

economic review

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FEDERAL RESERVE BANK OF CLEVELAND

AN ECONOMIC PROFILE OF CLEVELAND

PART I — BACKGROUND

Cleveland is the eighth largest industrial center in the United States. It is a city particularly vulnerable to cyclical swings in business activity, at least to the extent that what happens in the nation tends to happen with greater intensity in Cleveland.

The intent of this article, which is the first of a two-part series, is to sketch an economic profile of Cleveland, with some attention to how Cleveland has come to be what it is today. In the second article, the economy of Cleveland will be analyzed on the basis of the behavior of economic time series, with emphasis on relationships between Cleveland and the U. S. economy as a whole. In other words, the second article will consider the economic growth of Cleveland, cyclical fluctuations (timing, amplitude, and duration), and seasonal movements, as measured by a number of economic time series—all against the background of the national economy.

The general purposes of the two articles are threefold: (1) to provide a better understanding of the economy of a metropolitan area dominated by "heavy industry"; (2) to attempt to show how time series data can be used to analyze the economic activity of a local area; and (3) by promoting better understanding of the Cleveland economy, possibly open the way for measures that might lessen the severity of economic fluctuations in Cleve-

land and thus reduce the social and economic consequences of cyclical swings in business activity. It goes without saying that the articles are concerned with analysis, not prescription.

ECONOMIC DEVELOPMENT AND POPULATION GROWTH

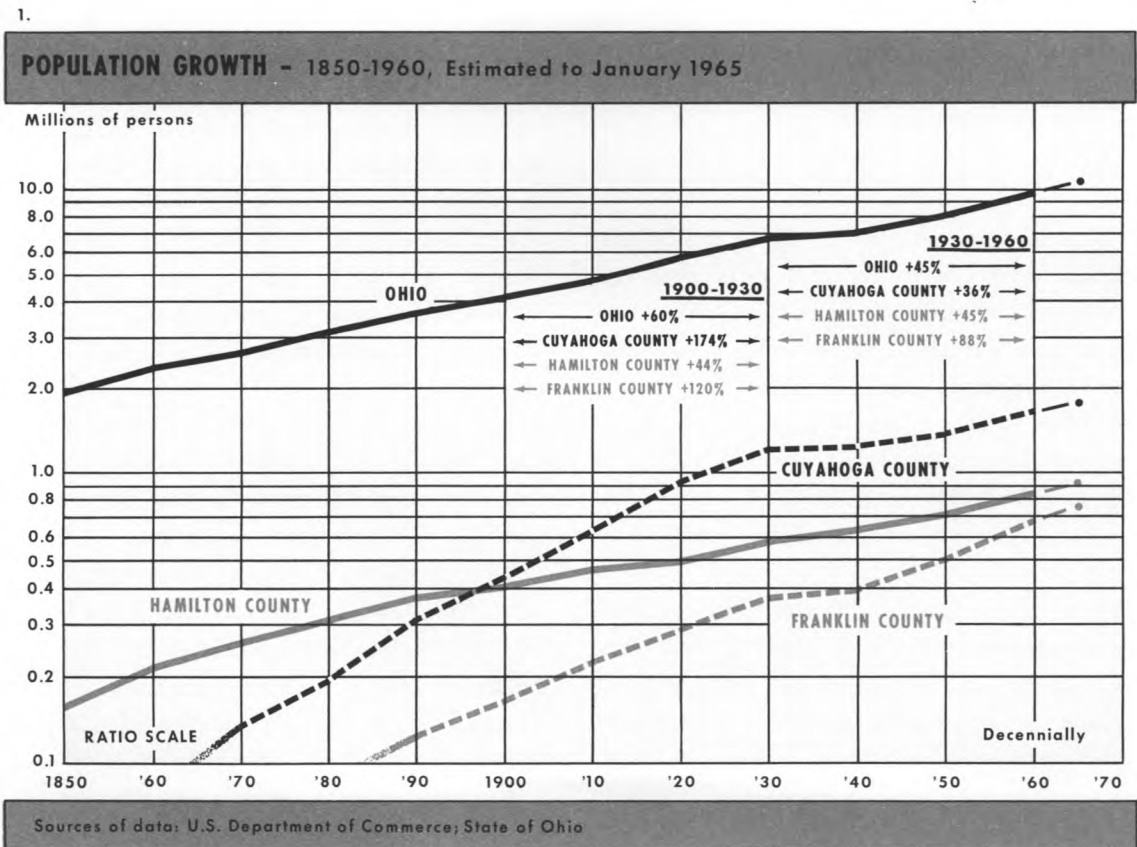
Cleveland received its first push toward economic importance with the opening of the Ohio Canal in 1832. The city became a major transshipment point for the complex of waterways that were the chief arteries of commerce prior to 1850. The Great Lakes and the Erie Canal moved goods east and west, while the Ohio Canal and the Ohio and Mississippi Rivers moved goods north and south, and there sat Cleveland at a major juncture point.

An infant iron industry working with bog iron took the lead in opening the Marquette range in 1844, and by the mid-1850's Cleveland was well on its way to becoming an industrial metropolis. In the decade of the 1860's, oil joined iron and steel as a growth industry. Twenty years later Cleveland witnessed the emergence of a third major industry, the electrical machinery and equipment industry. With this background, it is not surprising that, to this day, durable goods predominate among Cleveland's manufactures (three-fourths of production workers are employed in durable goods industries).

Strong economic demands—first of the Civil War and then of the rapid postwar industrial expansion, railroad building, and the settling of the west—stimulated an already thriving economy, and from 1860 on, Cleveland's population grew at a rate substantially greater than that of Ohio as a whole. It was not until the beginning of the present century, however, that Cleveland achieved its current position as the largest city in Ohio. The population of Cleveland continued to grow at a more rapid rate than that of either the State as a whole or of the cities which are

its nearest rivals, Cincinnati and Columbus, until 1930. Since then, the population growth rates of Cleveland and the State have been roughly the same. Chart 1 shows population trends for Cuyahoga County (Cleveland) as well as for Ohio and for the two next most populous counties, Hamilton (Cincinnati) and Franklin (Columbus).

While the population of Cuyahoga County has not resumed the growth rate of earlier decades, percentage gains have increased in recent decades (14.2 percent between 1940 and 1950 and 18.6 percent between 1950



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and 1960). In contrast, the adjoining counties of Lake, Geauga, and Medina, which with Cuyahoga County comprise the present Cleveland Standard Metropolitan Statistical Area, have grown at steadily increasing rates from decade to decade. The population of Lake County almost doubled between 1950 and 1960 while that of Geauga and Medina Counties increased by more than three-fourths and three-fifths, respectively. The combined population of the three counties in 1960 was still not quite one-sixth that of Cuyahoga, however, so that their growth remained relatively obscured in the SMSA total. The pattern just described is typical of most major SMSA's throughout the nation. The central county grows at a slower rate than its surrounding suburbs, which develop first as bedroom satellites and then enter a period of industrial development of their own.

DISTRIBUTION OF EMPLOYMENT

Manufacturing is the chief source of employment in Cleveland as it is in both the State of Ohio and the nation. The proportion of manufacturing employment to total non-agricultural employment is substantially higher in Ohio and its major metropolitan centers (except Columbus) than it is in the U. S. as a whole (see Table I). Although Cleveland is properly regarded as an industrial center, the proportion employed in manufacturing is slightly below the Ohio figure (38.4 percent as compared with 39.2 percent) and substantially below four other metropolitan centers in the State (Canton, Youngstown-Warren, Akron, and Dayton). It is, therefore, apparently not the proportion of nonagricultural workers engaged in manufacturing but

the kinds of manufacturing in which they are engaged that gives the economy of Cleveland its unique character—in short, the predominance of durable goods activity in the total manufacturing mix, as mentioned earlier. The second article of this series will analyze this manufacturing mix and consider the implications for Cleveland.

Wholesale and retail trade is second in importance as a source of employment in Cleveland. While the proportion of workers engaged in trade activity in Cleveland is above the State average, even higher proportions of workers in Toledo, Cincinnati, and Columbus are so employed.

Third in importance as a source of employment in both Ohio and the nation is government (Ohio, 13.7 percent and the U. S., 16.6 percent). Government employment in Cleveland ranks fourth (11.9 percent) behind service employment (14.0 percent). In both Ohio and the U. S., services rank fourth as a source of employment. It is not surprising that Columbus, the capital of Ohio, ranks first in the State in the percent of workers employed in both government and services. What may be surprising is the fact that Cleveland trails not only Columbus but also Dayton, Cincinnati, and Toledo in the proportion of workers employed in government. But this may be a transitory phenomenon. A substantial boost to government employment in Cleveland will result from the expansion of Cuyahoga Community College and the conversion of Fenn College to Cleveland State University and the subsequent development of this educational complex.

Employment in finance accounts for 4.7 percent of all Cleveland workers, a figure

TABLE I
Distribution of Total Nonagricultural Employment
Among Seven Major Employment Categories,
1965 Annual Average
Eight Large Ohio SMSA's, Ohio, and U. S.

Percent in Manufacturing		Percent in Trade		Percent in Services		Percent in Government	
Canton	49.0%	Toledo	21.1%	Columbus	14.9%	Columbus	20.6%
Youngstown-		Cincinnati	20.9			Dayton	17.7
Warren	47.0	Columbus	20.9	U. S.	14.7		
Akron	44.1			Toledo	14.3	U. S.	16.6
Dayton	41.4	U. S.	20.8	Cleveland*	14.0	Ohio	13.7
		Cleveland*	20.6	Cincinnati	13.6		
Ohio	39.2	Ohio	19.4	Youngstown-		Cincinnati	12.8
				Warren	12.9	Toledo	12.1
Cleveland*	38.4					Cleveland*	11.9
Toledo	37.4	Akron	18.7	Ohio	12.7	Akron	11.7
Cincinnati	35.3	Canton	18.2			Youngstown-	
		Youngstown-		Akron	12.4	Warren	9.4
U. S.	29.8	Warren	18.0	Dayton	12.2	Canton	8.6
		Dayton	17.4	Canton	11.8		
Columbus	26.1						

Percent in Transportation, Communication, and Public Utilities		Percent in Finance		Percent in Construction	
Cincinnati	7.6%	Columbus	6.2%	U. S.	5.3%
Toledo	7.6	Cincinnati	5.4		
				Columbus	4.9
U. S.	6.7	U. S.	5.0	Youngstown-	
				Warren	4.5
Akron	6.5	Cleveland*	4.7	Dayton	4.4
Cleveland*	6.2			Cincinnati	4.3
Columbus	6.1	Ohio	3.9		
				Ohio	4.3
Ohio	6.0	Canton	3.3	Toledo	4.2
		Toledo	3.3	Cleveland*	4.0
Youngstown-		Akron	2.8	Akron	3.7
Warren	5.4	Dayton	2.8	Canton	3.5
Canton	5.2	Youngstown-			
Dayton	3.9	Warren	2.5		

* Cleveland SMSA includes Cuyahoga, Lake, Medina, and Geauga Counties.

Sources: U. S. Department of Labor; Division of Research & Statistics, Ohio Bureau of Unemployment Compensation

close to the national proportion of 5.0 percent and in excess of the Ohio average of 3.9 percent. The proportions of Cleveland employment in the construction and transportation, utilities, and communications cate-

gories are virtually the same as those for the State. National percentages, however, are higher than either Cleveland or Ohio figures for both these categories (transportation, communications and utilities: U. S., 6.7 percent,

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Ohio, 6.0 percent, Cleveland, 6.2 percent; construction: U. S., 5.3 percent, Ohio, 4.3 percent, Cleveland, 4.0 percent).

EMPLOYMENT TRENDS

As shown at the top of Chart 2, between 1958-60 and 1965 the number of persons employed in Cleveland (Cuyahoga and Lake Counties) increased by 8 percent (or 55,000 persons).¹ That gain was only slightly smaller than the 8.6 percent increase in Ohio as a whole, but fell considerably short of the corresponding 14 percent rise in the U. S. Such a pattern is wholly consistent with national trends for major SMSA's, even in areas of more rapid growth. For example, employment in Los Angeles increased by only 5.1 percent between 1960 and 1965 as compared with a statewide gain of 17.4 percent in California.

Of the 55,000 increase in employment in Cleveland during the 1958-60 and 1965 period, nearly one-third was in government occupations, including public schools. The 23 percent rise in this category was larger than the corresponding 19 percent increase in Ohio, and almost equal to the 24 percent increase in the nation.

Approximately another third of the increase in Cleveland employment between the base period 1958-60 and 1965 occurred in the service industries. The 21 percent gain in service employment slightly exceeded the 19 percent increase in Ohio, but was less than the 25 percent increase in the U. S.

¹ The period 1958-60 is used as a base rather than 1957-59 because of various changes in employment groupings which were put into effect with the 1958 Census of Manufactures and 1958 Census of Business.

The remaining 20,000 additional jobs were allocated among trade, manufacturing, and finance, real estate, and insurance. The 8.5 percent increase of employment in trade in Cleveland was fractionally above the Ohio average, but considerably less than the 14 percent nationwide rate of increase. The gain in finance employment, although relatively small in actual numbers, amounted to an 11 percent increase, not far from the 13 percent rise in Ohio, but again less than the increase in the U. S. (17 percent).

The 7,000 increase in manufacturing employment between 1958-60 and 1965 represented a gain of barely 3 percent, or about half the 6 percent expansion in Ohio and about one-third the 9 percent increase in the U. S. However, since the average hourly wage in manufacturing in Cleveland exceeds the national average by approximately 17 percent, each additional worker on a manufacturing payroll in Cleveland represents a greater addition to total community buying power than is true of each such accession nationally. As figures in the table show, in recent years the average hourly wage in manufacturing in Cleveland has maintained a fairly steady relative differential over that in the U. S.

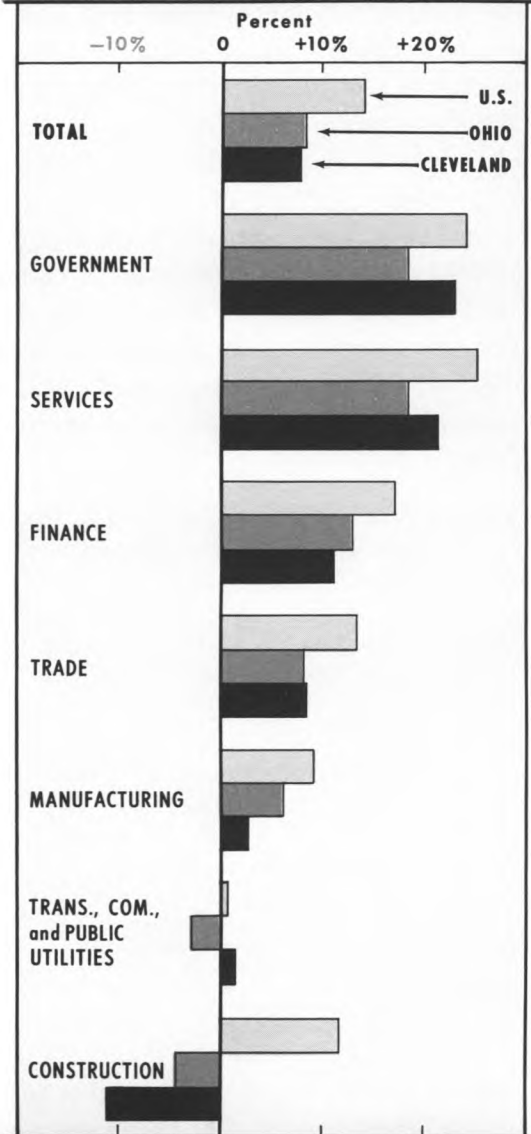
Average Hourly Wage in Manufacturing

Year	Cleveland	U. S.
1958	\$2.46	\$2.11
1959	2.59	2.19
1960	2.67	2.26
1961	2.73	2.32
1962	2.82	2.39
1963	2.89	2.46
1964	2.97	2.53
1965	3.02	2.61
1966 (Mar.)	3.15	2.68

Source: U. S. Department of Labor

2.

NONAGRICULTURAL EMPLOYMENT CHANGES, CLEVELAND,* OHIO, and U.S.
1965 Compared with 1958-60 Average



* Cleveland SMSA includes Cuyahoga and Lake Counties.
Sources of data: U.S. Department of Labor;
Division of Research and Statistics,
Ohio Bureau of Unemployment Compensation

MANUFACTURING

Manufacturing activity in Cleveland has expanded relatively slowly in recent years. This is implied by information on capital spending and value added by manufacture, as well as by employment data.

Trends in annual expenditures by manufacturers for capital projects in Cleveland, Ohio, and the U. S. are compared in Chart 3. As the chart shows, all three areas experienced a capital spending boom in 1956 and 1957, followed by several years of somewhat smaller increases in expenditures. The U. S. total was the first to surpass its high of the mid-1950's, doing so in 1964 with a total of \$18.58 billion as against the 1957 high of \$15.96 billion. In Ohio, capital expenditures of \$1,572 million in 1965 exceeded the State's previous high of \$1,135 million in 1957. In Cleveland, capital spending of \$210 million in 1964 and \$223 million in 1965 remained below the totals of \$245 million in 1956 and \$265 million in 1957. Planned expenditures for 1966, estimated at \$253 million, would equal the 1956-57 average, however, and would come close to the 1957 peak.

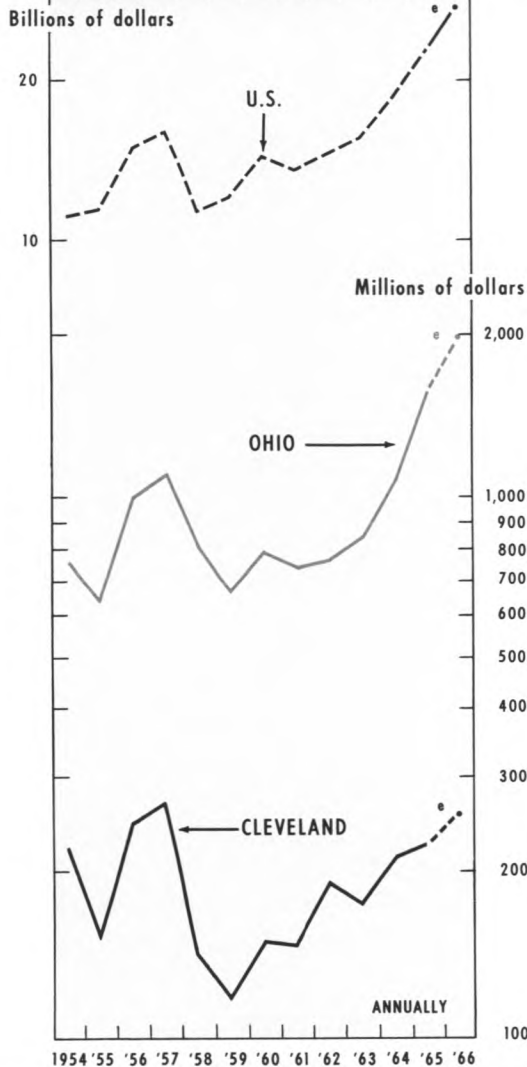
As shown in Table II, value added by manufacture in Cleveland amounted to \$3,253 million in 1963, a net gain of 6 percent from 1956. The increase was small in comparison with corresponding advances of 19 percent in Ohio and 31 percent in the U. S., and it also trailed the increases of 18 percent and 57 percent in Cincinnati and Columbus, respectively.² The table also highlights the

² See "An Economic Profile of Cincinnati," *Economic Review*, Federal Reserve Bank of Cleveland, Cleveland, Ohio, October 1964, and "An Economic Profile of Columbus," *Economic Review*, Federal Reserve Bank of Cleveland, Cleveland, Ohio, January 1966.

3.

CAPITAL SPENDING in MANUFACTURING CLEVELAND,* OHIO, and U.S.

(current dollars)



e Estimated
 * Cleveland SMSA includes Cuyahoga and Lake Counties
 Sources of data: Securities and Exchange Commission;
 U.S. Department of Commerce;
 Ohio Department of Development;
 Federal Reserve Bank of Cleveland

fact that year-to-year swings in value added are usually larger in Cleveland than in either Ohio as a whole or the U. S.

While Cleveland's share of total value added by manufacture is larger than that of any other SMSA in the State, it has eroded persistently since 1956, interrupted only by partial recovery in two years, 1959 and 1962. In contrast, as shown in the following tabulation, value added by manufacture in Columbus has been inching up as a percent of the Ohio total while Cincinnati's share of the State total has displayed no clear change. (The 1963 drop in Cincinnati's share of value added would have to be confirmed by data for subsequent years to establish a reversal of trend.)

Value Added by Manufacture in Three Ohio Cities as Percent of State Total

	Cleveland*	Cincinnati†	Columbus‡
1956§	23.7%	12.3%	4.4%
1957	23.0	12.9	4.6
1958	21.9	12.9	5.4
1959	22.2	12.5	5.3
1960	22.0	12.8	5.5
1961	21.1	13.0	5.5
1962	21.9	12.8	5.5
1963	21.1	11.8	5.8

* Cleveland—Cuyahoga and Lake Counties.

† Cincinnati—Hamilton, Clermont, and Warren Counties.

‡ Columbus—Franklin County.

§ The year 1956 is taken as the base of comparison rather than the census year 1958 during which the 1957-58 recession ended.

Source: U. S. Department of Commerce

Cleveland's industrial composition is basically different from that of Cincinnati and Columbus. The top five manufacturing industries in Cleveland—transportation equipment, machinery except electrical, primary metals, fabricated metal products, and elec-

TABLE II
Value Added by Manufacture, 1956-1963
Cleveland, Ohio, and U. S.

	Cleveland SMSA*		Ohio		U. S.	
	Current Dollars (millions)	Percent Change from Previous Year	Current Dollars (millions)	Percent Change from Previous Year	Current Dollars (millions)	Percent Change from Previous Year
1956	\$3,058		\$12,928		\$144,909	
1957	2,933	- 4.1 %	12,757	- 1.3 %	147,838	+ 2.0 %
1958	2,511	-14.4	11,473	-10.1	141,500	- 4.3
1959	3,079	+22.6	13,857	+20.8	161,315	+14.0
1960	3,048	- 1.0	13,830	- 0.2	164,003	+ 1.7
1961	2,809	- 7.8	13,307	- 3.8	164,179	+ 0.1
1962	3,188	+13.5	14,580	+ 9.6	179,290	+ 9.2
1963	3,253	+ 2.0	15,443	+ 5.9	189,995	+ 6.0
Net change for entire period and for two subperiods:						
1956-63		+ 6%		+19%		+31%
1956-59		+ 1		+ 7		+11
1959-63		+ 6		+11		+18

* Cleveland SMSA includes Cuyahoga and Lake Counties.

Source: U. S. Department of Commerce

trical machinery—are either metal producers or metal users.³ There are a number of important industries in both Cincinnati and

³ The following products are typical of the named industries as those industries are represented in Cleveland. The list is not exhaustive and is intended mainly to inform readers who have little or no acquaintance with Cleveland industry.

Primary metals: pig iron; steel ingots; rolled steel; iron and steel forgings, castings, and foundry products.

Fabricated metals: structural steel; sheet metal products; metal stampings; plumbing fixtures; wire and wire products; hardware; nuts, bolts, and screws; tools and dies.

Nonelectrical machinery: construction and mining equipment; machine tools; special tools and dies; office machines.

Electrical machinery: motors; generators; industrial controls; welding equipment; electronic components; X-ray apparatus.

Transportation equipment: bodies, engines and other parts for autos and trucks; aircraft engines and parts.

Columbus that are not related to iron and steel, particularly chemicals in Cincinnati and food products in both Cincinnati and Columbus.

Table III shows the five leading manufacturing industries in Cleveland. Transportation equipment was by far the leading industry during 1963, in both value added and share of total manufacturing employment. Table III also shows that, except for electrical machinery (the fifth-ranking industry), each of the other four metal-based industries was more heavily concentrated in Cleveland than in either Ohio or the U. S.

Trends in manufacturing employment in Cleveland are presented graphically in Chart 4 and compared with corresponding trends for Ohio and the U. S. It is apparent that Cleveland's manufacturing industries have not fared as well in recent years as have their

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TABLE III
Three Measures of Activity in
Leading Manufacturing Industries
Cleveland, Ohio, and U. S.

	Cleveland SMSA* 1963	Ohio 1963	U. S. 1963
Share of Value Added by <u>All Manufacturing Industries</u>			
Transportation equipment	19.9%	15.9%	11.9%
Primary metals	15.2	14.6	8.0
Nonelectrical machinery	14.7	12.4	8.9
Fabricated metals	10.9	8.6	6.2
Electrical machinery	8.7	10.0	8.6
Five-industry total	69.3	61.5	43.7
Share of Capital Spending by <u>All Manufacturing Industries</u>			
Transportation equipment	13.5	10.6	9.4
Primary metals	31.2	25.4	12.3
Nonelectrical machinery	13.2	9.6	7.0
Fabricated metals	8.2	7.2	5.5
Electrical machinery	5.4	6.1	6.2
Five-industry total	71.5	58.8	40.3
Share of Total Employment in <u>All Manufacturing Industries</u>			
Transportation equipment	17.0	13.2	9.5
Primary metals	13.0	12.9	6.6
Nonelectrical machinery	13.3	13.1	8.6
Fabricated metals	11.9	9.3	6.4
Electrical machinery	8.0	9.4	8.6
Five-industry total	63.3	58.0	39.7

* Cleveland SMSA includes Cuyahoga, Lake, Medina, and Geauga Counties. Data for individual industries are not available for the older two-county SMSA classification as used elsewhere in this article.

NOTE: Not additive due to rounding.

Source: U. S. Department of Commerce

statewide and nationwide counterparts. The lag is noticeable in the all-industry total shown at the top of the chart as well as in most of the subdivisions shown below.

In terms of growth in employment, Cleveland most closely matched the performance of Ohio in nonelectrical machinery and the "all other" industries categories, and lagged only slightly behind Ohio in the electrical machinery industry. In marked contrast, employment gains in Cleveland lagged behind the U. S. in all categories shown in the chart.

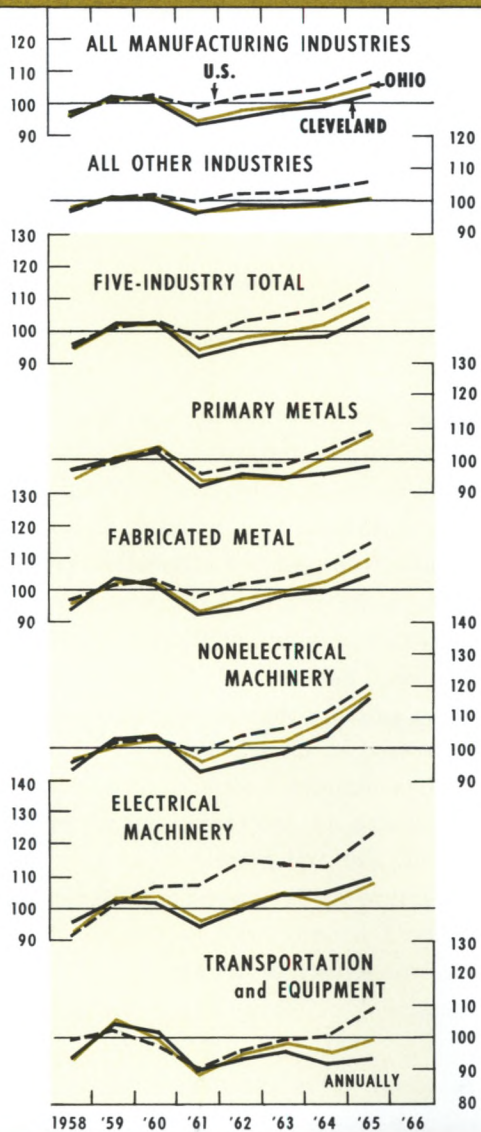
It would be important in identifying areas of potential future growth to take a somewhat more detailed look at the "all other" industries category⁴ since it represents nearly one-third of Cleveland's manufacturing complex. The all other industries group, as used here, includes all two digit SIC industries with establishments in Cleveland, except for the five charted individually in Chart 4, and

⁴ It is recognized that the component industries in the residual, all other industries total vary widely from area to area; some that are fairly important in one area may be absent in other areas.

4.

**TOTAL MANUFACTURING EMPLOYMENT
CLEVELAND,* OHIO, and U.S.**

Selected Industries
INDEX 1958-60=100



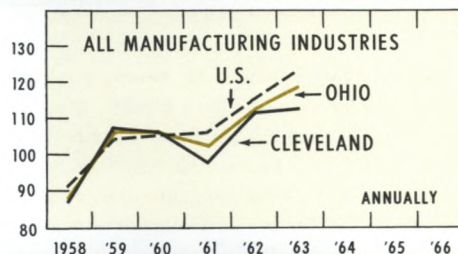
* Cleveland SMSA includes Cuyahoga and Lake Counties

Sources of data: U.S. Department of Labor;
Division of Research and Statistics,
Ohio Bureau of Unemployment Compensation

should not be confused with SIC 39, miscellaneous manufacturing including ordnance, which is but one component. It so happens, the miscellaneous category (SIC 39)—which includes a wide assortment of products ranging from hard surface floor coverings to umbrellas, and from lamp shades to dressed and dyed furs—showed the greatest growth in Cleveland in both employment (49.8 percent) and value added (93.8 percent) between 1958 and 1963. Within all other industries, the next largest gain in employment (26 percent) was that of rubber and plastic products (SIC 30), followed by the 11 percent gain of paper and allied products (SIC 26). Apparel and related products (SIC 23) increased almost 50 percent in value added during 1958-60 and 1963 despite a slight drop in employment (2.6 percent). Printing and publishing (SIC 27) presented a similar picture, gaining 25 percent in value added with a practically constant number of employees. The favorable showing of such industries, in relation to both the corresponding

5.

**VALUE ADDED in MANUFACTURING
CLEVELAND,* OHIO, and U.S.**
INDEX 1958-60=100



* Cleveland SMSA includes Cuyahoga and Lake Counties

Source of data: U.S. Department of Commerce

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residual groups of industries elsewhere and the five largest manufacturing industries in Cleveland, has helped to moderate Cleveland's generally slow growth in manufacturing activity in recent years.

Chart 5 presents an all-industry total for value added in Cleveland comparable to the top panel of Chart 4.⁵ The relative performance of value added in Cleveland versus Ohio and the U. S. is similar to that for employment, although the percentage changes in value added are larger for all three areas. Virtually throughout American industry, value added rises more rapidly than employment for a variety of reasons, including increased efficiency of labor, additional capital invested per worker, and in some years price increases. Since the value added figures are in current dollars, the fact that prices were relatively stable during the 1958-63 period implies that increases in value added were due almost entirely to the first two reasons, and that in these areas Cleveland apparently did not do as well as either the State or the nation.

The data on value added in Table IV supplement Chart 5. As the data show, growth of value added in Cleveland lagged considerably behind Ohio and the United States in the 1958-63 period in both total manufactur-

⁵ It is not possible to present an exactly comparable graphic picture for value added by year, by industry, because of the change made in the definition of the Cleveland SMSA from two counties to four counties. Value added by industry is available on a two-county basis for 1958-1962 but the 1963 census was compiled on the four-county basis. While data for 1958 have been revised to conform to the four-county basis, revision has not been made for the intervening years. Data that could be aggregated are not available by industry for individual counties.

TABLE IV
Percent Changes in Value Added by
Manufacture, 1958-1963
Cleveland, Ohio, and U. S.

	Cleveland SMSA*	Ohio	U. S.
All Manufacturing	30.2%	34.6%	34.3%
Five-industry total	31.6	40.0	40.2
Transportation equipment	33.8	56.9	30.7
Nonelectrical machinery	31.6	36.1	26.0
Primary metals	35.4	37.1	36.3
Fabricated metal products	29.8	28.7	57.1
Electrical machinery	23.5	34.5	48.0
All other industries total	27.1	27.2	30.0

* Cleveland SMSA includes Cuyahoga, Lake, Medina, and Geauga Counties.

Source: U. S. Department of Commerce

ing and the five-industry total that includes the five largest industries in the Cleveland area in terms of employment. When the five major industries are viewed individually, however, it is seen that Cleveland outpaced the nation in growth of value added in both transportation equipment and nonelectrical machinery and almost equaled the U. S. gain in primary metals, but failed to match the showing for Ohio in the same three industries. Cleveland did slightly exceed the Ohio performance in fabricated metal products, but both city and State fell far short of the U. S. figure in this category. City and State did about equally well in the all other industries category, a fact already noted in the discussion of employment patterns (see Chart 4).

Although value added data below the state level are not yet available beyond 1963, employment figures can be extended through 1965. Thus, from Chart 4, it is seen that, during 1964-65, employment rose in all industry groupings in Cleveland except trans-

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Source: U. S. Department of Commerce

As a substitute for the paragraph beginning "The data on value added.":

"The data on value added in Table IV supplement Chart 5. As the data show, growth of value added in Cleveland lagged considerably behind Ohio and the United States in the 1958-63 period in both total manufacturing and the five-industry total that includes the five largest industries in the Cleveland area in terms of employment. When the five major industries are viewed individually, however, it is seen that Cleveland outpaced the nation in both primary metals and fabricated metal products. Only in the latter industry, however, did it outperform the State as a whole. City and State did about equally well in the all other industries category, a fact already noted in the discussion of employment patterns (see Chart 4)."

portation equipment, where there was a slight decline. In the all other, fabricated metals, and primary metals industries, the increases were smaller than corresponding gains in Ohio and in the U. S.; consequently, the gaps in index levels between Cleveland and both the State and the nation widened.

As Chart 4 also shows, however, the two machinery groupings proved to be exceptions. Employment in nonelectrical machinery rose relatively faster in Cleveland than in either Ohio or the U. S. during the two-year period. Employment in the electrical machinery industry also increased relatively faster in Cleveland than in Ohio, although not as fast as in the U. S. This was the only instance where growth in a major Cleveland industry grouping surpassed statewide performance.

OTHER CHARACTERISTICS OF THE CLEVELAND ECONOMY

There are various other economic series that add to a profile of the Cleveland economy. A number of these series are assembled in Table V for convenient reference.

Unemployment and Help-Wanted Index. The rate of unemployment in the Cleveland SMSA has moved in a direction roughly comparable to corresponding Ohio and U. S. rates throughout the 1960's to date. However, the unemployment rate in Cleveland has been consistently lower than the Ohio rate, and except for the recession year 1961, also lower than the U. S. rate (see Table V). Moreover, unemployment in Cleveland has displayed a strong tendency toward increasingly favorable rates, particularly in comparison with the U. S. Thus, between 1960 and 1965, unemployment (on an average annual basis)

declined 35 percent in Cleveland as compared with 34 percent in Ohio and only 18 percent in the U. S.

The increasing demand for employees is reflected by the rising movement of the help-wanted index as well as in the reduced rate of unemployment. Rising from a level consistently lower than that of the U. S. index during 1958-63, the Cleveland help-wanted index overtook its national counterpart in 1964. By 1965, the Cleveland index at 168 was 180 percent higher than its 1958 level. The corresponding 1958-65 rise in the U. S. index amounted to only 99 percent.

Electric Power Production. Electric power production is a broad-gauged measure of economic activity. The data in Table V include production for both industrial and domestic consumption. The difference between the sum of these two figures and the total represents commercial and other uses. Demand for electric power in Cleveland has expanded in every year since 1958 except during the recession year 1961 when it held constant. Over the period 1958-65, sales of electricity in the Cleveland area rose 57 percent, an increase not quite matching the national figure of 67 percent. However, the lag was entirely in the smaller residential component. Industrial consumption of electric power is generally regarded as one of the best local indicators of manufacturing activity. Industrial sales in the Cleveland area increased by 72 percent in contrast to a national gain of 52 percent.⁶

Steel Production. Steel was the first heavy

⁶ Data on electric power production do not include power generated by industries for their own use.

TABLE V
Selected Economic Series
Cleveland SMSA, Ohio, and U. S.

		1958	1959	1960	1961	1962	1963	1964	1965	Percent Change
Unemployment Rate (annual average)	Cleveland	n.a.	n.a.	4.8%	7.0%	5.2%	4.4%	3.6%	3.1%	- 35%
	Ohio	n.a.	n.a.	5.3	7.3	5.7	5.1	4.2	3.5	- 34
	U. S.	6.8%	5.5%	5.6	6.7	5.6	5.7	5.2	4.6	- 18
Help-Wanted Index 1957-59 = 100 (annual average)	Cleveland	60	103	94	74	91	97	125	168	+180
	U. S.	78	111	104	97	110	109	123	155	+ 99
Electric Power Production (in billions of kwh's)	Cleveland-Residential	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	+ 44
	Industrial	3.2	3.8	3.9	3.7	4.2	4.5	5.0	5.5	+ 72
	Total	6.4	7.2	7.4	7.4	8.1	8.7	9.3	10.1	+ 57
U. S.-Residential	Industrial	165.0	180.0	196.0	209.0	226.0	242.0	262.0	281.0	+107
	Industrial	284.0	313.0	345.0	347.0	374.0	388.0	409.0	433.0	+ 52
	Total	570.0	628.0	684.0	722.0	778.0	830.0	892.0	953.0	+ 67
Steel Production Index Ingots and Steel for Casting 1957-59 = 100 (annual average)	Cleveland-Lorain	80	100	115	106	111	121	149	139	+ 74
	U. S.	88	96	102	101	101	113	130	135	+ 53
Commercial and Industrial Loans Outstanding Weekly Reporting Member Banks (midyear 1959-1966,* in millions of dollars)	Cleveland	\$ 560	\$ 578	\$ 567	\$ 598	\$ 648	706	\$ 836	\$ 1,004	+ 79
	Ohio	1,031	1,159	1,145	1,158	1,234	324	1,579	1,846	+ 79
	U. S.	32,904	31,632	31,769	33,354	35,559	748	46,839	55,769	+ 69
Building Contracts Residential and Nonresidential (in millions of dollars)	Cleveland-Residential	\$ 161	\$ 211	\$ 216	\$ 171	\$ 226	275	\$ 228	\$ 211	+ 31
	Nonresidential	134	176	132	168	134	144	227	166	+ 24
	Total	295	387	348	339	360	419	445	377	+ 28
Ohio-Residential	Nonresidential	\$ 681	\$ 1,056	\$ 894	\$ 852	\$ 966	060	\$ 1,017	\$ 1,047	+ 54
	Nonresidential	835	676	656	717	628	696	863	979	+ 17
	Total	1,516	1,732	1,550	1,569	1,594	756	1,880	2,026	+ 34
U. S.-Residential	Nonresidential	\$14,696	\$17,150	\$15,105	\$16,123	\$18,039	502	\$20,565	\$21,248	+ 46
	Nonresidential	10,948	11,387	12,240	12,115	13,010	377	15,522	17,219	+ 57
	Total	25,644	28,537	27,345	28,238	31,049	879	36,087	38,467	+ 50
Bank Debits (annual average, in millions of dollars)	Cleveland	\$ 3,270	\$ 3,688	\$ 3,870	\$ 3,918	\$ 4,244	626	\$ 5,136	\$ 5,631	+ 72
	Ohio	8,438	9,366	9,749	9,954	10,711	532	12,064	13,362	+ 58
	U. S. (excl. N. Y. C.)	123,419	137,963	144,659	152,691	168,380	224	200,405	223,652	+ 81
Personal Savings (yearend, in millions of dollars)	Cleveland	\$ 2,309	\$ 2,484	\$ 2,659	\$ 2,848	\$ 3,133	435	\$ 3,740	\$ 4,061	+ 76
	Ohio	8,361	9,287	9,868	10,923	11,919	085	14,089	15,004	+ 79
	U. S.	111,142	120,467	133,522	153,030	177,676	102	228,334	256,704	+131
New Passenger Car Registrations (annual, in thousands of units)	Cleveland	56	76	83	71	83	95	97	115	+105
	Ohio	273	383	414	350	414	457	482	565	+107
	U. S.	4,650	6,041	6,577	5,855	6,939	557	8,065	9,313	+100
Department Store Sales Index 1957-59 = 100 (annual average)	Cleveland	96	106	106	105	104	109	115	120	+ 25
	Ohio	98	105	104	106	110	113	122	128	+ 31
	U. S.	99	105	106	109	114	119	120	136	+ 37

n.a.—not available.

* This series began in June 1959.

Item	Source	Definition of Cleveland
Unemployment Rate	Division of Research and Statistics, Ohio Bureau of Unemployment Compensation U. S. Department of Labor	1960-63, Cuyahoga and Lake Counties; 1964-65, Cuyahoga, Lake, Geauga, and Medina Counties
Help-Wanted Index	National Industrial Conference Board, Inc.	Newspaper service area
Electric Power Production	Cleveland Illuminating Company Edison Electric Institute	Cuyahoga, Geauga, Lake, and Ashtabula Counties (utility service area)
Steel Production	American Iron & Steel Institute	Cleveland and Lorain District
Commercial and Industrial Loans Outstanding	Federal Reserve Bank of Cleveland Federal Reserve System	Service area of commercial banks
Building Contracts	F. W. Dodge Company	Cuyahoga and Lake Counties
Bank Debits	Federal Reserve Bank of Cleveland Federal Reserve System	Service area of commercial banks
Personal Savings	Federal Reserve Bank of Cleveland U. S. Savings & Loan League Federal Reserve System	Service area of commercial banks and savings and loan associations
New Passenger Car Registrations	Cuyahoga County Clerk R. L. Palk & Co. (further reproduction prohibited)	Cuyahoga County
Department Store Sales	Federal Reserve Bank of Cleveland (Monthly series terminated in January 1966) Bureau of Business Research, The Ohio State University Federal Reserve System—U. S. Department of Commerce	Cuyahoga, Lake, Geauga, and Medina Counties

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TABLE VI
Distribution of Commercial and Industrial Loans by Industry*
Cleveland and Ohio

	1962 June 27	1963 June 26	1964 June 24	1965 June 30	1966 June 29	Percent Change in Dollar Volume
CLEVELAND:						
Total Manufacturing	49%	52%	48%	44%	46%	+ 58%
Durable goods	31	33	31	28	27	+ 43
Nondurable goods	18	19	17	16	19	+ 84
Trade	15	16	16	19	18	+ 99
All other, mainly services	13	12	16	16	13	+ 87
Transportation, communication, and other public utilities	12	13	12	13	13	+ 91
Construction	5	5	5	5	5	+ 78
Mining	4	3	4	3	5	+114
Total	100%	100%	100%	100%	100%	+ 75%
OHIO:						
Total Manufacturing	40%	41%	40%	38%	41%	+ 67%
Durable goods	26	26	26	25	25	+ 61
Nondurable goods	14	15	14	13	16	+ 79
Trade	22	22	22	23	22	+ 72
All other, mainly services	17	16	19	19	16	+ 56
Transportation, communication, and other public utilities	10	10	10	11	11	+ 74
Construction	8	7	7	7	7	+ 36
Mining	2	2	2	2	2	+108
Total	100%	100%	100%	100%	100%	+ 66%

* Commercial and industrial loans outstanding at 19 banks in Ohio that report weekly on the distribution of loans outstanding by business of borrower.

NOTE: All columns may not add to 100 percent due to rounding.

Source: Federal Reserve Bank of Cleveland

industry to be established in Cleveland and has always exerted a strong influence on the economy of the city. Information on steel production in Cleveland is reported in combination with production in nearby Lorain and is published as an index based on actual output in the years 1957-59. The index of steel production in the Cleveland-Lorain district has been consistently above the comparable U. S. index in each year since 1958. Despite some reduction in 1965, the Cleveland-Lorain index posted a net increase of 74 percent in the 1958-65 period as against a

smaller net gain of 58 percent in the U. S.

Commercial and Industrial Loans. Business demand for bank credit provides an indication of the pace of general business activity, and also suggests the extent to which local banks are providing some of the financial resources needed by the business community. In company with other broad indicators, the volume of business loans at Cleveland banks has climbed steadily since 1961 as business firms (from Cleveland and elsewhere) turned increasingly to banks to raise funds needed in excess of those generated internally. From

mid-1959 to mid-1966, total commercial and industrial loans outstanding at Cleveland banks increased by 79 percent, exactly the same as the figure for the entire State and somewhat more than the 69 percent rise in the U. S. over the same period.

The percent distribution of commercial and industrial loans outstanding among various groups of borrowers is shown in Table VI for Cleveland and for Ohio. During the four-year period covered (from mid-1962 to mid-1966), all business groups in Cleveland increased their borrowings but they did so at varying rates. As a result, loans to manufacturing enterprises (specifically durable goods manufacturers) decreased as a share of total commercial and industrial loans outstanding, while the share of trade concerns increased.

Between the first and last dates shown in the table, total commercial and industrial loans rose 75 percent in Cleveland as against an increase of 66 percent in Ohio. Loans to manufacturers increased 58 percent in Cleveland over the period, or moderately less than the corresponding 67 percent in Ohio. Loans to "all others," mainly services, advanced 87 percent in Cleveland as compared with 56 percent in Ohio. In short, the increases in loan volume at Cleveland banks exceeded corresponding increases in Ohio for every major business grouping except manufacturers.

Total Building Contracts. The data on building contracts shown in Table V are for residential and nonresidential (commercial and industrial) construction. Nonbuilding construction, such as roads and bridges, is not included. As a general matter, building con-

tracts are a highly volatile series, and have to be interpreted with caution. Because of a sharp drop in building activity in the Cleveland area during 1965, the net increase in total building contracts for the full 1958-65 period amounted to only 28 percent, or somewhat less than both the 34 percent gain in Ohio and the 50 percent rise in the U. S. However, a similar comparison for the period 1958 to 1964 shows total building contracts rose 54 percent in Cleveland as against 24 percent in Ohio and 41 percent in the U. S. Regardless of whether the comparison is made for the period 1958-64 or for 1958-65, Cleveland's nonresidential construction activity exceeded that for all Ohio. Through 1964, it also exceeded the nationwide gain, but the sharp decline in nonresidential construction in Cleveland in 1965 dropped the local figure below the national for the 1958-65 period.⁷

Bank Debits. A measure of general business and commercial activity that is helpful in interpreting economic developments at the local level is bank debits—the volume of checkwriting activity. As implied in Table V, over 40 percent of the total dollar volume of checkwriting activity in the State of Ohio is recorded at Cleveland banks. The aggregate

⁷ There is perhaps no better illustration of the volatility of construction than the data used here. If the comparison is made for the years 1958-64, Cleveland outperformed both Ohio and the United States in both residential and nonresidential construction. If the comparison is for the years 1958-65, both Ohio and the U. S. surpassed Cleveland. The data also suggest another *caveat* that should always be borne in mind when analyzing economic data: the smaller the unit, the more strongly exogenous factors may influence a single set of statistics.

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of bank debits typically increases each year, and in Cleveland the expansion from 1958 to 1965 amounted to 72 percent, somewhat more than the 58 percent increase for Ohio as a whole. However, the increase in Cleveland (72 percent) was less than the corresponding 81 percent rise in the U. S.

Personal Savings. The growth of personal savings in Cleveland in recent years almost matched the performance for all Ohio (75.9 percent as compared with 79.4 percent). However, neither came close to equaling the performance of the U. S. where total savings deposits of individuals at commercial banks and savings shares at insured savings and loan associations rose by 131 percent between 1958 and 1965 (see Table V).

New Passenger Car Registrations. With the exception of the recession year 1961, sales of new passenger cars have increased each year since 1958 in Cleveland (Cuyahoga County), in Ohio, and in the U. S. In none of these areas, however, was the former 1955 record equaled or surpassed until 1963. In that year, new all-time highs were established in all three areas, and in 1964 and 1965, sales posted successive new records. Over the entire period from 1958 to 1965, sales of new passenger cars showed a 105 percent increase in Cleveland, slightly less than the 107 percent rise in Ohio but somewhat more than the 100 percent increase in the U. S.

Department Store Sales. Unlike new automobile sales, department store sales in Cleveland have lagged behind expansion in Ohio and in the U. S. The 1965 level of the department store sales index was 120 in Cleveland as compared with 128 in Ohio and 136 in the nation. Growth of sales volume between the

years 1958 and 1965 measured 25 percent in Cleveland, 31 percent in Ohio, and 37 percent in the U. S.

CONCLUDING COMMENTS

The foregoing discussion has been intended to sketch an economic profile of the Cleveland area. More detailed analysis of the various economic time series, as well as additional series, will be presented in a second article. Nevertheless, from the material discussed in the present article, several observations can be made.

The industrial development of Cleveland and its growth in economic stature span more than a century and a quarter. As Americans measure time, this makes Cleveland a mature economy. The biggest single factor in the development of manufacturing activity in Cleveland has been the metal-producing and metal-using industries. In turn, the domination of these industries has made Cleveland particularly responsive to cyclical swings in economic activity.

At present, Cleveland's economy may well be in a transitional stage. While the major, old-line manufacturing industries still rank among the prominent economic assets of the community, they do not appear to represent the expansionary force that they once did. Other lines of manufacture have exhibited excellent growth as a group, but they do not as yet account for enough of either total employment or value added to influence decisively the march of economic events. Recent steps to develop the educational, research, and business services sectors of the local economy—sectors that represent important components of economic growth at the national level—as well as the expansion of

diversified smaller industries, suggest the possibility of a broader economic base for Cleveland in the future. The growth of trade, especially wholesale trade, and of the service industries, as evidenced by previously cited employment data and commercial and industrial loan volume, are also favorable indications of a gradual shift in the economic base of Cleveland. At the same time, the strategic location of the city should continue

to work to its advantage as it has done in the past.

While the past is prologue, much can still be learned from what has gone before. Such important questions as what sectors provided the earlier impetus to growth, or were largely responsible for the extreme sensitivity of Cleveland to cyclical swings in business activity, or to seasonal swings and the like, will be considered in a subsequent article.



MUNICIPALS AT MIDYEAR

Holdings of municipal securities at 26 weekly reporting banks in the Fourth Federal Reserve District were reduced slightly during the first half of 1966, the second six-month period in a row that such a development occurred. This was revealed in the regular semiannual survey of municipal holdings at District weekly reporting banks, which was conducted as of June 30, 1966.¹ The total volume of municipal holdings at reporting banks on the latest survey date amounted to \$2.269 billion, \$34.4 million (1.5 percent) less than at the end of December 1965 and \$44.8 million (1.9 percent) less than at the end of June 1965.

While the latest reduction in municipal holdings represented the second straight semiannual decline, more recent data show that an even larger reduction has occurred in the period since the survey. Thus, since June 30, municipal holdings of the same weekly reporting banks have declined by an additional \$228.5 million (through September 28).

The first half reduction in municipal holdings occurred at a time when the nation's 100 largest banks were still adding to municipal

holdings, albeit at a decreasing rate.² There is no real conflict between the first-half figures for the 100 largest banks in the nation and those for District banks. That is to say, as a general matter the reduction in municipal holdings of District banks during the first half of 1966 does not indicate any basic difference in policies of these banks compared with the largest banks in the nation. A large majority of District reporting banks (21) continued to increase municipal holdings, in 11 cases at a rate below that of the second half of 1965 and in 14 cases below the rate of the first half of that year. The five reporting banks that reduced holdings of municipals during the first half of 1966 liquidated amounts sufficiently large to dominate the figures to the extent of reducing the total for all reporting banks.

That several District reporting banks reduced holdings of municipal securities while a larger number reduced the rate at which holdings were increased (in the second half of 1965 as well as in the first half of 1966), should not be surprising in view of the fact that during the past year or so banks have been under increasing pressure to satisfy demands for loans. Within the context of increasing monetary restraint, District reporting banks apparently attempted to help meet loan

¹ For previous discussions of survey results, see "Survey of Municipal Portfolios, Fourth District Weekly Reporting Banks," *Monthly Business Review*, Federal Reserve Bank of Cleveland, December 1963, and "Another Look at Municipal Portfolios," *Economic Review*, Federal Reserve Bank of Cleveland, November 1965.

² See *The Weekly Bond Buyer*, August 8, 1966, p. 6. Figures for the first half of 1966 reveal that additions to municipal holdings of the 100 largest banks in the nation were at a rate below that reported for both the first and second halves of 1965.

TABLE I
Basic Balance Sheet Items
Fourth District Weekly Reporting Banks

	6/30/64		6/30/65		6/30/66	
	Millions of Dollars	Percent Distribution	Millions of Dollars	Percent Distribution	Millions of Dollars	Percent Distribution
Total Earning Assets	\$11,593	100.0%	\$12,712	100.0%	\$13,656	100.0%
Loans	7,011	60.5	8,042	63.3	9,196	67.3
Total Investments	4,582	39.5	4,670	36.7	4,460	32.7
U. S. Govts.	2,391	20.6	2,256	17.7	2,021	14.8
Municipals	2,116	18.3	2,314	18.2	2,269	16.6
Total Deposits	\$12,502	100.0%	\$13,697	100.0%	\$14,609	100.0%
Time Deposits	5,530	44.2	6,409	46.8	7,309	50.0
	Percent Change					
	12/20/63—6/30/64		12/31/64—6/30/65		12/31/65—6/30/66	
Total Earning Assets	2.2%		3.8%		2.5%	
Loans	7.5		8.7		8.1	
Total Investments	— 5.0		— 3.7		— 7.2	
U. S. Govts.	—11.1		—11.1		—16.4	
Municipals	2.4		2.4		— 1.5	
Total Deposits	4.9		3.3		1.4	
Time Deposits	6.8		9.9		7.0	

Source: Federal Reserve Bank of Cleveland

demand either, in a minority of cases, by reducing municipal holdings or, in a majority of cases, by increasing municipal holdings at a reduced rate. Against this background, it is interesting to examine shifts in major balance sheet items of Fourth District weekly reporting banks (through June 30, 1966).

BASIC BALANCE SHEET CHANGES

As shown in Table I, the composition of earning assets at District weekly reporting banks has changed substantially. For one thing, loans have become more important, accounting for 67.3 percent of earning assets at the end of June 1966 compared with 63.3 percent a year earlier and 60.5 percent two years earlier. Loans expanded by 8.1 percent

in the first half of 1966, somewhat less than in the year-earlier period, but slightly more than in the first half of 1964.³

On the other hand, total investments continued to decrease as a percent of earning assets at reporting banks during the first half of 1966, led by substantial liquidations of U. S. Government securities (see Table I). Holdings of "governments" constituted 14.8 percent of earning assets at the end of June 1966 compared with 17.7 percent a year earlier and 20.6 percent two years earlier.

Municipal security holdings (valued at par)

³ During the first half of 1965, loan expansion was influenced by the rapid expansion in auto sales following the auto strike in late 1964 and the inventory buildup in anticipation of a steel strike later in 1965.

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decreased to 16.6 percent of earning assets at reporting banks by the end of June 1966, down from 18.2 percent a year earlier. Because the reduction of municipal holdings was relatively less than that of governments, municipals represented a slightly larger proportion of total investments at the end of June 1966 (51.0 percent) than a year earlier (49.6 percent).

Total deposits at reporting banks increased by only 1.4 percent during the first half of 1966 compared with an increase of 3.3 percent during the year-earlier period and 4.9 percent in the 1964 period (see Table I). Similarly, time deposits continued to increase substantially during the first half of 1966, comparable to the rate during the first half of 1964 but below that of the first half of 1965. During both the first half of 1966 and the year-earlier period, demand deposits (not shown in Table I) were reduced, with the reduction somewhat larger during the first half of 1966. As a result of these shifts in deposits, time deposits at reporting banks had risen to 50.0 percent of total deposits at the end of June 1966 as compared with 46.8 percent a year earlier and 44.2 percent two years earlier.

The slowdown in the growth of total deposits at reporting banks during the first half of 1966 contributed to a need to reduce investment holdings in order to accommodate loan demands. Sequentially, the pattern seemed to be one of slowdown in deposit growth, liquidation of U. S. Government securities, and then either smaller additions to or outright liquidation of municipals — with the latter step sort of a new twist in bank behavior, in view of the steady increases in

municipal holdings in recent years.

VOLUME AND MATURITY OF MUNICIPAL HOLDINGS

Despite the overall reduction in the total during the first half of 1966, District reporting banks continued to lengthen the average maturity of municipal holdings (see Table II). Thus, while municipal holdings carrying maturities of over ten years and under one year increased during the first half of 1966, additions to the longest maturity category were substantially larger than additions to the shortest maturity category. On a year-to-year basis, the increase in over-ten-year maturities far exceeded changes, plus or minus, in any of the other maturity categories (see Table II). Holdings of municipals in both the 1-5 year and 5-10 year maturity categories were reduced in the first half of 1966, and at the end of June were below year-earlier levels. As Table II shows, the major decline in holdings between mid-1965 and mid-1966 occurred in the 1-5 year maturity category.

The percentage distribution of municipal maturities further illustrates the shift to longer maturities at District reporting banks. Municipals with maturities of over ten years increased to 40.8 percent of the total by the end of June 1966, up from 35.4 percent a year earlier. From mid-1965 to mid-1966, the percent of municipal holdings with maturities under one year increased slightly. The percent of municipal holdings in the 1-5 and 5-10 year maturity categories decreased on a year-to-year basis from June 1965 to June 1966, with the reduction slight in the latter category, and fairly substantial in the 1-5 year category (from 29.0 percent to 24.0 percent).

TABLE II
Holdings of Municipal Securities (Volume and Maturity)
 Fourth District Weekly Reporting Banks
 1964-1966

Date	Outstanding by Maturity (Thousands of Dollars)				Total*	Percent Distribution by Maturity			
	Under 1 yr.	1-5 yrs.	5-10 yrs.	Over 10 yrs.		Under 1 yr.	1-5 yrs.	5-10 yrs.	Over 10 yrs.
6/30/64	\$290,825	\$671,007	\$532,563	\$621,845	\$2,116,240	13.7%	31.7%	25.2%	29.2%
12/31/64	326,570	655,865	564,451	713,015	2,259,901	14.5	29.0	25.0	31.5
6/30/65	244,292	677,640	572,279	819,896	2,314,107	10.6	29.3	24.7	35.4
12/31/65	242,195	623,916	577,039	860,576	2,303,726	10.5	27.1	25.0	37.4
6/30/66	246,564	545,020	550,853	926,879	2,269,316	10.9	24.0	24.3	40.8

* Includes holdings of Public Housing Authority bonds.

NOTE: Earlier data, beginning with December 1960, are available upon request to the Research Department, Federal Reserve Bank of Cleveland, Cleveland, Ohio.

Source: Federal Reserve Bank of Cleveland

Continued growth in municipal holdings with maturities of over ten years not only increased average maturity but, by definition, also tended to reduce the liquidity of total municipal portfolios despite the slight increase in the percentage of total holdings due to mature in less than one year.

QUALITY OF MUNICIPAL HOLDINGS

During the year ended June 1966, a number of shifts occurred in the quality of municipals held at reporting banks (Moody's classification). The most significant shift appears to have been a reversal of the downward trend in the percent of Aaa municipals relative to the total of municipal holdings (see Table III). At the latest survey date, Aaa rated municipals comprised 17.6 percent of total holdings compared with 15.8 percent in June 1965. On the other hand, on the same year-to-year basis, holdings of municipals rated Baa and below Baa relative to total holdings increased from 8.8 percent and 10.4 percent to 10.1 percent and 11.7 percent, respec-

tively. Holdings of Aa rated municipals relative to total holdings remained unchanged between June 1965 and the latest survey date. The A quality category was the only one that declined relative to total holdings, from 34.4 percent to 30.0 percent.

Despite these shifts, the overall quality rating of municipal holdings at District reporting banks remained virtually unchanged between June 30, 1965 and June 30, 1966. Thus, as indicated by the "quality index" in Table III, holdings of lower rated municipal securities were apparently counterbalanced by holdings of higher rated municipals.

YIELDS ON MUNICIPAL HOLDINGS

Market yields on municipal securities recorded exceptionally sharp advances during the period June 1965-June 1966, largely reflecting the advance of interest rates generally. As shown in Table IV, the steepest rise, 63 basis points, was registered by Baa rated municipals, while yields on the highest grade (Aaa) municipal securities climbed 45 basis

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points. The average weighted yield on municipal securities held by District reporting banks increased by 23 basis points to 3.13 percent between June 1965 and June 1966. The smaller increase in average yield on municipals in portfolios of reporting banks apparently was due to the influence of older,

lower yielding securities. Additions of newer, higher yielding municipals would of course tend to raise average yield, but since portfolios are never entirely turned over all at once, the latter would also tend to lag changes in average market yields, both on the upside and the downside.

TABLE III
Holdings of Municipal Securities (Quality)
 Fourth District Weekly Reporting Banks
 1964-1966

Date	Aaa	Aa	A	Baa	Below Baa*	Quality Index†
6/30/64	20.0%	25.2%	36.2%	8.5%	10.1%	3.365
12/31/64	16.2	27.7	37.0	10.2	8.9	3.321
6/30/65	15.8	30.6	34.4	8.8	10.4	3.326
12/31/65	16.7	30.2	32.1	10.2	10.8	3.318
6/30/66	17.6	30.6	30.0	10.1	11.7	3.323

* All unrated securities are included in the "Below Baa" quality category. The grouping is arbitrary and is not intended as a reflection of the quality of unrated issues.

† The percent of total municipal securities in each of the categories was multiplied by the weight indicated below for that category; the resulting values were then added and the total for each year was divided by 100 to derive the quality index:

Aaa = 5
Aa = 4
A = 3
Baa = 2
Below Baa = 1

Source: Federal Reserve Bank of Cleveland

TABLE IV
Market Yields on Municipal Securities and
Average Yields on Municipals
 Fourth District Weekly Reporting Banks
 1964-1966

Period	Market Yields* Moody's Ratings				Weighted Average Yield, Reporting Banks†
	Aaa	Aa	A	Baa	
1964 June	3.10	3.19	3.31	3.54	2.73
December	3.01	3.13	3.28	3.51	2.83
1965 June	3.15	3.23	3.35	3.54	2.90
December	3.39	3.47	3.60	3.78	3.01
1966 June	3.60	3.70	3.88	4.17	3.13

* Market yields are averages of monthly figures for long-term general obligation bonds.

† For Fourth District weekly reporting banks, weighted average reported as of the end of each period.

Sources: Moody's Investors Service and Federal Reserve Bank of Cleveland

TABLE V
Selected Balance Sheet Changes (Municipals, Loans, and Time Deposits)
Fourth District Weekly Reporting Banks
1964-1966

	1	2	3
	Dec. 1964—June 1965	Dec. 1965—June 1966	Banks Included in both Columns 1 and 2
MUNICIPAL HOLDINGS		(Number of Banks)	
Increased	20	21	18
Decreased	6	5	3
	26	26	
LOANS			
Increased	23	25	22
Decreased	3	1	0
	26	26	
MUNICIPAL HOLDINGS AND LOANS			
Both Increased	17	20	15
Both Decreased	0	0	—
Increased Municipals and Decreased Loans	3	1	0
Decreased Municipals and Increased Loans	6	5	3
	26	26	
TIME DEPOSITS			
Increased	26	24	24
Decreased	0	2	0
	26	26	
MUNICIPAL HOLDINGS AND TIME DEPOSITS			
Both Increased	20	19	18
Both Decreased	0	0	0
Increased Municipals and Decreased Time Deposits	0	2	0
Decreased Municipals and Increased Time Deposits	6	5	3
	26	26	

Source: Federal Reserve Bank of Cleveland

SOME BASIC CHANGES IN BALANCE SHEETS

As indicated earlier, reductions in municipal holdings at a small number of banks accounted for the decline in total holdings at all reporting banks during the first half of 1966. Accordingly, the total figure should not be considered as representative of the behavior of all reporting banks. To gain some feel of how various banks performed, comparisons have been made of changes in municipal holdings, loans, and time deposits at

all reporting banks. These are presented in Table V.

Municipals. A large majority of banks (21) increased holdings of municipal securities during the first half of 1966 (20 did so in the year-earlier period). Most of the banks that increased holdings of municipals in the first half of 1966 and in the first half of 1965 did so in both periods (see Table V, column 3). Thus, 18 of the 21 banks that increased municipal holdings during the first half of 1966 were included in the 20 banks that increased

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holdings in the year-earlier period. Of the several banks that reduced municipal holdings during either of the two periods, three did so in both periods.

Loans. Virtually all of the reporting banks increased loans during the first half of 1966. In fact, as shown in Table V, 25 of the 26 reporting banks expanded loans in the first half of 1966 compared with 23 banks in the year-earlier period. As revealed by column 3 in Table V, 22 of the banks that increased loans in the first half of 1966 also had done so in the 1965 period. Only one bank reduced loans during the first half of 1966 compared with three banks in the year-earlier period.

Municipals and Loans. A comparison of changes in municipal holdings with changes in loans during the first half of 1966 and the year-earlier period reveals a number of permutations and combinations. For one thing, a majority of the reporting banks expanded both municipal holdings and loans during each of the periods, and 15 banks did so in both periods. On the other hand, a small number of banks reduced municipal holdings and increased loans. Five banks reduced municipals and increased loans during the first half of 1966 compared with six a year earlier; three of these banks did so in both periods. An even smaller number of banks increased municipal holdings and reduced loans during the two periods. One bank increased municipals and reduced loans in the first half of 1966 compared with three a year earlier; none of these banks did so in both periods. Finally, none of the reporting banks reduced both municipals and loans in either of the two half-year periods. (See Table V.)

Municipals and Time Deposits. Nearly all (24) reporting banks increased time deposits during the first half of 1966; in the year-earlier period, all 26 banks had registered increases. More than two-thirds of the reporting banks increased both municipal holdings and time deposits in the first half of 1966 and in the year-earlier period, with 18 of these banks doing so in both periods. Several banks reduced municipal holdings in the first half of 1966 and in the first half of 1965 despite increases in time deposits; three banks did so during both time periods.

CONCLUDING COMMENTS

In view of the gradual tightening of credit conditions and banks' attempts to accommodate increasing loan demand, it is not surprising that reporting banks in the Fourth District on balance reduced holdings of municipal securities as well as U. S. Government securities during the first half of 1966. The higher priority given to loans is revealed by the increasing proportion of earning assets accounted for by loans and the corresponding reduction in bank investments.

A wide range of portfolio adjustments made by individual banks implies that there is no generally accepted method of adjudging the performance of banks in general. Thus, for example, the examination of changes in municipal holdings of reporting banks in relationship to changes in loans and time deposits reveals no completely consistent or totally uniform pattern. Nonetheless, some general observations can be made. Most reporting banks increased municipal holdings during both the first half of 1966 and the first half of 1965, and also increased loans. Of the banks

that increased municipals, a majority did so at a reduced rate. In addition, a small number of banks reduced municipal holdings, apparently in order to accommodate strong loan demands. Liquidation of municipals by these banks during the first half of 1966 was sufficiently large to reduce the total of municipals held by all District reporting banks.

Finally, while most reporting banks increased both time deposits and municipal holdings during the first half of 1965 and the first half of 1966, a small number of banks reduced municipal holdings despite increases in time deposits.



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