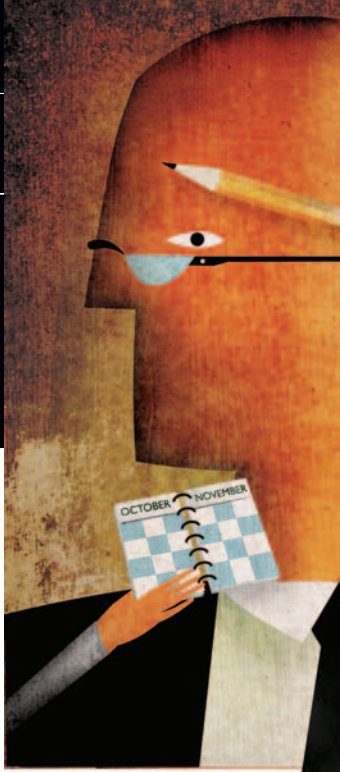
Where is the banking industry in this country heading?

1 The U.S. banking industry is in a long-term state of decline. The supply of traditional deposits is shrinking as households turn from checking accounts to cash-management accounts and from savings accounts to mutual funds. Demand for loans is falling as would-be borrowers turn from banks to commercial paper, bonds and stocks. Banks are destined to become a smaller and less important part of the financial system.



The Two Faces of Banking

Traditional Loans and Deposits vs. Complex Brokerage and Derivative Services

By Klimentina Poposka, Mark D. Vaughan and Timothy J. Yeager

Which of the above statements is true? Well, both. In two recent articles, Franklin Allen, who is a finance professor at the University of Pennsylvania, and Anthony Santomero, who is the president of the Federal Reserve Bank of Philadelphia, argue that traditional deposit-taking and loan-making have declined in the United States, yet the industry is holding its own because of an increasing focus on trading risk for households and firms.[1] For example, banks are increasingly packaging and securitizing consumer loans, which shifts the credit risk to investors. In addition, more banks are helping business customers reduce their exposure to rising interest rates by brokering swap agreements with other companies that are exposed to falling interest rates.

Allen and Santomero's insights are important because they look to changes in the source of value rather than changes in the structure of the industry for clues about the banking landscape of the future. An understanding of these changes will help bank supervisors preserve the safety and soundness of the banking system while minimizing the regulatory tax on individual banks. An awareness of the changes will also help customers understand better the new services that banks are offering.

Identifying the Complex Banks

To get a sense for how far along the U.S. banking system is in the shift from traditional activities to complex risk intermediation, we categorize each U.S. bank both in 1993 and 2003 as one that primarily engages in traditional activities or as one that primarily engages in complex risk management. We then examine trends over the past 10 years. Nearly all banks exhibit some degree of both characteristics. We classify banks based on their primary focus both at year-end 1993 and year-end 2003 by extracting key information from their financial reports. We focus on four elements: asset size, geographic diversity, fee income and derivative activity.

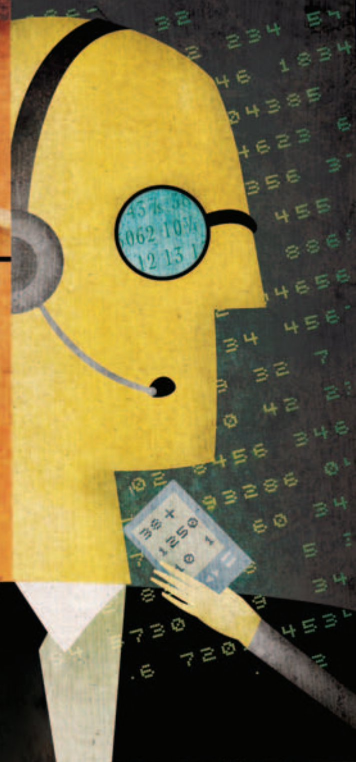
It is well-known that just a few organizations hold the majority of assets in the U.S. banking industry. At year-end 2003, Citigroup, JP Morgan Chase and Bank of America each had approximately $1 trillion in assets, collectively accounting for 35.7 percent of the industry total.[2] Because larger banking organizations are more likely to engage in more complex activities, we begin our classification exercise by assuming that banks with more than $10 billion (inflation-adjusted, 2003 dollars) in assets are eligible to be "complex" organizations. As the table illustrates, 62 banking organizations met the asset criterion in 1993. Ten years later, 67 banks met the criterion, and these banks held 79.4 percent of industry assets.

Traditional banks commonly conduct business in a single geographic area. Indeed, most U.S. banks operate within a single county.[3] In contrast, a complex organization, especially one that specializes as a service intermediary, typically comprises numerous subsidiaries, perhaps including multiple banks and trust, mortgage and finance companies. We expect a complex organization to have operations in several parts of the country. For our classification purposes, we assume that a complex bank operates in at least three of the 12 Federal Reserve districts.

Banks that engage in significant service and risk intermediation earn relatively more fee income than banks that engage primarily in loan-making. Traditional banks earn most of their income from interest rate spreads; they earn relatively modest amounts of fee income from ATM or insufficient funds charges. Complex banks, in contrast, generate significant amounts of fee income from trust services, mortgage originations and servicing, fund management, brokerage fees, insurance commissions and so on. We categorize complex banks as those that generate fee income exceeding 2 percent of assets.[4]

Derivatives activity is a strong signal that a bank is selling complex risk transfer services. Many banks engage in this activity primarily as market makers or matched traders for their customers.[5] The goal is to accommodate their customers by entering into trades with the intention of quickly entering into offsetting contracts with other counterparties. The bank earns fee income for this service, yet transfers the risk to another party. Use of derivatives at U.S. banks exploded in the 1990s. Interest rate derivatives—especially swaps—are the most common. In 1993, the notional amount of swaps registered $2.8 trillion; by 2003, that volume had grown to $42.4 trillion.

Despite the explosion in derivatives, surprisingly few banks engage in this activity. As of year-end 2003, only 523 of 6,699 (7.8 percent) banking organizations had any derivatives outstanding. And the activity is highly concentrated within those 523 banks. The top five interest rate derivative



There seem to be two prevailing—and very different—views:

2 The U.S. banking industry is on the cusp of unprecedented growth and innovation. Demand for traditional services such as loans and deposits may be waning, but demand for services that are more complex, such as brokerage services and derivatives intermediation, is waxing. The future has never looked brighter for the industry.

users account for 93.7 percent of the market. We assume that the ratio of derivatives to assets at a complex bank should exceed 10 percent.

Putting It All Together

Under our definition, a complex bank holds more than $10 billion in assets, operates within at least three Federal Reserve districts, generates fee income of at least 2 percent *and* holds derivatives equal to at least 10 percent of assets. The row labeled "Composite" in the table shows the number of banks and percent of assets that meet these criteria. In 1993, a total of 21 banking organizations, controlling 34.2 percent of industry assets, would have been considered complex under our definition. As of 2003, a total of 25 banks, controlling 61 percent of assets, qualify as complex. In turn, the number of traditional banks has declined by 1,831 and their share of industry assets dropped nearly 27 percentage points between 1993 and 2003.

Conclusion

Clearly, the industry is evolving from one that is engaged primarily in traditional activities to one that is engaged in complex risk intermediation. That is not to say that traditional banking will disappear. Indeed, traditional banking remains extremely viable, as illustrated by the high earnings posted by banks of all shapes and sizes over the past decade. The U.S. banking industry seems likely to include both traditional and complex activities for some time to come.

Bank supervisors must continue to adjust to the growing dominance of complex banks. Focusing simply on changes in the asset concentration of the industry understates the changes necessary in supervision because that approach implies a simple need to relocate the existing examiner resources as the banks relocate. In contrast, the approach by Allen and Santomero focuses on the expertise that bank examiners must possess to supervise adequately the complex banks of the future. Put another way, the Allen-Santomero framework implies less emphasis on supervising asset quality and more emphasis on supervising market risk exposure and risk management systems.

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ENDNOTES

1 See Allen and Santomero (1997 and 2001).

2 This figure includes assets from Bank One and Fleet Boston, which merged with JPMorgan Chase and Bank of America, respectively.

3 See Hall and Yeager (2002).

4 In 2003, 5.7 percent of all banks had fee income of 2 percent or higher.

5 See Puwalski (2003).

REFERENCES

Allen, Franklin and Santomero, Anthony M. "The Theory of Financial Intermediation." *Journal of Banking and Finance*, 1997, Vol. 21, pp. 1461-85.

Allen, Franklin and Santomero, Anthony M. "What Do Financial Intermediaries Do?" *Journal of Banking and Finance*, 2001, Vol. 25, pp. 271-94.

Hall, John and Yeager, Timothy J. "Community Ties: Does 'Relationship Lending' Protect Small Banks When the Local Economy Stumbles?" Federal Reserve Bank of St. Louis *The Regional Economist*, April 2002, pp. 4-9.

Puwalski, Allen C. "Derivatives Risk in Commercial Banking." Federal Deposit Insurance Corp., *For Your Information*, March 26, 2003. See www.fdic.gov/bank/analytical/fyi/index.html.

Vaughan, Mark D. "Bullish on Banking: Thriving in the Information Age." Federal Reserve Bank of St. Louis *The Regional Economist*, January 1996, pp. 5-9.

The Future of Banking Seems Nontraditional

	Date	Complex Banks No. Banks	Complex Banks % Assets	Traditional Banks No. Banks	Traditional Banks % Assets
Asset Size	1993	62	65.2	8,464	34.8
	2003	67	79.4	6,632	20.6
Geographic Diversity	1993	83	62.5	8,443	37.5
	2003	136	77.9	6,563	22.1
Fee Income	1993	494	39.3	8,032	60.7
	2003	383	66.6	6,316	33.4
Derivatives	1993	134	65.6	8,392	34.4
	2003	110	76.6	6,589	23.4
Composite	1993	21	34.2	8,505	65.8
	2003	25	61.0	6,674	39.0
Change in Composite (1993 to 2003)		**+4**	**+26.8**	**–1,831**	**–26.8**

Each U.S. bank is classified along four categories as complex or traditional in 1993 and again in 2003. A complex bank has to hold more than $10 billion in assets, operate within at least three Federal Reserve districts, generate fee income of at least 2 percent of assets and hold derivatives equal to at least 10 percent of assets. The row labeled "Composite" shows the number of banks and percent of assets that meet these criteria. In 1993, a total of 21 banks, controlling 34.2 percent of industry assets, would have been considered complex. As of 2003, a total of 25 banks, controlling 61 percent of assets, qualify as complex. Clearly, complex banks are growing while traditional banks are declining.