

ONGOING RESTRUCTURING OF RETAIL BANKING

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Comments invited

Abstract

The largest U.S. commercial banks are currently in the process of restructuring their retail operations. This paper describes the innovations that are being adopted, explains the integrated strategies for restructuring, and reviews the policy issues that emerge. We find that banks are restructuring by developing complete customer-relationship profiles, switching over to remote electronic delivery channels (phone centers, home banking, and next-generation ATM's), relocating branches to large retail outlets, and redesigning selected branches as investment centers.

The immediate goal of restructuring the branch network is to cut costs and stop the erosion of the customer base. The broader goal is to be well-positioned to take additional steps three to five years from now. From a policy perspective, restructuring of the branch system brings up a number of issues, including competition, the potential for consolidation in the industry, the public's access to financial services, liquidity, and security.

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Ongoing Restructuring of Banks' Retail Operations

D. Orlow, L. Radecki, and J. Wenninger

The largest U.S. commercial banks are currently in the process of restructuring their retail operations despite strong earnings. A stagnant deposit base and intense competition in the marketplace for financial services have made the overhead costs of an extensive branch network increasingly onerous. At the same time, electronic communications technology is making low-cost remote delivery of banking services more of a reality. While remote delivery provides banks the means to cut overhead in retail operations, it also enables nonbank and even nonfinancial firms to pose a credible threat to the industry's retail franchise. This threat adds urgency to this restructuring.

The main purposes of this study are to: (1) describe the innovations that are being adopted, (2) explain the integrated strategies for restructuring retail operations, and (3) review the policy issues that emerge. Interviews with industry analysts and bank officers in charge of branch or retail operations were instrumental for this study. We find that banks are restructuring by developing complete customer-relationship profiles, switching over to remote electronic delivery channels (phone centers, home banking, and next-generation ATM's), relocating branches to large retail outlets, and redesigning selected branches as investment centers. To emphasize the necessity and urgency of their restructuring plans, two of our interviewees maintained that they do not expect their institutions to ever build another traditional branch.

The immediate goal of restructuring the branch network is to cut costs and halt the erosion of the customer base. The broader goal is to be well-positioned to take additional steps three to five years from now. At this time it is highly uncertain which of the new technologies in

financial services will be cost effective and widely accepted by the public. Restructuring is intended to allow banks to move in whichever direction that technology, competition, and customer preferences take the business over a longer term. The industry can be said to be "hedging its bets." From a policy perspective, restructuring of the branch system brings up a number of issues, including competition, the public's access to financial services, liquidity, security, and the extent of consolidation in the industry.

The paper is organized into four sections. The first section analyzes the forces driving restructuring, in particular, the cost pressure already being felt. The second section describes the set of innovations that are being put in place. The third section shows how the steps being taken tie together and explains the strategies underlying the restructuring of branch operations. The fourth section identifies policy concerns and long-run issues raised by restructuring.

I. Forces Driving Banks to Restructure Their Retail Operations

Two main forces are pressuring the industry to act: a stagnant deposit base and the prospects for low-cost remote delivery of banking services. The lack of growth in the deposit base is due to a shift in the household sector's demand for intermediary services away from commercial banks and thrift institutions. The emergence of electronic remote delivery is changing the economies of scale, scope, and distribution in retail banking.

Stagnant Deposit Base

Banks' much diminished role as holders of personal savings is the first major force prompting banks to revamp their retail operations. Deposits at banks, thrifts and credit unions, measured as a share of the household sector's financial wealth, have fallen by a little more than

half during the past 21 years to 17.0 percent at year-end 1995.¹ Depositories' share peaked at 38.2 percent at year-end 1974. (See chart 1.)

The decline in the importance of deposits in the household sector's asset holdings has accelerated during the past few years. Despite significant increases in total personal financial wealth, the dollar volume of savings and time deposits has been virtually unchanged over the past seven years without adjusting for either inflation or economic growth. (See table 1.)

Cost disadvantage of banks

The rapid decline of deposits in relative terms and their stagnation in absolute terms has left banks with a high cost structure for their branch operations. The disadvantage that this creates can be illustrated by breaking down the cost and revenues of a typical branch into a few major categories (see table 2). A typical branch has total annual direct expenses of around \$700,000, of which the largest category is staff compensation (for 12 full-time equivalent employees). The cost of the building itself is the next largest category of total direct expenses, and the remainder is for electricity, supplies, snow removal, etc. On top of direct expenses are indirect operating expenses, incurred by the head office or other centralized functions for items such as computing, preparing and mailing monthly statements, and advertizing. These indirect expenses are roughly equal to direct expenses, bringing total annual operating expenses of a branch to \$1.4 million.²

¹The source is the Federal Reserve System's Flow of funds database. In calculating the percentage figures, the numerator is the sum of demand, savings, and time deposits at commercial banks, thrifts, and credit unions and currency in the hands of the household sector. The denominator is the total financial assets of the household sector less equity in unincorporated business and security credit. The household sector includes nonprofit organizations.

Total liquid financial assets were used instead of total financial assets as an alternative method of demonstrating the diminished importance of deposits in the household sector's finances. Once again, deposits' share has fallen by half since the mid-70's.

²The costs of branch operations cannot be allocated precisely because many noninterest expenses are shared by two or more units.

The dollar volume of deposits at a typical branch is about \$50 million, over which the \$1.4 million of noninterest expenses must be spread. The annual operating or noninterest expenses of \$1.4 million equals 2.8 percentage points of deposits. To break even, a margin of 280 basis points must be maintained between interest expense and interest earnings (less any noninterest revenue).³ In contrast, a money market mutual fund, a close substitute for a savings deposit, typically has an expense ratio in the area of 50 basis points. The cost disadvantage is at least 200 basis points. A short-term bond mutual fund, a substitute for a time deposit, has an expense ratio of 80 to 100 basis points but also a higher expected rate of return. Again, banks appear to have a serious cost disadvantage.

Banks have tried to reduce this disadvantage by removing remaining inefficiencies from their retail operations. For instance, branch management tracks the volume of teller window transactions at each office by day of the month, day of the week, and hour of the day. The observed traffic patterns are used to set schedules for full and part-time teller staff at each branch location. But our interviewees indicated that they have squeezed out nearly all the costs they can out of the existing system while maintaining an adequate level of service.

Remote Banking

The second major factor prompting the consolidation of retail branch operations is "remote banking," meaning contacting or transacting with one's bank from outside the branch office using any of several electronic devices: ATM, PC, video-phone, screen-phone, fax, point-of-sale (POS) terminal, and automated clearing house (ACH). It also includes the mundane

³Estimates of total expenses for branch operations fall in the range of 200 to 300 basis points. The variance seems to be attributable to both differences in a bank's operational efficiency and cost accounting methodology. It is unclear whether every estimate captures all direct and indirect expenses attributable to branch operations.

Scanning the results for operating income by line of business in banks' 1995 annual reports, there are indications that branch-based banking may not be doing as well as other lines.

"delivery channels" of the telephone and the mails.

Remote banking is already being used extensively. Bank of America, for example, states that in 1995 it conducted twice as many telephone and ATM "transactions" with its customer base of 11 million households as it did face-to-face transactions at its branches.⁴ But until now remote banking has been used primarily as an enhancement or add-on to existing branch operations.⁵ If there have been any cost savings, they have been incremental and somewhat incidental. With technological improvements and growing acceptance, remote banking can now be used strategically and can substitute for a considerable part of the existing branch structure. It will enable banks to consolidate branch offices and cut distribution costs by reducing branch personnel and maintenance expenses.

Competitive pressures from both inside and outside the industry should force banks to move in the direction of remote electronic banking. Even though banks have been earning healthy profits in recent years, they feel threatened by the substantial cost advantage that will accrue to those among them that are the successful early adopters. Furthermore, banks see a credible threat from outside the industry. Electronic distribution, like other major technological changes, has the potential to undermine long-established business patterns. Banks fear, in particular, that households will view nonbank firms as their primary provider of banking services. Banks' traditional role as trusted intermediaries would erode further over time.⁶ Banks are thus aggressively pursuing electronic delivery channels to realize cost savings as well as to protect the

⁴1995 Annual Report of BankAmerica Corporation, page 7. Other estimates indicate that between 50 and 70 percent of total retail transactions take place outside the branches of large banks.

⁵Stephen A. Rhoades, "Bank Mergers and Industrywide Structure," Staff Study 169 (Board of Governors of the Federal Reserve System, 1996), p. 24, and David B. Humphrey, "Delivering Deposit Services: ATMs Versus Branches," Federal Reserve Bank of Richmond Economic Review (spring 1994), pages 59-81.

⁶Final Recommendations of the Technology Task Force, The Bankers Roundtable, September 19-20, 1996.

banking franchise.

II. The New Structure Being Put in Place

Banks are working on several fronts to update their retail banking operations and structure. We will begin this section by discussing efforts to develop comprehensive data bases, a prerequisite to other moves. We will then turn to alternative delivery channels, and finally, new designs for branch offices. The next section of the paper explains how the innovations fit together to constitute a coherent strategy.

Complete customer-relationship profiles

Banks are now forming master data bases that contain a unified record of all their relationships with an individual customer. Prior to this effort, the standard practice was to maintain a separate data base for each product (deposit accounts, IRA, auto loan, credit card, mortgage, etc.). Complete customer-relationship profiles serve multiple purposes. They both increase the functionality of self-service devices and improve customer service. Internally, management uses the relationship profiles for analysis of costs and revenues, long-run planning, and promotional campaigns. The anticipated benefits include:

- o Improve functionality of self-service devices While computerized record-keeping is a vast improvement over a paper-based system, fragmented data bases have limited the usefulness of ATM's and other self-service delivery channels. When information is kept on separate data bases, an ATM can only dispense cash from a customer's checking account and give an account balance. Linking data bases is necessary for a customer to be able to transfer funds between accounts or pay down a credit line. Partial linking of data bases has been accomplished over the past 15 years, and banks are now pressing to complete the effort.
- o Improve customer service With a customer's total relationship immediately available on a bank's computer system, an employee can resolve problems quickly as well as make helpful recommendations.

- o Cross-sell financial products Complete relationship profiles create opportunities to cross-sell financial products every time customer contact is made. With the full relationship in view on a PC screen, branch or phone center personnel can suggest services complementing those already received. The need for additional services might also be anticipated and recommended at an opportune time (retirement, college attendance, change of address, or vacation). In addition, complete profiles allow banks to offer new services to existing customers with little or no additional personal information being collected, saving both parties from filling out and processing redundant forms.
- o Profitability analysis In the past, it was laborious, if not impossible, to determine the profitability of an individual customer's relationship. A bank knew the average cost and average profitability of each of its services, but it could not accurately identify which customers were profitable and the sources of the profits. Data bases containing complete profiles can be used to determine the profitability of each customer by account. This information can be used to set the terms of accounts with the total relationship in mind. Fee structures can be adjusted to allow the bank to at least break even with every customer.
- o Customer retention Master data bases allow profitable and unprofitable customers to be segmented. Extra efforts can then be made to retain high-profit customers, such as placing them in personal banking programs or assigning them an account representative.
- o Marketing Complete customer-relationship profiles can be used to develop promotions and marketing strategies. Customer segments can be identified, based on behavior, demographics or other attributes, and promotions can be customized to appeal to each segment.
- o Measuring branch performance Complete relationship profiles will be used to measure the performance of individual branches and employees. This allows employees who meet targets for selling profitable products to be rewarded. In addition, branches not meeting goals can be identified for management attention.

In sum, the construction of complete customer-relationship profiles is a prerequisite to restructuring retail operations. Everything the banks are attempting to do to revamp their branch system revolves around a substantially improved data base. In the following sub-sections we will discuss three electronic delivery channels -- phone centers, ATM's and home banking applications -- all of which work off the data base.

Phone centers

A phone center is a centralized customer service department that primarily takes incoming calls, but may also make out-going sales calls. Customers contact the bank by using an "800" number, regardless of which branch they typically visit. Calls first reach an automated response system, but a customer can have a call routed to a service representative. Most banks keep the phone centers open 24 hours a day and in all cases at hours that extend well beyond conventional branch hours.

The automated portion of the phone center is designed to handle inquiries (account balances, rate information), service requests (stop-payment instructions, an order for additional stocks of checks), and simple transactions (transfer between accounts, pay down of a credit card balance or other credit line). The representatives on duty handle more complicated requests as well as open new accounts and take loan applications. Many banks also offer a telephone bill-paying service. This service has been available for at least 20 years, but has never become popular and remains a minor function of phone centers. Nor is it likely to become more popular in the near future. It should be superseded by more flexible bill-paying facilities contained in home banking software.

Phone centers can replicate many of the services that are obtained at branches. The functionality and efficiency of phone centers are limited mainly by the scope of the relationship profiles that are maintained.⁷ The more complete the profiles, the more that can be done

⁷The functionality and effectiveness of phone centers are increased by creating video links. Mellon Bank Corp. has announced plans to install video links between all its branches and service agents. They will enable a customer to see the agent with whom he is discussing a mortgage, investments, or a business loan. See the American Banker (7/31/96), p. 16.

expeditiously either in an automated, self-service mode or with the aid of a phone center agent.⁸

Current usage and future plans

The American Bankers Association reports that two-thirds of all commercial banks operate an automated phone center and many larger banks already view their phone centers optimistically.⁹ The phone centers certainly appear successful when measured by the volume of incoming calls received. For example, Chase Manhattan expects 70 million calls to its phone center in 1997 and employs a staff of 1,200 to handle this volume.¹⁰ Fleet received 42 million phone calls from its 5 million customers in 1995. Banks below the super-regional bracket also have large phone center operations. People's Bank, an \$8 billion institution with 72 branches, handled about 12 million calls last year.¹¹ Most calls, however, tend to be for balance inquiries, not transactions or service requests.

Surveys taken by banks find greater customer satisfaction with the service they receive from the phone center than from branch staff. This success is attributed to three factors. First, service representatives are given more intensive training than branch personnel on how to field inquiries and complaints. Second, service representatives have supervisors immediately available at the phone center to consult with, or transfer customers to, when they encounter difficult or complicated cases. Third, by specializing, the service representatives handle infrequently made

⁸If too much "functionality" is built into the phone center, the customer must work through a maze of menus before reaching the desired option. As a result, some bankers expressed the opinion that practical limits may soon be reached for the number of functions performed by an automated phone center.

⁹See The Community Banker's Electronic Banking Toolbox, American Bankers Association (Washington D.C. 1996), page 20.

¹⁰American Banker, September 25, 1996, p.15.

¹¹Phone centers may have a higher priority than PC banking in banks' restructuring plans. A survey found that, among institutions with over \$2 billion of assets and planning to invest in remote banking technology, 66 percent will invest in telephone banking, 34 percent in PC banking, and 14 percent in screen telephone banking. See the American Banker (12/7/95), page 1.

requests more adeptly than branch personnel, who have a wider range of duties.¹²

Telephone centers create the opportunity for some cost savings within the framework of the current branch structure. By reducing traffic at branches, staffing can be trimmed. With fewer interruptions from phone calls, branch employees can perform more important and profitable functions. Some banks do not make the telephone numbers of individual branches readily available, preferring to steer all calls to the phone center. But large costs savings will not be realized until the phone centers are combined with other changes that will allow the closing of traditional branches.

Besides cutting costs, phone centers are used to cross-sell financial products. Representatives are trained to spot selling opportunities from a relationship profile during the time a customer is on the line. Software has even been developed to alert the service representative to an opportunity as soon as a customer's profile is called up on the screen. A flashing message points out a soon-to-mature CD, prompting an inquiry into the customer's desire to roll over the CD or place the funds in an alternative investment. Other software allows sales representatives to search over relationship profiles for selling opportunities and place out-going phone calls accordingly.

ATM's

ATM's have become nearly ubiquitous since their introduction 20 years ago. During that time they have been improved by new capabilities and the creation of nationwide networks. The current generation of ATM's performs the same functions as automated phone centers, and they can print interim statements showing recent account activity. ATM's, like phone centers, bring

¹²To aid phone representatives, a record of each customer's last call into the center is kept in his relationship profile.

greater convenience and create the opportunity, even with the current branch configuration, to cut costs at the margin by reducing traffic at teller windows.¹³

ATM's are widely accepted for balance inquiries and cash withdrawals and operate as a vital second electronic delivery channel. ATM's account for over half of total cash withdrawals at many banks and over 80 percent at some. But a large fraction of current branch traffic continues to be for the purpose of depositing at the teller window.¹⁴ Customers have been much slower to use ATM's for making deposits for two reasons: inability to make a split deposit or to cash a check for an amount other than a multiple of \$20.00, and fear of "the machine eating the check" without crediting one's account.

ATM's are being developed to overcome the resistance to depositing. The newest ATM's are set up to dispense cash in any amount desired, down to the penny. They are also equipped with a scanner. To make a deposit, a customer slips a check directly into the slot (not inside an envelope) and the check is scanned. An image of the check appears on the screen and a two-sided proof-of-deposit copy of the check, including the endorsement on the back, is printed for the customer.¹⁵ Industry sources report that several large banks have adopted or are planning to

¹³ Some functions added to ATM's, such as postage stamp and phone card dispensing, receive considerable attention in the press. But these functions are tangential to the real problem of developing ATM's to perform basic teller window transactions so that traditional branches can be closed.

¹⁴ Point-of-sale (POS) terminals are a part of this delivery channel since POS transactions are conducted on an extension of the ATM network. By substituting for cash payments at retail outlets, POS transactions reduce branch traffic and check usage at the margin. The more important benefit is getting the public accustomed to using ATM-debit cards and making payments electronically.

¹⁵ ATM's are being enhanced in several other ways. Some are being "preprogrammed" to give a user a personalized message on, for example, a new product offering. Special purpose ATM's are being developed to accept loan applications, determine credit worthiness, and issue a check for the amount of the loan, complete with a picture of the borrower. In the future, personal information about the customer loaded on a smart card may make this application process even easier. Only a limited number of automated loan-dispensing machines, or ALM's, are in actual operation and their ultimate usefulness is still indeterminate.

adopt imaging technology in the near future.¹⁶

Enhancements are being made because the public's reluctance to deposit checks through ATM's is a major stumbling block to the closing of branch offices. If cash-to-the-penny and proof-of-deposit were to overcome this reluctance, branch closings could follow. But bankers expressed skepticism that these enhancements would increase ATM usage significantly for depositing, even with encouragement given by lower fees and balance requirements for customers that deposit this way.¹⁷

Home banking

In addition to the telephone and ATM, customers are being given a third electronic option: banking at home via a personal computer equipped with a modem and loaded with the necessary software. The PC accesses the same master data base that the ATM or phone center contacts. The customer can then check balances and credit card activity, transfer funds, and pay bills -- all the functions available from the phone center. PC banking is generally thought to have more long-run potential than ATM's or phone centers because it has more powerful bill-paying capabilities and it allows account information to be downloaded into personal finance software.

Home banking has been available for several years but has had only mixed success. About one million households are thought to be using PC banking services. As more households become computer literate and have their own PC's, it should become more popular. A changeover to branchless banking, however, is not dependent on PC banking turning into a huge success.

¹⁶ATM's equipped with scanners can tie into a bank's system for the image processing and collection of checks. Image processing will eliminate the labor-intensive task of opening envelopes containing the deposits made at an ATM and inputting the data into the computer system.

¹⁷Some banks have had success in raising ATM usage by having branch staff demonstrate an ATM's features, or by taking customers out of long teller lines and assisting customers through the necessary steps involved in using an ATM, but this is a slow process.

Branchless banking can become widespread with greater use of ATM's and telephone banking.

New fee structures

Banks are experimenting with new fee structures to discourage visits to the teller window and to coax customers to use electronic self-service. Free checking is offered by some to customers who direct deposit their payroll checks. KeyCorp is encouraging ATM deposits by giving a small credit for deposits made that way.¹⁸ Others are charging for teller window visits.

Some banks have even discovered that they have been too successful at encouraging self-service. They are experiencing much greater use of their phone centers than they projected. It has now become too easy and convenient to find out one's account balance or whether a check has cleared. To halt "overuse," some have established fees of about 50 cents for calls in excess of six per month.

The collection of fees, whether for teller visits or phone calls, is now a simple matter with the introduction of the integrated customer profiles discussed earlier. Each time contact is made, whether through the automated phone center, an ATM, a PC, branch office staff, or telephone center staff, the data base is accessed. A mainframe computer keeps count of the number and types of contacts made by each customer and bills accordingly. These charges were, of course, impractical to collect with a paper-based system.

Direct banking

Several banks are rolling out a "direct banking" package. The key requirement of these packages of services is that the customer makes contact by telephone, fax, the mail, a PC, direct deposit, or ATM, but never through branch-office personnel. In return the bank offers free or low-cost accounts and services, such as free PC banking or telephone bill-paying, and better

¹⁸KeyCorp Annual Report (1995), page 11.

interest rates on savings accounts, CD's, or auto loans.

Direct banking packages are currently being offered by a few banks on a limited basis within the geographic area covered by the existing branch network. These banks, especially those with national brand name recognition, are planning to offer direct banking packages nationwide. When they do this, the geographic reach of the branch network would no longer limit the area over which they offer their services. It appears that PNC Bank will be the first to attempt nationwide direct banking. It has entered into a venture with the American Automobile Association (AAA). Under the agreement, PNC will offer its services through remote delivery channels to the AAA's 34 million members in all 50 states.¹⁹

How the delivery channels relate

Diagram 1 is a schematic representation of the innovations described in this section. Beginning at the top, banks are forming complete customer-relationship profiles by consolidating separate data bases for individual products. A complete relationship profile is used by bank employees engaged in sales, operations, and research. Access is also made available to customers who make contact directly through an ATM, telephone, or PC. If a customer declines to make direct contact through a self-service device, but makes a trip to the branch or speaks to a phone center agent instead, a bank employee accesses the data base. As direct electronic access becomes more widely accepted by customers, the branch delivery channel becomes increasingly redundant.

¹⁹PNC's 1995 annual report, page 7.

New design: supermarket branches

In addition to developing electronic delivery channels, banks are redesigning and relocating their physical branches. The first of the new designs is commonly referred to as a "supermarket" or "in-store" branch. It is a full-service branch office operating in leased space, usually located within a giant supermarket of 50,000 or more square feet, serving 15,000 or more shoppers per week. For the convenience of bank customers, it is open seven days a week and most evenings, like the supermarket.

An in-store branch usually occupies 400 to 600 square feet, compared with a traditional branch's 5000 square feet. A typical unit would be located near the entrance or the check-out lanes and feature two teller windows, two stations at a counter to open accounts, one or two ATM's, and direct connections to the phone center. It also has a single office to hold private consultations. Some banks equip their in-store branches with high-tech devices such as a videophone or an automated loan machine. According to industry analysts, there will soon be 4000 in place out of a total of 50,000 total commercial bank branch offices. Several large banks have each announced plans to open hundreds more during the next two to three years. See Table 3 for a list of bank holding companies with the largest number of supermarket branches as of mid-year 1995.

Supermarket branches can be built and installed for \$200,000 to \$300,000, or one-fifth the cost of a conventional branch. About \$60,000 to \$100,000 is for construction costs and the remainder is for equipment, most of which could be removed and reinstalled elsewhere. Hence, only construction costs represent a sunk cost.²⁰ The operating expenses are estimated to be about

²⁰Supermarket branches can be constructed off-site as a modular unit. Some firms already specialize in their manufacture and installation.

\$350,000 annually versus \$700,000 or more at a traditional branch, even though the supermarket branch is open many more hours per week. As a consequence, a supermarket branch can break even at slightly less than half the account and deposit volumes of a conventional branch.

Staffing of in-store branches

The "foot-traffic" passing through the supermarket is a critical element of what makes an in-store branch "work." A broad cross-section of households residing within 6 miles of a large suburban supermarket comes in two or three times per week to shop. Frequent shopping trips create opportunities to open accounts and sell products to households that are not customers of the bank currently and would never otherwise come into one of its branches. Opportunities are also created to cross-sell to existing customers, who typically visit a supermarket more frequently than a conventional branch. Supermarket branch staff will circulate through the store in order to win new accounts and sell banking products.

For the sales effort to be successful, the staff must be energetic, personable, and possess the aptitude and desire for making customer contacts. To find employees meeting these requirements, personnel departments are changing their search procedures. Recruiters are putting less weight on experience in banking and emphasizing a background in retail sales or customer relations. To sustain the staff's efforts to generate sales and new accounts, compensation includes commissions or bonuses linked to individual or branch performance.

In-store branches are less expensive to operate in part because they use fewer employees, about 6 full-time equivalents versus 12 at a conventional branch. Staff members cover for each other and are largely interchangeable. Flexibility is necessary because only two employees will usually be working at the same time. Consequently, no sharp division of tasks among tellers, platform personnel, and branch management is made. Moreover, the branch manager typically

has less management responsibility and a smaller range of duties than at a traditional branch. As a result, there is essentially one job description at supermarket branches.

Strategic considerations

Supermarket branches are seen by the supermarket and the bank to be mutually beneficial. The supermarket chain expects more of the bank's customer base to shop at a store housing a branch, giving a boost to sales. The bigger the bank's market share, the bigger the potential boost to sales. The revenue received from renting space to the bank is somewhat incidental. From its side of the alliance, the bank is trying to leverage off the supermarket's flow of shoppers. Banks seek out chains that have a high proportion of super-sized stores. The larger the store, the larger the flow of potential bank customers.

The supermarket-bank alliances tend to be exclusive within a state or metropolitan area. The supermarket chain prefers a single large bank to put branches in all of its stores. It is much simpler to negotiate with one bank than several, and the chain can more effectively promote the addition of a single partner's branches to its locations. The bank, in turn, is looking for a supermarket chain with a presence throughout a marketing area so that, like the supermarket chain, it can advertize the combination. As a result, it is becoming common for alliances to be formed between the largest players, both supermarkets and banks, in a geographic area.

Supermarket branching can be used as both an offensive and a defensive strategy. On the offensive side, opening in-store branches allows a bank to enter a market or expand at relatively low cost. It can also serve as an defensive strategy because only a very limited number of large supermarket chains operate in any state or metropolitan area. By forming an exclusive arrangement with one of them, a bank may hinder local competitors and potential out-of-state entrants from following the same low-cost strategy for penetrating the area on a large scale.

Banking kiosks

Besides full-service branches, banks are installing limited-service kiosks inside supermarkets and giant discount stores. A kiosk, occupying less than 100 square feet of space, consists of one or two ATM's, a dedicated connection to the phone center, and perhaps some other self-service device. One or two employees work from the kiosk, spending much of their time circulating among shoppers and opening new accounts. Some large retail banks will soon have numerous kiosks in place to supplement their network of full-service in-store branches. Kiosks are often installed in smaller supermarkets which do not generate the shopper flows necessary to sustain a true branch. This practice allows both partners to promote that a "branch," either full- or limited-service, is at every store in the chain.

Kiosks, which go by various names such as express centers, express branches, or in-store sales kiosks, are off-site ATM's; they are not considered to be branches by the banking agencies. Press reports, however, often refer to them as supermarket branches, failing to distinguish them from full-service locations.

Investment centers

A second new design for branches is an investment center or "superbranch." Some banks are planning to convert all branches they retain to this format. Others plan to set up a limited number and take referrals from their conventional and supermarket branches, a hub and spoke approach.²¹ Either way, the banks adopting the investment center concept are more optimistic on their ability to supply investment services. They hope to capitalize on their name recognition and wealthier customer base to expand their business in mutual funds, brokerage services, and in some

²¹The investment center concept varies substantially from one bank to another. Some banks simply place an investment representative in certain branches with no real change in physical design.

cases, insurance.

The physical layout of an investment center branch is intended to change the customer's mind set. Investment centers are to be seen by customers as offices dispensing financial advice, not as branches where just routine transactions are conducted. Upon entering an investment center, a customer will come to a service counter, not a row of teller windows. An employee at the counter, or "greeter station," will determine the reason for the customer's visit and either handle the matter or direct him to an investment or credit representative at a "sit-down station."

More of an investment center's employees will be certified investment analysts and have a sales orientation. Training and incentive pay packages will be used to develop a "sales culture" like that in the brokerage houses.

In one sense, the investment-center approach is at odds with electronic self-service. Large volumes of in-branch traffic would seem to be an important factor in generating opportunities to cross-sell credit and investment products. Banks adopting the investment-center approach in conjunction with remote electronic delivery channels will need effective advertising and direct-mail promotions to generate traffic at their offices.

III. The Strategies Underlying Restructuring

Some banks are putting in place the innovations in retail banking on a small scale, or at a slow pace, or in a piecemeal fashion. They are opening a handful of supermarket branches as a low-cost means of making incremental changes to their branch networks. Supermarket branches can be used to extend a bank's geographical reach, fill some holes in its market region, or expedite the consolidation of poorly performing traditional branches. Adding a few supermarket branches to the network is a minor change in the way a bank conducts its retail operations. Similarly,

setting up an automated phone center by itself is only an incremental change. The phone center gives extra convenience and it may have been opened to match a nearby competitor's move. It is an add-on to the existing branch-based system.

Other banks, however, are putting in place all or most of the innovations listed above quickly and with a coherent and integrated strategy in mind. In combination, complete customer-relationship profiles, a phone center, enhanced ATM's, PC banking, in-store branches, investment centers, and a sales-oriented branch office staff come together to remake a bank's retail operations. Management's goal is to bring the cost structure down while increasing the ability to cross-sell credit and investment products. The pieces of their integrated strategy come together in the following way.

- o Shifting transactions out of the branches

First, routine face-to-face transactions (cash withdrawals and deposits) are moved to self-service delivery channels and direct depositing.

Second, simple inquiries and requests are handled by automated phone center or ATM, not by tellers or platform personnel at the branch. Complex requests are taken by an agent at the phone center. However they are handled, a complete customer profile expedites the process, whether it is accessed by the customer via ATM, PC, or automated phone center, or by a bank employee working at the phone center, teller window, or branch platform.

Third, as is typically done already, loan applications are received by phone, fax, e-mail, or the conventional mail and processed in a centralized office.

Together, these changes reduce traffic at the branch and free branch personnel from operations work and interruptions. Having accomplished this, branch personnel concentrate on cultivating new business.

- o Staffing and compensation

For the sales effort to be successful, branches, investment centers, and the phone centers must be staffed by energetic and personable people who thrive on contact with the customer. Compensation must also include sales incentives.

o Branch location

Supermarket branches meet demands for greater convenience in terms of hours and location, while lowering operating costs. And by placing in-store branches in high "foot-traffic" locations, branch staff comes into direct contact with many more existing and prospective customers than in a traditional branch office. With much of the work load shifted to the phone center and self-service devices, in-store branch personnel, hired with selling in mind and motivated by an incentive pay package, are set to win new accounts and cross-sell credit and investment services.

o Coordinated sales efforts

To supplement the sales efforts of the in-store staff, information extracted from the relationship profiles will be used in direct mail campaigns and by phone center representatives. Existing customers will be selected to be contacted with an out-bound call, and customers who call into the center to make a rate inquiry or put in a request will hear a pitch for other products.

o Improved internal cost and revenue analysis

The information contained in the profiles will also be used to set prices and terms of accounts to make more of the customer base profitable. Banks claim that a fraction of the customer base generates most of the profits. The goal is to encourage the use of self-service devices without causing profitable customers to take their business elsewhere.

o Investment services

Some banks are more optimistic on their ability to supply investment services to their customer base, and they are foregoing in-store locations and developing investment centers instead. The strategy of this group, however, is not all that different from those turning to in-store branches. They are likewise going to rely on self-service delivery channels, develop complete customer-relationship profiles, and remake the staff.

Longer run strategy

The integrated strategy outlined above is intended to put a bank in a good position in the future, 3 to 5 years from now, to move quickly in almost any direction that the business takes. At this time, it is very uncertain as to which of the new technological developments in financial services will be cost effective and meet wide public acceptance. But home banking and other developments are credible threats to branch-based banking to which management must respond.

The popularization of supermarket branching should make retail banking markets more competitive for any value of the HHI.²³ Supermarket branching increases potential competition by lowering the fixed costs of entering or expanding in a market. Operating costs are also lower, which makes the break-even point, usually measured by the number of checking accounts or the dollar volume of deposits, lower than for traditional branches. A lower break-even point raises the likelihood of success and the threat of entry or expansion.

The lower fixed and operating costs of in-store branches are encouraging banks to increase the density of their branch networks and expand their geographical reach. Several large banks have each announced plans to open hundreds more of these branches during the next two to three years in areas where they have already established a branch network. The new branches will probably increase competition where the expanding banks already operate and in adjoining areas they are entering.

The lower costs are also encouraging banks to enter new locations far from their current service areas. An example is BankAmerica's long-distance de novo entry into Chicago. By forming an alliance with the largest chain in metropolitan Chicago, BankAmerica will be opening 175 supermarket branches in just two years.²⁴ (BankAmerica has said that it will use only in-store branches in Illinois.) The large-scale entry of BankAmerica would tend to raise the level of competition in the Chicago market.

Potential anti-competitive effects

Increases in the level of competition brought about by supermarket branching may not be

²³ See David S. Neill and John P. Dandforth, "Bank Merger Impact on Small Business Services Is Changing," Banking Policy Report (April 15, 1996), vol 15, no. 8, page 1.

²⁴ See the American Banker (July 26, 1996), page 4.

permanent. Suppose the two or three largest banks in a particular area ally with the largest chains and open a large number of supermarket branches. And subsequently, their deposit share increases proportionately with the expansion of their branch networks. The resulting increase in retail deposit concentration in the local market may lead to subdued competition.

Local markets could become still more concentrated in a few years time. If the new type of branch office proves to be cost effective and popular with the public, smaller banks may lose deposits and see average deposits per branch fall below their break-even point. The profitability of these smaller banks may decline enough to convince them to exit the industry. If they close, the outcome would be more concentrated and possibly less competitive markets. Furthermore, by allying with the two or three dominant supermarket chains in an area, the largest banks would have shut out potential competition from expanding through the in-store branch strategy.

The effect of remote electronic delivery

The effects of supermarket branches could be superseded by a switch to remote electronic delivery. If remote delivery becomes widely used, the relevant geographic area for markets would expand in size, possibly to the entire country. At this time, urban markets for many retail banking products are thought to roughly coincide with metropolitan areas as defined by the Census Department. The commuting patterns of households give banking markets their form. Individuals are thought to choose between banking near home or near the workplace.

Widespread use of remote delivery would allow banks from anywhere in the country to compete with those operating locally. If a large number of households take a direct banking package, local branches would not be indicators of the amount of retail business a bank is conducting in a geographic area, nor would the fixed costs of building a branch network be a barrier to entry. Banks would instead incur the fixed costs of setting up electronic delivery

channels and then work to gain as many customers as possible in order to capture economies of scale. Retail banking would operate in a national market as credit cards and home mortgages do already. Competition should be further intensified by households browsing the Internet, easily comparing CD rates and the costs and features of direct banking packages.

Issues raised by shared networks and third-party software

Until recently, each bank has owned and operated its distribution system, the branch office network, from end-to-end, with the exception of the ATM network. Production and distribution of retail banking services were inseparable; no distinction was made between competition among banks in production versus competition in distribution. Over time, banks have been switching to shared distribution channels. In operation now are national and regional ATM networks and the credit card networks organized by Visa and MasterCard. Going forward, banks will rely more on shared networks or networks owned and operated by nonbanks. In this setting, distribution of banking services can be distinguished from their production. Competitive concerns may shift from consolidation in local or regional banking markets to consolidation of ATM networks.²⁵

Home banking raises related issues. It appears that home banking will soon be available not just from individual banks, but from software firms, regional ATM networks, the national credit card associations, and a consortium of banks. As in the case of the ATM networks, a distribution channel will not be controlled individually by producers of banking services but by combinations of banks and nonbank firms.

²⁵See James J. McAndrews, "Retail Pricing of ATM Network Services," Federal Reserve Bank of Philadelphia Working Paper No. 96-12 (August 1995, revised April 1996).

Banking Needs of the Public

In evaluating merger and acquisition applications, the Federal Reserve System takes into consideration how well the needs of the public are being met. As part of the review process, it seeks comments from residents of communities that the applying banks serve. Some proposed mergers have been protested in recent years on the grounds that prospective post-merger closings of branch offices would inconvenience residents of affected communities.

In light of the innovations put in place during the past decade, banks are now able to produce a given level of service for retail customers with many fewer branches than before. The average distance traveled to visit a bank increases with fewer branches in operation, and undeniably, this detracts from convenience. But a trip to the bank is often made unnecessary by the availability of ATM's and a 24-hour phone center. It is certainly more convenient now to obtain cash or place a stop-payment order because it can be done from an ATM or from home via the telephone. It is also possible to use another local bank's ATM on a shared network to obtain cash and balance information, and in some locations (although not New York), to make deposits. The expansion of remote delivery and how well it meets the public's needs would seem to worthy of consideration in evaluating proposed branch closings in the aftermath of a merger.

The use of supermarket branches and kiosks is a development that could make banking services more readily available in low and moderate income communities. Because supermarket branches can lower fixed and operating costs substantially, a bank may be willing to operate supermarket branches and kiosks in those communities that could not sustain a traditional branch. A stumbling block, however, is the shortage of large supermarkets in urban areas. Hence, in deciding whether to offer tax incentives, zoning variances, or other inducements to attract supermarkets to low and moderate income areas, an additional factor a local government might

want to consider is the potential for the improved availability of banking services.

Other Issues: Security

As discussed, customer access to services at branch sites, where a teller initiates and intermediates entry to a bank's computerized and paper-based systems, is being phased out and replaced by self-service electronic delivery. With this switch, the nature and requirements of security are changing. John Reed, chairman of Citicorp, noted that control of access and authentication of user identity will become increasingly important issues in electronic retail banking.²⁶ Initiating transactions under a false identity (using someone else's credit card number, PIN, or card access) will become more troublesome. But the larger security issue is whether account holders can be safely given entry to a bank's consolidated data base without creating the potential for criminals to gain broader access to the records contained in the data base.

Of course, a bank will not give account holders unrestricted access to data. Rather, customers will be given access to software applications that allow them to perform a particular set of functions on a segment of a data base, all taking place in a controlled environment. Nonetheless, as information flows over open networks outside a bank's control and households use more sophisticated equipment, the potential for unauthorized tampering with information could turn out to be a new source of risk. As a result, encryption technology and other electronic security measures are likely to become more important for maintaining security. The strengths and weaknesses of the security for remote electronic banking may become a topic of increased interest for bank examiners in the future.

²⁶John Reed, "The Risk Implications of Changing Technology for Financial Institutions and Central Banks: The Private Sector Perspective," presented at the Symposium on Risk Reduction in Payments and Settlements Systems, New York City, January 25-26, 1996.

Liquidity of commercial banks

The retail deposit base is a source of stable funding for a substantial portion of bank assets. But it has become a much smaller share of total liabilities over the past several years. It has also become less interest rate sensitive, making it less useful as a source of funds to meet a temporary surge in loan demand. Banks are relying more heavily on wholesale deposits and nondeposit sources of funds to accommodate both permanent and transitory growth of assets. These market-based funds are more interest-rate elastic and less stable in that they are more sensitive to changes in banks' ratings.

Table 4 shows the composition of the total liabilities of commercial banks over the 1992-95 period. During these years, total liabilities increased by \$612 billion, but retail deposits (the sum of checkable, savings, and small time deposits) increased by only \$104 billion. Retail deposits contributed only 17 percent to the growth of total liabilities over the period, and retail deposits' share of total liabilities fell from about 60 percent in 1992 to 52 percent in 1995. If banks continue to raise the bulk of new funding in wholesale markets, liquidity could become an issue for an individual institution at some point in the future. The reliance on the wholesale markets may continue to grow until banks can reduce the overhead costs of their retail operations sufficiently to improve their competitiveness in markets for household savings.

Long-run Issues

The switch to electronic delivery channels is an application of new technology to the production and distribution of retail financial services. It implies a shift toward greater efficiency in a bank's production function and a reduction in its unit costs. But the econometric studies that are currently available on the economies of scale and scope in banking were conducted using data from an era when traditional branch offices were the main distribution channel for retail services.

At that time nearly all customer transactions with the bank were conducted face-to-face with branch personnel. Moreover, the design of a branch office and the systems that support it were essentially the same for every size of bank. (This uniformity across banks of different sizes could be the main underlying reason that most studies find weak scale economies.) During the past few years the largest retail banks have been moving away from this mode and in the future may move almost entirely away.

In a setting where traditional branches are a minor delivery channel, the earlier cost studies will be less relevant. Remote electronic distribution offers the prospects for huge economies of scale. The available cost studies will be outmoded, however, even if the evolution of retail banking is less radical. Larger banks should be able to reduce noninterest expenses by remaking their distribution system around supermarket branches and call centers. But until researchers can work with fresh data, it will be impossible to determine the new minimum size needed to be efficient. And without this piece of information, the total number of banks in operation or the concentration of business among the largest cannot be projected with confidence. For the same reason, the future of community banks becomes an open question. Their cost disadvantage may not continue to be small and manageable.²⁷

Industry consolidation and interstate branching

The restructuring of retail banking is coinciding with the advent of interstate branching. The elimination of branching restrictions across state lines encourages consolidation. Based on the effects seen from the easing of intrastate branching and interstate banking restrictions during the 1970's and 80's, the industry has been projected to consolidate from 8000 banking

²⁷ A paper by Jeffrey A. Clark, "Economic Cost, Scale Efficiency, and Competitive Viability in Banking," Journal of Money, Credit, and Banking (August 1996), pages 342-64, is a recent contribution to the research on this topic and contains a list of relevant references.

organizations (independent banks and bank holding companies) to about 4000 during the next five years and then stabilize.²⁸ California's long-standing experience with unrestricted intrastate branching over a large geographical area likewise indicates a figure of about 4000 banks in operation nationwide in the longer run. By these estimates, full interstate branching is expected to have a dramatic effect on the number of banks but not on the basic shape of the industry, which would still comprise a few thousand banking organizations.

The concurrent restructuring of retail operations, however, introduces considerable uncertainty into these projections for the future size and contours of the industry. The projection of 4000 banks, from either the short-cut or the more involved method, assumes implicitly that the delivery system for retail customers will evolve slowly from its current form. But the relationship between a bank's size and its cost structure may be significantly different in the future as a result of remote distribution and supermarket branches.

In thinking about the future configuration of the U.S. banking industry, the credit card business may be a useful alternative model to the California system. The credit card segment of retail banking has evolved into what is now essentially a mail and telephone operation. The large players serve a national market with a branchless distribution system (or in the case of a bank having a branch network, its national consumer finance program is run independently). After a changeover to remote distribution, national marketing, and processing centers located anywhere in the country, many retail product lines now provided through branches may have a cost structure resembling credit cards. For this reason, the shape of the credit card business may give an early indication of the future for retail banking as a whole.

²⁸ Allen N. Berger, Anil K. Kashyap, and Joseph M. Scalise, "The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been," Brookings Paper on Economic Activity (2:1995), pages 55-201.

Measured by managed credit card loans (credit card loans shown on the balance sheet plus securitized credit card loans outstanding), the 50 largest companies currently have 93 percent of this business line and concentration is rising.²⁹ If retail banking were to follow the pattern in credit cards, 50 or fewer banks would account for around 95 percent of retail deposits. Small institutions would be sharing just 5 percent of the market. In contrast, the 50 largest bank holding companies now hold 59 percent of total domestic deposits. Consolidating to 4000 banking organizations would imply an increase in the share of the largest to about 65 percent. Small institutions would be sharing the remaining 35 percent, still a sizable portion of the total market. Clearly, the credit card model implies consolidation well below 4000 banks.

The payments franchise

The erosion of the deposit base points to the growing obsolescence of savings and time deposits as an investment vehicle for households. At the same time, the shift to securities issuance by corporate borrowers and the growing importance of non-bank lenders has diminished banks' role in intermediating credit. These well-established trends have led many to conclude that the core of the banking business is provision of payment services.

The emergence of remote electronic delivery, however, causes bankers to fear that before long they could also lose their dominance over the retail end of the payments business. Banks may still be the actual suppliers, but households would no longer identify with individual banks. In a banker's worst nightmare, a household sees its banking relationship as being with some other type of institution: a mutual fund sponsor, a vendor of banking software for the PC, an electronic payments interchange (successors of today's ATM networks), an on-line service, or a bank credit card association, but not a bank. In this world, banks recede into the background just as they

²⁹The data source is the American Banker (10/1/96, pages 19-21).

already have with respect to money market mutual funds (MMMF's). Payments from a MMMF account are made by writing a check drawn on a bank, identified in the fine print. But as far as the individual household is concerned, its relationship is with the mutual fund's sponsor. It does not see itself having a relationship with the commercial bank that is the actual supplier of the service to fund shareholders. In the case of Fidelity Investments mutual funds, this happens to be United Missouri Bank of Warsaw, Missouri.

The loss of the retail payments franchise is not a foregone conclusion as remote electronic delivery could work in the banking industry's favor. By cutting costs, banks can offer better rates and prices. And by providing convenient and flexible bill-paying services and real-time information on deposit accounts, credit cards, and investments, banks can give households an incentive to consolidate their financial affairs with one of them. If all information can be downloaded to a PC, users of personal finance software are given an additional incentive to choose a bank as their main provider of financial services.

V. Conclusions and Summary

The largest commercial banks in the U.S. are in the process of completely restructuring their retail operations over the next three to five years. The banks feel they have squeezed out as much expense as they can from the branch network in its current form. Despite earlier cost-cutting efforts, they still have not fully addressed a stagnating retail deposit base or the credible threat of low-cost remote electronic delivery of payment services.

The restructuring of retail operations that is now occurring through electronics and alternative branch design raises a number of policy issues. Changes in the level and form of competition in banking markets will be a direct result of the overhaul of the branch office system.

Other matters of concern include: the availability of banking services to low and moderate income households, the liquidity of balance sheets, and the security of electronic delivery channels.

Table 1**Deposits of the household sector**

	<u>1988</u>	<u>1995</u>	<u>Percent change</u>
Total of deposits, currency, and MMMF shares	\$3103 bil	\$3572 bil	15
Checkable deposits and currency	499	701	40
Savings and time deposits	2342	2392	2
Money market mutual fund shares	262	479	83
Net worth	17274	23714*	37
Disposable personal income	3738	5402	45
Total financial assets	9951	18278	84
Pension fund reserves	2658	5435	104

* 1994 figure

Deposits at all banks, thrift institutions, and credit unions

Source: Flow of funds database

Table 2

Illustration of the Cost Disadvantage Facing Banks

Direct operating expenses of operating a branch office	\$700,000 per year
Indirect operating expenses	\$700,000 per year
Average dollar volume of deposits at a branch office	\$50,000,000
Noninterest expenses of a branch office's deposits (measured in percentage terms)	2.8 percent per year
Expense ratio of a money-market mutual fund	0.5 percent per year
Cost disadvantage facing banks	2.3 percent

Table 3

**Leading Banks in Supermarket Branching
as of June 30, 1995**

<u>Bank Holding Company</u>	<u>Number of Supermarket Branches</u>	<u>Supermarket branches as a percentage of a bank's total branches</u>
1. BankAmerica Corporation	126	6.1
2. Wells Fargo & Company	88	4.6
3. Fifth Third Bancorp	82	16.9
4. BancOne Corporation	71	4.5
5. NationsBank Corporation	68	3.1
6. National Commerce Bancorp	47	58.0
7. Mellon Bank Corporation	35	7.9
8. National City Corporation	29	3.1
9. Bank of Tokyo	27	9.5
10. Zions Bancorp	25	19.1

Note: Includes branches with zero deposits.

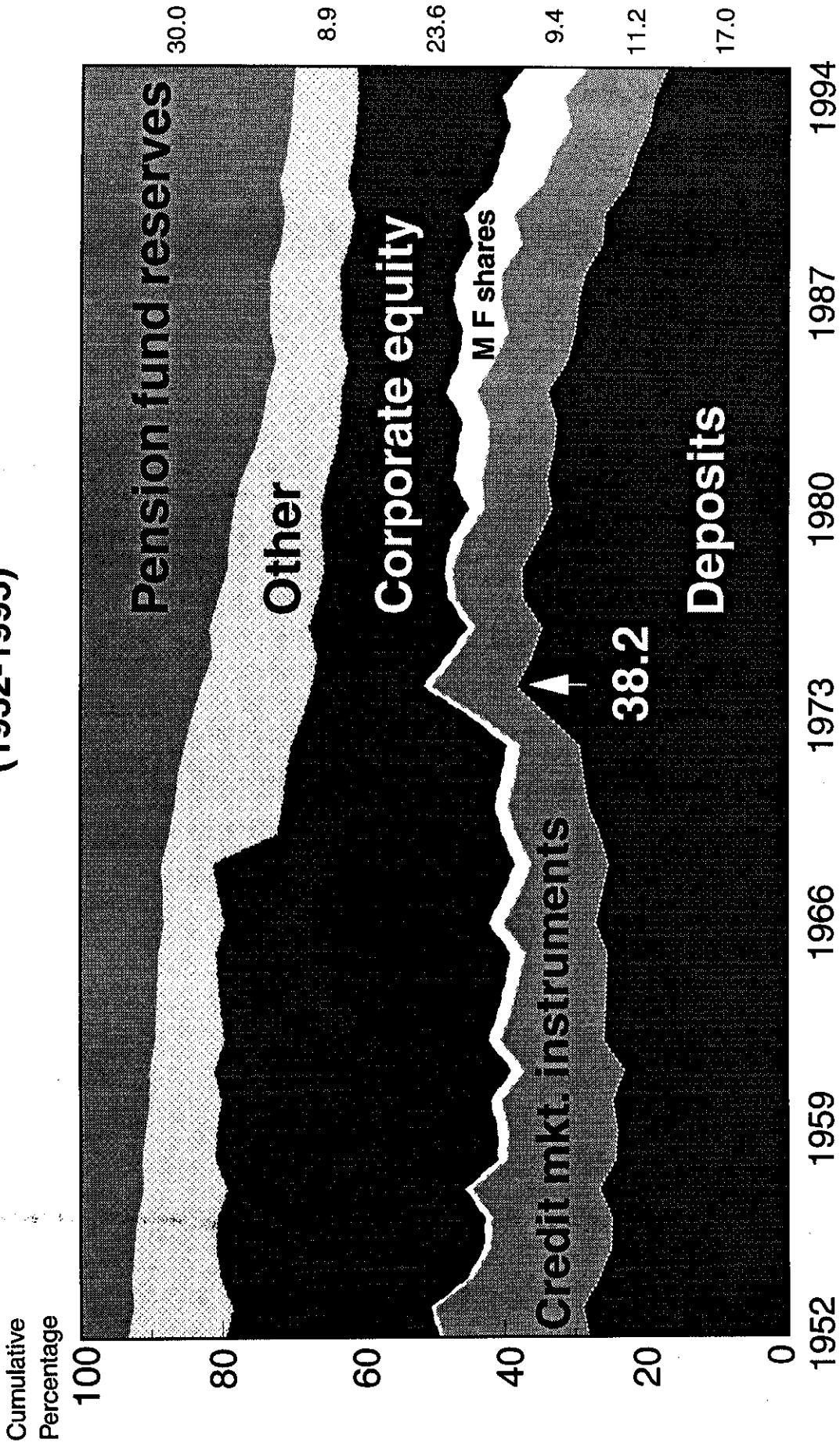
Source: SNL Branch Migration DataSource v1.5

Table 4**Composition of Commercial Bank Liabilities**

	<u>1992-Q2</u>	<u>1995-Q2</u>	<u>change</u>
Total liabilities	\$3,212 bil.	\$3824 bil.	\$612 bil.
Demand deposits	621	651	30
Savings deposits	750	764	14
Small time deposits	514	574	60
Total retail deposits	1,885	1,989	104
as a percent of total liabilities	59 %	52 %	- 7 points
All other liabilities	1,327	1,835	508
as a percent of total liabilities	41 %	48 %	+ 7 points

Source: Federal Reserve System

Chart 1
Distribution of Total Financial Assets Held by the Household Sector
(1952-1995)

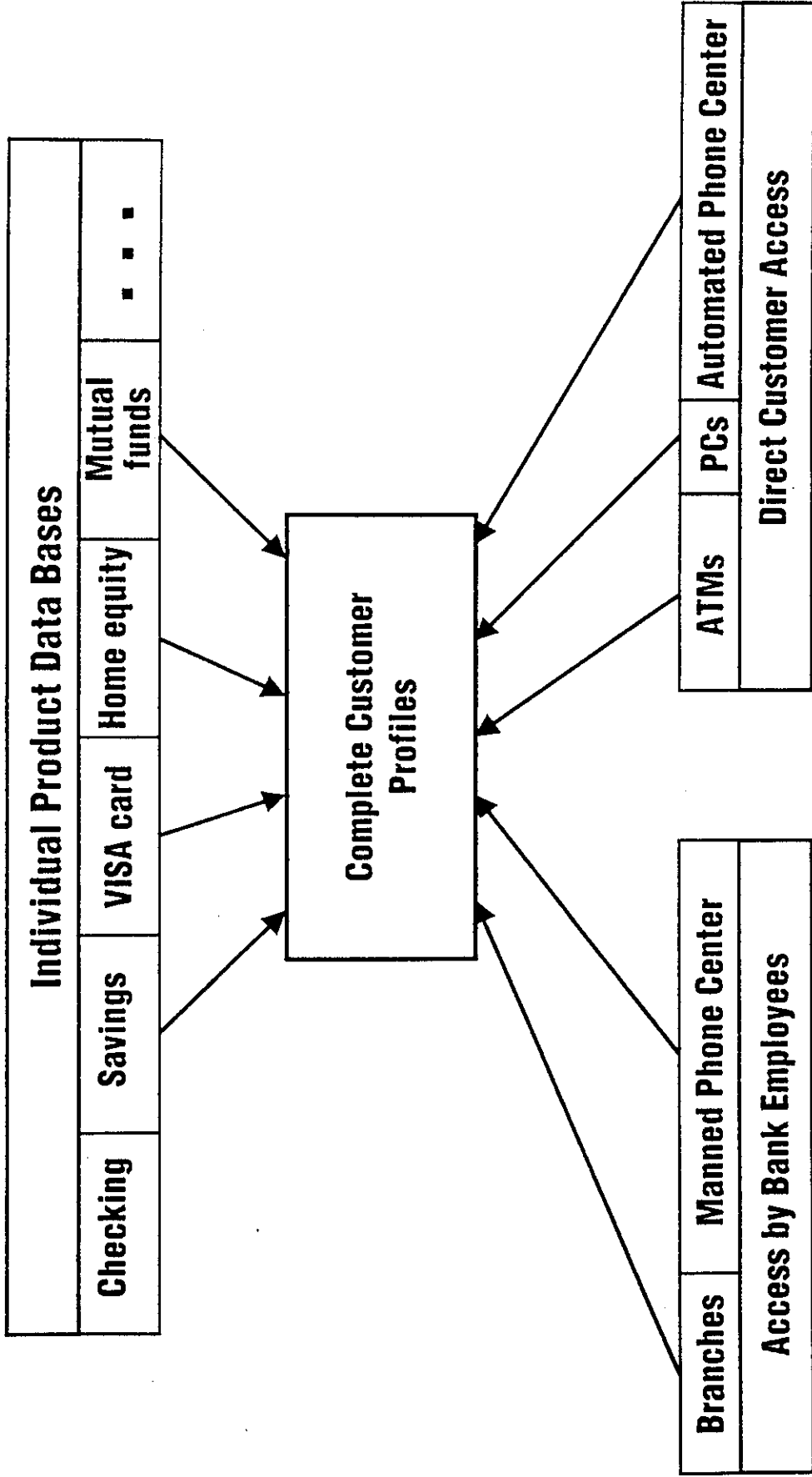


Figures on the far right show the percent shares for the fourth quarter, 1995

Source: Flow of funds database

Note: Fourth quarter data are reported for each year. The category "Other" includes life insurance reserves, investments in bank personal trusts, equity in non-corporate business security credit, & miscellaneous assets. MF=Mutual Fund.

Diagram 1 Data Base Consolidation



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