

Finance Companies, Bank Competition, and Niche Markets

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During the 1980s, U.S. commercial banks faced increased competition in their lending activity from other financial intermediaries. Large finance companies were an especially vigorous competitor of banks. Because finance companies enjoyed their success despite carrying apparently heavier capital burdens and lacking the advantage of deposit insurance, concerns arose that commercial banks were being hampered by the structure of their regulation and ownership.

This study seeks to explain the differential performance of banks and finance companies in common lending markets. We find that while regulatory and ownership factors were important, they were not the primary determinants of success in individual markets. Had these institutional factors been decisive, finance companies would have outperformed banks in both consumer and business credit markets. But in the consumer credit markets generally, finance companies lost market share to banks and their affiliates. Finance companies fared better than banks overall because they benefited from surging demand in sectors where they were well established and highly experienced, notably in the equipment leasing segment of the middle market for business credit. Even as banks with excess lending capacity became more willing to take risks in commercial real estate and highly leveraged transactions, they mounted little direct challenge to the finance companies in important segments of the middle market.

Why was this so? The evidence shows that much of the growth in the leasing market took place in niches, market segments of relatively risky credit where command of specialized information was critical to lenders.

In niches such as commercial aircraft leases and medical equipment leases, finance companies enjoyed dynamic scale economies in information because of their early entry and accumulated experience in the business. Since banks could not develop their own expertise at once, such learning-curve economies served as a substantial barrier to entry.

Nonetheless, the niche barrier was not insurmountable; indeed a few banks did break into the equipment leasing market. Banks could have overcome the niche barrier either by expanding rapidly to accelerate their learning or by acquiring an existing leasing operation. These strategies entail entry costs, however, and banks would have needed a sufficient cost-of-funds advantage to earn the high future returns that would make up for the initial costs. We argue that most large banks lacked this funding advantage and thus chose to bypass good opportunities in the fast-growing leasing markets.

In the following sections, we first analyze the growth of finance companies and the importance of good credit ratings. Then we examine how finance companies took advantage of niches in their traditional markets. Finally, we discuss the factors inhibiting bank entry into the finance companies' leasing niches.

Growth of finance companies

Nature of the industry

Finance companies are a diverse group of non-depository financial institutions. Like commercial banks, these institutions extend credit to both consumers and businesses, although they traditionally concentrate on loans secured by tangible assets.

Large companies have long dominated the finance company industry. In 1990 the combined assets of the twenty largest firms totaled \$426 billion, or 82 percent of the industry's overall assets (Table 1). These large companies tend to be wholly owned subsidiaries of nonfinancial firms, and the very largest are most often "captives" that finance principally the sales and leases of their parents. Of the twenty largest finance companies, seven are captives, five are noncaptives owned by nonfinancial parents, three are owned by nonbank financial parents, three are affiliated with banks, and two are independent.

The largest finance companies tend to be those that diversified from consumer credit into business credit. The convention in the literature is to consider a finance company diversified if it holds at least 35 percent of its receivables in the form of commercial and industrial credit; otherwise it is considered a consumer finance company.¹ Of the top twenty, twelve are diversified finance companies, and by 1990 they held over four-fifths of the assets of this group.

Growth and excess capacity

For most of the 1980s, finance companies grew faster than commercial banks (Chart 1). From 1980 to 1990,

¹The classification scheme follows that used by the First National Bank of Chicago. The bank's annual review of finance companies appears in the *Journal of Commercial Bank Lending*.

accounts receivable for the finance company industry grew an average of 11.4 percent a year; in contrast, commercial bank loans grew 8.4 percent a year. Yet finance companies enjoyed equity returns well above those of commercial banks (Chart 2). The banks' poor returns reflected excess lending capacity, specifically their having more resources in the short run than they needed to meet the demand for credit in their traditional markets.² We argue below that finance companies faced no such problem: the strong demand for credit in some of their traditional markets allowed them to utilize their resources fully.

Composition of credit growth

Finance companies set themselves apart from commercial banks by sustaining impressive growth in business credit through the second half of the decade. Initially, consumer and business credit contributed fairly evenly to the growth of finance companies, as they did to the growth of commercial banks. The major divergences in growth showed up mainly in the second half of the decade. For finance companies, consumer credit slowed and grew only 4.0 percent a year during this period, while business credit picked up the slack by growing 13.1 percent a year (Chart 3). Much of the business credit growth was in leasing, which grew 17.8

²These resources included the services of loan officers and the credit relationships they had developed.

Table 1

The Twenty Largest Finance Companies

Assets in Million of Dollars, End-1990

Rank	Assets	Parent Relationship/ Type of Parent	Concentration of Business
1 General Motors Acceptance Corp.	105,103	Captive	Diversified
2 General Electric Capital Corp.	70,385	Nonfinancial firm	Diversified
3 Ford Motor Credit	58,969	Captive	Diversified
4 Chrysler Financial	24,702	Captive	Diversified
5 Household Financial	16,898	Independent	Consumer
6 Associates Corp. of North America	16,595	Nonfinancial firm	Diversified
7 Sears Roebuck Acceptance Corp.	15,373	Captive	Consumer
8 American Express Credit	14,222	Captive	Consumer
9 ITT Financial Corp.	11,665	Nonfinancial firm	Diversified
10 CIT Group	11,374	Bank holding company	Diversified
11 I.B.M. Credit	11,132	Captive	Diversified
12 Westinghouse Credit	10,336	Nonfinancial firm	Diversified
13 Security Pacific Financial Services System	9,928	Bank holding company	Diversified
14 Beneficial Corp.	9,270	Independent	Consumer
15 Transamerica Finance	8,501	Financial nonbank	Diversified
16 Heller Financial	7,512	Bank holding company	Diversified
17 Commercial Credit Corp.	7,138	Financial nonbank	Consumer
18 American General Finance	5,933	Financial nonbank	Consumer
19 Toyota Motor Credit	5,579	Captive	Consumer
20 Avco Financial	5,084	Nonfinancial firm	Consumer

Sources: *American Banker*, December 11, 1991; First National Bank of Chicago; annual reports.

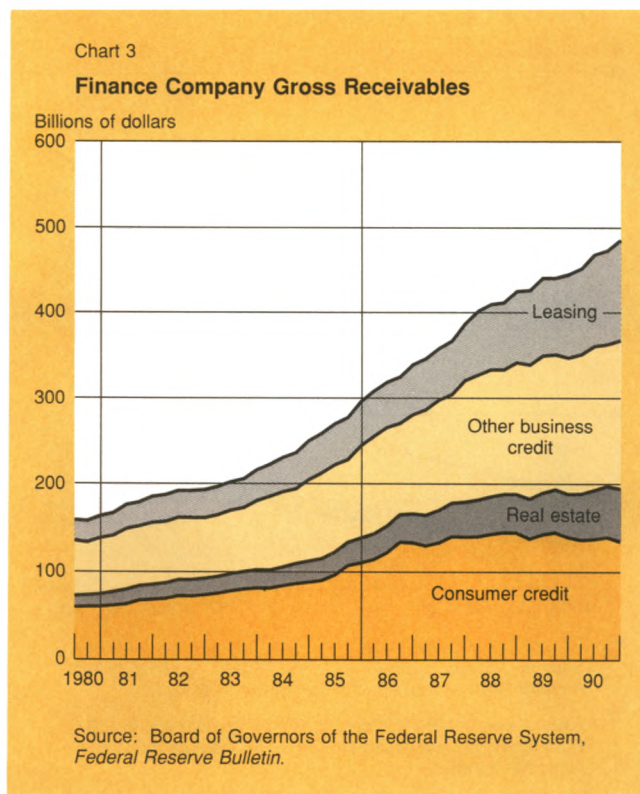
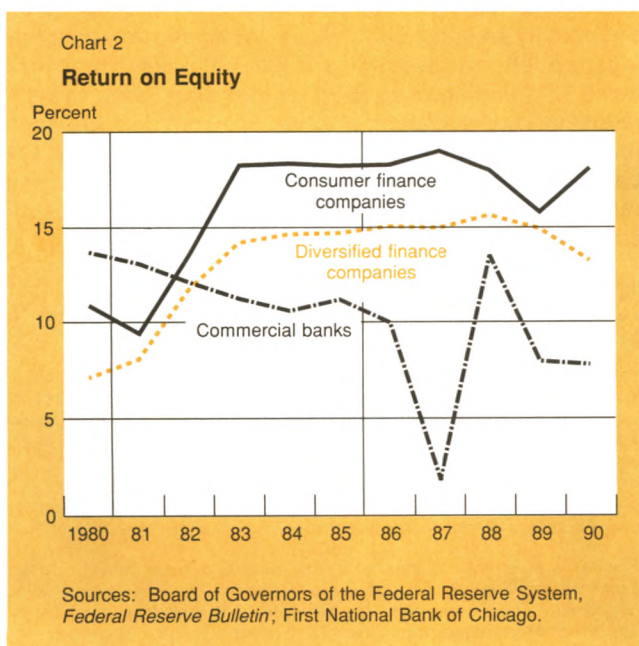
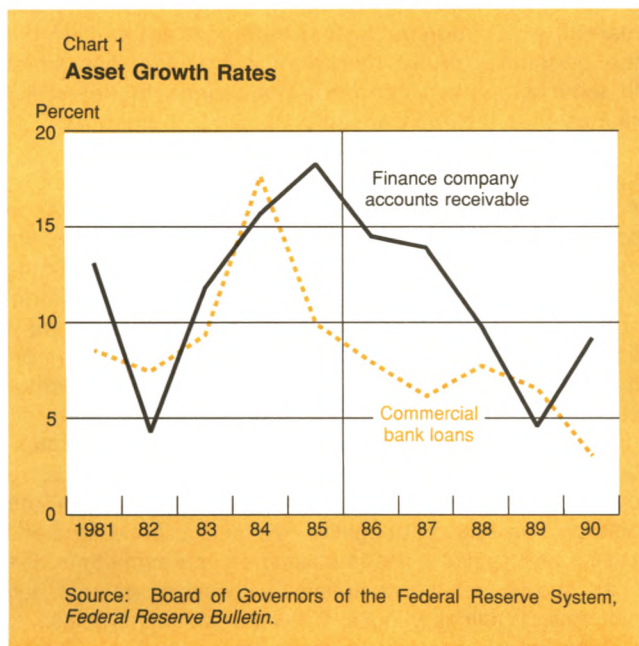
percent a year during the period. Banks and finance companies had opposite patterns of consumer and business credit growth: individual loans by banks still grew 5.1 percent a year, while their commercial and

industrial loans grew barely 2.8 percent a year.³ Thus, while finance company receivables altogether rose nearly 10.4 percent a year from 1985 to 1990, commercial bank loans increased only 6.3 percent a year.

Liabilities growth

The growth of finance company assets was financed largely with funds from the burgeoning securities markets (Chart 4). Unable to issue deposits, finance companies raised funds largely in the commercial paper (CP) and corporate bond markets. At first, the CP market was the primary source of funds, with money market mutual funds allocating major portions of their portfolios to highly rated commercial paper. Finance companies became by far the largest issuers in the CP market. The outstanding amount of CP by finance companies grew an average of 12 percent a year from 1980 to 1990 and stood at \$153 billion by the end of the period. In the second half of the decade, total liabilities grew more slowly, but corporate bond issuance surged 14 percent a year and assumed considerable importance as a

³Although real estate lending escalated throughout the decade for both commercial banks and finance companies, it grew from a small base and, in the case of finance companies, still represented only 12 percent of receivables at the end of 1990.



source of funds. By 1990, long-term debt, at \$184 billion, had become the largest component of finance company liabilities. A significant part of this debt took the form of subordinated debt from parents.

Importance of credit ratings

The finance companies' reliance on securities markets for financing made credit ratings a key determinant of their growth. Table 2 reports credit ratings for large finance companies' senior debt and CP in 1985 and 1990. The table divides the companies into the fast growing (those that exceeded the industry growth average) and the slow growing, and ranks the individual companies by growth rates within each category. The table shows that fast-growing companies had generally better credit ratings than did the slow-growing companies.

A more systematic statistical analysis confirms the importance of credit ratings. Using data from 1985 to 1990, Table 3 reports econometric estimates of the effect of senior debt ratings on asset growth when the effects of capital ratios, parent relationships, and demand conditions are taken into account. Year dummies proxy for demand conditions. Credit standings are

represented by bond ratings because these are not as tightly clustered as the CP ratings.⁴ The regression shows that of the supply-side variables, only the finance company's own credit rating significantly explains asset growth.

In the 1980s, a prime credit rating afforded easy access to low-cost funds from the securities markets.⁵ It was evidently the ticket to expanding in the business credit market, which required tighter lending margins than did the consumer credit market. Indeed, the diversified finance companies generally maintained higher credit ratings than did the consumer finance companies.

Importance of parents

A finance company's credit rating depends not so much on its own capitalization as on the existence of a parent and the perceived capital strength of that parent. Some of the strongest parents are commercial or industrial firms. Financial ties to such parents often help raise a finance company's credit ratings and thus lower its borrowing costs, a benefit of ownership that is not institutionally available to commercial banks.

Chart 5 plots credit ratings against stand-alone book capitalization for a number of large finance companies, distinguishing companies with well-rated parents from the others.⁶ The apparent negative relationship between credit ratings and capital ratios is striking. At the same time, the chart shows that the companies with strong parents had better credit ratings in spite of lower stand-alone ratios.

Econometric analysis confirms the central role of parents in finance companies' credit ratings. Table 4 presents estimates of the effect of capital ratios, asset size, parent relationships, and parents' senior debt ratings on a company's senior debt rating. When the parents' ratings are left out, asset size is the only significant variable. This finding may suggest that size leads to risk-reducing diversification or that size proxies for such unobservable factors as efficient management. For the companies with parents, however, the parent's credit rating is clearly the dominant factor explaining a subsidiary's rating.

⁴To estimate the regression, the bond ratings are assigned numerical values ranging from a value of 1 for AAA to a value of 10 for BBB-.

⁵A good credit rating is important to finance companies not simply because it keeps the explicit cost of funds low but also because it eases access to the securities market for large debt issues. The average rate for A2/P2 paper from 1980 to 1990, for example, was only 31 basis points more than for A1/P1 paper. More important, money market mutual funds shunned paper that was less than prime; under tight restrictions recently imposed by the Securities and Exchange Commission, this practice has become a rule.

⁶Capital is measured to include both equity and subordinated debt. Some studies include only equity when comparing the capital ratios of financial institutions. See, for example, U.S. Department of the Treasury, "Modernizing the Financial System: Recommendations for Safer, More Competitive Banks," February 1991, chap. 2, Table 1.

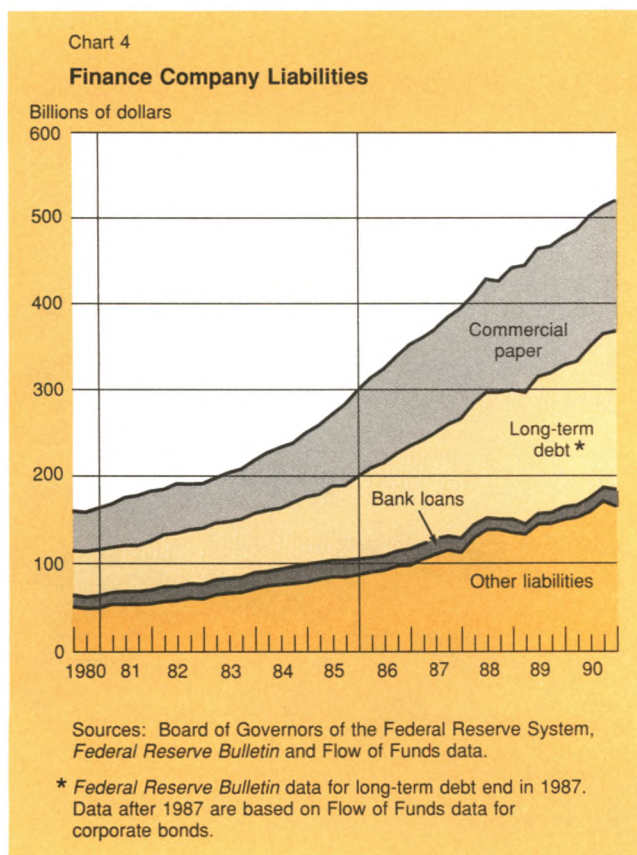


Table 2

Finance Company Credit Ratings and Growth

	1985 Credit Ratings		1990 Credit Ratings		1985-90 Growth Rate
	Senior Debt	Commercial Paper	Senior Debt	Commercial Paper	
Fast-growing companies					
Toyota Motor Credit	AAA	A-1+	AAA	A-1+	69.5
Transamerica Finance	A+	A-1	A+	A-1	31.0
General Electric Capital Corp.	AAA	A-1+	AAA	A-1+	25.6
Security Pacific Financial Services	N.A.	N.A.	N.A.	N.A.	19.9
American General Finance	A+	A-1+	A+	A-1+	18.7
Heller Financial	A+	A-1+	A+	A-1+	17.8
I.B.M. Credit	AAA	A-1+	AAA	A-1+	17.3
Associates Corp.	AA-	A-1+	AA-	A-1+	16.6
American Express Credit	AA	A-1+	AA	A-1+	16.2
Westinghouse Credit	A+	A-1	A	A-1	15.6
Ford Motor Credit	A	A-1	AA-	A-1+	13.5
ITT Financial Corp.	A+	A-1	A	A-1	13.2
Household Financial	AA-	A-1+	A+	A-1	13.2
Slow-growing companies					
Chrysler Financial	BBB	A-2	BBB-	A-3	9.3
Sears Roebuck Acceptance Corp.	AA-	A-1+	N.A.	A-1	9.2
CIT Group	AA	A-1+	A+	A-1	7.3
General Motors Acceptance Corp.	AA+	A-1+	AA-	A-1+	6.9
Commercial Credit	BBB+	A-2	A+	A-1+	2.4
Beneficial Corp	A	A-1	A	A-1	1.3
Avco Financial	A	A-1	A	A-1	-3.2

Source: Standard and Poor's Corporation, *Commercial Paper Guide*.

Table 3

Asset Growth of Finance Companies

(Dependent Variable Is Growth Rate of Assets in a Year)

	Coefficient	
Constant	8.193	(0.767)
Capital ratio (lagged)	-0.001	(-1.014)
Senior debt rating (lagged)	-1.963	(-2.885**)
1986 Dummy	1.539	(0.266)
1987 Dummy	12.669	(2.202**)
1988 Dummy	10.390	(1.847*)
1989 Dummy	5.011	(0.893)
Dummy for captives	10.522	(1.091)
Dummy for noncaptives with parents	12.116	(1.307)
R-squared	0.144	
Adjusted R-squared	0.083	
Sample size	122	
F-statistic	2.372	

Note: T-statistics are in parentheses.

* Significant at the 10 percent level.

** Significant at the 5 percent level.

By assigning the credit ratings, the rating agencies in effect set capital adequacy guidelines for finance companies. In these guidelines, the agencies take impor-

tant account of the parents' strength and the financial ties between parents and subsidiaries. When the parent is rated higher than the finance company, rating agencies consider the capital support the parent has provided in the past and its capacity for future support. When the finance company is rated higher than the parent, rating agencies look for mechanisms that protect the subsidiary in the event of parent stress. These mechanisms may include attorney's letters and debt covenants limiting the capital a parent may take out of a subsidiary. On average, a subsidiary receives a somewhat higher rating than its parent because the financial ties are designed to enhance the finance company's rating rather than its parent's.

Niche markets of finance companies

Finance companies of all sizes focus their business strategy on "niches," market segments in which the companies claim special expertise.⁷ These niches tend

⁷One of the biggest companies, for example, states, "GE Financial Services has been built on the premise that highly focused, individually led, niche businesses enable us to penetrate specific markets quickly, efficiently, and profitably. Thus, the 22 businesses that make up GEFS are discrete organizations staffed by employees who are experts in their market" (GE Financial Services, 1990 *Annual Report*, p. 1). In our interviews with senior officials of several large finance companies, the importance of niche markets was repeatedly emphasized.

to be segments of the consumer credit market and the middle market for business credit. In the consumer credit market in the 1980s, banks and their affiliates gained market share at the expense of finance companies. In the middle market, banks kept their dominance in lending against accounts receivable, while finance companies held sway over the leasing markets.

The niche strategy meant that, for the most part, finance companies avoided head-to-head competition with banks; instead, the finance companies found their own special segments within markets, competing only by offering services that were imperfect substitutes for bank credit. Some finance companies may have found niches by lending to buyers of their parents' products, others by locating market segments barred to banks by regulatory restrictions.

Dynamic economies of scale

In the credit market niches favored by finance companies, credit risks make specialized information critically

important. This special information is acquired through practical experience in the market segment—a form of learning-by-doing. Thus a new lender will face risks greater than those confronting lenders already established in the niche. Such dynamic economies of scale in information cause unit costs to decline with *cumulative* output, unlike static economies of scale, which cause unit costs to fall with *current* output levels. The unit cost curve of a financial service in a niche market is represented in Chart 6. The cost curve is intended to incorporate expected loan losses, operating expenses, and an assumed constant cost of funds. In providing credit services, the lender reduces its noninterest expenses as it learns more about the market, borrower characteristics, and ways to control credit risk.

Structure of income and expenses

The income and expenses of finance companies form a structure that appears consistent with an emphasis on niche markets. Table 5 compares the structure of income and expenses for large finance companies and

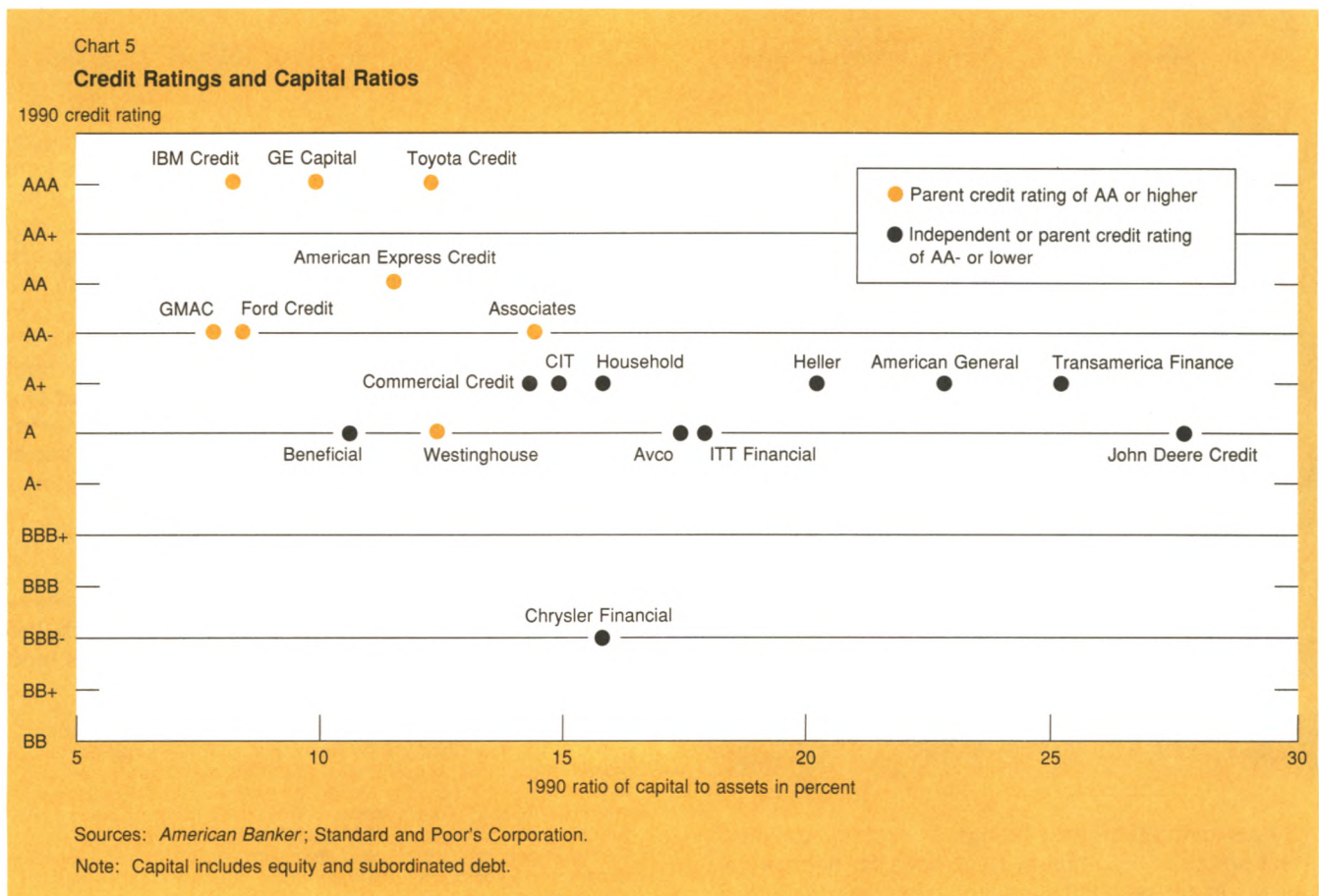


Table 4

Factors Affecting Credit Ratings of Finance Companies

(Dependent Variable Is Rating of Senior Debt)

	All Companies	Companies with Parents
Constant	5.518 (4.550**)	1.723 (5.273**)
Capital ratio (lagged)	0.039 (1.704)	-0.012 (-1.051)
Asset size (lagged)	-0.493 (-3.964**)	-0.130 (-2.877**)
Dummy for captives	1.460 (1.141)	
Dummy for noncaptives with parents	-0.522 (-0.430)	
Rating of captive's parent		0.809 (18.490**)
Rating of noncaptive's parent		0.580 (14.484**)
R-squared	0.260	0.826
Adjusted R-squared	0.235	0.818
Sample size	125	92
F-statistic	10.517	103.258

Note: T-statistics are in parentheses.

* Significant at the 10 percent level.

** Significant at the 5 percent level.

companies because banks can issue low-rate insured deposits. Nonetheless, finance companies earn higher spreads by charging their borrowers higher interest rates. Their higher lending rates reflect the greater risks in their niche markets as compared with the credit markets served by banks. In addition, dynamic economies of scale in information allow the finance companies to control their losses and keep their noninterest expenses nearly as low as banks'. As a result, finance companies are able to earn higher returns than banks earn.

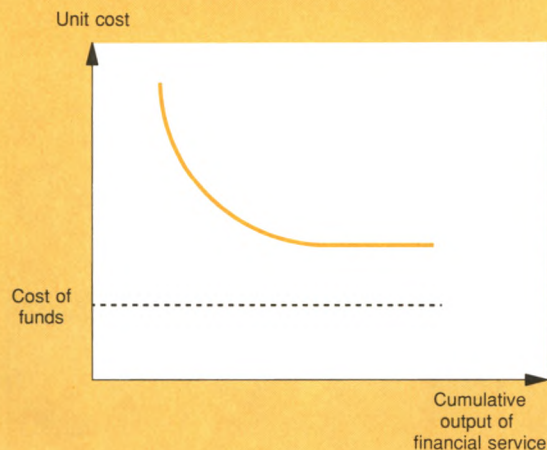
Consumer installment credit

As consumer installment credit grew in the 1980s, finance companies lost market share to banks. In this market, banks may have found an edge in the ordinary economies of scale achieved through data processing technologies and may then have built on that edge in the course of the decade. By the second half of the decade, consumer installment credit extended by banks was growing 7.2 percent a year, while that extended by finance companies was growing 4.2 percent. The finance companies' share of the market fell from 34 percent to 28 percent (Chart 7).

In the auto loan market, the finance company captives of domestic auto manufacturers used subsidized incentives to increase their market share in the middle years of the decade, but subsequent declines in the

Chart 6

Unit Cost of Financial Service with Dynamic Economies of Scale



insured commercial banks.⁸ Average interest expenses are a smaller fraction of assets for banks than for finance

⁸The comparison should be treated with caution because it sets only nine large finance companies against all insured commercial banks. A similar comparison by Richard Mead and Kathleen O'Neil uses data for 1980-84. See "The Performance of Banks' Competitors," *Recent Trends in Commercial Bank Profitability: A Staff Study*, Federal Reserve Bank of New York, September 1986, pp. 269-366.

Table 5

Analysis of Income for Finance Companies and Banks, 1988-90 Average

Percent of Assets

	Finance Company Sample	All Insured Commercial Banks
Interest revenues	11.36	9.48
Interest expenses	<u>7.21</u>	<u>5.99</u>
Interest spread	4.15	3.49
Other revenues	2.12	1.57
Other expenses	<u>4.54</u>	<u>4.18</u>
Income before taxes and extraordinary items	1.72	0.88
Income taxes and extraordinary items	<u>0.55</u>	<u>0.27</u>
Net income	<u>1.17</u>	<u>0.62</u>

Sources: Annual reports for finance companies; "Recent Developments Affecting the Profitability and Practices of Commercial Banks," *Federal Reserve Bulletin*, July 1991, p. 507.

Note: The finance company sample comprises American Express Credit, Associates Corp., Chrysler Financial, CIT Group, Ford Motor Credit, General Motors Acceptance Corp., Household Finance, ITT Financial Corp., and Sears Roebuck Acceptance Corp.

sales of the parents allowed banks to get their share back quickly.

Secular trends are clearer in the nonauto consumer credit market. Whatever niche advantage finance companies may have had in personal cash loans was overwhelmed by the advantages banks realized from the development of credit-card technologies, including large-scale credit information services and servicing systems for huge numbers of small accounts.⁹ Banks' experience in servicing retail deposits may have given them a better appreciation of the new technology, so that they were quicker than finance companies to offer card-based revolving credit. The technology allowed the extension of credit to be linked to purchases of a wide range of goods and services, an arrangement customers evidently found more convenient than the traditional personal loans from finance companies.

Factoring

Factoring is the business of making loans against accounts receivable, the financing arrangement most widely used in the apparel and textile industries. In

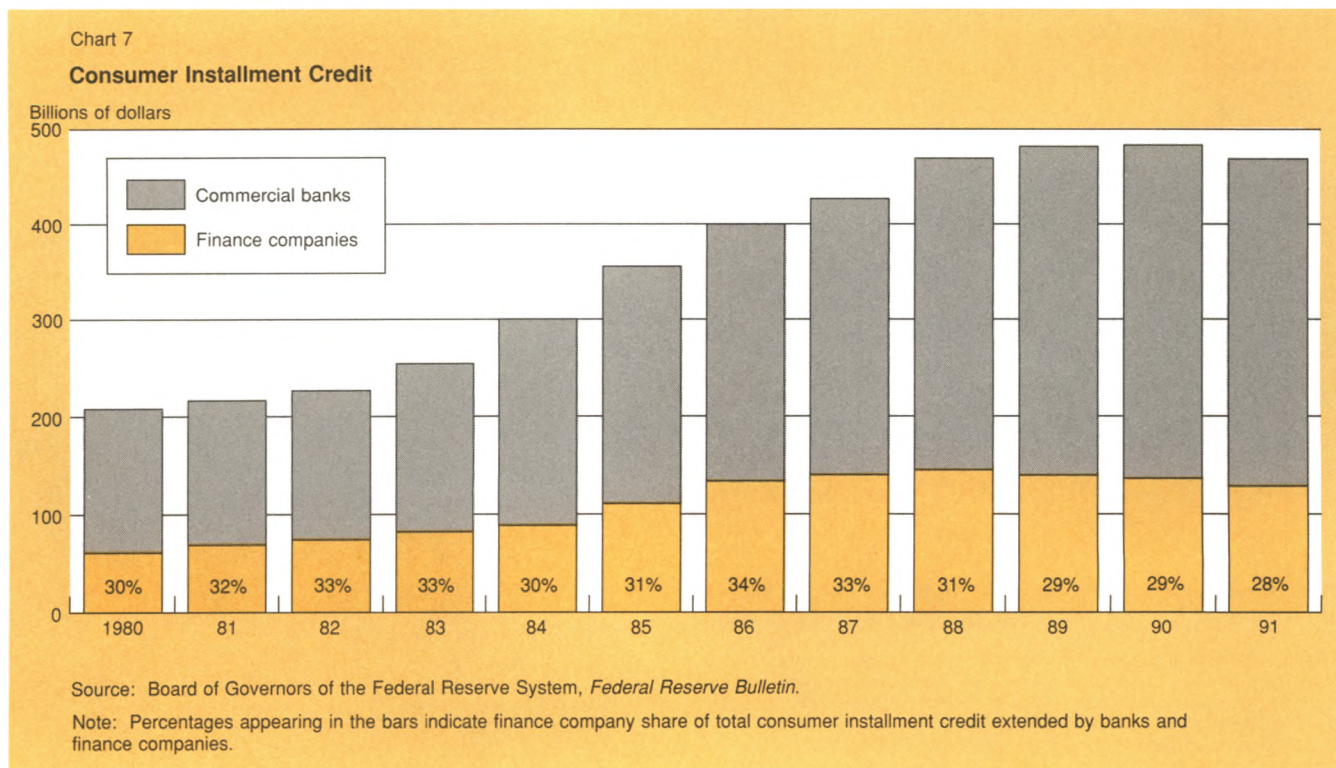
⁹See Sangkyun Park, "The Credit Card Industry: Profitability and Efficiency," Federal Reserve Bank of New York, May 1992, unpublished paper.

practice, the factor purchases a client's accounts receivable without recourse, thus assuming all credit risks as well as collection and bookkeeping responsibilities.¹⁰ This arrangement differs from ordinary accounts receivable financing, in which the client merely pledges its accounts receivable as collateral for a loan.

Bank-related factors have long dominated the factoring industry. Table 6 shows factoring volume in 1985 and 1990 for the fifteen largest factors. Bank-related factors accounted for 94 percent of the total volume in both years. Although volume for the non-bank-related factors grew faster than volume for the bank-related factors, the banks maintained their dominance of the business. Note that a growth rate of 8.4 percent a year in bank-related factoring is impressive compared with the 2.8 percent growth in commercial and industrial lending by banks in the same period.

A probable reason for the banks' success in factoring is that the credit review process for the business is similar to that for other forms of revolving credit extended by banks. Factoring, unlike certain forms of lease financing, does not give the creditor clear posses-

¹⁰See Charles Rumble, "Factoring by Commercial Banks," *Journal of Commercial Bank Lending*, February 1969, pp. 2-5.



sion of an asset, but banks have found effective ways to secure their interest in the underlying collateral.

Lease financing

Finance companies found the leasing market to be much more hospitable territory than the consumer installment credit market. Finance companies started out with a market share twice that of banks and ended up with a share perhaps three times the share of banks (Chart 8).¹¹ Most of the banks' share took the form of nonoperating leases because until late in the period, Federal Reserve Regulation Y limited banks to leases that were economically equivalent to loans.¹² During the decade, finance company leasing receivables grew 18 percent a year. Most of the increase in absolute terms was in equipment leasing, although auto leasing receivables grew at a faster rate.

¹¹More precise comparisons are difficult because the data are gross receivables for finance companies and net receivables for banks. However, an adjustment for the difference between gross and net would not change the figures by more than 20 percent.

¹²Under Section 225.25 (b) 5 for permissible nonbanking activities, the leases must be structured to transfer ultimate ownership of the asset to the lessee or to expose the lessee to most of the asset risk. Regulation Y stipulated that the residual value of the leased asset not exceed 20 percent of the acquisition cost.

The strong demand for equipment leasing in the 1980s stemmed from tax incentives. The Economic Recovery Tax Act of 1981 provided for a faster write-off of capital expenditures under simplified and standardized rules. The leases offered by finance companies were a way to shift the tax benefits of accelerated depreciation to the companies that had the income to shelter. Banks, however, could offer only nonoperating leases and thus could not shelter their own income.

Later in the decade, the corporate leveraging trend probably added to the demand for equipment leasing. The banks themselves contributed to this demand by their participation in highly leveraged transactions. Debt-burdened firms strapped for cash could turn to sale leasebacks to raise funds at a lower cost than that demanded in other debt markets. Unless the sale of equipment was prohibited by existing loan covenants, the sale leaseback enabled a lessee to borrow more cheaply by effectively offering the lessor seniority with respect to the leased asset. The cheaper cost of borrowing would come at the expense of other creditors, who would lose their seniority with respect to the asset.

In the main equipment leasing niches of finance companies—commercial aircraft, construction equipment, machine tools, and medical equipment—dynamic economies of scale in information are indeed important. Information about the value of the equipment over its economic life is crucial for assessing contracts. Most of the gains and losses in the business turn on having the proper estimates of residual value. In the event of default on an operating lease, the lessor already owns the asset and can easily repossess it, but knowing how to manage a repossessed asset becomes essential.

Finance companies arrived in these niches well ahead of banks and over time accumulated valuable information and developed the expertise necessary to operate effectively in the market. The importance of such information and the difficulty of acquiring the requisite expertise quickly may have given finance companies their most effective defense against bank competition. The experience banks had in securing their interest in financial forms of collateral provided no advantage in a market where repossession was so easy; at the same time the banks were short of experience in the critical area of managing repossessed physical assets.

Economies of scope

A few finance companies may have had an informational advantage in the equipment leasing market because they were owned by the equipment manufacturers. If the residual value of a type of equipment depended critically on the development of new models, it would obviously help a lessor to know what was on the drawing boards. IBM Credit offers a prime example

Table 6

Factoring Volume Millions of Dollars

	1985	1990	Annualized Percentage Change
Bank-related factors			
CIT Group/Factoring	5,800	6,751	3.1
BNY Financial Co.	4,664	6,200	5.9
Citizens & Southern Commercial	4,449	5,800	5.4
Heller Financial	3,300	6,501	14.5
BancBoston Financial	2,967	3,444	3.0
BarclaysAmerican Commercial	2,582	3,843	8.3
Congress-Talcott Factors	2,269	4,110	12.6
Republic Factors	1,750	4,200	19.1
Trust Co. Bank	1,543	2,906	13.5
Ambassador Factors	475	760	9.9
Midlantic Commercial	445	843	13.6
Standard Factors	143	151	1.1
Total	30,387	45,509	8.4
Non-bank-related factors			
Rosenthal & Rosenthal	730	1,160	9.7
Milberg Factors	675	860	5.0
Century Business Credit Corp.	460	901	14.4
Total	1,865	2,921	9.4

Source: *Daily News Record*, February 13, 1991, p. 9.

Notes: Volume is the cumulative dollar value of accounts factored during the year. The volume numbers in 1985 are adjusted for subsequent mergers.

of such economies of scope in its ties with its parent.¹³ These economies, however, appear to be less significant for other major leasing companies. GE Capital, for example, found it advantageous to acquire an existing aircraft leasing finance company, Polaris, even though its parent manufactured aircraft engines.

Breaking through the niche barrier

Bank strategies

Two basic strategies were available to commercial banks wishing to expand into the leasing niches of finance companies. First, banks could have hastened to develop their own expertise through rapid expansion in the niche markets. Second, banks could have purchased the necessary expertise by acquiring existing finance company operations. To succeed, either strategy would have required a cost-of-funds advantage to offset the costs of entry. The first strategy entails the costs of learning from experience, the second strategy the cost of a takeover premium. Moreover, even a signif-

icant cost-of-funds advantage would not have ensured the banks' success. The restrictions imposed by Regulation Y and the difficulties of integrating two different operating cultures presented additional hurdles to entry into the leasing niches.

The strategy of rapid expansion

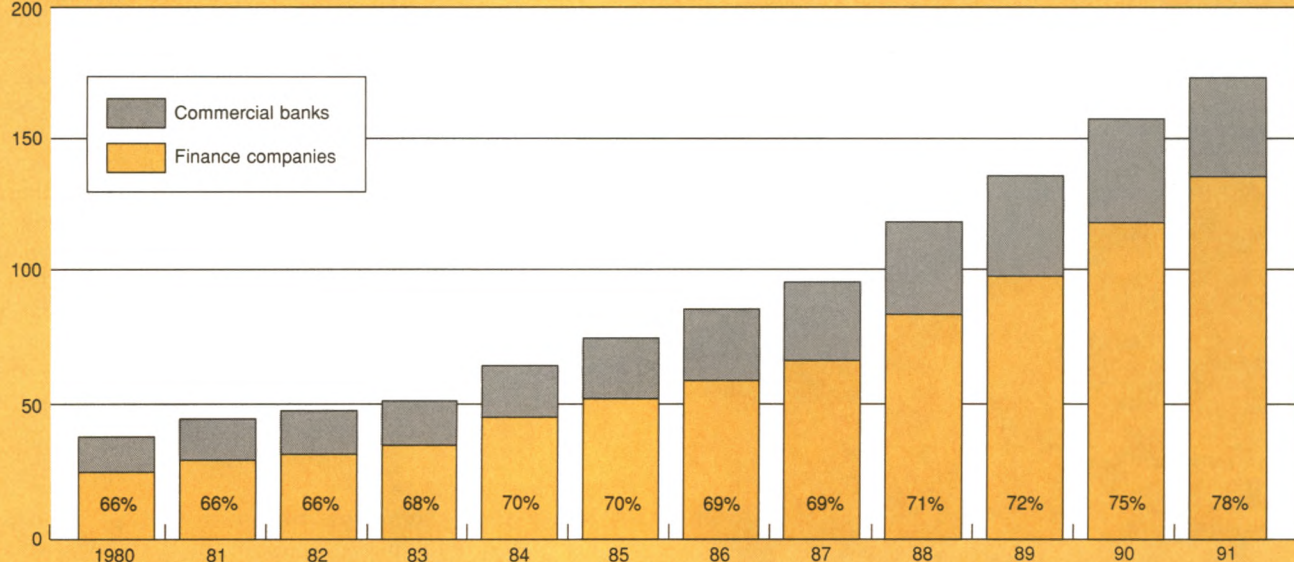
If banks had had a sufficient cost-of-funds advantage, they could have tried to catch up on the learning curves in the leasing markets by expanding rapidly on their own. Chart 9 depicts a lower cost of funds for banks by placing their dynamic cost curve below that for finance companies. Thus the banks may start at a unit cost of c_1 , which is higher than c_2 , the unit cost faced by finance companies. A sufficiently rapid expansion from q_1 to q_3 would bring the banks to a point on their curve that gave them the unit cost c_3 , which is now lower than the finance companies' c_2 . The higher returns the banks would then get would make up for the losses they incurred in pushing their way into the market. In a fast-growing market, this strategy would have a better chance of success if finance companies were already in the flat part of their learning curves, because the banks would not be chasing a moving

¹³The company's 1991 annual report states, "IBM Credit manages residual value risk by developing realistic projections of future values based on carefully monitoring IBM product plans, competitive announcements, and actual remarketing results" (p. 15).

Chart 8

Leasing Receivables

Billions of dollars
200



Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*.

Notes: Because leasing data for commercial banks are reported on a net basis, the data are increased by 20 percent to approximate gross amounts. Percentages appearing in the bars indicate finance company share of total leasing activities by banks and finance companies.

cost target.

Banks do report much lower average interest expenses and operate on much narrower average capital ratios than do finance companies. These differentials, however, represent an intramarginal cost advantage for banks, arising partly from the banks' ability to issue low-rate insured deposits. The relevant cost for competing in new markets is the cost of funds *at the margin*, and here it is less obvious that banks have had a significant advantage.

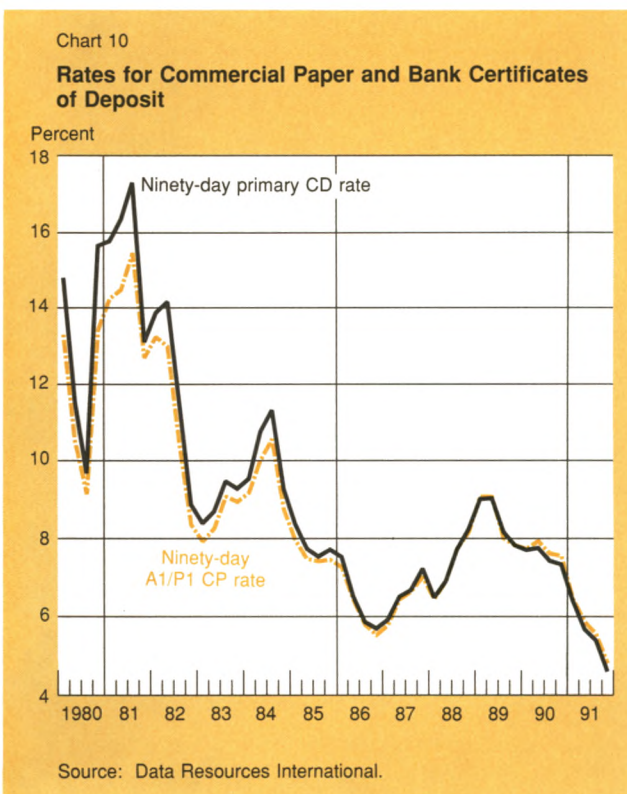
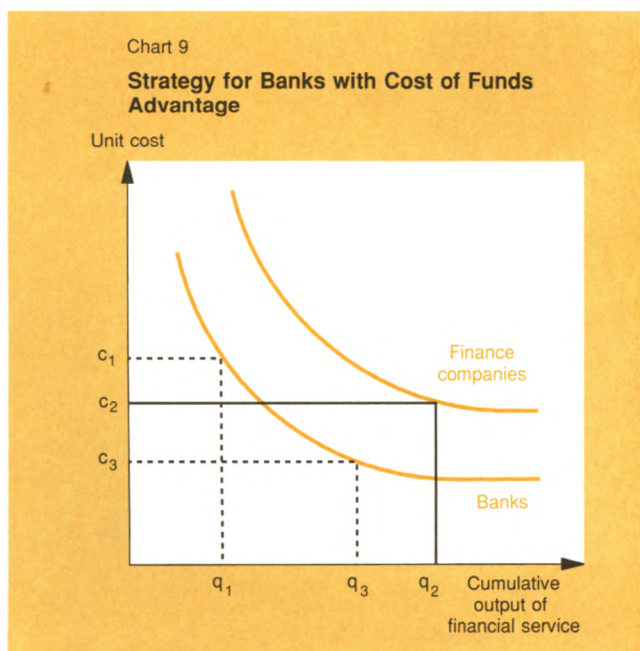
Borrowing costs

The marginal cost of debt in the 1980s appears to have been very similar for finance companies and banks. Finance companies funded themselves at the margin largely by issuing CP and corporate bonds, while banks funded themselves by issuing large certificates of deposit (CDs). In the middle business credit market, the banks' main rivals would have been the prime CP issuers, many of which enjoyed the ratings support of industrial parents. For most of the decade, prime CP rates and bank CD rates moved virtually together (Chart 10). In addition to paying the CP interest rate, finance companies would have paid commitment fees for backup credit lines and placement fees. For their part, banks would have paid deposit insurance premiums and the cost of required reserves. These borrowing costs would not have given banks a cost-of-funds differential to offset any noninterest cost advantage finance companies may have had in their niche markets.

To illustrate, the average interest rate on prime CP from 1986 to 1990 was 7.23 percent. In addition, finance companies would pay perhaps 20 basis points in fees to banks providing the backup credit lines and 5 more basis points to place the paper, resulting in an all-in cost of 7.48 percent. For their part, commercial banks issued their large CDs at an average interest rate of 7.27 percent. In addition they would pay about 8 basis points for deposit insurance and 24 basis points for the cost of the 3 percent reserve requirement on large CDs (the requirement was reduced to zero at the end of 1990). Thus banks incurred an all-in cost of 7.58 percent. This calculation gives finance companies a 10 basis point advantage in borrowing costs; actual costs may have been slightly different, but they are not likely to have given banks a substantial advantage.

Capital and leverage

The cost of funds also depends on leverage and the cost of equity. The true amount of capital held by finance companies that are wholly owned subsidiaries is difficult to calculate because much of a subsidiary's capital tends to be in the form of an option on the parent's capital. Nonetheless, a superficial analysis of the finance companies' booked capital in the second



half of the 1980s suggests that the more successful finance companies did not necessarily suffer a disadvantage relative to banks in terms of leverage and the cost of capital. Although banks operated on narrower average capital ratios, finance companies were able to raise their leverage and thus operate at the margin on capital ratios not far from those of banks.

For most of the large finance companies, growth was accompanied by a decline in capital-to-asset ratios without corresponding downgrades in credit ratings. The fast-growing firms that sharply leveraged up were thus able to expand on relatively narrow marginal capital ratios (Table 7). Five firms—Toyota Motor Credit, IBM Credit, American Express Credit, Westinghouse Credit, and Ford Motor Credit—increased their leverage to the point of placing their capital ratios at or below the median for the group of fast-growing firms. Their marginal capital ratios from 1985 to 1990 ranged from 4.9 percent for IBM Credit to 11.6 percent for Toyota Motor Credit, and as a group their ratio was a mere 6.5 percent. Of the five, only Westinghouse Credit suffered a credit rating downgrade; indeed, Ford Motor Credit managed to obtain upgrades for its senior debt and

commercial paper. The largest fast-growing firm, GE Capital, did not expand by increasing its leverage, but it had a low capital ratio of 10 percent from the start and it maintained this ratio as it grew. Its size and asset quality apparently allowed it to keep the highest ratings for its debt.

Financial ties to industrial parents evidently allowed some of the finance companies to raise leverage without sacrificing their credit ratings. These companies, however, cannot increase their leverage indefinitely, and beyond a leverage limit, they will lose the concomitant benefit in marginal funding costs.

These marginal capital ratios were sufficiently close to those of banks to give finance companies with access to cheap equity financing a cost of funds about on par with that of banks, particularly at a time when these banks were facing loan quality and capital adequacy problems.¹⁴ Relatively cheap equity capital was often available to the subsidiaries of industrial firms because in the 1980s, U.S. industrial firms enjoyed higher price-earnings ratios than did commercial banks

¹⁴In 1986, for example, the large U.S. banks started provisioning heavily for their less developed country (LDC) loans.

Table 7

Finance Company Leverage

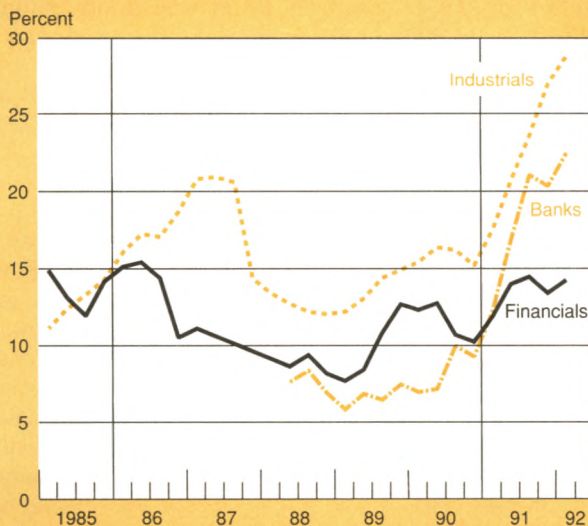
	Capital/Asset Ratio (In Percent) 1985	Capital/Asset Ratio (In Percent) 1990	Change in capital/ Change in assets (In Percent) 1985-90
Fast-growing companies			
General Electric Capital Corp.	10.0	9.9	9.9
Ford Motor Credit	10.4	8.4	6.1
Household Financial Associates Corp.	15.1	15.8	16.7
American Express Credit	17.8	14.4	11.5
ITT Financial Corp.	15.1	11.5	8.3
I.B.M. Credit	20.3	17.9	15.4
Westinghouse Credit	12.2	8.2	4.9
Security Pacific Financial Service	18.1	12.4	7.1
Transamerica Finance	13.3	13.7	13.9
Heller Financial	26.6	25.2	24.9
American General Finance	22.5	20.2	18.3
Toyota Motor Credit	22.1	22.8	22.9
Median	23.3	12.3	11.6
	17.8	13.7	11.6
Slow-growing companies			
General Motors Acceptance Corp.	8.7	7.8	5.4
Chrysler Financial	17.7	15.8	12.4
Sears Roebuck Acceptance Corp.	22.2	18.7	12.6
CIT Group	13.7	14.9	3.2
Commercial Credit	14.5	14.3	11.9
Beneficial Corp.	12.6	10.6	-19.4
Avco Financial	19.5	17.4	30.0
John Deere Credit	22.0	27.7	50.9
Median	16.1	15.3	12.2

Source: *American Banker*.

Note: In each growth category, finance companies are ranked by size.

Chart 11

Price/Earnings Ratios



Source: Standard and Poor's Corporation.

(Chart 11). In particular, GE Capital, IBM Credit, and Toyota Motor Credit seem to have combined access to low-cost equity through industrial parents with relatively narrow marginal capital ratios to at least match the cost of capital for most large U.S. banks.¹⁵

Operating culture

Some bank holding companies would have had difficulty integrating a leasing operation's activities with the whole organization's credit review process. In making credit decisions, commercial banks rely on information about the borrower's financial condition, while finance companies offer a lease based simply on the value of the collateral and the equity stake of the lessee in the equipment. The banks' credit process seems to work effectively in the factoring market, where banks continue to dominate, but not so well in leasing, where a

¹⁵An example will clarify how the cost of funds is calculated for banks and finance companies. In the case of banks, a marginal capital ratio of 0.07, a cost of debt of 7.5 percent, and a cost of equity of 18 percent would give a weighted cost of funds of 8.24 percent. In the case of finance companies, a marginal capital ratio of 0.10, a cost of debt of 7.5 percent, and a cost of equity of 15 percent would give a cost of funds of 8.25 percent, virtually the same as that of banks.

Table 8

Twenty-Five Largest Acquisitions of Finance Company Assets, 1980-91

Target	Target's Main Activity	Acquiring Company	Date	Value (Millions of Dollars)
Associates Corp.	Consumer credit	Ford Motor Co.	10/89	3,350
Ford Motor Credit (real estate receivables)	Real estate	Associates Corp.	1/91	2,200
CIT Group	Factoring	Manufacturers Hanover Corp.	4/84	1,510
Macy	Credit cards	General Electric Capital Corp.	5/91	1,400
Barclays American/Financial	Consumer credit	Primerica Corp.	3/90	1,350
Meritor	Consumer credit	Ford Motor Co.	3/89	1,300
CIT Group	Factoring	Dai-ichi Kangyo Bank	12/89	1,280
Henley Group	Leasing	Itel Corp.	9/88	1,194
Chase Manhattan	Leasing	General Electric Capital Corp.	1991	1,024
Bank of New England	Communications lending	Canadian Imperial Bank	4/90	1,000
Itel Corp. (leasing receivables)	Leasing	General Electric Capital Corp.	1991	917
Bank of New England	Credit cards	Citicorp	2/90	828
Commercial Credit	Commercial finance	Security Pacific Corp.	6/85	800
Chase Manhattan Leasing Co.	Leasing	Associates Corp.	9/91	800
BWAC	Commercial finance	Transamerica Corp.	11/87	783
Manufacturers Hanover Consumer Services	Consumer finance	American General Corp.	5/88	685
Signal Capital Corp.	Equipment finance	Fleet/Norstar Financial Group	8/89	674
C. T. Bowring & Co.	Consumer credit	Marsh & McLennan Cos. Inc.	7/80	569
Shawmut (credit card receivables)	Credit card receivables	Norwest Corp.	1/91	568
Fidelcor Business Credit Corp.	Commercial finance	CIT Group	2/91	502
Lomas Bankers Corp.	Consumer credit	LBC Acquisition Corp.	8/89	500
PacifiCorp Credit Inc.	Leasing and financing	AT&T	1/90	460
McCullagh Leasing Inc.	Leasing and commercial finance	General Electric Co.	2/90	450
Walter E. Heller International	Factoring	Fuji Bank Ltd.	1/84	425
BankAmerica Corp. (Finance America subsidiary)	Consumer credit	Chrysler Corp.	11/85	405

Sources: Automatic Data Processing; annual reports.

physical asset is involved. Most banks have not been set up for the active management of physical assets. If a lessee defaults, a finance company lessor would typically be better prepared than a bank lessor to take the asset back and to find the use for it that best allowed recovery of the investment.

Regulation Y

Until the latter part of the 1980s, Federal Reserve Regulation Y would have made it difficult for banks to expand into operating leases. This regulation limited nonbank subsidiaries of bank holding companies to providing only nonoperating leases, a restriction that deprived banks of the tax advantage of operating leases. National banks were subject to restrictions imposed by the Office of the Comptroller of the Currency (OCC). During the latter half of the decade, the OCC restrictions were less stringent than those of Regulation Y. Bank holding companies, however, could apply to engage in operating leases. By 1989, Regulation Y had been sufficiently relaxed so that it no longer served as a binding constraint on banks' leasing activities.¹⁶ By then, however, new capital standards under the Basle Accord, problems with loan portfolios, and a cost of equity disadvantage placed large banks at a serious disadvantage in expanding into the leasing market.

The acquisition strategy

Efforts by banks and other firms in the 1980s to acquire existing finance company operations provide indirect evidence of the difficulties of penetrating the leasing niches of finance companies. The acquisition strategy, like the strategy of self expansion, faced hurdles of funding costs, operating cultures, and Regulation Y.

The decade saw a total of perhaps \$30 billion in deals that resulted in acquisitions of finance company assets. Of the twenty-five largest acquisitions since 1980, seven were of leasing operations (Table 8). Of these, only one—the acquisition in 1989 of Signal Capital's equipment leasing business by Fleet Norstar—was an acquisition of a leasing business by a bank holding company. Indeed two other acquisitions took the opposite direction: Chase Manhattan sold one leasing operation to GE Capital and another operation to Associates, two acquirors with industrial parents. The banks' large acquisitions were most often factoring and consumer businesses. Industrial firms tended to acquire leasing and other business credit operations.

Fleet Norstar's acquisition of a leasing business,

though unusual, suggests that this bank, at least, perceived itself as having a cost-of-funds advantage. In addition, Fleet Norstar may have escaped the difficulties posed by differences in operating culture because at the time of the acquisition, it already had a substantial leasing operation of its own. Finally, the takeover shows that by 1989 Regulation Y was not an absolute barrier to expansion in the equipment leasing market.

Conclusion

Many observers interpret the apparent success of large finance companies in competition with banks as evidence of the advantages enjoyed by unregulated financial intermediaries with ties to industrial parents. Any such advantages, however, would not readily explain why finance companies would outperform banks in some credit markets but not in others: in the 1980s, finance companies gained in the middle market for business credit, while banks gained on finance companies in the consumer credit market. This article suggests that this differential performance was driven largely by structural features of specific markets rather than institutional differences between banks and finance companies.

Finance companies saw their most impressive gains in their leasing niches, where their long involvement gave them important advantages in market information. Success in credit market segments that were among the fastest growing in the United States allowed finance companies to outstrip banks overall. While niche information was the source of the finance companies' advantage in leasing markets, large-scale data processing technologies provided banks with their own advantage in the consumer installment credit market.

Institutional factors of regulation and ownership do help explain why banks were so slow to take advantage of opportunities in the fast-growing leasing markets. In the 1980s, Regulation Y and an alien operating culture served to inhibit bank entry into these markets. These impediments, however, did not prevent some banks from penetrating these markets successfully. It appears that the critical barrier for most banks was their lack of a cost-of-funds advantage. In the 1980s, the importance of funding costs was heightened by the ability of potential finance company rivals to increase leverage and raise cheap capital, often by exploiting financial ties to industrial parents. At the same time, many large banks saw their own cost of capital rise because of loan quality problems and tightened capital adequacy standards. Had the banks maintained a stronger capital base, they would have been in a better position to compete in the niche markets of other financial intermediaries.

¹⁶In May 1992 the leasing restrictions of Regulation Y were made comparable with the OCC's rules.