

Business Strategies: Bank Commercial Lending
vs. Finance Company Lending

by

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The secular decline of bank business lending and other traditional banking activities raises serious public policy concerns. Most observers regard banks as socially indispensable for their operation of the payments system and for their roles in transmitting monetary policy and channelling emergency liquidity to the financial system.¹ Some fear that shrinkage of the banking system will weaken the social benefits of consumer protection and community reinvestment laws that apply to banks but not to their nonbank competitors.² However, unlike the feared decline of these banking functions, the social cost of a decline of banks' business

¹ For example, E. Gerald Corrigan, "Rebuilding the Financial Strength of the U. S. Banking System," *Federal Reserve Bank of New York Quarterly Review*, Summer 1992, 1-4.

² Eugene A. Ludwig, "The Outlook for the Banking Industry," *Bank News*, January 1994, 9-12. Ludwig adds: "In another generation, at the current rate of decline, the banking system will have dwindled to economic insignificance".

lending and the rise of nonbank lenders is unclear.³ Few who fear the implications of the decline in banks' market share argue that the decline will result in the inefficient allocation of credit. On the contrary, the message implied in the shift of business borrowing to nonbank lenders may be that banks do *not* allocate credit efficiently.

Nevertheless, banks have advantages as allocators of credit that derive from their presumably indispensable role in society. Most notably, these include cost advantages in gathering information about borrowers' creditworthiness and in financing loans. As operators of the payments system, banks are in a unique position to assess the financial condition of borrowers by monitoring cash flows through the borrowers' deposit accounts.⁴ In addition, the deposit insurance system, created because of congress's desire to perpetuate critical banking functions, guarantees banks' access to low cost funding and subsidizes their cost of capital. On the other hand, some observers imply that the deposit insurance system leads to inefficient credit allocation by permitting an unhealthy expansion of banking. Because it makes massive amounts of guaranteed funds available, deposit insurance may have supported the expansion of banking to the point that "excessive numbers of banks has meant destructive competition in lending to

³ Beckett and Morris offer evidence that "nonbank sources of credit are becoming better substitutes for bank [business] loans". They conclude that the availability of alternative sources of credit has flattened the demand curve for bank loans. Sean Beckett and Charles Morris, "Are Bank Loans Still Special?" Federal Reserve Bank of Kansas City *Economic Review*, third quarter 1992, 71-84.

⁴ The specific advantage of privileged and costless information gained by observing a borrowers' deposit behavior over a period of time is raised by Fischer Black, "Bank Funds Management in an Efficient Market," *Journal of Financial Economics*, 1975, 323-339 and Eugene F. Fama, "What's Different About Banks?" *Journal of Monetary Economics*, June 1985, 29-39.

ever less creditworthy customers."⁵

This paper reviews the shift of a large segment of credit market share to commercial finance companies during the past decade and raises the question whether banks' loss of market share resulted in a loss of efficiency. Primarily, the paper compares the differences in lending and risk intervention strategies between banks and commercial finance companies and generalizes about the results in terms of risk reduction and risk-return tradeoffs. Commercial lending by independent finance companies and commercial finance credit subsidiaries of bank holding companies presents an interesting free market approximation to compare with lending operations in a regulated bank environment.⁶

The first section reviews the relative decline in bank lending and the concomitant rise of commercial finance company lending. The next section characterizes differences in loan selection by banks and finance companies, describes credit intermediaries as risk intervenors and compares how banks and finance companies exercise three distinct stages of risk intervention. The section following this presents evidence on the effectiveness of risk intervention by banks and finance companies. The next section applies the market model from the finance literature to attempt a comparison of post intervention risk in banks and finance companies. The next section attempts to explain differences in the effectiveness of risk intervention by banks and

⁵ Robert R. Glauber, "FDICIA: The Wheels Came Off on the Road Through Congress", in *Assessing Bank Reform: FDICIA One Year Later*, ed. George G. Kaufman and Robert E. Litan (Washington, D. C.: Brookings Institution, 1993, 33-41.

⁶ To be sure, finance companies are not totally unregulated. For example, they must adhere to an unfavorable system of providing for loan losses that prevents treating loss provisions as a routine tax deductible business expense. Small banks are permitted such expense.

finance companies by contrasting generic qualities of their credit cultures, including the effects of bank supervision. The final section summarizes policy implications.

Banks' Share of C&I Loans

Decline in Bank Business Lending

Data readily confirm the extent of a decade-long loss of banks' market share in business lending to commercial finance companies. Table 1 shows that in every year during the period from 1983 through 1992, business credit at commercial finance companies grew faster than at U. S. commercial banks. The ratio of finance company business credit to bank commercial and industrial (C&I) loans swelled from 20 percent in 1982 to 55 percent in 1992.

Numerous explanations of this dramatic shift have been offered. A long-term view holds that the reduction in bank loans to business is a continuation of losses of business relationships that began with the late 1960s' episodes of Regulation Q-induced disintermediation. Major banks of that era periodically encountered shortages of funds and reneged on lending commitments to large corporate borrowers, forcing the corporations to find alternative sources of credit such as the commercial paper market.⁷ Another view holds that banks have lost their historical funding cost advantage compared to nondepository intermediaries. Deposit interest rate deregulation of the 1980s, recent increases in FDIC insurance premiums and a stiffer pricing environment brought on by competition for deposits from investment intermediaries such as

⁷ James L. Pirece, *The Future of Banking*, Yale University Press (1991), 6.

mutual funds directly impacted banks' cost of funds.⁸

Further, the loss of banks' traditional "blue chip" corporate loan market, profitability concerns and the opportunity to exploit FDIC protection of their uninsured deposits attracted banks to the promise of large payoffs on high risk loans to less developed countries, energy development and production, real estate and highly leveraged takeovers.⁹ In this pursuit they shrank lending to their bread-and-butter core customers in the small and middle markets. The turning away from core business borrowers may have been accentuated by banks' excessive caution during the early 1990s' economic downturn when they dramatically tightened credit standards and reduced nonconsumer lending.¹⁰ In the meantime, finance companies persisted in their traditional core asset-based loan markets.

Finally, overzealous regulation and tough bank examinations may be responsible for cyclical declines in the availability of bank credit. In late 1991, in response to this perception, high level Bush administration officials lectured bank examiners about the need for "character lending" and the banking agencies modified supervisory rules on real estate lending.¹¹ During 1993, in a similar vein, the Clinton administration modified bank supervisory procedures by introducing streamlined measures for loan applications, including reduced documentation

⁸ Cynthia A. Glassman, *The Weakening Role of Banks in Financing Small Business*, Association of Reserve City Bankers, 1993.

⁹ *Supra* note 7.

¹⁰ Mike McNamee, "Jumping into the Credit Gaps," *Business Week*, October 19, 1992, 94,95.

¹¹ Office of the Comptroller of the Currency, Federal Deposit Insurance Corporation, Federal Reserve Board and Office of Thrift Supervision, "Interagency Policy Statement on the Review and Classification of Commercial Real Estate Loans", November 7, 1991.

requirements. Also, in particular, some observers believe that the Basle capital adequacy guidelines and, recently, the prompt regulatory action capital provisions contained in Section 131 of the Federal Deposit Insurance Corporation Improvement Act of 1991, have shifted banks' priorities from acquiring new loans to building their capital positions.¹² Alternatively, the influence of capital requirements on bank lending may be positive when the relationship is examined over several lending cycles.¹³

On the other hand, the decline in C&I lending at banks may be only a temporary matter. Banking firms have shifted "down market" into middle and small firm markets served by finance companies and otherwise have invaded finance company markets by establishing asset-based lending units or subsidiaries, with the latter frequently accomplished by acquiring well-established finance companies.¹⁴ Given their superior capital strength, including implied public capital derived from government deposit insurance, this substitution of bank lending for finance company lending is predictable. With such a shift, the issue raised in this paper concerning the "goodness" of bank lending is joined.

¹² A view representative of the early 1990s appears in Simon Brady, "Credit Crunch? What Credit Crunch," *Euromoney*, March 1991, 22-32.

¹³ Robert R. Moore, "Bank Lending and Bank Capital: A Panel Data Assessment of Market and Accounting Values," *Finance Industry Studies Working Paper*, Federal Reserve Bank of Dallas, 2-94 March 1994.

¹⁴ See Leslie Scism, "Commercial Finance Firms Have New Rivals in Banks," *Wall Street Journal*, June 24, 1993.

Financial Firms as Risk Intervenors

Risk Profiles: Banks and Finance Companies

Commercial finance companies, particularly the independent firms, typically are thought of as high risk institutions. On an asset quality scale, conventional wisdom places them somewhere between pawn shops and "quick-cash" storefronts on the low end and commercial banks on the high end. Their clients are considered less creditworthy than commercial bank borrowers. A typical finance company mission is to provide asset-based financing to "companies which are unable to obtain financing from traditional sources."¹⁵ Some firms target "ugly" industries typically shunned by banks such as auto repair shops, doughnut shops, and gospel radio stations.¹⁶ In general, commercial finance companies lend to borrowers that are highly leveraged, are prone to grow rapidly, serve relatively unstable markets, lack a lengthy record of past success and are thought to be less well managed. In general, they tend to have high variance operating cash flows.

Conventional wisdom about the asset quality of commercial banks is dramatically different. High risk activities are proscribed by bank regulation while on-site inspections by bank regulators attempt to reinforce safety and soundness of banks.¹⁷ By tradition, the business lending divisions of banks select loans with low default probabilities as determined by "periodic evaluations of the organization's ability to meet low-priority [subordinated] fixed payoff

¹⁵ SNL Securities, L.P., *The SNL Financial Services Quarterly*, 1993, 1, Number 4, B-40.

¹⁶ BBB Research, 1992. "Allied Capital Overview".

¹⁷ *Supra* note 7.

contracts".¹⁸ Such evaluations determine the sufficiency of and acceptable expected variance of borrowers' cash flows. Researchers have provided empirical evidence of the value of banks' evaluation processes by showing that the market values of borrowing firms rise either when they initiate bank loan agreements¹⁹ (but not private placements) or else when loan agreements are renewed.²⁰

Federally-guaranteed sources of funds combined with prophylactic regulation may insulate banks from the discipline of market forces. These factors might nourish a cloistered credit culture that prevents banks from efficiently performing the tasks of, first, measuring borrower risk and then pricing, structuring and managing credits to produce an appropriate return on (and recovery of) their investment.

In the first instance, insured depositors provide funds without concern for the quality of banks' credit management and may make banks indiscreet about credit risk. Second, because they are regulated, banks may have developed a credit culture that is not suited to dealing with market forces efficiently because bankers are preoccupied with creative responses to "man-made" regulation and on-site examinations. As a result of government's role, banks may be inhibited in the development of innovative approaches to pricing, structuring and managing credit and may fail to adopt a sufficiently independent strategic focus.

¹⁸ Fama, *supra* note 4.

¹⁹ Christopher James, "Some Evidence on the Uniqueness of Bank Loans: A Comparison of Broad Borrowing Agreements, Private Placements and Public Debt Offerings," *Journal of Financial Economics* 19, 217-236.

²⁰ Scott Lummer and John McConnell, "Further Evidence on the Bank Lending Process and the Capital Market Response to Bank Loan Guarantees," (Purdue University, West Lafayette, IN), 1988.

Risk Intervention

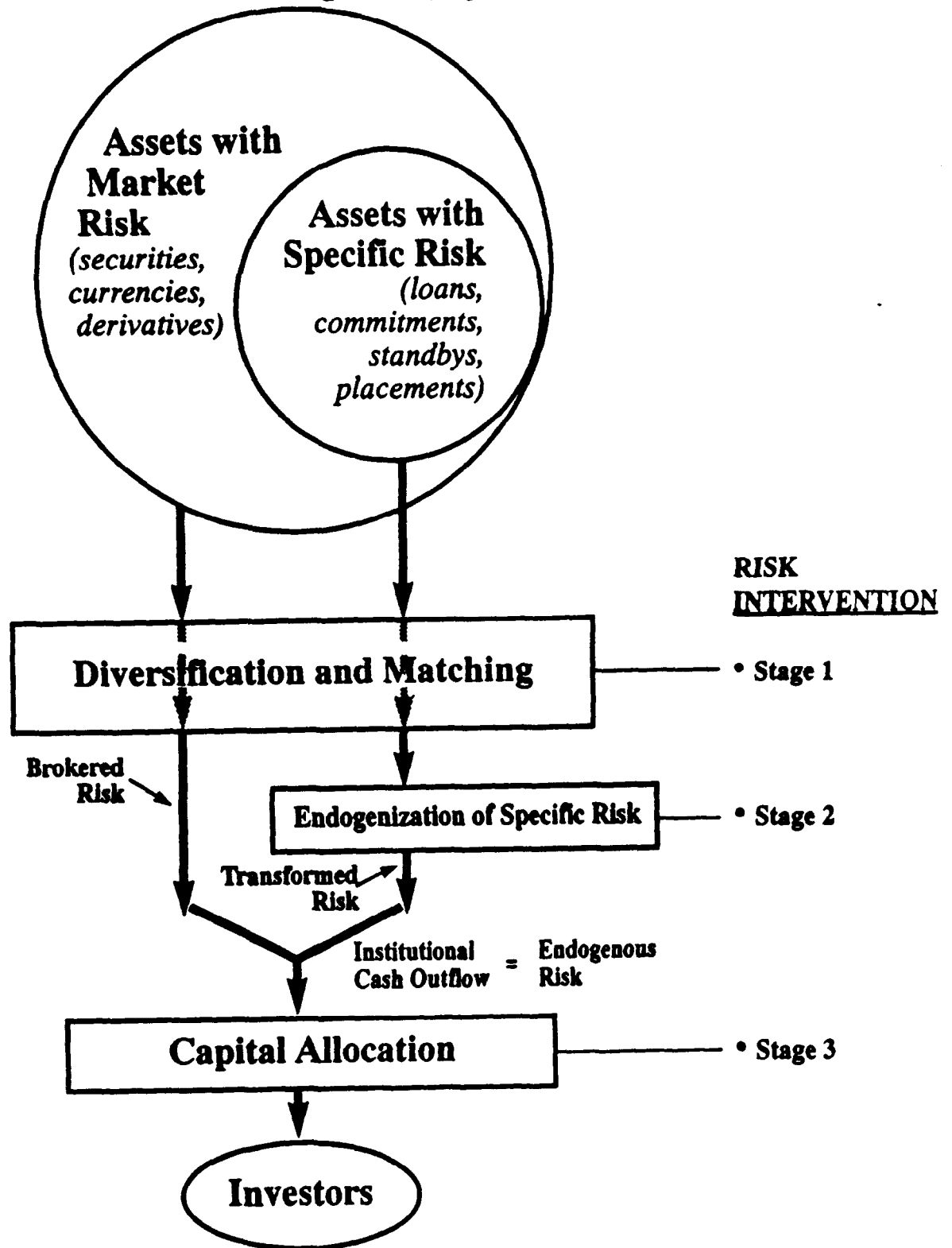
I postulate a simple theory of risk intervention as a vehicle for evaluating credit management in banks and commercial finance companies. Credit intermediaries acquire the exogenous risks of many single borrowers with given levels and variances of cash outflows. They tap into borrowers' cash flows and aggregate and transform them to create their own institutional cash flow pattern for ultimate distribution to their investors.²¹ The aggregation and transformation of borrowers' cash flows is not a transparent process. Managers of all financial institutions, including mutual funds, pension funds, finance companies, banks and others, intervene to control the detrimental effects of the variances of their borrowers' cash flows on their institutions and the institutions' shareholders. I analyze this intervention in three stages as illustrated in Figure 1.

In the first stage of risk intervention, financial institutions diversify the accumulation of single assets in order to avoid asset portfolios of homogeneous borrowers with highly correlated exogenous risks. In addition, at this stage, they control the match of asset maturities with funding maturities.

In the second stage, finance companies and banks do not simply broker the diversified exogenous (stage one) risk of their borrowers through to their shareholders as mutual funds do. Instead, in a process of risk endogenization, they attempt to overcome asymmetric information

²¹ Bank investors include private capitalists and taxpayers. The latter and their agent, the Federal Deposit Insurance Corporation, also are exposed to the variance of banks' cash flows as standby investors.

HOW CREDIT INTERMEDIARIES MANAGE RISK



and design contracts that transform borrower risk.²² Risk endogenization is accomplished through systems of gathering borrower information, contracting, auditing, monitoring performance and creating sets of external and internal prices.^{23 24}

The third stage of risk intervention for the control of investor risk consists of capital allocation. Managers allocate capital against the expected variances of cash flows from their several asset portfolios.²⁵ The larger institutions' capital allocations the smaller the remaining mean and variance of cash flows realized by individual shareholders, either as dividends or as gains from reinvested earnings. The probabilities of being wiped out are large for thinly capitalized institutions with high variances of internal cash flows. In the special case of

²² There is a rich theoretical literature explaining how financial intermediaries overcome informational frictions. A sampling includes Y. Chan, "On the Positive Role of Financial Intermediation in Allocation of Venture Capital in a Market with Imperfect Information," *Journal of Finance* 38, 1543-1568; Douglas W. Diamond, "Financial Intermediation and Delegated Monitoring," *Review of Economic Studies* 51, 393-414; Ramakrishnan and Thakor,

²³ This view is inspired by Mark Flannery's distinction between exogenous risk and the endogenization of risk which consists of reducing information asymmetries, selecting loans and transforming the attributes of "opaque" claims on borrowers. The present approach isolates asset selection as stage one and reserves the term "risk endogenization" for intermediaries that use the systems described to transform the qualities of assets. See especially pp. 236-238 of Mark J. Flannery, "Capital Regulation and Insured Banks' Choice of Individual Loan Default Risks," *Journal of Monetary Economics*, 1989, 24, 235-258.

²⁴ An interesting review of the application of internal prices to accounting and auditing under conditions of costly contracting is presented in Ray Ball, "The Firm as a Specialist Contracting Intermediary: Application to Accounting and Auditing," working paper, University of Rochester, May 1989.

²⁵ Banks apply practical schemes for allocating capital to cover both expected and unexpected losses in their product or business lines. Standard loss reserve accounting provides for expected losses. Conceptually, unexpected losses are covered by allocating an amount of capital to cover, for example, a "two- or three-sigma" event from a subjective probability distribution of losses estimated for unanticipated negative events. Donald G. Simonson, "Putting Capital Where It's Needed", *United States Banker*, May 1993, 68,71.

federally-insured depositories, regulatory formulae set minimum capital levels at the portfolio as well as aggregate levels and taxpayers provide standby capital in the form of guaranteed funding at below market cost.

Also in the special case of banks and other federally-insured depositories, regulators and on-site supervisors serve as taxpayers' agents and constitute an additional, external, risk intervenor. The essence of their role is to police the three stages of institutional risk intervention.

Stage One: Diversification and Matching.

For all appearances, banks take smaller risks than commercial finance companies in managing the diversification and matching stage of institutional risk intervention. Most banks' loan policies specify a target loan mix that distributes default exposure among a variety of consumer, business and government clients with widely varied needs. Moreover, banks are subject to formal diversification regulations that prevent concentrations of loans to single borrowers and restrict loans to insiders and nonbank affiliates.²⁶ On the other hand, banks serving small and medium-sized businesses may have larger geographic concentrations than many finance companies have.²⁷ Also pertinent to stage one risk intervention, interest rate risk regulations tend to force banks to pay closer attention to the matching of asset cash flows with

²⁶ Loan concentrations are addressed most recently in the Federal Deposit Insurance Corporation Improvement Act of 1991. Section 305 requires the federal agencies to revise bank risk-based capital standards "to take adequate account of concentration of credit risk".

²⁷ Small and medium-size businesses that use bank financing almost always use a local bank. In contrast, geographic proximity is not nearly as important in these firms' use of finance companies. "Banking Markets and the Use of Financial Services by Small and Medium-Sized Businesses," Gregory E. Elliehausen and John D. Wolken, *Federal Reserve Bulletin*, October 1990, 801-817.

liability cash flows.

The receivables of independent commercial finance companies generally are considered more concentrated than banks because they tend to specialize in certain types of financial "niche" markets and products. Typically they serve one or just a few industries and focus on one or just a few of a spectrum of business lines such as accounts receivable and inventory-based revolving debt, machinery and equipment loans, factoring, floor planning, leasing, leveraged buyouts and other financings usually associated with the industry as a whole.²⁸ For example, individual finance companies might concentrate their efforts in niche markets such as leasing a specific line of equipment or financing receivables in a certain industry segment. Many small independent firms conduct only one line of business.²⁹

Stage Two: Risk Endogenization.

Historically banks were considered to have an inherent advantage in endogenizing borrower risk because of their confidential relationships with large groups of customers about whom public information was limited.³⁰ With advances in computers and communications, information costs have fallen sharply over the past twenty or so years and largely have

²⁸ The Commercial Finance Association lists the types of financing offered by each of its members in "Addendum to Membership Roster Types, Size & Marketing Area of Loans," revised 5/19/93.

²⁹ For example, the entire business of one firm I interviewed consisted of factoring medical insurance receivables originated in small clinics.

³⁰ See Cynthia A. Glassman, *The Weakening Role of Banks in Financing Small Business*, Association of Reserve City Bankers, June 1993, especially 34 and 35. Also *supra* note 4.

eliminated banks' information advantages.³¹ It is difficult to find other institutional barriers that prevent nonbanks such as commercial finance companies from competing equally with banks in processing borrower risks and tailoring the attributes of claims on borrowers to their liking.

On the other hand, because they are regulated, banks may be at a disadvantage compared to unregulated finance company competitors. Bankers' assessments of risk and their systems for processing risk are accountable to the opinions of regulators who, in turn, have multiple incentives that may or may not be responsive to market forces.³² Finance company lenders are free to act principally in the interest of themselves and their shareholders. Further, the same moral hazards associated with deposit insurance that are purported to increase bankers' preferences for risk may also make them inattentive to endogenizing risk.³³

Finally, the greater loan selection risks of finance companies might be seen as a virtue if the risks are fully priced and are offset by superior systems of risk endogenization. The

³¹ While not directly related to risk intervention, banks may enjoy a funding advantage in making loans because deposit insurance provides them with funds at below market cost. Lower cost funds may give banks a greater margin for erroneously underpricing risk: not a good habit in itself, but one that might make banks unwittingly more competitive.

³² In his extensive critique of the deposit insurance system, Ed Kane explains how the system perversely incentivizes regulators. For example, Edward J. Kane, *Confronting Incentive Problems in U. S. Deposit Insurance*, *Deregulation of Financial Services, Public Policy in Flux*, edited by George Kaufman and Roger C. Kormendi, Ballinger Publishing Co., Cambridge, Mass., 1986; Kane, "How Incentive-Incompatible Deposit Insurance Funds Fail," Prochnow Educational Foundation, Research Report 88-014, Madison, Wisconsin; Kane, "Changing Incentives Facing Financial Services Regulators," Conference on Perspectives on Banking Regulation, Federal Reserve Bank of Cleveland, Ohio, 1988.

³³ There are many sources that explain the moral hazard of the unlimited taxpayer guarantee of deposits. The history of its role in the thrift debacle is in James R. Barth and Philip F. Bartholomew, "The Thrift Industry Crisis: Revealed Weaknesses in the Federal Deposit Insurance System," in *The Reform of Federal Deposit Insurance*, James R. Barth and R. Dan Brumbaugh, Jr., editors, Harper Business, 1992.

typical finance company attitude is that "with a niche lending approach [finance companies'] expertise can take higher credit risks, charge more for it and more than offset the banks' cheaper cost of funds and lower infrastructure costs."³⁴ In general, finance companies are perceived as experts in the control of and, if necessary, liquidation of collateral in narrow lines of business.³⁵

Stage Three: Capital Allocation.

Before deposit insurance, near-insolvent banks were suspended quickly and closed if they were unable to recapitalize themselves: as a result, depositor losses were miniscule.³⁶ Following the passage of deposit insurance, the discipline of banks' depositors weakened and, over time, their capital ratios steadily declined. Although safety-net initiatives like deposit insurance are intended to insure banking stability, they actually encourage risk-taking and suboptimal bank capital, as the recent banking dilemma has shown because standby taxpayer capital is substituted for private shareholder capital. The perverse incentives of deposit insurance are controllable with increasingly explicit regulation of capital such as the prompt regulatory action provisions of the FDIC Improvement Act of 1991.

Still, before the recent rash of thrift and bank failures depository institutions were considered by the markets to be low risk. A number of academicians believe that capital

³⁴ Quotation of Michael J. Litwin, Heller Financial, Inc. in Sidney Rutberg, "Factoring and Commercial Finance in the Year 2000," *The Secured Lender*, January/February 1993, 26, 28, 30, 31.

³⁵ Eli M. Remolona and Kurt C. Wulfekuhler, "Finance Companies, Bank Competition, and Niche Markets," Federal Reserve Bank of New York *Quarterly Review*, Summer 1992, 25-38.

³⁶ See George G. Kaufman, "Bank Risk in Historical Perspective" in George G. Kaufman, ed., *Research in Financial Services*, Greenwich, Connecticut: JAI Press, 1989.

regulation itself contains perverse incentives and may induce greater risk-taking or at least suboptimal choices of assets by banks.³⁷ This paper adopts the more traditional view that higher levels of risk-taking must be supported by higher levels of capital. As noted, in the absence of stricter capital regulation, increased risk is supported by taxpayers.

For their part, unregulated (independent) finance companies depend on the discipline of markets for the acceptance of their securities issuances. Remolona and Wulfekuhler conclude that credit ratings govern the growth of finance companies by conditioning their access to funds.³⁸ Fast-growing companies have stronger credit ratings than slow-growing companies. Effectively, the ratings agencies set the capital requirements for finance companies.

Comparative Risk Intervention: The Evidence

In this section I compare the effectiveness of risk intervention by banks and commercial finance companies. Such comparisons might reveal disadvantages of banks that can be remedied by bankers and regulators. Alternatively, they might reveal inherent weaknesses that cast doubt on the allocational efficiency of the substitution of bank loans for finance company loans. Data limitations on finance companies may affect the validity of comparisons of the endogenization of borrower risk by banks and finance companies. Data on capital allocation by banks and

³⁷ A sampling of this literature includes Gerard Genotte and David Pyle, "Capital Controls and Risk," *Journal of Banking and Finance*, 1991, 15, 805-824; Daesik Kim and Anthony M. Santomero, "Risk in Banking and Capital Regulation," *Journal of Finance*, December 1988, 43, 1219-1233; Y. Kahane, "Capital Adequacy and the Regulation of Financial Intermediaries," *Journal of Banking and Finance*, 1977, 1, 177-218.

³⁸ *Supra* note 35.

finance companies are more available, although the finance company data again are limited in scope.

The most satisfactory data on a representative breadth of commercial finance companies are produced from annual surveys conducted by the First National Bank of Chicago (FNBC). The data are not directly comparable to the FDIC data reported on commercial banks but some of them appear to be meaningful for the purposes of this study.³⁹ FNBC reports data for "diversified" finance companies as well as for consumer finance companies. I use the data on diversified companies, defined as companies that hold more than 25 percent of their loan receivables in business credit, which are based on a composite of representative firms that operate on a national and regional scale, as well as locally. The finance company ratios reported in Tables 2 and 3 are simple arithmetic averages of the ratios for the surveyed companies: small local companies carry the same weight as very large national companies. The ratios reported for commercial banks are derived from aggregate FDIC data for all insured U. S. banks.

Risk Endogenization.

Table 2 presents several ratios pertaining to the internal risk processing of banks and finance companies. Loan loss data (charge-offs minus recoveries) is shown in columns 1 and 2. These data are available for diversified finance companies only for the six years of 1987-1992. The FNBC diversified companies' annual charge-offs to loans during 1987-1992 averaged

³⁹ First National began reporting financial ratios on installment sales finance companies in 1935. The bank has extended credit lines to finance companies since 1916. John R. Swift, *Ratios of the Installment Sales Finance and Consumer Finance Companies*, First National Bank of Chicago (revised September 1982); Raymond M. Neihengen, *Analysis of Finance Company Ratios in 1987*, First National Bank of Chicago, 1988; Mark C. Kramer and Raymond N. Neihengen, "Analysis of Finance Company Ratios in 1992," *Journal of Commercial Lending*, September 1993, 37-46.

138 basis points. Charge-off rates on loans and leases for banks during this period averaged 125 basis points and were considerably larger than their 70 basis points average for the period 1981-1986 but moderately less than the 138 basis points finance company average. The shift in net charge-offs by banks occurred in 1987 and began a period of loss reckoning for banks, following a series of forays in the early and middle 1980s into nontraditional lines of credit such as highly leveraged transactions and commercial real estate.

Assuming equal risk processing proficiency among banks and commercial finance companies, the latter's reputed selection of lower quality loans and less diversified portfolios suggests, *a priori*, significantly larger losses for finance companies. The differential average loss rate of 13 basis points for the 1987-1992 time period does not appear to be especially significant. Further, charge-off ratios for banks for the period were less predictable with a standard deviation of 0.26 compared with 0.19 for finance companies.

Columns 3 and 4 reveal how well the two types of firms anticipated charge-offs and whether they set aside an actuarially sound reserve for absorbing charge-offs. For simplicity, I assume that loan loss allowances (the reserve account on the balance sheet) are set at the end of each year in anticipation of the next year's losses and, therefore, I divide the allowance by the net charge-offs of the following year. This ratio reveals that banks' coverage of ensuing charge-offs exceeded that of finance companies in every year and averaged 2.04 compared with an average of 1.58 for finance companies. However, the finance company coverage appeared to be adequate at a level well above one throughout the period which suggests that banks' coverage was excessive at times. In addition, bank loss coverage during 1986-1991 was more variable with a standard deviation of 0.39 compared to 0.24 for finance companies. Finally, the

banks' coverage takes an extreme jump to 3.25 based on 1992 allowances, indicating especially poor anticipation of the decline in bank charge-offs in 1993. One interpretation of the differences observed in loan loss reserving is that examiners unduly sought protective cover for themselves against the possibility of bank failures.

This interpretation contradicts a somewhat related analysis by Bernanke and Lown who reject a widespread assertion that examiners were excessively strict in forcing commercial banks to take charges-offs and were, therefore, a factor in causing the 1990-1992 "credit crunch".⁴⁰ Bernanke and Lown apply the ratio of provisions for loan losses (an expense or flow account) divided by net charge-offs to assess the "actuarial fairness" of such, presumably examiner-induced, provisions. The present analysis adds insight into this issue. Considering the conventional wisdom that finance companies select lower quality assets and portfolios of assets, the finding of routinely larger bank allowance coverage could be interpreted as excessive influence by examiners on bank reserves.

Columns 5 and 6 of Table 2 presents a longer time series for banks and finance companies relating allowances for loan losses to troubled (noncurrent) loans during 1981-1993. In general, future loan charge-offs are drawn from the pool of noncurrent loans, the majority of which, however, ultimately are collected. The table shows that banks' and finance companies' average ratios for the common period of 1982-1991, at 0.68 and 0.65 respectively, are essentially identical. The larger standard deviation of the bank ratios of 0.22 actually reflect a trend in which banks progressively raised their reserves in response to an awakening of greater

⁴⁰ Ben S. Bernanke and Cara S. Lown, "The Credit Crunch," *Brookings Papers on Economic Activity*, 2:1991, 205-248.

risk associated with noncurrent assets. The finance company ratios, with a standard deviation of 0.10, indicate that these firms made a highly stable assessment of noncurrent loans.

Capital Allocation.

Table 3 compares the aggregate capital ratios of banks with their unregulated diversified finance company competitors. Capital is defined to include equity and subordinated term debt. Finance company capital ratios were considerably larger than those for banks and differed by amounts ranging from nearly 15 percent in the early 1980s to over 6 percent in 1992. The above comparison of recent loss experiences and expectations of losses from troubled assets revealed in loss accounting data suggest that the two types of firms similarly diversify and endogenize risk. In essence, it is unlikely that the variances of their institutional cash flows can be easily differentiated. In other words, based on this paper's findings, the combined differences in the two types of institutions' portfolio and endogenous risks are not nearly large enough to explain such differences in capital support.

On this evidence, if banks were unregulated and subject to complete market discipline, presumably the market might require them to maintain an aggregate capital ratio approximately equal to that of finance companies. The observed contemporary difference between their ratios of 6 percent, then, is attributable to implicit standby capital provided by taxpayers. A contemporary estimate of the value of FDIC reserves and taxpayer standby capital is roughly \$220 billion, based on bank assets of nearly \$3.7 trillion.

It is likely that the comparative portfolio and endogenous risks of the two types of institutions have converged since the middle 1980s, and have tended to equalize intrinsic capital requirements. I cannot supply evidence of this convergence by comparing data on net charge-

offs because the data were not available for finance companies for the earlier period. Undoubtedly, however, banks were considered eminently safer than finance companies in the early 1980s before they were beset by a sequence of catastrophic defaults on LDC, energy, commercial real estate and LBO loans, followed by previously unimagined numbers of bank failures. While many banks digressed from their bread-and-butter markets in conventional middle market business credit, finance companies doubled their aggregate business lending from 1985 to 1991.⁴¹

Finally, the return on equity ratios (ROEs) reported in Table 3 provide interesting comparisons of risk and reward to suppliers of equity capital for commercial banks and finance companies. Over the respective periods for which the data are reported, the average ROE for banks was 10.34 percent and 12.96 percent for finance companies, a 262 basis-point advantage for the latter. Counter to intuition, however, the effective risk of variable returns to shareholders was fifty percent greater for banks, with a standard deviation of ROE equal to 3.56 (34 percent of the mean), compared to 2.74 (21 percent of the mean) for finance companies.

Equity Risk and Return

The final arbiter of credit intermediaries' risk intervention policies is the sensitivity of

⁴¹ Citing this trend, Remolona and Wulfekuhler note: "finance companies set themselves apart from commercial banks by sustaining impressive growth in business credit through the second half of the decade...[banks'] commercial and industrial loans grew barely 2.8 percent a year... while finance company receivables altogether rose nearly 10.4 percent a year from 1985 to 1990... A major growth area in business credit for finance companies came in leasing. *Supra* note 35; 26,27.

their shareholders' risk to overall risk in the stock market. Because the stock market is sensitive to economic risks associated with industrial activity, interest rates, inflation, business failures and so forth, it is important to test whether the effect of intermediaries' asset selection and diversification, risk endogenization, and capital allocation is to increase or decrease their sensitivity to such risks.

The market model relies on "beta" as a measure of the sensitivity of an individual firm's or a class of firms' equity returns to the return on the equity market at large. Beta represents sensitivity to non-diversifiable risk: stocks with large betas should produce large returns relative to overall stock market returns.

Using ordinary least squares, beta was estimated for stock price indices for banks and finance companies by regressing each index on the Standard & Poors 500 Stock Index. I used monthly returns calculated from daily quotations for the SNL Finance Company Index of Stock Prices, the SNL Commercial Bank Index of Stock Prices and the Standard & Poors 500 Stock Index from January 1989 to October 1993.⁴² Unfortunately, the SNL Finance Company Index is not specific to commercial finance firms but covers a wide spectrum of publicly-traded firms, including those specializing in consumer, credit card, acceptance and commercial finance. Prices for this index were not collected before January 1989.

The general form for the market model is:

$$r_{i,t} = a_i + b_i r_{S\&P,t} + e_i$$

⁴² Data were provided courtesy of SNL Securities, Charlottesville, Virginia.

where $r_{i,t}$ is the percentage return for the bank or finance company stock index over period t in excess of the risk-free (91-day treasury bill) rate of return, $r_{S\&P}$ is the percentage return on the S&P 500, a is the excess return, b is the sensitivity of the index in question to the S&P 500 and e is the residual risk. The return measures exclude dividends. Table 4 presents the monthly percentage returns and standard deviations of returns on 91-day treasury bills and the three indices as well as the parameters of the market model regressions.

The mean monthly finance company returns of 1.81 percent were well in excess of monthly returns of 0.71 percent on banks and 0.82 percent on the S&P 500 stocks. On the other hand, the standard deviations of 5.86 percent for banks and 6.15 percent for finance companies indicate that risk for each industry during the period was essentially the same. This similarity appears to corroborate my earlier conclusion, derived from analysis of aggregate financial statement data for banks and commercial finance companies, that ex post risk was essentially the same for both types of institutions. The standard deviation of market returns is a measure of total risk, however, while risk to diversified investors is estimated by the market model.

The R-squared values of the market model regressions indicate that 59 percent and 56 percent, respectively, of the variability in returns on the bank and finance company indices is explained by variability in the S&P 500. The finance company beta of 1.26 is just slightly larger than the bank beta of 1.23. Both are highly significant statistically and the difference between them is well within one standard deviation of either beta: the sensitivity of banks and finance companies to economic risk appeared to be essentially the same for the period covered. The large alpha factor (a_i) of 0.90 percent for finance companies is statistically significant at the 10 percent level and indicates an extraordinary monthly return on unsystematic risk during the

period. The alpha for banks was slightly negative and was not statistically significant.

In all probability, these results are specific to the period studied. That period is probably not representative of future conditions for banks and may not be representative for finance companies. As Table 1 suggests, it was a period of general retreat for banks from their credit policies of the 1980s while commercial finance companies appeared to have levered their growth by exploiting the relatively passive credit posture of banks during the period. In addition, it was a period in which over 600 banks failed.

Still, the data reveal the viability of nonbank lenders as risk intervenors in an unregulated market. The finance company example provides insight into the financial parameters, such as leverage and loan loss accounting, associated with a free-market competitor and illuminates the contrast with the same parameters for a commercial banking system that is subject to extra-market discipline. Despite the interim exit of a significant volume of bank lending, the credit markets and the investors in nonbank lenders appear to have been well served.

Contrast in Credit Cultures

Commercial finance companies traditionally have provided financing backed by borrowers' business assets.⁴³ An increasing number of banks also operate asset-based lending

⁴³ The history of commercial finance companies is one of developing strategies to secure borrowers' assets as the essential basis for funding. One of their first major business lines was the financing of automobile dealer inventories prior to World War I. Later, financing of accounts receivable originated by government contractors gained impetus just before World War II when commercial banks, still recovering from effects of the banking collapse of the early 1930s, proved insufficient for financing the government's preparations for war. The Contract Assignment Act passed by congress in 1940 brought commercial finance companies

units within the chartered bank, but they generally process risk differently. The finance companies perceive risk in terms of the collateral supporting their deals while banks are more likely to perceive their exposure in terms of the risks their borrowers face.

In several interviews I conducted with commercial finance company lenders, the interviewees consistently elaborated on this difference in risk perception. As a generalization, they asserted that bankers engaged in asset-based lending estimate the chances that deals will go bad and they attempt to minimize the risk that their borrowers will fail. On the other hand, the interviewees claim that finance company lenders *assume deals actually will go bad* and they rely on their ability to extract themselves by liquidating pledged assets on favorable terms. This difference is critical to the way each type of institution processes risk.

Bankers are more subject to the risks of asymmetric information. Their efforts are directed to discovering the true values of borrowers' investment projects by developing reliable estimates of borrowers' future cash flows from operations.⁴⁴ They set conservative limits on the acceptable degree of borrowers' financial leverage and gain insights into the probabilities associated with future cash flows by emphasizing the consistency and length of past profitability.

to the fore by overturning legal prohibitions against the assignment of claims against government orders to finance company lenders by government contract suppliers. In the late 1950s, commercial finance companies pioneering the leveraged buyout with "bootstrap financing" in which acquisition funding was accomplished with highly conservative use of the target companies' assets as collateral. John J. Murphy, "Asset-Based Lending: Evolution to Revolution Part ii, 1940-1960s," *The Secured Lender*, September/October 1992, 46-51; Swift, *supra* note 39. Factoring is a much older business that evolved in the nineteenth century from agents selling in the United States in the employ of foreign textile mills.

⁴⁴ One finance company lender characterized this approach as an exercise in "fictitious capital formation".

On the other hand, finance company lenders expend large resources on specialists who value and continuously monitor borrowers' cash flows, receivables, inventories, equipment or other collateral and set conservative advance margins against their values.⁴⁵ This approach typically results in larger loans to more highly leveraged borrowers who have less consistent records of profitability and who, frequently, are growing too fast to "clean up" working capital loans.⁴⁶

The case of leveraged buyout (LBO) financing provides a straightforward example of this contrast in the risk processing proclivities between commercial bank lenders and commercial finance company lenders. Bankers provide "structured financing", an approach that comprehensively reconfigures the target company's capital structure based on the capacity of the successor entity to produce projected cash flows for servicing debt. On the other hand, finance company lenders structure a loan package that is conservatively supported by a detailed "knock down" liquidation appraisal of the target company's assets. One interviewee noted, concerning the finance company point of view: "Leveraging on the assets of a firm was a natural instinct

⁴⁵ Finance companies' creative credit techniques involve tremendous detail and close controls that "match the likelihood and immediacy of the need to realize on collateral". Patrick Bocker, "The CFA's Proposal to the Office of the Comptroller of the Currency," *The Secured Lender*, September/October 1993, 76,78. The objective is to protect and monitor the values of assets on which they lend. Their staffs include disproportionate numbers of field auditor/examiners who conduct pre-agreement and on-going full field exams of prospects' inventories and other working capital. A common technique is to utilize lockboxes to capture clients' flows of cash receipts as a means of controlling loan paydowns (receipts are applied to loan outstandings) and to track collection and credit sale activities. Some firms specializing in sales finance make a point of exacting repurchase agreements from manufacturers: if the dealer fails, the manufacturer agrees to repossess the dealer's inventory and to make full restitution to the finance company. In this case, it is more important to monitor the manufacturer's ability to service potential returned goods than it is to monitor the dealer.

⁴⁶ A good description of asset-based loan agreements appears in Barry Herskowitz and David A. Kaplowitz, "Asset-Based Revolvers," *Journal of Accountancy*, July 1986, 97-104.

of commercial financiers”.

Supervisory issues.

Their contrasting approaches to risk processing adds insight into the different reputations for quality popularly associated with the two types of firms. Finance companies select borrowers with exogenous risks that would typically disqualify would-be borrowers under traditional bank selection criteria. To outsiders, their selection biases make such loans appear much riskier than the loans made by banks. In comparable deals, as noted earlier, the finance companies lend more money to less proven and more highly leveraged clients. In addition, finance companies naturally develop portfolio concentrations because of their well-known emphasis on niche markets.⁴⁷

However, it seems plausible that what appears to be greater lending risks are offset by differences in risk intervention. By lending against the future operating cash flows of single borrowers, banks are exposed to specific risk and asymmetries in information as well as to macro, or systematic, risks. On the other hand, by lending against asset values and emphasizing skills in the marketing of foreclosed assets, finance companies' exposure occurs in the context of relatively efficient markets. As a result, they tend to reduce their exposure to the risks of firm-specific events and information asymmetries and limit it to systematic risks and markets with more open information flows.

Bank examiners increasingly are required to evaluate asset-based loans of the type made

⁴⁷ Remolona and Wulfekuhler describe finance companies' "dynamic economies of scale" because of specialized information gained through cumulative output in niche markets. *Supra* note 35.

by finance companies because banking firms have actively acquired or started up asset-based lending units. These units are the vanguard of the recent and aggressive "down market" shift by banking firms into middle market finance.⁴⁸ It does not appear that bank supervisors have fully discerned the effectiveness of unbanklike risk control mechanisms used by asset-based lending units within banks and asset-based credit subsidiaries of banks or holding companies.

Interviews with lenders of both direct credit subsidiaries of banks and indirect credit subsidiaries of bank holding companies expressed their apprehension about being examined by examiners who were not sufficiently trained and experienced in looking at revolving asset-based loans. They believed that such examiners were predisposed to isolate their attention on borrowers' financial statements and cash flow prospects (which often appear less strong than those of typical bank borrowers) and not on inventory, receivables or equipment values, collateral control systems and asset disposal skills typical of finance companies.

In a couple of instances, finance subsidiary lenders reported that they have initiated meetings with examiner staffs to familiarize them with their intensive loan administration, preagreement full field examinations of prospective clients' collateral, manual tracking programs, manufacturers' takeback guarantees and other devices.⁴⁹

On the other hand, interviews with senior officers responsible for supervision for federal banking agencies revealed that, although they were concerned with the problems of examining

⁴⁸ *Supra* note 14.

⁴⁹ The Commercial Finance Company has recently presented a document to the Office of the Comptroller of the Currency designed "to update and modernize the Accounts Receivable Financing section of the Comptroller's Handbook for National Bank Examiners." *Supra* note 45.

commercial finance subsidiaries but they were confident that their agencies' examination practices recognized and adjusted to the subs' nontraditional risk control systems.

Summary

The decline in bank business lending and other banking activity raises questions about the protection of important and unique banking functions. The questions, however, are not couched in terms of whether bank lending is "good" in the sense of efficient allocation of credit in the economy. It is desirable to try to answer such a question, given the costs of public support of the banking system.

The surge of finance company lending during the recent period of stagnant bank lending presents an opportunity to test the goodness of bank lending by comparing the performance of banks with an unregulated lender. Based on rather incomplete data, it appears from a simple aggregate financial analysis that finance companies were no riskier, and possibly were less so, than commercial banks. However, they appear to have produced greater accounting returns as well as significantly greater risk-adjusted market returns for their shareholders despite their substantially greater capital positions.

As banks reassert themselves in credit markets for business, the finance companies make attractive acquisition targets. The public support base for banks implied in the deposit insurance system should enable banks to continue to acquire and financially lever finance company assets.

The evidence presented raises questions about possible losses in credit allocation efficiency over the lending cycle from such developments.

Table 1

Business Credit Outstanding

**Insured U. S. Commercial Banks (CB)
Finance Companies (FC)**

Year	<i>Business Credit</i> \$ billion		<i>Proportion:</i> percent FC/CB	<i>Growth Rate</i> percent	
	CB	FC		CB	FC
1980	391	90	23	-	-
1981	455	100	22	16	11
1982	504	101	20	11	1
1983	525	113	22	4	12
1984	565	135	24	8	19
1985	578	158	27	2	17
1986	601	173	29	4	10
1987	590	207	35	- 2	20
1988	600	236	39	2	14
1989	619	256	41	3	8
1990	615	294	48	- 1	15
1991	559	293	52	- 9	0
1992	536	297	55	- 4	1
1993II	536	291	54	0	- 2

Table 2
Loan Charge-off, Loss Allowance
and Noncurrent Asset Ratios

FDIC-Insured Commercial Banks (CB)
and Diversified Finance Companies (FC)

<i>Year</i>	<i>Net charge-offs/loans and leases</i>		<i>Allowances for losses/next period net charge-offs</i>		<i>Allowances for losses/noncurrent loans</i>	
	percent		ratio		ratio	
	CB	FC	CB	FC	CB	FC
	(1)	(2)	(3)	(4)	(5)	(6)
1980	-	-	2.79	-	-	-
1981	0.36	-	1.80	-	-	0.70
1982	0.57	-	1.69	-	0.37	0.55
1983	0.68	-	1.54	-	0.38	0.58
1984	0.78	-	1.47	-	0.43	0.55
1985	0.86	-	1.45	-	0.53	0.57
1986	0.99	-	1.79	1.41	0.60	0.62
1987	0.94	1.35	2.74	1.93	0.78	0.76
1988	1.02	1.10	2.09	1.69	0.82	0.81
1989	1.18	1.30	1.82	1.43	0.86	0.77
1990	1.46	1.40	1.66	1.29	0.71	0.69
1991	1.62	1.70	2.13	1.71	0.72	0.52
1992	1.28	1.40	3.25	-	0.87	-
1993	0.84	-	-	-	1.07	-
6-yr record						
mean	1.25	1.38	2.04	1.58	-	-
std dev	0.26	0.19	0.39	0.24	-	-
Total record						
mean	-	-	-	-	0.68	0.65
std dev	-	-	-	-	0.22	0.10

Source: Federal Deposit Insurance Corporation Division of Research and Statistics; various publications on finance company ratios, First National Bank of Chicago. Bank statistics for 1993 is based on annualized data for first three quarters. Bank noncurrent asset ratio is loans and leases 90 or more days past-due and in nonaccrual status divided by total loans and leases; finance company noncurrent asset ratio is commercial loan balances delinquent 60 days or more divided by commercial loan receivables.

Table 3
Capital Ratios and Return on Equity

FDIC-Insured Commercial Banks (CB)
and Diversified Finance Companies (FC)

<i>Year</i>	<i>Capital/ Assets</i>		<i>difference</i>	<i>Return on Equity</i>	
	percent			percent	
	CB	FC		CB	FC
	(1)	(2)	(3)	(4)	(5)
1980	6.2	21.1	14.9	-	7.25
1981	6.1	20.7	14.6	13.04	8.18
1982	6.2	19.9	13.7	12.02	11.81
1983	6.3	18.6	12.3	11.09	14.29
1984	6.5	17.4	10.9	10.53	14.73
1985	6.7	17.5	10.8	11.12	14.78
1986	6.8	15.8	9.0	9.91	15.13
1987	6.6	14.4	7.8	1.55	15.04
1988	6.8	13.6	6.8	13.13	15.70
1989	6.8	13.9	7.1	7.76	15.00
1990	7.2	14.0	6.8	7.55	13.30
1991	7.5	14.3	6.8	7.97	10.90
1992	8.5	14.6	6.1	12.99	12.40
1993	9.0	-	-	15.71	-
Total record:					
	mean		10.34	12.96	
	std dev		3.56	2.74	

Source: See notes, Table 2.

Table 4

**Stock Index Returns
and Risk**

(monthly percentage returns and
standard deviations: dividends excluded)
January 1989 - October 1993

	Returns	Std. Dev	a_t	b_t	R^2
SNL Bank Stocks	0.71	5.86	-0.182 (0.496)	1.231* (0.134)	.59
SNL Finance Company Stocks	1.81	6.15	0.903** (0.539)	1.260* (0.141)	.56
<hr/>					
S&P 500 Stocks	0.82	3.71			
91-day treasury bills	0.46	0.18			
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* significant at 1 percent level.

** significant at 10 percent level.