Federal Reserve Bank of Richmond

Neighborhoods and Banking

1994 Annual Report

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ABOUT THE BANK

The Federal Reserve Bank of Richmond serves the Fifth Federal Reserve District, which consists of the District of Columbia, Maryland, North Carolina, South Carolina, Virginia, and most of West Virginia. In addition to its headquarters in Richmond, Virginia, the "Richmond Fed" has branch offices in Baltimore, Maryland, and Charlotte, North Carolina. The Bank also operates check processing centers in Charleston, West Virginia, and Columbia, South Carolina.

The neighborhood shown in the photographs on the cover and on the facing page is part of the Fan District, located in Richmond, Virginia. The Fan gets its name from the way its streets fan out heading west from downtown Richmond.

Church Street, Charleston, South Carolina

Neighborhoods and Banking

by Jeffrey M. Lacker*

The economic condition of some of our low-income neighborhoods is appalling. Are banks responsible? Critics blame the banking industry for failing to meet the credit needs of poorer neighborhoods. Some claim that bankers pass up worthwhile lending opportunities because of racial or ethnic bias. Others argue that a market failure causes banks to restrain lending in low-income neighborhoods. They claim that joint lending efforts by many banks in such neighborhoods would be profitable, but no single bank is willing to bear the cost of being the pioneer.

The central statute regulating the relationship between bank lending and neighborhoods, the Community Reinvestment Act of 1977 (CRA, or "the Act"), was inspired by the critics' view that banks discriminate against low-income communities.[1] The Act directs the bank regulatory agencies to assess the extent to which a bank meets "the credit needs of its entire community, including low- and moderate-income neighborhoods." In a similar spirit, the Home Mortgage Disclosure Act (HMDA) requires depository institutions to disclose mortgage originations in metropolitan areas by census tract. The annual HMDA reports routinely show large disparities in mortgage flows to minority and white neighborhoods, bolstering the critics' case.

> THE ECONOMIC CONDITION OF SOME OF OUR LOW-INCOME NEIGHBORHOODS IS APPALLING. ARE BANKS RESPONSIBLE?

Defenders of the banking industry attribute the disparity in credit flows to differences in the creditworthiness of potential borrowers, information that is unavailable from the HMDA reports. They view the CRA as a burdensome interference in otherwise well-functioning credit markets and as a regulatory tax on banking activity. They argue that the decay of low-income neighborhoods, while deplorable, is beyond the capacity of the banking industry alone to repair.[2]

The CRA is currently attracting renewed attention. Public release of expanded HMDA reports, along with widely publicized research suggesting bank lending discrimination, has sparked complaints that banks neglect low-income neighborhoods. Critics now assert that regulators have been too lax in implementing the CRA, and they press for regulations

*The author has benefited from comments by Marvin Goodfriend, Tom Humphrey, Tony Kuprianov, Stacey Schreft, and John Weinberg. The views expressed are the author's alone and do not necessarily reflect the views of the Federal Reserve Bank of Richmond or the Federal Reserve System.

based on measures of bank lending in low-income neighborhoods. In response, federal banking agencies recently proposed revisions to the regulations implementing the CRA that would base a bank's assessment in part on quantitative measures of lending in low-income neighborhoods.[3] Banks' defenders argue that the regulations are already too burdensome and that numerical measures inevitably would come to resemble lending quotas. Banks would be induced to make loans to uncreditworthy borrowers, risking losses to the deposit insurance funds and, ultimately, to taxpayers.

This essay reexamines the rationale for the CRA. A reconsideration seems worthwhile in light of the dire condition of our poor neighborhoods on the one hand, and the demonstrable risks to banks and taxpayers on the other. After a review of the empirical literature relevant to critics' claims, I will argue that there is little conclusive evidence that banks fail to meet the credit needs of low-income neighborhoods per se. Instead, the CRA regulations should be understood as a transfer program, aimed at redistributing resources to low-income neighborhoods. The basic goal of the CRA to improve conditions in distressed neighborhoods is obviously a worthy one. But the lending and community investment obligations impose an implicit tax on the banking industry for which there is little justification. Nonprofit community development organizations (CDOs) also redistribute resources through subsidized lending in low-income neighborhoods and represent an alternative to imposing a potentially unsustainable burden on banks. Directing investment toward low-income neighborhoods could be better accomplished by carefully subsidizing existing institutions that specialize in community development, rather than by imposing a burdensome and potentially risky implicit tax on the banking system.

WITHOUT CONTROLLING FOR DIFFERENCES IN THE DEMAND FOR CREDIT, THERE IS LITTLE ONE CAN SAY ABOUT CONSTRAINTS ON THE SUPPLY OF CREDIT TO MINORITY NEIGHBORHOODS.

DO BANKS REDLINE?

The legislative history of the Community Reinvestment Act makes clear that the Act was based on the premise that banks engage in "redlining." Senator William Proxmire, principal sponsor of the CRA, defined redlining during debate on the Senate floor:

> By redlining ... I am talking about the fact that banks and savings and loans will take their deposits from a community and instead of reinvesting them in that community, they will invest them elsewhere, and they will actually or figuratively draw a red line on a map around the areas of their city, sometimes in the inner city, sometimes in the older neighborhoods, sometimes ethnic and sometimes black, but often encompassing a great area of their neighborhood.[4]

The term "redlining" dates back to the 1930s, when the Home Owners Loan Corporation and the Federal Housing Administration (FHA) used detailed demographic and survey analysis to classify city neighborhoods for lending risk.[5] The agencies adopted standardized appraisal and underwriting practices that embodied the common real estate practice of the time of rating neighborhoods in part on the basis of their current and prospective racial and ethnic composition.[6] Blocks with the lowest of four grades were color-coded red on secret maps. A 1939 FHA *Underwriting Manual* warned that "if a neighborhood is to retain stability, it is necessary that properties shall continue to be occupied by the same social and racial classes."[7] While government agencies retreated from explicitly racial policies after the 1948 U.S. Supreme Court decision against racial deed covenants, neighborhood racial composition apparently continued to affect appraisals into the 1970s.[8]

Shepherdstown, West Virginia

As evidence of continuing redlining, legislators cited the results of numerous studies in the early 1970s by community groups and local governments. The availability of HMDA data in the mid-1970s spurred further redlining research in the academic and policy communities. Although critics often cite discrimination against older or lower-income neighborhoods, research has addressed almost exclusively redlining on the basis of a neighborhood's racial composition. The studies documented large disparities in mortgage lending activity, which led critics of banks to conclude that they had unfairly restricted loan supply in predominantly minority neighborhoods and thus had failed to serve the credit needs of their communities.[9]

This first-generation research failed to show, however, that supply rather than demand was responsible for the lending disparities. A basic premise of the redlining hypothesis is that banks curtail the supply of credit to a neighborhood for noneconomic reasons such as racial composition. Many factors that influence the demand for mortgage credit by qualified borrowers also vary across neighborhoods: income and wealth levels, owner-occupancy rates, and housing turnover rates, for example. Moreover, many of these factors are known to be correlated with the racial composition of a neighborhood. Without controlling for differences in the demand for credit, there is little one can say about constraints on the supply of credit to minority neighborhoods.

Subsequent redlining research sought to remedy this problem using information on the economic characteristics of neighborhoods and individual loan applicants. When such information is taken into account, mortgage flows and loan approval rates appear unrelated to neighborhood racial composition. For example, Schill and Wachter (1993) estimate models of banks' loan approval decisions. In their simplest model, the neighborhood racial composition is significantly related to approval probability, but when neighborhood characteristics such as median income, vacancy rate, and age of the housing stock are included, neighbor-

Genesis Park, Charlotte, North Carolina

hood racial composition is no longer important. Similarly, Canner, Gabriel, and Woolley (1991) find that, after controlling for individual and neighborhood measures of default risk, there is no evidence of discrimination based on the racial composition of neighborhoods. Several other studies confirm these findings.[10] Research thus has failed to uncover any evidence that banks discriminate against neighborhoods on the basis of racial composition.[11]

DO BANKS DISCRIMINATE AGAINST INDIVIDUALS?

Redlining is distinct from racial discrimination against individuals because not all minority applicants live in redlined neighborhoods.[12] Although research has found little evidence of discrimination against minority *neighborhoods,* recent research has uncovered evidence consistent with discrimination against individual minority loan *applicants.* The most widely publicized evidence comes from the HMDA data. In 1989, Congress amended the Home Mortgage Disclosure Act to require lenders to report the disposition of every mortgage loan application, along with the race or national origin, gender, and annual income of each applicant. Numerous press reports have focused on the disparities between whites and minorities in the fraction of applicants denied credit. For example, the 1993 data show that for conventional home purchase loans, 34 percent of African-American applicants and 25 percent of Hispanic applicants were denied credit, while only 15 percent of white applicants were denied credit.[13]

RESEARCH ... HAS FAILED TO UNCOVER ANY EVIDENCE THAT BANKS DISCRIMINATE AGAINST NEIGHBORHOODS ON THE BASIS OF RACIAL COMPOSITION.

By themselves, however, simple tabulations of HMDA data are inconclusive for the same reason that raw mortgage flow data are misleading. The HMDA data report applicant income, but not credit history or other economic characteristics. Without controlling for applicant creditworthiness, the disparity in mortgage loan denial rates in the HMDA data could reflect the disadvantaged economic status of minorities, rather than noneconomic discrimination by banks. It is well known that racial and ethnic groups differ significantly on many dimensions of creditworthiness. For example, the average minority individual has lower income, lower net worth, and lower financial asset holdings than does the average white American. Furthermore, minority mortgage applicants are more likely to have adverse credit histories and to request larger loans relative to property value, factors associated with higher default risk.[14] In short, differentiating between racial discrimination and racial disparities in creditworthiness is difficult.

THE BOSTON FED STUDY

A recent study by economists at the Federal Reserve Bank of Boston has gone the farthest toward solving this problem.[15] They asked banks and mortgage companies for detailed information from the loan applicant files for a sample of Boston HMDA data for 1990. They obtained data on housing expenses, total debt payments, net wealth, credit and mortgage payment histories, appraised property values, whether properties were single- or multi-family dwellings, whether applicants were self-employed, and whether applicants were denied private mortgage insurance. Combining this information for a sample of 3,062 individual applicants with applicant race and the unemployment rate in the applicant's industry, they estimated the probability of a particular mortgage loan application being denied.

> ALTHOUGH RESEARCH HAS FOUND LITTLE EVIDENCE OF DISCRIMINATION AGAINST MINORITY NEIGHBORHOODS, RECENT RESEARCH HAS UNCOVERED EVIDENCE CONSISTENT WITH DISCRIMINATION AGAINST INDIVIDUAL MINORITY LOAN APPLICANTS.

The study's major finding is that, after controlling for the financial, employment and credit history variables they were able to observe, race still had a highly significant effect on the probability of denial. The results imply that minority individuals with the characteristics of an average white applicant have a 17 percent denial rate compared to an 11 percent denial rate for white applicants with the same characteristics. Moreover, the Boston Fed study suggests that whatever discrimination takes place is of a subtle form. Whereas applicants of all races with unblemished credentials were almost certain to be approved, the study found that the vast majority of applicants had some imperfection. As a result, lenders have considerable discretion to consider compensating factors in evaluating creditworthiness. The Boston Fed researchers suggest that "lenders seem more willing to overlook flaws for white applicants than for minority applicants."[16]

These findings are consistent with the widely held view that lending discrimination is common in housing markets. A recent survey found that 69 percent of African Americans and 33 percent of whites do not feel that African Americans have an equal opportunity for credit loans and mortgages. Housing discrimination also has been the focus of housing market audit studies, in which matched pairs of testers, one white and one minority, respond to advertisements for rental or sales properties. Such studies have found evidence of differential treatment based on race, such as African Americans not being shown certain available properties. The few pilot studies on home mortgage lending discrimination at the pre-application stage are too small to be conclusive. Anecdotal reports of lending discrimination are sometimes cited as well.[17]

Pungo Village, Belhaven, North Carolina

INTERPRETING THE BOSTON FED RESULTS

Although anecdotes and evidence from audit studies are suggestive, the Boston Fed study remains the most rigorous evidence available of home mortgage lending discrimination.[18] Despite the study's sophistication, however, considerable uncertainty remains concerning its interpretation. Some researchers have questioned the reliability of the data and the empirical model underlying the study.[19] Although the critiques are far from definitive, replication of the study's results using different data sets obviously would increase confidence in its findings. Seldom is a single retrospective study taken as conclusive, particularly in the social sciences, and the Boston Fed study is the only research on lending discrimination that explicitly controls for individual applicants' credit history. Further research would be especially valuable in view of the plausible alternative hypotheses that are consistent with the Boston Fed results.

> FURTHER RESEARCH WOULD BE ESPECIALLY VALUABLE IN VIEW OF THE PLAUSIBLE ALTERNATIVE HYPOTHESES THAT ARE CONSISTENT WITH THE BOSTON FED RESULTS.

One such alternative view is that the variables in the study measuring creditworthiness are imprecise or incomplete and fail to capture completely the judgment of a hypothetical unbiased loan officer. If there is any random discrepancy between applicants' true creditworthiness and their creditworthiness as measured by model variables, there is likely to be a bias in measuring discrimination. When true creditworthiness is inaccurately measured, it is very difficult to distinguish racial discrimination from unmeasured racial disparities in creditworthiness. If true creditworthiness is associated with applicant race, the model will indicate that race affects the probability of denial, even if race plays no direct causal role. If true creditworthiness is lower on average for minority applicants, then there will be a bias toward finding discrimination against minorities.[20]

The fact that measured creditworthiness is statistically associated with race suggests that this condition holds. Regulatory field examiners report that it is often difficult to find matched pairs of loan files corroborating discrimination detected by a statistical model or summary statistics. Examination of applicant files often reveals explanatory considerations that are not captured by any model variables. The credit history variables in the Boston Fed study are simple functions of the number of missed payments or whether the applicant ever declared bankruptcy, and do not reflect the reasons for any delinquencies. Evaluating explanations of past delinquencies is at the heart of credit underwriting; some will indicate poor financial management skills or unstable earnings, while others will reflect response to unusual one-time financial shocks or inaccurate credit reports. It seems quite plausible, therefore, that the Boston Fed findings are an artifact of our inability to capture complex credit history information in a tractable quantitative representation.

Another hypothesis consistent with the evidence from the Boston Fed study is that minority borrowers are more likely to default than equally qualified white borrowers, so lenders implicitly use race as an indicator of creditworthiness in marginal cases, above and beyond the information provided by income, balance sheets, or credit history. Such behavior, often called "statistical discrimination," might be economically rational, though still illegal. The statistical discrimination and measurement error hypotheses are closely related because both assume that the outside analyst does not observe true creditworthiness. The distinction is that under the measurement error hypothesis the loan officer observes true creditworthiness, while under the statistical discrimination hypothesis the loan officer does not directly observe credit quality but uses race as a proxy.

A recent study of mortgage default data supports these alternative explanations. The study found that an African-American borrower is more likely to default than a white borrower, even after controlling for income, wealth, and other observable borrower characteristics.[21] Why would a minority borrower be more likely to

Adams Morgan, Washington, D.C.

default than an equally qualified white borrower? Mortgage defaults often are attributable to "trigger events," such as involuntary job loss or large unexpected health care costs, that sharply reduce the borrower's ability to repay.[22] Most people are poorly insured against such risks, and it seems plausible that minorities experience these events more often than whites.[23] For example, unemployment rates are higher for minorities than for whites, but more important, the probability of involuntary job loss is higher for minorities.[24] Minority household holdings of financial assets are far smaller on average, reducing their ability to withstand uninsured financial shocks.[25] Minorities tend to be less healthy on average and are more likely to lack health insurance.[26] There seems to be no research on whether these differences in the likelihood of trigger events persist after controlling for income, wealth, credit history, and other factors observable at the time of the application. But it seems plausible that these risk factors can explain the disparity in mortgage default rates and can thereby account for disparities in loan approval rates. This line of reasoning suggests that disparities outside lending markets — in labor markets, for example — might well be responsible for what appears to be lending discrimination.[27]

[D]ISPARITIES OUTSIDE LENDING MARKETS — IN LABOR MARKETS, FOR EXAMPLE — MIGHT WELL BE RESPONSIBLE FOR WHAT APPEARS TO BE LENDING DISCRIMINATION.

One other consideration that lends support to these alternative explanations of the Boston Fed results is the presumption that competitive forces should act to eliminate unprofitable discriminatory practices. If some lenders discriminate on noneconomic grounds, they ought to systematically lose business over time as long as there are some lenders that do not discriminate. The discriminatory lenders may end up serving only part of the market, but nondiscriminatory lenders would be eager to fill the void.[28]

To summarize, the empirical evidence on bank lending discrimination based on an applicant's race seems inconclusive. A skeptic with a strong prior belief in the ability of market forces to restrain unprofitable discrimination could easily remain unconvinced by the Boston Fed study. On the other hand, critics with a strong prior belief in the prevalence of lending discrimination will find striking confirmation in the Boston Fed study. Between these two extremes lies a range of reasonable assessments.[29]

What does the empirical evidence on discrimination, such as it is, imply about appropriate public policy? Discrimination against mortgage applicants on the basis of an individual's race calls for vigorous enforcement of fair-lending laws. However, the lack of evidence of discrimination against neighborhoods per se raises questions about the need for a lending obligation aimed at neighborhoods. Not all minority applicants have low incomes or live in low-income neighborhoods, so the connection between racial discrimination against individuals and lending to low-income neighborhoods is doubly obscure. The evidence that we do have, which suggests the possibility of racial discrimination against *individuals* but not neighborhoods, provides little reason for a law like the CRA that targets lending to low-income *neighborhoods*.[30]

IS THERE SOME OTHER SOURCE OF MARKET FAILURE?

Lacking evidence of bank discrimination against neighborhoods, is there some other rationale for a government-imposed lending obligation? Could CRA-induced lending be socially desirable even though banks would otherwise find it unprofitable? In other words, is there a market failure affecting lending in low-income neighborhoods?[31]

A SKEPTIC WITH A STRONG PRIOR BELIEF IN THE ABILITY OF MARKET FORCES TO RESTRAIN UNPROFITABLE DISCRIMINATION COULD EASILY REMAIN UNCONVINCED BY THE BOSTON FED STUDY.

Many writers have pointed out that low-income housing markets are frequently characterized by "spillover effects" because the physical condition and appearance of one property affects the desirability of nearby properties. This leads to a strategic interaction among property owners; improvements to a house in a well-maintained block are worthwhile but would have little value if the rest of the block is poorly maintained or vacant. A run-down neighborhood might be worth renovating from society's point of view, yet no single property owner has an incentive to invest. This strategic interaction extends to potential lenders as well. Each bank judges an applicant in isolation, ignoring the effect on nearby properties. Taking the poor condition of neighboring properties as given, the loan might appear to be a poor risk, even though simultaneous loans to improve all properties might be worthwhile. All would be better off if lenders could coordinate their decisions and agree to lend, since those loans would be profitable. But in the absence of coordination, each bank's reluctance to lend confirms other banks' reluctance to lend and becomes a self-fulfilling prophecy of neighborhood decline. In these circumstances, a genuine market failure could be said to occur.[32]

Spillovers seem quite important in affluent residential and commercial markets as well. The preeminence of location in valuing suburban homes epitomizes the importance many homebuyers place on the characteristics of the surrounding neighborhood. Office buildings often are clustered to take advantage of common services or homogeneity of appearance. What is striking about spillovers in more affluent real estate markets is that they do not seem to cause any serious market failure; private market mechanisms seem quite capable of coordinating investment decisions. For example, suburban housing is often developed in large parcels of very similar homes, ensuring the first buyers that subsequent investment will not blemish the neighborhood. The development is coordinated by a single entity that either builds all the homes or enforces homogeneity through building restrictions and deed covenants.

From this perspective, it is hard to see just what would impede similar market mechanisms in low-income neighborhoods. A substantial part of the economic role of a real estate developer is to coordinate investment decisions, internalizing the spillovers inherent in closely neighboring investments. If a coordinated investment in a low-income neighborhood is in society's best interest, why wouldn't a private developer assemble the capital to finance the investment?

ON THE WHOLE ... IT SEEMS DIFFICULT TO ARGUE THAT LENDING IN LOW-INCOME NEIGHBORHOODS IS ANY MORE BESET BY MARKET FAILURES THAN LENDING IN AFFLUENT NEIGHBORHOODS.

Several notable differences between the suburbs and low-income, inner-city neighborhoods might explain why coordinating investments is more difficult or costly in city neighborhoods. Low-income urban neighborhoods tend to be older, higher-density areas, while development in the suburbs is often on virgin tracts of undeveloped land. Assembling control of the requisite property rights is arguably less costly for the latter. Another factor affecting the ease of assembling property rights is the higher incidence in the cities of governmental encumbrances such as rent controls or tax liens. The greater incidence of crime in urban areas also inhibits development by making it more costly to provide residents with a given level of security.

Disparities between urban and suburban markets in the costs of coordinating investments, however, do not necessarily provide a rationale for government stimulus of low-income community development. The expense of keeping crime out of a neighborhood, for example, is a real social cost that deserves to be addressed directly, and there is no reason to encourage people to ignore it in their investment decisions. Similarly, government restrictions on property rights distort decisions, although usually with the aim of benefiting some particular group. These distortions impose genuine costs, and it is hard to see why we should encourage people, including lenders, to discount them. In sum, these very real costs do not, by themselves, represent a market failure.

Lang and Nakamura (1993) describe a more subtle type of spillover. The precision of appraisals, they argue, depends on the frequency of previous home-sale transactions in the neighborhood. A low rate of transactions makes appraisals imprecise, which increases mortgage lending risk in the neighborhood, reducing mortgage supply, and thereby reducing the frequency of transactions.

Georgetown, Washington, D.C.

A neighborhood can get stuck in a self-reinforcing condition of restricted mortgage lending and low housing stock turnover. The key impediment to efficiency in this story is the failure of lenders and homebuyers to account for the social benefit of their transaction on others' ability to make accurate appraisals in the future.

While this argument seems theoretically plausible, some important problems remain. For example, it is not clear what limits this phenomenon to low-income neighborhoods. Affluent housing markets are quite prone to transitory declines in transactions volume, but rarely seem to get stuck in a depressed condition. And again, it is not clear why market mechanisms would be unable to coordinate transactions in low-income neighborhoods as they do in many other real estate markets. On the whole, then, it seems difficult to argue that lending in low-income neighborhoods is any more beset by market failures than lending in affluent neighborhoods.

IS REDISTRIBUTION THE PURPOSE OF THE CRA?

If the CRA cannot be rationalized as a corrective for lending discrimination or some other identifiable market failure, then the CRA must be essentially a redistributive program that should be justified by equity rather than efficiency considerations. Indeed, the desire to simply transfer resources to low-income neighborhoods is understandable in view of their appalling condition. But how should such a transfer be carried out?

The CRA has been likened to a tax on conventional banking linked to a subsidy to lending in low-income neighborhoods.[33] Although banks are examined regularly for compliance with CRA regulations and receive public CRA ratings, enforcement relies on the power of the regulatory agencies to delay or deny an application for permission to merge with or acquire another bank or to open a new branch. The prospect of having an application delayed or denied, along with the public relations value of a high CRA rating, provides banks with a tangible incentive for CRA compliance.[34] According to this view, by tilting banks' profit-loss calculations, the CRA regulations give banks an incentive to make loans they would not otherwise have made. To the extent that banks are


Harpers Ferry, West Virginia

induced to make loans and investments they would not otherwise have found profitable, the CRA regulations encourage banks to subsidize lending in low-income neighborhoods. Investments at concessionary rates and CRA-related outlays, such as for marketing programs and philanthropic contributions, directly reduce a bank's net earnings. The gap between the cost of these loans to borrowers and what they would have cost in the absence of the CRA represents a transfer to the low-income neighborhood.

Two questions naturally arise, though, if the CRA is viewed as a redistributive program. First, why should we provide low-income neighborhoods with an enhanced credit supply rather than unencumbered cash payments? Second, why should the banking industry be the source for such transfers?

WHY SUBSIDIZE LENDING IN LOW-INCOME NEIGHBORHOODS?

If the goal is to make the residents of low-income neighborhoods better off, why not provide unrestricted transfer payments? Economists generally argue that unrestricted income transfers are more efficient than equally costly transfers tied to particular goods or services. This efficiency arises from the expanded choices available to recipients. Community development subsidies via enhanced mortgage lending, in contrast, tie transfers to borrowing and homeownership. Why encourage low-income households to take on more debt? And why should subsidies to residents of low-income neighborhoods be tied to their ownership of housing?

A PLAUSIBLE ARGUMENT CAN BE MADE FOR TARGETING SUBSIDIES TO LOW-INCOME HOMEOWNERS AS A WAY TO RECTIFY THE BANEFUL HOUSING AND LENDING POLICIES OF THE PAST.

A plausible argument can be made for targeting subsidies to low-income homeowners as a way to rectify the baneful housing and lending policies of the past. A variety of explicit policies at both public and private institutions in the first half of this century encouraged the flight of white middle-class residents from inner cities to the suburbs. Metropolitan real estate boards adopted explicitly racial appraisal standards and attempted to prevent members from integrating neighborhoods.[35] The FHA provided a significant stimulus to homeownership, but agency underwriting policies and housing standards strongly favored newly constructed homes in all-white suburbs.[36] It recommended racially restrictive deed covenants on properties it insured until the Supreme Court ruled them unenforceable in 1948. The banking industry apparently adopted similar underwriting policies.[37] Some researchers cite these policies as important in the creation and persistence of racial segregation and the concentration of poverty in the inner cities.[38]

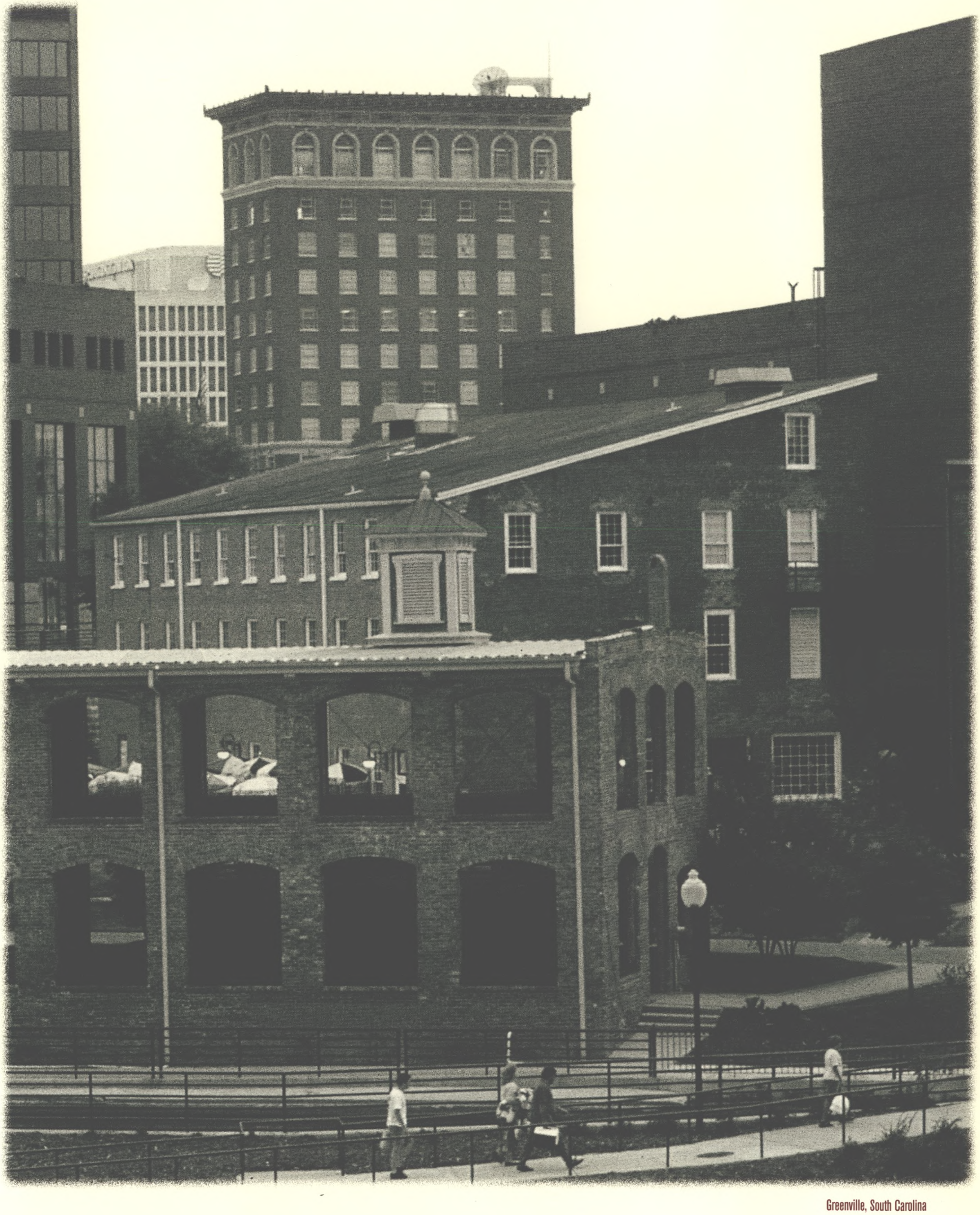
This rationale for the CRA invokes the notion of corrective justice, the normative idea that compensation should be made for past inequities.[39] The discriminatory practices of earlier times depressed the welfare of low-income minority communities by raising the cost of home mortgages there relative to more affluent suburban communities, although the lack of evidence of redlining in recent years suggests that noneconomic cost differentials have largely been removed. Subsidies that lower the cost of home mortgage lending in low-income minority communities — in contrast to unrestricted cash payments — transfer resources to precisely the same groups that the earlier discriminatory polices transferred resources *from* — nearly creditworthy low-income homeowners. As Peter Swire (1994) notes, "Only a very small subset of the effects of discrimination [in housing markets] can be traced with enough specificity to permit legal redress" (p. 95). Thus, it may be quite difficult to target unrestricted income transfers to individuals directly harmed by past discriminatory practices. Mortgage lending subsidies that mirror the implicit tax of historic home lending discrimination might be the most efficient way of compensating those who were harmed.

New Market, Maryland

SHOULD BANKS SUBSIDIZE LENDING?

Why should depository institutions be singled out for the affirmative obligation imposed by CRA regulations? Why do other lending intermediaries such as mortgage, finance, and life insurance companies escape obligation? More broadly, why should financial intermediaries bear the burden rather than society as a whole? Senator Proxmire provided a partial answer when introducing the original Act by noting that a bank charter "conveys numerous benefits and it is fair for the public to ask something in return."[40] The CRA, in this view, is a quid pro quo for the special privileges conferred by a bank charter, which incidentally explains why the Act links assessment to a bank's "application for a deposit facility." To the extent that CRA obligations are unprofitable or are equivalent to charitable contributions, apparently they are to be cross-subsidized from the stream of excess profits otherwise generated by the bank charter.

Morganton, North Carolina



Greenville, South Carolina

The difficulty with this role for the CRA is that cross-subsidization may be infeasible.[41] The competitive environment facing banks has changed greatly since passage of the CRA in 1977. Over the last two decades the legal and regulatory restrictions on competition among banks have been substantially reduced, a trend that will continue with the implementation of the Interstate Banking Efficiency Act of 1994. Perhaps more important, rapid changes in financial technology are eroding the advantages of banks relative to nonbank competitors. Consequently, imposing a unique burden on the banking industry might only diminish banks' share of intermediated lending. The regulatory burden ultimately would fall on bank-dependent borrowers in the form of higher loan rates and on bank-dependent savers in the form of lower deposit rates. And to the extent that lending induced by the CRA regulations increases the risk exposure of the deposit insurance funds, taxpayers who ultimately back those funds bear some of the burden as well.

> THE REGULATORY BURDEN ULTIMATELY WOULD FALL ON BANK-DEPENDENT BORROWERS IN THE FORM OF HIGHER LOAN RATES AND ON BANK-DEPENDENT SAVERS IN THE FORM OF LOWER DEPOSIT RATES.

Senator Proxmire suggested a practical reason banks are asked to shoulder the CRA burden when he remarked that "there is no way the Federal Government can solve the problem [of revitalizing the inner cities] with its resources."[42] From this perspective, the CRA imposes a tax on banks to avoid an explicit general tax increase. But a general tax increase is usually less costly to society than an equal-sized tax on a single industry because spreading the burden over a wider base minimizes the resulting distortions in economic activity. From this perspective, imposing the CRA tax on banks rather than the economy as a whole involves an excess social cost.

Compelling banks to provide subsidized lending in low-income neighborhoods might be warranted nevertheless if banks have a unique comparative advantage in doing so. The cost savings from such a comparative advantage might justify incurring the excess social cost of the CRA burden on banks. But if no comparative advantage can be identified, we ought to consider alternative means of providing subsidized lending that avoid the excess cost of a tax levied solely on banks.

COMMUNITY DEVELOPMENT ORGANIZATIONS PROVIDE SUBSIDIZED LENDING

Community development organizations (CDOs) are institutions that promote investment in target neighborhoods, working closely with homebuyers, private lenders, businesses, government agencies, and private donors.[43] They primarily arrange loans for development projects and homeowners, and their costs are generally funded by grants and donations. Their goal of revitalizing decaying neighborhoods matches exactly the avowed purpose of the CRA. CDOs represent an alternative to channeling subsidized lending through the banking system.

Neighborhood Housing Services of Baltimore (NHSB) is one such organization.[44] The main focus of the NHSB is promoting occupant homeownership, improving the physical appearance of neighborhoods, and "stabilizing" the real estate market. The NHSB has targeted four different Baltimore neighborhoods since its inception in 1974. Within a neighborhood, it often targets particular blocks by systematically searching for owner-occupants for each property on the block. When it finds a suitable buyer for a property, NHSB often arranges for extensive renovations, handles the design and bidding, and selects a contractor.

> COMPELLING BANKS TO PROVIDE SUBSIDIZED LENDING IN LOW-INCOME NEIGHBORHOODS MIGHT BE WARRANTED ... IF BANKS HAVE A UNIQUE COMPARATIVE ADVANTAGE IN DOING SO.

A great deal of the work of NHSB involves lending. It provides extensive education and counseling to help prospective borrowers qualify for loans. This assistance can involve establishing bank accounts, repairing credit records, documenting sources of income, learning about home purchase and mortgage application procedures, and saving for a down payment. Qualification often requires a number of sessions lasting nearly a year or more. Counseling serves as a screening process — NHSB officials often talk of seeking a "match" between a property and a borrower. After the purchase, counselors provide advice to financially strapped borrowers and may help them renegotiate payment schedules.

COMMUNITY DEVELOPMENT LENDING IS DIFFERENT

The activities of NHSB are different in many ways from the usual for-profit home mortgage lending that banks perform. NHSB coordinates a package of home purchase financing for a borrower that is generally more complex than typical arrangements. A first mortgage is obtained, sometimes from a conventional lender, often on conventional terms, but occasionally through a special mortgage program tailored to low-income borrowers. NHSB also makes first mortgages from its own loan fund. Some NHSB loans are sold in a secondary market run by a national organization, Neighborhood Housing Services of America. A second mortgage is usually crucial to the package since borrowers generally have just a minimal amount of cash. NHSB arranges for the second mortgage, usually from its own loan fund. Further funding may be available from a "Closing Cost Loan Program" it administers. Loan terms often are designed to retire the junior debt first before retiring principal on the first mortgage. NHSB officials often refer to their supplemental financing as "soft second" money, since they are sometimes willing to reschedule payments if the borrower suffers an adverse financial shock.

Middle Towne Arch, Norfolk, Virginia

The NHSB goes to great lengths to minimize the credit risks posed by its clients. Extensive information about borrowers emerges in the early counseling stage. Borrowers are carefully selected for the right "fit" with the property in the sense that the payments will be affordable. Borrowers generally are required to save a down payment of at least $1,000, which provides an equity interest in the home and helps demonstrate the discipline required to manage mortgage payments. NHSB also closely monitors the neighborhood and encourages close connections between residents through community clean-up projects, neighborhood organizations, and crime patrols. This helps NHSB learn early on about a borrower's financial difficulty before a costly mortgage default, generally the last stage of financial distress for a conventional borrower. In addition, renovations are designed in part to minimize the chance of costly repairs — new furnaces and appliances are often installed, even when existing units satisfy city housing codes. Active post-purchase counseling helps minimize the ex post costs of financial distress.

Second, the NHSB spends much time coordinating investment in targeted neighborhoods. A primary goal of NHSB is to achieve a "generally good physical appearance" in a neighborhood. It tries to develop vacant properties, rehabilitate existing properties, and improve commercial areas. It encourages owner occupancy in the belief that owners who occupy their own home spend more on maintenance and improvements. It tries to influence local government spending on amenities such as streets, sidewalks, and public lands. Sometimes it helps arrange the departure of taverns or other "undesirable" businesses. In short, much of NHSB's activity involves trying to overcome just the sort of neighborhood externalities discussed earlier in this essay.

Third, NHSB lending requires substantial subsidies. Its counseling, monitoring, and coordination activities are quite labor-intensive, and home purchase transactions are often subsidized. Operating and program expenditures are funded out of federal, state, and local grants and private donations. Officials admit that they often "overimprove" a house, undertaking renovations that cost more than the resulting increase in market value. NHSB officials also recognize that their second-mortgage loans are not "bankable" in that no private

Ellicott City, Maryland

lender would lend on the same terms. In fact, loans sold to Neighborhood Housing Services of America, a national umbrella group, are backing for notes sold to institutional investors who agree to receive a below-market rate of return on their "social investment."

SHOULD BANKS DO COMMUNITY DEVELOPMENT LENDING?

The community development lending performed by CDOs is the type of subsidized lending encouraged by CRA regulations. As suggested above, however, the community development activities of CDOs like NHSB differ in many respects from traditional banking. Do banks have any comparative advantage in providing community development lending? Furthermore, how many of these activities are banks capable of performing safely?

> THE COMMUNITY DEVELOPMENT LENDING PERFORMED BY CDO'S IS THE TYPE OF SUBSIDIZED LENDING ENCOURAGED BY CRA REGULATIONS.

First, the concessionary lending done by NHSB seems inappropriate for insured depository institutions. Although CRA regulations require that lending be "sound," the regulations also encourage concessionary investments and charitable contributions toward community development. Banks get CRA credit for offering higher loan-to-value ratios and other "more flexible" lending terms, which can only mean more risky lending terms. In fact, in the newly proposed CRA regulations, concessionary community development investments are included alongside low-income neighborhood lending in assessing CRA compliance. This approach threatens to blur the distinction between concessionary and for-profit lending and could induce banks to make underpriced or excessively risky loans. In the absence of convincing evidence that banks pass up economically viable lending opportunities in low-income neighborhoods, the attempt to stimulate additional bank lending to these neighborhoods risks saddling the banking industry with a large portfolio of poorly performing mortgages if it has any effect at all. Since these debts would carry regulators' implicit imprimatur, forbearance in the event of widespread losses would be hard to avoid, as in the case of sovereign debt in the 1980s.

Maintaining a clear boundary at banks between concessionary and for-profit lending is thus crucial to the clarity and integrity of regulatory supervision. Examiners need to know whether a portfolio is intended to be profitable or philanthropic. Allowing government-insured banks to carry concessionary lending on their books hides the cost, unless the subsidy is explicitly recognized up front through higher loan loss reserves or discounting the value of the loan for interest rate subsidies. Funding concessionary lending explicitly out of retained earnings or bank capital subjects transfers to at least minimal accounting safeguards, ensures timely recognition of costs, and makes their redistributive nature clear. Better yet, concessionary community development lending could be conducted separately through a community development subsidiary of a bank's holding company. This would have the advantage of keeping such lending programs separate from the bank's conventional lending, making the evaluation of both portfolios easier.

Ghent Square, Norfolk, Virginia

One impediment to community development lending by banks or bank holding companies, however, is the extensive counseling that appears crucial to lending by NHSB and other CDOs. Unlike CDO counselors, bank loan officers face regulatory constraints on their ability to communicate with borrowers; under the Equal Credit Opportunity Act, they cannot tell an applicant what to do to qualify for a loan without triggering a formal application with the required documentation and disclosures. As a result, NHSB counselors learn far more about borrowers than would bank loan officers. Because the screening inherent in these programs appears to be essential to the viability of community development lending, banks often contract with community development groups to perform pre-application counseling. Thus, even bank holding company subsidiaries may require external assistance to perform community development lending.[45]

Would banks have any comparative advantage in community development lending that would motivate a community development requirement for banks? The experience of the NHSB suggests the answer is no. NHSB counselors have extensive contact with local bank lending officers and appear well informed about specialized loan programs available and the constraints associated with conventional for-profit lending. In addition, NHSB has extensive contact with residents through ongoing work with neighborhood associations, and thus sometimes has better information about borrowers than would a bank. If anything, then, CDOs would seem to have a comparative advantage over banks in the community development lending encouraged by the CRA regulations.

Banks have made substantial contributions of funds to community development, much of it under agreements negotiated with community groups.[46] Do banks have any special advantage at making such contributions? Perhaps their working involvement with local community development groups helps them compare and evaluate organizations. Bankers often speak of trying to select "truly responsible" organizations.[47] On the other hand, banks and other lenders appear to be a minority among NHSB's contributors. Most are corporations, individuals, and foundations in the Baltimore area, and it seems unlikely that they learned about NHSB through joint lending arrangements. Also, the national network of Neighborhood Housing Services organizations, along with explicit certification programs, assures some uniformity, making evaluation easier for outside investors and contributors. Thus, it is unclear why banks would have any advantage in evaluating subsidy recipients.

Festival Center, Washington, D.C.

To summarize, there does not seem to be a compelling rationale for imposing a costly lending obligation on banks. Ultimately such an obligation is a tax on bank-dependent borrowers and depositors. Similarly, there seems to be scant economic justification for looking to banks for the concessionary investments encouraged by the CRA regulations.

Harpers Ferry, West Virginia

WHERE DO WE GO FROM HERE?

Our low-income neighborhoods nevertheless remain in appalling condition. Community development lending seems to be a promising way of channeling resources toward improving conditions in these neighborhoods. The evidence summarized in this essay, however, suggests that the CRA is not an efficient vehicle for revitalizing decayed neighborhoods, despite its laudable goals.

An alternative to the CRA is to fund community development subsidies directly out of general tax revenues. The Community Development Banking Act (CDBA), signed into law in September 1994, provides federal funding for community development. This Act creates a new government corporation, called the Community Development Financial Institutions Fund, charged with providing financial and technical assistance to specialized, limited-purpose community development financial institutions (CDFIs), and authorizes expenditures of $382 million over four years.[48] Explicit appropriation for community development has distinct advantages over drawing subsidies from banks. Removing the implicit tax burden on banks would reduce existing distortions in financial flows and avoid the risks of concessionary lending. By directing assistance through organizations that have community development as their sole mission, monitoring and evaluation of such assistance would become transparent.

AN ALTERNATIVE TO THE CRA IS TO FUND COMMUNITY DEVELOPMENT SUBSIDIES DIRECTLY OUT OF GENERAL TAX REVENUES.

The CDBA leaves considerable uncertainty, however, about important aspects of the Fund's operation.[49] For example, the CDBA requires that a CDFI have "a primary mission of promoting community development," without defining the latter term. Other key provisions depend on undefined concepts like "significant unmet needs for loans or equity investments." More fundamentally, distributing public money to a network of small, information-intensive lending organizations can create adverse incentives in much the same way that deposit insurance can distort bank behavior. Moreover, the oversight and reporting provisions in the CDBA are notably less detailed than current banking legislation, and formal regulations have been left to the Fund to establish. Consequently, much will depend on the way in which the CDBA is implemented; in particular, effective screening and monitoring is essential. Nevertheless, the CDBA or something similar to it seems to be more promising than the CRA for dealing with the plight of the nation's low-income neighborhoods.

ENDNOTES

1. I will use the term "banks" throughout to refer to commercial banks and thrifts. Credit unions are currently exempt from the CRA.

2. I will use throughout the essay the less cumbersome term "low-income neighborhoods" to refer to the low- and moderate-income neighborhoods that are the focus of the CRA. The newly proposed CRA regulations define low-income neighborhoods as census tracts with median household income less than 50 percent of the median household income of the metropolitan statistical area (MSA). Moderate-income neighborhoods are defined as census tracts with median household income between 50 and 80 percent of the median household income of the MSA.

3. Board (1994).

4. *Congressional Record*, daily ed., June 6, 1977, S. 8958, cited in Dennis (1978). Senator Proxmire's definition of redlining also reflects the doctrine of localism in banking — the idea that the savings of a community should be invested locally rather than where returns are highest. See Macey and Miller (1993) for a critique.

5. See Woelfel (1994) for a description of the HOLC and the FHA.

6. Jackson (1985).

7. Quoted in Jackson (1985), p. 207.

8. In 1977 the American Institute of Real Estate Appraisers removed discriminatory racial references from their textbook as part of an agreement settling a federal lawsuit. See Art (1987), p. 1078.

9. See Canner (1982) and Benston (1979) for surveys.

10. See Avery and Buynak (1981), Holmes and Horvitz (1994), King (1980), Munnell et al. (undated), and Schill and Wachter (1994). Some studies have reported evidence of redlining, but in these the controls for individual characteristics are limited or absent. Bradbury, Case, and Dunham (1989) use data at the neighborhood level, but they employ a problematic credit flow variable that includes commercial as well as residential transactions. They do not control for individual economic characteristics. Calem and Stutzer (1994) also use neighborhood-level data, and so do not control for individual economic characteristics. Avery, Beeson, and Sniderman (1993) rely on HMDA data and census tract information, and so are unable to control for applicant wealth or creditworthiness. Although it is conceivable that future research will turn up evidence of redlining, it seems unlikely; the fact that studies with better controls for individual economic characteristics obtain smaller or negligible estimates of the effect of racial composition on mortgage outcomes suggests that the estimates we have are biased upward.

11. Critics also have charged that banks redline older and lower-income neighborhoods (see Art [1987], for example), but age of the housing stock and borrower income are both plausibly related to lending risk. As a result, statistical research of the type referred to above is unable to distinguish between legitimate underwriting practices and redlining these neighborhoods. I am unaware of any attempt to disentangle the two.

12. For example, in 1992, 39.2 percent of minority individuals lived outside of census tracts in which over half of the population was minority (derived from Canner, Passmore, and Smith [1994]).

13. Federal Financial Institutions Examination Council (1994).

14. On racial disparities in income and economic status, see, for example, Kennickell and Shack-Marquez (1992), Jaynes and Williams (1989), or the Symposium in the Fall 1990 issue of the *Journal of Economic Perspectives*. Munnell et al. (1992) report that loan-to-value ratios and adverse credit history variables are higher for minority applicants; see also Carr and Megbolugbe (1993). Canner and Luckett (1990) report that households headed by a minority are significantly more likely to have missed a debt payment, even after controlling for other household characteristics.

15. See Munnell et al. (1992).

16. Munnell et al. (1992), p. 3.

17. The survey data are from National Conference (1994). On audit studies in housing, see Fix and Struyk (1993), but particularly the critique by Heckman and Siegelman (1993). Cloud and Galster (1993) survey home mortgage lending audit studies, along with anecdotal reports of lending discrimination. The application of audit methodology to lending discrimination is inhibited by laws prohibiting applying for a mortgage under false pretenses. Audit methodology is thus limited to the more subjective problem of differential treatment at the pre-application stage.

18. Several redlining studies examined data for outcomes of individual mortgage applications. Some found that minority applicants were less likely than whites to obtain a mortgage loan, even after controlling for neighborhood economic characteristics. See Avery, Beeson, and Sniderman (1993), Shafer and Ladd (1981), Canner, Gabriel, and Woolley (1991), and Schill and Wachter (1993, 1994). None of these studies controlled for applicant credit history, and so they suffer from the same omitted-variable problem that plagues the analysis of the HMDA data. In related research, Hawley and Fujii (1991), Gabriel and Rosenthal (1991), and Duca and Rosenthal (1993), using data from the 1983 Survey of Consumer Finances, find that after controlling for individual characteristics, minorities are more likely than whites to report having been turned down for credit. Information on individual creditworthiness was quite limited, however, again leaving these studies vulnerable to the omitted-variable problem.

19. Horne (1994) reports on reexaminations of some of the loan files at the FDIC institutions participating in the study. Although he reports a large number of data errors, he does not reestimate the model, so no conclusion is possible about the effect of those errors. In addition, files were selected for reexamination in a way that would bias any reestimation. Liebowitz (1993) claims in an editorial page essay in *The Wall Street Journal* that correcting selected data-coding errors eliminates the finding of discrimination, but Carr and Megbolugbe (1993) and Glennon and Stengel (1994) document that the discrimination finding persists after systematic data-cleaning, suggesting bias in the way Liebowitz corrects errors. See also Browne (1993a). Zandi (1993) claims that omission of a variable assessing whether the institution reports that the applicant met their credit guidelines was responsible for the estimated race effect. Carr and Megbolugbe (1993) confirm that including this variable reduces the estimated race effect somewhat, but note that this subjective assessment by the lending institution is significantly related to an applicant's race, even after controlling for the objective economic characteristics of the applicant. See also Browne (1993b). Schill and Wachter (1994) also study the Boston Fed data set.

20. If a true explanatory variable is measured with noise, its regression coefficient will be biased toward zero. In that case, any other variable correlated with the true explanatory variable will be significant in the regression, even though it may play no direct causal role in explaining the behavior in question. Thus, measurement error is a very serious problem in statistical inference. See Johnston (1963) for a discussion of measurement error and Cain (1986) for a discussion of the implications for detecting discrimination.

21. Berkovec et al. (1994) use data on more than a quarter of a million FHA mortgages originated during 1987-1989. Their data do not include information on the borrower's credit history, but they estimate that including credit history would reduce the estimate of the race effect by only 30 percent. Barth, Cordes, and Yezer (1979, 1983), and Evans, Maris, and Weinstein (1985) also show that race is significantly related to default probabilities, but the omission of important variables weakens the interpretation of their results.

22. See Quercia and Stegman (1992) for a review of recent literature on mortgage default.

23. Cochrane (1991) reports evidence that households are poorly insured against involuntary job loss and long-term absences due to illness.

24. Jackson and Montgomery (1986), Blau and Kahn (1981), and Flanagan (1978).

25. Kennickell and Shack-Marquez (1992).

26. National Center for Health Statistics (1994).

27. See Jaynes (1990) for a survey of the labor market status of African Americans.

28. Calomiris, Kahn, and Longhofer (1994) suggest that a lack of "cultural affinity" between white loan officers and minority applicants may explain findings of discrimination. A lack of affinity might reduce the reliability and accuracy of loan officers' subjective evaluations, leading to higher standards for African Americans at predominantly white banks. The cultural affinity hypothesis, however, has trouble explaining the higher rejection rates found at minority-owned banks.

29. Public policy toward neighborhoods and banking could be aided greatly by research on the root cause of mortgage defaults: Why is it that trigger events such as health problems or involuntary job loss are so poorly insured? Such research might allow us to distinguish between competing explanations of disparities in credit flows across neighborhoods and ethnic groups. Furthermore, we might find that reducing disparities in the incidence of trigger events is more effective than affirmative lending obligations that encourage banks to ignore such disparities.

30. For a similar view, see the Shadow Financial Regulatory Committee (1994).

31. Market failure can occur in situations with spillover effects, since one person does not have to pay for the effect of their decision on the well-being of others, as when polluters do not pay for the damage caused by their emissions.

32. Guttentag and Wachter (1980) present this externality argument.

33. White (1993), Macey and Miller (1993).

34. The recent proposed revision to the regulations implementing the CRA would allow regulators to seek enforcement action in cases of "substantial noncompliance," the lowest possible CRA rating.

35. Helper (1969).

36. Jackson (1985).

37. Jackson (1985), p. 203.

38. See, for example, Wilson (1987) or Massey and Denton (1993). Homeowner preferences apparently play a role as well.

39. In a paper devoted to legal and economic analysis of the CRA, Swire (1994) discusses corrective justice as a "noneconomic" rationale for the CRA. He also discusses "distributive justice," which would also rationalize transfers but would not necessarily suggest they take the form of subsidized lending.

40. U.S. Congress (1977), p. 1. See also Fishbein (1993).

41. White (1993).

42. See U.S. Congress (1988), p. 7.

43. See Wells and Jackson (1993) for a survey of community development lending, and Board of Governors (1993) for a survey of community development lending by banks.

44. Neighborhood Housing Services of Baltimore, Inc., is a private nonprofit organization and is affiliated with a network of over 200 Neighborhood Housing Services organizations nationwide. NHSB also operates an affiliated organization, Neighborhood Rental Services, that renovates rental property.

45. Other community development activities of the NHSB seem difficult for banks as well. For example, much of the coordinating activity that seems vital to the CDO approach involves finding owner-occupants that are viewed as beneficial to the neighborhood. Such discrimination among buyers or borrowers would pose legal problems for a bank real estate subsidiary.

46. Allen Fishbein (1993) of the Center for Community Change estimates that around $35 billion has been "committed" by banks and savings and loans since the late 1970s under agreements with community groups. The banking agencies officially view commitments for future action as "largely inapplicable to an assessment of the applicant's CRA performance" (Garwood and Smith 1993, p. 260).

47. "Our job, quite frankly, is to choose partnerships with organizations that do not have hidden agendas, are truly responsible and have an appreciation of our limitations" (Milling 1994, p. 7).

48. Funds can be provided in the form of grants, equity investments, loans, or deposits, and must be matched dollar for dollar by private funds. The Fund is prohibited from holding over 50 percent of the equity of a CDFI and may not provide more than $5 million to any one CDFI during any three-year period. Up to one-third of the appropriation may be applied toward a depository institution's deposit insurance premium. The appropriation covers administrative costs as well. Many similar efforts have been funded in smaller amounts in the past. See Wells and Jackson (1993). Macey and Miller (1993) also argue that direct funding of community development would be superior to the CRA as it is currently implemented.

49. See Townsend (1994) for a critique of an earlier draft of the Community Development Banking Act.

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BANK HIGHLIGHTS

Perhaps the Bank's most important achievement this year was its progress in restructuring and reducing costs in its check operations. Achieving these cost reductions was a major short-term goal in the Bank's strategic plan. Cost reductions were essential because of changes in the financial industry and in regulations that were reducing Federal Reserve check-processing volume. Mergers and acquisitions among depository institutions, for example, have resulted in a larger share of check transactions between people or businesses with accounts at the same bank, which has reduced the number of checks that require outside processing. In addition, a major regulatory change (known as "same-day settlement") allowed private-sector check processing to be more competitive with Federal Reserve processing. Check Collection staff worked energetically and successfully to modify and improve services offered to financial institutions and to reduce operating costs. Their efforts resulted in a smaller reduction in check-collection volume and lower costs than projected. The Bank expects the restructuring and cost reductions to keep its check services financially viable for the foreseeable future.

Bank staff, District bankers, and community development leaders visited several Baltimore neighborhoods in August.

During 1994 the Bank also paid considerable attention to the relationship between banking and our communities. The Bank's Community Affairs Department, for example, expanded its efforts to increase the public's understanding of innovative community development financing programs in the Fifth District. Bank staff logged many hours traveling throughout the District, talking to residents, bankers, and community groups to get a feel for the impact of lending on District neighborhoods. Community development groups and bankers assisted the Bank in these efforts by organizing tours of several Fifth District neighborhoods. The Bank's Community Affairs Department also cosponsored two conferences on community development financing — one with the Neighborhood Reinvestment Corporation and one with the Ms. Foundation for Women.

Within the Bank, the Research Department introduced banking policy briefings that inform the Bank's senior officers on banking issues and foster a sense of community among staff from various departments. The banking meetings are an interdepartmental version of the monetary policy briefings that the Research Department has held for many years to prepare the president for Federal Open Market Committee meetings. Staff from the Bank's Richmond and branch offices attend the quarterly meetings. Among the topics covered in 1994 were the Community Reinvestment Act, interstate banking, and the pricing of Reserve Bank services.

In addition to these internal briefings, Bank staff shared their expertise with central bankers from a number of foreign countries. During 1994 they provided more forms of assistance to bankers in more countries than ever before. China, Mexico, Russia, Saudi Arabia, Ukraine, and Vietnam were among the countries with which Bank staff worked. One senior staff member, for example, advised the Bank of Mexico on issues such as the control of daylight credit and the design of a new large-value-transfer system. He also represented the Federal Reserve on a committee responsible for reforming the Russian payment system. Another senior staff member taught monetary theory and economic development in Switzerland to central bankers from around the world. In addition, he advised the Saudi Arabian Monetary Agency on restructuring its research department.

While in previous years the Bank's international assistance has primarily involved senior staff teaching central banking concepts and principles, this year it included a wider range of staff conducting practical workshops on central banking functions. For example, in March the Bank hosted and its staff lectured at a payment-system training program that the World Bank organized for its senior staff with responsibilities for economic development programs. In another case, Bank staff helped organize and conduct an International Monetary Fund workshop in Vienna, Austria. The workshop, held for bankers from the former Soviet Union, included an on-line computer demonstration by an accounting supervisor of the Federal Reserve's risk-management system.

During 1994, the Bank expanded the assistance it provides nationally as well as internationally. The Richmond Bank, like all the Reserve Banks, has long aided the Treasury by processing savings-bond transactions that originate within its own district. When the Treasury chose to consolidate savings-bond processing within the Federal Reserve System, it selected the Bank to handle the transactions that another Federal Reserve District previously would have processed. In addition, the Treasury designated Richmond as a contingency backup site for all the remaining savings-bond processing sites.

In December, representatives of the National Bank of Ukraine toured the Check Collection Department while at the Bank to study the Research Department's operations.

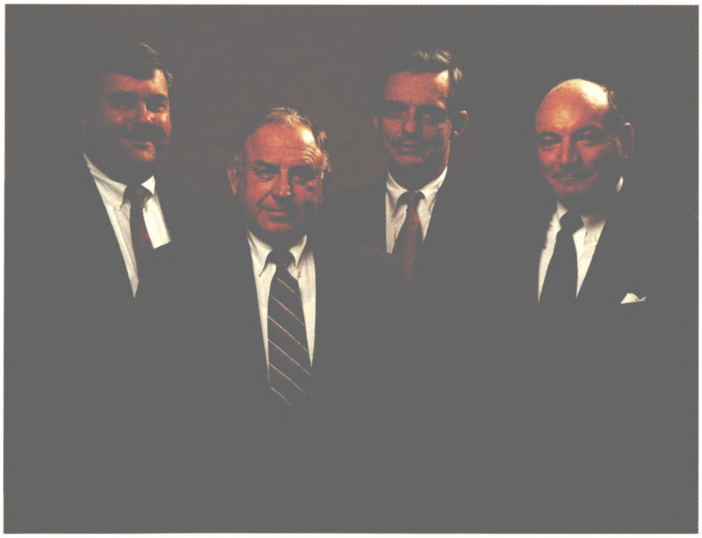
The Bank also provides support services to the Treasury and the Federal Reserve Banks through its operation of the Currency Technology Office (CTO), now located in Richmond. The CTO coordinates the development of currency processing and counterfeit detection technologies; the installation and implementation of new currency processing systems; and the provision of ongoing support and training in the use of currency processing equipment. During 1994, the office worked with the Bureau of Engraving and Printing to redesign the U.S. currency to make counterfeit notes more difficult to produce and easier to detect. Among the visible changes to the bills will be the appearance of a standard Federal Reserve seal in place of a specific Reserve Bank seal and the addition of a watermark. The new currency will be introduced over the remainder of the decade, starting with the $100 bill.

During 1994 the CTO also assisted Reserve Banks with the installation of the ISS 3000, the most advanced currency processor on the market. The ISS 3000 operates with fewer employees and at a faster rate than its predecessor. Already the new machines are processing 70,000 notes per hour on average compared to 60,000 notes per hour for the old equipment. This performance is expected to improve as operators gain experience using the machines. Another feature of the ISS 3000 is its improved counterfeit detectors. In 1994 the CTO helped install a total of 56 machines, eight of them in the Fifth District. By 1997, 132 ISS 3000s will be in place in the 37 Federal Reserve offices throughout the country.

Plans to close the Bank's Culpeper facility precipitated the need not only for the CTO to relocate, but also for a new disaster recovery site for the Bank, the Board of Governors, and the Federal Reserve Automation Services (FRAS) operation. In an emergency, the site will handle critical functions and house key staff. Three other Reserve Banks — Boston, Philadelphia, and Cleveland — agreed to establish a joint backup site with Richmond and to share the costs to support it. They chose the Baltimore Branch as the common site because of its central location, proximity to large airports, and ability to renovate space at low cost. Boston, Philadelphia, Cleveland, Richmond, and FRAS will use Baltimore as their backup for shared mainframe peripherals (printers, tape drivers, etc.). Richmond, the Board, and FRAS will use it for relocation of their key business functions and operations. By year-end 1994, Baltimore had converted approximately 7,600 square feet to accommodate approximately 200 staff members in an emergency. In early 1995 Baltimore will reconfigure about 1,800 additional square feet to house shared mainframe peripherals.

BANK DIRECTORS
FEDERAL RESERVE BANK OF RICHMOND (DECEMBER 31, 1994)

(From left to right) Stephen Brobeck; Claudine B. Malone; Webb C. Hayes IV; Robert M. Freeman; L. Newton Thomas, Jr.



(From left to right) Charles E. Weller; R.E. Atkinson, Jr.; Henry J. Faison; Paul A. DelaCourt

Chairman

Henry J. Faison
Chairman
Faison Associates
Charlotte, North Carolina

Deputy Chairman

Claudine B. Malone
President
Financial & Management
Consulting, Inc.
McLean, Virginia

R.E. Atkinson, Jr.
Chairman
Dilmar Oil Company, Inc.
Florence, South Carolina

Stephen Brobeck
Executive Director
Consumer Federation
of America
Washington, D.C.

Paul A. DelaCourt
Chairman
The North Carolina
Enterprise Corporation
Raleigh, North Carolina

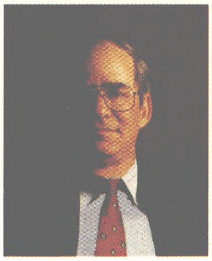
Robert M. Freeman
Chairman and
Chief Executive Officer
Signet Banking Corporation
Richmond, Virginia

Webb C. Hayes IV
Chairman of the Board
Palmer National Bancorp, Inc.
President
The Palmer National Bank
Washington, D.C.

L. Newton Thomas, Jr.
Retired, Senior Vice President
ITT/Carbon Industries, Inc.
Charleston, West Virginia

Charles E. Weller
President
Elkridge National Bank
and ENB Financial Corporation
Elkridge, Maryland

MEMBER, FEDERAL ADVISORY COUNCIL



Richard G. Tilghman
Chairman and
Chief Executive Officer
Crestar Financial Corporation
Richmond, Virginia

BALTIMORE OFFICE (DECEMBER 31, 1994)

(From left to right) Richard M. Adams; Morton I. Rapoport; Daniel R. Baker; Rebecca Hahn Windsor

(From left to right) F. Levi Ruark; Thomas J. Hughes; Michael R. Watson

CHARLOTTE OFFICE (DECEMBER 31, 1994)

(From left to right) David B. Jordan; Dorothy H. Aranda; Jim M. Cherry, Jr.

(From left to right) James O. Roberson; Harold D. Kingsmore; Dennis D. Lowery

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Chairman and
Chief Executive Officer
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New Market, Maryland

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Chief Executive Officer
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Parkersburg, West Virginia

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President and Chief
Executive Officer
Tate Access Floors, Inc.
Jessup, Maryland

Thomas J. Hughes
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Navy Federal Credit Union
Merrifield, Virginia

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University of Maryland
Medical System
Baltimore, Maryland

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President, and Chief Executive Officer
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Cambridge, Maryland

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Association of Maryland Pilots
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James O. Roberson
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Research Triangle Foundation
of North Carolina
Research Triangle Park, North Carolina

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(From left to right) Robert A. Quicke; Vernon A. Reid; Joseph C. Jefferds, Jr.; Catherine L. Hughes

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(From left to right) Gerald L. Martin; Rick A. Wieczorek; C. L. Wilson, III; Raymond L. Gazelle; Jimmie R. Monhollon

(From left to right) Daniel E. Lanier, Sr.; John G. Chapman; Ralph M. Burns, III; William E. Albert; G. Dodson Mathias

(From left to right) Thomas W. Dispenza; Richard D. Pillow; David G. Poole; Michael L. Morgan; Ronald D. Brown

Chairman

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West End, North Carolina

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Partner/Manager
Blackwoods Farm
Fort Motte, South Carolina

Catherine L. Hughes
Owner/CEO
Radio One, Inc.
Baltimore, Maryland

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Better Cleaning Maintenance
Supply, Inc.
Charlotte, North Carolina

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Chaptico, Maryland

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Principal, Chief Investment Officer
V. A. Reid & Associates, Inc.
Baltimore, Maryland

Chairman

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Senior Vice President
Branch Banking and Trust Company
Wilson, North Carolina

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Vice President and Cashier
The First National Bank of Bluefield
Bluefield, West Virginia

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NationsBanc Services, Inc.
Richmond, Virginia

Frances Bradshaw
Assistant Vice President–Operations
First Carolina Corporate Credit Union
Greensboro, North Carolina

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The Riggs National Bank
of Washington, D.C.
Washington, D.C.

Ralph M. Burns, III
Senior Vice President
The Palmetto Bank
Laurens, South Carolina

John G. Chapman
Senior Vice President
SouthTrust Bank of Charleston
Charleston, South Carolina

J. Maurice Clark
President
Huntington Federal Savings &
Loan Association
Huntington, West Virginia

John S. DiPietro
Senior Vice President
Peninsula Bank
Princess Anne, Maryland

Thomas W. Dispenza
Chief Executive Officer
NARC Federal Credit Union
Beltsville, Maryland

Raymond L. Gazelle
Executive Vice President
Citizens Bank of Maryland
Laurel, Maryland

Kenneth L. Greear
Senior Vice President
United National Bank
Charleston, West Virginia

D. C. Hastings
President and Chief Executive Officer
Virginia Bank and Trust Company
Danville, Virginia

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Senior Vice President and
Automated Systems Manager
Raleigh Federal Savings Bank
Raleigh, North Carolina

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Vice President–Operations
One Valley Bank
Charleston, West Virginia

Ashpy P. Lowrimore
Senior Vice President–City Executive
Southern National Bank
of South Carolina
Florence, South Carolina

Gerald L. Martin
Executive Vice President
and Chief Financial Officer
Fidelity Federal Savings Bank
Richmond, Virginia

G. Dodson Mathias
Senior Vice President
First Union National Bank
of North Carolina
Charlotte, North Carolina

Harry G. McDonnold
Executive Vice President
American Federal Bank FSB
Greenville, South Carolina

Michael L. Morgan
Senior Vice President–Group Executive
Wachovia Operational
Services Corporation
Winston-Salem, North Carolina

Martin W. Patterson
Senior Vice President and Division
Manager of Production Services
Crestar Bank
Richmond, Virginia

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Vice President
Virginia Credit Union League
Lynchburg, Virginia

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Senior Vice President
of Corporate Operations
First National Bank of Maryland
Baltimore, Maryland

David G. Poole
Senior Vice President
Industrial Bank of Washington
Washington, D.C.

Elwyn G. Raiden, Jr.
President and Chief Executive Officer
Home Federal Savings Bank
Washington, D.C.

Charles C. Schmitt
Executive Vice President
Loyola Federal Savings Bank
Glen Burnie, Maryland

Charles E. Thomas
Vice President
West Virginia Credit Union
League, Inc.
Parkersburg, West Virginia

Rick A. Wieczorek
President
District of Columbia
Credit Union League
Washington, D.C.

Associate Member

Norman K. Robinson
Executive Director & Treasurer
Virginias Automated
Clearing House Association
Richmond, Virginia

BANK OFFICERS (DECEMBER 31, 1994)

Senior Vice President Bruce J. Summers, who has played a leading role in developing and implementing the Bank's strategic plan, was given responsibility for Community Affairs, Discount and Credit, Financial Planning and Control, and Accounting.

Senior Vice President James D. Reese, formerly responsible for Check Collection in Richmond and Charleston, Electronic Payments, Fiscal Agency, Securities, Customer Support, Cash, and Business Development and Planning, assumed full-time responsibility for System Cash Services. He also assumed responsibility for the Currency Technology Office, which relocated from Culpeper to Richmond.

Senior Vice President Roy L. Fauber was assigned responsibility for Electronic Payments, Cash, Fiscal Agency, Securities, Business Development, Product Development and Planning, Customer Support, and Check Collection in Richmond and Charleston. He continued to head Business Applications Services, Operations and Technical Support, and Culpeper's Contingency Processing Center. Vice President Andrew L. Tilton added responsibility for Cash to his existing responsibilities for Check Collection, Fiscal Agency, and Securities. Assistant Vice President Bradford N. Carden, previously responsible for Electronic Payments, assumed responsibility for Business Development and became the Federal Reserve System's liaison to the U.S. Treasury. V.H. (Sonny) Rosson, Jr., assistant vice president for Product Development and Planning, was given responsibility for Electronic Payments. Information Systems Officer Janice Haase's responsibility for Operations and Technical Support was expanded to include Customer Support.

Vice Presidents Timothy Q. Cook, William E. Cullison, and George B. Evans and Associate General Counsel William C. Fitzgerald retired.

Vice President Dan M. Bechter was appointed chief public information officer and given full-time responsibility for Public Affairs. Stacey L. Schreft, who was promoted to associate research officer, assumed responsibility for Regional Economics and Research Publications. Both officers continue to contribute to the Bank as economists.

Jeffrey M. Lacker was promoted to research officer, and Peter N. Ireland was promoted to associate research officer.

A. Linwood Gill III, in the Banking Supervision and Regulation Department, and B. Wayne Deal and Susan A. Saavedra, in the Audit Department, were promoted to assistant vice president.

Vice President William E. Pascoe, III, of the Baltimore Office, died suddenly on June 14, 1994. Pascoe had worked in several departments in the Richmond Office before moving to Baltimore in 1971 to become general manager of the check operation. He advanced to assistant vice president in 1972 and vice president in 1974. Before his death, he was responsible for Personnel, Building Services, Public Information, Data Services, and Business Development and was "second-in-command" to Senior Vice President Ronald B. Duncan. Margaret M. Murphy, in the Baltimore Office, was promoted to vice president in September and acquired the departmental responsibilities formerly held by Pascoe. Vice President William J. Tignanelli assumed the role of "second-in-command."

At the Charlotte Office, Vice President Robert F. Stratton retired. Marsha H. Malarz was promoted to vice president and took over responsibility for Accounting, Personnel, and Public Information. Bobby D. Wynn, assistant vice president, transferred from Richmond to Charlotte and assumed responsibility for Public Information and Business Development.

Senior Vice President John G. Stoides, of the Culpeper Office, retired.

At the Charleston Office, Vice President Richard L. Hopkins added Business Development to his responsibilities for the Charleston Regional Processing Center territory of West Virginia.

RICHMOND
701 East Byrd Street
Richmond, Virginia 23219
(804) 697-8000

J. Alfred Broaddus, Jr.
President

Jimmie R. Monhollon
First Vice President

Lloyd W. Bostian, Jr.
Senior Vice President

Roy L. Fauber
Senior Vice President

Marvin S. Goodfriend
Senior Vice President and Director of Research

James McAfee
Senior Vice President and General Counsel

Joseph C. Ramage
Senior Vice President

James D. Reese
Senior Vice President

Bruce J. Summers
Senior Vice President

Fred L. Bagwell
Vice President

Dan M. Bechter
Vice President

William H. Benner, Jr.
Vice President

Wyatt F. Davis
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Michael Dotsey
Vice President

Robert L. Hetzel
Vice President

Thomas M. Humphrey
Vice President

Yash P. Mehra
Vice President

Michael W. Newton
Vice President

G. Ronald Scharr
Vice President

John W. Scott
Vice President

Andrew L. Tilton
Vice President

Roy H. Webb
Vice President

Malcolm C. Alfriend
Assistant Vice President

Kemper W. Baker, Jr.
Assistant Vice President

Jackson L. Blanton
Assistant Vice President

William A. Bridenstine, Jr.
Assistant General Counsel

Bradford N. Carden
Assistant Vice President

Betty M. Fahed
Assistant Vice President

James J. Florin III
Assistant Vice President

A. Linwood Gill III
Assistant Vice President

Sharon M. Haley
Assistant Vice President and Secretary

Eugene W. Johnson, Jr.
Assistant Vice President

Jeffrey S. Kane
Assistant Vice President

Thomas P. Kellam
Assistant Vice President

Anatoli Kuprianov
Research Officer

Jeffrey M. Lacker
Research Officer

Harold T. Lipscomb
Assistant Vice President

Susan Q. Moore
Assistant Vice President

Joseph F. Morrissette
Assistant Vice President

Virginius H. Rosson, Jr.
Assistant Vice President

Marsha S. Shuler
Assistant Vice President

James R. Slate
Assistant General Counsel

Charlotte L. Waldrop
Assistant Vice President

Robert E. Wetzel, Jr.
Assistant Vice President

William F. White
Assistant Vice President

Howard S. Whitehead
Assistant Vice President

Arthur J. Zohab, Jr.
Assistant Vice President

Floyd M. Dickinson, Jr.
Examining Officer

Janice E. Haase
Information Systems Officer

Peter N. Ireland
Associate Research Officer

Lawrence P. Nuckols
Examining Officer

Ruth S. Pratt
Information Systems Officer

Arlene S. Saunders
Personnel Officer

Stacey L. Schreft
Associate Research Officer

John N. Weiss
Examining Officer

H. Lewis Garrett
Senior Vice President and General Auditor

B. Wayne Deal
Assistant Vice President

Susan A. Saavedra
Assistant Vice President

BALTIMORE
502 South Sharp Street
Baltimore, Maryland 21201
(410) 576-3300

Ronald B. Duncan
Senior Vice President

Margaret M. Murphy
Vice President

William J. Tignanelli
Vice President

R. William Ahern
Assistant Vice President

John S. Frain
Assistant Vice President

Patricia S. Tunstall
Assistant Vice President

John I. Turnbull II
Assistant Vice President

CHARLOTTE
530 East Trade Street
Charlotte, North Carolina 28202
(704) 358-2100

Walter A. Varvel
Senior Vice President

Marsha H. Malarz
Vice President

Samuel W. Powell, Jr.
Vice President

Jeff A. Walker
Vice President

Lyle C. DeVane
Assistant Vice President

Ronald D. Steele
Assistant Vice President

Bobby D. Wynn
Assistant Vice President

CULPEPER
19053 Mount Pony Road
Culpeper, Virginia 22701
(703) 829-1600

Thomas C. Judd
Assistant Vice President

Julius Malinowski, Jr.
Assistant Vice President

CHARLESTON
1200 Airport Road
Charleston, West Virginia 25311
(304) 345-8020

Richard L. Hopkins
Vice President

COLUMBIA
1624 Browning Road
Columbia, South Carolina 29210
(803) 772-1940

Woody Y. Cain
Vice President

COMPARATIVE FINANCIAL STATEMENTS

CONDITION

Assets	December 30, 1994	December 31, 1993
Gold certificate account	$ 902,000,000.00	$ 899,000,000.00
Special Drawing Rights certificate account	652,000,000.00	652,000,000.00
Coin	56,354,936.44	66,664,434.39
Loans to depository institutions	0	65,000,000.00
Federal agency obligations	290,698,054.04	361,803,779.06
U.S. government securities		
Bills	14,178,645,999.75	12,508,901,522.51
Notes	11,522,018,033.19	10,302,126,663.67
Bonds	3,436,984,865.02	3,086,639,170.04
Total U.S. government securities	29,137,648,897.96	25,897,667,356.22
Cash items in process of collection	392,072,216.52	501,742,124.09
Bank premises	133,814,709.74	138,618,569.74
Furniture and equipment (net)	151,623,521.71*	153,529,571.22*
Other assets	2,225,794,821.10	2,212,833,953.92
Interdistrict settlement account	(867,239,113.22)	598,286,734.97
Accrued service income	4,982,912.52	5,981,127.29
TOTAL ASSETS	$33,079,750,956.81	$31,553,127,650.90

Liabilities		
Federal Reserve notes	$28,846,504,812.00	$28,034,847,897.00
Deposits		
Depository institutions	2,782,100,893.95	2,356,864,209.97
Foreign	9,472,408.94	9,563,200.00
Other	70,392,642.45	31,537,576.38
Total deposits	2,861,965,945.34	2,397,964,986.35
Deferred availability cash items	446,625,128.05	477,144,405.72
Other liabilities	331,987,071.42	186,183,061.83
TOTAL LIABILITIES	$32,487,082,956.81	$31,096,140,350.90
Capital Accounts		
Capital paid in	$ 296,334,000.00	$ 228,493,650.00
Surplus	296,334,000.00	228,493,650.00
TOTAL LIABILITIES AND CAPITAL ACCOUNTS	$33,079,750,956.81	$31,553,127,650.90

**This amount includes $96,158,058.28 in 1994 and $111,584,927.29 in 1993 for Federal Reserve Automation Services.*

EARNINGS AND EXPENSES

	1994	1993
Earnings		
Loans to depository institutions	$ 343,007.64	$ 230,415.87
FDIC assumed indebtedness	0	0
Interest on U.S. government securities	1,518,935,700.92	1,309,605,453.09
Foreign currencies	60,179,648.61	85,509,214.61
Income from services	62,684,003.74	65,142,479.48
Other earnings	556,485.19	251,348.24
Total current earnings	$1,642,698,846.10	$1,460,738,911.29
Expenses		
Operating expenses	$ 166,374,125.25*	$ 185,472,700.89*
Cost of earnings credits	13,602,461.65	10,500,337.76
Net expenses	179,976,586.90	195,973,038.65
CURRENT NET EARNINGS	$1,462,722,259.20	$1,264,765,872.64
Additions to current net earnings		
Profit on sales of U.S. government securities (net)	(1,950,982.29)	3,037,703.43
Profit on foreign exchange transactions	162,752,518.02	18,266,352.43
All other	22,195.65	4,333.72
Total additions	160,823,731.38	21,308,389.58
Deductions from current net earnings		
Losses on foreign exchange transactions	0	0
All other	15,049.17	36,520,950.00
Total deductions	15,049.17	36,520,950.00
Net additions or deductions	160,808,682.21	(15,212,560.42)
Cost of unreimbursed Treasury services	4,152,968.75	2,875,704.56
Assessment for expenses of Board of Governors	10,122,800.00	9,619,500.00
Federal Reserve currency costs	30,012,475.00	29,323,293.00
NET EARNINGS BEFORE PAYMENTS TO U.S. TREASURY	$1,579,242,697.66	$1,207,734,814.66
Distribution of Net Earnings		
Dividends paid	$ 15,506,612.12	$ 13,061,398.81
Payments to U.S. Treasury *(interest on Federal Reserve notes)*	1,495,895,735.54	1,176,241,765.85
Transferred to surplus	67,840,350.00	18,431,650.00
TOTAL	$1,579,242,697.66	$1,207,734,814.66
Surplus Account		
Balance at close of previous year	$ 228,493,650.00	$ 210,062,000.00
Addition of profits for year	67,840,350.00	18,431,650.00
BALANCE AT CLOSE OF CURRENT YEAR	$ 296,334,000.00	$ 228,493,650.00
Capital Stock Account *(representing amount paid in, which is 50% of amount subscribed)*		
Balance at close of previous year	$ 228,493,650.00	$ 210,062,000.00
Issued during the year	75,345,550.00	26,139,150.00
	303,839,200.00	236,201,150.00
Canceled during the year	7,505,200.00	7,707,500.00
BALANCE AT CLOSE OF CURRENT YEAR	$ 296,334,000.00	$ 228,493,650.00

**This amount includes $43,811,487.90 in 1994 and $59,654,828.00 in 1993 for Federal Reserve Automation Services.*

SUMMARY OF OPERATIONS

OPERATION	NUMBER		AMOUNT ($ thousands)	
	1994	1993	**1994**	1993
Currency and coin processed				
Currency received and verified	**2,119,457,000**	2,093,672,000	**28,412,365**	27,225,822
Currency verified and destroyed	**702,796,000**	660,012,000	**6,812,575**	6,423,583
Coin bags received and verified	**216,013**	271,203	**167,470**	208,064
Checks handled				
Commercial—processed*	**1,480,814,000**	1,521,814,000	**1,033,893,000**	1,120,853,000
Commercial—packaged items	**329,989,000**	446,289,000	**157,253,000**	179,026,000
U.S. government	**55,611,000**	56,677,000	**91,727,000**	103,779,000
Collections items handled				
U.S. government coupons paid	**11,274**	14,362	**2,903**	6,833
Noncash items	**0**	0	**0**	0
Commercial book-entry transfers originated	**230,331**	237,340	**2,271,016,000**	2,462,115,000
Funds transfers sent and received	**6,456,322**	6,379,386	**11,372,596,000**	10,434,014,000
Food stamps redeemed	**292,192,000**	325,731,000	**1,484,255**	1,568,573
Loans advanced	**273**	266	**2,451,000**	2,428,552

**This category excludes checks on this Bank.*

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Blue Ridge Community Action Agency and the North Carolina Housing Finance Agency, photograph page 21;

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Charleston Trident Convention & Visitors Bureau, photograph page 4;

Community Developers of Beaufort-Hyde and the North Carolina Housing Finance Agency, photograph page 11;

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