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Recent District Industrial Developments

INDUSTRIAL EXPANSION has continued to be an important feature of economic development in the Tenth Federal Reserve District, according to preliminary results of the 1958 Census of Manufactures.¹ As has been true throughout much of the postwar period, fluctuations in the amount and type of defense-allied production activity have continued to influence materially the pattern of factory output. While the rate of expansion indicated by a comparison of the 1947 and 1954 censuses was somewhat faster than in the subsequent 4 years, it should be recalled that manufacturing activity in the early 1950's was swelled by defense production related to the Korean War. Although some decline in defense output had already occurred by 1954, it nevertheless remained a year of unusually high military production in the District. Consequently, expansion in the subsequent years probably could not have been expected to continue at the rate recorded in the earlier period. Contraction in defense-related phases of activity in some areas has offset growth in others. However, as in the earlier postwar years, industrial growth in this region has continued at a more rapid pace than nationally.

A primary objective of this article is to describe the important industrial developments revealed by the 1958 census. By drawing on

the various measures of activity provided—chiefly data on employment, value added, and number of establishments—the geographic location of major changes in manufacturing activity is indicated, as are the more significant developments among various kinds of manufacturing industries. Subsequently, the 1954-58 experience is reviewed in the light of events in the earlier postwar years.

Finally, the pattern of industrial expansion and the composition of manufacturing in this region is compared with that in the Nation. Unfortunately, the two most recent censuses were taken during years of recession. While this probably does not distort comparisons for the District substantially—since in both cases effects here were comparatively moderate—it does bear significantly upon the meaningfulness of comparisons with the United States. Durable goods production, which is comparatively more sensitive to recessions than non-durables output, constitutes a larger share of total production in the Nation than in the District. In addition, the relatively large influence of military production in the District has helped to moderate the impact of recession on durables output here. For these reasons, comparisons of national and District output or employment patterns during the recent census years must be interpreted judiciously.

Measures of Manufacturing Activity

The data gathered in the periodic censuses of manufacturing provide several measures of the extent and nature of industrial activity. Each measure has its peculiar qualities and, for a given purpose, one indicator may be more useful than another. For this reason, a better perspective is achieved by looking at several aspects of activity. For example, value

¹ The 1958 census is the third of the postwar period, others having been made in 1947 and 1954. It should be noted that the 1958 census figures in this article are preliminary and subject to some revision and reclassification. It is not expected that final figures will alter conclusions stated in the text. Readers interested in additional background or more detail on industrial development in the District during the earlier postwar period may find it useful to refer to a series of articles on this topic previously published in the *Monthly Review*. See the December 1952, July 1957, November 1957, April 1958, and August 1958 issues.

Measures of Change in Manufacturing Activity

	Number of Employees					Value Added (Dollars in Thousands)			
	1954	Per Cent Distribution	1958	Per Cent Distribution	Per Cent Change 1954-58	1954	Per Cent Distribution	1958	Per Cent Distribution
Colorado	64,446	13.8	78,157	16.5	+21.3	\$ 472,433	13.7	\$ 761,954	17.7
Kansas	131,432	28.2	119,063	25.1	-9.4	1,049,291	30.5	1,163,955	27.0
Nebraska	59,381	12.8	58,653	12.4	-1.2	394,222	11.5	507,689	11.8
New Mexico	15,061	3.2	20,278	4.3	+34.6	126,326	3.7	206,153	4.8
Oklahoma	89,257	19.2	92,933	19.6	+4.1	580,633	16.9	716,115	16.6
Wyoming	6,261	1.3	6,496	1.4	+3.8	51,361	1.5	65,822	1.5
Western Missouri (Kansas City, Joplin, St. Joseph)	99,614	21.4	98,194	20.7	-1.4	768,512	22.3	886,586	20.6
Tenth District Total	465,452	100.0	473,774	100.0	+1.8	\$ 3,442,778	100.0	\$ 4,308,274	100.0
United States	16,126,000		16,015,000		-0.7	\$116,913,000		\$140,113,000	

SOURCE: U. S. Census of Manufactures: 1954 and 1958.

added by manufacture — a statistic computed by subtracting cost of materials, supplies, fuel, etc., from value of shipments — is considered to be the best measure available for comparing the relative economic importance of manufacturing among industries and geographic areas. This concept, however, when used to compare performances over time, may not directly indicate changes in physical output. For example, the U.S. Department of Commerce suggests that higher prices may have accounted for as much as 10 per cent of the over-all dollar gains in value added over the 4-year interval, 1954-58.

Consequently, in the following discussion primary emphasis will be placed on the employment figures provided by the census. Statistics on employment are perhaps the most widely used of all measures of regional activity and, since the census data can be augmented with estimates from other sources for intervening years, they lend themselves most readily to area analysis. Employment as an indicator of changing activity has, however, one distinct disadvantage compared with value added—it does not reflect productivity changes. When productivity rises, the amount of value added increases relative to employment even though prices are unchanged. The

actual value of output thus tends to rise more than higher employment suggests. Indeed, it is quite possible for employment to fall somewhat while the real value of output increases. In the following pages, however, when reference is made to striking gains in value added, it must be recalled that they contain a fictitious element attributable to price change.

As is always true when statistics are improved through time, a degree of comparability with earlier periods is lost. For this reason the 1958 census data are not strictly comparable with the information reported for 1947 and 1954. In general, each census has represented successively broader coverage. For example, the 1958 figures include data on ready-mixed concrete operations and machine shops engaged mainly in repair work, while earlier surveys did not. Similarly, both the 1958 and 1954 censuses include data on establishments engaged in the processing and distribution of fluid milk and for logging camps and contractors — industries excluded from the 1947 survey. While these changes are of some importance in analyzing developments in the affected industries, the over-all comparability of the censuses is not seriously impaired except for data on number of establishments.

Number of Establishments with 20 or More Employees

Per Cent Change 1954-58	1954	Per Cent Distribution	1958	Per Cent Distribution	Per Cent Change 1954-58
+61.3	490	18.2	540	18.2	+10.2
+10.9	572	21.2	645	21.8	+12.8
+28.8	378	14.0	411	13.9	+8.7
+63.2	101	3.7	152	5.1	+50.5
+23.3	524	19.4	574	19.4	+9.5
+28.2	49	1.8	57	1.9	+16.3
+15.4	585	21.7	586	19.8	+0.2
+25.1	2,699	100.0	2,965	100.0	+9.9
+19.8	90,473		95,461		+5.5

Major Developments in the 1954-58 Period

One of the most striking points which can be inferred from a comparison of the 1954 and 1958 census figures is that defense production programs have continued to play an important part in determining the course of factory activity in this region. In 1954, the effects of the Korean War expansion were still apparent, whereas by 1958 activity in some of the industries, especially ordnance and certain aircraft programs, had almost completely subsided. Other phases of aircraft production, which had been sustained by continued efforts to enhance our national defense capabilities, also had slowed down by 1958. In addition, the shift in emphasis from manned aircraft to missiles resulted in transfers in production from some areas to others within the District. These notable developments were superimposed on a pattern of steadily increasing importance of several industries and continuing relative declines in others.

Among the District states, New Mexico and Colorado experienced the greatest absolute and relative gains in manufacturing activity between 1954 and 1958. In both cases, national defense programs were the major impetus for the advance. In New Mexico, fac-

tory employment increased about one third and value added rose by three fifths. The sharpest increases appear to have occurred in firms engaged in national defense projects, such as ordnance, aircraft, and electronics. A good indication of the extensive expansion of manufacturing in a state where industry was quite limited just a few years ago is the substantial increase in the number of larger establishments. While increased coverage was responsible for some of the gain, in 1958 there were 152 establishments with over 20 employees compared with 101 in 1954 and 89 reported for 1947.

The most significant single development prompting Colorado's industrial gain between 1954 and 1958 was the establishment of a major missile-producing plant near Denver. In addition, the same area experienced a considerable expansion—in part related to the missile facility—in the electronics industry. The impact of the new industries is reflected in the fact that employment in transportation equipment (largely the new missile plant) and electrical machinery increased from less than 3 per cent of all manufacturing jobs in 1954 to 12.5 per cent in 1958. As in New Mexico, most other manufacturing lines also have expanded. In total, employment in Colorado rose 21 per cent and value added increased by 61 per cent relative to 1954.

In contrast to the rising importance of defense production in New Mexico and Colorado between 1954 and 1958, most other areas of the District experienced losses in that type of activity. The largest decline due to reduced defense business occurred in Kansas. Employment in that state's transportation equipment industry fell nearly 10,000, reflecting for the most part the demise of aircraft production in Kansas City. The closing down of a chemical ordnance plant in the same area, as well as an ordnance facility in Parsons, contributed further declines. In total, manufacturing employment in 1958 was 9 per cent below the

1954 level and, although an 11 per cent gain in value added was reported, this was considerably below the District average. A substantial rise and subsequent decline in Wichita's aircraft industry is not reflected by a comparison of the 1954 and 1958 census figures. Employment there was on the upswing in 1954 and was declining in 1958, with annual averages for those years at about the same level.

Another important center of military aircraft employment—Tulsa—also had experienced declining employment in that industry by 1958. In addition to the 9 per cent drop in Oklahoma's transportation equipment industry which reflected that loss, employment in foods, petroleum and coal, primary metals, and fabricated metals establishments also fell below 1954 levels. On the other hand, significant gains occurred in apparel, electrical machinery, and administrative and auxiliary forces,² with total employment showing a 4 per cent rise relative to 1954.

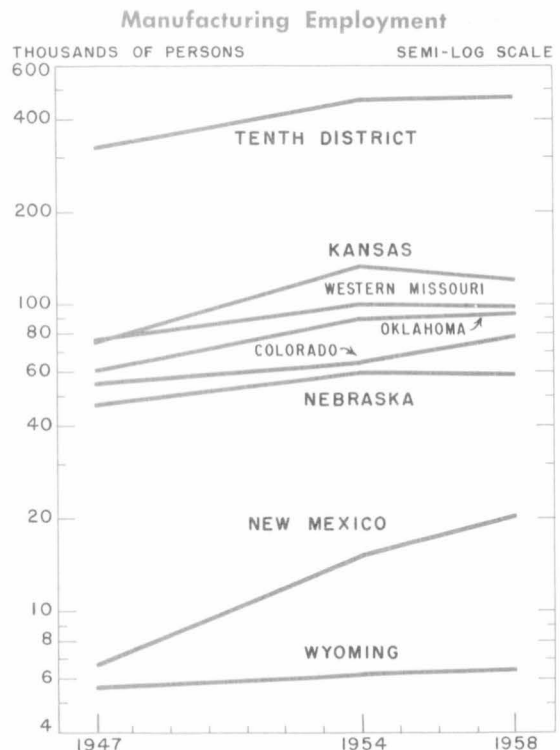
Nebraska employment figures also mirrored the drop in jobs associated with the end of the Korean War. The closing of ordnance plants near Grand Island and Wahoo resulted in a substantial loss of jobs. This was reinforced by sizable declines in instruments—associated with the closing of a watch plant at Lincoln in mid-1958—and in the number of administrative and auxiliary workers reported. However, gains in chemicals, machinery, and transportation equipment, as well as in the metals group, contributed considerably toward offsetting the losses.

While defense production continued to influence manufacturing activity in the Western Missouri portion of the District, the pattern was in part one of offsetting changes. A drop

² Central administrative offices or auxiliary units include such places as storage warehouses, power plants, research laboratories, garages, and repair shops, which serve more than one manufacturing establishment or which are not located in the same general location as the plant served.

in employment in Clay County due to the phasing out of aircraft wing production and declines in ordnance and aircraft engine plants in Jackson County were in part offset by a gain in jobs at an Atomic Energy Commission contract facility. In addition, the production of rocket engines near Neosho has boosted employment in that area. On the whole, however, factory employment in 1958 was about 1 per cent below the 1954 level.

In Wyoming, where the relative importance of manufacturing has remained small, the gradual rise, typical of the earlier postwar period, continued. Factory jobs showed a 4 per cent gain and value added was up 28 per cent, despite a slight employment drop in the state's major manufacturing industry—petroleum refining.



NOTE: On a semi-logarithmic scale, equal slopes indicate equal rates of change.

SOURCE: U. S. Census of Manufactures: 1947, 1954, and 1958.

A Change of Pace

It is interesting to observe the 1954-58 developments in the light of earlier events. To an important degree, of course, the magnitude and direction of the 1954-58 changes in a given state are dependent on its 1954 position. For example, in Kansas where employment in 1954 incorporated a sharp rise resulting from the Korean War effort, a decline from that level was experienced between 1954 and 1958. Employment fell 9 per cent in that 4-year period compared with a 74 per cent gain in the previous 7 years. Taking the postwar period as a whole, however, Kansas ranked second only to New Mexico in relative gains and contributed more than any other state in terms of number of manufacturing jobs.

With the exception of Colorado, all District states experienced either a decline in employment or a slower rate of expansion in recent years than in the 1947-54 period. New Mexico continued to show the sharpest gain but the 35 per cent expansion in the 1954-58 period was considerably smaller than in the earlier years. For the District as a whole, employment rose about 2 per cent compared with a 40 per cent gain in the previous 7 years.³

Accompanying the lesser rate of expansion in the 1954-58 period was a continued but moderate shift in industrial composition in the District. Investigation of the structure of manufacturing employment in 1958 compared with that of 4 years earlier reveals that about half of the major industry groups experienced gains in relative importance. Because of the short period and rather gradual growth, changes were small, with the largest being

³ Includes the six District states as well as Kansas City, Joplin, and St. Joseph, Mo., i. e. Jackson, Clay, Buchanan, and Jasper counties. In the subsequent discussion dealing with industrial structure, the analysis is limited to developments in the six states only, due to the absence of county industry detail in the preliminary releases.

slightly more than 1 percentage point. Compared with 1954, shares of total employment in the transportation equipment, ordnance, and chemicals industries each declined about 1 percentage point, while electrical machinery moved up in importance by about that amount.

Despite the fact that some of the more notable industrial declines occurred in durable goods industries, in the aggregate they continued to expand relative to nondurables. Between 1954 and 1958, employment rose about 3 per cent in hard goods industries compared with less than a 1 per cent rise in nondurables. As a result of the differential gains, the relative importance of durables increased slightly to about 49 per cent of the total.

Major Changes in Industrial Composition Six States*

	Per Cent of Total Manufacturing Employment		
	1947	1954	1958
Transportation equipment	5	19	18
Food	35	24	23
Petroleum and coal	6	4	4

* Colorado, Kansas, Nebraska, New Mexico, Oklahoma, Wyoming.

With relatively minor changes in composition occurring between 1954 and 1958, the major changes in industrial structure which have characterized the postwar period are still defined by earlier shifts among industries. Changing shares of the food and transportation equipment industries are the outstanding examples of this development, with a 12 percentage point decline from 1947 to 1958 in the former and a 13 point gain in the latter. The reduced share of food has been due to the failure of employment to expand rather than to any significant decline in the actual number of jobs in that industry. Thus, despite the food industry's sharply reduced share of total manufacturing employment in this region, it continues to make up an important part of the District's industrial structure. The importance of transportation equipment has been enhanced primarily by the expansion in aircraft production, although the auto in-

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dustry in the Kansas City Metropolitan Area also has grown considerably during the postwar period. The next largest change in share of total factory employment was a 2 point decline in petroleum refining. Additional losses of about 1 point occurred in lumber and wood, primary metals, and printing and publishing, while 1 point gains occurred in electrical machinery, and chemicals. Shares of the other major industry groups have changed little from the 1947 pattern.

Comparison with United States

The national, as well as the District, pattern of industrial activities has undergone only moderate changes since 1954. Thus in 1958, as in 1954, the major differences between the District and U. S. distributions of employment were in the food and transpor-

tation equipment industries. Only 11 per cent of all manufacturing workers in the United States are employed by food manufacturing establishments compared with 23 per cent in the 6-state area. Transportation equipment firms in this region employ 18 per cent of the factory workers compared with 10 per cent nationally. The greater relative importance of textiles, apparel, and electrical machinery nationally constitute other areas of major difference.

Nevertheless, the continued rise in relative importance of durable goods industries as a group and the edging downward of nondurables, especially foods, has brought the District structure closer to that for the Nation. While the 4-year period between the last two censuses indicates only moderate further movement in this direction, it appears to be a continuation of the sizable steps made earlier in the postwar period. However, durables continue to be relatively less important in this region than nationally. For the United States as a whole, jobs in durable goods industries comprise about 55 per cent of total manufacturing employment while slightly less than half are thus employed in the District. This difference is probably understated, however, by reason of the more severe impact nationally of the 1957-58 recession. Thus, the cyclical implications of an industrial structure comparatively heavily oriented towards nondurables production continue to exist in this region. In periods of general economic decline, this manifests itself in a better sustained level of output. On the other hand, during periods of rapidly rising output due to cyclical recovery, the District is not likely to experience gains of the same relative magnitude as those noted in areas where durables make up a larger share of total manufacturing activity.

Structure of Manufacturing Employment, 1958

	Per Cent of Total	
	Six District States	United States
Total	100	100
Food	23	11
Transportation equipment	18	10
Nonelectrical machinery	8	10
Printing and publishing	7	5
Stone, clay, glass	6	3
Fabricated metals	5	7
Chemicals	5	5
Primary metals	4	7
Petroleum and coal	4	1
Rubber	3	1
Apparel	3	7
Electrical machinery	2	6
Lumber and wood	2	4
Miscellaneous, including ordnance	2	4
Furniture and fixtures	1	2
Pulp, paper	1	3
Leather	1	2
Instruments	1	2
Textiles	*	6
Tobacco	*	1
Administrative and auxiliary	4	3

* Less than 0.5 per cent.

SOURCE: U. S. Census of Manufactures: 1958.

State and Local Government Activities—

District and National Patterns

THE POSTWAR PERIOD has seen an unusually rapid climb in the expenditures of state and local governments. Partly for this reason, both the level and growth of state and local activities have recently drawn much attention from people interested in diverse aspects of the economy. The primary objective of the present article and one to appear in a future issue of the *Monthly Review* is to describe and compare state and local government activities in states of the Tenth Federal Reserve District. Insofar as possible, these activities are also related to the national pattern and to a variety of factors which appear to correspond to that pattern. A description of state and local government activities in the District states is of interest in its own right, but, in addition, it is hoped that these articles will help to shed some light upon the factors associated with differing levels of expenditures among the District states and upon the forces that tend to cause changes in such activities over time.

Before attention is directed more specifically to the District states, some description of the over-all national context in which they operate is provided. This is done by viewing the role of state and local expenditures in the national economy as it might be seen by persons with differing perspectives. In addition, several problems which are encountered in making state-to-state comparisons of state and local expenditures are discussed.

Some Perspectives on the Nature and Role of State and Local Expenditures

The individual who keeps his eye on fluctuations in over-all levels of economic activity may have been greatly impressed by the stable rate of increase exhibited by state and local expenditures in the postwar period. The growth in these outlays has been distinctly more unvarying than expansion in the gross national product. Indeed, there have been no years and very few quarters in which seasonally adjusted state and local expenditures failed to increase. This record contrasts especially strongly with such volatile components of GNP as consumer durable goods outlays and business plant and equipment investment, both of which have in recent years been of roughly the same order of magnitude as state and local expenditures. Thus, activity in this sector has had a notable stabilizing effect upon over-all growth in the economy. In fact, some short-run forecasting of over-all state and local outlays recently has come close to simply extending the virtually straight line traced by these expenditures in the past several years.

However, the person who believes that the expanding role of government constitutes a threat to an economy which has generally depended upon the market system to appropriately allocate its resources may view the rapid growth of state and local expenditures in a different light. He may, for example, be con-

cerned because the expenditures of these governments for goods and services have expanded to the level of some major private sectors of the economy. Perhaps he is especially impressed by the fact that in the past few years these government units have spent slightly more upon resource inputs than non-farm private business has for new plant and equipment. In addition, he may have observed that in the postwar period the outlays of state and local governments for goods and services have grown considerably faster than the total gross national product and presently constitute almost one tenth of the current value of that broad measure of output. Also, he may note that the rate of increase of state and local expenditures has not diminished in recent years — indeed it may have advanced.

Conversely, the person who feels that the Nation generally is not devoting an appropriately large amount of its total production to the provision of public services may well see state and local outlays in a still different perspective. While recognizing the rapid growth of the state and local sector relative to the gross national product, measured in current dollars, in the postwar period, he may at the same time feel that the level which has been achieved is not particularly high. For example, he may note that state and local governments have been the victims of extraordinarily rapid increases in costs. A large portion of state and local outlays has gone for construction in the postwar period and construction costs have advanced at an unusually rapid pace. When state and local government expenditures for goods and services are converted to constant prices and compared with gross product, also in constant prices, the proportion which they represent is near the levels prevailing on the eve of the great depression and just prior to World War II. This, in light of an upsurge in factors commonly thought to necessitate increased civilian expenditures by government — such as

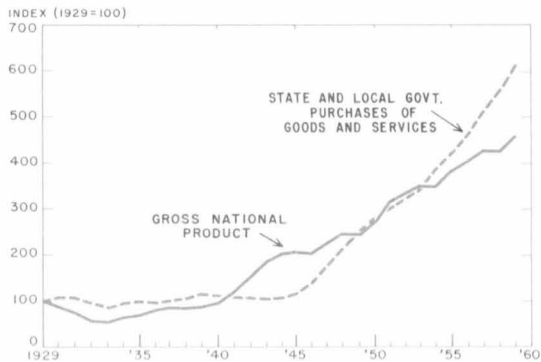
greatly increased urbanization and the rapid rise of the automobile—may not strike him as a particularly impressive record.

Finally, the persons most intimately concerned with what has been happening to state and local government expenditures may be the officials and the citizens concerned with financing them. Some states and numerous local jurisdictions are now involved in fiscal problems which are widely considered highly difficult, if not grave. Indeed, the word “crisis” has been heard numerous times in this connection. In addition, current population projections point to a high rate of gain during the 1960's, with those segments of the population eliciting a high level of public services — the urban, aged, school age, and college age — expected to increase at a faster than average rate. Also, there does not seem to be any evidence that other factors, such as demands upon the educational system for a wider range of services and pressures for higher standards for public services generally, are declining in significance—indeed they are probably rising.

1957 Census of Governments — A Rich Source of Information

For all those interested—for whatever reason—in state and local government activities, the recent publication of the several volumes of the *U.S. Census of Governments: 1957* presents a great fund of information. Nothing approaching the detailed data concerning the activities of state and local governments obtainable from these volumes has been available since the 1942 Census of Governments. Congress did not appropriate funds for the decennial census which had been scheduled for 1952, thus causing the longest lapse in the census of governments since it was begun in 1850. This fact, combined with questions arising out of the strikingly stable and strong upward trend in state and local expenditures, has caused unusual interest in the results of the

Indexes of Gross National Product and State and Local Government Purchases of Goods and Services



SOURCE: U. S. Department of Commerce.

1957 survey. The census makes possible detailed cross section comparisons—i. e., comparisons of different government units at a given time—as well as comparisons with previous census dates. Unfortunately, the latter comparisons are somewhat limited by the fact that recent census dates—1932 and 1942 for example—have coincided with periods of great stress in the economy.

The objective of the present investigation is to utilize the results of the 1957 census and, to a limited degree, those of earlier censuses to describe state and local expenditures in the District in a comparative fashion. It is hoped that such comparisons will help reveal some of the factors associated with differences in expenditures between states, especially as those differences manifest themselves in the states of the Tenth District. Not only are comparisons of individual states interesting in their own right, but such collation may help to illuminate influences tending toward further changes. To the degree that existing differences between states can be related to objectively determinable factors, anticipation of further changes in individual states, as well as over-all changes may be aided.

Some Ground Rules for Making State-to-State Comparisons

Why Treat State and Local Activity Together?

The census of governments provides detailed information on expenditures and employment of a variety of subnational government units. Much of this information is of interest but, in comparing activities from state to state, the diversity of government types presents a serious problem since the states vary considerably in the allocation of functions to different units of government. In January 1957 there were 102,328 government units in the continental United States. The greatest number of these were school districts—making up almost one half of the total. The remainder included the Federal Government, the 48 state governments, and numerous townships, municipalities, special districts, and counties. Nebraska has more government units—6,658 compared with an average of 2,131—than any other state and Kansas ranks fourth among the states. Comparisons of government activities among the states are complicated, not only by the different ways in which functions are allocated among the units of government, but also because types of government common in some states are not even found in others. For example, the township and town type of government is not used at all in the southern and in some western states; in some states there are no special school districts; in some others special districts for highways and sewers abound, while in still others they are absent.

Even the broad division between state and local government does not furnish a good foundation for comparison. Functions performed by state government in one state may be performed by a local unit—with or without a grant from the state—in another. In fact, there seems to be some tendency for states having relatively low state expenditures per person to rank higher in local expendi-

tures and vice versa. This sort of rough off-setting is apparent among the District states when the direct general expenditures are compared at the local level on the one hand and at the state level on the other.

New Mexico ranks highest and Nebraska lowest among the District states in terms of per capita expenditures at the state level. It is interesting to note that these two states also respectively rank highest and lowest in the District in terms of the proportion of total taxes collected at the state level. In fact, they represent rather extreme cases among all the states in the Nation. Only one state ranks below New Mexico in the percentage of taxes collected at the local level, and only one ranks above Nebraska. Since states vary widely, not only in arrangements whereby they share taxing power with their local governments but also in terms of the functional distribution of expenditures as between levels of government, state and local expenditures are best combined for purposes of interstate comparison. The combined total constitutes expenditures on a group of functions which are fairly comparable from state to state. This is especially true when "general" rather than "total" expenditures are compared.

Table 1
Direct General Expenditures of State and Local Governments

District States and the United States, 1957

State Governments		Local Governments	
	Dollars Per Capita		Dollars Per Capita
New Mexico	144	Colorado	193
Wyoming	141	Wyoming	187
Oklahoma	131	Kansas	167
Kansas	103	United States	156
Colorado	88	Nebraska	134
United States	81	New Mexico	130
Nebraska	68	Oklahoma	117
Missouri	76	Missouri	115

NOTE: While a significant share of the population of the Tenth District resides in Missouri, the largest influences upon state and local expenditures in that state are beyond the bounds of the District. It is not possible to make meaningful comparisons of state and local activities in the portion of Missouri in the District with other District states.

Why Compare General Expenditures?

"General" expenditures are a better basis for interstate comparison than "total" expenditures because the comparability of the latter among states is seriously limited, primarily by the inclusion of outlays on the operation of such enterprises as utilities and liquor stores. The incorporation of these types of outlays makes it difficult to relate different levels of expenditure to the factors which are ordinarily believed to bear upon them — population growth, urbanization, etc. On the other hand, their exclusion makes a substantial difference in some states. In the District, Nebraska is an excellent example. All electric utility service is publicly provided in Nebraska. That state contains two of the Nation's largest special districts — the Loup River Public Power District and the Omaha Public Power District. Consequently, "general" expenditures of Nebraska local governments are only about two thirds as large as "total" expenditures. Across the Nation, "general" expenditures of state and local governments constitute about 85 per cent of the total. In all of the District states other than Nebraska, general expenditures are a somewhat higher percentage of the total than in the Nation.

Per Capita Expenditures to be Compared

Obviously, the largest factor accounting for differences in state and local expenditures is variation in population. Thus, the state of New York, with a population of over 16 million, spent almost \$5 billion in 1957, while Nevada, with a population of less than 300 thousand, spent a little less than \$100 million. When the influence of population is removed by dividing outlays in both states by their respective populations, their relative expenditure positions are reversed, with Nevada spending considerably more per person than New York. In the present study, the influence of total population is eliminated by converting all activities to a per capita basis. This does not mean, however, that popula-

tion characteristics are disregarded in explaining *per capita* expenditures. Factors such as the proportion of aged, persons of school age, and city dwellers in the population may bear importantly upon differences in expenditures per person.

Are Prices Responsible for Differing Per Capita State and Local Expenditures?

Almost everyone has observed that price levels differ considerably in various places in the United States. Not only are prices higher in the West than in the South but, for some items at least, they are higher in large cities than in smaller towns. The question may be raised legitimately, therefore, whether differences in state and local expenditures are accounted for largely, if not entirely, by either generally higher prices in some geographical areas than in others or by the fact that some states have big cities with high prices and others have mostly smaller towns with generally lower prices. Unfortunately, information that would permit an exact answer to the question does not exist. However, it is possible to shed some light upon it.

The first thing to notice is the very large variation in per capita expenditures among the states. Arkansas spent about \$148 per person in 1957; Nevada, on the other hand, spent \$367 per capita — or about two and one half times as much. Even within the District the range is from about \$202 per capita in Nebraska to around \$328 in Wyoming. The information available on regional and rural-urban price differences is for the most part rather crude and, in the case of some of the best studies, rather old, but it does not indicate differences in price levels of anything like the magnitudes of the expenditure differentials.

In addition, one might suppose that prices would be a less important distorting influence on comparisons made within the Tenth District than if all the states in the Nation

were compared with one another. While price differences are known to exist among the District states, one would hardly expect them to be of anything like the order of those encountered if Mississippi, for example, were to be compared with California, or Alabama with New York. The District states, while far from being a homogeneous economic unit, do after all have certain features in common aside from their geographical contiguity — durable goods manufacturing is relatively unimportant, they are comparatively heavily dependent on agriculture, and they do not differ drastically in the percentage of their population that is urban. Furthermore, price levels in the District are neither among the highest nor the lowest in the Nation. Since they appear to represent a somewhat intermediate position, comparisons with national expenditure levels are probably not greatly distorted by differences in over-all prices.

Another way to shed some light on the problem of real differences in levels of activity as opposed to those merely attributable to price differentials is to peruse state and local government employment rather than expenditures. The range again is quite large. In 1957, West Virginia had about 227 full-time equivalent employees per 10,000 population, while at the other extreme Wyoming had around 368. Among the six District states the equivalent figure varies from the high level of Wyoming to a low of about 298 in New Mexico. It might be noted here that each of the six District states exceeded the national average. The range of variation in employment is not so large as in the case of expenditures but it is still quite striking. The difference between the employment and expenditures measures cannot, of course, be taken as a straightforward indication of the influence of prices since the composition of expenditure varies considerably and the average employee in one state is not necessarily equivalent in terms of skill and productivity

to an average employee in another. Still, the marked variation does imply that there are impressive differences in real per capita levels of activity. As will be elaborated at a later point in this study, however, differences in cost—especially in wages and salaries—may be an important factor accounting for differences in expenditures particularly for certain functions.

Over-All State and Local Expenditures in District States

In 1957 over-all state and local government expenditures in the six District states varied from about 15 per cent less—in Nebraska—to almost 40 per cent more—in Wyoming—than the national average. It is notable, however, that generally per capita expenditures in the District ranged appreciably above the national average and in Wyoming were next to the highest in the Nation. However, expenditures in Nevada—which was the top state in the Nation—were almost \$40 per person higher than in Wyoming.¹

While the satisfactory identification of the major tangible factors associated with differences in expenditures among the District states and between the District states and the Nation would require at least a breakdown by major types of outlays, some general commentary about differences in over-all levels may be of interest at this point. A later article will give attention to the pattern of District state expenditures, both in order to identify in which functions the differences occur and in order to throw further light upon the factors accounting for comparative over-all levels of expenditures.

¹The factors which helped to account for Wyoming's high rank are found in Nevada to an even more extreme degree. Both states have comparatively high per capita incomes—with Nevada ranking near the national maximum—and an extremely low density of population.

Some studies of state and local expenditure have concluded that the most important factor explaining differences in per capita outlays is per capita income. Perusal of the whole array of state and local expenditures reported in the 1957 Census of Governments indicates a rather close correspondence between income and expenditures which appears to persist—in a rough fashion—through the entire range of income levels. This conclusion is also indicated when the more formal statistical technique of multiple correlation is used.

Nevertheless, income differences cannot be invoked to explain the generally higher level of expenditures in the District than in the Nation, since none of the District states exceeded the national per capita income level in 1957. Considering direct general expenditures as a whole, a general reason that can be given for the comparatively high level of expenditures in District states is their relatively low population density. Experience across the Nation suggests that, at a given level of per capita income, states with lower population densities tend to have higher per person state and local expenditures. The six District states, while accounting for about 18 per cent of the area of the United States, account for only 5 per cent of the population. Since some functions are more affected by population density than others, it may be expected that a comparison of specific functions would provide additional information on the importance of the density factor.

On the other hand, among the District states themselves there appears to be a discernible relationship between income and per capita expenditures. The only real discrepancies are New Mexico—which on the basis of income should rank lower than it does—and Nebraska—which might be expected to rank higher than it does. On a general level, New Mexico's high expenditures may be easier to account for than Nebraska's low level, although the same factors may bear impor-

Table 2

Influences Upon Over-All State and Local Government Expenditures

	Per Capita General Ex- penditures 1957	Rank in Dist.	Per Capita Personal Income 1957	Rank in Dist.	% Increase in Per Capita Ex- penditures 1942-57	Rank in Dist.	% Increase in Per Capita Income 1942-57	Rank in Dist.	% Increase in Popu- lation 1942-57	Rank in Dist.	Popula- tion Per Square Mile 1957	Rank in Dist.
Wyoming	\$328	1	\$2,038	1	263	4	116	5-6	26	3	3	6
Colorado	281	2	2,019	2	225	5	127	3	49	2	16	4
New Mexico	279	3	1,720	5	333	1	174	1	62	1	7	5
Kansas	271	4	1,830	4	326	3	116	5-6	19	4	26	2
Oklahoma	248	5	1,654	6	332	2	165	2	2	6	32	1
Nebraska	202	6	1,834	3	222	6	126	4	16	5	19	3
Missouri*	191		1,974		260		144		11		61	
Mean—48 States	237		2,043		246		125		27		56	
Median—48 States**	238		1,847		237		122		25		61	

* See note to Table 1.

** The median represents a figure which is selected so that 50 per cent of the total number of cases, when arranged in order of size, lie below it and 50 per cent above it.

SOURCE: U. S. Department of Commerce.

tantly upon the situation in both states. In recent years, the population of New Mexico has been rising at an unusually rapid pace, both in regard to the other District states and relative to the Nation. This increase was more than accounted for by the growth of a handful of urban areas. The rapidly advancing requirement for urban services combined with unusually swift income growth and sparse population density would certainly suggest comparatively large government expenditures in the state. Nebraska, on the other hand, ex-

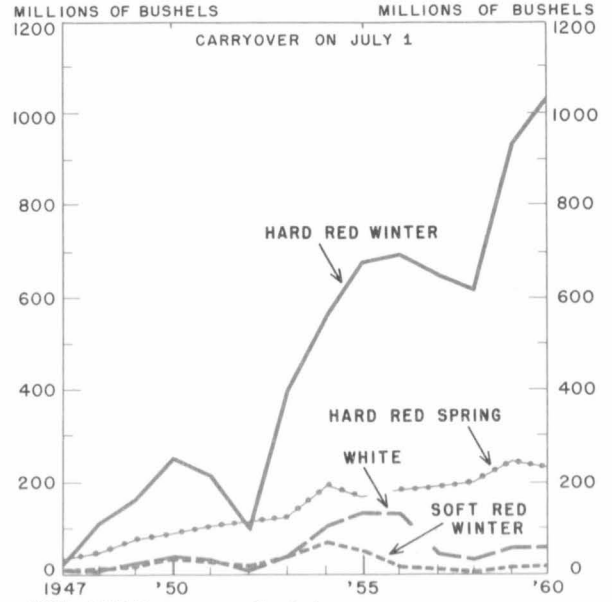
perienced a considerably lesser growth in both income and population. In Nebraska, population actually declined from the late twenties until the postwar period. This implies that requirements for social overhead capital may have been comparatively small. In addition, Nebraska is much less sparsely populated than New Mexico. Again, however, specific factors associated with such differences may be more clearly delineated by investigating expenditures for specific functions, as will be done in a future article.



PRICES RECEIVED AND PAID BY FARMERS



CARRYOVER OF WHEAT BY CLASSES



NOTE: 1960 figures are estimated.

BANKING IN THE TENTH DISTRICT

District and States	Loans				Deposits			
	Reserve City Member Banks		Country Member Banks		Reserve City Member Banks		Country Member Banks	
	May 1960	June 1959	May 1960	June 1959	May 1960	June 1959	May 1960	June 1959
	June 1960 Percentage Change From							
Tenth F. R. Dist.	†	+2	+2	+9	+1	-4	+1	+1
Colorado	+1	+6	+3	+11	†	-1	-1	+1
Kansas	-1	-6	+4	+9	+4	-1	+2	+3
Missouri*	-2	+3	+1	+8	+2	-3	-1	-3
Nebraska	+1	-2	+2	+10	-2	-5	-1	-1
New Mexico*	**	**	+3	+12	**	**	†	+2
Oklahoma*	+2	+3	-1	+8	†	-8	+3	+3
Wyoming	**	**	+2	+9	**	**	-1	+2

*Tenth District portion only.
†Less than 0.5 per cent.

**No reserve cities in this state.

PRICE INDEXES, UNITED STATES

Index	June 1960	May 1960	June 1959
Consumer Price Index (1947-49=100)	126.5	126.3	124.5
Wholesale Price Index (1947-49=100)	119.5	119.7	119.7
Prices Rec'd by Farmers (1910-14=100)	236	241	242
Prices Paid by Farmers (1910-14=100)	299	301	298

TENTH DISTRICT BUSINESS INDICATORS

District and Principal Metropolitan Areas	Value of Check Payments		Value of Department Store Sales	
	Percentage change—1960 from 1959			
	June	Year to date	June	Year to date
Tenth F. R. District	+5	+3	-1	-1
Denver	+9	+8	-1	+2
Wichita	-6	-4	-15	-13
Kansas City	+5	+3	+4	+2
Omaha	+8	+1	+2	+3
Oklahoma City	+7	+2	+5	-1
Tulsa	-1	0	-6	-5