

ECONOMIC COMMENTARY

Federal Reserve Bank of Cleveland

Banking and the Flow of Funds: Are Banks Losing Market Share?

by Katherine A. Samolyk

By some accounts, the 1980s was the decade of both debt buildup and the decline and fall of the commercial banking industry. Nonfinancial sector debt grew substantially faster than national output during this period and was mirrored by a commensurate rise in financial intermediation. The commercial banking industry, however, once the dominant type of intermediary, does not appear to have shared in the proliferation of financial sector activity. Funds advanced by U.S. commercial banks as a fraction of nonfinancial sector credit outstanding has declined from 29 to 22 percent in the past 10 years. Moreover, the trend within the industry is widely characterized as one of consolidation: The number of commercial banks has fallen from more than 15,000 in 1984 to fewer than 11,000 today.

Opinions differ on how to interpret the evolving role of banks in the broader financial sector.¹ One view is that the increased competition from nonbank financial firms reflects a diminishing need for banks. Others argue that banks have been hampered from competing by excessive regulation. However, few dispute the perception that banks are losing market share to other financial services providers.² This *Economic Commentary* takes issue with the notion that banks are declining in importance by examining how they have fared in their role as lenders.

By definition, a commercial bank makes commercial and industrial (C&I) loans. At year-end 1993, C&I loans accounted

for less than 18 percent of the total credit extended to the nonfinancial business sector, versus more than 22 percent 30 years ago. However, banks make other types of loans — in particular mortgages and consumer loans — and in these markets they are faring better. Indeed, in terms of overall borrowing by households and businesses, banks are directly funding nearly the same share of credit as they did in the early 1960s. Moreover, they are playing a greater role in facilitating nonbank credit market activity. Thus, although there are substantially fewer banks today than a decade ago, the industry appears to be far from extinction.

■ Banking versus Banks

Financial intermediation is the process of pooling credit market claims on a set of borrowers and funding them by issuing another set of claims to financial investors. One distinguishing characteristic of banks in this process is that they facilitate the monetary transactions associated with settling these claims. Commercial banks issue transactions accounts that are easily used as a means of payment, making them major players in the U.S. payments system. Another important feature of banks is that they lend deposit funds to certain borrowers who could not obtain credit as easily elsewhere (if at all). These include smaller, localized businesses and households that require costly screening and monitoring. By developing expertise and diversifying across many borrowers, banks are able to reduce the attendant

Over the last decade, the media and the public alike have expressed growing concern about the health of the U.S. banking industry. Their fears are centered on the decline in the share of nonfinancial sector credit intermediated by banks and on the consolidation of the industry into fewer, but larger, institutions. However, flow of funds data indicate that banks today account for nearly the same share of outstanding household and nonfinancial business sector debt as they did 30 years ago.

costs of supplying credit to these segments of the economy.

Thus, the function of banking is generally associated with deposit taking that is used to fund loan making. To the extent that investors want to hold bank liabilities, banks can perform this lending function. However, banks also intermediate some types of credit that involve little banking in the traditional sense. For example, a bank may invest its deposit funds in U.S. government securities. In this case, the government does not really obtain credit from the bank. Rather, the bank is buying securities that were issued in (and could easily be resold in) direct capital markets. Mutual fund managers as well as individual investors do this very thing.

The distinction between a bank's lending activities and its other investments is a notable one. In the early 1950s, almost half of the banking sector's portfolio was invested in U.S. government securities. Today, banks are doing significantly more private sector lending, despite the shift to funding securities witnessed over the past several years.

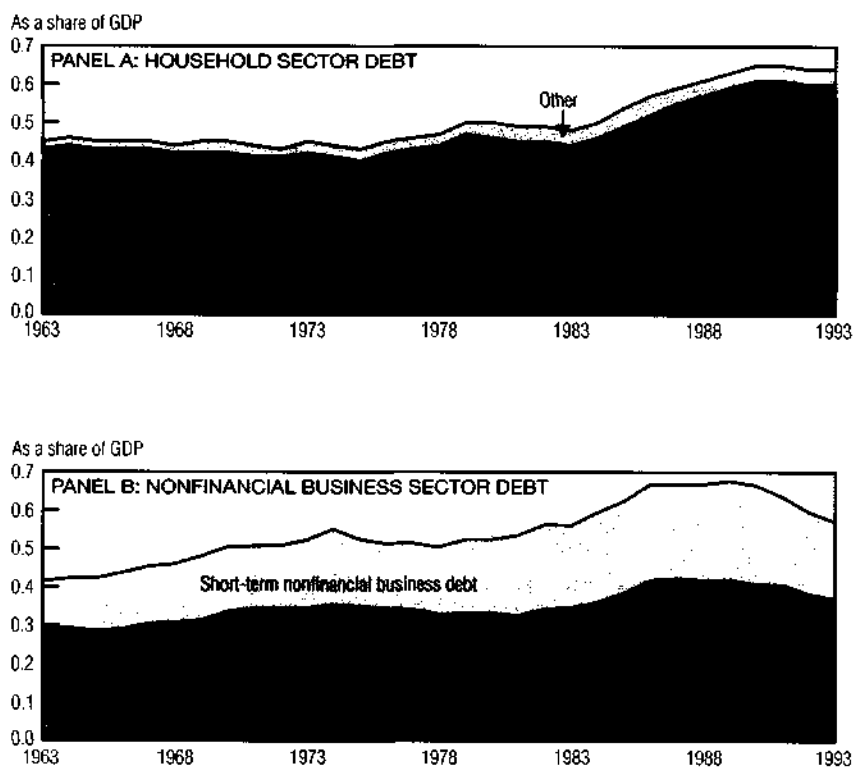
■ You Can't Tell the Players without a Scorecard

Identifying the types of credit obtained by households and businesses helps to distinguish the markets where banks compete as lenders. Household borrowing primarily takes the form of home mortgages and consumer credit (such as auto loans). Nonfinancial businesses obtain credit in more numerous forms that can be broadly categorized into short-term and long-term sources of funds. Shorter-term credit includes working capital loans from financial intermediaries as well as commercial paper issued directly in capital markets by large corporations. Long-term borrowing consists primarily of business mortgages on commercial real estate and bonds that firms issue directly in capital markets.

Over the past 40 years, the credit demands of businesses and households have risen as the markets where banks compete as lenders have expanded. The panels in figure 1 illustrate the magnitude of this credit growth by depicting the outstanding debt of each sector as a share of GDP. The growth of household debt has been accompanied by a shift toward more mortgage borrowing (including home equity loans). Trends in the composition of nonfinancial business sector credit have been less marked. Short-term debt has gained somewhat in importance, while long-term debt continues to be fairly evenly divided between business mortgages and bond issues.

The box on the following page describes the competition banks face as lenders in these markets. Thrift institutions (including savings and loans, credit unions, and mutual savings banks) have a long tradition as both consumer and mortgage lenders. This industry is most similar to the banking sector in terms of its funding (deposits), regulations, and

FIGURE 1 TRENDS IN HOUSEHOLD AND BUSINESS FINANCING



SOURCE: Board of Governors of the Federal Reserve System.

decentralized structure. However, perhaps because thrifts have had more problems than banks in the past decade, other competitors are receiving greater attention these days.

Finance companies have historically been a vital source of credit to businesses and households, funding their portfolios in direct capital markets (as well as with bank loans) rather than with deposits. There is great deal of diversity within the industry in terms of its lending activities, as individual finance companies tend to specialize in funding particular credit niches.³ By diversifying across many borrowers of a given type and developing expertise in transforming their risks, finance companies can enhance the performance of their loan portfolios and hence fund borrowers at a lower risk-adjusted cost. Currently, the common perception is that finance companies have an advantage over banks because they are less restricted in their activities and incur fewer regulatory costs.

Banks are also facing heightened competition from direct credit markets. The broadening of the commercial paper market in the last two decades has made it cost effective for very large firms to obtain short-term business loans directly from capital markets rather than from banks. This market has also benefited finance companies, as it has become a dominant source of their funding and, again, represents an alternative to borrowing from banks.

More recently, asset securitization has spread as a means of funding certain types of credit.⁴ Asset securitization (also referred to as asset-backed lending) is the process of pooling a large group of loans and funding that pool by issuing commercial paper or bonds directly in capital markets. Mortgage securitization by government-sponsored agencies accounts for much of the growth of the asset-backed market. However, asset securitization is also allowing other types of lending —

SOURCES OF FUNDS BY TYPE OF INVESTMENT

Type of Financial Intermediary	Primary Types of Credit to Businesses and Households	Sources of Funds by Type of Instrument
Commercial banks	C&I loans Business mortgages Home mortgages Consumer credit	Deposits
Thrifts	Home mortgages Consumer credit Business mortgages	Deposits
Finance companies	Business loans Consumer credit Home mortgages	Commercial paper Bonds Bank loans
Insurance companies and pension funds	Corporate bonds Business mortgages Commercial paper Home mortgages	Insurance premiums and pension contributions
Asset-backed securities issuers	Home mortgages Consumer credit Business mortgages Business loans	Commercial paper Bonds
Government-sponsored enterprises and credit pools	Home mortgages Business mortgages Business loans	Agency securities
Bond mutual funds	Corporate bonds	Mutual fund shares

such as consumer credit — to be funded directly in capital markets.

Financial intermediaries compete not only in making loans but also in attracting investors. Commercial banks have traditionally had a comparative advantage in funding their portfolios with bank deposits because before 1980, they alone were allowed to issue liquid transactions accounts. Given that banks were also insured, they had unique access to a relatively low-cost source of funds. However, the deregulation of depository institutions during the 1980s allowed thrifts to issue the same types of accounts as banks. In addition, the creation of money market mutual funds in the early 1970s provided small savers with another liquid alternative to bank deposits.⁵

While banks are undoubtedly facing more competition in providing deposit-type accounts, investors also seem to be shifting their portfolios toward the higher-yielding capital-market-type instruments

that fund the nonbank competition. Tax policies have created an incentive for households to invest more of their wealth in tax-deferred accounts issued by both insurance companies and pension funds. These longer-term funds hold longer-term investments (securities as well as mortgages) as reserves against their future liabilities. High relative yields and reduced transactions costs have also boosted the popularity of bond and stock mutual funds.

■ Sizing Up the Competition for Business Loans

Having identified the relevant markets where banks compete, we can now turn to examining how they have fared as lenders during the past few decades. As illustrated in figure 2, short-term credit has increased somewhat as a source of business financing and currently accounts for more than 35 percent of total nonfinancial business sector debt outstanding. This compares to about 30 percent in the early 1960s. C&I lending by banks, however, represents only 18 percent of total business borrowing, down from 22 percent 30 years ago.

In terms of the short-term business credit market itself, the declining prominence of banks is quite dramatic. Banks now fund less than half of all short-term business loans, versus around three-quarters in the early 1960s. Finance companies and the commercial paper market have clearly gained in relative market share.⁶ Hence, consistent with popular wisdom, it appears that commercial banks have lost ground in their traditional role of supplying working capital to the nation's businesses.

In contrast, they appear to be gaining as longer-term business lenders. Mortgages on commercial real estate, farms, and multifamily residential properties are the major longer-term alternatives to borrowing directly in the bond market, and banks have stepped up the pace of their lending in this area.⁷ As indicated in figure 3, business mortgages held by commercial banks now account for more than 10 percent of total nonfinancial business sector credit outstanding — up from approximately 5 percent 30 years ago.

In terms of the business mortgage market itself, commercial banks now directly fund 36 percent of outstanding credit (versus only 14 percent in the early 1960s). Most of this growth in market share occurred during the commercial real estate boom of the 1980s. Nonetheless, the industry has maintained a strong presence despite the broad-based slowdown in commercial real estate lending in the past several years. The success of banks as business mortgage lenders seems to be coming largely at the expense of the thrift industry.

Thus, in terms of the nonfinancial business sector, commercial banks do not appear to be relinquishing their prominence as lenders. In fact, C&I loans and commercial mortgage lending now account for about 28 percent of total nonfinancial business sector debt — slightly more than was the case 30 years ago. Furthermore, the most recent data represent a period following a cyclical downturn in both business borrowing and bank lending that by some accounts has yet to

FIGURE 2 SHORT-TERM BUSINESS CREDIT

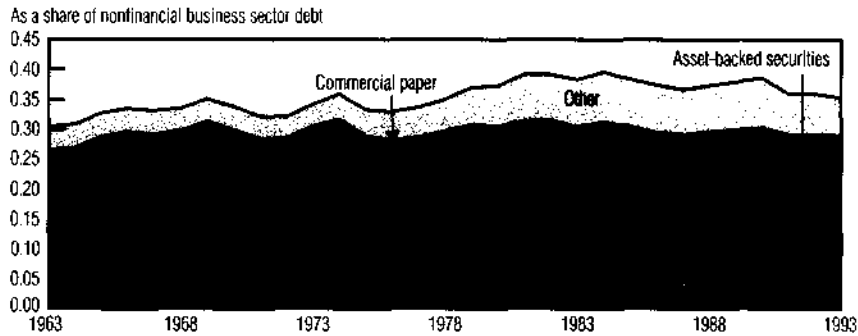
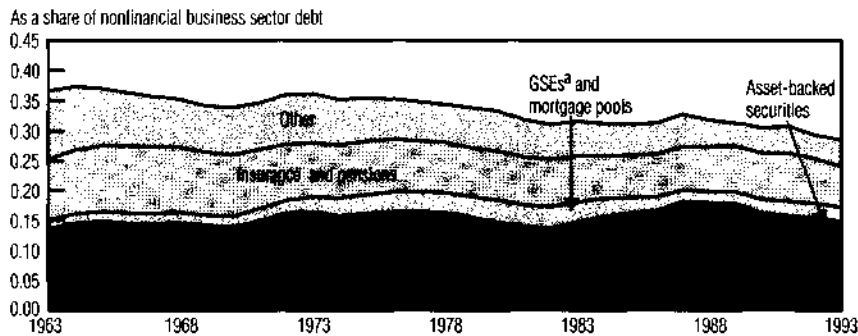


FIGURE 3 BUSINESS MORTGAGES



a. Government-sponsored enterprises.

SOURCE: Board of Governors of the Federal Reserve System.

rebound. Banks do appear to be changing *how* they lend to the business sector, however. The shift from short-term finance to mortgage lending should not be that surprising, as business mortgage lending requires the localized screening and monitoring services viewed as the forte of depository institutions. In this arena, the banking industry has benefited from problems in the thrift industry. Recent data also indicate that asset securitization has yet to become a dominant force in business loan markets.

■ Banks as Competitors in Household Credit Markets

Commercial banks also appear to be competing effectively in meeting the increasing credit needs of the household sector. Banks have historically vied with thrifts and finance companies (as well as with nonfinancial retail businesses) in the consumer credit market. During the past decade, banks have fared better than these competitors in the face of both the shift in household borrowing from consumer loans to mortgage-related obligations and the growth of asset securitization.

As indicated in figure 4, the share of household debt funded by banks in the form of consumer credit has fallen from around 13 percent to 9 percent over the past three decades. However, to some extent this decline mirrors the diminished importance of consumer loans as a source of household sector financing. In terms of the consumer credit market itself, commercial banks hold around 46 percent of the debt outstanding — a slightly larger share than they did in the early 1960s. And while asset-backed securities (backed, for example, by credit card receivables or auto loans) have become a viable means of financing consumer borrowing, securitization appears to have impacted the market share of finance companies (and thrifts) more than that of banks.

Banks have also fared better than non-bank intermediaries in the expanding residential mortgage market. Figure 5 depicts home mortgages by type of holder as a share of total household debt outstanding. Home mortgages held by commercial banks now account for 12

percent of household sector debt — up from around 9 percent 30 years ago. To some degree, this trend reflects the growth of mortgage-related borrowing by households.

Still, in the home mortgage market itself, commercial banks now hold about the same share of outstanding loans as they did in the early 1960s — albeit a share of a much larger market. Banks have maintained this position in spite of the dramatic changes in residential mortgage financing witnessed over the past several decades. A much greater fraction of these loans are now sold into the government-sponsored secondary mortgage market, where they are “liquefied” into pools and funded by mortgage-backed securities. Meanwhile, the thrift industry’s share has dwindled to the point that by year-end 1993, commercial banks actually held more home mortgages than did thrifts.

Similar to trends in nonfinancial business lending, the total volume of mortgages and consumer loans held by banks accounts for about the same share of household sector debt as it did 30 years ago. Unlike business credit markets, asset securitization has become a prominent means of funding both types of household borrowing. Thus, the commercial banking industry has maintained its overall market share even as financial innovations have cut into the business of the traditional competition.

■ Off-Balance-Sheet Banking

Though banks have responded to their environment in part by changing the types of loans they fund, another notable trend in the industry is the growing importance of the services banks provide that are not reflected quite so directly on their balance sheets. Some services do not involve banking per se. For example, banks are offering a fuller set of investment services to depositors (such as selling mutual fund shares) in order to earn fee income and to attract or retain customers who desire one-stop financial shopping. Other off-balance-sheet activities, while not identified specifically as lending, involve banking in the sense that they help borrowers obtain financing — albeit from other sources. A good example of a credit service provided by

banks is loan origination. Although pools of securitized mortgages and consumer credit are funded in direct capital markets, commercial banks earn fee income for originating and servicing the loans in these pools.

Banks also earn fee income by issuing promises of credit, credit guarantees, and interest-rate hedges to business borrowers. These contractual arrangements are known respectively as loan commitments, standby letters of credit, and interest-rate swaps. A loan commitment is simply a line of credit that can be drawn down at the discretion of the borrower. A standby letter of credit is in essence a promise to stand behind a claim issued by a borrower. An interest-rate swap is a contract in which the bank promises to change the credit terms facing an existing borrower (for example, from a variable-rate to a fixed-rate contract). These promises do not appear on bank balance sheets as credit outstanding, because as long as they remain only promises, no funds have been advanced. Nevertheless, the promises have value, since they increase the liquidity and reduce the risk of the purchaser.

These off-balance-sheet services help borrowers to obtain credit on better terms, frequently from sources other than the issuing banks. Indeed, the liquidity of commercial paper issues (which help to fund finance companies, asset securitization, and large corporations) to some extent reflects the credit enhancements that banks issue to back these claims. Thus, somewhat ironically, the success of the nonbank competition is at least partially due to the services provided by banks.⁸

Currently, the volume of funds promised through loan commitments and standby letters of credit represents about one-third of banks' total on-balance-sheet credit. Although it is difficult to measure an amount of banking services associated with these promises, looking only at the flow of funds on bank balance sheets clearly understates the weight of these institutions as lenders.⁹

FIGURE 4 CONSUMER CREDIT

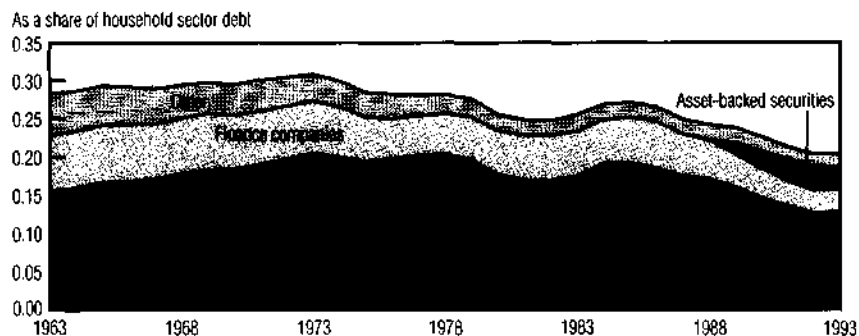
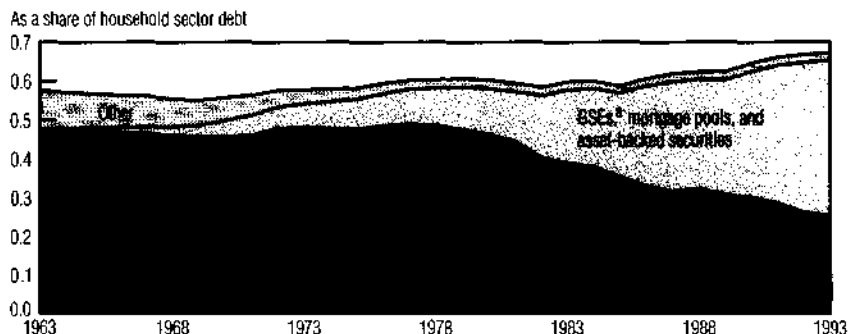


FIGURE 5 HOME MORTGAGES



a. Government-sponsored enterprises.

SOURCE: Board of Governors of the Federal Reserve System.

■ Banking Sector Trends and the Flow of Funds

A record number of bank mergers occurred in 1993. From a policy perspective, it is important to assess whether this consolidation trend is indicative of an industry in decline. Proponents of deregulation argue that the banking industry is shrinking because excessive regulation has created an uneven playing field on which banks cannot compete with other financial services providers. However, current policies also yield advantages for banks: The industry is subsidized and protected by a federal safety net because it is viewed as playing a pivotal role in providing credit and facilitating payments.¹⁰ Still, some contend that banks will not survive unless policymakers grant them the power to expand into new geographic and financial arenas.

This article does not attempt to sort out how government policies versus market factors are influencing current trends in the banking industry. It does, however, document the extent to which commercial banks continue to supply credit directly to U.S. households and nonfinancial businesses. Evidence from aggregate data indicates that bank loans account for nearly the same share of these sectors' outstanding debt today as they did 30 years ago. Thus, in terms of what we see on balance sheets, banks have not diminished in importance to household and business borrowers. Moreover, the shift in banking services to off-balance-sheet activities indicates that the share of credit directly funded by banks understates their true market share in providing services that help borrowers obtain credit. Hence, while I do not dispute the potential for prudent banks to benefit from expanded powers, the claim that the industry will not survive without them appears to deserve greater scrutiny.

■ Footnotes

1. For an overview of these perspectives, see David C. Wheelock, "Is the Banking Industry in Decline? Recent Trends and Future Prospects from a Historical Perspective," Federal Reserve Bank of St. Louis, *Review*, vol. 75, no. 5 (September/October 1993), pp. 3-22.
2. For an exception, see John Boyd and Mark Gertler, "Are Banks Dead, or Are the Reports Greatly Exaggerated?" Federal Reserve Bank of Chicago, *Proceedings of a Conference on Bank Structure and Competition*, May 1994 (forthcoming).
3. Some are captive funding vehicles for large conglomerates (Ford Capital Corp.), some are independent firms that extend credit to particular sectors (Household Finance Corp.), and others are subsidiaries of bank holding companies that allow the holding companies to broaden the scope of their activities. For an informative description of the industry, see Jane D'Arista and Tom Schlesinger, "The Parallel Banking System," Economic Policy Institute Briefing Paper, Washington, D.C., 1993.
4. For an overview of asset securitization trends, see Charles T. Carlstrom and Katherine A. Samolyk, "Securitization: More than Just a Regulatory Artifact," Federal Reserve Bank of Cleveland, *Economic Commentary*, May 1, 1992.
5. These accounts do not require deposit insurance or its attendant regulatory costs because they fund very liquid claims (such as Treasury bills, commercial paper, and large-denomination bank certificates of deposit).
6. Asset securitization remains a negligible source of short-term working capital.

7. Household sector debt includes a small share of what are classified as business mortgages, and business sector debt includes a small share of home mortgages. Because it is not possible to identify what fraction of an intermediary's business mortgages was issued to businesses (versus households), I assume that business mortgages and home mortgages (issued by a given intermediary) are the liabilities of the business sector and the household sector, respectively. The actual volume of the business sector's mortgage debt outstanding has been generally quite close to the volume of business mortgages outstanding. Similarly, the volume of household sector mortgages outstanding has tended to track fairly close to that of home mortgages.

8. This point has been made by others. For very different interpretations of the policy implications, see Boyd and Gertler (footnote 2) and D'Arista and Schlesinger (footnote 3).

9. Boyd and Gertler (footnote 2) estimate an adjusted bank share of intermediation by taking off-balance-sheet activities into account. Their estimates indicate that even in terms of total credit flows (including government borrowing, for example), banks are not losing market share.

10. Yet, relatively recent experience has shown that deposit insurance and the policy that a bank can be too big to let fail allow large banks to take on substantial risks. In the past several years, banking legislation has attempted to mitigate the incentives for excessive risk-taking by making banks pay for the risks on their balance sheets.

Katherine A. Samolyk is an economist at the Federal Reserve Bank of Cleveland. The author thanks Lydia K. Leovic for helpful research assistance.

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Federal Reserve Bank of Cleveland
Research Department
P.O. Box 6387
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