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Sources of Bank Expansion in the Fifth District: Internal and External Growth

Labor Turnover: Another View of The Labor Market

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SOURCES OF BANK EXPANSION IN THE FIFTH DISTRICT: INTERNAL AND EXTERNAL GROWTH

Among those tasks charged to bank regulatory agencies is the responsibility for maintaining competition in the commercial banking industry. In their efforts to achieve this objective, regulatory agencies must keep abreast of those changes in bank structure that affect bank performance. Among the most closely watched factors influencing structure and performance are the number of banks in a market, the degree of concentration of banking resources among the largest banks in a given geographical market, and the absolute size of individual banks in a market area. For purposes of studying the effects of bank expansion, or bank deposit growth, on these market characteristics, it is useful to distinguish between internal and external deposit growth of a banking organization. Using the three largest banks in each Fifth District state, this article attempts to estimate the portions of deposit growth attributable to internal and to external expansion, respectively, between 1961 and 1971.

External growth refers to expansion by acquiring the resources of other banks through merger or consolidation or, in the case of a bank holding company, by acquiring controlling interest in an operating bank. Internal growth, by contrast, is associated with the economic expansion of the geographical areas served by the bank and with the bank's attempts to increase its market share in areas that it already serves. Internal expansion is achieved by one of the following methods: (1) expansion of the resources of existing offices, (2) establishment of new, or *de novo,* offices, or (3) in the case of a holding company, establishment of *de novo* bank subsidiaries. Growth through *de novo* banking or branching generally results from management's decision to tap new geographical markets or to attract deposits by opening additional offices in areas that it presently serves. Examples of this type of growth are numerous. They include the development of suburban drive-in facilities as well as the establishment of new facilities (either banks or branches) in areas that have become economically promising.

Effect of Regulations on Bank Expansion Differences in state banking laws and regulations are a major factor explaining differences in internal-external growth patterns among Fifth District states. Three District states permit branching statewide, one state permits *de novo* branching in a bank's home office territory and statewide branching through merger, and one state prohibits branching entirely. Multiple-bank holding companies exist in three District states.[1]

Bank regulations do not, of course, directly restrict deposit growth in existing offices. The market environment, coupled with the success or failure of bank management teams to market their products effectively, is the primary determinant of this kind of internal deposit growth. State restrictions on *de novo* branching and on the formation of *de novo* holding company subsidiaries, however, can pose serious obstacles to internal growth through moving into new markets or expanding facilities in old markets. Hence, while internal growth is possible in all states regardless of state regulations, the opportunities open to bank management are greater in states where banking laws governing branching and holding company activity are more permissive.

State laws affecting branching and holding company activity also determine the potential for external growth. Banks located in states with few limitations on branching often rely exclusively on mergers with other banks to achieve external growth. In states with restrictive branching regulations but relatively permissive holding company regulations, banking organizations may rely more heavily on the organizational structure of a bank holding company to achieve desired growth.

Federal antitrust laws as well as Federal bank regulations are also important in determining the path of expansion pursued by banking organizations. Federal bank regulatory agencies and the Justice Department are required by the Bank Merger Act and the Bank Holding Company Act to examine

[1] For a complete discussion of Fifth District branching and holding company laws, see this *Review*, December 1970. A recent opinion released by the Attorney General of West Virginia states that bank holding companies are legal in the state.

carefully the competitive and public benefit aspects of mergers and acquisitions of banking organizations. Especially in the case of large banking organizations that occupy a distinctly dominant position in their respective markets, strict enforcement of Federal banking and antitrust laws may pose serious barriers to external growth. Because of this, some large banks or banking organizations may judge their external growth potential to be limited and may, for that reason, concentrate on internal means of growth. That is, they may focus their efforts on increasing the business of existing offices or on establishing *de novo* branches or, in the case of holding companies, on setting up *de novo* bank subsidiaries.

Effect of Expansion on Market Characteristics Since state banking laws are perhaps the chief determinants of the method of growth pursued by banking organizations, it follows that these laws also have an important bearing on the degree of concentration of banking resources, the number of banks, and the size of banks in banking markets. Internal growth, of course, does not reduce the number of banks or banking offices in a particular market. Indeed, internal growth through *de novo* branching into a new market increases the number of competing offices in that market. Similarly, *de novo* bank expansion by a bank holding company increases the number of banking offices in a market, and, in addition, increases the number of banks in the market.

External growth of bank holding companies through the acquisition of operating banks does not reduce the number of banks or offices; however, the concentration of resources among the market's largest banking organizations is altered when these bank holding companies acquire additional banks in a particular market. The result of such acquisitions is, of course, that the number of independently controlled banks is reduced. Likewise, external growth by merger of existing banks in the same market results in the elimination of one of the banks as an independent entity and thus has a direct effect on the concentration of banking resources.

Because external growth affects the concentration of banking resources, information concerning the share of growth accounted for by acquisitions of the large banking organizations is often helpful in assessing the present and future competitive impact of acquisition by these organizations. If external growth has been a major contributor to the total growth of the state's largest organizations, the competitive effect in local markets is likely to be greater than the resulting effect where growth has occurred through internal expansion. The degree of this effect, of course, depends on several other factors as well, such as the geographical dispersion of offices in the state, the absolute size of the bank, the relative size of the bank, size variation among the largest banks, and the number and size of nonbank affiliates.

The following section explains one method of estimating a bank's internal growth rate. Subsequent sections attempt to isolate the method of growth (internal or external) that was used by the three largest banks in each Fifth District state between 1961 and 1971 and some of the statewide banking statistics that were affected by the decisions of these banks.

Estimation of Internal and External Deposit Growth External growth is defined above to include the acquisition of deposits by merger, consolidation, or purchase of a bank by a holding company. While such growth may be conceptually distinguishable from internal growth, it clearly has implications for the internal expansion of the affected institution. For example, if a bank acquired another bank in 1963, the deposits of the acquired bank would be considered in the computation of external growth in 1963. Thereafter, growth in the newly acquired office would be computed as part of the internal expansion of the successor institution. In order to estimate the growth of a banking institution that results strictly from internal expansion, an estimate of the growth of acquired offices must be determined.

Several methods can be used to approximate the part of internal expansion that results from past acquisitions of banks. In this article, it is assumed that offices of acquired banks grow at a rate equal to the average growth rate of all banks in the state. To justify this method, a sample of acquired banks was taken from each District state (except West Virginia) to determine whether the growth of acquired banks differed significantly from the average growth rate of all banks. In each state, the tests revealed no significant differences between the two rates.

Expansion in Fifth District States Total deposits of commercial banks in the Fifth District increased by 138 percent between 1961 and 1971. North Carolina banks had the fastest growth rate followed by Virginia, South Carolina, West Virginia, and Maryland. The compounded annual rates of growth varied from 10.1 percent in North Carolina to 8.3 percent in Maryland. Total deposits in the District grew at a rate of 9.1 percent compounded annually.

The number of Fifth District banking organizations declined from 921 to 664. A total of 126 new banks were formed while 301 banks were acquired by merger, absorption, or consolidation. Two banks suspended operations.

Maryland Between 1961 and 1971, total deposits in Maryland banks increased $3,261 million. Forty-one percent of the growth was attributable to the internal and external growth of deposits in the three largest banks. These banks also accounted for 14 of the 38 mergers and acquisitions of Maryland banks in the ten-year period.

External growth through merger accounted for approximately 19 percent of the increased deposits of the three largest banks. After projecting deposits of the acquired banks, however, almost one-third of the growth resulted from acquisitions. One interesting aspect of the Maryland experience was that the fastest growing bank among the three largest relied very little on acquisitions to achieve its deposit growth. On the other hand, the bank with the smallest rate of deposit growth acquired 45 percent of its new deposits by acquiring other banks. After projecting the deposits of its acquired banks, external growth accounted for 78.4 percent of this bank's total deposit growth between 1961 and 1971.

North Carolina North Carolina and Virginia experienced the fastest rates of deposit growth among Fifth District states, each with a growth rate of approximately 10 percent compounded annually. Total North Carolina deposits increased $5,638 million, while the number of banking organizations declined by 46 percent from 171 to 92. Between 1961 and 1971, 86 mergers and acquisitions were consummated, 32 by the three largest banks. These banks accounted for about 48 percent of the total deposit growth in the state.

Internal expansion in the three largest banks accounted for a larger share of total expansion in North Carolina than in any other District state (except West Virginia where growth must be internal). Only 16.7 percent of the growth in the three North Carolina banks was external. After projecting deposits of acquired banks, 29.8 percent was external.

Unlike the Maryland situation, the fastest growing North Carolina bank relied heavily on acquisitions. Over 50 percent of its total growth was attributable to mergers and subsequent growth of the acquired banks. The other two banks in the sample increased their deposits primarily through internal expansion. Almost 90 percent of their growth was internal prior to projection, and 80 percent was internal after projecting deposits of acquired banks.

The three-bank concentration ratio increased from 48 percent in 1961 to 50 percent in 1971. Each of the three banks had more than $1 billion in total deposits in 1971.

South Carolina Total deposits in all commercial banks in South Carolina increased by 151 percent or 9.7 percent compounded annually. The three largest banks accounted for 46.5 percent of the total deposit growth in the state. Between 1961 and 1971, the number of banking organizations declined from 144 to 99. Some 55 mergers were consummated, 19 involving acquisitions by the three largest banks.

External growth accounted for 18 percent of the deposit growth of the three largest banks prior to adjustment for growth of acquired banks and 34 percent after adjustment. As in North Carolina, the bank with the highest deposit growth rate relied more heavily on acquisitions than the other two banks, and the bank with the slowest rate of deposit growth grew primarily by internal means of expansion. Approximately 32 percent of the growth of the fastest growing bank resulted directly from bank mergers. After projecting the deposits of the acquired banks, almost 60 percent of the growth could be attributed to acquisitions in the 1961 to 1971 period. On the other hand, the bank with the slowest rate of growth among the three largest acquired only three small banks over the ten-year period. These acquisitions accounted for only 6 percent of its total deposit growth prior to adjustment for growth of the acquired banks, and 14 percent after adjustment for this growth.

West Virginia Since West Virginia does not permit multiple branch offices and multiple-bank holding companies, deposit growth must be achieved by attracting more deposits to existing offices. Not surprisingly, the growth rate of the three largest banks in West Virginia was not as high as that achieved by the largest banks in other District states. West Virginia's rate of growth of banking deposits did, however, exceed that of total Fifth District deposits. Total state deposits increased by $1,958 million; the three largest banks accounted for only 9.8 percent of the increase. The number of banking organizations increased from 181 to 199, while the number of organizations declined in other District states.

Virginia Because of its relatively restrictive branching laws, Virginia's banking structure underwent considerable change between 1961 and 1971. Prior to 1962, statewide branching was not permitted either by merger or by the establishment of *de novo*

DEPOSIT GROWTH OF THREE LARGEST BANKING ORGANIZATIONS IN FIFTH DISTRICT STATES, 1961-1971

	Total State Deposit Increase ($ Mil.)	Deposit Growth of 3 Largest Banks ($ Mil.)	Col. 2 Divided by Col. 1 (%)	Sources of Deposit Growth of 3 Largest Banks			
				Internal (% of total)	External (% of total)	Internal* Projected (% of total)	External* Projected (% of total)
Maryland	3260.7	1336.4	41.0	81.5	18.5	67.5	32.5
Virginia	5674.2	2426.9	42.8	64.3	35.7	33.7	66.3
North Carolina	5638.1	2675.4	47.5	83.3	16.7	70.2	29.8
South Carolina	1679.9	780.6	46.5	81.6	18.4	65.9	34.1
West Virginia	1958.1	192.0	9.8	100.0	0.0	------	------

* The deposits of acquired banks are projected from acquisition date to the end of 1971.

offices. The 1962 change in the branching law permits statewide branching but only by merger.

In their efforts to broaden their geographic markets, several Virginia banks formed multiple-bank holding companies, through which they acquired other banks. This method of acquisition gave the holding company the added advantage of branching locally from its various bank subsidiaries. Spread of the holding company movement, coupled with the more lenient merger law passed in 1962, resulted in tremendous external growth of Virginia's banking organizations in the ten-year period ending in 1971.

Virginia's total commercial bank deposits increased $5,674 million or 10 percent compounded annually. The three largest organizations accounted for approximately 43 percent of the total deposit growth. The number of banking organizations declined from 293 to 171. A total of 117 mergers and acquisitions were consummated in the state, 52 by the three largest organizations.

Each of Virginia's three largest banking groups grew at a much faster rate than total state deposits. Most of their growth was accounted for by mergers or holding company acquisitions. An expected consequence of this activity was an increase in the percentage of total deposits held by the three largest organizations from 23 percent to 35 percent.

Almost 36 percent of the deposit growth of the three organizations was external. After projection of deposits of the acquired banks, two-thirds of their total deposit growth was accounted for by mergers and acquisitions and subsequent growth in the acquired offices. The external growth of the fastest growing organization was slightly higher than the external growth of the other two.

Conclusions Total commercial bank deposits in the Fifth District increased at a compounded annual rate of 9.1 percent between 1961 and 1971 compared to a rate of 7.8 percent for total deposits in the United States. Total deposits of each of the Fifth District states grew at a faster rate than the growth rate of total U. S. deposits.

In North Carolina, South Carolina, and Virginia, the fastest growing bank among the three largest in each state relied more heavily on external methods of acquiring deposits than the other two large banks. In Maryland, however, the fastest growing of the three banks had the highest internal growth rate.

The three banks in Maryland, North Carolina, and South Carolina achieved approximately two-thirds of their deposit growth (including projections) by internal means of expansion. West Virginia's banks, because of laws prohibiting branching and multiple-bank holding companies, achieved all of their growth internally. Changes in Virginia branching laws and increased activity of bank holding companies resulted in a higher proportion of external growth among Virginia's large banks than among large banks in the other states. Two-thirds of their total growth was external after adjusting for growth of acquired offices.

The concentration of deposits in the three largest banks increased in North Carolina, South Carolina, and Virginia; decreased in West Virginia; and remained unchanged in Maryland. The total number of banking organizations in the five states declined 28 percent from 920 to 664.

Clyde H. Farnsworth, Jr.

LABOR TURNOVER: ANOTHER VIEW OF THE LABOR MARKET

For many years, the unemployment rate has served as an indicator of labor market conditions, an index of general economic welfare, and a guide to economic policymaking. Like most summary economic indicators, the unemployment rate is influenced by both supply and demand factors, whose separate influences may be mutually offsetting or reinforcing. A given rate of unemployment can therefore be consistent with more than one set of labor market conditions, each of which could have different wage (and price) implications. Under such circumstances, undue emphasis on the unemployment rate as a policy guide without regard to underlying supply and demand conditions could lead to unwarranted policy actions. Economic policies designed to reduce the unemployment rate by stimulating aggregate demand may increase labor demand, place upward pressure on wages (and prices), and yet have little impact on employment and the unemployment rate either because of offsetting supply shifts or labor market imperfections.

The purpose of this article is to focus attention on demand conditions in the labor market as reflected in labor turnover and to examine recent unemployment rate behavior in the context of labor market conditions as indicated by labor turnover statistics. Particular emphasis is placed on a comparison of labor turnover behavior in the current business cycle with that of the representative post-World War II cycle.

Labor Turnover Data Each month the Bureau of Labor Statistics publishes data on the turnover of payroll employment in the manufacturing sector. Labor turnover data measure the gross movement of workers into and out of manufacturing employment and are frequently cited as indicators of overall labor market conditions. The data are estimated from a sample of firms accounting for approximately 54.0 percent of total manufacturing employment and approximately 26.0 percent of nonagricultural payroll employment.[1]

Labor turnover data consist of monthly time series on accessions and separations in manufacturing industries. Total accessions include new hires, rehires of previously laid off workers, and miscellaneous accessions. Total separations include voluntary quits, layoffs, and other separations. In addition to aggregate manufacturing series, data are available by state and by industry. Labor turnover series are expressed as the number of turnovers per 100 employees per month. An accession rate of 2.1, for example, is interpreted as 2.1 accessions per month for each 100 employees.

Labor Demand and Labor Turnover The use of labor turnover statistics as indicators of labor market demand conditions rests upon a number of basic assumptions.[2] The demand for labor is assumed to be directly related to the aggregate demand for goods and services. Given the level of aggregate demand, the desired stock of workers is conceptually equal to the sum of employment (filled jobs) and vacancies (unfilled jobs). The extent to which the desired labor force is achieved depends upon the efficiency of the labor market in matching the available work force to the available jobs. Labor turnover statistics reflect the processes by which employers and employees adjust to demand conditions in the labor market. Turnover is thus assumed to respond systematically to the changing composition of total labor demand between employment and job vacancies. Under these assumptions, labor turnover statistics should generally reflect the degree to which total labor demand is translated into actual employment and, conversely, the extent to which total demand is unrealized because of inefficiencies in the labor market.

Quits Voluntary quits are assumed to be positively related to the availability of alternative job opportunities. If aggregate demand growth causes vacancies to rise relative to actual employment, quits can be expected to increase for two reasons. First, employers seeking needed workers may attempt to attract them from other firms. Such quits are at-

[1] A technical discussion of the sample and the relationship of labor turnover data to other published series can be found in U. S. Department of Labor, Bureau of Labor Statistics, *Employment and Earnings*, 19 (December 1972), pp. 118-29.

[2] The economic implications of labor turnover are examined in detail by Charles C. Holt and Martin H. David, "The Concept of Job Vacancies in a Dynamic Theory of the Labor Market," in *The Measurement and Interpretation of Job Vacancies* (New York: Columbia University Press, 1966), pp. 73-110. More recently, an empirical examination of labor turnover data was conducted by Charles L. Schultze, "Has the Phillips Curve Shifted? Some Additional Evidence," *Brookings Papers on Economic Activity* (2:1971), pp. 452-67.

tributable to a scarcity of workers with desired skills. Second, workers are more likely to quit in order to search for better employment opportunities when jobs are plentiful. Available evidence indicates that the latter quit component has become increasingly important in recent years and reflects primarily the behavior of dissatisfied young workers, who are generally less educated workers with relatively little work experience seeking jobs with better pay and improved advancement potential.[3] In either case, the voluntary quit rate can be expected to rise in response to increasing job availability. By similar reasoning, the quit rate should decline in response to the effect of moderating aggregate demand on the demand for labor. It will also decline as employment begins to approach the total demand for labor and vacancies become scarce. Based on these assumptions, the quit rate can be interpreted as an indicator of employee response to changing employment opportunities.

Layoffs One aspect of the employer response to changing labor requirements is assumed to be reflected in the layoff rate. If vacancies rise relative to employment as economic activity quickens, layoffs should decline, particularly if firms find it increasingly difficult to satisfy growing labor requirements. Eventually, as employment begins to approach the desired labor stock, and vacancies decline, employers may become less reluctant to lay off marginal workers. When economic activity moderates, the desired labor stock declines relative to employment, and layoffs can again be expected to rise.

Accessions Accessions, which represent mainly new hires and rehires of previously laid off workers for both permanent and temporary positions, also reflect employer attempts to adjust to changing labor demand conditions. In general, total hires should tend to increase as job vacancies rise relative to employment and to fall as vacancies decline relative to employment. The magnitude of the accession rate, which reflects the speed of employment response to changes in desired labor, also depends upon labor supply and the efficiency of the labor market in matching workers with jobs, however. Under identical demand conditions, hires should proceed at a faster rate in an efficient labor market than in an inefficient market. Thus, a low accession rate might reflect an approximate equilibrium between desired labor and actual employment. But it would also be consistent with a relatively large number of job vacancies that remain unfilled due to labor market inefficiencies. In such situations the accession rate by itself is an ambiguous indicator of labor demand conditions. If, however, it is interpreted in light of labor demand conditions implied in quit and layoff behavior, the accession rate may provide information on the efficiency of labor markets. So long as labor turnover suggests strong demand conditions, high accessions would indicate a relatively efficient labor market and low accessions an inefficient market. Of course, as employment approaches the desired labor stock, vacancies will decline and the rate of accession should fall. Such an interpretation will be useful in discussing the behavior of accessions in the current economic recovery.[4]

Labor Turnover and the Business Cycle The cyclical behavior of labor turnover is displayed in Charts 1-5. Two series are plotted in each chart: (1) the current cycle indicator from the fourth quarter of 1972; (2) the corresponding representative cycle indicator. The value of the representative cycle indicator in each period is the geometric mean of the corresponding period values of the indicator from each of the four previous business cycles.[5] (The geometric mean is frequently used in computing averages of ratios.) The behavior of the representative cycle indicator is charted over a thirteen quarter period, from four quarters prior to the cyclical trough through eight quarters after the trough.

The Quit Rate The behavior of the quit rate follows a definite cyclical pattern, as illustrated in Chart 1. During past cycles, the quit rate has generally fallen during recession, risen during early recovery, then turned back down after six quarters of economic recovery. This downturn probably represents workers' perceptions of declining job availability in the later stages of recovery as employers complete their adjustment to changing economic conditions. In contrast, the quit rate has risen con-

[3] The impact of increasing labor force participation by young workers receives considerable attention in U. S. Congress, Joint Economic Committee, *Reducing Unemployment to 2 Percent, Hearings*, 92nd Congress, 2nd Session, 1972.

[4] The relationship between labor hoarding and labor turnover should perhaps be mentioned. Hoarding generally refers to employer attempts to maintain or obtain an employment level in excess of the desired labor stock. The practice can be attributed to uncertainty regarding the timing and magnitude of economic fluctuations and the costs of labor turnover. Layoffs will tend to be delayed until the employer is convinced that an economic slowdown is in progress. Premature layoffs would increase a firm's chances of losing trained workers to other firms and in turn having to incur the overhead expense of finding, hiring, and training replacements. Likewise, (re) hiring workers during economic recovery will generally pick up only after employers have become strongly convinced of a cyclical upturn. Hoarding might then occur if employers anticipated subsequent labor shortages and built up a temporary excess labor stock in order to avoid the higher costs of finding needed workers when labor became relatively scarce. In short, labor hoarding can be interpreted as a rational employer response to cyclical economic fluctuation. Labor hoarding is generally consistent with assumed labor turnover behavior.

[5] The cycle periods are based on cyclical trough dates established by the National Bureau of Economic Research: 1949-IV; 1954-III; 1958-II; 1961-I; 1970-IV.

tinually through the current cycle. Moreover, except for the fourth quarter of 1971, the current cycle rate has consistently exceeded the representative cycle rate. The sustained rise and overall higher value of the current cycle quit rate suggest that total labor demand has consisted of a relatively high proportion of unfilled jobs during the current business cycle, particularly in the recovery. Apparently, workers have not been reluctant to quit and search for better jobs, and employers have been able to attract needed workers away from other firms.

The Layoff Rate Chart 2 indicates that representative cycle layoffs began to decline two quarters prior to the cyclical trough, then turned back up after the third quarter of economic recovery. The 1970 auto strike and an anticipated 1971 steel strike are presumed to account for the sharp rise in current cycle layoffs during the fourth quarter of 1970 and the third quarter of 1971. Except for these strike effects, the layoff rate declined continuously through eight quarters of economic recovery, compared with the mid-recovery turnaround observed for the representative cycle. In addition, the current cycle layoff rate is generally lower than the representative cycle rate.

Relatively low layoff rates also indicate the possibility of unsatisfied labor demand indicated by quit rate behavior. Faced with a large number of unfilled jobs and rising quits, employers can be expected to lay off fewer workers as one means of maintaining their needed labor force. The persistence of the decline in current cycle layoffs is thus consistent with the continuing increase in the quit rate during the current cycle.

The Quit-Layoff Ratio The separate reactions of workers and employers can be summarized in the quit-layoff ratio. This ratio, which can be expected to rise as job vacancies increase and to fall as vacancies decline, provides a comprehensive indicator of labor demand conditions. As shown in Chart 3, the ratio has generally declined in recession and risen in recovery. Reflecting the behavior of its components, the current cycle ratio generally exceeds the representative cycle ratio, indicating that relatively high job vacancies have prevailed throughout the current recovery. The ratio has likewise continued to rise throughout the current cycle, although it turned down in mid-recovery in the representative cycle.

The Accession Rate Chart 4 indicates that over the representative cycle, accessions have fallen during recessions, risen during recovery, and then fallen again. Representative late recovery behavior of quits and layoffs would seem to indicate that the decline in accessions was attributable to a decline in the availability of jobs as actual employment approached the desired stock of workers and vacancies declined.

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Chart 1

QUIT RATE

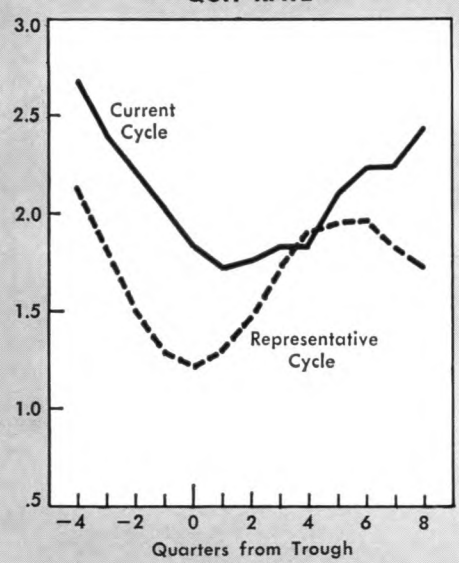
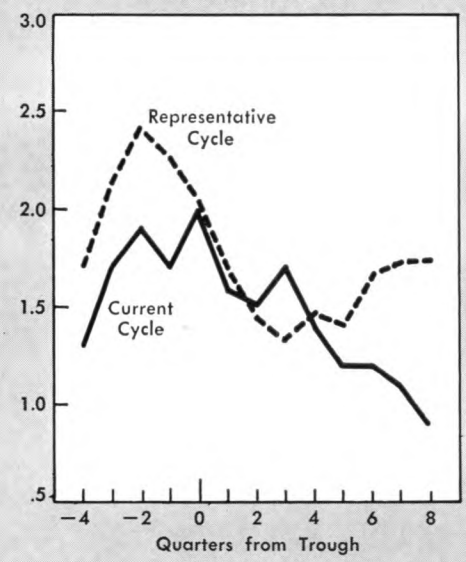


Chart 2

LAYOFF RATE



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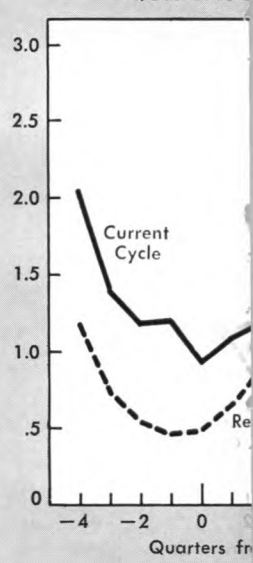
QUIT-LAYC



Note: Turnover rates are expressed as the number of turnovers per 100 employees per month.

Current cycle accessions did not display the mid-recovery downturn observed in the representative cycle, and this sustained rise in accessions is consistent with the quit and layoff evidence of a persistently large stock of unfilled jobs. On the other hand, current cycle accessions have been on the whole lower in recovery than have representative cycle accessions, even though generally higher quits and lower layoffs indicate a relative abundance of jobs. It is evidently not a scarcity of jobs that is responsible for the low accession rate so much as a scarcity of workers to fill available jobs and/or a reluctance of workers to accept them. Firms have apparently attempted to compensate for slow hires by significantly reducing layoffs, as indicated in Chart 5, which illustrates the cyclical behavior of the accession layoff ratio. The ratio is somewhat greater for the current cycle recovery than for the representative cycle, even though current cycle accessions are relatively low, and the ratio has risen continuously throughout the current recovery. It is thus possible that the relatively slow accession response to relatively high job availability reflects labor market imperfections affecting the speed of adjustment of employment to the desired labor stock. One impediment to adjustment would be a scarcity of skilled workers. Another might be the tendency for young labor force participants to search longer because of the relative scarcity of jobs that require few skills and yet are appealing. Both situations would signal the failure of the labor market to provide labor market participants, employees and employers, with adequate information for arriving at mutually agreeable conditions for employment. Such imperfections have the effect of retarding the adjustment of actual employment to desired labor; they, consequently, dampen the response of the unemployment rate to economic recovery. Persistently low accessions and high vacancies might indicate a need for employers to tailor production requirements to available labor. At the same time, if high quits reflect unrealistic job aspirations of inexperienced workers, the labor market should somehow encourage workers to revise their aspirations or improve their employability.

To summarize, labor turnover during the current business cycle does not indicate unusually sluggish labor demand. Relatively high quit rates sustained throughout the recovery indicate that employed workers perceive favorable alternative employment opportunities. At the same time, relatively low and persistently declining layoff rates indicate that employers are unable to find and keep needed workers and, as a result, have reduced layoffs as one means of maintaining their desired labor stock. Although accessions have risen over the current recovery, the increases have been mild in comparison to their representative cycle behavior. The failure of rising labor demand to be translated into actual employ-

ER INDICATORS

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FF RATIO

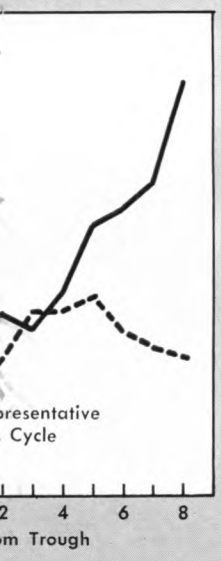


Chart 4

ACCESSION RATE

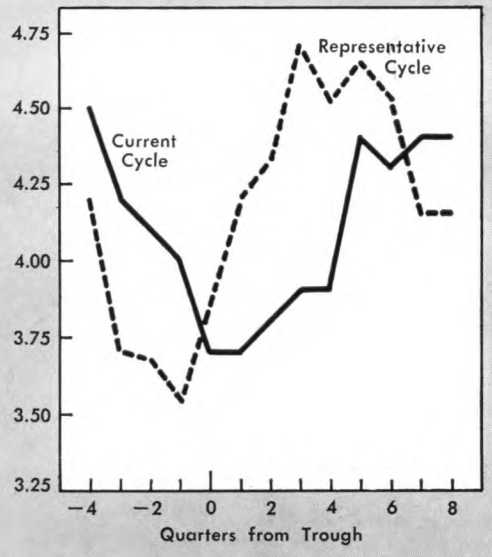
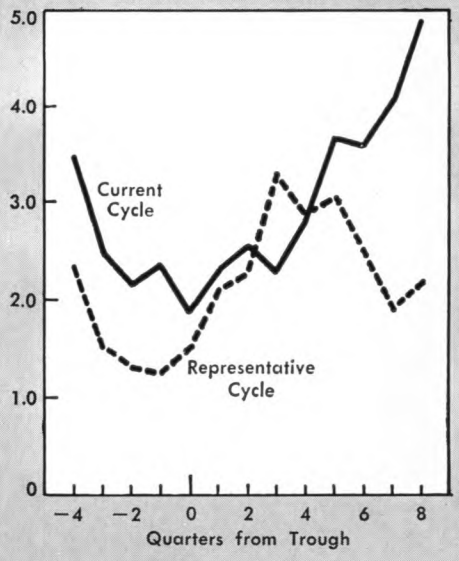


Chart 5

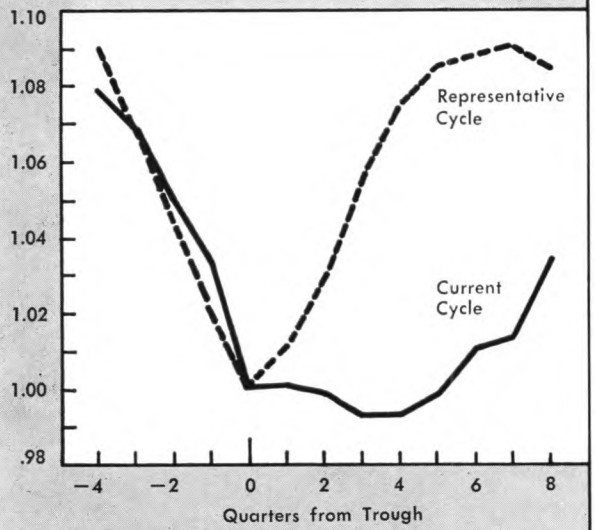
ACCESSION-LAYOFF RATIO



Source: U. S. Department of Labor, Bureau of Labor Statistics, **Employment and Earnings:** Bulletin 1312-8 and various monthly issues.

Chart 6

MANUFACTURING PAYROLL EMPLOYMENT



Note: Representative cycle employment during each period is an arithmetic mean of corresponding period employment in the four previous cycles. Current and representative cycle data are charted as a percentage of their respective trough values.

Source: U. S. Department of Labor, Bureau of Labor Statistics, **Employment and Earnings:** Bulletin 1312-8 and various monthly issues.

ment contributed to the restrained response of the unemployment rate to economic recovery. Consequently, actual current cycle employment growth in manufacturing has not kept pace with representative cycle growth, as shown in Chart 6, although employment has accelerated in the latter stages of the current recovery.

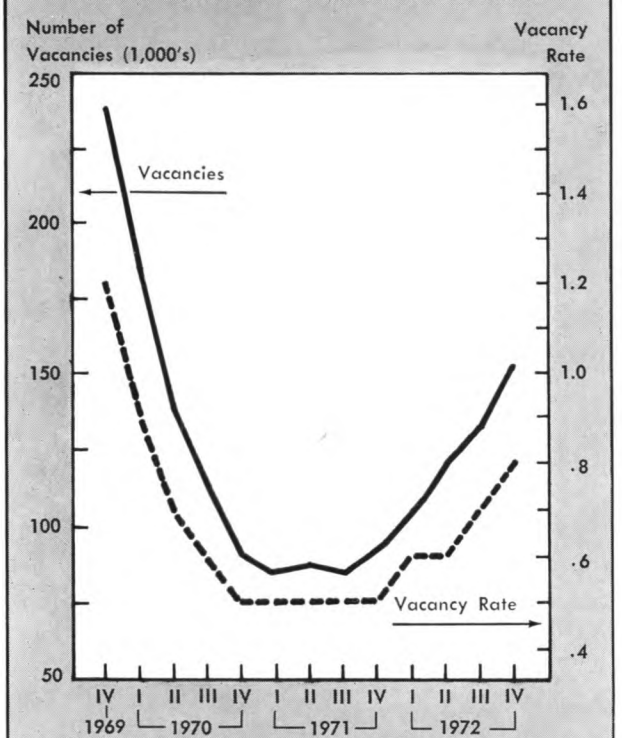
The lack of job vacancy data prior to 1969 makes it impossible to examine directly the assumed relationship between vacancies and labor turnover during previous business cycles. Chart 7 indicates that job vacancies, however, have in fact risen during the current cycle, as the previous discussion has suggested. Moreover, the ratio of vacancies to vacancies plus employment, which reflects unsatisfied demand as a proportion of total labor demand, has also risen during the current recovery.

Labor Turnover and the Unemployment Rate

Labor turnover represents movement into and out of employment primarily in response to demand factors operating in the labor market. Of course the unemployment rate also reflects these factors, but it also responds to changes in the labor force that are essentially supply determined. Since these supply shifts may either offset or reinforce demand factors, the unemployment rate alone can be an ambiguous indicator of job availability. If a growing demand for labor is accompanied by an increasing number of labor force participants, due to rising population, larger participation rates, or both, the unemployment rate might remain unchanged or even rise. The unemployment rate would thus fail to signal the underlying improvement in job opportunities. In addition, enhanced job opportunities may not be translated into increased employment if available workers do not possess skills needed for the jobs generated. Employment might also fail to respond to demand if the available jobs did not satisfy the workers' desire for appealing jobs with advancement potential. Of course, given sufficient skills, these workers could probably find desirable jobs, so this case is not completely different from the problem of scarce skills. In either case, favorable employment opportunities might have little impact on employment and the unemployment rate, even in the absence of labor supply changes. It is also possible that favorable job avail-

Chart 7

JOB VACANCIES IN MANUFACTURING



Note: The vacancy rate is equal to 100 times the ratio of vacancies to the sum of employment plus vacancies.

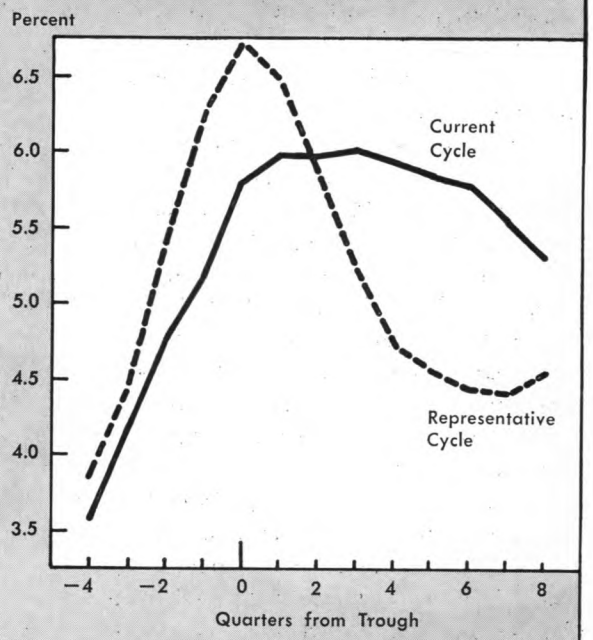
Source: U. S. Department of Labor, Bureau of Labor Statistics, **Employment and Earnings,** March 1973.

ability would induce workers to quit voluntarily and endure short spells of joblessness while searching for better jobs, placing upward pressure on the unemployment rate. It is thus evident that the unemployment rate can react in various ways to changes in labor market demand. The response of employment to labor demand will depend upon labor market efficiency. The unemployment rate in turn is determined by employment and the response of labor supply to aggregate demand changes. By providing information on the first of these two responses, labor turnover data can shed some light on the moderate unemployment rate response to economic recovery during the current business cycle.

The cyclical behavior of the unemployment rate is shown in Chart 8, which indicates that the representative cycle rate exceeded the current cycle rate in recession and that the current cycle peak was almost 1 percentage point less than that of the representative cycle. The cause of recent concern has been the failure of the rate of unemployment to respond as it has in the past to general economic recovery. Examination of labor turnover during the current recovery reveals a labor market characterized by relatively high unrealized demand. Thus, the unemployment problem represents in part a failure of demand to translate into actual employment because of skill discrepancies between jobs and workers, exacerbated perhaps by offsetting increases in the labor supply.

Chart 8

UNEMPLOYMENT RATE OF CIVILIAN LABOR FORCE



Note: The representative cycle unemployment rate is a geometric mean of corresponding period unemployment rates in the four previous cycles.

Source: U. S. Department of Commerce, **Business Conditions Digest**, various issues.

Conclusion The opening paragraphs of this article pointed out the significance of the relationship between price stability and the rate of unemployment in the formulation of economic policy. On the basis of labor turnover in the manufacturing sector, it appears that labor demand has displayed a tendency to translate into relatively more job vacancies than employment, reflected in higher quits and fewer accessions. As a result, the unemployment rate has been somewhat less responsive to aggregate demand policies than in previous business cycles. An important cause appears to be the rising proportion of young and inexperienced workers in the labor force and a relative decline in the availability of skilled workers for available job openings.

Much is still unknown about the interrelationships between the unemployment rate, job vacancies, labor turnover, and wage determination. But if labor market imperfections can drive a wedge between labor demand and employment, while allowing demand pressures to affect wage pressures, the implications are clear. Potentially significant constraints may exist with regard to the extent to which traditional aggregate demand policies can achieve substantially lower unemployment rates consistent with reasonable price stability. The situation instead calls for policies designed to improve the coordination of labor force skill characteristics with the economy's skill requirements. The importance of improved job counseling facilities, particularly for young people about to enter the labor market for the first time, has been pointed out. The young who make up the bulk of new labor force entrants should be realistically informed of their job opportunities in light of their limited skills and experience. Vocational training should be available for those desiring to acquire non-academic skills commensurate with satisfying jobs offering opportunities for advancement. Although the costs of these and other labor market improvements may be great, they might in the long run be less than the social and economic costs of unfilled jobs and unemployed workers.

Glenn Picou

RURAL HOUSING IN THE FIFTH DISTRICT

The National Housing Act of 1949 called for "the realization as soon as feasible of the goal of a decent home and a suitable living environment for every American family." Thus, for 23 years now the United States has had a national housing policy directed toward providing adequate housing for all Americans. In 1968 Congress, considering additional housing legislation, noted that this goal of the 1949 Act "has not been fully realized for many of the nation's lower income families." Accordingly, it passed the Housing and Urban Development Act of 1968 reaffirming the national housing goal. Each year since passage of this Act the President has issued a report on the nation's housing goals with recommendations on how to achieve them.

Despite this long-standing Federal concern with the nation's housing, census data suggest that realization of this national goal remains a distant prospect. While national attention tends to focus on the housing problems of urban areas, the data indicate that deficiencies may be greater in rural areas. This article explores some features of the rural housing situation in the United States, with special emphasis on the Fifth Federal Reserve District.

In any rural-urban analysis the question of definition naturally arises. The Census Bureau defines as "rural" those places located outside of urbanized areas[1] that have a population of less than 2,500. Relative to Federal housing programs, "rural" is defined as open-country areas and places outside of urbanized areas with less than 10,000 people. Recently, numerous proposals have been made to authorize the extension of Federal rural housing programs to towns and cities with populations of up to 50,000. The primary emphasis of this report is on comparing housing in rural areas, as defined by the Census Bureau, with housing in all other areas. In view of the recent emphasis on expanding the areas served by Federal housing programs, however, housing statistics for places with populations between 2,500 and 50,000 are also presented.

There were approximately 5.6 million occupied housing units in the Fifth District in 1970, compared to 4.3 million in 1960. In 1970, 40 percent of District occupied housing units were in rural areas, and 60 percent were in non-rural areas. Nationally, only 25 percent of all occupied units were located in rural areas. Within the Fifth District, Maryland, the most densely populated state, had the smallest proportion located in rural areas, and West Virginia had the largest proportion in rural areas. Comparable figures for the District states and for the nation are shown in Table I.

Incomplete Plumbing One of the most commonly used indicators of housing quality is the presence or absence of plumbing facilities. Housing units having hot and cold piped water inside the structure as well as a flush toilet and a bathtub or shower for exclusive use of the occupants are defined in the *Census of Housing* as having complete plumbing. Units lacking one or more of these facilities are defined as lacking complete plumbing.

In 1970, 653,823 Fifth District occupied housing units, or 11.6 percent of all occupied units, lacked complete plumbing. The comparable fraction for the nation as a whole was only 5.9 percent. Among Fifth District states, South Carolina had the highest proportion of occupied units lacking complete plumbing facilities, 17.3 percent; and Washington, D. C. had the lowest proportion, 2.1 percent.

Lack of complete plumbing is a more common characteristic of rural housing than of non-rural housing. Nationally, nearly two-thirds of the occupied units lacking complete plumbing were in rural areas, although rural areas contained only one-fourth

[1] An urbanized area consists of a central city with 50,000 or more inhabitants and smaller adjacent cities and surrounding closely settled territory. For a detailed definition, see page XII, *1970 Census of Population*, PC(1)-A1.

Table I

LOCATION OF OCCUPIED HOUSING UNITS

UNITED STATES AND FIFTH DISTRICT STATES, 1970

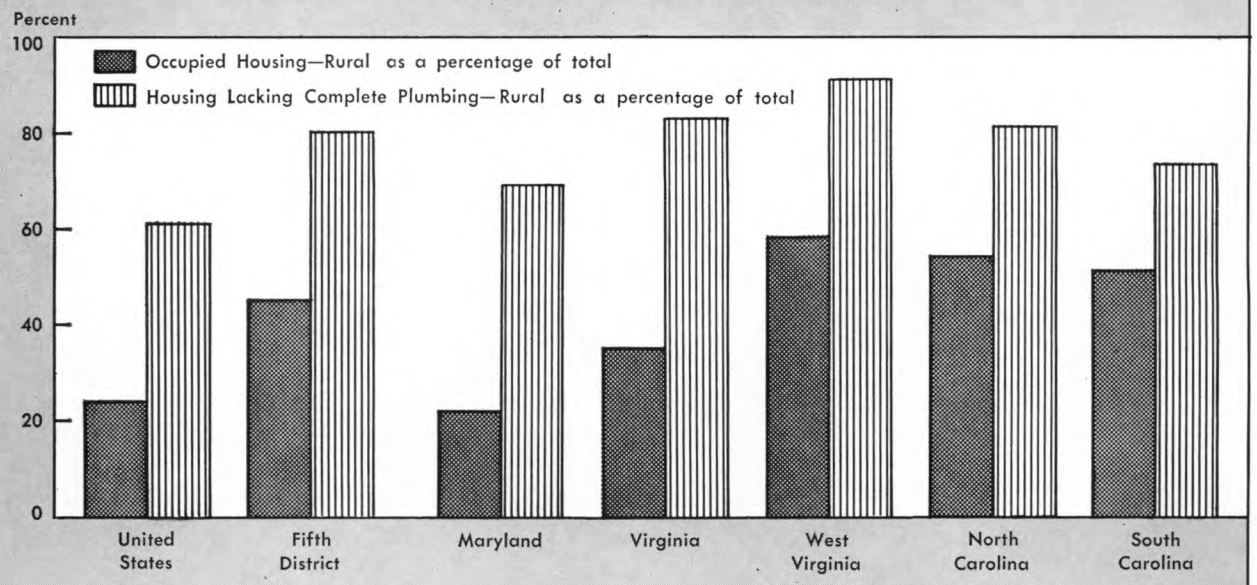
	Rural		Non-rural		Total	
	Number	%	Number	%	Number	%
Md.	255,245	22	919,828	78	1,175,073	100
D. C.	....	....	262,538	100	262,538	100
Va.	491,106	35	899,530	65	1,390,636	100
W. Va.	317,633	58	229,581	42	547,214	100
N. C.	815,320	54	694,244	46	1,509,564	100
S. C.	373,684	51	360,689	49	734,373	100
5th Dist.	2,252,988	40	3,366,410	60	5,619,398	100
U. S.	15,887,066	25	47,562,681	75	63,449,747	100

Source: 1970 Census of Housing.

Chart 1

SELECTED CHARACTERISTICS OF RURAL HOUSING

UNITED STATES AND FIFTH DISTRICT STATES, 1970



Source: **1970 Census of Housing**

of the occupied housing units (Table II). In the District 80 percent of the occupied units lacking complete plumbing were in rural areas, whereas only 40 percent of all occupied units were located in rural areas. Comparable data for each District state are presented in Chart 1.

Crowding A common measure of the adequacy of space in a housing unit is persons per room. Considering units that house more than one person per room as crowded, there were 514,583 crowded units in the District in 1970. This figure amounted to 9.1 percent of the occupied units; whereas for the nation as a whole, only 8 percent of the occupied units were crowded. Although crowding is commonly considered to be an urban rather than a rural problem, such is not the case in the Fifth District. In all District states except Maryland, crowded units

Table II

LOCATION OF OCCUPIED HOUSING UNITS LACKING COMPLETE PLUMBING

UNITED STATES AND FIFTH DISTRICT STATES, 1970

	Rural		Non-rural		Total	
	Number	%	Number	%	Number	%
Md.	32,747	69	14,643	31	47,390	100
D. C.	....	....	5,601	100	5,601	100
Va.	139,501	83	28,811	17	168,312	100
W. Va.	80,635	91	8,271	9	88,906	100
N. C.	175,695	81	40,276	19	215,971	100
S. C.	93,710	73	33,933	27	127,643	100
5th Dist.	522,288	80	131,535	20	653,823	100
U. S.	2,301,464	61	1,471,354	39	3,772,818	100

Source: **1970 Census of Housing.**

Table III

LOCATION OF CROWDED UNITS

UNITED STATES AND FIFTH DISTRICT STATES, 1970

	Rural		Non-rural		Total	
	Number	%	Number	%	Number	%
Md.	20,870	27	56,514	73	77,384	100
D. C.	....	....	32,160	100	32,160	100
Va.	56,515	51	54,353	49	110,869	100
W. Va.	37,488	75	12,341	25	49,829	100
N. C.	95,051	62	58,667	38	153,718	100
S. C.	54,969	61	35,654	39	90,623	100
5th Dist.	264,894	52	249,689	48	514,583	100
U. S.	1,610,851	31	3,600,023	69	5,210,874	100

Source: **1970 Census of Housing**

Table IV

PROPORTION OF RURAL OCCUPIED UNITS THAT LACK COMPLETE PLUMBING AND ARE CROWDED

UNITED STATES AND FIFTH DISTRICT STATES, 1970

	Number of Occupied Units	Percent Lacking Complete Plumbing	Percent Crowded
Maryland	255,245	13	8
Virginia	491,106	28	12
West Virginia	317,633	25	12
North Carolina	815,320	22	12
South Carolina	373,684	25	15
Fifth District	2,252,988	23	12
United States	15,887,066	14	10

Source: 1970 Census of Housing.

as a proportion of all occupied units were higher in rural areas than in non-rural areas (Table III). This condition is in sharp contrast to the situation for the entire United States where only 31 percent of the crowded units were in rural areas. West Virginia had the largest ratio of total number of crowded units to total number of occupied units in rural areas, and Maryland had the smallest.

Frequency of Housing Deficiencies In rural areas of the District in 1970, 23 percent of the occupied units lacked complete plumbing, and 12 percent were crowded. For the United States comparable statistics were 14 percent and 10 percent, respectively. Virginia had the highest percentage of units lacking complete plumbing, and South Carolina had the highest proportion of units that were crowded. Maryland had the lowest proportion both for units lacking complete plumbing and crowded units. Data for each District state are presented in Table IV.

Rural Housing Programs Various Federal and state programs exist to help improve the quality of housing in the United States. The major responsibility for administering Federal housing programs directed towards improving housing conditions in rural areas lies with the Farmers Home Administration in the U. S. Department of Agriculture. Founded to bridge the housing credit gap in rural areas, the primary purpose of the Farmers Home Administration is to lend to low and moderate income people who cannot obtain credit from other sources. This agency is restricted by law to lending in rural places with a population of 10,000 or less. Accordingly, its activities extend to some areas not included in the census definition of rural.

The housing program of the Farmers Home Administration is primarily a homeownership program, although the agency also makes loans for rental housing and cooperatively-owned multi-family units as well as for farm labor housing. In recent years, the number and amount of Farmers Home Administration loans for rural housing, shown in Table V, have demonstrated a dramatic increase both nationally and in Fifth District states. In fact, according to the President's *Fourth Annual Report on National Housing Goals,* such loans accounted for approximately 15 percent of total Federal credit assistance for housing in 1971. Increases in the number and the amount of loans in District states have exceeded the national increases.

The Farm Credit Act of 1971 authorized the Farm Credit System to make non-farm rural housing loans. Farm Credit System loans are made through the Federal Land Banks and may be made to residents in open country and in places with a population of 2,500 or less. Through September 30, 1972, the Farm Credit System had extended 206 loans for a total amount of approximately $4 million. The Federal Land Bank of Columbia, South Carolina, which serves the states of Florida, Georgia, North Carolina, and South Carolina, extended the first Farm Credit System non-farm rural housing loan made in the United States and accounts for approximately two-thirds of the number and amount of outstanding loans.

Thomas E. Snider

Table V

NUMBER AND AMOUNT OF FARMERS HOME ADMINISTRATION RURAL HOUSING LOANS

UNITED STATES AND FIFTH DISTRICT STATES

FISCAL YEARS 1969 AND 1971

	1969		1971	
	Number	Amount in Millions	Number	Amount in Millions
Maryland	542	$ 7.3	1,014	$ 15.1
Virginia	1,287	12.8	3,634	44.8
West Virginia	987	8.8	2,066	24.2
North Carolina	3,225	31.6	7,313	92.7
South Carolina	1,573	14.5	7,212	97.5
Fifth District	7,614	75.0	21,239	274.3
United States	53,818	480.6	113,464	1,367.8

Source: Data provided by Farmers Home Administration.

APPENDIX

SELECTED CHARACTERISTICS OF FIFTH DISTRICT HOUSING, 1970

Occupied Units

	Rural Areas	2,500 to 10,000	10,000 to 50,000	Urbanized Areas	Total
Maryland	255,245	48,072	77,338	794,418	1,175,073
Washington, D. C.	.....	.....	.....	262,538	262,538
Virginia	491,106	79,822	86,093	733,615	1,390,636
West Virginia	317,633	46,054	68,218	115,309	547,214
North Carolina	815,320	129,777	197,174	367,293	1,509,564
South Carolina	373,684	92,820	84,154	183,715	734,373
Fifth District	2,252,988	396,545	512,977	2,456,888	5,619,398
United States	15,887,066	4,527,259	5,221,333	37,814,089	63,449,747

Occupied Units Lacking Complete Plumbing

Maryland	32,747	1,842	2,484	10,317	47,390
Washington, D. C.	.....	.....	.....	5,601	5,601
Virginia	139,501	7,304	4,389	17,118	168,312
West Virginia	80,635	2,463	2,386	3,422	88,906
North Carolina	175,695	15,259	14,680	10,337	215,971
South Carolina	93,710	13,964	9,882	10,087	127,643
Fifth District	522,288	40,832	33,821	56,882	653,823
United States	2,301,464	274,550	249,622	947,181	3,772,818

Occupied Units That Were Crowded

Maryland	20,870	2,706	4,352	49,456	77,384
Washington, D. C.	.....	.....	.....	32,160	32,160
Virginia	56,516	14,340	5,143	34,870	110,869
West Virginia	37,488	2,609	3,435	6,297	49,829
North Carolina	95,051	12,098	17,686	28,883	153,718
South Carolina	54,969	10,753	9,034	15,867	90,623
Fifth District	264,894	42,506	39,650	167,533	514,583
United States	1,610,851	349,176	384,132	2,866,715	5,210,874

Source: **1970 Census of Housing.**

RECENT PUBLICATIONS

1972 ANNUAL REPORT The *Annual Report* features an article entitled "The Check Payments System and the Fifth District Regional Clearing Plan." The article reviews the historical development of the payments mechanism and describes the proposed Fifth District regional clearing system. The *Report* also includes highlights of the Bank's operations during 1972, comparative financial statements, and current lists of officers and directors of our Richmond, Baltimore, and Charlotte offices.

BANKING IN THE CONSUMER PROTECTION AGE This 24-page reprint, which first appeared as a series of *Monthly Review* articles, reviews the development of consumer protection legislation in the United States, with particular emphasis on the Truth in Lending Act and the Fair Credit Reporting Act. In addition, important legislation involving bank credit cards is examined, and the work of the National Commission on Consumer Finance is discussed.

LINEAR PROGRAMMING: A NEW APPROACH TO BANK PORTFOLIO MANAGEMENT This reprint of a *Monthly Review* article describes the linear programming model in a nonmathematical manner and explains how it can be used in the bank portfolio management process.

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