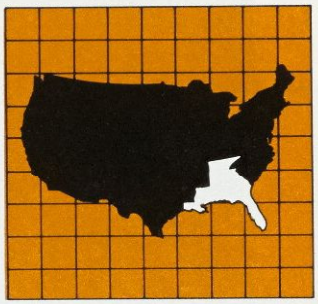
Economic Review



DERAL RESERVE BANK OF ATLANTA APRIL 1984

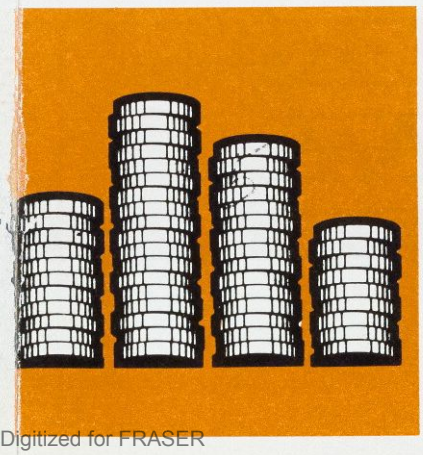
PERFORMANCE How Companies Achieve It

INNOVATION New Financial Industry Emerges

RESERVES Improved Monetary Control?

BANKING The Rise of Bankers' Banks

DEREGULATION Interstate Banking Issues



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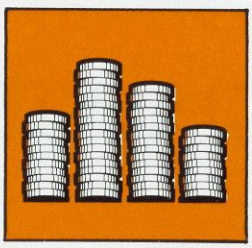

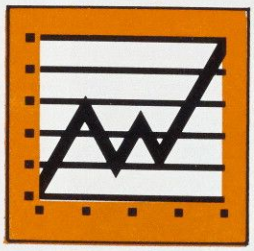

VOLUME LXIX, NO. 4

High-Performance Companies in the Southeast: What Can They Teach Us?

American business is seeking fresh initiatives to overcome the economic inertia of the past decade. Poor productivity gains, decaying mature industries, and prolonged high unemployment have defied traditional solutions. Bold initiatives seem necessary to launch the American economy on a new course of extended prosperity. Rather than study economic solutions grounded in foreign cultures, with different political and social values that contribute to the effectiveness of such measures, the Federal Reserve Bank of Atlanta has examined models of success closer to home—in the southeastern United States.

This study concentrates on corporate growth models to reappraise the basic American business climate. Some scholars see the entrepreneur, the calculated risk-taker, as the hero in the saga of economic growth. Research that focuses on the management side of entrepeneurship, therefore, may be a useful way of refocusing on incentive systems at the microeconomic level. We looked at 22 high-performance southeastern companies to learn whether common patterns underlie their outstanding profitability and growth rates (see box on "How Companies Were Selected"). Identifying characteristics shared by high-performance companies of strikingly different size and output, from small high-technology businesses to mature firms producing familiar commodities, could help renew the entrepreneurial spirit that established the United States as the unrivaled land of opportunity.

This six-month project (see box on "The Case Study Approach") developed from a 1983 study of high-technology firms carried out by the Atlanta Fed.[1] Researchers in that study were struck by the link between the growth of high-tech firms and their application of modern management principles. They suggested investigating whether similar practices prevailed at rapidly growing companies in other industries. We did, in fact, find such patterns, which this article will describe in detail. These patterns are (1) a major emphasis on innovation, particularly in the area of technology; (2) an entrepreneurial management style that keeps organizational structures lean and flexible for prompt action and willing to take risks that promise high returns; (3) a view of employees as associates or affiliates—the company's most valued long-term asset—rather than as adversaries; and (4) an ongoing attention to marketing strategy that sharply defines the company's comparative advantages.

Outstanding southeastern companies adhere to a number of common management principles, judging from this major Atlanta Fed study. These shared principles might help revive America's productivity.

All four traits are grounded in corporate culture or identity, which makes the company—for consumers, employees, and management—more than the sum of the products and profits it produces. This identity or mission expresses the nature of such firms as social institutions, generating a dynamic community spirit similar to that of a pioneer community of the past or a winning athletic team of the present. We developed the acronym **Team** to refer to the key patterns we found—technology, entrepreneurship, affiliation, and marketing—all embedded in a common spirit or culture (see box on "Modern Management Theory"). We believe the "winning teams" we have studied offer valuable lessons for the renewal of the American free-enterprise system. The hero, the entrepreneur, the calculated risk-taker, are basic ingredients of the American dream. As models they are standards for innovation, creativity and excellence.

MAJOR FINDINGS

Technology/Innovation

We found that the companies we interviewed are engaged in some form of change or innovation. Many are pioneering products and processes never used before. Innovative activity often permeates the organization. Many firms innovate by applying experience from other industries or by deviating from tradition. Innovation frequently takes the form of technological change. Technology is applied with a sensitivity to all concerned—employees using equipment, customers enjoying the results, and shareholders realizing improved earnings.

Innovation and applications of technology are related to other characteristics we found in high-performance companies. Accepting change fosters an entrepreneurial bias toward action in management. Technology is often required in order to act quickly in a changing environment. Human resource management is enhanced by technology. Dirty and unpleasant jobs may be eliminated. In some cases, people are given greater responsibility and training for higher skilled jobs. High-performance companies tend to retrain and reassign workers who are displaced by technology. These companies' fast growth plus the care and feeding of technically advanced machinery usually provide jobs for employees.

Market strategy is also tied closely to innovation and technology. Many successful companies view technology as a competitive weapon. They are constantly looking for more efficient ways to do things. These companies are typically market leaders in some aspect of their business. They believe that to remain ahead of the competition they have to be on the forefront of change. If they are constantly playing catch-up in technology, they are constantly playing catch-up in the marketplace. The companies we interviewed embrace change by using state-of-the-art technology, redefining their target market, offering new delivery systems, or introducing innovative products.

State-of-the-Art Technology in Mature Industries. Some companies have found that, in order to compete in commodity businesses and against foreign producers with relatively low labor costs, they must adopt advanced technology.[2] Automation of the production process is almost an obsession with some of the companies we studied. Keeping up with technology is a continuous process that requires shopping widely for existing technology, helping suppliers design more functional equipment, finding ways to make equipment more flexible through computerization techniques, and evaluating new equipment. Technology used in production processes at many of the companies we visited was developed by foreign firms.

Manufacturers in commodity businesses can no longer rely on lower wage southern labor to man their factories. To excel as low-cost producers, they believe they must automate. Four companies we interviewed stood out in this respect: Nissan U.S.A., Russell Corporation, Nucor Corporation, and Flowers Indusries. (Although not a manufacturer competing with low-cost foreign producers, Delta Air Lines also scored high in our sample as a leader in technology. Delta keeps its fleet equipped with the most modern airliners flying.) Nissan, a Smyrna, Tennessee subsidiary of the Japanese car and truck producer, had the opportunity to fully automate its facility, constructed in the early 1980s. The company has almost 230 robots in use, handling unpleasant and dangerous jobs such as painting and welding. They can be programmed to adjust automatically to different size and model vehicles, thereby allowing a more flexible production schedule. Russell Corporation, an Alexander City, Alabama textile and apparel manufacturer specializing in athletic clothing, operates one of the most automated textile manufacturing facilities in the Southeast. Gene Gwaltney, the firm's chief executive

Modern Management Theory

In the past several years, popular interest in management has reached a new peak. Books on the subject have topped the best-seller list for months. Our economic malaise has contributed to widespread interest in management as cause and cure for such problems as lagging productivity and slow economic growth. We used these works as a reference point as we interviewed financially successful companies in the Southeast, although we attempted to remain receptive to new principles.

One book that influenced our initial thinking was **In Search of Excellence.** The authors, Thomas J. Peters and Robert Waterman Jr., identify eight management principles employed by large American corporations that had survived over decades of good and bad economic conditions. These eight include (1) the conscious propagation of a company's values or mission among all employees through credos, rituals, and myths; (2) achievement of high productivity through concerned attention to employees; (3) lean management structure that fends off bureaucratic tendencies, such as long memos, committees, and complex procedures commonly found in large, established organizations; (4) an atmosphere of procedural informality akin to that found at smaller companies ("loose/tight" principles); (5) close attention to customers; (6) a bias toward action (rather than forming committees or studying proposals too long); (7) product continuity (rather than conglomerate-style diversification); and (8) a spirit of entrepreneurship and autonomy that fosters product development and decision-making at the lowest levels. By fostering these eight principles of management, Waterman and Peters assert, large, mature companies can retain many desirable traits of smaller firms.

Another book that addressed these questions is Rosabeth Moss Kanter's **The Change Masters: Innovation for Productivity in the American Corporation.** We sought to determine whether the innovation-fostering traits identified by Kanter were present at the companies we interviewed. These traits include a pervasive spirit of autonomy and an atmosphere of brisk intellectual interchange that keep these companies from becoming complacent and that force them to be aware of their changing environment and the need to adapt with it.

A recent study commissioned by the American Business Conference to identify characteristics common to successful mid-sized companies reiterated patterns described by Waterman and Peters.* One important addition with regard to these smaller companies was market orientation. Mid-sized growth companies tend to produce for a well-defined niche, and they fit into that niche not as the low-cost producer but as suppliers of a high value-added product or service that bespeaks quality and commands a higher price and profit.

Our focus on individual companies as the catalyst of economic development led us to look for signs of an entrepreneurial management style: "Entreprenuers," as one researcher summed up, "are responsible for a significant amount of the change in our society, much of the economic growth, practically all of the sustained growth in employment, plus the new technologies that make our life easier and more enjoyable and the new drugs and medical instruments that keep us healthy and cure us when we are sick."**

Finally, we acknowledge our debt to a variety of works (see bibliography), such as **The Art of Japanese Management, Theory Z,** and to research by George Odiorne, Peter Drucker, and others on modern principles of management. Those works extol a participative and collegial rather than hierarchical, authoritarian style of leadership, cooperative rather than adversarial employee relations, and management respect for the contribution of employees to the company's success.

We organized traits cited as important in the literature into four areas. These areas are, with one exception, those defined in classical economics as the factors of production—land, labor, capital, and entrepreneurship. We looked at companies' products and how they are marketed, their treatment of labor, utilization of capital (both human and physical capital and the attendant role of technology), and management or entrepreneurship. We gave little attention to land, or possession of special resources such as oil deposits or patents, because we were seeking aspects of management with more universal application. We do not deny their importance. Indeed, officials of the Coca-Cola Company assert that their trademark is one of the most critical factors in the corporation's long-lived success.

Within the remaining areas—product, management, employees, and capital, we sought to determine whether management principles frequently cited in recent works prevailed at high performing southeastern companies. Not surprisingly, we found some successful companies that defied several of these management principles. Nonetheless, our research indicates that these principles seem generally applicable to financially successful companies based in the Southeast.

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*"The Winning Performance of Mid-sized Growth Companies," American Business Conference (May 1983).

Silver, David A. **The Entrepreneurial Life, New York: John Wiley & Sons, 1983), p. 1.

officer, goes so far as to say, "If you wait until you can cost justify a piece of equipment, you're too late. You can't afford not to have the latest technology in place."

Nucor, a Charlotte, N.C. steel manufacturer, uses continuous casting, a technologically advanced process used extensively in Europe and Japan, to produce steel. Nucor managers continue to seek the latest technologies by traveling abroad to learn about research, development and utilization. Flowers Industries, a Thomasville, Georgia baked goods company, succeeds where others have failed by buying near-bankrupt bakeries, modernizing the plant and equipment, and achieving economies of scale through reciprocal baking.

Adding Noncommodity Lines of Business in Mature Industries. Some of the more mature companies find it wise to seek higher value-added products and diminish their dependence on traditional commodity lines of business. Diversifying out of mass production of low-priced standard goods during the last several years helped two southeastern companies, Sonoco Products, a South Carolina-based paper products company, and Oxford Industries, an apparel firm based in Atlanta, outperform their peers in declining industries. While the products were familiar to the American consumer, the transition into value-added businesses was a radical departure from these companies' historical experience. By seeking products with higher margins and a market niche, these two companies transformed themselves into value-added producers, and their orientation shifted from production to marketing.

From its inception, Sonoco Products has been tied closely to the textile industry because it produces paper and plastic cones onto which thread or yarn is wound. Sonoco's leaders redefined their business as industrial packaging, which enabled them to move into other items, such as paper cans used for packaging orange juice, potato chips, and motor oil. Oxford Industries was a private-label apparel producer until its top management realized that it was unprofitable to compete with lower-cost, foreign producers. To establish a greater perceived value for its goods, it took advantage of the designer trend in clothing. The company has exclusive production rights to the Ralph Lauren Polo line of boys clothing and has added other designer labels. Days Inn, another Atlanta-based firm we interviewed, is in a low-price commodity business—renting economy rooms to cost-conscious travelers. Richard Kessler, CEO, has sought to add value to those rooms by stressing high quality, friendly service, consistent products, and good hotel design.

Offering New Delivery Systems in an Old Business. Several companies we interviewed were innovative in designing a new way to deliver an old product or service. Federal Express, a Memphis-based delivery service, uses computerized dispatching rather than the traditional radio dispatching. This system enables the firm to improve the efficiency of its delivery system. Home Depot, an Atlanta-based retailer, found it could reduce costs and prices by eliminating the warehouse link in the distribution chain of the lumber and home-repair retail industry. Its retail stores function as the warehouses. The firm's discount prices, variety of goods, and well-trained sales assistants have produced rapid growth for the relatively new company. Key Pharmaceutical, a Miami-based drug manufacturer, boasts an innovative delivery system involving new technologies in delivering proven drugs to the patient's system. One of the company's lead products, Nitro-Dur, continuously administers the proper dose of nitroglycerin to a heart patient by means of a patch worn against the skin. The drug is "delivered" to the body through the skin rather than through the mouth.

Wachovia Bank and Trust Company, headquartered in Winston-Salem, N.C., pioneered a new delivery system for banking services in the early 1970s. It assigned a "personal banker" to every retail customer who has an account at one of its branches. The personal banker coordinates the customer's deposit and loan accounts and any other financial service needs. To accomplish this one-on-one attention, Wachovia had to establish a computerized means of assimilating and dispensing demographic and account information about each customer.

Offering a Product Previously Unavailable. Product innovation at high-performance companies takes place continuously to supplement or replace old products reaching their maturity. However, two companies applied existing technology in new situations to serve a previously unmet market need. Publix Super Markets, based in Lakeland, surprised the Florida banking system when it announced the introduction of its own automated teller machine (ATM) network in which banks could participate. The supermarket chain is one of the first in the country to place

multibank ATMs in every store. It also jumped the gun on banks by establishing its own computerized point-of-sale payment system.

Federal Express' initial product was so unique that it started a new industry. The Memphis company popularized the small-package air express business in the early 1970s and remains the market leader. Today Federal Express is expanding its boundaries with its new Gemini project, which will transmit facsimiles of documents by satellite rather than by airplane.

We did find notable exceptions to the general rule of companies being on the cutting edge of innovation and technology. For example, Coca-Cola officials place much more value on the proper timing of innovation. They purposely wait until the first generation of a new product or technique has proven its viability and revealed its flaws. Then Coke, capitalizing upon the mistakes of its predecessors, moves in, seeking to dominate the market. Officers of the Atlanta-based Trust Company bank holding organization also stated their preference to follow in the footsteps of technological leaders and innovators.

Balance. Perhaps more important than the cautiousness implicit in this attitude toward technology is the widespread sense of balance we found. Many officials indicated the need to apply technology without losing the human touch. The companies we visited displayed a sensitivity to humanizing the workplace despite the high degree of automation surrounding workers. Assembly line workers at Nissan, for instance, had been allowed to place potted plants and hanging baskets in their work areas.

Many companies emphasized that, although a particular service or procedure theoretically can be performed more efficiently by a machine than by a person, a people-oriented approach makes more sense. Federal Express uses a surprisingly manual process to sort packages. "We have considered every possible technology to automate this process," one officer told us. "We have rejected most suggestions because they inconvenience the customer or they cost more than the labor-intensive process that we currently use."

Pervasive Innovation. We found companies where innovation is a way of life. It is evident not only in high-level decision making but also in the way the line workers do their jobs and middle managers seek to improve operations. Production workers at Key Pharmaceuticals often suggest ways to improve the equipment to make the output more efficient. They know that Key is growing fast enough to redistribute workers, so they readily suggest improvements to reduce the number of workers on a line. Plant managers at Flowers Industries are responsible for requesting new equipment for their bakeries. Each middle manager researches available equipment and decides what is best for his operation. When we visited Flowers, a superviser had obviously rigged a piece of equipment to keep the bread straight on the conveyor. It was his responsibility to get a high-quality product out the door on time, so he took the initiative to improve the operation.

In most cases, innovation is more prevalent, or more apparent, at higher-level decision-making posts. We found little evidence of new product development at the grass roots that Waterman and Peters described. Fred Smith, chief executive of Federal Express, commented that he does not want innovation everywhere in the company. Certain guidelines must be followed, he says; deviations may cause problems further down the line. Workers are not free to change these standards at will. Yet, we found that workers often suggest changes that are reviewed by industrial engineers to see how they fit into the whole process.

When new processes are being developed, those who will eventually be doing the work are consulted to help optimize the procedure. Nissan's industrial engineers consult assembly workers, who often suggest better ways to do a job. Russell operators and maintenance technicians help evaluate new equipment. Publix's store managers and clerks work with the technical staff in designing and implementing customer-related computer systems.

Technology Transfer. We found that much innovation occurs by technology transfer, taking a concept or process from one industry and applying it to another. Publix applied banking technology (ATMs and point-of-sale terminals) to its supermarket business to reduce losses from bad checks and processing costs. Key Pharmaceuticals adapted food production methods and explosives technology to its production of nitroglycerin drug patches. On the product side, unlike pharmaceutical companies that refuse to promote products not invented by their own researchers, Key looks outside the company for new technology it can turn into profitable products. Charter Medical of Macon, Georgia applied

expertise from real estate to the health care industry; for Charter, a hospital management company specializing in psychiatric care, the result is a system that emphasizes patient satisfaction and returns a profit largely by cost reduction. Bank Earnings, Inc. has combined technology in the banking industry with their own marketing program, by applying microcomputers to the solution of operations problems at commercial banks.

Much of the technology transfer occurs because officers of the company have experience in other industries. This often facilitates the cross-pollination of ideas. One top manager at Key Pharmaceuticals had worked previously for Ford Motor Company. Federal Express's top officers bring experience from the airline, travel, and computer industries. Nucor's CEO is an aeronautical engineer by training with long experience in metallurgy but none in the steel industry prior to taking over Nucor.

Entrepreneurial Management

An important factor in the success of companies we studied was their entrepreneurial management style—the "E" of our "TEAM" principles. We found management to be lean, informal, and action-oriented. However, we found other patterns that ran counter to expectations derived from recent books (see box on "Modern Management Theory"). We had anticipated a participative management style, characterized by decentralization, autonomy, and an atmosphere of spirited but friendly dissent. We found two distinct styles, one centralized, the other decentralized. At many companies, CEOs and their top colleagues told us that they are personally involved in operations, organization is fairly centralized, and that cohesiveness, especially among the top management team, is much more characteristic than dissent. At others, decentralization prevailed, with considerable low-level autonomy and lively debate.

High-performance companies instill a sense of ownership, an action-oriented entrepreneurial spirit throughout their organization. They do so not only through financial incentives but, more importantly, through the definition and communication of a corporate mission. Almost none of the companies we visited based management primarily on efficiency, financial returns or other quantitative norms. While such standards are important, they consider vision, corporate culture, and other qualitative norms equally significant, especially in the company's long-run success.

Identity. Virtually all the companies we visited had a keen sense of identity. This identity determines the norms by which a firm chooses products to market, implements technology, treats employees, and generally organizes and manages its affairs. A self-conscious view of one's company as a social institution embodying far more than financial values was widespread and strong among our sample.

Dennis Hayes, CEO and founder of Hayes Microcomputer Products in Atlanta, says he grew frustrated with the bureaucratic malaise at two large companies where he worked. He says he decided to leave the security of a corporate engineering job to "build the great American company." He wanted to create a place where people would want to come to work, would be committed to and enthusiastic about their jobs and would be able to achieve more of their human potential.

Many companies expressed their identity through a formal statement of philosophy. Nowhere was this more evident than at Nissan. Marvin Runyon, the CEO, has evolved this statement of purpose: "To build the best quality trucks sold in North America." The slogan is posted in the plant for all employees to see, remember, and strive for.

Publix, on the other hand, defines itself as the company where "shopping is a pleasure." Publix workers hold this as their primary goal. Federal Express's stated mission is to solve people's high-priority logistics problems. "People-service-profit" is a shorthand version of this mission that is transmitted to all employees. Charter Medical's purpose is "to provide quality health care through the free enterprise system." Sun Banks, a Florida bank holding company based in Orlando, also has a formal mission statement. Its essence is that Sun Banks' purpose is to please, not just satisfy, customers, employees, and shareholders. Days Inn is formulating a statement about the high quality of lodgings it offers and the attendant high value to its customers. This statement will be displayed in all its motel lobbies. CEO Richard Kessler already stresses the importance of inculcating employees with the company "mindset" so he can turn over more responsibility to them.

No formal credo exists at other companies we visited, but a link between the product marketed

and the company's identity is strong. Coca-Cola President Donald Keough told us that Coke is more than a product; it's a moment of pleasure, a set of life experiences as reflected in customer collections of Coke memorabilia. This special experience that surrounds the product is felt not just by customers but also by Coca-Cola's 40,000 employees. Sam Ayoub, Coke's chief financial officer, mentioned the old saying that "Coke, not blood, runs through the veins of employees," implying that the staff is involved in the spirit of the company. Some high-performance firms elicit special loyalty from employees and customers because of their role as social institutions. Both Trust Company and Coca-Cola have contributed to the historical development of Atlanta. Sun Banks also sees community development in all the areas where it operates as an important aspect of its corporate identity.

Symbols serve as surrogates or reinforcement for formal credos. Tenure pins are common. Upon joining Management Science America (MSA), an Atlanta-based software developer, each employee receives a Tiffany-designed silver key. After five years this is replaced with a gold pin. Coke has pins for different tenure, including a diamond pin for 25 years service. Ties carrying the company logo are also to be found at such firms as Trust Company and Sun Banks. Federal Express and Coke operate company stores with an assortment of products carrying the company logo. At Federal these range from T-shirts to luggage. Uniforms are another way of fostering company identity. Nissan issues all employees slacks, T-shirt, shirt, and jacket. Wearing the uniform is voluntary. The plant is a heterogeneous mixture, with some employees wearing only their own clothes, others wearing the Nissan jacket over personal attire, and some sporting the Nissan T-shirt. Days Inn issues its front desk employees well styled and tailored uniforms. Thus, self-pride is integrated with pride in one's company. Quadram Corporation, a subsidiary of the Atlanta-based Intelligent Systems Corporation, a manufacturer of computer peripherals and graphics, created a new trademark—"Quadram Quality," or QQ—but management told employees it could not be displayed until the return rate on all products was reduced to less than one-half of one percent. Today, with that goal long since achieved, the symbol is entrenched in the Georgia microcomputer firm's corporate identity.

Finally, design and architecture reflect the company's identity. At Trust Company's headquarters in downtown Atlanta, three pillars from the former building that stood for half a century have been preserved near the entrance. A portion of the old facade is incorporated into an interior wall in the lobby. These architectural touches reinforce Trust Company's sense of history. Officials of the bank today speak of a strong sense of stewardship toward their legacy. Trust Company prides itself on sound financial practices, conservatism, and quality.

Credos and symbols are not typical of all the companies we visited. Nucor eschews such trappings as tenure pins. It recognizes length of service by giving employees shares of stock. However, such recognition is quite in keeping with the company's no-nonsense view of itself and its industry. CEO Ken Iverson told us: "Steelmaking is hot, noisy, dangerous, dirty work, and there's no getting around that." In this environment, he believes, fancy ties and tenure pins would be totally inappropriate.

Two-Way Communications. Besides communicating the corporate mission and values, high-performance companies emphasize communications in general. What makes the emphasis on communications at these companies special is that it is two-way and linked with a willingness to respond to complaints, problems, or suggestions. Many update employees regularly about the companies' financial performance. Flowers' management emphasizes to employees that the best security for keeping their jobs and assuring advancement opportunity is through profit. They give employees an opportunity to share in those results. Nucor and Sonoco also stress the importance of informing employees about the company's fortunes. Fred Smith of Federal Express says, "For people to have pride in what they are doing, they must be constantly informed about the importance of their jobs and the results they are attaining."

Communications take many forms. Sun Banks and Sonoco keep their employees informed through newsletters and videotapes. Daily newsletters, containing information about new policies, pricing, products, recent performance, problems, and even personal stories, are read to station and hub employees at Federal Express.

Meetings are a widespread means of two-way communications. Nucor's general managers and often the CEO meet once or twice a quarter with

groups of 50 employees to discuss business conditions. Sun Banks CEO Joel Wells visited all his company's banks to encourage bank presidents to do the same regularly. MSA's CEO, John Imlay, and its chief operating officer, Bill Graves, meet personally with all employees once or twice a year. Such meetings serve not only to keep corporate staff knowledgeable about line operations; they also provide a means for employees to become informed about the company, to voice suggestions, and to seek action on grievances. At Nissan, groups of 20 employees have lunch with CEO Marvin Runyon. These meetings have apparently won a reputation for trouble-shooting; once the ice is broken, employees bring out lists of complaints and problems. When we interviewed him, he apologized for being late, saying he had to call a manager to convey a suggestion an assembly line worker had made during lunch.

At Sonoco, 36 workers are chosen at random to have lunch with CEO Charles Coker once a month. In addition, Sonoco has an advisory board consisting of 10 elected employee representatives and 10 appointed managers. Flowers sends teams from headquarters every 18 months to interview groups of production line employees; the latter, guaranteed anonymity, air concerns and grievances, and suggest changes in management policies and practices. Days Inn's top officers meet quarterly with employee peer groups, such as chambermaid supervisors, to inform them of the company's current financial condition and discuss problems. High-performance companies stress that bottom-up communication works only when management acts on the suggestion or explains why nothing can or should be done about the problem.

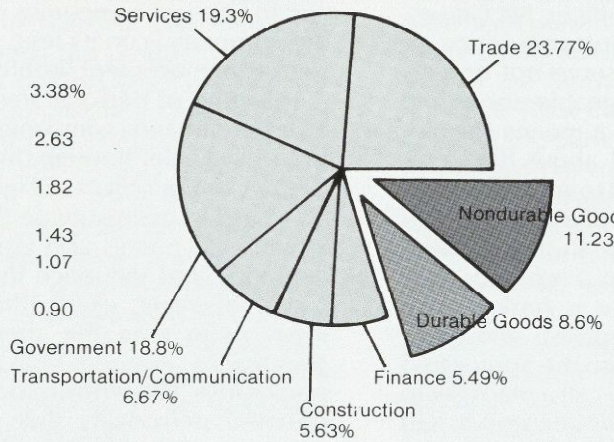
Personal Involvement. The emphasis on two-way communications is closely related to another aspect of entrepreneurial management—personal involvement of senior management in the company operations, a top-level attention to detail that results in lean organization and a minimum of bureaucratic formality. Days Inn's Richard Kessler, who typifies that personal involvement, insists on being informed of all decisions. He spends a day each month with the company's top 20 managers just below the senior staff; the meetings keep him abreast of potential problems and "bad news" he might not hear from senior officers. Kessler says that he does at times delegate authority; however, he believes that Days Inn's growth requires intense involvement on his part. Charles Muench, chairman of Intelligent Systems, on the other hand, is the archetypal entrepreneur. He likes to invent new products and to get new companies off the ground. Once the company is on its feet, he likes to turn over routine management problems to someone else.

This type of personal involvement reinforces high-performance companies' mission and entrepreneurial spirit through the personalities of the CEO. A senior officer at Federal Express told us, "It's hard to overestimate the influence of Fred Smith." His energy and vision clearly mold the company and influence its every action. Most CEOs, however, exert influence through their ideas more than the sheer strength of their personality. Bernard Marcus of Home Depot personifies the enthusiastic, energetic sales-oriented personality that he hopes company employees bring to their jobs. He told visitors he was taking on a short tour of corporate headquarters, "You'll have to walk faster than that. Hurry up, this is retail!"

Personal involvement is not limited to CEOs. Many companies have work-sharing programs designed to keep corporate leaders in touch with the company's basic operations. For example, Sun Banks' senior management spends one and one-half days a quarter first relearning a basic function such as customer service, credit approval, or data processing, and then actually performing such activities in a local bank. Federal Express sends teams composed of one senior officer and his staff to work at the firm's Memphis hub, where packages are sorted and routed to final destinations. This is intense work at breakneck speed, conducted between midnight and 4 a.m. Such "hub blitzes," as they are called, help keep corporate headquarters in touch with the core of Federal's operations.

Several companies have "apprenticeship" programs for entry-level managers, particularly those whose specialties, such as law and accounting, will tend to remove them from line operations. Flowers requires incoming lawyers and financial analysts to get a feel for the business by working temporarily in the bakeries or as route salesmen driving delivery trucks. Home Depot put a rising company lawyer on the sales floor for several months to give him a better perspective. Management trainees at Oxford must make a garment, using every piece of machinery in the plant. At Publix all management personnel must begin by

Chart 1: Distribution of Southeastern Employment by Industry, 1983



Nondurable Goods	
Textiles	3.38%
Apparel & other textile goods	2.63
Food & other kindred products	1.82
Chemicals & allied products	1.43
Printing & publishing	1.07
Paper & allied products	0.90

Durable Goods	
Electrical & electronic equipment	1.54
Machinery, except electrical	1.41
Transportation equipment	1.29
Lumber & wood	1.12
Fabricated metal	1.08
Furniture	0.95
Stone, clay and glass	0.66
Primary metal	0.55

Source: Unpublished data from Bureau of Labor Statistics, 1983

How Companies Were Selected

Our pool of 22 high-performance southeastern companies came from discussions with regional securities analysts, from formal nominations by the 44 directors of the Federal Reserve Bank of Atlanta and its five branches, and our own reading of current business literature. We used this screening method initially to ensure that we drew on the opinions of respected business leaders and financial analysts in selecting exceptional, privately held companies as well as publicly traded corporations.

We asked for nominations from the Atlanta Fed's directors because of their business backgrounds and their geographic diversity. Directors are respected business people and community leaders. Geographic representation is evenly dispersed throughout the District.[1] We asked each director to name three firms headquartered in the Southeast that he or she personally endorsed as being well-managed and likely to sustain their current success. Directors were asked to limit their selections to companies, public or private, large enough to have some impact on the local economy—preferably over $10 million in sales.

Nominated companies were subjected to a quantitative financial screen using industry data obtained from Standard and Poors (S&P). Our screen compared current and historical performance measurements for individual companies with those for their industry. Nominated companies passed this screen if they out-performed their industry peers. Our two measurements of current profitability were return on assets and return on equity for 1982. These ratios measure a firm's efficient use of its assets and its return to shareholders. We also were interested in summarizing each company's historical performance and thus selected the five-year compound growth rate of net sales to measure its performance over time. Net sales measure the growth of a company more clearly than net income because a dramatic change in sales volume requires operational adjustment over time.

We compared each nominated company's measures of current and historical performance with those of its peer group—which we defined as companies headquartered in the Southeast with the same three or four-digit Standard Industry Classification (SIC). Each company measurement within an industry peer group was compared to the S&P national industry average for that same measure. Nominated companies were accepted into the pool of high-performance companies if their 1982 profitability and sales growth figures exceeded their industry average. We made this comparison to assure that each company stood out among its southeastern as well as its national peers. Companies selected were, in all cases, among the top in their peer group.[2]

Banks were subjected to different financial tests. Because of the sensitivity of the Fed's position as an industry regulator, we analyzed banks from a stockholder's point of view rather than from a regulatory standpoint. Banks were screened on four quantitative measurements: current price-earnings ratio, net interest margin, return on assets and five-year compound growth rate of total assets. These assessed each institution's current and historical performance relative to its southeastern peer group. For convenience, we limited our selection of banks to the ten largest in the region, although we recognize that many small banks are well-managed and highly profitable.

Table 1. Bank Performance Rankings
(1 = highest)

Ranked by Total Assets September 30, 1983	Price-Earnings Ratio	1982 Net Interest Margin	1982 Return on Average Assets	5-Year Compound Growth Rate of Total Assets
NCNB	10	9	7	3
Barnett Banks of Florida	5	2	4	2
Sun Banks	4	4	6	4
Southeast Bank	8	7	8	7
Wachovia	3	8	2	9
C&S	6	6	5	10
First Union	7	8	10	1
First Atlanta	9	5	3	8
Trust Company	1	1	1	5
Florida National	2	3	9	6

Frequency of Occurrence in Top 4

Barnett Banks - 3
Sun Banks - 3
Trust Company - 3
Wachovia - 2

Our first measure of banks' current performance, the price-earnings (P/E) ratio, reflects the growth potential and risk of a company as perceived by financial markets. A high P/E ratio, relative to other companies, means that the market places a greater value on a company's potential. The ratio was calculated for each bank by dividing the current market price of the bank's stock by its trailing 12-month earnings per share. Net interest margin and return on assets, the two current profitability measures used in our analysis, are important performance indicators. The net interest margin reflects the bank's major source of income, and its return on assets measures its efficient use of total assets.

We also wanted a measure of historical performance and therefore calculated each bank's five-year compound growth rate of total assets, which measures a bank's ability to serve its customers.

We ranked each bank on a scale of one to 10 on all four criteria. Wachovia, Trust Company, Barnett Banks, and Sun Banks ranked in the top four in all categories more often than did their peers (see Table 1). Our results were confirmed by the November 1983 National Banking Survey of Chief Executive Officers.[3] CEOs from 2,000 of the largest commercial banks ranked Wachovia, Trust Company, Barnett and Sun Banks among the best-managed commercial banks in the South.

Using Bureau of Labor Statistics' (BLS) industry employment information, we selected industry groupings with significant southeastern employment (see Chart 1). We looked at four nonmanufacturing categories: wholesale and retail trade; transportation, communication and public utilities; finance, insurance and real estate, and miscellaneous services. We selected five industries from nondurable manufacturing: textiles, apparel, food and kindred products, chemicals and allied products, and paper and allied products. We also selected three durable manufacturing industries: transportation equipment, fabricated metal, and electrical and electronic equipment.

Because of the time involved, we were unable to interview all of the companies that were nominated and passed the financial screen. We instead limited ourselves to conducting interviews at 21 companies that represent a cross-section in terms of southeastern industry, geographic location, size, and age. Table 2 shows the selected companies, their industry dispersion and geographic location.

Table 3 shows the size and age of each company within the selected group. Companies chosen range in age from four to 107 years and vary in size from less than $70 million to $6.8 billion in sales. Their staffs ranged from 350 employees to almost 40,000.

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[1] Directors nominated companies based in North Carolina and South Carolina, as well as states in the Sixth Federal Reserve District—Alabama, Florida, Georgia, Louisiana, Mississippi and Tennessee.

[2] Nominated private companies also were compared to their industry peers whenever information was available. Nissan USA in Tennessee was not subjected to the same quantitative screen. Financial information was not readily available because the new Nissan USA is a subsidiary of the larger Nissan Limited of Japan. The U.S. company was selected because of its unique position in the Southeast as a Japanese-owned American company that has incorporated elements of Japanese-style management. Financial information for Hayes Microcomputer Products and Bank Earnings International was disclosed to us on a confidential basis.

[3] **National Banking Survey of Chief Executive Officers,** November 1983, Egon Zehnder International Management Consultants, p. 11. The best-managed commercial banks in the South were ranked as follows: 1) Wachovia, 2) Texas Commerce, 3) Trust Company, 4) Barnett Banks, 5) Allied Bancshares, 6) Republic of Dallas, First Tennessee, Louisiana National, Sun Banks, United Virginia (all equally ranked).

Table 2. Industry Representation

Industry Group	Company	Line of Business	Geographic Location
Wholesale and Retail Trade	Home Depot	Retail lumber	Atlanta, Ga.
	Publix Super Markets	Retail grocery	Lakeland, Fla.
Miscellaneous services	Bank Earnings International	Bank Consulting	Atlanta, Ga.
	Days Inn	Hotel and motel	Atlanta, Ga.
	Charter Medical	Hospital management	Macon, Ga.
	Management Sci. Amer.	Computer software	Atlanta, Ga.
Transportation, Communication and Public Utilities	Federal Express	Express information delivery	Memphis, Tenn.
	Delta Air Lines	Airline	Atlanta, Ga.
Finance, Insurance and Real Estate	Barnett Banks of Florida	Banking	Jacksonville, Fla.
	Sun Banks	Banking	Orlando, Fla.
	Wachovia	Banking	Winston-Salem, N. C.
	Trust Company	Banking	Atlanta, Ga.
Electrical and Electronic equipment	Intelligent Systems	Computer graphics terminals	Norcross, Ga.
	Hayes Microcomputer Products	Consumer electronics	Norcross, Ga.
Transportation equipment	Nissan Motor Manuf., U. S. A.	Truck manufacturing	Smyrna, Tenn.
Fabricated metal	Nucor	Steel manufacturing	Charlotte, N. C.
Textile and apparel	Russell	Textile and apparel	Alexander City, Ala.
	Oxford Industries	Apparel	Atlanta, Ga.
Food and kindred products	Flowers Industries	Bakery products	Thomasville, Ga.
	The Coca-Cola Co.	Beverage	Atlanta, Ga.
Chemicals and allied products	Key Pharmaceuticals	Pharmaceutical	Miami, Fla.
Paper and allied products	Sonoco Products	Industrial packaging	Hartsville, S. C.

Table 3. Corporate Profiles

	Age in Years	Number of Employees 12/31/83	Sales Calendar Year 1983 ($ Mil.)	5-Year Compound Growth Rate Net Sales (%)	Return[1] on Average Assets (%) 1983	Return[1] on Average Equity (%) 1983
Nissan Motor Mfg., U. S. A.	4	1,800	5,000[2]	N. A.	N. A.	N. A.
The Home Depot	6	2,400	256[3]	125.5[4]	14.91	24.61
Hayes Microcomputer Products	6	350	N. A.[5]	N. A.[5]	N. A.[5]	N. A.[5]
Bank Earnings International	8	122	N. A.[5]	N. A.[5]	N. A.[5]	N. A.[5]
Federal Express Corp.	11	17,059	1,194[6]	44.5	10.63	20.58
Intelligent Systems	11	420	73	52.0	19.08	24.21
Days Inn of America, Inc.	14	13,500[7]	228	13.6	3.99	31.96
Charter Medical Corp.	15	8,500	375	29.5	7.18	29.44
Nucor Corp.	18	3,700	543	12.1	7.0	11.38
Management Sci. Amer., Inc.	21	1,857	145	40.8	9.10	12.29
Key Pharmaceuticals, Inc.	37	1,150	127	78.5	19.63	37.97
Oxford Industries, Inc.	42	12,884	543	17.3	12.30	23.53
Sun Banks, Inc.	50	9,200	8,901[8]	31.5[8]	0.85	14.75
Publix Super Markets, Inc.	54	33,985	2,853	11.2	11.09	17.93
Delta Air Lines, Inc.	55	37,239	3,883	12.0	−0.45[10]	−1.45[10]
Flowers Industries, Inc.	65	9,065	553	15.7	9.25	18.50
Russell Corp.	82	8,800	319	12.6	10.78	17.03
Sonoco Products Co.	85	10,008	669	14.2	9.04	14.77
Trust Company of Georgia	93	4,671	4,850[8]	12.2[8]	1.58	24.38
The Coca-Cola Co.	98	39,792	6,829[9]	10.8	11.01	19.61
Wachovia Corp.	105	6,544	7,850[8]	11.6[8]	1.20	18.41
Barnett Banks of Florida, Inc.	107	10,669	9,397[8]	24.2[8]	.98	17.94

[1]Calendar year net income divided by average assets and average shareholders equity, respectively. Averages were calculated based on beginning and ending balances.
[2]Approximated U. S. sales
[3]Year-ending January 30, 1984.
[4]Three-year compound growth rate
[5]Privately-held company, data not available for public use.
[6]Year-ending November 30, 1983
[7]Includes approximately 6,000 franchised employees
[8]Total assets as of December 31st
[9]Worldwide
[10]Deregulation reduced returns in the airline industry in 1983.

bagging groceries, cutting meats, or operating a cash register.

One byproduct of this personal management involvement is informality. Personal involvement obviates much of the need for memos, standing committees, and procedural manuals. Many companies are simply too new to have developed procedural manuals. In such firms, autonomy and authority flow from the inculcation of corporate values and the expectations that relations between employees and management are long-term and essentially harmonious.

Another result of such patterns is a lean organizational structure. Nissan has only five levels of management above production line workers: supervisor, operations manager, plant manager, vice president, and president. In contrast, many American auto companies have 10 to 12 layers. Nucor has only 17 people at its austere headquarters in Charlotte. Flowers has only 100 people. Of course, given our focus on southeastern companies, we tended to exclude very large businesses; financial criteria, such as high growth and profit rates, also tended to draw newer companies into our sample. However, older and larger high-performance companies such as Oxford Industries and Flowers also feature lean management structures and achieve superior results through decentralization.

Decentralization. The emphasis on shared goals and values, reinforced through two-way communications and personal involvement of senior management, inculcates the entrepreneurial, action-oriented spirit throughout high-performance companies. Some businesses also foster this orientation through decentralization.

Barnett Banks of Florida, the largest bank holding company in Florida, best exemplifies such decentralization. Company officials attribute much of the bank's success to an organizational structure with grass-roots autonomy that heightens motivation for lower level management. In an environment where employees at all levels feel free to take the initiative to solve problems without first seeking approval from a higher official, often at a remote headquarters location, a "bias toward action" ensues. As a result, customers can expect faster decisions and more personalized service. Barnett stresses this aspect of its management in its advertising. Barnett officials also believe that decentralization fosters product innovation and experimentation. An idea can be tested on a small scale without central approval; if successful, it can be adopted elsewhere in the system. Barnett's cash management and its program to market to consumers planning to move to Florida came from banks within the system, not from headquarters.

Each of Charter's hospital managers is responsible for the budget and profits of his operation. Charter Medical's CEO William Fickling hires "compulsive overachievers" and gives them free rein. He not only leaves the operational details to others in the company; he allows subordinates to pursue policies or directions that he believes may be misguided. Oxford and Nucor employ the single business unit concept: each division is responsible for its own marketing, manufacturing, budgeting, planning, plant, equipment, and personnel. Similarly, each of Sonoco's five divisions operates as a profit center. In Flowers' system of specialized plants, each bakery produces items needed by other Flowers bakeries in its region. Thus, each plant must stand on its own profitability as if it were an independent company.

Not all successful companies are decentralizing. Charter Medical dissolved three regional headquarters on the grounds that the company's size could not justify the overhead costs. Even some of the intrinsically decentralized retail companies centralize many functions. Home Depot's store managers control only personnel matters; pricing, advertising, and purchasing are handled centrally. Federal Express's station managers are not expected to be creative. The company's success is predicated upon uniform quality.

Nonetheless, many action-oriented companies try to delegate responsibility and thereby avoid the bureaucratic mentality of following rules imposed by someone else in the organization. Employees at most companies we studied are encouraged to solve problems in a way that best fits the corporate mission and value structure. At Nissan, production teams practice consensus decision-making among peers rather than seeking a ruling from top management. Managers who had formerly worked at U. S. automobile companies told us, "We solve problems across the table here, rather than up and down the chain of command." When decisions are made by the people who are most affected, the result can be quicker and more flexible actions. Leland Strange, CEO of Intelligent Systems, emphasizes each employee's responsibility for action: "The only way our employees get in trouble with us is to not be doing something, not taking action. They'll

never get in trouble for doing the wrong thing if they use a reasonable, rational process to get there."

Creating an atmosphere free from recrimination also fosters the spread of an entrepreneurial spirit. Sonoco's Coker takes ultimate responsibility for acquisitions recommended by various managers. If an acquisition proves less successful than anticipated, the managers are not blamed. There is a certain risk in telling others of a problem or of calling off a project in which the company has invested heavily, but companies in our sample encourage such forthrightness. These companies do not "kill the messenger who brings the bad news." Marvin Runyon tells his employees, "Never stay in trouble by yourself." By telling others about a problem, it can be corrected before it becomes insurmountable.

Few Perquisites. Incentives are intended to foster action, decisions, and risk-taking; therefore, high-performance companies consciously avoid perquisites based on status and seniority rather than performance. Nissan and Nucor have no reserved parking spaces for officers. Both Federal Express and Nucor restrict management vacations to conform with those allowed employees. No management personnel at Federal Express may take vacation during the Christmas holidays since employees must work during these periods. Federal Express has no executive dining room. There are no offices at Hayes Microcomputer Products. Everyone, including the CEO, works in a cubicle open at the top and with no door. Nissan offers discounted auto leases on Nissan trucks to all employees, not just to managers. CEO Marvin Runyon wears the company's standard blue coveralls, issued to all employees.

This sensitivity does not imply that these companies are worker democracies, although they do give employees opportunities to participate in decision-making. Managers are rewarded well, typically through stock options and bonuses based on return on assets. Days Inn offers limited partnerships to rising managers. Moreover, the reduction or redistribution of status symbols does not imply a social egalitarianism. Neither a woman nor a black was among the 100 or so executive officers we interviewed. In several manufacturing facilities, women hold the lowest positions and seemed to have little hope of career advancement. At Nissan and Nucor, however, women held high-paying, traditionally male jobs, such as welding. Moreover, opportunities for disadvantaged groups seem promising because most high-performance companies emphasize treating all employees fairly.[3]

Cohesiveness. A final action-fostering management characteristic, and one that surprised us initially, was the stress on cohesiveness, especially among top management. CEOs seek to build such a cadre because they believe it enhances the entrepreneurial spirit. Wachovia uses the analogy of a basketball team. If the players know one another well, they can gain an intuitive sense of what to expect of their colleagues and thus act faster. Kessler of Days Inn typified this outlook with his comment: "Management is at its best when it is of similar mind, spirit, and objective." Many companies are led by graduates of the same college. Georgia Tech alumni predominate at Days Inn and MSA. Many of the top officers at Sonoco have known each other most of their lives. The average tenure of senior management at Wachovia is 20 years. At Federal Express, Fred Smith urges participation from below. Chief operating officer Jim Barksdale says the reason he got the job is because he could "take Fred on." Yet other officers say they feel lucky if they come away with a draw in a confrontation with Smith.

Some companies encourage dissent and diversity. Debate and dissent flourish at Barnett, not just within the circle of top management but in larger meetings that include board members and stockholders. MSA recruits a diverse work force, ranging from extroverted sales people to creative computer specialists, who write software, and nurturing employees who help sustain the company's reputation for customer service. The company tries to hire a diversity of educational backgrounds, including music majors as well as those trained in math and computer science. Company leaders value debate. At a company meeting of 30 people, a manager rose after President Bill Graves' presentation and told him, in so many words, that the idea Graves had advanced was ridiculous. The manager was subsequently promoted to an officer, in large part because of his willingness to stand up for what he believes. Of course, MSA officials note that dissent must remain in the realm of ideas; employees at all levels are expected to comply in action with company policies until they can convince others through the persuasiveness of their arguments of the need for change.

More typically, we found a collegiality in decision-making within the companies' somewhat homogeneous management teams. Sonoco's CEO describes himself as an "orchestrator" who solicits ideas from other senior managers rather than originating all strategies himself. Nucor's Iverson characterizes himself as more of an arbiter at the company's regular group managers meetings, where key decisions are made. Sun Banks called on the assistance of 100 people to formulate its mission statement and attendant strategy and tactics.

Many CEOs express concern about the lack of dissent and divergence. The longevity of management and the commonality of backgrounds may serve to insulate the organization and create a need for self-renewal at times. Once a company has achieved success, it becomes harder to maintain the reputation of excellence than it was to build it. Coca-Cola finds complacency a major concern as do Wachovia and MSA. Donald Keough at Coke said, "You have to keep providing opportunities for people to enjoy the thrill of victory. When you've been on a winning team for so long, the motivation becomes the fear of losing rather than the thrill of winning." Coca-Cola responded to this challenge when Roberto Goizueta took the helm in 1980. Although his new management team consists of long-term Coke employees, they have established a new strategy and sense of direction. Division and country managers have been encouraged to contribute their views to policies and decisions in a way that had long been absent at Coke. The new spirit instituted by Goizueta is reflected in the spate of new products Coca-Cola has introduced in the last three years, in the company's willingness to rely more heavily on debt financing than in the past, and in its commitment to retain a higher portion of earnings for reinvestment rather than for distribution as dividends to stockholders.

For many managers, the entrepreneurial spirit is renewed when a series of events threatens the company's success or even survival. Wachovia redirected itself in the early 1970s. Flowers, Sonoco, and Oxford realized the need for a change as their industries matured and began declining. Days Inn pulled through a tough period in the mid-1970s by demanding emphasis on quality control. The memories of these times are still vivid in the minds of senior management. Many have vowed never to "get fat, dumb, and happy" again.

The fact that we found an entrepreneurial style of management operating in new companies, sustained in older firms, and renewed in businesses that had lost it gave us reason to believe that this style and the mechanisms that support it—corporate mission, communications, personal involvement, and participative decision-making—are important in the corporate successes we studied.

Affiliation of Employees

Viewing their companies as social institutions, families, or teams leads management of high-performance firms to look on their employees as integral affiliates rather than as adversaries or commodities. Employees at high-performance companies often exhibit the same "fired up" enthusiasm as members of winning sports teams. Since workers are viewed as family members, they do not seem to seek an outside party, such as a union, to represent their interests. Unions were noticeably absent at these companies, even those in highly unionized industries.

Profit-Based Rewards. This familial view of employees is, in most cases, distinct from the paternalism that prevailed historically in certain industries and areas. Workers are treated with respect. Nissan refers to its assembly-line workers as technicians. Employees at Nissan and elsewhere are paid well, especially in comparison to industry or local standards. Moreover, their remuneration is usually based on the same criteria as that of management. Nucor's employees receive weekly and yearly bonuses based on their division's return on assets. There is no upper limit to this. The $30,000 median income of steelworkers at Nucor's Darlington, S. C. mill is far higher than local income norms.[4] Stock ownership by employees is widespread, although stock purchase plans outnumber plans based solely on employer contributions. Charter Medical, Federal Express, Nucor, and Sun Banks are among the companies with stock purchase plans. Key Pharmaceuticals, Publix, and Intelligent Systems have employee stock ownership plans.[5] Coca-Cola is implementing a stock ownership plan in stages so that many of its employees will become shareholders on retirement.

Profit-sharing plans also are fairly common. For example, 20 percent of Publix's profits go to employees and another 15 percent go to an employee retirement fund. Similarly, Nucor has

The Case-Study Approach: Advantages and Problems

Having identified high-performance companies in the region, we spent six months conducting case studies to identify common management characteristics. Our case studies began with intensive scrutiny of annual and 10-K reports, studies by securities analysts, and other published literature for each company. Then our team of researchers conducted day-long interviews with senior management, touring operations, and, in some cases, meeting with employees.

We chose this in-depth approach, encompassing a smaller sample, rather than the broad swath of respondents typically covered by a survey, for several reasons. The case-study method has been used extensively in social science research, particularly in anthropology, psychology, and, to some extent, in politicial science. It is the primary method of analysis used by such premier business schools as Harvard, Stanford, and the University of Virginia, which promote excellence in the management of business. We felt this approach was appropriate to our research.

Another factor motivating our choice was our concern with the problem of response set bias. This phenomenon, whereby most respondents try to give positive answers that they believe the researcher wishes to find, distorts the results of attitude surveys. Although careful phrasing of questions can help counter the human trait to please, we felt that the popularity of recent books on this subject would make it difficult to overcome this tendency.

We felt it was necessary to interview a variety of top officers and, in some cases, workers in the companies we were sampling to determine whether adherence to principles was more than rhetoric. Through interviews, our panel of four researchers—who have diverse academic and professional backgrounds—were able to probe and discover patterns that could not be discerned through a questionnaire. Some of those interviewed pointed out aspects of currently popular management literature they considered completely incorrect. Others voiced initial agreement with certain management principles, but the ensuing interchange suggested that such principles were either not borne out in fact or were of minor importance in their organization.

Using a research team helped us address another problem of certain types of survey research, that of intercoder reliability. Some surveys utilize more open-ended questions that allow respondents greater opportunity to phrase answers in an idiosyncratic and presumably more sincere manner. Tallying or finding patterns in answers to such open-ended questions involves an evaluation by the researcher who codes responses in accordance with a preconceived set of answers or a typology. Different researchers may code the same document in a variety of ways. By using the case-study approach, with several researchers present at each interview, we could test the correctness of our evaluation of interviewee comments by discussing them with one another.

A final problem this methodology addressed better than that of survey research was that of validity—do the indicators really measure the variables and hypotheses being tested? Certainly, we cannot be sure that because top management and a handful of employees told us a company placed a high value on its staff, that it did in fact do so in general. On the other hand, we are much more certain of the validity of the responses we got because of the opportunity to talk at length with more than one respondent at each firm—including those most responsible for the conduct of the company.

This study is subject to certain limitations. The most important is that we are not unequivocally certain that these principles are in fact correlated with the financial success of the companies under study. Many of the policies we have reported have been implemented only recently. We, along with most of the corporate officials we interviewed, believe such a relationship exists. Yet it remains for subsequent research to examine this issue further. Second, we cannot be certain that the management principles related to us by senior officers are in fact being implemented in the way they claim or believe. However, plant tours, our conversations with employees, and the strong objections voiced by many company leaders regarding certain characteristics we expected to find lead us to believe that the principles do obtain in practice. Third, our findings seem more prominent or consistent at new or rising entrepreneurial companies than at long-established and historically successful companies for which stewardship is a prominent value. Fourth, our focus on southeastern companies might incorporate a regional bias. Because the area's traditional comparative advantage has been low-cost labor, for example, attitudes toward technology and human resource optimization might be somewhat less pronounced than in other sections of the country. Despite these potential limitations, we believe our study has validity and bears policy implications both for the private and public sector.

no fixed pension plan but rather a deferred profit-sharing plan that will produce retirement income for the company's 3,600 employees only if it continues to succeed financially. Days Inn recently instituted Day Cap, a thrift plan, whereby the company matches employee savings by 25 percent or more, depending on annual profits. To participate, employees must contribute at least 2 percent of their wages or salaries. Wachovia has a savings incentive plan that allows employees to contribute up to 6 percent of their salaries. The company matches from 50 to over 100 percent of employee contributions, according to annual performance in meeting profitability targets. Trust Company offers an incentive compensation plan, whereby all employees with at least three years tenure receive a bonus of as much as 20 percent of their pay. The bonus is based on both the performance of the company as a whole and the individual's bank. Flowers offers bonus, incentive, and stock purchase programs; employees are informed weekly of their plant's profitability, its attainment of operating goals, and areas requiring improvement.

In these plans, employee compensation or retirement benefits are linked directly to the company's profitability. These plans also are similar in deriving from group rather than individual performance. Like the owner, employees can not succeed through excellent individual performance alone; the group—whether a work station of 20 people, a unit bank, or a corporate division—must prosper for the individual to gain.

Employees: Long-Term Corporate Assets. Employees at high-performance companies are regarded as the firm's most important long-term asset, not a cheap resource that is easily replaced. Delta officials believe job security is critical in sustaining employee commitment. Delta has not furloughed workers since 1956. Nucor and Nissan, among others, avoid laying people off. Nucor has not laid off an employee in 15 years; in hard times all workers go on short hours. Since employees are regarded as a quasi-permanent investment, high-performance companies place great importance on recruiting. Many companies intentionally locate in rural areas where few employers will compete with them in hiring the best applicants. Nissan, Nucor, and Oxford have been most successful in this regard. Nucor recently received 1,400 applicants for nine openings. Nissan had 130,000 applicants for 1,800 positions.

Some companies prefer to hire employees with no previous experience in the industry so that they can instill the company's values from the outset. At Charter Medical, for example, officers like to hire hospital administrators fresh out of school and then "Charterize" them. Nucor and Nissan have few workers with previous experience in the steel or auto industries.

Some companies look not just to individual employees as long-term corporate assets, but to their families as well. Key Pharmaceuticals prides itself on having 13 members of one family. Flowers offers scholarships and summer jobs for children of employees and boasts of its second-generation workers. Nucor provides partial-tuition reimbursement to children of employees; in return they must attend several company meetings, write an analysis of the annual report, and consider Nucor as a potential employer upon graduation.

Training. Since they view employees as their most important long-term assets, high-performance firms offer substantial training opportunities. Sun Banks employees at a variety of grade levels can improve their career prospects while remaining with the company by attending Sun Banks University. Sun Banks attempts to identify, train, and advance what it calls "mustangs," employees with great promise but insufficient education to fulfill their potential. Moreover, Sun Banks has a formal mentoring system: everyone from the assistant manager level up is assigned to a senior officer. Nucor pays for the training of employees who successfully post for vacancies within a mill. Nissan's employees go through pre-employment training, funded by the state of Tennessee, before being hired. They continue to have access to a variety of machines and instruction facilities in order to advance to other jobs to develop a pool of candidates for future leadership. Home Depot officers train middle managers; Sonoco and Flowers also have extensive training for management and supervisors.

Flexibility. Another aspect related to training is job flexibility or enrichment. Most companies we interviewed rotate their employees through a variety of tasks, particularly those whose work tends to be monotonous or unpleasant. For example, Days Inn's chambermaids also work as waitresses, Key Pharmaceuticals' production-line workers, who watch bottles to make sure labels have been affixed properly, rotate every two

hours to perform other activities. At Nissan every chassis division worker must learn all 19 skills involved in this stage of the assembly process. This flexibility benefits the company by expanding the supply of labor able to perform any given task and gives the employee a larger perspective regarding the company.

The latter is an important point. Although most companies we visited attempt to make working for the company more fulfilling, they make no pretense about the nature of some jobs. Work at many of the companies is far from utopian. However, most of these companies try to mitigate the effects of unpleasant tasks.

Participation. Another common characteristic at high-performance companies is a greater opportunity for participation. In addition to two-way communications, companies we studied offer opportunities for employee peer groups to meet on their own. At Oxford, for example, job enrichment groups meet regularly to discuss ways to improve production and other job-related matters. This is the closest to quality circles we discovered. Even Nissan has not yet instituted this element of Japanese management. Employees at Charter, Federal Express, and Oxford are polled frequently regarding their supervisors. Managers at Federal and Oxford who consistently receive negative remarks from subordinates are not promoted. Trust Company and Sun Banks recently surveyed their employees about their job satisfaction and instituted policy changes as a result.

Market Strategy

Judging from our research, clearly defined market strategy seems to stem from a well-understood and well-focused corporate mission. In refining this strategy, management has asked: What can we do well? What is our comparative advantage relative to other companies in the business? What unmet market needs can we satisfy? What additional expertise must we develop?

Niches. The answers to these questions have led most high-performance companies to seek a market niche—a well-defined segment of a much larger market. "Niching" limits the competition and allows companies with good quality and low costs to dominate a market segment. Some companies create a niche by identifying and serving an unmet need. Key Pharmaceuticals found a niche among pharmaceutical giants by developing new ways to administer proven drugs. Federal Express provided a totally new service—delivering time-sensitive business documents and equipment parts point to point within 24 hours at a relatively low cost.

High Value-Added. Companies competing in the lower-cost end of the market try to distinguish themselves by offering better quality than their competitors. To provide that extra level of quality at reasonable prices, the company must contain costs. Days Inn seeks to provide high quality, low-cost lodgings by choosing simple, no-frills, yet attractive, designs. Home Depot reduces costs and adds value through its retail-warehouse concept, while offering a larger variety and stock of products. Russell's new marketing effort promises customers high quality athletic wear, such as warm-up suits and jogging shorts, at lower-than-designer-label prices.

Companies serving the higher-priced end of the market are able to create a demand based on the perceived quality or value of the product. Trust Company emphasizes its return on assets, one of the best among American banks. It seeks high caliber customers, not the greatest volume. As one officer states, "Trust Company does not give away dishes." Barnett raises such standard financial services as auto installment loans above the level of a commodity by making its service faster and more dependable. Barnett's staff can approve a car loan request from a dealer in an hour at most. In addition, unlike many banks, it continues auto lending even when interest rates are abnormally high. In general, Barnett tries to avoid selling only commodity financial products like IRAs. Instead it encourages employees to know their local market as a whole and how best to respond to it. Oxford Industries improved its financial performance by shifting from manufacturing for mass market retailers to producing designer and specialty label sportswear. When a competitor lowered its prices, Federal Express responded by raising prices and improving its delivery time from noon to 10:30 a.m. on next-day service. Sonoco locates its plants near customers to ensure reliable delivery. It distinguishes its commodity-like paper products by offering consistent availability and designs tailored to the customer's needs.

Market Share. Some high-performance companies are driven by market share, constantly trying to gain a larger share of the pie by taking

business from competitors rather than by seeking to increase demand. This strategy contrasts with trying to make the pie larger by creating a greater demand with new and innovative products. When the pie stops growing and market share has reached a high point, it is difficult to generate much growth in the company. This phenomenon occurred in the beverage industry. Once driven solely by increasing the volume of soft drink sales, Coca-Cola is now looking for new opportunities in new markets.

In some cases, demographics, deregulation, or technological breakthroughs expand the market "pie" dramatically. Florida's banking industry is growing because almost 1,000 people move into the state each day. Barnett and Sun Banks are striving to increase market share, although quality of service and innovative product lines are also important to them. Publix also benefits from the growing Florida population and makes its goal to blanket the state with new stores.

Oxford's primary business is designing, manufacturing, and selling consumer apparel products. Sonoco's is manufacturing and selling industrial packaging products. However, within those broad definitions, the two companies dominate several niches. In addition to supplying the textile industry with almost all of the paper and plastic cones used to wind yarn, Sonoco is one of the few suppliers of the new plastic grocery bags. Oxford has the exclusive rights to produce and sell several designer lines. While Russell's business is sportswear, it also specializes in team uniforms.

Product Integrity. We found several principles that guide companies in selecting and implementing market strategies. A prominent one is: they "stick to their knitting." Acquisitions and new market niches fit closely with their current mix of business. Sonoco seeks companies that complement its existing lines. For example, a byproduct from one division may be used as a resource for another division. Federal Express' ground delivery system complements its move into facsimile transmission of documents. Federal Express will be able to pick up a customer's document and deliver it by truck to a processing center, which will use image technology and satellite communications to transmit it to another city. Flowers uses its efficient distribution system, which was established to deliver fresh-baked bread daily, to deliver the snack foods it has begun producing. Its acquisitions are primarily in snack foods because of the higher margins, but the company realizes the importance of increasing market share in its "bread and butter" business - loaf bread. Iverson transformed Nucor from a money-losing hodgepodge of miscellaneous products into a company focusing almost solely on low-cost steel production. Coke has in the past three years brought more continuity to its product line by divesting subsidiaries such as Aqua-Chem and Tenco, which were not marketing to individuals, and by acquiring Columbia Pictures and Ronco, both of which market directly to consumers.

Wachovia cut back its data services subsidiary and divested itself of a credit business, a courier company, an insurance agency, and a title insurance agency in the early 1970s. John Medlin says, "We have rededicated ourselves to being the very best bank we know how to be and to sticking with the basic corporate, retail, trust, and money market services that are permitted to a bank." When Wachovia was highly diversified, its compound earnings growth rate was 10 percent a year. Since the redirection, earnings have compounded at 19 percent annually. Medlin says, "You shouldn't acquire things that you can't manage and don't understand and don't know how to run."

Long-term orientation. Another marketing principle of high-performance companies is a long-term orientation. These companies look for consistent growth and profitability. Flowers, for instance, looks to long-term growth when it buys failing bakeries and spends liberally to modernize them. Closely-held ownership of many of these companies enhances corporate leaders' freedom to retain an orientation to longer-term instead of quarterly profits. William Fickling of Charter Medical, for instance, holds most of the voting stock of his company. Sonoco, Russell, and Flowers are closely held by family members, with only a small portion of their stock traded by institutional investors. Russell's chief financial officer says the company prefers to keep it that way to avoid constant "looking over your shoulder" by the investment community.

Service to Customers. Most companies in our study believe their mission is to serve their customers' needs. Nissan's production line employees are kept in touch with the people

Exhibit 1.

	1	2	3	4
T echnology/Innovation	No original innovation, copies innovative activity of others after proven successful	Innovates with high degree of caution	Innovates extensively after careful analysis	Innovation is lifeblood of organization
E ntrepreneurial Management	Bureaucratic hierarchical structure breeds passivity; focus of action on "turf battles"	Leadership acts in response to crisis & to catch-up to competitors	Leadership takes risks; employees execute but do not originate	Participation spreads action-orientation throughout organization
A ffiliation of Employees	Meets basic human needs, but views human resources as a commodity	Develops human resources to limited degree	Develops human resources extensively	Human potential is developed as major corporate investment
M arket Strategy	Maintains stable market share	Participates in some new markets and increases share of existing markets	Participates extensively in new markets	Creates new markets

Tracking the Patterns: A Spectrum

Technology and innovation constitute the lifeblood of some organizations. Change is constant. These companies' markets are fast-growing, and relevant technologies are evolving rapidly. Other companies find innovation and technology necessary to their businesses, but they emphasize feasibility rather than innovation for its own sake. Some companies are cautious toward innovation but are willing to embrace change when the benefits are evident. The far left end of the spectrum holds companies whose strategy is to copy the innovative activity of others once it has proven successful.

Entrepreneurial management is most pronounced at companies with a strong sense of purpose and identity and participative decision-making style that fosters debate, autonomy, and initiative. At firms with a less entrepreneurial management style, middle managers and employees are kept well-informed of company policies and performance, but they merely implement decisions made at the top. At other companies action is undertaken usually in response to outside crises, and less emphasis is placed on informing lower level managers and employees of company philosophy, policies, or changes in these. Finally, in

bureaucratically managed businesses, entrepreneurship is inhibited by a hierarchical structure that breeds passivity and conformity to rules and traditions. Energy is focused more on rivals within the organization than on competitors in the market.

Human resources are utilized most effectively in companies that seek to develop employees to their fullest potential. They consider their employees investments that can leverage the company's hard assets. Other companies emphasize developing and training employees, but do not see that as the major way to improve productivity. In less people-oriented companies, employees may be treated fairly but there is limited fulfillment through jobs. Finally, some companies meet the basic human needs, but view labor as an easily replaceable commodity.

Some companies expand by finding new, unexploited markets. These are the entrepreneurs in the truest sense of the word. Others participate in existing growth markets and some new markets. Some companies grow by increasing their market share in stable markets and by limited participation in new markets. Others merely try to maintain stable market share in existing businesses.

Each of four researchers in our group ranked the companies on a continuum of TEAM characteristics (Exhibit 1). According to our scale, the perfect TEAM company would receive a rating of 16: four points were awarded when a characteristic was strongly present; one point implied a weak presence of the trait. This rating method, although subjective, provides a useful benchmark for comparison.

We encourage the reader to score his or her company on its performance of the TEAM characteristics. If the total score is lower than the average (13 points for all the high-performance companies we visited), our findings suggest some of the measures employed by high performance companies might be beneficial.

they serve by means of displays at each work station quoting customer and dealer comments. Sonoco's production employees occasionally visit customer sites to see how their products are used. At some Sun Banks, tellers are given a quarter every time they call a customer by name. Barnett's employees receive $5.00 for selling a credit card to a customer; having a customer fill out an application earns them $1.00.

At many firms senior officers are required to keep in touch with the market directly. At Federal Express each top officer has personal responsibility for at least one major sales account, which he must visit regularly. Sonoco customers work with company engineers to design product innovations and refinements. MSA awards special status, in addition to the typical financial remuneration, to high-performing sales people. Prestige awards include King's Court, Tiger's Club, and President's Council. Winners take vacation trips with the company's senior management and carry special ID cards marked with their elite affiliation. Perhaps Bank Earnings, Inc. is the ultimate in serving the customer. When they go into a bank to offer their advice on cutting costs in the bank's operations, they are generally paid with a proportion of the first year of savings resulting from BEI's efforts. Basically, the accountants at the client and the consultant agree on how this should be measured. "We don't even talk in terms of how many days it will take our team to do a job," says President Jerry Eickhoff. "That's our problem. We promise certain results, regardless of how long it takes to get them. And those results are defined in terms of the client's satisfaction, not ours. We can't afford to have unhappy clients running around, so we do everything we can to give them a quality job."

Conclusions

Technological innovation, participative management, respect for employees, and carefully defined market strategies are qualities shared by our sample of successful southeastern companies. The corporate characteristics we have designated as the TEAM approach are emphasized more by some high-performance companies than others. It would be unfair to say that the elements we are highlighting are appropriate in every business situation. Moreover, the four TEAM characteristics exist within each company in a variety of mixtures. For example, some companies have invested heavily in technological innovation, but have yet to discover the importance of their human capital. We found it useful to picture each trait along a continuum (see box on "Tracking the Patterns").

Nonetheless because we found patterns across industry lines, in both old and new companies, in manufacturing and services, in high tech and low tech, in large and small companies, we believe the management principles we have identified apply broadly. Moreover, many

measures involve little capital infusion. Respectful treatment of employees and participative management techniques cost little and may reduce costs during economic downturns. Thus, the implications of this study for the private sector are positive.

The implications for public policy are more complex. Many programs now pursued by state economic development agencies seem irrelevant to the principles discerned through our investigation. Virtually no officials mentioned favorable state and local tax treatment as a critical factor in their company's start up or success. One important exception seems to be state programs that provide funding to train labor for facilities locating in the state. High-performance businesses consider employee training an important function. This study calls into question whether such programs should be limited to new businesses coming into the state; perhaps state-sponsored training programs should be extended to existing firms wishing to improve their performance by upgrading workers. Programs might also be expanded to help managers and supervisors implement a more participative management style. Many companies we visited had such programs in-house, and others noted the difficulties of having managers accept the full spirit of this style.

The main implication of this study is that a primary goal of economic development policies should be creating a climate conducive to developing and nourishing the entrepreneur. The entrepreneur who develops the kind of people-oriented companies discussed in this study provides a model for innovation and sustained high performance.

—Donald L. Koch
Delores W. Steinhauser,
Bobbie H. McCrackin
and Kathryn Hart

Notes

[1]Donald L. Koch, William N. Cox, Delores W. Steinhauser and Pamela V. Whigham, "High Technology: The Southeast Reaches Out For Growth Industry," **Economic Review**, Federal Reserve Bank of Atlanta (September 1983), pp. 4-19.

[2]"Commodities" refer to highly uniform, usually mass-produced, goods.

[3]Most companies attribute this absence to the fairly recent entry of women and minorities into management ranks. As they build up experience, they say, such employees are likely to be selected for top positions.

[4]In Darlington County, South Carolina, where Nucor is located, the average per capita income is less than $7,000 a year.

[5]Some Intelligent Systems employees have accumulated 40,000 shares of stock, worth about $64,000 at recent prices. Corporate officers link this benefit and the longer-term commitment of its employees, a rarity in the computer industry where rapid turnover is the norm.

[6]Publication deadlines prevented our including HBO & Company. HBO is an Atlanta-based firm that designs, sells and services hospital information systems used to monitor and analyze billing costs, patient information, and drug and laboratory data. HBO stands out as an example of the beneficial results of decentralization. Although HBO has only 600 employees, it has six regional offices that include the majority of the company's work force. This arrangement, company officials believe, gives customers better service and employees more autonomy, thus improving productivity.

In addition, recognizing that we may have missed some important characteristics of smaller financial institutions by limiting our sample to the ten largest in the Southeast, we selected First Railroad & Banking Company of Georgia in Augusta from our list of directors' nominations. The $1.5 billion in assets holding company is a medium-size financial institution whose most outstanding characteristic is its decentralized, autonomous management structure. Subsidiaries are loosely associated through the holding company; they share information and ideas through task forces and teams, and are held accountable to a financial plan.

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The Emerging Financial Services Industry: Challenge and Innovation

Innovation can help lead a banking institution into a new corporate culture according to the Federal Reserve Bank of Atlanta's director of research. Despite the risks, he says, banks must experiment to remain competitive in today's marketplace.

In the financial services industry, institutions' functions have significantly broadened over the past two decades, and product and geographic markets have become much more integrated. Institutions that once looked quite different from each other now offer similar products and offer them in much broader geographic markets. Though we tend to think of this as a process of nondepository institutions intruding onto the turf of banks and thrifts, a close look at the changes shows that banks and thrifts also have hurried to diversify.

Barriers Have Fallen

Commercial banks and their holding companies have moved into credit cards,discount brokerage, leasing, operating finance companies and many other activities. They have greatly increased the proportion of their assets held in mortgages. Thrift institutions, though slow to diversify until the 1980s, have received broad new powers from the Monetary Control Act of 1980 and the more recent Garn-St Germain Act. They may now offer a wide range of products to consumers and businesses where before they were limited to individual savings and mortgage markets. Considerable evidence from financial reports and advertisements indicates that an important segment of the thrift industry is using its new powers. I have heard several bankers complain recently that thrifts were competing with them not only for customers but also for imaginative managers and competent lending and operations people.

On what was once called the nondepository side of the fence, firms of all sorts have been crossing institutional boundaries with abandon (Chart 1). Insurance companies have pushed diversification into securities, consumer finance

Chart 1. Financial Services
1960 and 1984

	Banks		Savings & Loans		Insurance Companies		Retailers		Security Dealers	
	1960	1984	1960	1984	1960	1984	1960	1984	1960	1984
Checking	★	★		★		★		★		★
Saving	★	★	★	★		★		★		★
Time Deposits	★	★	★	★		★		★		★
Installment Loans	★	★		★		★		★		★
Business Loans	★	★	★	★		★		★		★
Mortgage Loans	★	★	★	★		★		★		★
Credit Cards		★		★		★	★	★		★
Insurance					★	★		★		★
Stocks, Bonds, Brokerage Underwriting		★		★		★		★	★	★
									★	★
Mutual Funds						★		★	★	★
Real Estate				★		★		★		★
Interstate Facilities		★		★		★		★		★

and even banking and thrift industries. Prudential is probably the best known of these firms with its acquisition of Bache, its money fund and its nonbank bank—a chartered and insured bank that, because it is owned by a nonbank company, is not subject to the restrictions of the Bank Holding Company Act. American General, with money market funds, more traditional mutual funds and its billion-dollar finance company, may have gone further in decreasing its concentration on insurance alone. Travelers has embarked on an entirely different strategy of expanding into a broader variety of businesses, providing financial services at the wholesale level to financial firms of all types. (Travelers also has a nonbank bank.)

Among securities firms, Merrill Lynch is the quintessential diversified financial corporation, but others have accomplished much the same sort of diversification. Merrill's CMA account has clones and semi-clones coming from several sources. In all, at least $93 billion has been channeled into more than 1.1 million accounts of this type.

But CMAs represent only the leading edge of securities firms' spread into nontraditional product lines. They are venturing into insurance underwriting and sales, commercial lending and nonbank banks. Some offer brokered bank and thrift CDs (large certificates of deposits that have been broken into $100,000 units to qualify for federal insurance), second mortgages and financial planning.

Firms that were once consumer finance companies have gotten into the diversification act too. Household International does not fit the image of the finance company of yesteryear. It owns a nonbank bank, a group of thrifts and a life insurance company. A competitor, Beneficial Corporation, also has a nonbank bank and insurance companies and has expanded into commercial finance, leasing and sales finance. Household is engaged in pilot programs that make insurance, ATMs, equity lines of credit and safe deposit boxes available at its consumer finance offices. Such offices could become the one-stop financial center for a substantial portion of our population.

The once-solid barrier separating these formerly nondepository industries and banking has shown cracks, which CMAs and money funds have penetrated in the past. Since 1980, the nonbank bank concept has threatened to burst the barrier. The nonbank bank is a strange word and a strange concept growing out of the Bank Holding Company Act's definition of a bank. The Act says that, to be considered and regulated as a bank holding company, a company must own an institution that offers both demand deposits and commercial loans. Nonbank firms have been acquiring bank charters and using them to operate insured depository institutions

Chart 2. ROAA Depository Financial Institution

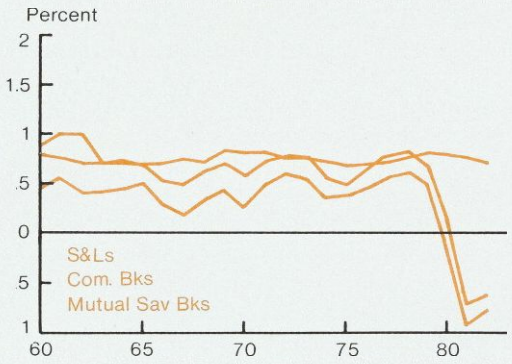
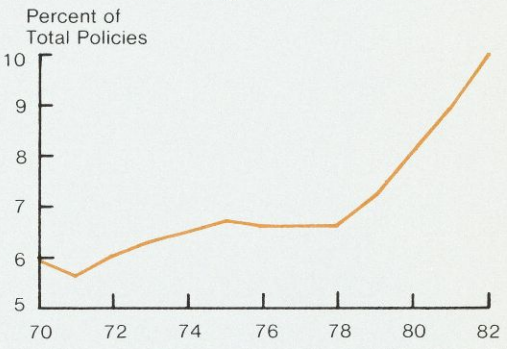


Chart 3. Life Insurance Companies

Ordinary Life Policies
Voluntarily Terminated



without demand deposits or without commercial loans in order to avoid the limits of the Holding Company Act.

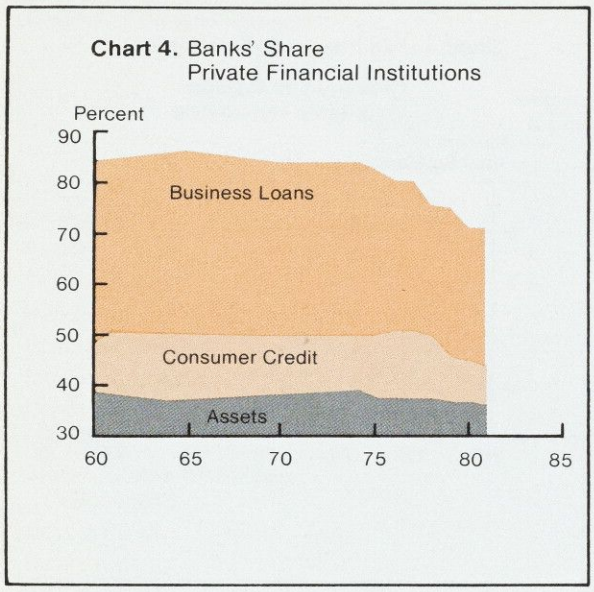
Through that approach, they have been able to continue offering most bank services, particularly accepting insured deposits. Although the Federal Reserve has interpreted the bank definition broadly, the inventiveness of owners of nonbank banks and a recent court setback raise questions about whether the Fed has, by its new interpretation of the bank definition, sealed off the nonbank bank passage between depository and nondepository institutions[1]. If not, nondepository institutions will have additional opportunities to continue their move into traditional bank products, including insured deposits.

Fruits of Diversification

The diversification of other institutions into banking functions has been motivated by a pull from the market for bank products and a push from the markets in which the other institutions operated. Banks have been, in many ways, the most diversified segment of the financial services industry. Their diversification and the markets in which they are diversified have provided them with good, steady earnings growth and, just as important, excellent earnings stability. Through the financial turmoil of the last 25 years, banks in the aggregate have suffered just one year of earnings decline—1959. Their compound earnings growth rate over that period has been 9.1 percent—well above the inflation rate for the period. In addition, bank earnings have been quite stable, around 0.75 percent return on assets (Chart 2).

Other segments of the industry have not fared so well. Thrift industry problems of the past several years are well known. Even before this debacle, their earnings were quite cyclical, showing much greater year-to-year variation than those of commercial banks. Security dealers suffered a shake-out during the back office problems and commission deregulation of the early and mid 1970s. Their health has improved but their earnings remain quite volatile. Life insurance companies have found themselves in the position of selling financial buggy whips. Many customers have allowed their ordinary life policies to lapse, demonstrating the inroads of competition by group insurance (Chart 3). Many new types of savings instruments have helped drive these insurance firms to reassess their positions and products. A look at retail growth and margins shows dramatically why Sears, Penney's, Kroger, K Mart and other retailers have sought balmier climes with consistent financial earnings performers in their portfolios.

But the banks' financial performances, reflecting the value of their markets, have created



problems for them by attracting a multitude of competitors. Commercial banks' share of the financial assets held by all private financial institutions dropped sharply after 1975, as did their share of consumer credit (Chart 4). The banks' share of business credit began declining earlier, in the 1960s, and has declined further in recent years.

Banks have lost market share not only because their managements have failed to keep pace with those diversifying into their markets. Regulatory limitations of several types have kept banks in their protected hothouse, unable to meet many challenges with proper pricing, product or geographic strategies. As it became obvious how much impact these limits were having on commercial banks' market shares and thrifts' earnings during the high-interest period of the early 1980s, some of the restrictions were lifted by the government.

Interest rate limits have been removed gradually to engender unlimited competition for funds. Soon only demand deposits will be controlled. These changes already have bought banks and thrifts a resurgent share of time and savings deposits. They also have transformed the major part of banks' and thrifts' liability markets into commodity markets with heavy price competition and similar service offerings. The activities allowed to banks and thrifts have been increased. While questioning some changes, the Federal Reserve has added credit insurance underwriting and sales, finance and mortgage company operations, leasing, discount brokerages, financial advice and several other businesses to the activities permitted bank holding companies. It proposes to add more. At the same time, Congress and the Federal Home Loan Bank Board have greatly extended permissible activities for thrifts.

Geographic barriers also have been removed by many states and by federal regulators responding to emergencies. Seventeen states already have passed some kind of limited interstate banking legislation and several more are considering such laws. Savings and loans have been acquired in interstate emergency mergers. The latest approval for such acquisitions was granted to Citicorp by the Federal Reserve.

New Meanings for Old Terms

The continuing elimination of barriers in the industry alters old ideas about winners and losers among the firms providing financial services. First of all, it is becoming much less meaningful to talk about subindustries such as banks, thrifts, insurance, finance and securities companies. Firms in all these industries can offer products that substantially overlap those of each other. So far the strong trend is for product capabilities to keep on increasing. It makes little sense to talk of long-term regulatory advantages any more.

Integration of product and geographic markets means there are few protected markets left. Protective limits are gone; entering new markets is relatively easy. Economies of scale are of minor importance in the production of many services, so many potential entrants are moving into most markets. Where economies of scale exist, service corporations that can exploit them can wholesale their advantage to many small institutions acting as agents. In such situations, products tend to become commodities. Differentiation is more difficult when most products can be copied and produced easily and when price is an important dimension.

Challenges for Management

A situation is developing in which the financial industry is becoming like most others. There is no clear protection; getting into banking does not guarantee a business that is somewhat

proprietary, that provides a monopolistic right. With this easier entry, sharp profit squeezes are likely in the future and more and more bank products are going to be commodities rather than unique services. A major skill required of future senior management will be to design products that are unique or at least a bit different from those offered by the competition.

Success in providing financial services is going to be similar to succeeding in any other business. The major focus will be on finding out what customers want and really working to supply those needs. A recent detailed survey by a large Florida bank disclosed that its customer base really did not want additional services such as discount brokerage. The customers' whole emphasis was on high quality of existing products and on consistent service. All sellers of financial services will increase their focus on quality as we go through the 1980s and into the early 1990s.

Attention to customer needs will be the most crucial factor in financial institutions' success over the next decade. This may seem obvious, but the failure of many technologically feasible systems to gain customer acceptance indicates that many managers have failed to grasp the idea. A product's feasibility is not sufficient to assure success.

Closely related to the need to satisfy the customer is a growing desire by bank customers for quality service. Quality will offer a way to differentiate products successfully, at least for a while. Continued emphasis on quality gives promise of generating a wave of differentiated products over time.

One way to approach customer satisfaction with new technology is to put the computer to work saving the customer time and trouble and providing him or her with information. Computers can be a major offensive weapon if they are used to work for customers rather than for engineers. So long as they can save time and overcome disadvantages of distance and location, computer-based banking products will have a chance to succeed. But they must offer advantages over systems already in use. Electronic home banking, for example, has received a lot of attention lately. Whether any of the pilot projects now running will succeed depends on whether they can develop advantages over our present home banking system—the one that uses the Post Office instead of a computer as its delivery system. Whether people will receive their bills by mail and then run to their computer terminals to pay them remains to be seen. I would feel more secure about home banking by computer if the bills were delivered by computer also.

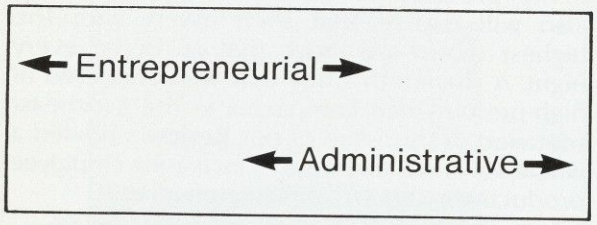
The premier providers of financial services also will realize that their assets with the highest return are those that go home every night. A six-month study that we conducted of high-performance companies in the Southeast (detailed in this issue of our **Review**) showed a whole set of exciting ways of increasing employee productivity and encouraging creativity.

This study of 21 varied companies—including four outstanding banking organizations in the Southeast —finds certain themes recurring over and over again. The successful firms, for instance, generally had a lean staff of workers, with small divisions or plants, and small work groups. They weren't monolithic behemoths with thousands and thousands of workers under the same direction, and they offered opportunities for promotion from within. These corporations also emphasized careful selection of employees, frequent feedback in both directions, continued recognition of what is good and what is bad about what employees and managers do, and aggressive employee participation in ownership of the firm.

Other shared characteristics include few executive privileges; relatively few management layers, so the level from the CEO to the bottom line person is not nine or ten levels but maybe two or three; a dedicated commitment to employee training in all forms—not just internal programs but external programs where people are developed and encouraged to recognize their potential fully over time. One Florida bank, for instance, surveyed its employees and found out that some were saying, "Sure, this is a great place to work, but I never get promoted." Management decided to change and came up with a university system in its own institution. They bring employees in, give them training or course skills, send them back out and also move them around the system. A branch manager of a small bank can earn more than he or she could if the employee were just thought of as an assistant cashier.

Finally, of course, these shared characteristics imply that the most important thing is always to

Chart 5. Management Skills

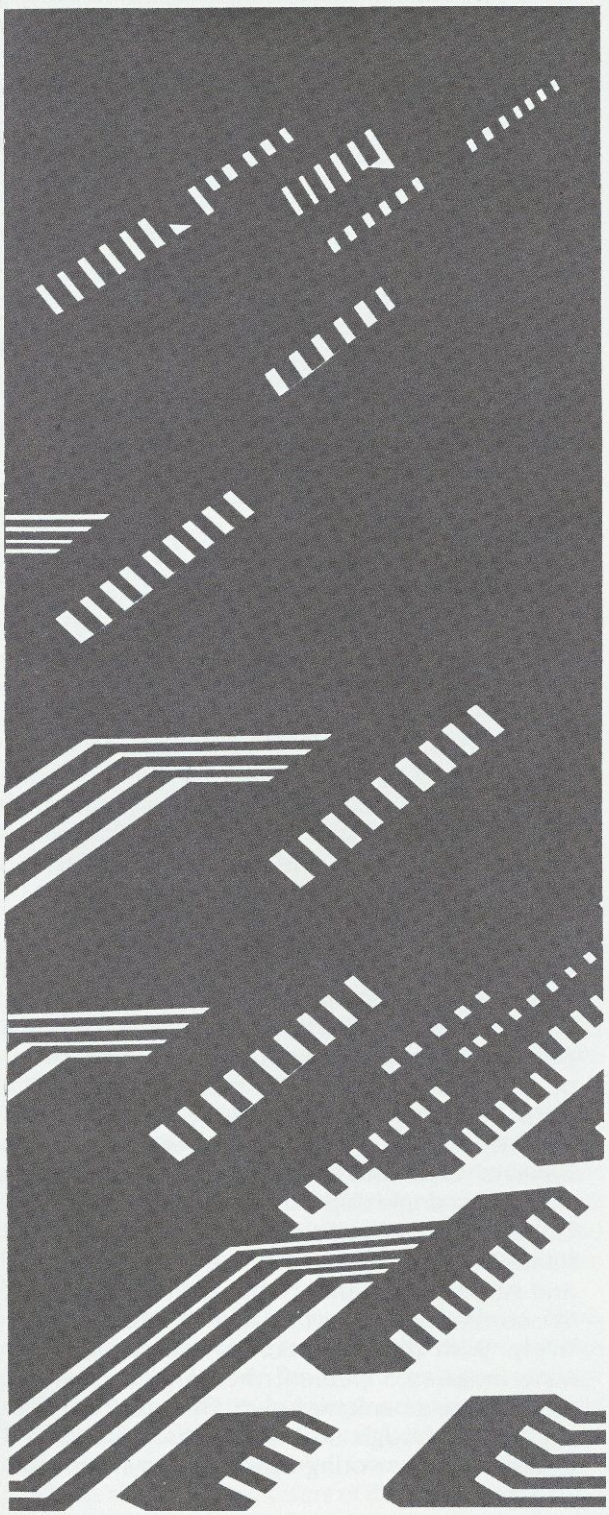


encourage a high degree of controlled experimentation in a banking organization. As financial institutions break their parochial barriers, they will place greater emphasis on managers' entrepreneurial skills and less on their administrative abilities (Chart 5). The balance between the administrator and the entrepreneur will shift decisively toward the entrepreneur. Despite the risks inherent in attempting something new, a firm must innovate in planning its strategies. If one firm fails to innovate, some bright young turk elsewhere is going to figure out an operations or marketing approach that works and works well. Innovation may change the entire culture and make an institution more dynamic, more sensitive to the marketplace and more entrepreneurial. Success in financial services, as in any other industry, requires a high degree of energy, focus, sensitivity and, above all, creativity—the creativity to encourage excellence and the willingness to permit the entrepreneur the freedom to succeed.

—Donald L. Koch*

**This article is based on a speech presented to a national conference on financial services sponsored by the Atlanta Society of Financial Analysts, Feb. 23, 1984.*

[1]Since this speech was presented, the Federal Reserve Board has approved acquisition of a nonbank bank in Florida for U. S. Trust Corp. of New York, a registered bank holding company, stating "...although the Board believes that approval of this proposal presents a serious potential for undermining the policies of the (Bank Holding Company) Act, the Board is constrained by the definition of bank in the BHC Act to approve the application." U. S. Trust agreed not to engage in the business of making commercial loans in Florida. Federal Reserve System, "U. S. Trust Corporation, New York, N. Y." Press Release, Mar. 23, 1984.



Bankers' Banks: An Institution Whose Time Has Come?

As competition in the financial industry has intensified, the correspondent relationship enjoyed by independent banks in the past has started to deteriorate. Independent banks, facing a changing atmosphere, are being encouraged to look to other institutions for the services they normally obtain from correspondent banks. Liberalization of state laws concerning bank holding companies and statewide branch banking has permitted consolidations, increasing the number of relatively large institutions. The number of states permitting either statewide or limited branching rose from 33 in 1960 to 43 in 1983, while the number of unit banking states declined from 18 to 8 during the same period.

This trend has sounded an alarm among the smaller independent banks. Large institutions historically have provided correspondent services to independent banks. With the changes in banking laws, however, these large banks have, in many cases, acquired a competing institution across the street from their respondent banks. Some of the small independents are questioning whether or not their correspondent has their best interest at heart, especially in cases where the correspondent has acquired a direct competitor. Can the correspondent bank be expected to continue to provide top-notch information and services at a reasonable cost to a competitor? The respondent banks are skeptical and find themselves looking for a new correspondent bank. Usually many alternative correspondent relationships could be established, but establishing such a new relationship is time consuming and expensive. Therefore, many independent banks have begun to look to an alternative source to provide the services they formerly obtained from a correspondent bank.

A new breed of "bankers' banks" is emerging to offer services to smaller institutions. Early successes indicate the concept may pose a challenge to the historic correspondent banking system.

These services, which typically require huge capital outlays or considerable management expertise, generally are not economically feasible for the smaller independent banks to provide themselves. A new type of financial institution known as a bankers' bank may provide one answer. Typically, bankers' banks are owned and established by a syndicate of relatively small banks, none of which owns more than 5 percent of the institution. Bankers' banks are designed to provide the services the independent banks need or want, but, unlike a correspondent bank, they pose no competitive threat to the independent because it provides financial services only to banks, not to the public at large, hence the name bankers' bank.

Table 1. States Authorizing the Establishment of State-Chartered Bankers' Banks

Arizona	New Mexico
Arkansas	North Dakota
California	Ohio
Colorado	Oklahoma
Connecticut	Oregon
Florida	Pennsylvania
Hawaii	South Dakota
Illinois	Tennessee
Kansas	Texas
Louisiana	Virginia
Maryland	Washington
Minnesota	West Virginia
Montana	Wisconsin

Background

The first dedicated bankers' bank was formed in 1975 by a group of independent banks in Minnesota. The Minnesota concept was based on a similar bank in Omaha, Nebraska. Packers National Bank in Omaha, the prototype for the Independent State Bank of Minnesota, has as its shareholders a group of independent bankers rather than independent banks. It provides both retail and correspondent services. The executive council of the Minnesota bankers' bank decided that a purely correspondent bank with a new charter would suit their needs better—providing them both flexibility and control—than if they purchased an existing bank offering retail and correspondent services. The executive council successfully sponsored a bill in the Minnesota legislature that allowed banks to invest in the new institution. Although national and Federal Reserve member banks were declared ineligible, the Independent State Bank of Minnesota opened in December 1975.

The institution has been successful in attracting independent banks as shareholders. Currently its shareholders include over 240 independent banks. It has established an interstate network to perform data processing, profit analysis, compliance instruction, advertising, and other services for its more than 473 customers, all relatively small independent banks. Banks do not have to be shareholders to obtain services from a bankers' bank.

To date, 26 states (see Table 1), including three Sixth District states, have authorized the establishment of state-chartered bankers' banks either by specific state law or "wild card" statute. The "wild card" statute is a provision of state law giving the state banking commisioner authority to charter banks with the same powers available to nationally chartered associations. All the bankers' banks in operation today have been chartered under state laws. A Louisiana institution sought to form a bank holding company and a bankers' bank simultaneously. Although not in operation yet, it has received approval for the formation of the holding company and the first nationally-chartered bankers' bank.

Bankers' banks exist today in Colorado, Florida, Minnesota, Ohio, Texas and Wisconsin, serving over 1,300 independent banks (see Table 2). Similar banks are being established in Louisiana and Pennsylvania. Each state specifies restrictions on its bankers' banks. The major differences in state laws involve the amount of capital and surplus a bank may invest in the stock of a bankers' bank and the percentage of its voting shares any single depository institution can hold. Colorado, Florida, Ohio, and Minnesota permit banks to invest up to 10 percent of their capital and surplus in a bankers' bank, while Texas and Wisconsin limit banks to 5 and 4 percent, respectively. With the exception of Minnesota, each state limits to 5 percent the amount of voting stock a single bank may own. That state imposes no limit, although no bank owns more than 3 percent of the voting stock of the Minnesota bankers' bank.

Table 2. Bankers' Bank Activity

States	Date Established	Number of Shareholder Banks	Number Currently Being Served	Number of Independent Banks in the State
Colorado	10/80	82	122	245
Florida	8/83	60	35	220
Minnesota	12/75	240	473	298
Ohio	5/83	74	45	235
Texas	1/82	350	550	756
Wisconsin	9/81	130	109	338

How It Works

A bankers' bank is capitalized by the issuance of stock to existing and potential customers. Potential customers generally are the independent community banks in the state where the bankers' bank is established. However, community banks in neighboring states may also subscribe to the services offered by the bankers' bank, making possible the creation of interstate networks. The bankers' bank typically is owned jointly by a group of independents seeking to achieve economies of scale by pooling financial resources. Their cooperation allows these small independent banks to realize the benefits usually associated with large banks or holding company conglomerates without as large a financial outlay.

This relationship also raises the question of possible competitive problems. The bankers' bank may provide a vehicle for collusion in that it ties together independent banks who depend on the same source for loan participation and other pricing guidelines. To date though, no evidence has been presented to substantiate this.

The bankers' bank is formed primarily to serve the needs and desires of the banks that own it. This is in contrast to the traditional correspondent relationship, where a respondent bank is offered a menu of services by correspondents and then chooses which service it will obtain from which correspondent.

The relationship between the bankers' bank and its shareholders is almost the reverse of the more widely known holding company relationship where a bank holding company owns and directs its subsidiary banks. A bankers' bank is owned and directed by its customers, who are also its shareholders. Users of the services maintain control of the bankers' bank, whose board of directors is selected from subscribing banks.

Services offered by a bankers' bank are similar to those found in the traditional correspondent banking relationship. These may include services similar to those rendered by large banks and holding companies to affiliates and subsidiary banks but not offered to respondent banks or services offered to subsidiaries at a cost differential that places the independent banks at a disadvantage. Each bankers' bank may differentiate the services it provides to shareholders. To date, the bankers' banks have been established to solve particular problems or to take advantage of opportunities within a single state. The institutions have developed plans to fit the particular needs of respondent banks.

"A bankers' bank is owned and directed by its customers, who are also its shareholders."

The services most often offered can be grouped into three basic areas; (1) check clearing; (2) investment services (the sale and purchase of Fed funds, commercial paper, and both long and short term government securities), and (3) lending functions such as participation in overline loans, bank stock loans, and bank customer letters of credit. Other areas of service include secondary market activities (in both mortgages and bank stock loan participation), data processing, farm

Legislative Background

Section 711 of the Monetary Control Act of 1980 gave national banks the power to invest in state-chartered bankers' banks insured by the FDIC, with a qualification. The stock of the bankers' bank must be owned exclusively by other banks (unless state laws require directors' qualifying shares) and the bankers' bank must conduct business only with other banks, their officers, directors, or employees. Federal law limits the amount of stock held by a single association to 10 percent of its capital and surplus and restricts the amount of voting securities to no more than 5 percent.

Limiting each bank's ownership to less than 5 percent of the voting shares of a bankers' bank removes the possibility that the formal ownership structure could be defined as a bank holding company under the Bank Holding Company Act. Ownership of less than 5 percent does not trigger the presumption of control standard of the Bank Holding Company Act.[1] Under Section 103 of the Monetary Control Act, bankers' banks are exempted from Federal Reserve requirements. However, all have chosen to maintain reserve balances in order to gain access to the Federal Reserve Banks for check clearing and the discount window.

In 1980, the Federal Reserve Board issued its interpretation of Regulation D, which governs bankers' banks. The board ruled that a bank is a bankers' bank if it satisfies all the following criteria:

1. It is organized solely to do business with other financial institutions.
2. It is owned primarily (75 percent or more) by the financial institutions with which it does business.
3. It does not do business with the general public except for officers, directors, and employees of other banks.

Depository institutions failing to satisfy the criteria will not be regarded as bankers' banks by the Federal Reserve and will be required to satisfy reserve requirements on all transaction accounts and non-personal time deposits. A bankers' bank may be permitted, on a case-by-case basis, to act as a pass-through correspondent if it enters into an agreement with the Federal Reserve to accept responsibility of pass-through reserve accounts. The Federal Reserve also must be satisfied that the quality of management and financial resources is adequate.

The most recent legislation dealing with bankers' banks is Section 404 of the Garn-St Germain Depository Institutions Act of 1982. It authorized the comptroller of the currency to charter limited-purpose national association bankers' banks to be owned exclusively by depository institutions and to serve those institutions. The comptroller was granted rule-making and enforcement authority and was empowered to waive or modify requirements normally applicable to national banks if they are deemed inappropriate or irrelevant.

marketing, safekeeping, educational seminars, leasing, insurance, stock brokerage, and electronic funds transfer (EFT).

In addition to these normal services, the bankers' banks seek innovative services tailored to the needs of their respondents. An example is the Minnesota Farm Plan offered through the original bankers' bank, the Independent State Bank of Minnesota. This plan is the largest credit card operation in Minnesota. By providing credit cards for the customers of implement dealers, lumber companies, and similar businesses, it spares those firms from carrying the financing themselves. That leaves them with working capital that otherwise would be tied up in accounts receivable.

Another innovative idea was discount purchasing of microfilm by the Minnesota institution, which has provided independent banks with significant savings over individual purchasing. The Independent Bankers' Bank of Florida will help banks meet the demand for home financing in the state by creating a secondary market for conventional real estate loans. These are just a few examples of how bankers' banks may tailor services for users of their services.

The relationship between a bankers' bank and its respondents offers several advantages to independent banks over the traditional correspondent relationship. Independent banks are dealing with an institution whose main purpose is to serve them, not one that in many cases is in competition with them. They are not providing income to the competition, income not always used to improve the services available to the respondent banks. The goal of the bankers' bank is to provide a full array of correspondent services, in addition to innovating services previously unavailable to independent banks. Advocates say the quality of services provided by the bankers' bank to its users is often higher and costs are generally lower than those offered by correspondent banks. Although the bankers' bank is owned by independent banks and exists to serve those that own it, non-owners are allowed to participate. The bankers' bank can perform

the same services offered by the correspondent banks, but it cannot compete with the independents for any direct retail or commercial services.

How successful have the existing bankers' banks been? Texas Independent Bank, which opened in January 1982, now serves more than half of the 750 independent banks in the state. As shown in Table 2, bankers' banks have met with a great deal of success. In Texas, Colorado, and Minnesota, at least half of the eligible banks statewide are being served by the bankers' banks. This is evidence that the needs and desires of independent banks for correspondent services were not being met by traditional correspondent banks. Smaller independent banks have shown a willingness to change from the traditional correspondent banking relationship and align themselves with the more responsive bankers' bank.

"The bankers' bank appears to be a concept whose time has come."

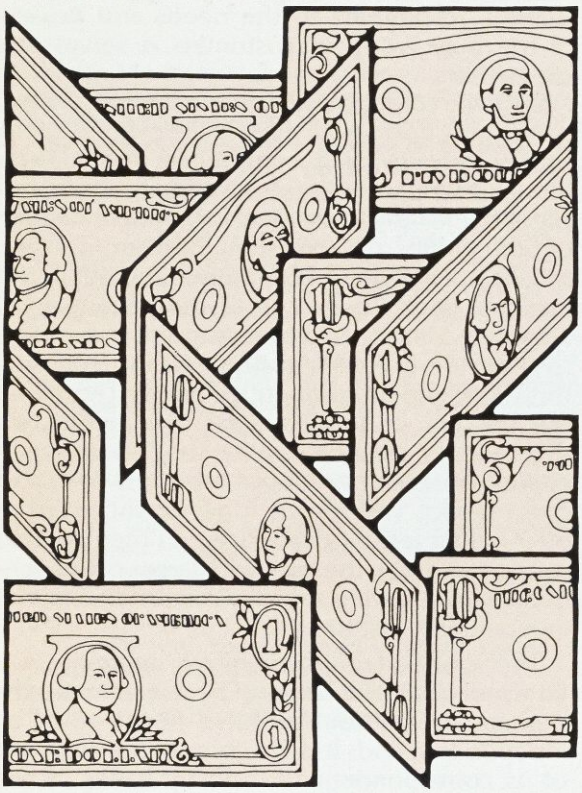
Conclusion

The bankers' bank appears to be a concept whose time has come. As with the entire financial services industry, the traditional correspondent banking relationships are being reshaped by the demands of users. Bankers' banks fill voids in each of the six states where they have been created. The early success of bankers' banks in attracting users suggests that the traditional correspondent banks, in certain areas at least, have lacked either the motivation or the ability to provide customized services effectively priced and delivered in a competitively neutral manner. Instead of offering a menu from which a respondent institution can choose a given set of services, the banker's bank provides customized services responding to the needs and desires of the only group of customers it serves—its client/users.

Since the correspondent business is the bankers' bank's only business, it must make every effort to supply services at a competitive price. Even though there are two sets of users (owners and client banks) the institution's objectives relative to both groups are consistent. Both groups seek to take advantage of economies inherent in the bankers' bank. Its success is dependent upon attracting a large customer base, and attracting a large customer base is related directly to offering those consumers competitive prices. Therefore, the success of the bankers' bank ultimately depends on offering quality services advantageously priced for its consumers—its owners and client banks. This means it has no incentive to offer a dual set of prices based on membership status, as is often the case with larger correspondent banks serving their own subsidiaries and independent institutions.

The question of competitive neutrality is a little less clear. The bankers' bank eliminates the perhaps insignificant problem posed when an independent finds itself in competition with one of its correspondent's subsidiary banks. When this occurs, a reasonable respondent would simply find a new correspondent, one with which it did not compete. True, the bankers' bank may find itself attempting to serve the needs of two or more independent banks in the same market. This would not differ substantially from what occurs within the existing correspondent banking framework. Yet the result may prove less harmful to competition while offering the advantages of customized services and effective competitive prices for correspondent services. The bankers' bank, overall, appears to offer the independent bank a reasonable alternative to its traditional correspondent relationship and thus may improve competition among banks.

—Pamela Frisbee



Interstate Banking: Issues and Evidence

Interstate banking promises to offer the public—and banks— more benefits than disadvantages, according to this study. But it suggests that excessive limitations could diminish the potential benefits without helping banking customers.

Debate and action concerning the nation's limitations on interstate banking have increased greatly over the past two years. The attention of Congress and bank regulators increasingly has been drawn to the subject by state governments' actions or proposals. Proponents of interstate banking in several states have taken various initiatives to overcome interstate banking prohibitions. Their proposals have ranged from allowing entry by banks with limited functions, as South Dakota and Delaware have done, to allowing entry by any out-of-state bank holding company, as is the case in Alaska and Maine.

Banks headquartered in one state are prohibited from operating deposit-taking offices in any other state by the McFadden Act of 1927 (amended in 1933); bank holding companies are prohibited from owning a bank in another state without that state's permission by the Douglas Amendment to the Bank Holding Company Act of 1956. Until the last four years, these two laws effectively stopped interstate operation of full-service banks or branches by all domestic banking organizations except for a few "grandfathered" by the Douglas Amendment. Recently, however, emergency takeovers and state laws have breached interstate prohibitions to a greater degree.

The Current Situation

Current proposals and action on interstate banking are driven by a combination of market forces that seem to be breaking down the barriers to interstate banking inexorably despite continued legal prohibitions. Some of these forces and their results were detailed in a 1983 Federal Reserve Bank of Atlanta report by David D. Whitehead.[1] Other forces have come into prominence since that research was done.

The May 1983 study indicates that various banking organizations have used different legal avenues to establish offices outside their home states. By analyzing the location of those offices, Whitehead also concludes that these interstate organizations have followed market forces to attractive markets located primarily in the faster growing states of the Sun Belt.

The report identifies several avenues banking organizations have taken to conduct interstate banking: grandfathered subsidiaries of domestic and foreign bank holding companies, agencies and branches of foreign banks, nonbank subsidiaries of bank holding companies, loan production offices, offices of Edge Act corporations, interstate savings and loan associations and limited service offices opened under special state laws. In all, the research uncovered 7,724 such offices as of late 1982. Comparing this number to the 39,835 within-state branches of all domestically chartered commercial banks at the end of 1982 gives an idea of the significance of interstate banking.

Interstate prohibitions have been challenged further by nonbank companies that have devised ways to offer many or all banking services through interstate offices. The names of the nonbank companies are familiar. Many add deposit services to their lending services through brokered time certificates or transactions accounts offered by a bank under contract. They typically have gained access to the payments system through a commercial bank. A refinement that allows them to offer insured deposits and to access the payments mechanism directly gained considerable attention in 1982 and 1983. This is the nonbank bank, so called because it is a chartered and insured bank, but it is not a bank for purposes of the Bank Holding Company Act.

Since these are not banks for the purposes of that act, their owners are not covered by it and may engage in activities not allowed by the act and operate banks in more than one state. The Federal Reserve Board has attempted to close the loophole in its regulations that allows nonbank banks to operate.[2] The threat posed by nonbank banks to interstate banking prohibitions is demonstrated by Dimension Financial Corp., an organization that has applied to operate nonbank banks in 25 states.

Several states have taken it upon themselves to move toward interstate banking before the federal government decides what is to be done on a national scale. As of the beginning of March 1984, fully 17 states had passed legislation allowing out-of-state bank holding companies to operate within their borders (see "States' Interstate Banking Laws").

Such moves have laid the groundwork for debates in several state legislatures in 1984 and 1985. We might also expect Congress to debate the subject if there is continued state movement toward interstate banking legislation. Federal Reserve Board Chairman Paul Volcker has testified that he prefers a national interstate banking law to a diverse group of state or regional policies.[3] Senator D'Amato of New York has introduced a bill that would provide for the phase-in of national interstate banking while voiding regional interstate compacts. Senator Tsongas of Massachusetts has taken the opposite tack, introducing legislation that would legitimize regional interstate compacts. In this article, we will set out the major interstate banking issues being debated, review and assess the evidence on these issues, detail the prospective costs and benefits of interstate banking and comment on problems of moving to de jure interstate banking.

Public Policy Issues

Public issues that arise in the debate on interstate banking can be classified under three principal headings: competition/efficiency, credit and savings flows, and safety. Each category has several subheads and none is absolutely separate from the others.

Competition and Efficiency

The issues of competition and efficiency generally are related to a stereotypical view of the process by which banking will become interstate. Most observers think that large banks in a few money centers will spread out over the country and become full-service competitors of smaller banks. This view probably overstates the role of money-center banks in the process. Larger regional banks also are likely to attempt expansion on a regional basis at least. Mergers of small banks in multiple state market areas are also likely. Nevertheless, the most relevant picture of interstate banking is one of larger banks entering local markets to compete with smaller banks. Thus, the effects of interstate banking on the costs of bank services, the dynamics of bank competition, the concentration of the banking business and the variety of services available to customers are usually discussed in terms of the advantages and disadvantages of larger and smaller banks.

Bank Costs

A relatively consistent body of evidence on bank costs indicates that large banks have no

Box 1
States With Out-of-State Banking Laws

State	Year Passed	Provisions
Alaska	1982	*De novo*-No. *Acquisition of existing banks*-Yes in business for three years. *Branching into state*-Not explicitly stated, (N.E.S.) *Acquisition of savings bank, S&L and Trust company*-Trust companies only. *Reciprocal agreement*-Not explicitly stated.
Connecticut	1983	*De novo*-N.E.S. *Acquisition of existing banks*-Yes. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-Yes, other than trust companies (variety of other restrictions). *Reciprocal agreement*-New England only and anti-leap-frogging provision (non-NE to Maine and then Connecticut, Massachusetts and/or Rhode Island).
Delaware	1981-1983	**1981** *De novo*-Yes 1. Minimum capital stock and paid-in-surplus at least $10 million, with 1 year to reach $25 million. 2. Employ at least 100 persons 3. Not likely to attract customers from general public. *Acquistion of existing banks*-N.E.S. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S. *Misc. provision*-No interest rate ceiling on credit cards. **1983** *De novo*-Yes, if above three conditions are met and bank holding company was present under 1981 law. May also charter *de novo* bank although capital requirements for consumer credit banks may be different (initial capital requirement different if affiliated with credit card bank). *Acquisition of existing banks*-N.E.S. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S. *Misc. Provision*-Bank may only accept deposits other than demand deposits and make loans to natural persons for noncommercial uses.
Georgia	1984	*De Novo*-No *Acquisition of existing banks*-Yes, in business for 5 years. *Branching into state*-No. *Acquisition SB, S&L and Trust*-No S&L. *Reciprocal agreement*-Yes, other states permitted are Alabama, Florida, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee and Virginia.
Florida	1972	*De novo*-N.E.S. *Acquisition of existing banks*-Yes, if on 12-20-72 owned a bank or trust company in the state. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S.
Illinois	1981	*De novo*-N.E.S. *Acquisition of existing banks*-Only grandfathered interstate bank holding companies under Bank Holding Company Act of 1956. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S.
Iowa	1972	*De novo*-N.E.S. *Acquisition of existing banks*-Yes, if on 1-1-71 bank holding company were registered as a bank holding corporation and owned 2 banks in Iowa. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust-N.E.S.* *Reciprocal agreement*-N.E.S.
Maine	1975	*De novo*-Yes. *Acquisition of existing banks*-Yes. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-Yes. *Reciprocal agreement*-Yes.

State	Year Passed	Provisions
Maryland	1983	*De novo*-Yes, if: 1. Minimum capital stock and paid-in-surplus of $10 million, rising to $25 million in 1 year. 2. Employ at least 100 persons. 3. Not likely to attract customers from general public. *Acquisition of existing banks*-N.E.S. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S. *Misc. provision*-24% interest-rate ceiling on credit cards.
Massachusetts	1982	*De novo*-Yes. *Acquisition of existing banks*-Yes. *Branching into state*-Yes. *Acquisition SB, SL and Trust*-Yes. *Reciprocal agreement*-Yes, New England only and anti-leapfrogging provision.
Nebraska	1983	*De novo*-Yes, if: 1. Limited to one office. 2. Minimum capital stock and paid-in-surplus is at least $2.5 million. 3. Employ at least 50 state residents within one year. 4. Operate in a manner not likely to attract customers from the general public. *Acquisition of existing banks*-N.E.S. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S. *Misc. provision*-No interest-rate ceiling on credit cards.
	1983	*De novo*-N.E.S. *Acquisiton of existing banks*-Yes, if on 3-12-63 the bank owned at least 2 banks in state. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S.
New York	1982	*De novo*-Yes. *Acquisition of existing banks*-Yes. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-No. *Reciprocal Agreement*-Yes.
Oregon	1983	*De Novo*-No. *Acquisition of existing banks*-Yes, but of mutual savings banks only. *Branching into state*-No. *Acquistion SB, S&L and Trust*-Mutual savings banks only. *Reciprocal agreement*-No.
Rhode Island	1983	*De novo*-N.E.S. *Acquisition of existing banks*-Yes. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-Yes, but not trust companies. *Reciprocal agreement*-Yes, New England states only. After 7-1-86, nationwide. *Misc. provision*-Law does not take effect until 7-1-84.
South Dakota	1983	*De novo*-Yes, if: 1. Minimum capital of $5 million. 2. Operated in manner not likely to attract the general public. 3. Limited to one banking office. *Acquistion of existing banks*-Yes, but must not be for acquisition of additional offices. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-N.E.S. *Reciprocal agreement*-N.E.S. *Misc. provision*-State chartered banks may engage in all facets of insurance business.
Virginia	1983	*De novo*-Yes, if: 1. Minimum capital and paid-in-surplus of $5 million. 2. Employ at least 40 state residents. 3. Operate in manner that is not likely to attract the general public. *Acquisition of existing banks*-N.E.S. *Branching into state*-N.E.S. *Acquistion SB, S&L and Trust*-N.E.S. *Misc. provision*-No interest rate ceilings on credit cards.
Washington	1983	*De novo*-N.E.S. *Acquisition of existing bank*-Yes, but bank must be in danger of closing & there must be no in-state institution willing to acquire it. *Branching into state*-N.E.S. *Acquisition SB, S&L and Trust*-Trust companies only. *Reciprocal agreement*-N.E.S.

cost advantages over most smaller banks in producing basic banking deposit and loan services. Bank holding company subsidiaries also seem to have no cost advantage over independent banks.[4] This evidence on bank costs has been consistent in studies done over a period of almost 20 years. Studies using more recent data and more sophisticated methods actually have found less evidence of economies of scale in banking than earlier studies.

These bank cost studies' conclusions about the implications of interstate banking are corroborated by other evidence. They are, in the main, applicable. However, they have three main limitations. First, the studies cover only banks with deposits of $1 billion or less, while the aggressive organizations most often identified as likely interstate banks are larger. Second, the evidence on bank costs pays little attention to economies of scope—that is, the behavior of a particular product's unit costs when output of related products is expanded. Finally, no cost studies of nationwide organizations in the United States or elsewhere are available.

These limitations do not shake the conclusion that large banks have no cost advantages in their basic product lines. While costs of very large banks have not been estimated, a large body of evidence on their performance in entering markets in competition with smaller banks indicates that they possess no great advantages. In addition, economies of scope seem to play at most a small role in the costs of basic banking services. Recent studies by pioneers in the study of both economies of scope and economies of scale in banking indicate this.[5] The conclusion is confirmed by indirect evidence again provided by the lackluster performance of large banks in competition with smaller ones.[6] It is discussed below. While nationwide systems have not been studied, their unit costs should be somewhat greater than the costs of less geographically extensive systems because of longer lines of communication.

Large Banks' Advantages

Large banks' paucity of advantage is seen in their relatively poor performance when they have entered markets in competition with smaller banks. The large banks' lack of advantage is exemplified by the record of large New York City banks in upstate New York between 1970 and 1980 and by new banks in California. Several of the nations' largest banks entered upstate New York markets between 1970 and 1977. All entries involved either new or small banks or branches. Of the 33 entries, two were closed and the remaining 31 recorded an average market share gain of only 1.3 percentage points through 1980. Their average market share in 1980 was 1.8 percent.[7] Other evidence indicates the entry by the large banks through acquisition of banks with high market share results in no better performance by these institutions than does foothold or de novo entry.[8]

On the flip side of the evidence, the record of new banks in California in the 1970s is instructive. During the decade, 153 new banks opened in the state. In 1980, fully 141 of these were still operating, and those started in the decades' first three years had reached average sizes between $55 million and $70 million.[9] These new banks were competing against some of the nation's largest banks, with extensive and mature branch systems.[10]

"For basic services, large potential entrants seem to have few cost advantages over existing banks."

Bank Costs and Public Benefits

Competition-efficiency arguments on interstate banking, thus, cut both ways. For basic banking services, large potential entrants seem to have few cost advantages over existing banks. They would be unable to offer basic services at lower prices or to pay higher interest on deposits in markets that were already competitive. Nor would they be able to drive smaller competitors out of business, at least not by taking advantage of lower production costs. Some have argued that large banks will gain more size advantages in the future because computers will perform more bank functions and increase economies of scale in production of bank services. Both premises probably are correct, but the conclusion need not be. As Paul Metzker has argued, small banks can capture advantages of economies of large

scale production by purchasing services from large service companies, franchisers, networks and bankers' banks.[11] Pronounced trends in these directions are taking place. They seem likely to allow smaller banks to continue holding their own in competition with larger entrants.[12]

New Entry

In banking markets that presently are not competitive, interstate banking seems likely to benefit the public. Interstate banking would increase the number of potential entrants into all banking markets. Markets considered likely to be profitable will attract real entrants. Product and service markets that are not now competitive are likely to generate higher profits and competing institutions. Even if new entrants do not come in, their presence "in the wings" may limit prices charged in previously uncompetitive markets. To the extent that noncompetitive markets remain, then, interstate banking seems likely to provide the public with more competitive prices, higher quality and more innovation in financial services.

"... the best evidence now available indicates that conditions similar to those under interstate banking would improve market performance to the public's benefit."

Recent evidence indicates that the spread of large banks into markets throughout the nation may also reduce loan rates and increase deposit interest rates through another route. The competitive impact of large banks facing each other in many geographically dispersed markets has puzzled economists for several years. Evidence developed in 1978 by Whitehead, who studied the development of bank holding companies in Florida, indicated that local markets with more large holding companies that also compete in many other markets experienced lower loan prices and bank profits and higher deposit interest rates. This evidence was contradicted by a study of other states by Stephen Rhoades at that time.

Recently, Whitehead (with Jan Luytjes) improved his study, again concluding that markets in which more widely dispersed large companies compete have more competitive prices and lower bank profits.[13] A more recent study of other states by Rhoades proved consistent with Whitehead's findings.[14] The issue needs more study, but the best evidence now available indicates that conditions similar to those under interstate banking would improve market performance to the public's benefit.

Interstate banking's impact on the national concentration of financial resources is subject to much more speculation. Nationwide, fewer banks would probably hold more resources. However, large banks' paucity of advantages in basic banking services argues that local markets will not be monopolized. Whether more nationwide concentration of banks will have adverse effects will depend on the extent of the concentration and the entry of other financial firms into banking. For now the evidence on larger banks' competitive problems and bank costs (cited above) indicates that concentration increases may not be very severe. In addition, large nonbanking firms are indeed entering the banking industry.

Special Services and Large Loans

The previous discussion has concentrated on basic banking services; however, banks also offer more specialized services and large loans. The larger banks most likely to enter local markets if interstate banking is allowed enjoy advantages over smaller local banks in offering sophisticated services and large loans directly. (Smaller banks generally can make these services available through their larger correspondents, but this may be cumbersome.) An institution's ability to establish deposit-taking offices may create some economies of scope that will lower costs of the sophisticated services and encourage large banks to offer them in some areas. In addition, large banks' higher loan limits may allow them to grant large loans more quickly, without finding other banks to participate. Such capabilities would benefit the relatively small number of bank customers who require sophisticated services and large loans.

Banking Industry Health

Of course, we can also assume that the public benefits from the continued health of the commercial banking industry as distinct from nonbank

providers of banking services. Commercial banks are at a disadvantage relative to nonbank firms because they can offer some services in only one state. Firms such as Sears, Merrill Lynch, Prudential and Beneficial Corp. are able to offer most financial services on a nationwide basis. In a mobile society, where consumers who use banking services move fairly often, financial services providers with multi-state presence are able to maintain relationships with transient customers more easily than geographically limited firms. The impact of their advantage is difficult to ascertain; however, over a long period it may be sufficient to allow nonregulated providers to gain market share at the expense of commercial banks.

If nonregulated providers gain market share, the public will still be provided with basic financial services. However, commercial banks might well be weakened. Since they remain important to the payments system, their weakness may be considered a public cost. The occasion for this cost can be avoided by allowing banks interstate expansion.

On the whole, allowing interstate banking seems likely to bring competitive benefits rather than costs. More competitors, potential competitors and sophisticated services are likely to be available in local markets. The nationwide expansion of banks that confront each other in many markets may engender greater competition and a more viable industry. At the same time, large banks appear to enjoy no advantages that would allow them to drive smaller banks to the wall and thus increase local market concentration.

Savings and Credit Flows

Conflicting claims abound regarding the probable impact of interstate banking on flows of saving and credit among parts of the country. Proponents of interstate banking typically argue that the opening of large out-of-state banks' full-service offices will provide ample amounts of new credit in the states that are entered. Opponents argue that the same phenomenon will suck savings from those areas to the headquarters states of the entering banks. Evidence on this question is sketchy primarily because money is fungible; savings and credit dollars cannot be traced through a complex financial system in which transfers are made quickly through many channels.

Yet the very existence of such a system holds the keys to the answer to this puzzle. The system exists because savers and their agents seek top returns on their money, purchasers of capital seek to acquire money most economically, and financial intermediaries seek to profit by satisfying both. It is obvious that local savers and banks are in no way limited to local investments. Savers can choose between options offered by local banks and by money funds, stockbrokers with (and without) 800 telephone numbers, national insurance companies and basically nonfinancial companies like Sears Roebuck and Penneys. The local bank itself may acquire funds from nonlocal savers and use them for nonlocal investments. It may buy federal funds and brokered deposits. It may put locally or nonlocally generated funds into nonlocal loans, federal funds sales and securities. At the same time, local borrowers—with the possible exception of small businesses—have a fairly large menu of local and nonlocal sources of funds. Today in many markets this menu includes nonbank subsidiaries of large money center banks.

"There is little reason to believe that interstate banking will change capital flows substantially."

There is, then, little reason to believe that interstate banking will change capital flows substantially. Savings already can move by many routes to and from local economies. These change every day as institutions seek new ways to intermediate profitably. Under these circumstances, interstate banking is unlikely to dislocate capital movements significantly. American capital markets are already efficient at moving capital to its most productive uses. Savings from local areas have many opportunities to get out to other uses and local areas have many opportunities to acquire savings for profitable projects. "Local control" of savings and lending does not exist in most markets.

Bank Safety

The third major category for interstate banking issues is bank safety. Again, this is primarily a large bank versus small bank issue. Recent petro-loan and international loan problems combine with the memory of the REIT problems of the early 1970s to support an argument that larger banks tend to be less safe—more prone to be threatened by consequences of their risk-taking--than smaller banks. Small banks' size and limited geographic coverage, on the other hand, suggest that they may be unable to diversify their asset portfolios sufficiently to avoid taking more overall risk than large banks. Another argument occasionally cited is that small banks' managements often are not sufficiently sophisticated to take advantage of various methods of controlling risk.

Evidence about the risk-size relationship in banks is inadequately developed. A thorough analysis of the literature on this subject done in 1982 by Whitehead and Robert Schweitzer revealed little evidence that banks of any size enjoyed risk advantages over banks of other sizes.[15] Further evidence presented by Mark Flannery indicates that both large and small banks have managed their interest rate risk effectively during the 1970s and early 1980s.[16] Finally, small banks seem to have suffered no more than large banks as deposit interest rates were deregulated over the past five years.[17] All of this evidence indicates that if large banks substitute for small banks in an interstate environment it is not likely to bring instability to any state's banking system.

"Sketchy evidence indicates that interstate banking would neither increase nor decrease risks to the banking system substantially."

Interstate banking might impact other risks in two ways that have not been carefully studied. If large banks are able to compete directly for deposits outside of money centers, they may be able to accept more deposits directly rather than through the market for large certificates of deposit. We might call this process disintermediating the large CD market. If the large CD market is reduced in this manner, large banks will have a broader deposit base—more depositors with smaller deposits. This base seems less likely to desert the large banks on a rumor than are the large depositors concentrated in the large CD market. Broader depositor bases that might emerge from interstate banking seem likely to reduce the risk of the financial system somewhat.

Interstate banking might have two opposing effects on risk to the banking system from bank failures. It could reduce risk by providing a larger group of potential merger partners for failing banks. The Garn-St Germain Act has moved the financial system toward solving regulators' problem of finding merger partners for weak banks from a limited in-state group of potential acquirers. Small, troubled banks are not covered by that act, however. Interstate banking would make it more likely that small failing banks could be merged. More spirited bidding for weak banks probably would also reduce losses to the Federal Deposit Insurance Corporation (FDIC) insurance fund.

On the other hand, as some banks get much larger in size and geographic spread, the resolution of their failure would become more difficult. Larger banks require larger merger partners. The failure of more geographically dispersed banks would impact communities throughout the nation. How these effects on system risks would balance out is speculative. Sketchy evidence indicates that interstate banking would neither increase nor decrease risks to the banking system substantially. It could create broader, more stable deposit bases for large banks. It would provide more potential merger partners for small failing banks, but it would increase the difficulties of handling large failing banks.

Public Costs and Benefits

Costs of interstate banking, for the public at least, seem unlikely to be at all large. A considerable body of research indicates that the danger of market concentration arising from interstate banking is negligible. Nor is it likely that credit flows would be dislocated significantly. A much less well-developed body of evidence also indicates that expansion of large banks would not increase the risk of instability in local

banking markets or in the financial system. Benefits of interstate banking clearly appear to outweigh the costs. The benefits are most closely related to the number of actual and potential entrants that interstate banking would allow into local markets. These entrants could be expected to make local banks behave more competitively and to provide a larger group of potential merger partners for failing banks. The availability and quality of sophisticated bank services also should improve. To the extent that a healthy group of banks is in the public interest, interstate banking may improve banks' health by allowing them to compete with other unregulated providers of financial services on an interstate basis.

Other Issues

Two other issues raised by the interstate banking debate deserve mention because they seem to influence many of the policy recommendations concerning the question. How interstate banking is accomplished is likely to have a considerable influence on the wealth (and influence) of particular bankers and groups of bankers. This includes both bank owners and bank management.

Owners of banks will be affected by the manner of entry by outside banks. De novo entry into noncompetitive markets is likely to cut into the profits of bankers already offering services in those markets. Consequently, local bankers with some competitive advantage are likely to lose if de novo entry is allowed. They will be unable to exact so high a price if they choose to sell or to make as high a level of profits if they continue to operate.

A bank's management may also be threatened if the bank is acquired. Influence, income and position may all be lost by management of the acquiree in such a transaction.

For these reasons and others that contend local control of savings and credit flows and local involvement with financial institutions are in the public interest, entry limitations are often proposed in interstate banking laws. The two most common proposals are restrictions on de novo entry and regional interstate banking—which effectively restricts entry by large money-center banks. The former protects owners of existing banks from competition or allows them to sell to outside organizations that want to enter their markets. The latter protects managements of some larger institutions, allowing them to negotiate with similar or smaller organizations in selling their banks or in acquiring smaller banks. Regional restrictions may work against smaller banks interests, however, because they decrease the number of potential acquirers. Such restrictions, if temporary, may also allow time to assess the actual impact of interstate banking.

Since the primary benefits of interstate banking are closely related to the number of potential and real entrants it allows in local markets, limitations on de novo entry and on the location of potential entrants diminish the potential benefits. The extent of the diminution is closely related to the extent of the limitations.

Arguments in favor of limitations premised on local control of credit are not convincing. They assume that there is now some local control of savings and investment flows. In most markets, we have argued above, no such control exists. It exists only in the noncompetitive markets where the benefits brought by potential new entrants would be the greatest.

"The public generally should benefit from the adoption of interstate banking."

Arguments premised on the need for local involvement in and identity with financial institutions are difficult to analyze. There are, certainly, local banks whose managements are closely involved with and supportive of local communities. Acquisition by a regional rather than a national company may or may not be more likely to continue that involvement. Benefits of this increasing probability are difficult to quantify. Political bodies making the interstate banking laws are probably in the best position to weigh those benefits.

Implications

The above analysis has several implications:

1. The public generally should benefit from the adoption of interstate banking.

2. Benefits should come in the short run and should not be dissipated in the longer run by increased concentration in the markets for financial services.

3. Benefits should come in the areas of: competition—by allowing more potential and real entrants into banking markets and more widespread and efficient provision of specialized banking services; credit flows—by allowing somewhat more efficient provision of lending services; and risk—by making it easier to handle some failing banks and providing more stable deposit bases for large banks.

4. The impact should not be so abrupt as to be overwhelming. Much has already been gained by de facto interstate banking.

5. Regional and de novo limitations should diminish all types of benefits of interstate banking.

6. De novo limitations should be more crippling because they should eliminate much of the competitive value of interstate banking.

7. Regional limitations should not entirely eliminate benefits of interstate banking. They may be acceptable temporarily to ease the transition to national interstate banking and to gain support of large banks' managements. A time limit on regional application of states' interstate banking laws would be a desirable feature.

—B. Frank King

Notes

[1] David D. Whitehead, **A Guide to Interstate Banking**, Federal Reserve Bank of Atlanta, September 1983. The report is summarized and issues involved in interstate banking are discussed in detail in the May 1983 issue of the Atlanta Fed's **Economic Review.**

[2] B. Frank King, "Nonbank Banks," **Economic Review**, Federal Reserve Bank of Atlanta, May 1984.

[3] Paul Volcker, "Testimony Before the Senate Committee on Banking, Housing and Urban Development," September 13, 1983.

[4] B. Frank King, "Interstate Expansion and Bank Costs," **Economic Review**, Federal Reserve Bank of Atlanta, May 1983.

[5] Thomas Gilligan, Michael Smirlock and William Marshall. "Scale and Scope Economies in the Multiproduct Banking Firm," Working Paper, March 1983 and George Benston, Allen N. Berger, Gerald N. Hanweck and David B. Humphrey, "Economies of Scale and Scope in Banking," **Proceedings of a Conference on Bank Structure and Competition**, Chicago, Illinois, Federal Reserve Bank of Chicago, 1983, pp. 432-435.

[6] B. Frank King, "The Impact of Local Market Entry by Large Bank Holding Companies," **Economic Review**, Federal Reserve Bank of Atlanta, November 1982.

[7] Golembe Associates, Inc., "The Public Benefits and Costs of Maine Banks Affiliating With Out-of-State Institutions," memo, January 1982.

[8] B. Frank King, "The Impact of Local..."

[9] Golembe Associates, Inc., "The Public Benefits..."

[10] If customers perceive that large banks are less likely to fail or to be allowed to fail, these larger institutions will be helped by the FDIC s newly stated policy of paying off only estimated recoveries to uninsured depositors in purchase and assumption transactions involving failing banks.

[11] Paul F. Metzker, "Future Payments System Technology: Can Small Banks Compete?" **Economic Review**, Federal Reserve Bank of Atlanta, November 1982.

[12] A similar conclusion was reached in a study done for the Association of Reserve City Bankers by Dwight B. Crane, Ralph C. Kimball and William T. Gregor (**The Effects of Banking Deregulation**, July 1983.)

[13] David D. Whitehead, and Jan Luytjes. "Can Interstate Banking Increase Competitive Market Performance? An Empirical Test," **Economic Review**, Federal Reserve Bank ofAtlanta, January 1984.

[14] Stephen Rhoades, "Multimarket Interdependence and Market Performance in Banking," **Antitrust Bulletin** (forthcoming).

[15] David D. Whitehead and Robert L. Schweitzer. "Bank Risk and Bank Size: A Note on the Evidence," **Economic Review**, Federal Reserve Bank of Atlanta,November 1983.

[16] Mark Flannery, "Some Further Evidence on Market Interest Rates and Bank Profitability," **Journal of Money, Credit and Banking**, August 1983.

[17] Larry D. Wall, "Commercial Bank Profits," **Economic Review**, Federal Reserve Bank of Atlanta, July 1983.

Contemporaneous Reserve Accounting: The New System and Its Implications for Monetary Policy

Although the Fed's adoption of contemporaneous reserve accounting need not be associated with any change in the Fed's monetary control procedures, the new system creates the potential for total reserve targeting and thereby increases the feasibility of improved short-run monetary control.

In February, the Federal Reserve changed the way depository institutions compute their required reserves from a lagged reserve accounting system to a nearly contemporaneous reserve accounting system. This article will describe both the previous and current reserve accounting systems, outline the process of monetary control under each system, and finally, assess the potential and probable changes in monetary control associated with the new system.

Since the mid-1970s, attention has been focused on the monetary aggregates and on the Federal Reserve's ability to achieve the targets chosen for monetary growth. The extent to which the money supply can actually be controlled, particularly over shorter time periods, is a source of much controversy. It is widely agreed, however, that the control of monetary growth can be improved. In an attempt to improve

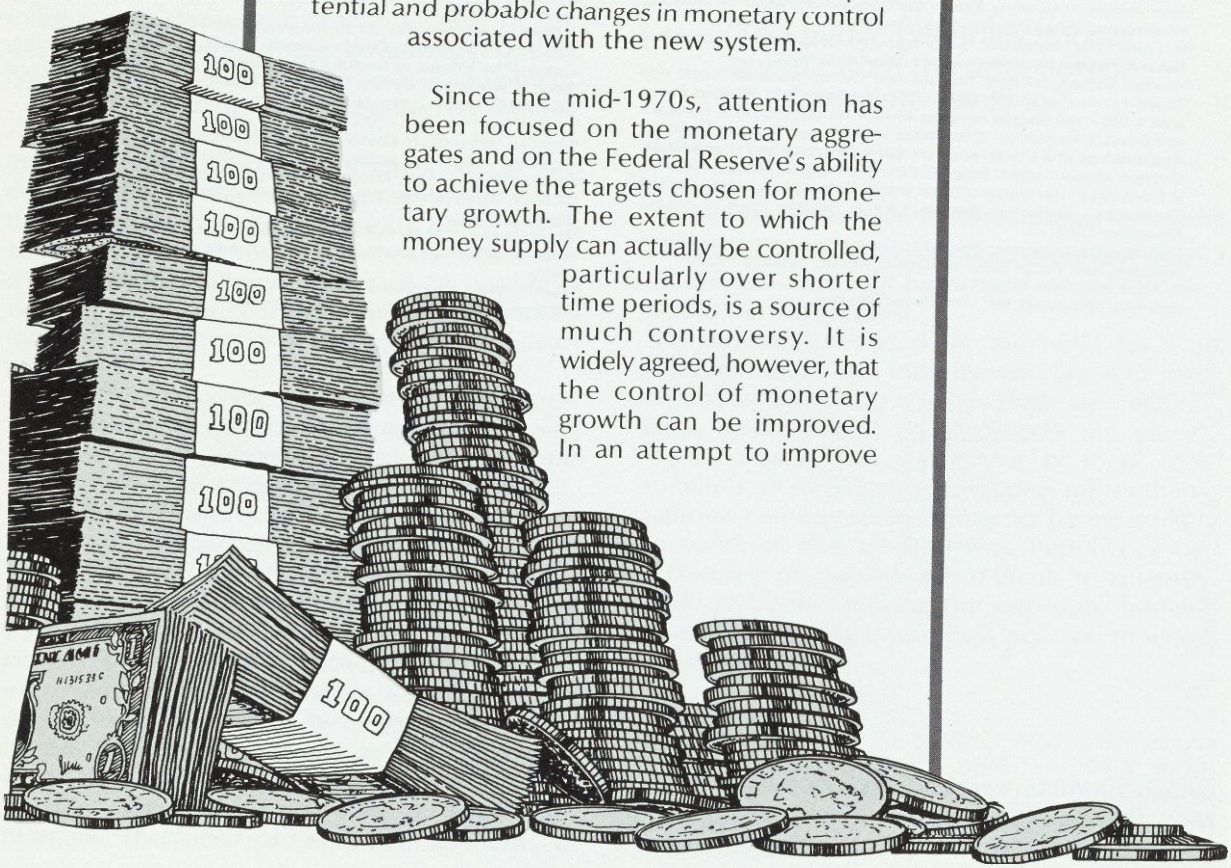
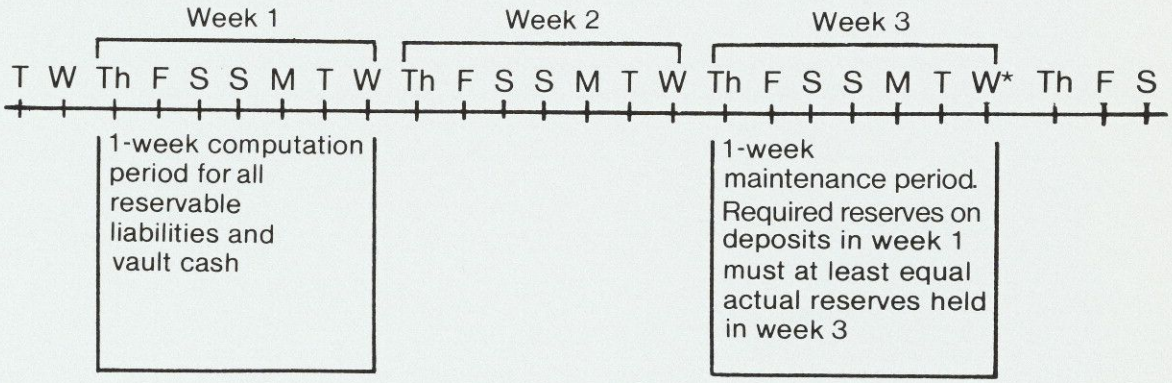


Exhibit 1. The Lagged Reserve Accounting System



*Settlement day.

the Fed's short-run control of the money supply, the Board of Governors has revised the reserve accounting system, which affects the response of the money supply to changes in reserves.

LAGGED RESERVE ACCOUNTING

Reserve Accounting Procedures Under LRA. Under the system of lagged reserve accounting (LRA), begun in September 1968, reserve **maintenance periods** (periods during which a depository institution's average daily reserves must meet or exceed its specified required reserves) comprised seven days ending each Wednesday. Required reserves for a reserve maintenance period were based on the average daily reservable deposits in the reserve computation period (a one-week period, two weeks earlier, also ending every Wednesday), as illustrated in exhibit 1. Thus the reserve maintenance period followed, or lagged, the reserve **computation period**. Because of this lagged arrangement, required reserves were predetermined and known by the depository institution ("bank" hereafter) at the beginning of the maintenance period. To meet these requirements, banks needed to worry only about actual changes in reserves held during the maintenance period and the cost of altering them.[1] Assets counted as reserves for the current maintenance period were the average daily vault cash held in the computation period two weeks earlier plus average reserve balances held in the current maintenance period. Some leeway was allowed by carryover provisions. That is, a reserve deficiency of up to 2 percent of required reserves could be made up in the next maintenance period. In the same way, extra reserves of up to 2 percent of those required could be "carried over" and counted as reserves in the next maintenance period.[2]

If banks hold reserves above the level required, they are said to have **excess reserves**. Because of potential disturbances to actual reserves in any period, banks may choose to hold excess reserves. However, since banks earn no interest on reserves, banks try to minimize excess reserves. Excess reserves thus represent available funds not used to support deposits. At any time, the level of total reserves in the banking system is composed of required plus excess reserves. Alternatively, total reserves also can be broken down into nonborrowed reserves and borrowed reserves. The reserves made available to banks through open market operations are created as the result of the Fed exchanging reserves in payment for securities.[3]

Banks own these reserves outright. Reserves supplied in this manner are called **nonborrowed reserves**. On average, nonborrowed reserves constitute over 96 percent of total reserves.[4]

Banks have another source of reserves. This source is the Fed's discount window, a facility provided by the Fed allowing banks to borrow reserves, on a short-term basis, against approved collateral (such as government securities). The rate of interest charged by the Fed to banks at the discount window is called the discount rate. Reserves provided this way are **borrowed reserves**. The Fed cannot reduce total reserves below required reserves without forcing the banking system into a reserves deficiency.[5] Nor can banks change their required reserves, since these were determined two weeks previously. Thus, any change in bank assets and deposits in the current week will have no effect whatsoever on required reserves in the same week. This is important. It implies that under LRA there is no link between bank portfolio adjustment (and hence deposit adjustment in the current week) and changes in required reserves.

"The LRA system effectively forces the Fed to supply at least the amount of reserves determined by deposits held two weeks earlier."

Specifically, given a predetermined level of required reserves based on deposits two weeks earlier, reserves to meet these requirements must originate from either open market operations (that is, nonborrowed reserves) or the discount window (borrowed reserves). The LRA system effectively forces the Fed to supply at least the amount of reserves determined by deposits held two weeks earlier. The importance of the particular reserve accounting system for monetary control differs greatly under the different operating procedures used to implement monetary policy. In particular, the significance of LRA depends crucially upon whether a federal funds targeting procedure or a reserves targeting procedure is in use.

Federal Funds Rate Targeting Under LRA. Prior to October 1979, the Federal Reserve attempted to control monetary growth by targeting the federal funds rate.[6] The federal (fed) funds rate is the rate of interest at which banks trade overnight funds.[7] A bank with excess reserves may lend some or all to banks with deficient reserves. Clearly, any activity that influences the availability of reserves, such as open market operations, will then influence the fed funds rate. An operating procedure that targets the fed funds rate can be thought of as controlling or pegging the **cost** of reserves. Other things being unchanged, the lower the fed funds rate target, the more expansionary is monetary policy. Such a strategy required the Fed to determine the fed funds rate consistent with desired growth in the money stock. As long as permanent shifts in the underlying relationships between growth and interest rate levels did not occur, the fed funds rate was maintained over periods of time within a relatively narrow range. And any movement outside this narrow range was immediately offset by open market operations. This meant that any pressure on interest rates led to accommodating changes in the money stock.

For example, upward pressure on the rate caused by an increased demand for credit would lead to increases in reserves and, eventually, in the money supply. In such a case, the fed funds rate initially would tend to rise above the targeted level. The Fed would respond by supplying additional funds to the market by purchasing securities. The supply of excess reserves would rise, putting downward pressure on the fed funds rate. The Fed would continue making open market purchases until the fed funds rate returned to its targeted level. Similarly, if the fed funds rate were under downward pressure, the Fed would drain funds from the market by selling securities until intervention was no longer necessary to maintain the fed funds rate at the targeted level. As practiced, fed funds rate targeting actually could prevent increases and decreases in the rate. Any pressure on the rate could be offset before a significant change in interest rates took place.

There were several important implications of this operating procedure. First, since the Fed adjusted reserve availability to conditions in the money markets, (i.e., reserve demand) **monetary**

growth tended to accommodate rather than to offset disturbances in that market. Any developments that put upward pressure on interest rates (for example, rising inflationary expectations) would result in higher monetary growth. Clearly, however, any given fed funds target could be associated with either more or less monetary growth than originally intended, depending on changes in reserve demand. If these changes were merely temporary, accommodation would not lead to a large deviation between intended and actual money growth. Permanent changes, however, could lead to pro-cyclical monetary growth patterns that exacerbated both upturns and downturns in economic activity.

Keep in mind that a given fed funds target was chosen initially because it was assumed to be consistent with desired monetary growth. If this relationship were to change, maintaining the fed funds target implied some actual rate of monetary growth different from the rate originally intended. Conversely, if the originally chosen rate of money growth remained the desired rate, then the fed funds target needed to be changed. Only discretionary changes to the fed funds **target** could offset movements in reserve demand. However, recognition of necessary changes in the fed funds target came slowly. In the 1970s, the fed funds target often was adjusted long after the need became obvious. Additionally, the adjustment was at times too small to effect the desired change in monetary growth. Many of the severest inflationary shocks to the economy were initially mistaken as transitory and so were accommodated. Thus, monetary growth proved to be not only generally procyclical, but inflationary as well.

Second, the particular reserve accounting system is irrelevant under a fed funds rate targeting procedure. The use of a fed funds strategy is independent of the reserve accounting procedure. Note that to achieve a given fed funds target it is immaterial whether required reserves are determined two weeks previous, or are determined currently. What matters is that the Fed can accommodate current reserve demand and so affect the fed funds rate immediately. As long as reserve demand can be accommodated (to keep the rate from rising) or reinforced (to keep the rate from falling) it does not matter that required reserves, which account for the bulk of reserves demand, are set two weeks previously.

Reserve Targeting Under LRA. By the late 1970s, experts in and out of the Federal Reserve had recognized the problems associated with fed funds targeting. Additionally, greater emphasis was put on achieving publicly-announced monetary growth targets. Consequently, in October 1979, as a part of a program to improve monetary control, the Fed adopted a new reserves-oriented operating procedure. Under this system, the Fed influenced monetary growth by targeting reserve growth directly. The control process became one of calibrating the correct level of nonborrowed reserve growth associated with the monetary growth target, and supplying just that amount. In contrast to the old procedure that involved controlling the cost of reserves, this procedure involved controlling the quantity of reserves. In the absence of a change in policy, any deviation in reserve growth from the path associated with desired monetary growth was to be offset. To control the money stock, the Fed attempted to affect deposits by altering the availability of nonborrowed reserves. The pressure that this change created in the fed funds market influenced the fed funds rate. Such changes in the fed funds rate forced banks to change their portfolios, eventually producing changes in the money supply.

"Prior to October 1979, the Federal Reserve attempted to control monetary growth by targeting the federal funds rate."

Thus, to bring about some given change in monetary growth, the Fed had to correctly estimate the change in nonborrowed reserve availability that would create the proper degree of pressure in the fed funds market to change the level of borrowings and deposits. In practice, the actual level of borrowing could easily differ from the assumed level for a number of reasons: (a) factors aside from open market operations affecting nonborrowed reserves, such as Federal Reserve float or changes in Treasury deposits at the Fed,

could behave differently than anticipated;[8] (b) the excess reserve assumption could prove incorrect; (c) required reserves could differ from the levels first estimated. Any of these influences could be accommodated. Note that since total reserves in a given week had to equal or exceed required reserves determined by deposits two weeks earlier, the Fed had to supply **at least** the predetermined level of required reserves through either the discount window or open market operations. Not to do so would send some banks into a reserve deficiency. Therefore, the Fed could not control total reserves. The only reserve measure over which the Fed did exercise control in the current maintenance period was nonborrowed reserves. Thus, the post-October 1979 monetary control procedure usually was referred to as a nonborrowed reserves targeting procedure.

Consider, for example, the consequences of a move by the Fed to reduce monetary growth. In this case, targeted total reserves are reduced below current required reserves. As the supply of nonborrowed reserves declines, banks enter the fed funds market to "buy" reserves from banks with a surplus. But they simply use the excess reserves of the lending banks without increasing total reserves of the banking system. The fact that individual bank adjustment of available reserves to required reserves does not accomplish banking system adjustment was realized long before the adoption of reserve targeting.[9] Ultimately, any required reserves not supplied through regular open market operations (nonborrowed reserves) will be sought at the discount window (borrowed reserves). In the short run, under LRA, the Fed can determine only the level of nonborrowed reserves. Any attempt to lower total reserves through open market operations, for example, would be largely offset by discount window borrowings. Thus, under LRA, the Federal Reserve could determine the mix but not the total of nonborrowed and borrowed reserves.

Over the longer run, changes in interest rates will affect borrowings (because reserve pressure is simultaneously translated to the fed funds market) and cause banks to increase or decrease their earning assets. In this sense, the original move by the Fed to tighten reserve availability by lowering nonborrowed reserves eventually leads to an increase in interest rates and a decrease in monetary growth. Note that while this is not a direct fed funds targeting procedure, it does rely on changes in that rate to change borrowings and to encourage adjustments in bank portfolios to bring about changes in monetary growth. The successful use of a nonborrowed reserves targeting procedure depends critically upon an understanding of the relationship between the level of borrowed reserves and the fed funds rate. Once this is understood, the Fed can elicit the requisite changes in bank assets.

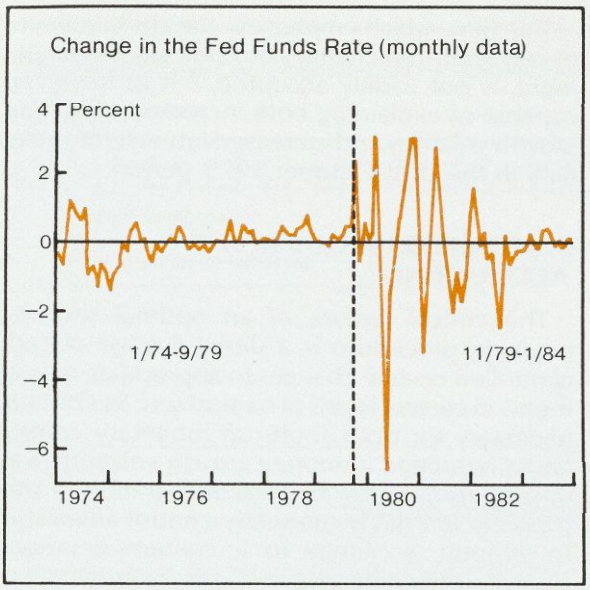
Under reserves targeting, the Fed allows the markets to determine this fed funds rate, while under fed funds targeting, it is set by the Fed itself.[10] Clearly, in this case (LRA), targeted total reserves do not determine deposits. The Fed does not unilaterally (exogenously) determine total reserves (and thus the money supply) in the short run since it is obligated to supply at least enough reserves to support deposits from two weeks ago. Thus, it is often said that in this setup, money "causes" reserves, instead of vice versa. Evidence supporting this contention has been documented in the literature.[11]

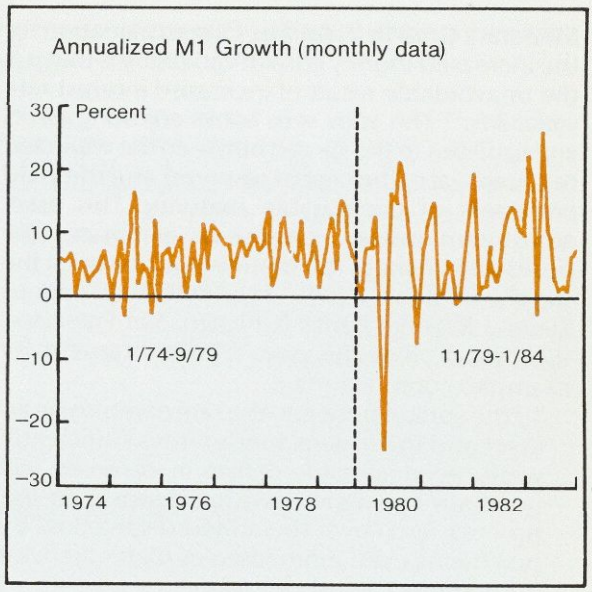
Monetary Control Under LRA: The Post-1979 Experience. Fed funds rate targeting was discontinued because it proved to be an inflexible and ultimately substandard procedure for monetary control. Reserves targeting was, however, associated with a slowing in the trend of monetary growth (a successful anti-inflation effort). But it was also

"Fed funds rate targeting was discontinued because it proved to be an inflexible . . . procedure for monetary control."

accompanied by increased volatility in both monetary growth and interest rates. While interest rate volatility had been anticipated, the money growth volatility had not.

Variability in monetary growth increased considerably following the change to reserves targeting. This volatility, as measured by the standard deviation about the mean of monthly M1 growth in two periods, January 1974 to September 1979 and November 1979 through January 1984, increased from 4.14 to 8.28. The increase in interest rate variability was equally pronounced. The standard deviation of the average monthly





fed funds rate rose from 5.89 to 10.43 over the same period.[12] See the accompanying charts.

Interest Rate Volatility. Consider the consequences of an increase in demand for reserves under LRA with a given nonborrowed reserve target. Because of administrative limitations imposed by discount officers at Federal Reserve Banks on discount window borrowing, banks first turn to the fed funds market to obtain needed reserves. Their bidding for funds puts upward pressure on the federal funds rate and other market rates, prompting portfolio adjustments that will temper tendencies toward excessive money growth. The tighter the fed funds market, the greater will be the upward pressure on interest rates for any given increase in the amount of borrowing that banks must do to meet their reserve requirements and satisfy their demands for excess reserves. With a firm nonborrowed reserves target, any deviation in monetary growth will be reflected in demand for borrowed reserves and in the money markets, throwing the burden of adjustment on interest rates. Under reserves targeting, increased interest rate volatility was seen as the 'price that must be paid' for enhanced monetary control.

Short-run Monetary Control. Short-run monetary control has been an elusive goal since 1979 whether the criterion is adherence to short-term targets or a low level of monetary growth volatility.

Hitting short-run monetary growth targets is difficult in reserves targeting under LRA. Monetary growth will deviate from the targeted levels unless the Fed holds to an unalterable nonborrowed reserve path, administers the discount window very strictly (so borrowings do not exceed the level assumed consistent with targeted money growth), and is not sensitive to wide swings in the fed funds rate. Even this ignores the pitfalls in correctly estimating borrowing levels, and in accurately anticipating demand for excess reserves. It also assumes that the relationship between reserve growth and monetary growth (known as the multiplier) is predictable. These secondary factors, coupled with the primary problem of reserve slippage attributable to LRA, can also cause short-run monetary growth to be quite different from that initially intended.[13]

There is wide disagreement about the importance of attaining short-run targets. It is generally agreed that if the Fed hopes to achieve its long-run money growth objectives, and the associated goal of price stability, it needs to achieve shorter-run targets consistent with those objectives.[14] But some economists argue that a shorter-run (week-to-week) link between money and reserves is not necessary for successful longer-run monetary control.[15] Nevertheless, the reasons for the failure to **consistently** hit targets are not sufficient explanation for the tremendous increase in money growth variability.

Monetary Growth Volatility. One explanation for the increased money growth variability is that it is the unavoidable result of increased interest rate variability.[16] This view sees banks adjusting assets and liabilities to the spread between the expected fed funds rate (the cost of reserves) and the yield on assets of comparable maturity. This asset adjustment process creates or eliminates deposits and changes the money stock through the supply of bank assets. Economists at various Federal Reserve Banks (Chicago, San Francisco, Richmond) share this view.[17] Robert Laurent, for example, contends that:

> "If the spread between the rate of return on an asset and the federal funds rate is sufficiently wide, even a bank deficit in reserves will purchase the asset, creating deposits in the process, and cover the added reserve loss by purchasing even more reserves than otherwise in the federal funds market.
>
> "That bank asset adjustment decisions are affected by the price of reserves (federal funds rate), and not by pre-existing reserve positions is clearly demonstrated by the fact that many large banks consistently purchase more reserves in the federal funds market than their entire level of required reserves. Without federal funds purchases, these banks would not only be deficient, but would actually have negative reserve levels."[18]

"The switch to CRA significantly alters bank reserve accounting procedures and has the potential to change bank reserve management practices as well."

It follows that the frequent changes in the fed funds rate associated with non-borrowed reserves targeting under LRA also will be associated with changes in the interest rate spreads to which banks respond. These changes, in turn, lead to rapid adjustments in bank assets. Such is the process by which interest rate volatility could become associated with money stock volatility. In short, since the money stock is determined by interest rate spreads, interest rate volatility will produce monetary growth volatility.

This view, which emphasizes the consequences of very short-run changes on bank asset management, is not widely accepted.[19] It is, however, capable of explaining **both** increased monetary growth volatility and increased interest rate volatility in the post-October 1979 period.

CONTEMPORANEOUS RESERVE ACCOUNTING

The critical feature of an optimal reserves targeting procedure is a direct linkage of Fed-controlled reserve changes to appropriate adjustments in **current** levels of bank assets. Such a link, necessary for both short-run monetary control and a reduction in money growth volatility, was missing under LRA. General recognition of this problem led many monetary control advocates to support a change to a contemporaneous reserve accounting system. Their argument eventually prevailed, and contemporaneous reserve accounting (CRA) was put in place beginning February 2 (see box on next page).[20]

The switch to CRA significantly alters bank reserve accounting procedures and has the potential to change bank reserve management practices as well. These changes have important implications for monetary control.

To summarize the material in the box, those holdings available to support deposits in the current maintenance period are:

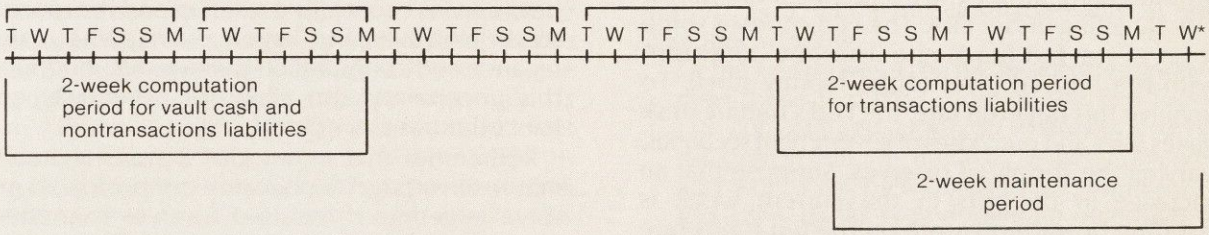
(1) average daily vault cash held in the two week computation period ending 30 days before,

(2) average daily deposits at Federal Reserve Banks held in the two week reserve maintenance period, and

(3) any excess reserves carried over from the previous maintenance period.

While this system may appear more complicated than LRA, each of its features has a strong rationale. First, since M1 is the monetary aggregate most closely correlated with transactions and real economic activity, it has been the aggregate that policymakers are most interested in controlling. Thus, only transactions deposits will be reservable on a nearly contemporaneous basis. The new CRA rules are designed to strengthen control over M1.[21] Second, banks cannot immediately calculate their required reserves at the end of the day; most need a lag of a day or two to compile deposit data, after which time

Exhibit 2. The New Contemporaneous Reserve Accounting System



*Settlement day

Reserve Accounting Procedures under CRA.

The change in reserve accounting affects only certain deposits in certain banks. First, depository institutions with total liabilities subject to required reserves of over $15 million that are required to report liabilities to the Fed on a weekly basis ("weekly reporters"), are subject to CRA. Second, and more important for monetary control, required reserves against transactions deposits (M1) will need to be held on an essentially contemporaneous basis, instead of being lagged two weeks. The reserve computation period will span two weeks beginning on a Tuesday and ending on a Monday. The reserve maintenance period is the two-week period beginning on a Thursday (two days after the first day of the reserve computation period) and ending on a Wednesday (two days after the end of the reserve computation period) (see exhibit 2). These changes affect only reserves required on the transactions deposits of weekly reporters.

Required reserves on weekly reporters' nontransactions liabilities and for all reservable liabilities at banks with less than $15 million in reservable liabilities are based on average daily reservable deposits over a two-week period ending 30 days before the end of the current reserve maintenance period. Additionally, average daily vault cash held in that same period will serve as reserves available to support deposits in the maintenance period ending 30 days later.

For the first year of CRA, the carryover allowance will be liberalized. Each reporting institution will have a minimum carryover allowance of $25,000. During the initial six months of CRA, the carryover allowance for reserve deficiencies or excesses will be 3 percent of required reserves, or $25,000, whichever is larger. In the following six months, the carryover allowance will be 2½ percent. At the end of the first year of CRA, the allowable percentage carryover will revert to 2 percent, with the $25,000 minimum still in place.

required reserves are known. This is the rationale given for the reserve maintenance period ending two days after the reserve computation period. Thus, to be precise, CRA is **almost** contemporaneous. Were banks required to hold reserves on a completely contemporaneous basis with deposits, they would have more difficulty computing their average daily reservable deposits and so would tend to be uncertain of required reserves until after the end of the maintenance period. If the reserve computation and maintenance periods covered the same 14 days, there would be more uncertainty with respect to deposits and required reserves than under the system as it is now designed. In response to this increased uncertainty and to avoid experiencing a reserves deficiency, banks would likely hold high levels of excess reserves. This, in turn, would impose additional costs on the banks and could complicate the Fed's reserve targeting procedures.

The most important change in the timing of reserve accounting is that the reserve maintenance and reserve computation periods for transactions balances are nearly contemporaneous. This structural change was consciously designed to tighten the linkage between changes in reserves and consequent changes in transactions deposits (i.e., it was designed to influence faster bank portfolio adjustments than under LRA). So, the switch to CRA is premised on both the use of M1

as the preferred monetary aggregate and the use of monetary targeting in general.

Interest Rate Targeting Under CRA. Interest rate targeting under CRA is identical to interest rate targeting under LRA. The Fed chooses some level of the fed funds rate assumed consistent with the desired level of the money stock. To achieve this targeted rate, the Fed's trading desk varies sales and purchases of government securities, varying the supply of reserves. Suppose that an increase in deposits in the current week is exerting upward pressure on the fed funds rate through increases in required reserves. Banks could make portfolio adjustments (change deposits) **within** the reserve computation period that will reduce pressure on the fed funds rate. Yet they will not do so because the rate must be allowed to increase before banks will make the adjustments. However, under an interest rate target, the requisite changes in rates necessary to induce these adjustments are not allowed to occur or are quickly eliminated.

Additionally, there is no reason to expect that new reserve accounting procedures will make it any more clear what level of interest rates is consistent with desired monetary growth. Consequently, the potential improvement to monetary control under CRA appears quite small under an interest rate operating procedure.

Monetary Control Under CRA: Reserves Targeting. With the implementation of CRA, the Federal Reserve can adopt operating procedures that involve the control of total reserves in the short run. Consequently, the Fed now has an opportunity to improve monetary control both in the short run and the long run. This would be the first time the Fed has attempted to use total reserve targeting as a way of controlling the money stock.[22]

Several critically important distinctions between reserves targeting under CRA and reserves targeting under LRA should be noted. Under LRA, a bank (and the banking system as a whole) knew its level of required reserves during the whole reserve maintenance period. Now a bank cannot know these requirements during the entire maintenance period but will accumulate more and more of the information necessary to compute required reserves as the maintenance period progresses. However, it will not have all the necessary data until, at best, a day before the end of the maintenance period. Since the new CRA rules require more current deposit information for the calculation of required reserves, excess reserves holdings may be greater than under LRA. This, in turn, may increase the slippage between Fed-controlled reserves and the money stock. However, the largely overlapping maintenance and computation periods that introduce this uncertainty also allow for potentially enhanced monetary control.

Remember that under LRA it was inevitable that reserve targeting became nonborrowed reserve targeting. If required reserves exceeded the targeted nonborrowed reserve level, then pressure in the fed funds market would force banks to the discount window to secure these reserves by borrowing. So, the Fed expressed targets in terms of nonborrowed reserves, since total reserves could not be controlled in the short run.

"Only if the Fed sets a nonborrowed reserves level but declines to accommodate demand for borrowings will a total reserves targeting procedure be possible."

The potential for CRA to end this forced accommodation of reserve demand and improve monetary control depends critically on operating procedures used in open market operations as well as on administrative controls at the discount window and on banks' response to these actions. Given reserve targeting under CRA, if nonborrowed reserves are used as the monetary control instrument and demand for borrowings is accommodated, monetary control will not necessarily improve. Although banks may be able to make portfolio adjustments and thereby alter deposits in the reserve computation period, they will have a reduced incentive to do so if the Fed readily accommodates demands for borrowed reserves. Only if the Fed sets a nonborrowed reserve level but declines to accommodate demand for borrowings will a total reserves targeting procedure be possible. Thus, the efficacy of reserves targeting under CRA will likely be no different than that of reserves targeting under LRA unless administration of the discount window is reformed.

How will this differ from a nonborrowed reserves targeting procedure as operated under LRA? Consider that, under LRA, reserves held in the maintenance period against deposits in the computation period are subject to change while required reserves are not. That makes it impossible for banks to alter their portfolios to meet reserve requirements. The only possible adjustment is an explicit change in available reserves to meet the unalterable requirement. Under CRA, on the other hand, changes to deposits during the maintenance period will affect the average level of required reserves in the computation period as well. This is the critical feature of bank portfolio management under CRA: banks can adjust their reserve positions on a continuing basis throughout most of the reserve maintenance period by changing their holdings of reservable liabilities.

"Thus, the reserve adjustment behavior of depository institutions will depend on the banks' perception of how the Fed will administer the discount window."

It can be argued that except for changes to reserves on the last two days of the maintenance period, banks should be able to adjust their assets and liabilities within the period in response to total reserve changes. That is, banks can change their required reserves by changing the level of reservable deposits. Thus, the rationale for liberal administration of the discount window under reserves targeting is somewhat weakened. The Fed can discourage discount window borrowing without forcing banks into a reserves deficiency and by doing so it can gain control of total reserves. In this case, the role of the discount window becomes critically important.

One feature of CRA may present an impediment to total reserves targeting. That is the two-day lag between the end of the computation period and the end of the maintenance period (for reserves against transactions balances). During these two days, required reserves are predetermined, just as they are for the entire reserve maintenance period under LRA. Thus, the reserve adjustment behavior of depository institutions will depend on the banks' perception of how the Fed will administer the discount window. A firm nonborrowed reserve target, for instance, implies that any additional reserves for the banking system as a whole are available only at the discount window.

> "If the Fed proves to be highly accommodative over these two days, holding the Fed funds rate constant and supplying whatever reserves are demanded, the linkage between reserves and money will be weakened considerably. In this case, banks would have an incentive to delay their reserve adjustments until these two days of relative certainty regarding reserve availability, and the reserves-to-money causality would be essentially lost."[23]

This would be similar to reserve adjustment behavior under LRA. However, with both strict control of borrowing and reserve targeting, the Fed could condition bank behavior to produce a system that operates very close to a true total reserves targeting procedure. If banks knew that demand for borrowed reserves would not be accommodated automatically by the Fed and that the burden of adjustment would be transferred to the fed funds market, then they would be expected to try to adjust their portfolios to available reserves **within the reserve computation period**. This is the essence of the feedback that allows changes in total reserves to be followed by proportionate changes in deposits.

> "Conversely, if the Fed proves to be extremely stringent in its reserve provision during the two-day lag, refraining from any open market operations and letting the funds rate adjust to clear the market, many banks would probably encounter severe adjustment pressures, and their holdings of precautionary excess reserves would become greater and more variable."[24]

However, if the Fed did choose to proceed with a total reserves target, it could simplify Fed operations considerably. Once the desired monetary growth ranges were chosen, the Fed would calculate the associated level of required reserves and make an assumption concerning excess reserves holdings. The sum of these last two reserve measures is total reserves. With less flexibility at the discount window associated with less predictable levels of exceess reserves, the Fed would have difficulty estimating the money multiplier. This might inject as much costly uncertainity into monetary control as would accommodative discount window administration.

Consider the process of monetary control under CRA with total reserve targeting. The channels of monetary influence work through the money markets to bring actual total reserves into line with targeted total reserves. Suppose that required reserves exceed targeted total reserves. The shortage of reserves leads banks to bid up the federal funds rate. As this happens, some banks will respond by adjusting (reducing) their portfolios to the change in the spread between bank assets and fed funds. These adjustments will reduce the money stock, reducing the level of required reserves as well. This process will continue until deposits have contracted enough to reduce required reserves at least to the level of reserves provided.

There are two notable features of this adjustment process. **First**, when targeted and actual reserves are not equal, banks adjust assets and liabilities (and thus deposits) to a level consistent with the level of reserves supplied by the Fed instead of the Fed accommodating reserves to the level demanded by the banks. **Second**, the fed funds rate and other interest rates may need to rise sharply to induce the correct adjustment. But the Fed need not estimate the amount of market pressure that will bring the correct adjustment as it did when it relied on forced borrowing to make banks adjust portfolios.

Alternatively, if required reserves are less than targeted total reserves, the surplus will put downward pressure on the fed funds rate. As rates fall, banks will respond by adding to their portfolios, increasing deposits (and so the money stock). This process will continue until the downward pressure on the fed funds rate has been played out as actual required reserves increase to the targeted level.

The implementation of CRA is generally expected to increase volatility in the fed funds rate under total reserves targeting. There is, however, simulation evidence showing that this would not necessarily be the case under nonborrowed reserves targeting.[25]. Again this depends on the banking system's response to the new procedure.

The successful implementation of a total reserves target strategy depends critically on the administration of the discount window. If reserves remain available at a given price as they were under LRA and nonborrowed reserves targeting, effective total reserves targeting will not be possible and monetary control may not improve. Even if a total reserves target is chosen, as long as banks are assured that reserves will be available from the discount window at a given price during the maintenance period, **including its last two days**, they will have no incentive to manage their reserve positions over the course of the period. Then reserve targeting becomes nonborrowed reserves targeting.

Effective total reserves targeting would be facilitated by some modification of the administration of the discount window. Reform of the discount window "makes a nonborrowed reserves policy resemble, approximately, a total reserves policy."[26] This reform could take the form of price rationing, nonprice rationing, or the virtual elimination of the discount window.[27]

Restraints used to control discount window credit could take the form of **price rationing**. There are two ways of pricing borrowings to control their level. One method is to tie the discount rate to a market interest rate. This would maintain a constant spread between the discount rate and, for example, the fed funds rate.[28] If the spread were large enough, it would constitute a penalty rate and discourage borrowing from the discount window outside of emergencies.[29] Another option for price rationing is to make the discount rate an administered, **nonfloating** rate. It would be fixed for certain (perhaps brief) periods of time at a level above prevailing money market rates and changed at the discretion of policy makers. **Nonprice rationing** could be accomplished by administratively the discount window. This appears simple on the surface: the window would be closed after borrowings reach the level consistent with the total reserves target. However, administrative regulations would be necessarily complex and possibly arbitrary. Rules guiding the availability of

"...under CRA, total reserve control is possible, ensuring that the money supply responds quickly to changes in reserves."

discount and credit would have to be rigid. They would cover such questions as what constitutes sufficient reasons for use of the window, how long such borrowing could continue before the window was closed to a given bank, and what defines reasonably available alternative sources.

Currently, internal lending guidelines, while uniform, give discount officers considerable discretion. Again, if administration of the discount rules are revised to allow the Fed to stabilize borrowed reserves at a chosen level, then banks would be expected to increase holdings of excess reserves. The loss attributable to this might more than offset the potential gain attributable to control of borrowings. Generally, any change in procedures that enhances control of the reserve aggregate creates incentives to evade control. Those incentives are reflected in changes in the money multiplier. Thus, even if it is possible to manage the discount facility to accomplish effective total reserves targeting, it is unclear whether a total reserves-money multiplier strategy would result in better monetary control than the present nonborrowed reserve procedure.

Under CRA, total reserve control is possible, ensuring that the money supply responds quickly to changes in reserves. Tighter monetary control may be associated with larger fluctuations in the fed funds rate.[30] However, there is considerable disagreement among policy makers over how large fluctuations in interest rates can grow before they become too costly. Thus, even though the primary emphasis of total reserves targeting is on the amount of reserves available and not their cost, there remains intense concern about the variability of interest rates. It seems likely that an optimal policy must give weight to both these concerns. Thus, total reserves targeting may not be optimal if there is a strong preference for interest rate stability. In fact, if monetary control is not considered important, then the reserve accounting system is essentially irrelevant to the achievement of economic policy goals.

CONCLUSIONS

Strictly as a reserve accounting reform, the adoption of CRA need not be associated with any change in the Fed's monetary control procedures or with an improvement in monetary control itself. However, the switch creates the potential for **total** reserves targeting and thereby increases the feasibility of improved short-run monetary control.[31] The original motive for the change to CRA was to tighten the linkage between changes in reserves and changes in money, allowing for better short-run and longer-run control of money. Although the implementation of CRA creates institutional arrangements whereby short-run monetary growth can be controlled better, CRA alone is not sufficient to ensure this improvement. Since late 1982, the FOMC has placed much less weight on M1, given the accelerated financial market innovations associated with deregulation. This change in emphasis does not eliminate the potential for a real improvement in monetary control, it merely limits it. Thus, there remains considerable room for improving monetary control.

—Mary Susan Rosenbaum*

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Notes

[1]See Warren L. Coats, Jr., "Lagged Reserve Accounting and the Money Supply Mechanism," **Journal of Money, Credit, and Banking** 8 (May 1976).

[2]Deficiencies in a depository institution's required reserve balance, after application of the 2 percent carryover, were subject to penalties. The penalty was an interest surcharge over and above the discount rate. For details see **Regulation D,** Board of Governors of the Federal Reserve System. Although carryover provisions were designed to reduce bank reserve adjustment pressure, some economists argue that the provisions actually induce such adjustments even in the absence of changes in deposits. See Richard M. Friedman and William M. Roberts. "The Carry-Forward Provision and Management of Bank Reserves," **Journal of Finance,** 38 (June 1983).

[3]The Federal Open Market Desk (the "Desk") at the New York Federal Reserve Bank conducts these transactions.

[4]Nonborrowed reserves as a percent of total reserves ranged from 93.30 percent to 99.45 percent, averaging 97.85 percent weekly from October 7, 1981 to February 1, 1984.

[5]This is true except for the 2 percent carryover provision.

[6]"Up to that time the System focused on short-term interest-rates influenced through open-market operations, as the day-to-day "Operating target' for policy." See Paul A. Volcker, 'Letter' in **Monetarism and the Federal Reserve's Conduct of Monetary Policy.** U.S. Congress, Joint Economic Committee. December 1982, p. 31.

[7]For an excellent treatment of the fed funds market, see Marcia Stigum, **The Money Market** (Homewood: Dow Jones-Irwin, 1983), chapter 11.

[8]For an explanation of these factors, see **Modern Money Mechanics,** a workbook on deposits, currency, and bank reserves, Federal Reserve Bank of Chicago, October 1982.

[9]See William Poole and Charles Lieberman, "Improving Monetary Control," **Brookings Papers on Economic Activity,** (1972:2).

[10]See Robert D. Laurent, "A Critique of the Federal Reserve's New Operating Procedure," Federal Reserve Bank of Chicago, Working Paper 81-4 (1981), especially pp. 23-24.

[11]Edgar L. Feige and Robert McGee, "Money Supply Control and Lagged Reserve Accounting," **Journal of Money, Credit, and Banking** 8 (November 1977) and David A. Pierce, "Money Supply Control: Reserves as the Instrument Under Lagged Accounting," **Journal of Finance** 6 (1976).

[12]For more detail, see P. A. Tinsley et. al. "The Short-Run Volatility of Money-Stock Targeting, **"Journal of Monetary Economics** 10 (Sept. 1982).

[13]For an overview of the post-October 1979 monetary control procedures, see New Monetary Control Procedures, Vol. I and II, Federal Reserve System, February 1981.

[14]See Edgar L. Feige and Robert McGee, "Federal Reserve Policy and Interest Rate Instability," **The Financial Review** (May 1982), and Michael R. Pakko, "Lagged and Contemporaneous Reserve Accounting, Money Market Stability and Monetary Control: A Topical History of Recent U.S. Monetary Policy, " Federal Reserve Bank of Richmond (1983).

[15]See Daniel L. Thornton, "Lagged and Contemporaneous Reserve Accounting: An Alternative View," **Review,** Federal Reserve Bank of St. Louis (November 1983). Also, Daniel E. Laufenberg, "Contemporaneus Versus Lagged Reserve Accounting," **Journal of Money, Credit, and Banking** 8 (May 1976).

[16]The following analysis draws heavily upon Robert D. Laurent, "Lagged Reserve Accounting and the Fed's New Operating Procedure," **Economic Perspectives,** Federal Reserve Bank of Chicago (Mid-year 1982) pp. 32-43.

[17]See Laurent, op. cit., John P. Judd and John L. Scadding, "Liability Management, Bank Loans and Deposit 'Market' Disequilibrium," Federal Reserve Bank of San Francisco **Review** (Summer 1981), and Marvin Good Friend, "A Model of Money Stock Determination with Loan Demand and A Banking System Balance Sheet Constraint," Federal Reserve Bank of Richmond, **Economic Review** 68 (January/February 1982).

[18]Laurent, op cit. p. 35.

[19]For other explanations of money growth and interest rate behavior after October 1979, see **New Monetary Control Procedures,** op. cit.

[20]The Board of Governors of the Federal Reserve System gave final approval to the plan in October 1982.

[21]The FOMC has put more weight on M2 (which includes non-transactions deposits since the end of 1982. However, M1 may replace M2 as the principally targeted aggregate once the effects of recent financial innovations have been worked out.

[22]The system of contemporaneous reserve requirements, as operated before LRA was introduced in 1968, did not involve total reserves targeting.

[23]Pakko, **op. cit.** p. 67.

[24]Ibid.

[25]Peter A. Tinsley, et. al. "Policy Robustness," **Journal of Money, Credit, and Banking,** 14, part 2 (November 1982).

[26]Tinsley, op. cit., p. 848.

[27]For regular adjustment borrowings only. Seasonal borrowings and extended credit would not be subject to such provisions.

[28]As a practical matter, the discount rate would have to be set to some level above a market rate of the day (or a certain number of hours) before the time the reserves were borrowed.

[29]For a more complete discussion of discount window reform proposals and the discount window's role under various monetary policies, see Marvin Goodfriend, "Discount Window Borrowing, Monetary Control, and the Post-October 6, 1979 Reserve Operating Procedure," Federal Reserve Bank of Richmond, January 21, 1981; Peter Kier, "Impact of Discount Policy Procedures on the Effectiveness of Reserve Targeting," in **New Monetary Control Procedures,** Vol. I., Board of Governors of the Federal Reserve System, February 1981, and Anthony M. Santomero, "Controlling Monetary Aggregates: The Discount Window," **Journal of Finance** 38 (June 1983).

[30]One exception is the system described in Robert D. Laurent, "Reserve Requirements—Are They Lagged in the Wrong Direction?" **Journal of Money, Credit, and Banking** 13 (August 1981).

[31]Simulation evidence suggests that there may be an improvement to monetary control under CRA and nonborrowed reserve targeting. See Tinsley, op. cit.

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FINANCE

STATISTICAL SUPPLEMENT

$ millions	FEB 1984	JAN 1984	FEB 1983	ANN. % CHG.		FEB 1984	JAN 1984	FEB 1983	ANN. % CHG.
UNITED STATES									
Commercial Bank Deposits	1,317,739	1,351,109	1,232,245	+ 7	Savings & Loans**				
Demand	292,879	339,855	291,797	+ 0	Total Deposits	634,601	630,088	570,029	+ 11
NOW	85,117	88,719	69,797	+22	NOW	17,828	18,904	15,351	+ 16
Savings	351,519	350,184	277,655	+27	Savings	172,948	175,541	156,897	+ 10
Time	618,735	619,801	622,246	- 1	Time	446,871	439,989	400,379	+ 12
Credit Union Deposits	60,467	60,745	52,089	+16		DEC	NOV	DEC	
Share Drafts	5,266	5,546	4,312	+22	Mortgages Outstanding	483,596	479,026	473,656	+ 2
Savings & Time	49,983	50,491	42,746	+17	Mortgage Commitments	32,331	34,332	17,964	+ 80
SOUTHEAST									
Commercial Bank Deposits	150,517	152,054	136,837	+10	Savings & Loans				
Demand	34,525	38,739	34,088	+ 1	Total Deposits	N.A.	N.A.	N.A.	
NOW	11,117	11,360	9,355	+19	NOW	N.A.	N.A.	N.A.	
Savings	39,610	39,297	30,115	+32	Savings	N.A.	N.A.	N.A.	
Time	68,313	67,269	66,009	+ 3	Time	N.A.	N.A.	N.A.	
Credit Union Deposits	6,029	6,025	4,979	+21		DEC	NOV	DEC	
Share Drafts	465	502	363	+28	Mortgages Outstanding	68,866	68,791	67,016	+ 3
Savings & Time	5,203	5,168	4,248	+22	Mortgage Commitments	4,578	4,926	3,067	+ 49
ALABAMA									
Commercial Bank Deposits	15,679	15,930	14,571	+ 8	Savings & Loans**				
Demand	3,552	4,106	3,527	+ 1	Total Deposits	5,273	5,222	4,564	+ 16
NOW	1,007	1,040	836	+20	NOW	144	151	178	- 19
Savings	3,241	3,210	2,583	+25	Savings	893	865	649	+ 38
Time	8,282	8,186	8,032	+ 3	Time	4,274	4,242	3,784	+ 13
Credit Union Deposits	917	915	852	+ 8		DEC	NOV	DEC	
Share Drafts	83	89	69	+20	Mortgages Outstanding	3,846	3,791	3,685	+ 4
Savings & Time	794	791	723	+10	Mortgage Commitments	288	289	247	+ 17
FLORIDA									
Commercial Bank Deposits	53,176	53,616	46,681	+14	Savings & Loans**				
Demand	12,386	13,550	12,127	+ 2	Total Deposits	54,424	53,387	50,188	+ 8
NOW	4,632	4,707	4,012	+15	NOW	2,056	2,119	1,787	+ 15
Savings	18,583	18,364	13,438	+38	Savings	14,918	14,591	13,503	+ 10
Time	18,564	18,417	17,924	+ 4	Time	37,855	37,152	35,181	+ 8
Credit Union Deposits	2,650	2,638	2,247	+18		DEC	NOV	DEC	
Share Drafts	233	253	193	+21	Mortgages Outstanding	41,223	40,809	39,268	+ 5
Savings & Time	2,139	2,114	1,787	+20	Mortgage Commitments	3,181	3,458	2,346	+ 36
GEORGIA									
Commercial Bank Deposits	22,033	22,248	19,532	+13	Savings & Loans				
Demand	6,602	7,458	6,184	+ 7	Total Deposits	N.A.	N.A.	N.A.	
NOW	1,465	1,509	1,251	+17	NOW	N.A.	N.A.	N.A.	
Savings	4,949	4,885	4,097	+21	Savings	N.A.	N.A.	N.A.	
Time	9,998	9,692	8,840	+13	Time	N.A.	N.A.	N.A.	
Credit Union Deposits	1,340	1,359	934	+43		DEC	NOV	DEC	
Share Drafts	67	75	39	+72	Mortgages Outstanding	8,326	8,259	8,641	- 4
Savings & Time	1,205	1,208	836	+44	Mortgage Commitments	477	503	182	+162
LOUISIANA									
Commercial Bank Deposits	25,477	25,717	24,114	+ 6	Savings & Loans**				
Demand	5,618	6,376	5,874	- 4	Total Deposits	9,139	8,997	8,430	+ 8
NOW	1,459	1,474	1,240	+18	NOW	198	202	172	+ 15
Savings	5,478	5,449	4,094	+34	Savings	2,368	2,400	1,841	+ 29
Time	13,306	13,105	13,322	- 0	Time	6,653	6,494	6,470	+ 3
Credit Union Deposits	202	202	162	+25		DEC	NOV	DEC	
Share Drafts	22	22	12	+83	Mortgages Outstanding	8,046	8,109	7,394	+ 9
Savings & Time	196	195	153	+28	Mortgage Commitments	446	531	210	+112
MISSISSIPPI									
Commercial Bank Deposits	11,754	11,784	11,034	+ 7	Savings & Loans**				
Demand	2,287	2,541	2,346	- 3	Total Deposits	2,507	2,545	2,508	- 0
NOW	819	827	715	+15	NOW	93	98	86	+ 8
Savings	2,457	2,442	1,734	+42	Savings	483	498	417	+ 16
Time	6,453	6,320	6,473	- 0	Time	1,967	1,974	2,028	- 3
Credit Union Deposits	*	*	*			DEC	NOV	DEC	
Share Drafts	*	*	*		Mortgages Outstanding	2,035	2,048	2,033	+ 0
Savings & Time	*	*	*		Mortgage Commitments	63	62	21	+200
TENNESSEE									
Commercial Bank Deposits	22,398	22,759	20,905	+ 7	Savings & Loans**				
Demand	4,080	4,708	4,030	+ 1	Total Deposits	6,806	6,765	6,748	+ 1
NOW	1,735	1,803	1,301	+33	NOW	169	180	161	+ 5
Savings	4,929	4,947	4,169	+18	Savings	1,335	1,354	1,282	+ 4
Time	11,710	11,549	11,418	+ 3	Time	5,343	5,282	5,332	
Credit Union Deposits	920	911	784	+17		DEC	NOV	DEC	
Share Drafts	60	63	50	+20	Mortgages Outstanding	5,390	5,775	5,995	- 10
Savings & Time	869	860	749	+16	Mortgage Commitments	185	205	153	+ 21

Notes: All deposit data are extracted from the Federal Reserve Report of Transaction Accounts, other Deposits and Vault Cash (FR2900), and are reported for the average of the week ending the 1st Wednesday of the month. This data, reported by institutions with over $15 million in deposits as of December 31, 1979, represents 95% of deposits in the six state area. The major differences between this report and the "call report" are size, the treatment of interbank deposits, and the treatment of float. The data generated from the Report of Transaction Accounts is for banks over $15 million in deposits as of December 31, 1979. The total deposit data generated from the Report of Transaction Accounts eliminates interbank deposits by reporting the net of deposits "due to" and "due from" other depository institutions. The Report of Transaction Accounts subtracts cash items in process of collection from demand deposits, while the call report does not. Savings and loan mortgage data are from the Federal Home Loan Bank Board Selected Balance Sheet Data. The Southeast data represent the total of the six states. Subcategories were chosen on a selective basis and do not add to total.

* = fewer than four institutions reporting.

** = S & L deposits subject to revisions due to reporting changes.

N.A. = not available at this time.

CONSTRUCTION

	JAN 1984	DEC 1983	JAN 1983	ANN % CHG		JAN 1984	DEC 1983	JAN 1983	ANN % CHG
12-month Cumulative Rate									
UNITED STATES									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	52,264	51,297	45,194	+ 16	Value - $ Mil.	69,204	67,830	41,118	+ 68
Industrial Bldgs.	5,592	5,550	4,967	+ 13	Residential Permits - Thous.				
Offices	13,024	12,555	11,924	+ 9	Single-family units	900.7	891.2	561.1	+ 61
Stores	7,187	6,998	5,241	+ 37	Multi-family units	716.0	699.1	460.8	+ 55
Hospitals	2,065	2,045	1,746	+ 18	Total Building Permits				
Schools	857	858	785	+ 9	Value - $ Mil.	121,468	119,126	86,312	+ 41
SOUTHEAST									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	8,271	8,096	6,527	+ 27	Value - $ Mil.	12,934	12,660	7,283	+ 78
Industrial Bldgs.	676	668	727	- 7	Residential Permits - Thous.				
Offices	2,036	1,942	1,405	+ 45	Single-family units	184.7	183.1	116.5	+ 59
Stores	1,376	1,329	947	+ 45	Multi-family units	165.2	160.7	87.8	+ 88
Hospitals	470	480	340	+ 38	Total Building Permits				
Schools	152	155	108	+ 41	Value - $ Mil.	21,132	20,683	13,809	+ 53
ALABAMA									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	543	526	394	+ 38	Value - $ Mil.	440	434	248	+ 77
Industrial Bldgs.	35	33	63	- 44	Residential Permits - Thous.				
Offices	62	60	73	- 15	Single-family units	8.0	8.0	5.2	+ 54
Stores	102	94	64	+ 59	Multi-family units	8.1	8.0	4.2	+ 93
Hospitals	5	4	36	- 86	Total Building Permits				
Schools	9	9	5	+ 80	Value - $ Mil.	983	960	642	+ 53
FLORIDA									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	4,133	4,032	3,296	+ 25	Value - $ Mil.	7,578	7,387	4,223	+ 79
Industrial Bldgs.	360	364	388	- 7	Residential Permits - Thous.				
Offices	969	897	687	+ 41	Single-family units	99.8	98.4	59.8	+ 67
Stores	777	753	509	- 6	Multi-family units	92.1	88.8	50.8	+ 81
Hospitals	297	289	176	+ 69	Total Building Permits				
Schools	57	58	21	+171	Value - $ Mil.	11,711	11,419	7,518	+ 56
GEORGIA									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	1,384	1,341	989	+ 40	Value - $ Mil.	2,436	2,405	1,440	+ 69
Industrial Bldgs.	175	163	138	+ 27	Residential Permits - Thous.				
Offices	464	445	227	+104	Single-family units	41.9	41.5	27.8	+ 51
Stores	159	155	85	+ 87	Multi-family units	25.0	25.4	14.4	+ 74
Hospitals	35	31	25	+ 40	Total Building Permits				
Schools	28	28	15	+ 87	Value - $ Mil.	3,820	3,747	2,429	+ 57
LOUISIANA									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	1,164	1,185	1,030	+ 13	Value - $ Mil.	1,098	1,093	686	+ 60
Industrial Bldgs.	33	35	83	- 60	Residential Permits - Thous.				
Offices	370	374	308	+ 20	Single-family units	16.6	16.8	11.8	+ 41
Stores	130	131	155	- 16	Multi-family units	17.1	17.1	9.0	+ 90
Hospitals	97	119	54	+ 80	Total Building Permits				
Schools	49	49	51	- 4	Value - $ Mil.	2,262	2,278	1,716	+ 32
MISSISSIPPI									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	195	192	162	+ 20	Value - $ Mil.	316	312	191	+ 65
Industrial Bldgs.	10	10	14	- 29	Residential Permits - Thous.				
Offices	22	18	15	+ 47	Single-family units	4.7	4.7	3.7	+ 27
Stores	40	38	39	+ 3	Multi-family units	5.1	4.8	2.2	+132
Hospitals	19	18	5	+280	Total Building Permits				
Schools	4	6	5	- 20	Value - $ Mil.	511	503	353	+ 45
TENNESSEE									
Nonresidential Building Permits - $ Mil.					Residential Building Permits				
Total Nonresidential	852	820	656	+ 30	Value - $ Mil.	1,066	1,029	495	+115
Industrial Bldgs.	63	63	41	+ 54	Residential Permits - Thous.				
Offices	149	148	95	+ 57	Single-family units	13.7	13.7	8.2	+ 67
Stores	168	158	95	+ 77	Multi-family units	17.8	16.6	7.2	+147
Hospitals	17	19	44	- 61	Total Building Permits				
Schools	5	5	11	- 55	Value - $ Mil.	1,845	1,776	1,151	+ 60

NOTES:
Data supplied by the U. S. Bureau of the Census, Housing Units Authorized By Building Permits and Public Contracts, C-40. Nonresidential data excludes the cost of construction for publicly owned buildings. The southeast data represent the total of the six states. The annual percent change calculation is based on the most recent month over prior year. Publication of F. W. Dodge construction contracts has been discontinued.

GENERAL

	LATEST DATA	CURR. PERIOD	PREV. PERIOD	YEAR AGO	ANN. % CHG.		FEB 1984	JAN (R) 1984	FEB 1983	ANN. % CHG.
UNITED STATES										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	2,775.1	2,709.1	2,584.7	+ 7	Prices Rec'd by Farmers				
Taxable Sales - $ bil.		N.A	N.A.	N.A.		Index (1977=100)	142	144	132	+ 8
Plane Pass. Arr. 000's	JAN	N.A.	N.A.	N.A.		Broiler Placements (thous.)	80,879	79,404	81,638	- 1
Petroleum Prod. (thous.)	FEB	8,675.5	8,661.9	8,654.1	+ 0	Calf Prices ($ per cwt.)	63.4	60.9	66.2	- 4
Consumer Price Index						Broiler Prices (¢ per lb.)	37.4	36.9	27.7	+35
1967=100	FEB	306.6	305.2	293.2	+ 5	Soybean Prices ($ per bu.)	7.02	7.85	5.65	+24
Kilowatt Hours - mils.	DEC	185.4	170.5	170.3	+ 9	Broiler Feed Cost ($ per ton)	243	243	206	+18
SOUTHEAST										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	332.1	326.7	310.0	+ 7	Prices Rec'd by Farmers				
Taxable Sales -$ bil.		N.A.	N.A.	N.A.		Index (1977=100)	133	131	120	+11
Plane Pass. Arr. 000's	JAN	4,169.6	4,447.6	4,301.9	- 3	Broiler Placements (thous.)	31,217	30,610	31,405	- 1
Petroleum Prod. (thous.)	FEB	1,404.0	1,403.0	1,397.0	+ 1	Calf Prices ($ per cwt.)	59.9	56.0	63.2	- 5
Consumer Price Index						Broiler Prices (¢ per lb.)	36.7	37.0	26.9	+36
1967=100		N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	7.31	7.78	5.79	+26
Kilowatt Hours - mils.	DEC	27.8	26.7	26.1	+ 7	Broiler Feed Cost ($ per ton)	235	235	195	+21
ALABAMA										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	36.8	36.2	34.2	+ 8	Farm Cash Receipts - $ mil.				
Taxable Sales -$ bil.	DEC	30.2	29.6	28.4	+ 6	(Dates: DEC, DEC)	2,145	-	2,272	- 6
Plane Pass. Arr. 000's	JAN	99.9	109.2	93.7	+ 7	Broiler Placements (thous.)	10,596	10,362	10,341	+ 2
Petroleum Prod. (thous.)	FEB	49.0	50.0	54.0	- 9	Calf Prices ($ per cwt.)	55.4	54.7	62.5	-11
Consumer Price Index						Broiler Prices (¢ per lb.)	35.5	36.5	27.0	+31
1967=100		N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	7.25	7.42	5.71	+27
Kilowatt Hours - mils.	DEC	3.7	3.4	3.5	+ 6	Broiler Feed Cost ($ per ton)	275	270	210	+31
FLORIDA										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	124.9	121.9	115.1	+ 9	Farm Cash Receipts - $ mil.				
Taxable Sales - $ bil.	FEB	74.8	74.3	67.7	+10	(Dates: DEC, DEC)	4,130	-	4,250	- 3
Plane Pass. Arr. 000's	JAN	2,189.8	2,258.7	2,316.2	+ 5	Broiler Placements (thous.)	1,827	1,783	1,965	- 7
Petroleum Prod. (thous.)	FEB	49.0	51.0	65.0	-25	Calf Prices ($ per cwt.)	63.5	58.7	65.6	- 3
Consumer Price Index - Miami		**JAN**	**NOV**	**JAN**		Broiler Prices (¢ per lb.)	36.0	36.0	27.0	+33
Nov. 1977 = 100		165.0	164.0	157.9	+ 4	Soybean Prices ($ per bu.)	7.25	7.42	5.71	+27
Kilowatt Hours - mils.	DEC	7.3	7.6	7.1	+ 3	Broiler Feed Cost ($ per ton)	260	260	215	+21
GEORGIA										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	59.3	58.2	54.4	+ 9	Farm Cash Receipts - $ mil.				
Taxable Sales -$ bil.	3Q	41.1	40.4	39.3	+ 5	(Dates: DEC, DEC)	3,265	-	3,210	+ 2
Plane Pass. Arr. 000's	JAN	1,469.0	1,647.4	1,474.2	- 0	Broiler Placements (thous.)	12,694	12,459	12,727	- 0
Petroleum Prod. (thous.)		N.A.	N.A.	N.A.		Calf Prices ($ per cwt.)	59.0	53.1	59.1	- 0
Consumer Price Index - Atlanta		**FEB**	**DEC**	**FEB**		Broiler Prices (¢ per lb.)	36.5	36.0	26.5	+38
1967 = 100		309.3	307.3	295.1	+ 5	Soybean Prices ($ per bu.)	7.11	7.67	5.74	+24
Kilowatt Hours - mils.	DEC	4.6	4.1	4.1	+12	Broiler Feed Cost ($ per ton)	215	220	185	+16
LOUISIANA										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	45.3	45.9	44.9	+ 1	Farm Cash Receipts - $ mil.				
Taxable Sales -$ bil.		N.A.	N.A.	N.A.		(Dates: DEC, DEC)	1,815	-	1,844	- 2
Plane Pass. Arr. 000's	JAN	244.3	258.8	262.6	- 7	Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Petroleum Prod. (thous.)	FEB	1,220.0	1,215.0	1,190.0	+ 3	Calf Prices ($ per cwt.)	61.0	55.9	63.3	- 4
Consumer Price Index						Broiler Prices (¢ per lb.)	38.0	38.0	28.0	+36
1967 = 100		N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	7.47	8.21	5.87	+27
Kilowatt Hours - mils.	DEC	4.2	4.3	4.1	+ 2	Broiler Feed Cost ($ per ton)	295	295	255	+16
MISSISSIPPI										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	21.1	20.8	19.8	+ 7	Farm Cash Receipts - $ mil.				
Taxable Sales -$ bil.		N.A.	N.A.	N.A.		(Dates: DEC, DEC)	2,325	-	2,431	- 4
Plane Pass. Arr. 000's	JAN	30.0	31.4	28.9	- 3	Broiler Placements (thous.)	6,101	6,006	6,371	- 4
Petroleum Prod. (thous.)	FEB	86.0	87.0	88.0	- 2	Calf Prices ($ per cwt.)	60.8	57.6	64.7	- 6
Consumer Price Index						Broiler Prices (¢ per lb.)	39.0	40.0	27.0	+44
1967 = 100		N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	7.11	7.72	5.79	+23
Kilowatt Hours - mils.	DEC	1.9	1.8	1.8	+ 6	Broiler Feed Cost ($ per ton)	191	191	170	+12
TENNESSEE										
Personal Income						Agriculture				
($bil. - SAAR)	3Q	44.7	43.7	41.6	+ 7	Farm Cash Receipts - $ mil.				
Taxable Sales -$ bil.	JAN	39.0	38.2	35.8	+ 9	(Dates: DEC, DEC)	1,823	-	2,113	-14
Plane Pass. Arr. 000's	JAN	136.6	142.1	126.3	+ 8	Broiler Placements (thous.)	N.A.	N.A.	N.A.	
Petroleum Prod. (thous.)		N.A.	N.A.	N.A.		Calf Prices ($ per cwt.)	59.5	55.3	63.2	- 6
Consumer Price Index						Broiler Prices (¢ per lb.)	36.5	35.0	26.5	+38
1967 = 100		N.A.	N.A.	N.A.		Soybean Prices ($ per bu.)	7.59	7.75	5.79	+31
Kilowatt Hours - mils.	DEC	6.1	5.5	5.6	+ 9	Broiler Feed Cost ($ per ton)	220	225	184	+20

Notes:
Personal Income data supplied by U. S. Department of Commerce. Taxable Sales are reported as a 12-month cumulative total. Plane Passenger Arrivals are collected from 26 airports. Petroleum Production data supplied by U. S. Bureau of Mines. Consumer Price Index data supplied by Bureau of Labor Statistics. Agriculture data supplied by U. S. Department of Agriculture. Farm Cash Receipts data are reported as cumulative for the calendar year through the month shown. Broiler placements are an average weekly rate. The Southeast data represent the total of the six states. N.A. = not available. The annual percent change calculation is based on most recent data over prior year. R = revised.

EMPLOYMENT

	JAN 1984	DEC 1983	JAN 1983	ANN. % CHG.		JAN 1984	DEC 1983	JAN 1983	ANN. % CHG.
UNITED STATES									
Civilian Labor Force - thous.	111,025	111,795	109,779	+ 1	Nonfarm Employment- thous.	90,576	92,232	87,660	+ 3
Total Employed - thous.	101,270	102,803	97,262	+ 4	Manufacturing	15,711	15,975	15,755	- 0
Total Unemployed - thous.	9,755	8,992	12,517	-22	Construction	3,787	4,058	3,528	+ 7
Unemployment Rate - % SA	8.0	8.2	10.4		Trade	20,577	21,341	20,108	+ 2
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	15,711	15,975	15,755	- 0
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	19,841	20,041	18,947	+ 5
Mfg. Avg. Wkly. Hours	40.4	41.2	39.2	+ 3	Fin., Ins., & Real Est.	5,501	5,507	5,335	+ 3
Mfg. Avg. Wkly. Earn. - $	366	373	341	+ 7	Trans. Com. & Pub. Util.	4,966	5,035	4,914	+ 1
SOUTHEAST									
Civilian Labor Force - thous.	14,504	14,706	14,121	+ 3	Nonfarm Employment- thous.	11,784	11,889	11,245	+ 5
Total Employed - thous.	13,174	13,439	12,458	+ 6	Manufacturing	2,228	2,229	2,089	+ 7
Total Unemployed - thous.	1,329	1,267	1,663	-20	Construction	677	691	595	+14
Unemployment Rate - % SA	8.6	8.8	11.1		Trade	2,857	2,926	2,691	+ 6
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	2,163	2,171	2,160	+ 0
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	2,364	2,371	2,251	+ 5
Mfg. Avg. Wkly. Hours	41.1	41.6	39.9	+ 3	Fin., Ins., & Real Est.	682	678	643	+ 6
Mfg. Avg. Wkly. Earn. - $	324	326	301	+ 8	Trans. Com. & Pub. Util.	687	694	682	+ 1
ALABAMA									
Civilian Labor Force - thous.	1,753	1,733	1,726	+ 2	Nonfarm Employment- thous.	1,324	1,339	1,283	+ 3
Total Employed - thous.	1,516	1,536	1,439	+ 5	Manufacturing	344	346	324	+ 6
Total Unemployed - thous.	236	197	287	-18	Construction	61	62	52	+17
Unemployment Rate - % SA	12.9	11.9	16.0		Trade	274	282	264	+ 4
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	286	286	289	- 2
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	216	218	212	+ 2
Mfg. Avg. Wkly. Hours	40.9	41.6	39.4	+ 4	Fin., Ins., & Real Est.	60	59	58	+ 3
Mfg. Avg. Wkly. Earn. - $	320	322	295	+ 8	Trans. Com. & Pub. Util.	70	71	69	+ 1
FLORIDA									
Civilian Labor Force - thous.	4,984	5,101	4,789	+ 4	Nonfarm Employment- thous.	4,051	4,056	3,789	+ 6
Total Employed - thous.	4,617	4,719	4,290	+ 8	Manufacturing	493	488	450	+10
Total Unemployed - thous.	367	382	499	-26	Construction	288	288	240	+20
Unemployment Rate - % SA	7.0	7.5	10.0		Trade	1,099	1,110	1,011	+ 9
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	637	643	638	- 0
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	991	988	935	+ 6
Mfg. Avg. Wkly. Hours	41.5	42.2	40.2	+ 3	Fin., Ins., & Real Est.	300	298	275	+ 9
Mfg. Avg. Wkly. Earn. - $	311	317	290	+ 7	Trans. Com. & Pub. Util.	233	232	231	+ 1
GEORGIA									
Civilian Labor Force - thous.	2,656	2,722	2,626	+ 1	Nonfarm Employment- thous.	2,309	2,341	2,192	+ 5
Total Employed - thous.	2,483	2,553	2,401	+ 3	Manufacturing	522	522	489	+ 7
Total Unemployed - thous.	173	169	225	-23	Construction	111	117	97	+14
Unemployment Rate - % SA	6.5	6.4	8.4		Trade	557	577	523	+ 7
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	439	440	439	0
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	401	403	375	+ 7
Mfg. Avg. Wkly. Hours	41.2	42.3	40.4	+ 2	Fin., Ins., & Real Est.	123	123	118	+ 4
Mfg. Avg. Wkly. Earn. - $	306	312	279	+10	Trans. Com. & Pub. Util.	150	152	144	+ 4
LOUISIANA									
Civilian Labor Force - thous.	1,889	1,891	1,820	+ 4	Nonfarm Employment- thous.	1,560	1,581	1,551	+ 1
Total Employed - thous.	1,692	1,696	1,606	+ 5	Manufacturing	176	178	183	- 4
Total Unemployed - thous.	197	195	214	- 8	Construction	114	116	111	+ 3
Unemployment Rate - % SA	9.6	10.7	12.3		Trade	370	380	359	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	317	320	313	+ 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	307	308	299	+ 3
Mfg. Avg. Wkly. Hours	41.4	40.7	40.9	+ 1	Fin., Ins., & Real Est.	83	83	80	+ 4
Mfg. Avg. Wkly. Earn. - $	417	402	391	+ 7	Trans. Com. & Pub. Util.	113	116	120	- 6
MISSISSIPPI									
Civilian Labor Force - thous.	1,022	1,043	1,047	- 2	Nonfarm Employment- thous.	793	805	769	+ 3
Total Employed - thous.	910	937	899	+ 1	Manufacturing	210	210	193	+ 9
Total Unemployed - thous.	112	106	148	-24	Construction	32	33	34	- 6
Unemployment Rate - % SA	10.3	10.2	13.3		Trade	164	170	159	+ 3
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	181	183	181	0
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	125	126	122	+ 2
Mfg. Avg. Wkly. Hours	40.4	41.6	39.0	+ 4	Fin., Ins., & Real Est.	34	34	33	+ 3
Mfg. Avg. Wkly. Earn. - $	279	289	257	+ 9	Trans. Com. & Pub. Util.	38	39	38	0
TENNESSEE									
Civilian Labor Force - thous.	2,200	2,216	2,113	+ 4	Nonfarm Employment- thous.	1,747	1,767	1,661	+ 5
Total Employed - thous.	1,956	1,998	1,823	+ 7	Manufacturing	483	485	450	+ 7
Total Unemployed - thous.	244	218	290	-16	Construction	71	75	61	+16
Unemployment Rate - % SA	9.7	10.5	12.6		Trade	393	407	375	+ 5
Insured Unemployment - thous.	N.A.	N.A.	N.A.		Government	303	299	300	+ 1
Insured Unempl. Rate - %	N.A.	N.A.	N.A.		Services	324	328	308	+ 5
Mfg. Avg. Wkly. Hours	40.9	41.1	39.7	+ 3	Fin., Ins., & Real Est.	82	81	79	+ 4
Mfg. Avg. Wkly. Earn. - $	311	314	293	+ 6	Trans. Com. & Pub. Util.	83	84	80	+ 4

Notes: All labor force data are from Bureau of Labor Statistics reports supplied by state agencies.
Only the unemployment rate data are seasonally adjusted.
The Southeast data represent the total of the six states.
The annual percent change calculation is based on the most recent data over prior year.

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