FEDERAL RESERVE BANK OF DALLAS

Issue 2 March/April 2001

Southwest Economy

Texas Economy Cools in 2000

The Texas economy has known nothing but growth for more than a decade now. Steady employment gains and an increasingly diverse marketplace have been the hallmarks of this expansion. After 13 years of positive job growth, Texas came through once again. The Lone Star State added over 338,000 jobs last year despite a sizable falloff of domestic activity in the closing months of 2000.

However, Texas did not escape the economic softening in 2000 unscathed. Every sector except finance, insurance and real estate (FIRE) saw weakened employment growth during the second half. And statewide nonfarm employment growth waned from 5.1 percent in the first quarter to 2.8 percent in the fourth (*Chart 1*).[1]

Several factors curbed the rate of economic growth during the latter half of 2000. Higher interest rates and weakened U.S. and world economies negatively affected the Texas business environment. Excess capacity and increased input costs hurt the chemical and refining sector, and high technology suffered as sales of computers, semiconductors and telecommunications equipment ebbed from high levels.[2]

Consumer confidence took several hits toward

(Continued on page 2)

Bank Competition in the New Economy

Numerous economic forces, including technological innovations and prudent monetary and fiscal policy, account for the unprecedented growth and prosperity experienced over the past decade. However, an important, and often overlooked, factor is the relative stability and health of the banking system. A healthy, vibrant banking sector helps ensure that financial capital is directed to those businesses that would benefit most, thereby enhancing the nation's economic well-being.

Although the banking system has not experienced major problems over the past decade, it has undergone substantial changes; in particular, its market structure has been evolving. This evolution is due primarily to two factors: (1) financial deregulation, in particular the repeal of restrictive laws; and (2) technological innovations related to computers and the Internet. Both factors have the potential to produce long-lasting effects on market structure not

(Continued on page 6)

INSIDE:
Why Free Trade in the Americas?

Bank Competition in the New Economy

(Continued from front page)

only in the banking sector, but also in the financial sector, which includes banking, insurance, securities underwriting and similar businesses.

This article explores the likely impact of these recent events on both concentration and competition within the banking and financial sectors. It is important to distinguish between concentration and competition. Concentration refers to the market share held by the largest producers in an industry; competition refers to a company's ability to dictate prices. Although the two are linked, highly concentrated industries are not necessarily less competitive. For example, although there are fewer than 10 major banks in Canada (high concentration), the banking system is extremely competitive because all banks compete against each other in every region of the country.

The elimination of some legal restrictions on banks' activities as a result of financial deregulation has contributed to numerous mergers and fewer banks. The impact has been to increase concentration in the banking industry without lessening competition between banks. The effect of technological innovations is less clear. While better technology generally helps lower costs, allowing easier entry by new competitors, it is unclear, long term, whether increased competition will follow; greater access to a market does not guarantee new entrants success.

An Engine of Economic Growth and Stability

Although banking has not generated the headlines garnered by the Internet phenomenon, it has been crucial to sustaining the New Economy. Banks have traditionally played the pivotal role in providing financial capital via loans. Over the past few decades, however, firms have gained access to a variety of financing sources (*Chart 1*). As a result, banks have adapted, with larger banks now also providing venture capital for start-ups and securities underwriting for initial public offerings and with smaller community banks still providing loans for local businesses.

Bank stability has also been critical to our recent prosperity. During much of the 19th and early 20th centuries, every major recession was preceded by bank failures. Since the inception of the Federal Reserve System in 1914, both the banking system and the economy have been far less volatile. The importance of a stable banking sector was also demonstrated recently when economic problems in other countries, such as Japan, Indonesia and Russia, were all related to unhealthy, fragile banking sectors.

In particular, a comparison with Japan highlights the importance of banking to economic health. While the United States experienced many bank failures during the savings and loan crisis of the late 1980s, it established institutions, like the Resolution Trust Corp., to quickly deal with the failed banks. Once the banking system was restored to health, economic growth ensued. In contrast, Japan did not swiftly reform its banking sector after suffering many large bank failures in the 1990s, and the banking system's ongoing ills have contributed to Japan's 10-year malaise.

Given the importance of the banking sector to economic growth, it is vital to understand how financial deregulation, with the resulting consolidation in the banking sector, and technological evolution, especially the rise of the Internet, will affect the economy. In particular, how does the degree of competition within the banking system affect economic growth and prosperity? And, will the specific events listed above affect the level of competition in the financial sector?

Financial Sector Structure and Economic Growth

Although recent mergers and legislation are unlikely to lead to a monopoly in financial services, it is, nevertheless, important to understand the effects of reduced competition. There are both detrimental and beneficial aspects of reduced competition in the financial services industry.[1]

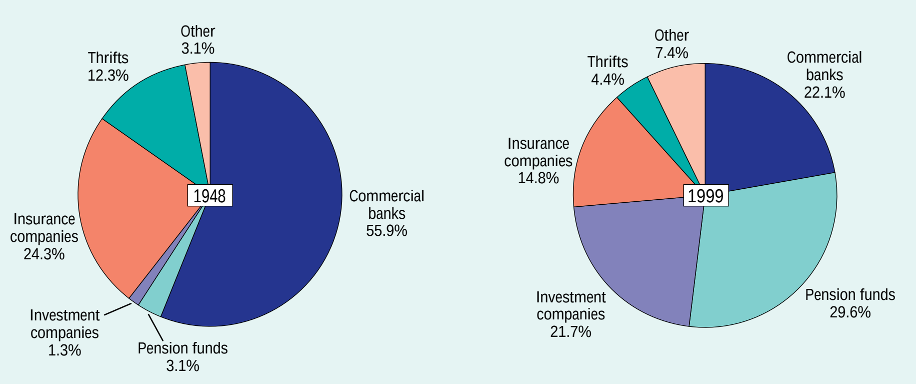
As economics textbooks teach, reduced competition in any market harms the macroeconomy by raising prices and reducing output. In banking, this might translate into higher fees, higher loan interest rates, lower deposit interest rates and fewer new services. Higher loan rates result in less productive and more risky projects obtaining funding and increase the likelihood of bankruptcies and defaults. Lower interest rates on deposits and higher fees for services reduce the savings available to finance investment. These distortions on fees and interest rates reduce productive investment, lessen growth and lower our standard of living.

The benefits of a less competitive banking system are less well known.

Chart 1

Source of Funds in the United States

Percentage of assets held



SOURCES: Anthony Saunders and Ingo Walter (1996), *Universal Banking: Financial System Design Reconsidered* (Chicago: Irwin Professional Publishing); Federal Reserve Board of Governors.

Reduced competition helps overcome the biggest problem facing borrowers and lenders: a lack of information. Usually, the largest costs banks incur when making loans come from obtaining information about prospective borrowers. With a competitive banking system, it is likely that more than one bank will seek information about a borrower, a cost duplication that wastes resources. Also, once a borrower secures a loan, it is possible for the funds to be redirected to highly risky or inappropriate projects. Monopoly banks, in general, can exert greater influence over how funds are used, since the borrower has no other access to future funds.

Whether the costs of a less competitive banking system outweigh the benefits depends on the severity of the information problems. In the United States, where information retrieval is relatively inexpensive, the costs from a reduction in competition would likely outweigh the benefits, thereby adversely affecting the nation's macroeconomic well-being.

Will Deregulation Lessen Competition?

Given that less competition is detrimental to the overall economy, what are the likely net effects on the degree of competition as a result of recent deregulation and technological innovation? Financial deregulation, especially laws passed in 1994 and 1999, has spurred considerable merger activity within the banking sector and is also likely to lead to consolidation throughout the financial sector.

Banking Sector Consolidation. Like many areas of the economy, the banking sector has experienced numerous mergers of late, notably Citicorp with Travelers Group, NationsBank with BankAmerica and, most recently, Chase Manhattan with J.P. Morgan. These mergers have involved not only the largest banks but also numerous other banks with considerable asset values (*Table 1*).

Many recent mergers have been made possible in part by the Riegle–Neal Interstate Banking and Branching Efficiency Act of 1994. This law repealed the McFadden Act of 1927 and Douglas Amendment of 1970, which curtailed interstate banking.[2] (Table 2 summarizes some of this federal legislation.) Since 1997, banks have been allowed to own and operate branches in different states. Equally important, though, the recent wave of mergers is the result of banks attempting to achieve larger, more cost-efficient organizations. For example, mergers often eliminate duplicate services such as branches, automated teller machines and information technology-related services.

Numerous studies have analyzed the effects of mergers on concentration in banking.[3] Mergers have had little impact on local market concentration. At the national level, mergers have increased concentration somewhat—although not enough to dramatically alter the industry's competitive nature. In addition, the U.S. banking industry remains much less concentrated than that in many coun-

Table 1

Dollar Value of Recent U.S. Bank Mergers

	Acquired or merged bank	Asset value of acquired/merged firm (in billions of dollars)
Total value for 1998 (Top 50 bank holding companies)		**1,017**
Largest mergers		
Travelers Group	Citibank	311
NationsBank	BankAmerica and Barnett Banks	304
Bank One Corp.	First Chicago NBD Corp. and First Commerce Corp.	132
Total Value for 1999 (Top 50 bank holding companies)		**309**
Largest mergers		
Deutsche Bank	Bankers Trust	156
Fleet Financial Group	BankBoston Corp. and Matewan BancShares	76
Firstar Corp.	Mercantile Bancorporation	36
Total Value for 2000 (Top 50 bank holding companies)		**494**
Largest mergers		
Chase Manhattan Corp.	J.P. Morgan & Co.	282
Citigroup Inc.	Associates First Capital Corp.	93
Wells Fargo & Co.	First Security Corp.	23

SOURCE: Federal Reserve Board of Governors.

Table 2

Summary of Federal Banking Legislation

Legislation	Impact
Federal Reserve Act of 1913	Established the Federal Reserve System
McFadden Act of 1927	Placed national and state banks on equal footing regarding branching; prohibited banks from branching across state lines
Banking Act of 1933 and 1935 (Glass–Steagall)	Established the Federal Deposit Insurance Corp.; separated commercial and investment banking
Bank Holding Company Act of 1956 and Douglas Amendment of 1970	Gave the Federal Reserve regulatory oversight and established rules governing bank holding companies
Financial Institutions Reform, Recovery, and Enforcement Act of 1989	Established the Office of Thrift Supervision and Resolution Trust Corp. to clean up savings and loan crisis; provided funding to resolve savings and loan failures
Riegle–Neal Interstate Banking and Branching Efficiency Act of 1994	Allowed interstate banking and branching across state lines
Gramm–Leach–Bliley Financial Services Modernization Act of 1999	Eliminated barriers separating commercial banking, investment banking and insurance

SOURCE: Mishkin, Frederic S. (1998), *The Economics of Money, Banking, and Financial Markets*, 5th ed. (New York: Addison–Wesley).

tries. Finally, increased concentration also leads to greater banking stability. Having more regional and national banks and fewer local banks should reduce the incidence of bank failures because larger banks tend to have more diversified portfolios, which can better absorb adverse economic shocks.

As for competition, there are few signs that banking is becoming less competitive. Recent studies find little evidence of a decrease in the number of small business loans, of higher prices for services or of increased profits resulting from a more concentrated market—all indicators of a less competitive market.[4] Even if the industry were to become highly concentrated, it is doubtful that this would have a negative effect on bank competition. It is probable that our banking system, like Canada's, would have fewer (potentially more efficient) banks, but still be highly competitive. (See box titled "Mergers and New Bank Formation.")

Mergers and New Bank Formation

Although mergers over the past decade have reduced the number of banking institutions in the United States, the increase in bank mergers in the second half of the 1990s also coincided with an increase in new bank charters. Economic research has yet to establish a conclusive connection (causality) between these two events. Seelig and Critchfield (1999) find that mergers do not lead to increased bank formation. Consolidation within a local market results in fewer, more concentrated banks that can more easily act to bar potential entrants.

However, Berger et al. (1999) find that mergers can increase new bank formation. Mergers often involve acquisition of smaller banks by larger banks or local banks by distant banks, leading to a reduction in personal, local services and dissatisfaction among the acquired bank's customers. This provides a market for new, local banks to serve the dissatisfied constituents. Keeton (2000) also finds that mergers are likely to lead to new bank formation.[1] This relationship is strongest when mergers involve smaller banks being acquired by larger banks or local banks by distant banks.

Thus, merger activity appears to provide the stimulus for new bank formation. This is an additional reason why the banking sector will continue to be competitive in spite of (or as a result of) recent merger activity.

[1] This article provides a good overview and explanation of the other two articles cited above.

Financial Sector Consolidation. In addition to recent banking mergers, consolidation across the financial sector is likely as a result of the passage of the Gramm–Leach–Bliley Financial Services Modernization Act of 1999, which repealed parts of the Glass–Steagall Act (officially known as the Banking Act of 1933). Glass–Steagall had separated banking, insurance and investment banking into three distinct, nonoverlapping sectors (for example, banks could not offer insurance or underwrite securities and vice versa). Although the legal barriers between these three activities had eroded over time, they still prevented banks from completely entering the other two businesses. For example, although Citicorp (a bank) and Travelers Group (an insurance company) merged in 1998, if not for the repeal of Glass–Steagall, Citigroup, the resulting company, would have been required to divest its insurance underwriting business in a few years.

The Financial Services Modernization Act of 1999 will likely foster a consolidation of the financial sector as banks, securities firms and insurance companies combine.[5] Mergers involving banks, insurance companies and investment banks will be motivated by potential economies of scope and diversification rather than by the economies of scale that motivate mergers solely between banks. Recent studies conclude that banks benefit from diversifying into certain types of insurance underwriting and that investments in insurance underwriting and securities brokerage can reduce the probability of insolvency.[6]

In the end, consolidation will likely help to create a single, unified financial market where firms and individuals can address all their financial needs at a single integrated financial company. Economic research suggests that removal of statutory barriers between banking, insurance and securities will result in fewer banks but a more competitive financial system.[7] As with mergers within the banking sector, consolidation will likely occur within the financial sector without an appreciable loss of competition.

Technology, Banking and the New Economy

In addition to the legal reforms, another major force affecting the banking industry is the rapid advancement in technology and the Internet. Consolidation in financial markets, along with technological advances, may bring about one-stop financial shopping at a potentially limited number of large, national financial institutions. If this happens, it is not clear how concentration in the industry will affect competition. In addition, the Internet is creating considerable competition to traditional banks from firms both in and out of the financial sector. Whether these new firms can remain in business and provide sustained competition is an open question, especially given the recent rash of business failures in the high-tech sector. Thus, the overall impact of technological change on competition in the financial system is ambiguous.

One-Stop Shopping. Technological advances, combined with recent legislative reforms, make it easier and more efficient for firms to obtain financing from a single entity capable of handling everything from loans to stock offerings to insurance. This one-stop shopping should reduce the costs firms currently incur finding various companies to meet these different needs. It will also lessen the information-gathering costs finance companies incur by facilitating more efficient exchanges of information. Both of these benefits strengthen the competitive environment. These cost-saving benefits also apply to consumers, who, for example, can use the Internet to find multiple rates for car loans and mortgages.

However, there are two other issues to consider when examining competition. First, the creation of integrated finance companies may result in a few extremely large, national financial companies but eliminate small local firms from the industry because they lack economies of scale. These few large firms may, or may not, compete fiercely across all local markets. Second, it is not clear whether these integrated financial companies will actually emerge and dominate the market. With lower search costs, both businesses and consumers may find it cost-efficient to continue using different financial companies to handle their various needs. This would eliminate the anticipated savings derived from having integrated financial companies. Consequently, the impact on competition is unclear.

The Internet and Outside Competition. The Internet and new technologies may also increase competition by making it harder to exclude new entrants. New technology makes both workers and machines more efficient, thereby reducing fixed costs, start-up costs and operating costs. This makes it easier for potential new competitors to enter a market.

With the advent of Internet banking, new banks (both large and small) are able to compete against the more traditional bricks-and-mortar banks. In the last two to three years, the banking sector has seen the formation of stand-alone Internet-only banks, nonbanking businesses forming Internet banks and large, traditional banks forming Internet-only banks. Thus, it has already become extremely hard to exclude new banks from a market. However, merely having access to the market is not sufficient to guarantee competition. Some smaller banks have decided not to form Internet-only banks because they do not have the resources to compete. Also, many Internet-only banks have either merged, exited the market or been swallowed up by more traditional banks.[8]

In addition to competing with Internet start-ups, traditional banks are beginning to face competition from nonfinancial sources, including AOL Time Warner, Microsoft Corp., Yodlee and CheckFree Corp. Two major areas of new competition are electronic bill payment and presentment (EBPP) and account aggregation (the ability to view all one's financial accounts on a single web page). Both EBPP and account aggregation have recently become areas of intense competition between banks and nonbanks. Many companies in addition to banks, including the U.S. Postal Service and Microsoft, offer bill-payment services, while most portals, such as Yahoo!, and financial web sites, such as Quicken.com, offer account aggregation. In fact, account aggregation was provided by nonbank firms long before many larger banks, such as Citigroup, began offering this service. Thus, in the future, traditional banks could face greater competition sparked by new technology and the Internet. However, the long-term viability of these new competitors, as well as traditional banks' forays into the Internet, remains uncertain.

An Evolving, Competitive Banking System

An important, although often overlooked, source of our recent economic prosperity has been our healthy and stable banking sector. While avoiding major problems, the banking and financial sectors have been subject to numerous changes that have affected their underlying structure.

The two major forces affecting competitiveness have been financial deregulation and technological innovation. As a result of deregulation, merger activity within the banking sector will continue, albeit at a slower pace, while the extent of merger activity in the broader financial sector is still unclear. Although these consolidations are likely to result in a more concentrated banking sector, the impact on financial market competition will probably be negligible. Mergers will lead to fewer, larger banks that compete fiercely across national markets and may spur new, smaller competitors at the local level.

The effects of consolidation may also be more than offset by the increased competition stemming from the Internet and new technologies that make it easier for both nontraditional banks and nonbank firms to compete with more traditional banks.

—Mark G. Guzman

Guzman is an economist in the Research Department at the Federal Reserve Bank of Dallas.

Notes

Thanks to John Duca, Pia Orrenius, Alan Viard and Kay Champagne for helpful comments and suggestions.

1 Guzman (2000) provides a detailed overview of some of the recent literature examining the theoretical impact of financial sector market structure on the economy. See the references therein for a more detailed explanation of some of the ideas mentioned in this section.

2 Not all interstate branching was eliminated, since various states entered into regional pacts that allowed some interstate branching or holding companies.

3 For recent works, see Stiroh and Poole (2000), Osterberg and Thomson (1999), DeYoung (1999) and Moore and Siems (1998).

4 Although fees for some services (ATM, overdraft and so forth) have been rising, these increases are not directly linked to greater concentration and less competition in the banking sector.

5 As of March 2, 2001, the Federal Reserve Board had granted 509 firms financial holding company status, a first step toward being allowed to combine banking, insurance and securities underwriting.

6 For recent work regarding the impact of banks' expansion into insurance and securities underwriting, see Laderman (2000) and the references therein.

7 See Boot and Thakor (2000).

8 Examples of Internet-only banks include Net.B@ank and First Internet Bank of Indiana; an example of a nonbank is Sony; examples of traditional banks include Citigroup's Citi f/i and Bank One's Wingspanbank.com. North Fork Bancorporation is an example of a bank that decided against an Internet bank due to cost constraints. Finally, Citigroup's Citi f/i is an example of an Internet-only bank that has been absorbed by its bricks-and-mortar parent company.

References

Berger, Alan N., Seth D. Bonime, Lawrence G. Goldberg and Lawrence J. White (1999), "The Dynamics of Market Entry: The Effects of Mergers and Acquisitions on De Novo Entry and Small Business Lending in the Banking Industry," Board of Governors of the Federal Reserve System, Finance and Economics Discussion Series no. 1999-41, July.

Boot, Arnoud W.A., and Anjan V. Thakor (2000), "Can Relationship Banking Survive Competition?" *Journal of Finance* 55 (April): 679–713.

DeYoung, Robert (1999), "Mergers and the Changing Landscape of Commercial Banking (Part I)," Federal Reserve Bank of Chicago *Chicago Fed Letter*, No. 145, September.

Guzman, Mark G. (2000), "The Economic Impact of Bank Structure: A Review of Recent Literature," Federal Reserve Bank of Dallas *Economic and Financial Review*, Second Quarter, 11–25.

Keeton, William R. (2000), "Are Mergers Responsible for the Surge in New Bank Charters?" Federal Reserve Bank of Kansas City *Economic Review*, First Quarter, 21–41.

Laderman, Elizabeth S. (2000), "The Potential Diversification and Failure Reduction Benefits of Bank Expansion into Nonbanking Activities," Federal Reserve Bank of San Francisco Working Paper no. 2000-01 (San Francisco, January).

Moore, Robert R., and Thomas F. Siems (1998), "Bank Mergers: Creating Value or Destroying Competition?" Federal Reserve Bank of Dallas *Financial Industry Issues*, Third Quarter, 1–6.

Osterberg, William P., and James B. Thomson (1999), "Banking Consolidation and Correspondent Banking," Federal Reserve Bank of Cleveland *Economic Review*, First Quarter, 9–20.

Seelig, Steven A., and Timothy Critchfield (1999), "Determinants of De Novo Entry in Banking," Federal Deposit Insurance Corp. Working Paper no. 99-1.

Stiroh, Kevin J., and Jennifer P. Poole (2000), "Explaining the Rising Concentration of Banking Assets in the 1990s," Federal Reserve Bank of New York *Current Issues in Economics and Finance*, August.