-- Congressional findings and statement of purpose.**

The Congress finds that –

(1) regulated financial institutions are required by law to demonstrate that their deposit facilities serve the convenience and needs of the communities in which they are chartered to do business;

(2) the convenience and needs of communities include the need for credit services as well as deposit services; and

(3) regulated financial institutions have continuing and affirmative obligation to help meet the credit needs of the local communities in which they are chartered.

b) It is the purpose of this chapter to require each appropriate Federal financial supervisory agency to use its authority when examining financial institutions, to encourage such institutions to help meet the credit needs of the local communities in which they are chartered consistent with the safe and sound operation of such institutions.

Sec. 2903 -- **Financial institutions; evaluation**

In general. In connection with its examination of a financial institution, the appropriate Federal financial supervisory agency shall –

(1) Assess the institution's record of meeting the credit needs of its entire community, including low- and moderate-income neighborhoods, consistent with the safe and sound operation of such institution; and

(2) Take such record into account in its evaluation of an application for a deposit facility by such institution.

(b) Majority-owned institutions. In assessing and taking into account, under subsection (a) of this section, the record of a nonminority-owned and nonwomen-owned financial institution, the appropriate Federal financial supervisory agency may consider as a factor capital investment, loan participation, and other ventures undertaken by the institution in cooperation with minority- and women-owned financial institutions and low-income credit unions provided that these activities help meet the credit needs of local communities in which such institutions and credit unions are chartered.

The Gramm-Leach-Bliley Financial Services Modernization Act of 1999 also requires public disclosure of bank-community CRA-related agreements. This law does grant some regulatory relief to small depository institutions by reducing the frequency of their CRA examinations if a bank received outstanding or satisfactory ratings in previous examinations.

There are three federal laws that require depository institutions to serve the communities in which they take deposits. The Community Reinvestment Act of 1977 requires that depository institutions serve the needs of communities in which they operate. Section 109 of the Riegle-Neal Act of 1994 prohibits operation of deposit production offices by out-of-state banks; this is a direct reference to the issue of funds drainage from communities. The Gramm-Leach-Bliley Act of 1999 requires public disclosure. It is also important to note that depository institutions are regulated private businesses and that, while the Riegle-Neal Act and Gramm-Leach-Bliley Act represent further moves toward de-regulation in the industry, these laws do recognize and strengthen the principles of serving communities contained in the original Community Reinvestment Act of 1977.

The CRA requires that appropriate supervisory agencies of depository institutions assess institutions' performance for CRA compliance. The Federal Financial Institutions Examination Council points out that a financial institution's performance in helping to meet credit needs of its community is evaluated through information about the institution – its capacity, constraints and business strategies, its community - demographic and economic data, lending, investment, and service opportunities, and its competitors and peers (FFIEC 2002). Four ratings are used and reported after examinations: outstanding, satisfactory, needs to improve, and substantial noncompliance. The FFIEC also indicates that for an interstate bank, federal bank supervisory agencies are required by law to evaluate an institution's CRA performance in each state and metropolitan statistical area (MSA) in which it has a branch in addition to providing an overall rating for the bank's performance. The bank's performances in these areas are appropriately weighted in determining an institution’s final CRA rating.

Table 10 contains the ratings for the major depository institutions in the Toledo MSA that have headquarters elsewhere. The six institutions accounted for 74 percent of total deposits in the local market in 2001. The examinations cover the period from 1990 to 2000. Note that there are no unsatisfactory CRA ratings for this group. Three banks: Keybank, National City Bank, and Standard Federal Bank, received outstanding ratings at each examination. In short, out-of-market owned banks are meeting the needs of the community according to provisions contained in the CRA.

Conclusion

In sum, the period of liberalization ushered in with the passage of the Riegle-Neal Act of 1994 has changed the landscape for financial institutions in the Toledo MSA. The area is now more concentrated and dominated by large institutions with headquarters elsewhere. As a peripheral financial area, industrial development is unlikely to occur in the F.I.R.E. sector. The Toledo MSA does not possess a comparative advantage in providing those services.

Table 10
Community Reinvestment Act Ratings

Institution	Headquarters	Year	Exam Rating
Fifth Third Bank	Cincinnati	2001	Satisfactory
aFifth Third Bank of Northwestern Ohio, NA	Toledo	1998	Satisfactory
		1996	Satisfactory
		1993	Satisfactory
		1991	Satisfactory
Keybank National Association	Cleveland	1999	Outstanding
		1996	Outstanding
bSociety National Bank		1994	Outstanding
		1990	Outstanding
Charter One Bank, F.S.B.	Cleveland	1998	Satisfactory
		1995	Satisfactory
		1993	Satisfactory
		1991	Satisfactory
Huntington National Bank	Columbus	1999	Satisfactory
		1996	Satisfactory
		1994	Satisfactory
National City Bank	Cleveland	2000	Outstanding
cNational City Bank Northwest	Toledo	1996	Outstanding
	Toledo	1993	Outstanding
Standard Federal Bank	Troy, MI	1998	Outstanding
		1995	Outstanding
		1993	Outstanding
		1991	Outstanding

a Now an affiliate of Fifth Third Bank with headquarters in Cincinnati.
b) Acquired by Keybank NA.
c) Now an affiliate of National City Bank Ohio with headquarters in Cleveland
Source: Federal Financial Institutions Examination Council, ***INTERAGENCY CRA RATINGS***.

At this point it appears that evolution in the financial sector has resulted in service to the area from a mixture of large depository institutions and smaller community banks. The larger institutions have retail outlets (branches) in the area, but major decisions are made outside the area. Nevertheless, the competitive nature of the industry means lower costs borrowers as institutions compete across local markets.

There is no explicit evidence of funds drainage because of the changed structure of financial institutions here. In fact, there is anecdotal information that the loan-deposit ratio is greater than one, that is, funds flow into the area. Large depository institutions that serve the local market are capable of moving funds to this market if profitable conditions exist. In fact, the larger institutions with headquarters outside the area are not restricted in loan activity by local deposits. Under current conditions, funds will flow through the transaction-lending process to borrowers whose prospects are highest. Compliance with the Community Reinvestment Act requires banks to demonstrate sensitivity to local economic conditions, however.

Although the Toledo MSA is a peripheral financial area and larger outside institutions control more of the market than in the past, the information presented shows that large depository institutions in the Toledo MSA have good records in serving the credit needs in the community in which they operate. Nevertheless, old-style community banks with relationship lending are declining in this period of consolidation and transactions-based lending.

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