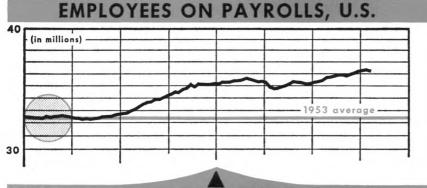
# Business Review

#### FEDERAL RESERVE BANK of CLEVELAND

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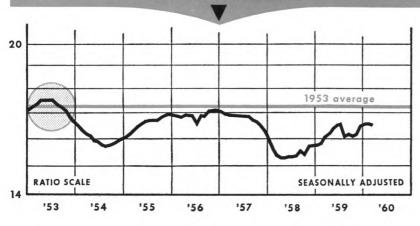
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Employment in nonmanufacturing industries has continued to increase since 1953...

## NONMANUFACTURING

### MANUFACTURING



while manufacturing employment has not regained the peak reached in 1953.

(Neither series includes farm employment.)

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## From Factory to Service Employment

INCREASED recognition is now being given to the gradual structural change in the economy of the United States which is evinced in the trend away from factory employment and toward employment in service-type industries or occupations. The fact that the change is gradual and that it is less dramatic than occasional sensationalized versions would suggest, makes it none the less real.

Part of the problem of appraising the magnitude or speed of change derives from the necessity of separating genuine long-term or intermediate-term trends from the shorter-run cyclical fluctuations which commonly obscure the basic march of events. The observations offered below, although they do not cover as long a time span as might be desirable for the firm appraisal of trends, may nevertheless be useful in providing perspective on this important subject, especially in its most recent manifestations.

In mid-1953 there were 17.5 million people employed in manufacturing industry in the United States. (1) That number of factory jobs was not far below the all-time high reached in 1943 under the stimulus of war mobilization. More important is the fact that the mid-1953 figure represented a high point which has not been regained since, either at the high point of the 1955-57 boom or during the current expansion. Manufacturing employment in March of this year was, in fact, still below the peak of the 1955-57 period, which was reached in December 1956.

Compared with the 17.5 million factory jobs in mid-1953, manufacturing employment

totalled 17.1 million in December 1956, and 16.5 million in March 1960, the latest month for which such data are available. (All data are seasonally adjusted.) As the cover chart shows, this longer-term decline in the number of factory jobholders has proceeded concurrently with an increase in employment in the group of nonmanufacturing industries (excluding agriculture), which has more than offset the decline in manufacturing employment. (2) Factory jobs represented 35% of the total number of nonfarm (payroll) jobs in mid-1953. By December 1956 that proportion had declined to 33%, and in March 1960 it was 31%.

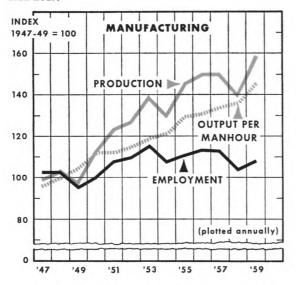
The decline in manufacturing employment referred to here is a change which is measured from one high point in business activity to another, not a decline during the downswing phase of a business cycle. The two kinds of declines may have quite different implications. A drop in factory employment during the downswing of a business cycle is the result of a reduction in industrial production, in turn due to a falling off in sales and orders as part of the chain of events which is involved in cyclical fluctuations.

The situation is different when measurement is made from one high point in business activity to a subsequent high point, in both of which industry is operating at, or close to, full stretch. Changes in employment and output between such periods should indicate trends in industrial efficiency and capacity. The period since 1953 affords evidence of such trends.

<sup>(1)</sup> All employment data in this article are from the U. S. Department of Labor, Bureau of Labor Statistics. Recent data are provisional and subject to revision.

<sup>(2)</sup> Both of these totals exclude the self-employed, domestic workers, and unpaid family workers in non-farm employment, as well as all farm employment.

All of the increase in manufacturing production since 1953 has been due to increases in output per man-hour.



#### Higher Output Per Man-Hour

As shown in an accompanying chart, manufacturing production has increased since 1953, despite the decline in factory employment, because of the concurrent increase in output per man-hour. (3) In this respect the period from 1953 to the present differs from the 1947-53 period, when the gain in manufacturing output was achieved through both an increase in the number of persons employed in manufacturing and gains in output per man-hour. Since 1953, in contrast, increasing output per man-hour has accounted for all of the advance in manufacturing production.

The difference between the two periods may be attributable to the fact that 1953 marked the peak year of the rearmament pro-

(3) In interpreting the data on output per man-hour, the following qualification should be borne in mind:

gram embarked upon after the outbreak of the Korean War. This factor may also have been dominant in causing the 1953 peak in factory employment, i.e., that peak may have been due largely to the exceptional needs for industrial manpower stimulated by rearmament. Such an interpretation suggests that the 1953 peak should be treated as an exception rather than as a benchmark against which to measure the subsequent performance of the economy.

A major factor in the growth of output per man-hour has been technological progress, manifested in new products, materials, and equipment. Other factors have been the increase in the stock of capital, in the use of electric power, and in research and development activities.

Not all manufacturing industries have experienced declines in employment since 1953, but most major groups have reduced their employment. In general, the durable goods industries have accounted for the largest part of the shrinkage in factory jobs, but the largest percentage decline in any major manufacturing industry occurred in textilemill products, in which employment has declined about 25 percent since 1953. Other major industry groups in which employment changes have been proportionately large are shown in Table 1.

If it is kept in mind that higher living standards depend in large part on produc-

Table 1 CHANGE IN EMPLOYMENT IN SELECTED

MANUFACTURING INDUSTRIES BETWEEN YEAR 1953 AND MARCH 1960

	Thousands of Persons
Ordnance	-383
Transportation equipment	-259
Textile-mill products	-241
Food and related products	-75
Primary metals industries	-58
Fabricated metal products	-47
Nonelectrical machinery	-37
Apparel and related products	-22
Electrical machinery	+ 83

following qualification should be borne in mind:

"Although the measure relates output to man-hours it should not be interpreted to represent the unique contribution of labor to production. Rather the measure reflects, in addition to labor effect and skill, the operation of many factors, such as changes in technology, equipment, and other capital investment per worker, utilization of capacity, layout and flow of materials, managerial skill, and labor-management relations. Thus, gains in output per man-hour cannot be ascribed to any one factor, but reflect the interaction of all factors." (Trends in Output per Man-Hour in the Private Economy, 1909-1958. Bulletin Number 1249, page 1, U. S. Department of Labor, Bureau of Labor Statistics, December 1959. page 1, U. S. Departm tistics, December 1959

tivity gains, the longer-term decline in employment in manufacturing and concurrent increase in production can be considered an indicator of progress. This has been a development typical of the "goods-producing" industries as a group, which includes not only manufacturing and construction, but also mining and agriculture. As a matter of fact, the number of workers in agriculture began to decline several decades ago and this industry employed considerably fewer people in 1959 than in 1919, despite the large expansion in farm production. In manufacturing and mining, the advent of a long-term downtrend in absolute employment is a more recent phenomenon which dates, in the case of manufacturing, from the historical peak reached in 1953. As was true of agriculture, the decline in the total number of manufacturing and mining workers has been accompanied by an increase in the total volume of goods produced. Altogether, the goods-producing industries, as a group, employed no more people in 1959 than they did in 1919; thus the very large increase in total output of goods during the interval represents a substantial contribution to the material progress of the nation.

#### Growth in Service Industries

More than offsetting the decline in employment in manufacturing since 1953, as well as in agriculture and mining, the growth in employment offered by service-type industries has swelled the figure of total employment. This group of industries includes trade, finance and banking, personal and business services, government, utilities, transportation and communication. As Table 2 shows, all of these industries, except transportation and communication, have increased their workforce since 1953, and several of them have made very large increases. In terms of employment, these are the "growth" industries.

#### **Declining Production-Worker Employment**

A trend which has accompanied the decline in total manufacturing employment since

Table 2

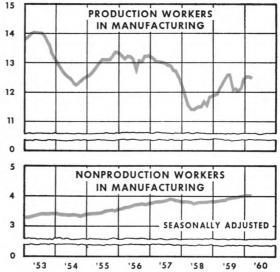
#### CHANGE IN EMPLOYMENT IN SERVICE-TYPE INDUSTRIES BETWEEN YEAR 1953 AND MARCH 1960

	Thousands of Persons
Transportation	-314
Communication	- 6
Public Utilities	+ 20
Wholesale trade	+ 334
Retail trade	+ 686
Finance, insurance, and real estate	
Personal and business services	+1026
Federal government	+ 52
State and local government	+1831

1953 is the shrinking proportion of the total represented by production workers. As an accompanying chart shows, all of the shrinkage in manufacturing employment since 1953 has occurred in the number of production workers, that is, workers directly connected with plant activity, either on a production line or in maintenance work. Employment of nonproduction workers — supervisors, re-

All of the decline in manufacturing employment since 1953 has occurred among production workers.





search workers, engineers, office workers—continued to increase meanwhile. As a result of this trend, nonproduction workers, who accounted for 20 percent of total manufacturing employment in 1953, currently represent about 25 percent of total factory employment.

In recent years most of the expansion in employment of nonproduction workers has been attributable to the increased hiring of professional and technical workers to carry on research and development programs. A secondary factor is the introduction or expansion of overhead functions, necessitating the hiring of additional clerical employees.

The growth of nonproduction worker employment can also be thought of as another aspect of the growth of the service industries, since the nonproduction workers are in effect manufacturing industry's own private service workers, in some instances doing a type of work which is indistinguishable from that performed in the service industries. For example, some of the functions performed within particular manufacturing concerns by nonproduction workers, such as research, are contracted out to private research organizations by other firms, or, in some cases, part of a company's research effort is carried on internally while the remainder is contracted to outside organizations. The same situation may operate in the case of some accounting functions.

The trend toward a larger proportion of professional, clerical, and sales personnel has not been confined to manufacturing; the same has been true of other industries, such as mining, construction, utilities, and trade. The total number of so-called "white-collar" workers first exceeded the number of "blue-collar" workers (skilled, semi-skilled, unskilled) in 1956, and the proportion of white-collar workers has been increasing since. Among the group of white-collar workers the fastest gain was recorded by the professional and technical worker group, which in February 1960 numbered 7.4 million, or 12 percent of total employment.

#### Increased Employment of Women

Another aspect of the growth of employment in service-type industries and in nonproduction-worker employment in manufacturing has been the increase in employment of women, and particularly women over 45. The number of such women in paid employment increased by nearly half from 1950 to 1958; most of them took jobs in the trade and service industries or clerical positions in manufacturing. It is not possible to determine whether the increased employment of older women was the cause or the effect of the growth of the service-type industries. All that can be said is that the two developments have been closely associated. More older women became available for work, as a result of more labor-saving devices in the home, the reduction in the age at which women are completing their families, and the increasing survival of women due to better medical care. Concurrently, the demand for clerical and sales help expanded, and with it opportunities for the part-time and seasonal type of work which many older women apparently preferred.

# Implications of Decline in Factory Employment

The longer-term decline in employment in manufacturing, as well as in other goods-producing industries, together with the concurrent increase in employment in service-producing industries, has several important implications for industrial relations and economic growth and stability. The implications for industrial relations are two:

- 1. The base of industrial unionism, in the form in which it has become familiar since the mid-1930's, is shrinking. Efforts to organize nonproduction workers and workers in trade, services, banking-finance, and general government have not been very successful to date.
- 2. The shrinkage in the employment of production workers may stimulate fear of

technological unemployment and encourage worker resistance to productivity improvements which are expected to result in further shrinkage in industrial employment.

There are several implications for economic growth and stability in the shrinkage of manufacturing employment:

- 1. A continuation of the decline in manufacturing employment may tend to aggravate further the problem of long-term unemployment (unemployment of 15 weeks or longer) because persons displaced from manufacturing jobs as a result of technological change or market shifts often experience a long spell of unemployment before they find other employment, or give up looking for work. At this point in the business expansion (spring 1960) long-term unemployment accounts for a larger part of total unemployment than in the comparable periods of earlier expansions in the postwar period.
- 2. The increasing importance of service-type industries and "white-collar" employment in the economy should tend to reduce cyclical fluctuations in employment, because employment in these industries and occupations typically fluctuates less than in manufacturing. This stabilizing force did not prevent a very sharp drop in employment in 1957-58, but it is possible that the drop would have been larger if manufacturing employment had been as important as in earlier years.
- 3. The growth in job opportunities will, very likely, continue to be largely in the service-type industries, as it has been since 1953. In view of that probability, it is noteworthy that the increase in employment in the service-type industries during the current expansion is much smaller (except for government) than the growth attained during

the comparable portion of the 1955-57 business upswing. The contrast is apparent from Table 3.

Table 3
Increase in Employment\*, Selected Industries

fro to I	m July, 1953 March, 1956** t	from July, 1957 o March, 1960**
	Thousands of	of Persons
Trade	+ 624	+ 178
Finance	+ 249	+ 103
Services	+ 589	+ 169
Government	+ 550	+ 890
Total	+2021	+1340
* Adjusted for seasonal varia ** Pre-recession peak plus 33	ation 3 months	

Since there has apparently been no decline in consumer purchases of these services, the recent slower growth in employment may reflect a more rapid rate of productivity improvement than in the earlier period. This may, in turn, have some implications for a possible dampening of the rise in the prices of services, which has been such a conspicuous development of the postwar period.

A final point to be borne in mind in evaluating the growth of the service-type industries is that this trend indicates further additions to the nation's already high standard of living. Current living standards include subsistence needs-food, clothing, and sheltera wide range of consumer durables, and an increasing variety and volume of services, such as travel, medical care, and recreation. The fact that an expanding proportion of the labor force is employed in producing these services indicates how "developed" the United States is; in the "underdeveloped" majority of countries most people are fully occupied in trying to produce enough for minimum subsistence needs.

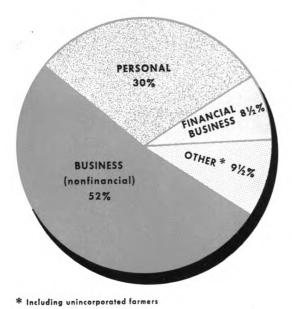
## Ownership of Demand Deposits

(Fourth District)

DURING the twelve months preceding January 27, 1960, the amount of privately-held demand deposits at insured commercial banks in the Fourth Federal Reserve District continued to increase, although not in the same magnitude as in the preceding twelve-month period. As of January 27, 1960, total privately-held demand deposits amounted to an estimated \$8,676 million, indicating a deposit growth of \$187 million during the preceding twelve months. (1) Table 1 shows that all types of owners of demand deposits shared in this increase with the exception of unincorporated farmers.

OWNERSHIP OF DEPOSITS

All Insured Banks, Fourth District
January 27, 1960



Along with the increase in deposit volume, the number of accounts increased. As of January 27, 1960, the estimated number of privately-held accounts amounted to 4.3 million, indicating an increase of 0.3 million during the preceding twelve months. Table 1 shows that accounts held by unincorporated farmers were the only type that did not increase. The relative increase in the number of accounts (7.9 percent) was larger than the increase in the deposit volume (2.2 percent), indicating that the average amount of individual accounts declined.

#### **Business Accounts**

As in the past, business deposits accounted for the largest single share of total privately-held demand deposits, amounting to about three-fifths of the total deposit volume on January 27, 1960. Consequently, the movement of business deposits has had an appreciable effect on the total deposit volume. Although business deposits have increased in each of the last two survey years, they have not increased sufficiently to make up the ground lost in the 1958 survey year. A result has been that total deposit volume has not increased as much as it would have otherwise.

A breakdown of the business accounts reveals that the slow progress of business deposits toward the January 30, 1957, level is attributable to the lower deposit volume of corporate nonfinancial business. In turn, this has contributed to the net decline in total deposit volume in the three-year period between January 30, 1957, and January 27,

<sup>(1)</sup> Based on the Survey of Ownership of Demand Deposits of Individuals, Partnerships, and Corporations as of January 27, 1960. This was the fourth annual survey of the same sample of insured commercial banking offices, except for minor adjustments for changes in the banking structure.

 ${\bf Table~1}$  DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS BY TYPE OF HOLDER

(Estimates for Insured Commercial Banks, Fourth Federal Reserve District)

	January 30, 1957		January 29, 1958		January 28, 1959		January 27, 1960	
TYPE OF HOLDER	Number (thou- sands)	Amount (millions of dollars)	Number (thou- sands)	Amount (millions of dollars)	Number (thou- sands)	Amount (millions of dollars)	Number (thou- sands)	Amount (millions of dollars
Business	402	\$5,453	403	\$5,004	409	\$5,064	440	\$5,242
Nonfinancial	381	4,754	385	4,379	387	4,351	414	4,492
Financial	21	699	18	625	22	713	26	750
Corporate	132	4,424	135	4,164	137	4,087	162	4,130
Noncorporate		1,029	268	840	272	977	278	1,112
Personal	3,096	2,568	3,124	2,396	3,220	2,582	3,514	2,600
Farmers, Noncorporate	173	192	160	171	152	170	140	149
All Others	237	611	238	604	249	673	254	685
TOTAL	3,908	\$8,824	3,925	\$8,175	4,030	\$8,489	4,348	\$8,676

Table 2

DEMAND DEPOSITS OF INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS PERCENTAGE DISTRIBUTION BY TYPE OF HOLDER

TYPE OF HOLDER	January 30, 1957		January 29, 1958		January 28, 1959		January 27, 1960	
TIPE OF HOLDER	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Business	10.3%	61.8%	10.2%	61.2%	10.2%	59.7%	10.1%	60.4%
Nonfinancial	9.8	53.9	9.8	53.5	9.6	51.3	9.5	51.8
Financial	0.5	7.9	0.4	7.7	0.5	8.4	0.6	8.6
Corporate	3.4	50.1	3.4	50.9	3.4	48.2	3.7	47.6
Noncorporate	6.9	11.7	6.8	10.3	6.8	11.5	6.4	12.8
Personal	79.2	29.1	79.6	29.3	79.9	30.4	80.8	30.0
Farmers, Noncorporate	4.4	2.2	4.1	2.1	3.8	2.0	3.2	1.7
All Others	6.1	6.9	6.1	7.4	6.1	8.0	5.9	7.9
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

1960. A partial explanation of the smaller business deposit volume lies in the fact that executives of corporate business may be diverting funds from demand deposits to alternative outlets.

#### Personal Accounts

Although the deposit volume in personal accounts has remained relatively stable, the number of accounts has continued to increase slightly but steadily. Comprising nearly 81 percent of the total number of demand deposit accounts, personal accounts held only 30 percent of total deposits volume on January 27, 1960. Unlike business accounts, both the number and deposit volume of personal accounts are greater than comparable figures on January 30, 1957, probably reflecting in part the generally rising trend of personal income.

#### Farmers' Accounts, Noncorporate

Demand deposits of unincorporated farmers continued to be the only class of ownership that declined in both number of accounts and dollar volume between the 1959 and 1960 survey dates. This decline may be explained in part by the fall in farm income

in the Fourth District during the survey year. Since the 1957 survey, the number of accounts and dollar volume have declined 18.9 percent and 22.1 percent, respectively. Because accounts of this type comprise a relatively small share of total demand deposits, they have not affected appreciably the movement of total demand deposits.

#### All Other Accounts

This category, which includes deposits of nonprofit organizations and institutions, trust funds of banks and deposits of nonbanking institutions and persons domiciled outside the United States, continued its recent increase in both number of accounts and deposit volume. Although remaining consistently at about 6 percent of the total number of accounts, this type of account has increased slightly its share of total deposit volume.

Table 1 below shows both the number and amount of demand deposits by type of holder in Fourth District insured commercial banks for recent survey years. Table 2 shows the same distribution in terms of the respective percentages of total deposits held by each ownership group.

## Around the Jourth District-

#### Department Store Sales, March and First Quarter

	Mar. '60 % change from year ago	JanMar. '60 % change from year ago
Youngstown	+ 4%	+ 7%
Erie		- 5
Columbus		+ 2
Pittsburgh		+ 3
Akron	- 1	+ 3
Canton		+ 2
Cleveland	- 3	+4
Toledo		-0-
Springfield	- 7	-0-
Cincinnati	<b>—</b>	- 1
Portsmouth	-12	-11
Lexington	-13	-11
Wheeling		<b>-</b> 9
FOURTH DISTRICT TOTAL	0-	+ 3

Although dollar sales by Fourth District department stores in March were about on a par with the year-ago month, due consideration should be given to the fact that March 1959 contained the full four-week pre-Easter shopping period. After allowance for this and other factors, seasonally adjusted sales in March were 9 percent above the year-ago level. Preliminary data indicate that April sales, similarly adjusted, exceeded those of the year-ago month by 8 percent.

During the week ended April 20, total loans adjusted at 26 weekly reporting banks in the Fourth District reached a new all-time high of \$5,052 million, which was 8 percent above a year ago. Nearly all loan categories showed increases during the week, including loans to nonbank financial institutions which expanded for the first time in the past five weeks.

In the third week of April, sales of new passenger cars in Cleveland soared by more than 500 units to a long-time peak of 2,377. Only once in the past four and a half years has a larger weekly total been recorded.

During the five weeks ended March 30, savings deposits of individuals at 47 reporting banks in the Fourth District rose to a new high of \$2,910 million, 3 percent above a year ago. New all-time records in savings deposits were reported for nine of the twelve cities represented.

(The above items are based on various series of District or local data, which are assembled by this bank and distributed upon request in the form of mimeographed releases.)

