

# BUSINESS REVIEW



**October 1969**

FEDERAL RESERVE BANK OF PHILADELPHIA

Suburban Jobs and Black Workers  
Full Silos and Bulging Corn Cribs  
Bank and Non-Bank Competition

#### Suburban Jobs and Black Workers

*... Suburbanization of employment in the Philadelphia area poses growing problems for black workers in blue-collar trades. An improved transit system may be the best of several possible solutions.*

#### Full Silos and Bulging Corn Cribs

*... 1969 is shaping up as a banner year for agriculture in most of the Third District.*

#### Bank and Non-Bank Competition

*... A look at the expansion of non-bank financial institutions and the location of merging banks suggest that competition may not have been blunted to the extent their merger figures imply.*

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## Suburban Jobs and Black Workers

by Richard W. Epps

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In the summer of 1968 when a "Jobmobile" searched along the streets of North and West Philadelphia offering jobs to the residents of ghetto neighborhoods, three thousand applicants filed through the trailer housing the roving employment agency. The "Jobmobile" canvassed areas employers seldom tread, and found that a tip about a job was all that was needed by many of the unemployed.

With city-wide unemployment then at a historically low 3.2 per cent, the influx of new workers was welcomed by employers suffering from the tight labor market. But there were problems. Many of the newly recruited workers needed basic training. Moreover, some employers with the greatest number of job openings were too far away from North and West Philadelphia to benefit from the newly tapped labor pool. As one businessman who signed up a hundred workers from North Philadelphia complained, the expense and inconvenience of the two-hour bus and trolley ride to his suburban electronics plant caused most of the new employees to quit within a few weeks.

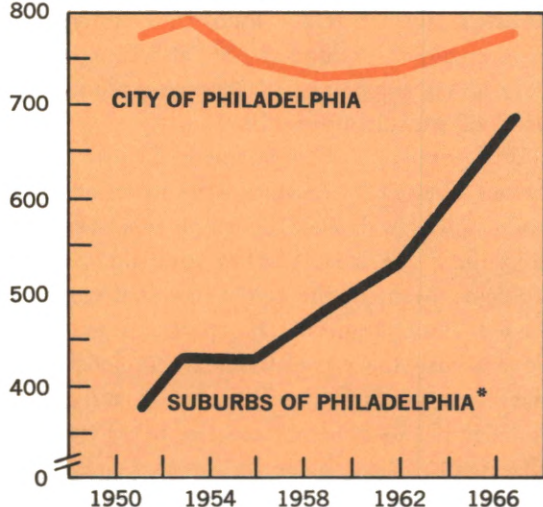
Although a problem for this suburban manager, the incident also is indicative of substantial problems for residents of older sections in Philadelphia. Because virtually all growth in employment is going on in the suburbs, the increasing number of black workers in older, less accessible areas of the city may have difficulty in finding jobs.

This part of the economic problem of the Negro community is receiving increasing notice, and programs are being designed to eliminate the impact of inaccessibility on employment. Proponents of black capitalism, for example, urge creation of new factories in Negro communities in part to give black workers a better chance of finding a job close to home. Also,

## CHART 1

City Employment has Stagnated while Suburban Employment has Mushroomed . . .

Thousands of Non-Agricultural Employees,  
Excluding Government Employees



\*Chester, Montgomery, Delaware and Bucks Counties in Pennsylvania, and Gloucester, Camden and Burlington Counties in New Jersey.

Source: *County Business Patterns*, United States Department of Commerce

some people have suggested that government subsidies be devoted to mass transit to help ghetto residents get to suburban plants. How important a problem is the inaccessibility these programs are designed to correct? Are Negroes closer or further from jobs, on average, than are white workers? Although these questions have been widely discussed, there have been few attempts to give quantitative answers.<sup>1</sup> This article reports upon a measurement of the problem for Philadelphia.

<sup>1</sup> The problem has been studied for Chicago and Detroit by John Kain. See John F. Kain, "Housing Segregation, Negro Employment, and Metropolitan Decentralization," *Quarterly Journal of Economics*, Vol. 82, No. 2, (May, 1968), pp. 175-197.

## THE CHANGING DISTRIBUTION OF JOBS AND PEOPLE

As have firms in other areas, many Philadelphia employers have found suburban locations to be more suitable than city industrial areas. Consequently, employment has been expanding rapidly in suburban areas of Philadelphia, as shown in Chart 1, while the City of Philadelphia, at least since the early fifties, has suffered an absolute decline in employment.

The worst loss for the City of Philadelphia has been in manufacturing activities where employment has plummeted nearly 20 per cent (Chart 2). The story in manufacturing has been repeated to a lesser extent in all industries except finance and services. Growth in these two areas has offset most of the decline in other industries.

The profile of population is similar to that of employment. As shown in Chart 3, city population declined slightly during the fifties, but recovered much of the loss during the early sixties. Suburban population expanded rapidly throughout the period.

While the city population has remained roughly constant in size, its racial composition has shifted sharply. Since 1950, the Negro proportion of the population of Philadelphia has nearly doubled—jumping from 18 to 32 per cent.

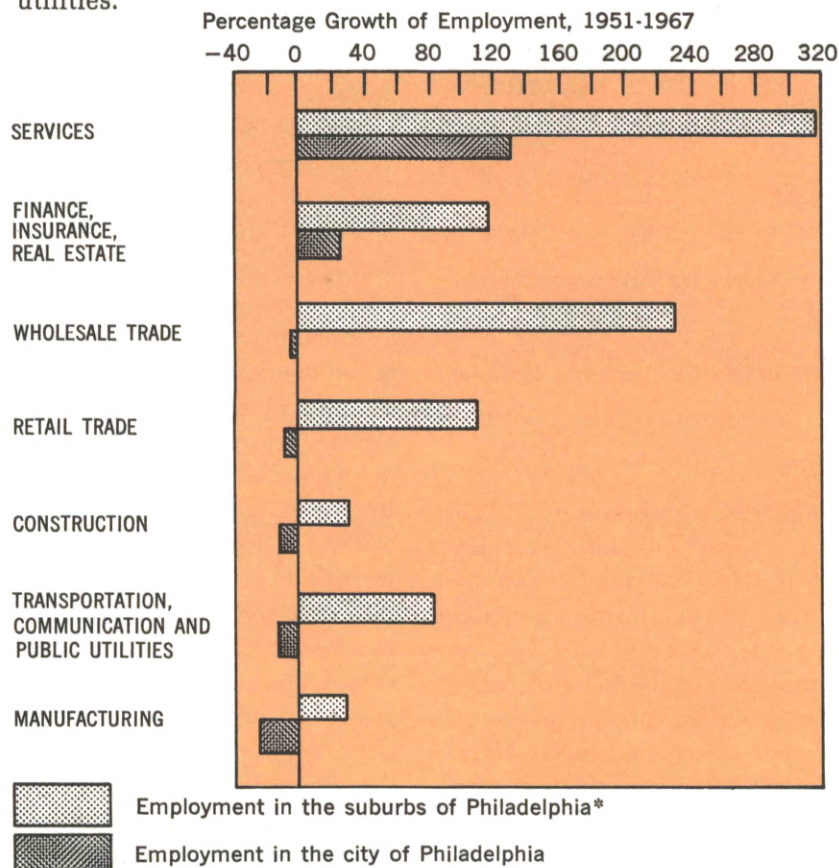
The apparent similarity of the shifts in employment and population disguises an important feature. Industries in which the city has done most poorly—manufacturing, transportation and public utilities, and construction—are the biggest employers of blue-collar workers. Replacing these firms are ones offering jobs to paper-shuffling and meeting-going white-collar workers. But the population of the city has become increasingly characterized by blue-collar



## CHART 2

And, City Employment has Changed from Factories to Offices.

Each bar represents the percentage growth of employment between 1951 and 1967. The City of Philadelphia has lagged its suburban areas in every sector, but has lost most employment in industries hiring workers in the manual trades—manufacturing, construction, and transportation, communications and public utilities.



\*Chester, Montgomery, Delaware and Bucks Counties in Pennsylvania, and Gloucester, Camden and Burlington Counties in New Jersey.

Source: **County Business Patterns**, United States Department of Commerce

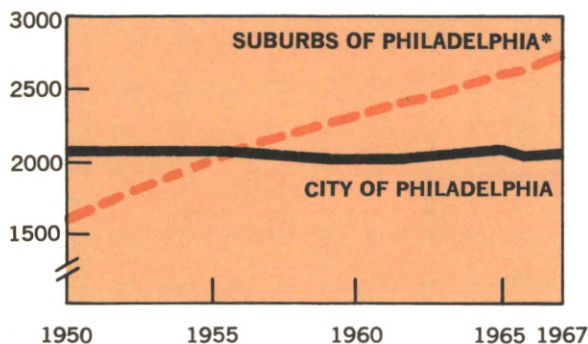
workers such as truck drivers, carpenters, and janitors. Consequently, the city has a smaller number of appropriate jobs to offer to its citi-

zens. Because Negro workers are especially concentrated in manual trades, the shift in structure of jobs probably affects them the most severely.

## CHART 3

Population, like employment, has stabilized in the City.

Population in Thousands



\*Chester, Montgomery, Delaware and Bucks Counties in Pennsylvania, and Gloucester, Camden and Burlington Counties in New Jersey.

Sources: U.S. Census of Population, 1950 and 1960, Population Estimates, series p-25, United States Department of Commerce.

## SPACE AND JOBS

High participation of Negro workers in city jobs adds to the importance of this shift in employment structure. In 1960, 92 per cent of the city's Negro workers found their jobs within the city limits, with a proportionately greater number of Negroes working in each occupation in the city than in the suburbs. One can attribute this greater concentration of Negro workers in the city to two principal factors: (1) the effect of distance to jobs on the *supply* of workers; and (2) the effect of discrimination by employers and consumers on the *demand* for workers.

**Supply side.** The supply of Negro workers available to employers distant from Negro residential areas is less than that available to employers close to these areas. For one thing, commuting costs tend to discourage workers

from taking employment in distant locations. Also, imperfect flows of knowledge about jobs and hesitancy of Negroes to work in all-white areas may reduce the supply available to employers located some distance from the ghettos.

The average worker in the Philadelphia area spent more than fifty cents a day getting to and from work in 1960, and covered about two and one-half miles each way. More lengthy trips of workers cost up to four dollars a day, and amount to more than fifteen miles each way. These expenditures make a big dent in paychecks of low-income workers, and may act as a powerful incentive for workers to attempt to find a job close to home, or to take no job at all if there are none close to home.

If housing markets functioned better, the cost of commuting would be less of a barrier to choosing a job. Workers could survey the whole metropolitan area for the best job, and move their residence if that best job were far away. But, moving the residence is not easy for black workers. Segregation in housing markets severely limits the number of places where black workers can live. And for workers with meager incomes, the necessity of finding cheap housing reduces the alternatives even more. If the best job is in a white community in the suburbs, a black worker may be effectively shut off from the local housing market.

Unable to reduce any or all of the cost of commuting by moving, black workers must subtract transportation costs from each week's paycheck, significantly reducing their income from distant jobs. Less regular or lower-paying jobs in the neighborhood become more attractive. If no jobs are available close to home, temporary withdrawal from the labor force may seem justified.

If job openings are far away from the job



seeker's neighborhood, chances are he will not find out about them. Most workers depend upon advice and information from friends and acquaintances for guidance in their search for a job. With few Negroes living in suburban areas, there is little opportunity for the word about these outlying job openings to filter through to black workers. Employment agencies, public and private, aid the flow of information, but they play a role secondary to that of the more casual process of verbal communication.<sup>2</sup>

Racial composition of the area in which jobs are located also has an impact upon the supply of workers in a subtle way. Negro workers may be hesitant to venture into all-white areas for jobs. The work force of plants in these areas is often predominantly white, and may appear non-receptive to black workers.

**Demand Side.** For some black workers, distance to jobs is not a constraint—there simply may be few jobs for them outside of black areas. Prejudice by employers or residents in white areas may largely eliminate demand for black workers. The problem is two-dimensional. First, there may be a tendency for employers to hire workers similar in race to their customers. For example, retail merchants in predominantly white areas, suspecting that their customers would like to trade with members of their own race, may hire mostly white workers. Conversely, stores in mostly Negro areas may hire black workers in the belief that it will help boost sales. Negro physicians and lawyers are concentrated in Negro residential areas; black teachers have usually been predominant in schools with largely black student bodies.

Second, Negroes in traditionally white occupations may have a difficult time finding employment except in Negro areas. Employers have tended to open only certain kinds of employment to Negro workers, typically in manual or menial jobs. Although managers increasingly look to Negroes to fill more responsible and skill-oriented positions, the transition has by no means been completed. Thus, Negro workers seeking non-manual jobs may often have a difficult time finding employment. Their best opportunities may be in Negro-owned firms or in firms where most of the work force is Negro. Since these firms are concentrated in areas of Negro residents, demand for these workers may be low in most white areas.

### THE BALANCE OF SUPPLY AND DEMAND

The impact of distance from job opportunities differs by occupation. In general, employment of Negroes in blue-collar trades is most strongly affected by the supply side—the combination of commuter costs and information flow. White-collar workers, on the other hand, are most strongly affected by characteristics of demand—the low level of demand for black workers in predominantly white areas.

The importance of supply and demand considerations in employment of Negro workers was determined by comparing relative Negro employment in each part of the region with accessibility to black workers and the racial balance of local neighborhoods.<sup>3</sup> Accessibility compares the closeness of an area to Negro workers with the closeness of that same area to white workers.<sup>4</sup> And it represents the relative supply of black workers available to employers in an

<sup>2</sup> For a discussion of job-seeking behavior see H. L. Sheppard and A. H. Belitsky, *The Job Hunt: Job Seeking Behavior of Unemployed Workers in a Local Economy*, (Baltimore: Johns Hopkins Press, 1966).

<sup>3</sup> Relative employment of Negroes is defined as the per cent of all employees who are Negro.

<sup>4</sup> See Appendix for a more extensive explanation of the accessibility index.



**TABLE 1**  
**FACTORS UNDERLYING SPATIAL VARIATION IN NEGRO**  
**EMPLOYMENT IN THE PHILADELPHIA METROPOLITAN AREA†**

Occupation	Per Cent of Variation in Relative Negro Employment Attributable to:				
	Labor Market Structure	Relative Accessibility	Market Structure and Accessibility Jointly	Error and Other Factors	Total
Professional, Technical, and Kindred . . . . .	<b>12.4</b>	<b>10.6</b>	<b>15.1</b>	61.9	100
Managers, Officials and Proprietors . . . . .	—	—	—	100	100
Clerical Workers . . . . .	<b>8.3</b>	<b>5.9</b>	<b>12.2</b>	73.6	100
Sales Workers . . . . .	<b>14.2</b>	<b>1.7</b>	<b>10.9</b>	73.2	100
Craftsmen, Foremen . . . . .	3.9	<b>13.1</b>	<b>12.4</b>	70.6	100
Operatives and Kindred Workers . . . . .	2.1	<b>15.0</b>	<b>12.6</b>	70.3	100
Service Workers . . . . .	2.2	<b>13.5</b>	<b>11.9</b>	72.4	100
Laborers . . . . .	0	<b>17.6</b>	0	82.4	100

†See appendix for an explanation of methodology and data. Bold numbers are significantly different from zero at the .01 level of confidence.

The variation in relative employment of Negroes among parts of the Philadelphia Metropolitan Area is broken into four parts in Table 1. The first two are the minimum amounts attributable *separately* to market structure, and to accessibility. The third is the part attributable to market structure and accessibility which, because of the correlation between market structure and accessibility, cannot be statistically divided between the two factors. It is safe to assume, however, that when the independent contribution of one of the two factors is low, this joint part may be attributed to the other factor.\* The fourth part is the amount of variation resulting from errors (probably high) in measuring relative Negro employment and from the operation of other factors.\*\*

\*Market structure and relative accessibility are partly correlated with each other. Thus, areas having a high (low) relative accessibility to Negroes tend to have a high (low) proportion of Negro residents. In such areas it is not possible to say statistically whether their high (low) relative employment of Negroes is because of their market structure or because of their accessibility. But, when in other parts of the region where the level of accessibility and of market structure differ from each other the level of Negro employment is tied exclusively to, say, accessibility, it is safe to assume that accessibility is the causative factor throughout the region.

\*\*As explained in the Appendix, the measure of relative Negro employment is based on a 5 per cent sample of employment in the region. When used on as disaggregated a basis as in this study, these data probably include a substantial amount of measurement errors. These errors understate the effect of relative accessibility and market structure. They do not, however, bias the conclusions of the study.

area. An accessibility of 20 per cent, for example, means that four times more white workers live within commuting distance of an area than do black workers. The index of racial balance

measures the proportion of the residents of each area of the city that are Negro, and it is a proxy for the effect of demand upon employment opportunities of Negroes.



As shown in Table 1, cost of travel and flaws in the flow of information, both proxied for by accessibility, are of some importance for each occupation. Racial composition of the local market, a proxy for discrimination by employers, is an important consideration only for white-collar trades.<sup>5</sup>

Perhaps because of the importance of discrimination, Negroes in white-collar occupations travel less far to work than do their white counterparts. As shown in Table 2, Negro sales workers and managers travel less than half as far to their jobs as their white counterparts do; black professional and clerical workers travel only 80 per cent as far. This shorter distance suggests that jobs at a distance from Negro residential areas are not open to black workers in these occupations. This situation contrasts with that of Negroes in blue-collar pursuits who generally travel as far or further to work than their white counterparts.

TABLE 2

## AVERAGE MILES TRAVELED TO WORK, 1960\*

Occupation	White	Non-White
Professional .....	3.83	2.59
Managerial .....	3.35	1.63
Clerical .....	3.02	2.50
Sales Workers .....	3.35	1.50
Craftsmen .....	3.17	2.52
Operatives .....	2.41	2.39
Service Workers .....	1.85	1.84
Laborers .....	2.17	2.86
Total .....	2.96	2.37

\*The averages are geometric means.

Source: "First Work Trip File," Delaware Valley Regional Planning Commission.

<sup>5</sup> These conclusions are in agreement with, and reinforce, the conclusions of the study of Chicago and Detroit mentioned in footnote 1.

## DISTRIBUTION OF JOBS AND RESIDENCES

In 1960, the last year for which small-area employment figures are available, there were relatively few white-collar jobs in Negro areas, but Negro communities were close to large concentrations of blue-collar employment. Thus, the distribution of jobs was favorable for blue-collar workers, but unfavorable for white-collar workers.

This line-up of employment is changing because of the shifting structure of the city. Most blue-collar jobs are concentrated in manufacturing, construction, and public utilities, with a sprinkling of employment through other kinds of businesses. Manufacturing, the largest single employer, is currently involved in a search for space which is leading many firms engaged in that pursuit to the outer perimeter of the metropolis. As a hold-over from the pre-automobile days when transportation facilities were concentrated within the city, a large number of plants still ring the center city. Close to neighborhoods of Negro residents, these hold-overs, together with firms operating with port facilities on the Delaware River, form much of the employment market for Negro workers in blue-collar trades. The current movement of these firms out of the city will reduce this market.

In contrast to the story for manual workers, industries employing large numbers of white-collar workers—service industries and financial institutions—have grown rapidly within the city. The greater accessibility to Negro workers is less important for this group of employers, however. Composition of the product market served by firms and the attitudes of employers are the major determinants of employment opportunities for black workers. It is not clear that the growth of these firms in the city near Negro neighborhoods has led to any change in

the composition of markets for their products. Many of the institutions that have grown most rapidly serve regional or national markets from a central city location. Those that locate in and serve Negro neighborhoods—the retail and local service shops—probably have not sustained the same growth. Thus, growth of white-collar employment in the city probably has not given black workers special advantages in competing for jobs. Still, black workers have made considerable progress in the white-collar occupations. Employment of black workers has grown more rapidly in white-collar than blue-collar jobs during the sixties, with Negroes filling an increasing proportion of the white-collar opportunities. This gain can be attributed to changes in attitudes of employers and to a rapidly growing demand for office workers in general.

### IN AID OF NEGRO WORKERS

The apparent improvement in the outlook for jobs in white-collar occupations affects only one-fourth of the Negro labor force, however. For the larger segment of the black work force, the outlook is dimmer.

Accessibility is a growing problem for black workers in the blue-collar trades. The negative impact of distance from job opportunities, combined with the movement of blue-collar jobs to the suburbs and the concentration of Negroes in the city casts a threatening shadow on the outlook for employment of Negroes in blue-collar occupations. Efforts to counteract the effect of distance, therefore, will become important as suburbanization of employment continues.

In the abstract, there are three different kinds of solutions to the problem of inaccessibility:

- a. increase employment in Negro areas,

- b. integrate Negro homes throughout the region,
- c. improve transportation and communication channels between Negro and suburban areas.

The first approach, advocated by backers of black capitalism and by many business and government leaders, would make a dent in the problem of inaccessibility.<sup>6</sup> However, it may also have harmful social effects in the long-run. In part, the growing separation between the Negro community and major segments of employment in the metropolitan area is increasing the breach between black and white communities. Increased job opportunities within Negro communities for primarily black workers might accelerate this trend. In addition, government subsidies would be required to help firms locating in ghetto areas defray the high costs of operation that have led many firms to leave ghetto areas.

Integration of housing is a long-term solution. Efforts in this direction over the last decade have shown little substantial progress for two reasons. First, open-housing laws are enforced on a case-by-case basis. With limited manpower available for enforcement, there is a long lag between occurrence of alleged discrimination and correction of the abuse. Second, segregation may be partly voluntary. Given freedom of choice, many black workers may choose to live in black communities, although possibly not in the city.

Improvements in transportation and channels of communication are perhaps the more practical ways of counteracting the problems of inaccessi-

<sup>6</sup> For a more extensive discussion of this alternative see Richard W. Epps, "The Appeal of Black Capitalism," *Business Review*, Federal Reserve Bank of Philadelphia, May, 1969.



bility in the near term. The flow of job information and transportation of workers is more amenable to alteration by public policy than are housing patterns. Also, the consequent increase in contact between black and white workers would be beneficial on social grounds.

Urban transportation systems typically are composed of public or quasi-public facilities, subject to substantial government control, if not to direct public ownership. The kinds and locations of facilities provided, therefore, can be guided by government to serve objectives such as providing adequate transportation to ghetto residents. But, two problems complicate the provision of transportation services to ghetto residents. First, because of the cost of auto-ownership, most residents of poor neighborhoods must rely on mass transit. While fees on users of highways support the construction and maintenance of highways, fees on users of mass transit have generally not been sufficient to support their construction and maintenance. Thus, government must decide to subsidize the transportation of poor workers if it is to provide a suitable system of mass transit for their use. Second, suburban locations of employment are widely dispersed; they are laid out according to an auto-oriented transportation system. Mass transit is most efficient for concentrated centers of employment and housing. Consequently, if mass transit can provide adequate transportation to dispersed centers of employment in the suburbs, the cost of so doing will be high.

Government and industry are currently involved in communicating information on job openings. As evidenced by Philadelphia's "Job-mobile," government is experimenting with new ways of getting information on jobs to residents of poor, inaccessible neighborhoods. In addition, special efforts by industry, such as the "Jobs"

campaign of the National Alliance of Businessmen, an effort to recruit the hard-core unemployed, are helping improve communication on employment opportunities. But, improved communications alone will not be sufficient to eliminate the effect of suburbanization of employment upon black workers in blue-collar trades. A combination of subsidized transportation to reduce commuting cost and improved communications would seem to have the greatest chance of success.

#### APPENDIX: A Note on the Methods and Data of the Study

Estimates of the impact of supply and demand upon the spatial variation of Negro employment in the Philadelphia metropolitan area were made by correlation analysis. Three variables were correlated: one representing Negro employment; one representing the effect of demand (market structure); and one representing the effect of supply (accessibility).

**Negro Employment.** The proportion of employment made up by Negro workers in each area of the city was used as the measure of Negro employment:

$$\% \text{Negro employment in area } i = \frac{\text{number of Negro employees in area } i}{\text{total number of employees in area } i}$$

**Market Structure.** The racial composition of each area was used as a proxy for variations among areas in relative demand for Negro workers. As explained in the text, demand for black workers may be affected by the composition of the market area served by the employer.

In occupations traditionally considered "white," demand for black workers may be low except in Negro firms and firms with mostly Negro work forces, both of which tend to concentrate in Negro areas. The relative number of Negroes living in each area, the index of demand, was defined as:

%Negro residents in area  $i$  =

$$\frac{\text{number of Negro residents in area } i}{\text{total number of residents in area } i}$$

**Accessibility.** An index of relative accessibility of each area to Negro workers was used as a proxy for supply. Conceptually, relative accessibility represents the proportion of all workers applying for work in each area that would be expected to be Negro. The index was computed in two parts—accessibility to all workers and accessibility to Negro workers. The accessibility to Negro workers was then expressed as a percentage of accessibility to all workers.

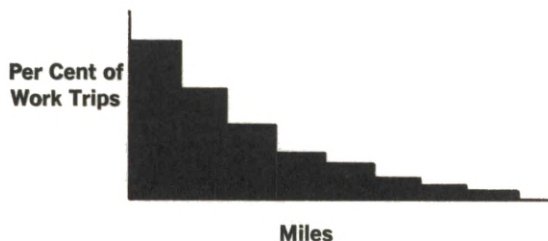
We can explain the process of computation by a simple example for a small town. Assume that a small town of thirty workers is divided into three districts, as shown below:

Number of workers living in district		
District	White	Negro
1	0	10
2	10	0
3	5	5

As a first step, we measure the distance that workers must travel within and between districts to get to work:

Distance From District Number	To district number		
	1	2	3
1	.5	1.0	1.5
2	1.0	.3	2.0
3	1.5	2.0	.4

Second, from a survey of travel habits, we find out how far workers typically travel. From this we determine a curve showing the proportion of the workers that may be expected to travel each distance (see diagram). The fairly rapid



decline in the curve results from both the cost of travel and the flow of information about jobs. Finally, we apply this curve to the distance and labor force figures to determine how many workers may be expected to travel from each district to each other district. As an example, the number of Negroes expected to travel to District Number 1 from each district is computed in the following table:

A	B	C	D	E
District Number	Labor Force of District	Distance to District 1	Proportion of Workers Expected to Travel Each Distance	Column D Times Column B Equals Number of Workers Expected to Travel to District 1
1	10 workers	.5 miles	30%	3.33
2	0	1.0	15	0
3	5	1.5	5	.25
				<u>3.58</u>



The number of Negro workers expected to travel to District 1 is 3.58. If the same calculation were carried out for all workers, we would find that a total of 5.33 workers would be expected to travel to District 1. Dividing the Negro figure by the total figure gives the relative accessibility of District 1 to black workers, equal to 67.2 per cent.

These steps were carried out for 162 districts which comprise the greater Philadelphia area. All of the data used were derived from the Transportation Survey of the Delaware Valley Regional Planning Commission.

**Allocation of Variance.** The variance components listed in Table 1 were calculated from correlation coefficients in the following manner:

Let,  $r_{em}$  = correlation coefficient between relative Negro employment and racial composition of the local market

$r_{ea}$  = correlation coefficient between relative Negro employment and relative accessibility

$R_{e.am}$  = coefficient of multiple correlation between relative Negro employment, the dependent variable, and

racial composition of the market and relative accessibility, the two independent variables.

Then,

1. The minimum per cent of the variation in relative Negro employment separately attributable to the racial composition of the local market is equal to,

$$R_{e.am}^2 - r_{ea}^2$$

2. and, the minimum per cent variation separately attributable to relative accessibility is equal to,

$$R_{e.am}^2 - r_{em}^2$$

3. and, the per cent variation attributable to relative accessibility and/or the racial composition of the local market, but not separable, is equal to,

$$r_{ea}^2 + r_{em}^2 - R_{e.am}^2$$

4. The per cent variation attributable to error and other factors is equal to,

$$1 - R_{e.am}^2$$

## Full Silos and Bulging Corn Cribs

by Evan B. Alderfer

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Tall corn makes full silos, assuring succulent silage for winter-feeding to dairy cows and beef cattle. The ears of yellow corn are big and full; bulging granaries gladden the hearts of dairy farmers and poultrymen.

The Pennsylvania corn crop will probably come very close to the 1967 harvest which is the highest on record. The Commonwealth's crop of hay is said to be the largest since 1924 when Cal Coolidge presided over the country. South Jersey's great market garden, which produced \$60 million worth of vegetables in 1968, is currently expected to duplicate last year's record in tonnage and might do even better in value. Reports from Delaware also promise an excellent 1969 harvest, based upon a late summer's survey.

What made the year so good for so many farmers in these three states was that the weather was on its best behavior most of the season—not too much frost, hail, high winds, high water, or drought. Farmers fare best when rain falls in the right amount at the right time.

### THE PRECIPITATION PATTERN

After the melting of winter's snow, moisture was generally adequate in April so that Pennsylvania farmers found the soil in good condition for plowing. May was warm and dry, permitting farmers to do their field work. June rainfall was a bit below normal, but soil was moist enough for good growth all month. July rainfall was overabundant, in some sections damaging. Corn grew so fast that it could almost be heard cracking, as they say in Iowa. Grass also luxuriated, but the abundance of rain which brought heavy yields of hay impaired its quality in areas where the amount and frequency of rainfall interfered with drying and baling. The weather pattern in New Jersey and in Delaware was similar to that in Pennsylvania.



## HEAPING HARVESTS

The dairy farming section of northeastern Pennsylvania, where there are almost as many cows as people, experienced the best growing season ever. Good weather for hay and good prices for milk made the region flow with milk and money. One evidence of prosperity in the northeast is the number of silos being built this year—more than in the past five years.

In our pomological paradise—Adams, Franklin, and York counties—fruit hung heavy at harvest. Apples are of excellent size and hue, as were the peaches and pears harvested earlier. However, considerable tonnage of cherries was left on the trees because heavy July rains caused much cracking of the fruit.

Perennially prosperous Lancaster County was short on rainfall this season, but prospered all the same. Perhaps the shortage of rain was confined to the immediate area of the official rain gauges! There was a good harvest of hay. The corn fields look as if silos are going to overflow. Fruits and vegetables did well. Tobacco fields were reported to be yielding close to a ton per acre versus 1,700 to 1,800 pounds in previous years. A satisfactory crop of potatoes is also expected. Dairy men and beef cattle feeders are getting good yields of field crops for winter feeding. The abundance of corn on the ear also benefits the poultrymen who have been receiving good prices for eggs. Good land makes good farming in Lancaster County.

The world's number one vegetable—the Irish potato—is a favorite crop with many farmers and a favorite ingredient in many chefs' creations. The 1969 Pennsylvania harvest is expected to be about 8 per cent larger than a year ago, and the New Jersey crop 8 per cent smaller because of the damage done by the heavy July rains.

Mushrooms, of course, are not affected by rainfall. In the fiscal year ending June 30, 1969, Pennsylvania produced a \$42 million crop. This is the Commonwealth's leading cash crop, and the 121 million pounds produced accounted for 64 per cent of the country's mushroom production.

South Jersey's July rainfall was two and a half times the normal. That helped some crops but hurt others. Field crops and fruits seemed to flourish with the excess moisture, but certain vegetables suffered.

King of the New Jersey market garden is the tomato—some grown for the fresh market, others for processing. The '69 harvest of tomatoes for the fresh market is expected to be about 10 per cent less than the '68 crop, but that perhaps is explained by a reduction of the same proportion in acreage. Tomatoes grown for processing are always measured and talked of in *tons* rather than *hundred-weights*. Canhouse tomatoes, to use the trade lingo, suffered somewhat from the July deluge. But not all of the 28 per cent drop in the '69 expected harvest, compared with '68, can be attributed to excessive moisture. There was also a 19 per cent drop in acreage. Some of the shrinkage in acreage may be attributable to unhappy memories of the '68 strike at a leading canhouse which left tonnage to rot in the fields.

New Jersey orchards yielded bountifully. The expected harvest of apples will be about 8 per cent over last year, and the peach crop up 24 per cent. Blueberries are probably the best since the record 1966 crop, both for size of berries and size of crop.

Cranberry bogs still keep New Jersey barrelling along as the country's third ranked producer, despite a decline of about 5 per cent from last year's harvest of 155,000 barrels. Late

spring frosts and late July's heavy rains did the damage. Incidentally, cranberry production is now highly mechanized; for example, a farmer who formerly employed over 500 workers now gets along with only 16 men.

Delaware farmers also had a growing season characterized by local shortages of spring rains, precipitation aplenty at mid-season, and near-ideal weather in late summer to assure good to overflowing harvests. By all appearances, good yields are in store for the growers of field corn and soybeans—the state's leading cash crops. Potatoes did well, although tomatoes encountered too much moisture at harvest time for best results.

Broilers continue to hold the top spot in farm income in Delaware. Demand for broilers is holding up well, and broiler people are prospering. But broiler-growing has changed. Many small, independent growers with little capital have been displaced by large, integrated operators with big money. Major meat packers and mash makers now own and operate the works from beginning to end: they own the chicks, make the mash, run the dressing plants, sell the dressed broilers, and may even operate the restaurants where broilers are served. Some big operators own and process over forty million birds a year. Perhaps the most significant indication of the change in this industry was the permanent closing in mid-summer of the Eastern Shore Poultry Growers Exchange.

### A GREENHOUSE TOMATO POSTSCRIPT

As early as April, locally grown tomatoes appear in Philadelphia food markets—at a price. Two tomatoes, one about the size of a baseball and the other a trifle smaller, may cost you 59 cents.

That's because it is April, and these tomatoes were grown in a nearby greenhouse.

The tomato greenhouse looks like an ordinary glass greenhouse, or it may be a plastic affair. The seedlings, usually homegrown to reduce the danger of introducing disease problems, are planted in an artificial mixture of horticultural vermiculite and shredded peat. For the spring crop, the seedlings may be started about Christmas time, transplanted about mid-February, and picked for the first time late in April. During the entire growing season, these greenhouse plants need a tremendous amount of care—pruning, watering, feeding, spraying, pollinating, and controlling temperature and humidity. Growing a crop of healthy greenhouse tomatoes is a task that requires intensive care. A goof may ruin the whole crop.

### A SUGAR BEET POSTSCRIPT

Sugar beets, long grown in the West, are now being grown in our area. Lehigh, Northampton, and Bucks are the major counties raising sweet beets, although they also are being produced in Lancaster, Berks, and Lebanon counties. Probably 1,500 acres of the beets were planted in Pennsylvania this year. The crop is mainly under contract to a sugar refinery in New York State. Yields of 25 to 30 tons per acre are expected. Sugar beets command \$14 to \$18 a ton, depending upon the sugar content, and there is also a Federal Government subsidy of \$2 a ton. Under favorable circumstances, therefore, a farmer might gross as much or more in sugar beets as in tobacco. Of course, an investment of \$12,000 to \$15,000 for specialized machinery is required to grow sugar beets. Whether sugar beets have come here to stay, we do not know.



# Bank and Non-Bank Competition

by Mark H. Willes

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For every ten commercial banks which existed in the Third Federal Reserve District two decades ago, there are only six today. This shrinkage has brought the banking industry under attack. Competition, it is claimed, is being threatened. The main concern generally is not for large corporations or for wealthy individuals. They are not likely to be limited to any specific geographical location, and can generally choose from a wide variety of financial alternatives. Rather, the concern is for small corporations and the majority of individuals who usually must fill their financial needs locally and, therefore, have the choice of fewer alternatives. These are the customers most affected by any drop in the degree of competition in local financial markets.

When examining changes in the competitive atmosphere in local banking markets, it is necessary to do more than look at the number of mergers that have occurred and the concentration of bank resources that has resulted. The growth of non-bank financial institutions, as well as the location of merging banks themselves, must also be considered in weighing the impact of mergers on competition. Within the Third District, a study of these factors suggests that competition may not have been reduced to the extent that bank merger figures alone imply.

## COMPETITION FROM NON-BANKS

Even though the number of banks has slipped sharply, competition may not have been reduced correspondingly, thanks to the increased role of non-bank financial institutions. Growth of non-bank financial institutions is significant to the financial customer because he can get a greater variety of services at an increased number of alternative institutions. Non-bank institutions

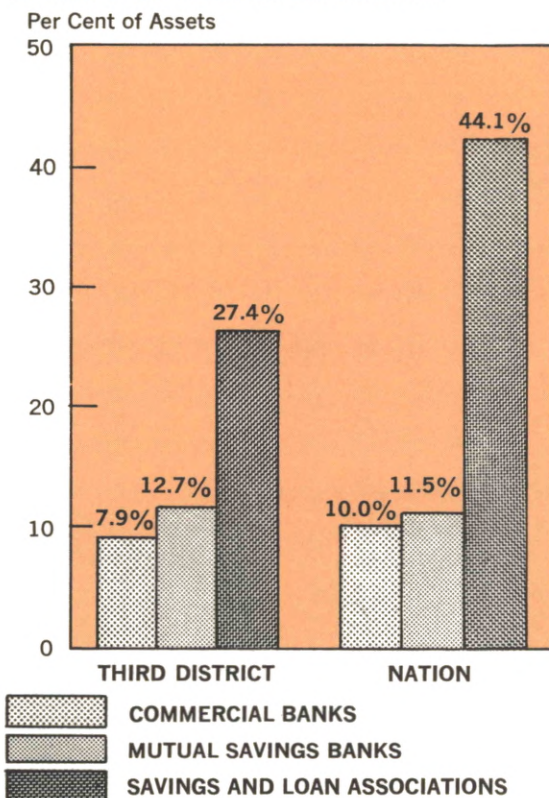
provide substitutes for some of the services of commercial banks (for example, savings accounts and mortgage loans) and, therefore, help boost competition in at least some financial markets.<sup>1</sup>

For most individual and small corporate savers and borrowers in the Third District, the most familiar and ready alternatives to commercial banks are mutual savings banks (MSB's) and savings and loan associations (S&L's).<sup>2</sup> In the District as in the nation, these non-bank financial institutions have grown much more rapidly than commercial banks, as shown in Chart 1. From 1950 to 1967, assets of savings banks in the Third District expanded steadily at an average annual rate of 12.7 per cent, while District savings and loan associations grew at an average annual rate of 27.4 per cent. In contrast, the average annual growth since 1950 of assets at commercial banks in the District has been only 7.9 per cent.

The expansion of MSB's and S&L's in the District suggests that banks may now face more intense competition than they did in the past. How this relative growth of other financial institutions has affected banking competition in so far as individuals and small businesses are concerned can be measured realistically only at the local market level.<sup>3</sup> Since the degree of bank competition in these local markets is primarily determined by the number and size of financial alternatives open to individuals or small bus-

CHART 1

Growth of commercial banks in the district over the past two decades has lagged that of non-bank financial institutions.



<sup>1</sup> Mutual savings banks and savings and loan associations are pressing hard for expanded lending powers. If granted, this authority could lead to direct competition with commercial banks in additional consumer lending markets.

<sup>2</sup> A more nearly complete picture of non-bank financial alternatives would include sales and consumer finance companies, credit unions, and insurance companies. Suitable data, however, were not available for these institutions.

<sup>3</sup> The appendix contains a discussion of the definition of banking markets used in this article.

innesses, national or District banking data are poor indicators of the competitive picture. Although a banking market cannot be easily determined, and no universal definition of a market exists, it is possible to use counties as a very rough approximation.<sup>4</sup> County borders certainly do not coincide with the complex boundaries of actual local bank markets for different prod-

<sup>4</sup> It should be emphasized that the definitions and measures of markets used in this article are not necessarily those used by the Federal Reserve or other agencies in determining the competitive effects of specific mergers.



**TABLE 1**  
**SHARE OF ASSETS HELD BY COMMERCIAL BANKS IN THE THIRD DISTRICT**  
**(Number of Counties)**

Year	Percentage of Total Assets					
	Under 50%	50%-60%	60%-75%	75%-85%	85%-95%	95%-100%
1950	0	0	1	8	19	32
1967	1	1	13	11	13	21

ucts. Counties, however, are the smallest geographical areas for which data can be readily obtained, and the trends at this level should be suggestive of what has happened in many local markets.

At the county level in the Third District, the growth of savings banks and S&L's in the last two decades seems to have created new and stronger competitors for many Third District commercial banks. In 1950, commercial banks held 85 per cent or more of the combined assets of commercial banks, savings banks, and S&L's in 51 of the 60 Third District counties. By 1967, commercial banks had maintained that same share of assets in only 34 counties; their relative role had increased in only six counties (see Table 1).

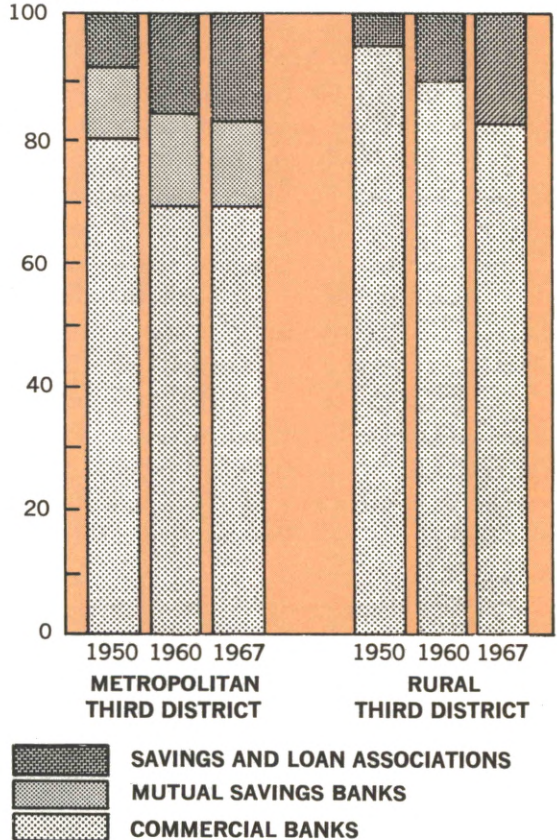
MSB's operate in only a half dozen of the sixty counties in the District. S&L's, however, exist in all but nine counties. Between 1950 and 1967, the assets of S&L's were expanding faster than those of commercial banks in 54 of the 60 counties, and MSB assets were growing faster than commercial bank assets in all but one of the counties in which MSB's operate.

Commercial banks located in metropolitan areas of the District probably have had to face tougher competition from S&L's and savings banks than have their rural counterparts, largely because all savings banks in the Third District

**CHART 2**

The share of total assets held by non-bank financial institutions is larger in metropolitan areas than in rural areas.

Per Cent of Assets





are located in metropolitan counties.<sup>5</sup> Chart 2 shows that commercial banks in rural areas traditionally have controlled a larger share of financial assets in their respective markets than have metropolitan banks in their own markets. And the role of commercial banks has not declined as much in rural areas as it has in metropolitan areas. In their respective markets, rural commercial banks still hold nearly 9 out of 10 dollars of total assets, compared with 7 out of 10 for metropolitan banks.

### INTER-BANK COMPETITION

While it appears that in some counties many commercial banks now face greater competition from non-banks, commercial banks offer some services, such as checking accounts, which are not available at other types of financial institutions. Demand for services offered exclusively by commercial banks, coupled with the demand for one-stop banking, makes the competition among commercial banks particularly important. As the number of commercial banks declines through merger, and the number of branches increases, it is argued that more and more bank offices are controlled by fewer and fewer banks. Thus, the assets of commercial banks in any given geographical area are being increasingly concentrated into a few organizations—a development which raises all the standard fears and warnings of the dangers of oligopoly and monopoly.

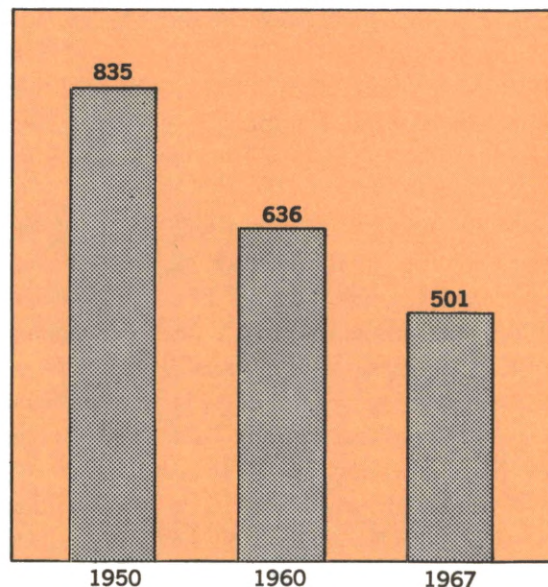
This line of argument has been prevalent in much of the recent concern about bank mergers, and is an important factor in merger cases. This was noted, for example, in the denial of the Philadelphia National-Girard Trust merger in 1962, when the Supreme Court commented on

the diminishing number of banks in the nation and within metropolitan areas of the country.

It is certainly true that the number of banks in the Third District is decreasing (see Chart 3). But the decline in the number of banks does not present the entire story of local bank-to-bank competition. A more realistic picture of concentration within the banking industry is one which is focused on the local market area relevant to any one customer and any one bank. The competitive implication of any merger may appear quite different when viewed in this way. For example, if a bank merges into a market area where it previously had no offices, competition in that area is not necessarily reduced. In fact, it may be enhanced by the entrance of a larger institution which possibly is more progressive.

### CHART 3

The number of commercial banks in the third district has declined.



<sup>5</sup> Counties designated as metropolitan are those included in one of the Third District's 13 Standard Metropolitan Statistical Areas, as defined by the Bureau of the Budget. Rural counties are those not part of a SMSA.



**TABLE 2**  
**Distance between Two Closest Offices**  
**Mergers Approved between January 1, 1950 and May 31, 1969 in the**  
**Third District**

Mergers	Miles							Total
	0	Less than 1	1 to 2	2 to 5	5 to 10	10 to 15	Over 15	
<b>District Mergers</b>								
Number	33	40	31	54	96	51	73	378
Per Cent	8.7	10.6	8.2	14.3	25.4	13.5	19.3	100.0
<b>Metropolitan Area Mergers</b>								
Number	7	33	22	27	36	22	34	181
Per Cent	3.9	18.2	12.2	14.9	20.0	12.2	18.8	100.0
<b>Non-Metropolitan Area Mergers</b>								
Number	25	7	9	27	60	29	39	197
Per Cent	12.7	3.6	4.6	13.7	30.5	14.7	20.0	100.0

Table 2 presents results of a case-by-case examination of the mergers approved in the Third District since 1950. For each merger, the distance between the two closest offices of the merging banks was measured. In cases where the two closest offices were located in the same small town, a distance of zero miles was recorded, under the assumption that the market area of a bank in a small town encompasses that entire town. If the two closest branches were located in the same city, but within one of the 13 SMSA's in the Third District, actual mileage between the offices was used. This procedure was used in the belief that the market area of a bank in a large metropolitan area does not necessarily spread over the entire area. This would be especially true for the earlier years in the study period when the economic interaction between different sections of metropolitan areas was less than it is today. All mileages were taken as "the shortest distance between two points," not road miles.

To interpret the results of this study, it is necessary to establish some criteria to determine the size of a bank's market area. Al-

though there is no steadfast rule that can be used as a guideline to define a banking market, there is considerable evidence to support the view that the market area for a given bank office and for many important services is a localized one.<sup>6</sup> If market areas extend two miles beyond a bank's outermost branches, then 27.5 per cent of the mergers that have occurred since 1950 joined banks whose markets overlapped, and, therefore, by this definition, reduced competition because they cut the number of options open to customers in those areas. If the definition of a market area were extended

<sup>6</sup> A study completed in St. Louis showed that the average distance between a business firm and its bank was 5.7 miles for large firms and 2.9 miles for small firms. (Clifton B. Luttrell and William F. Pettigrew, "Banking Markets for Business Firms in the St. Louis Area," Federal Reserve Bank of St. Louis, *Review*, September, 1966.) Metropolitan bankers consider the market area of their branch offices to be very local because the bulk of their business originates within a one-mile radius. (Thomas R. Hawk, "Changes in Competition and Concentration Within Philadelphia Financial Markets, 1946-1966," [Unpublished Master's Thesis], University of Pennsylvania, 1967.) Each of these studies, and the cut-off values for market boundaries used in this section, imply a "service-area" definition of bank markets. The appendix contains a discussion of this and other definitions which could be used.



to five miles beyond the outermost branches, the proportion of these "competition-reducing" mergers would climb to 41.8 per cent. Other cutoff points, of course, would yield still different results.

Bank offices in metropolitan areas usually serve a smaller geographical market than those in rural areas. Table 2 shows a distribution of mergers in metropolitan and non-metropolitan areas. When the two-mile limit is applied to the metropolitan mergers and the larger five-mile limit is used for the mergers that occurred in non-metropolitan areas, 34.1 per cent of the mergers may have reduced competition within local markets.

Concern over the declining number of banks is often particularly strong in metropolitan areas. In the Philadelphia SMSA, for example, the number of banks has plunged from 122 in 1950 to 37 in 1967. It is often felt that figures like these are an indication of the adverse effects of bank mergers on competition within metropolitan areas. Table 2, however, shows that mergers in the Third District have had no more (or equally) serious competition-reducing consequences for metropolitan areas than for non-metropolitan areas. If the two-mile limit definition for metropolitan bank markets and the five-mile limit for markets of non-metropolitan banks are used, 34 per cent of the mergers in metropolitan areas and 35 per cent of those in non-metropolitan sectors may have adversely affected existing competition.

One caution should be noted. The designation of "competition-reducing" mergers should be considered in terms of potential as well as direct competition. Although the market areas of merging banks may not overlap, there may be the potential for *de novo* branching of one bank into the other's market area. In such a case,

merger eliminates the possibility for potential competition, even though a given merger may not adversely affect existing competition.<sup>7</sup>

## CONCLUSIONS

The merger trend since 1950 has caused a consolidation within the banking industry that many find alarming. Ample evidence can be presented to show that the number of banks in the nation or in any large geographical area has declined in the last two decades, but it is debatable whether the necessary conclusion of this trend is greatly reduced competition.

Extensive growth of non-bank financial institutions suggests that they have strengthened the degree of competition faced by many commercial banks. Expansion of these institutions indicates that their role in some banking markets is large enough to provide some important competitive alternatives to commercial banks.

The merger trend itself in the Third District, although it certainly reduces the number of banks, may not have the anti-competitive effects that are claimed. If one definition of market areas is used, almost two-thirds of the mergers since 1950 occurred between banks which were sufficiently separated geographically so that a substantial reduction of direct competition is less than a certainty.<sup>8</sup> In fact, increased competition could be a possible consequence of some mergers if they bring a more aggressive institution into a local market.

<sup>7</sup> This could have immediate as well as longer-run effects on competition, since the threat of entry of potential competitors may influence the policies of existing competitors.

<sup>8</sup> This statement does not take into account possible reduction in potential competition. There may be a tendency on the part of some observers who focus on issues of potential competition to overstate the anti-competitive effects of many mergers. Some preliminary investigations into this area are currently underway at this Bank.



**APPENDIX: Definition of a Bank Market**

There is no unique definition of a banking market which is suitable for all purposes because, in part, there are many different bank markets which have quite different properties and dimensions. For example, a single bank may compete with other banks, non-bank financial institutions, and the open-market in the national market for large business loans. At the same time, it may compete with only a few local banks for the deposits of neighborhood residents. The geographical and institutional dimensions of a bank's market, therefore, may vary widely depending on what specific bank service (product) is being considered and the size of the bank.

But there is another and more difficult problem in trying to define a banking market. Some argue that banks compete only with banks or other institutions that draw customers from the same service area. On the other hand, it can be argued that the behavior of an individual bank can be influenced by other banks that do not draw customers from the same service area. For example, if a bank knows that there are other banks which could set up branches in its service area, but which are not there now, it might behave differently than if there were no potential entrants into its area. Consequently, some would argue that the boundaries of a banking market should be drawn widely enough to include *potential* as well as *direct* competitors.

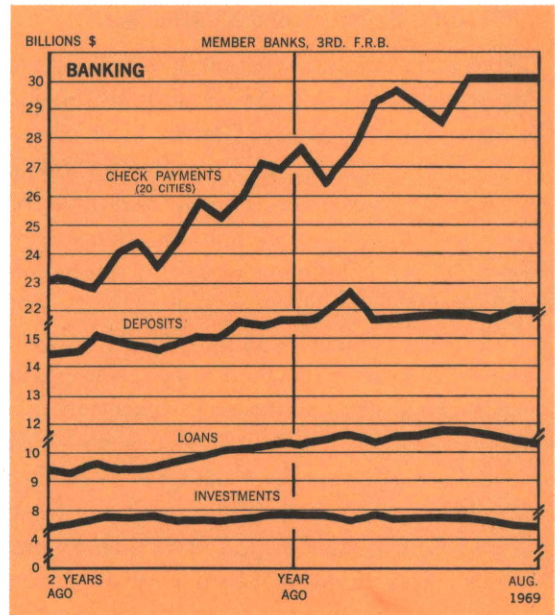
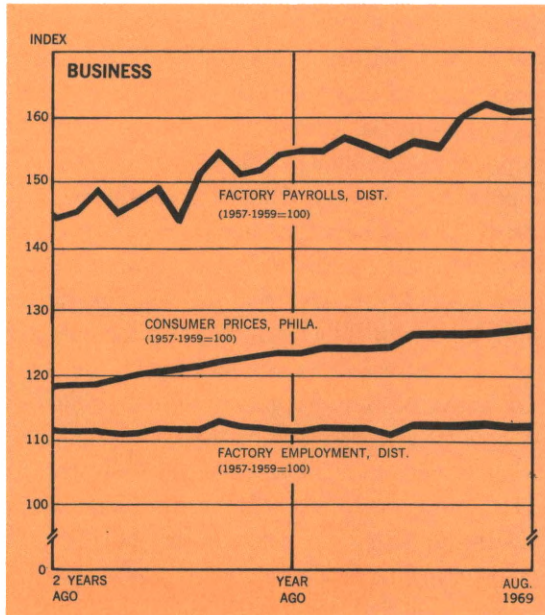
Even where bank entry through branching is not possible (for legal, regulatory, or other reasons), the situation can still be complicated.

Suppose, for example, Bank A is quite far from Bank C and neither one can branch into the other's area, so there appears to be little or no direct or potential competition. It is nevertheless possible that Bank A may be influenced by the policies of Bank C if there is another bank, Bank B, located between them which competes with both of them. This kind of *indirect* competition would suggest that banking markets should be drawn sufficiently large to include indirect as well as direct competitors.

Inclusion of indirect and potential competitors as well as direct competitors in a banking market is very difficult in practice. Only those indirect and potential competitors that have a significant effect on behavior in the market should be included. Unfortunately, no measures have yet been developed which can satisfactorily gauge the effects on competition of indirect and potential competitors. In fact, there are still some unresolved theoretical issues as to what variables and elasticities are the important ones to measure.

The market concept used in this paper is essentially the service-area concept. It was not used because it was regarded as superior to broader definitions which include indirect and potential competitors, but rather because of great theoretical and empirical complexities involved in other definitions. The market definitions and measures used here do not necessarily correspond to those used by the Federal Reserve or other agencies in determining the competitive effects of specific mergers.

# FOR THE RECORD...



## SUMMARY

	Third Federal Reserve District			United States		
	Per cent change			Per cent change		
	August 1969 from		8 mos. 1969 from	August 1969 from		8 mos. 1969 from
	mo. ago	year ago	year ago	mo. ago	year ago	year ago
<b>MANUFACTURING</b>						
Production .....	.....	.....	.....	+ 4	+ 7	+ 5
Electric power consumed .....	+ 1	+ 7	+ 7	.....	.....	.....
Man-hours, total* .....	+ 2	+ 2	0	.....	.....	.....
Employment, total .....	+ 1	+ 1	- 4	.....	.....	.....
Wage income* .....	+ 3	+ 9	+ 7	.....	.....	.....
CONSTRUCTION** .....	-28	+16	+14	+ 6	+ 3	+11
COAL PRODUCTION .....	+42	- 3	- 1	+41	- 4	- 4
<b>BANKING</b>						
(All member banks)						
Deposits .....	0	+ 1	+ 6	- 1	+ 2	+ 6
Loans .....	0	+ 9	+12	- 1	+12	+13
Investments .....	0	0	+ 4	- 1	- 4	+ 2
U.S. Govt. securities..	+ 3	- 9	- 6	- 1	-13	- 8
Other .....	- 2	+ 6	+12	- 1	+ 4	+10
Check payments*** ..	0†	+17†	+21†	+ 2	+11	+17
<b>PRICES</b>						
Wholesale .....	.....	.....	.....	0	+ 4	+ 4
Consumer .....	+ 1‡	+ 6‡	+ 5‡	0	+ 6	+ 5

\*Production workers only

\*\*Value of contracts

\*\*\*Adjusted for seasonal variation

†15 SMSA's

‡Philadelphia

## LOCAL CHANGES

Standard Metropolitan Statistical Areas\*

	Manufacturing				Banking			
	Employment		Payrolls		Check Payments**		Total Deposits***	
	Per cent change August 1969 from		Per cent change August 1969 from		Per cent change August 1969 from		Per cent change August 1969 from	
	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago	mo. ago	year ago
Wilmington ..	+ 6	+ 5	+ 4	+ 6	- 1	+38	+ 2	+ 8
Atlantic City ..	.....	.....	.....	.....	- 4	0	+ 3	+ 7
Trenton .....	+ 1	+ 5	+ 2	+ 4	+12	+11	- 4	+ 8
Altoona .....	+ 1	+ 4	+ 1	+12	-11	+ 4	+ 1	+ 8
Harrisburg ...	0	0	+ 2	+ 7	+ 2	+15	0	+10
Johnstown ...	0	- 1	0	+24	0	+ 8	0	+11
Lancaster ...	+ 1	+ 3	+ 3	+12	- 4	+17	0	+13
Lehigh Valley.	+ 1	0	+ 2	+11	+ 2	+11	0	- 7
Philadelphia ..	0	- 1	+ 2	+ 8	0	+13	0	0
Reading .....	+ 1	+ 2	+ 7	+ 5	- 4	+22	0	+ 9
Scranton .....	+ 1	+ 1	+ 2	+ 6	- 3	+ 2	0	+ 2
Wilkes-Barre ..	+ 3	+ 1	+ 2	+ 8	+ 2	+12	0	-20
York .....	+ 2	+ 3	+ 3	+11	- 2	+ 9	0	+ 7

\*Not restricted to corporate limits of cities but covers areas of one or more counties.

\*\*All commercial banks. Adjusted for seasonal variation.

\*\*\*Member banks only. Last Wednesday of the month.