

*A review by the* **Federal Reserve Bank of Chicago**

# Business Conditions

**1959 November**



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# THE Trend OF BUSINESS

Several indicators of business activity dipped appreciably during the third quarter. Total spending on goods and services declined in this period after rising steadily during the preceding five quarters. Industrial production fell 5 per cent between June and September. Wage and salary employment, seasonally adjusted, declined by 600,000 during these months; and retail sales, which had been at a record level during July, sagged in August and September. In the face of a three-month steel strike, the surprising thing about these developments is not that they occurred, but rather that the repercussions were not more severe.

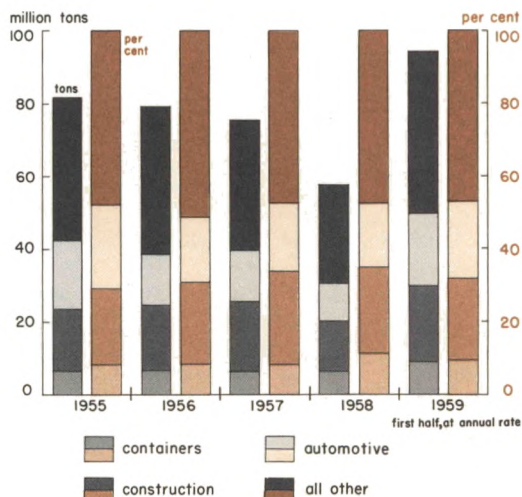
Secondary unemployment, as a result of the steel strike, was rising rapidly as negotiations for a settlement continued past mid-October. The Department of Labor reported that the number of workers idled by side effects of the strike totaled 195,000 as of the end of September and that the number was rising rapidly, by possibly as much as 25,000 a week, as steel shortages became more widespread. Furthermore, steel shortages were expected to continue to grow worse in the weeks following the end of the strike since it would take time to get steel produced and flowing to users in the needed kinds, shapes and amounts. The fourth quarter of 1959, as well as the third, will show the dampening effect of the extended shutdown of most steel producers.

Although the Chicago area has about 20 per cent of the nation's steel capacity and

Detroit over 5 per cent, the most important effect of the strike on the Midwest may result from its position as a *user* of steel. Detroit, Chicago and Milwaukee rank near the top of the steel-consuming centers. Moreover, despite rapid expansion of steel capacity in this region, steel consumption here continues to outrun local production.

The important layoffs in the Detroit area, of course, have been in the automobile industry. These were expected to become much more widespread in November when assembly plants as well as the plants of components suppliers would be affected.

## Steel shipments at record rate in first half





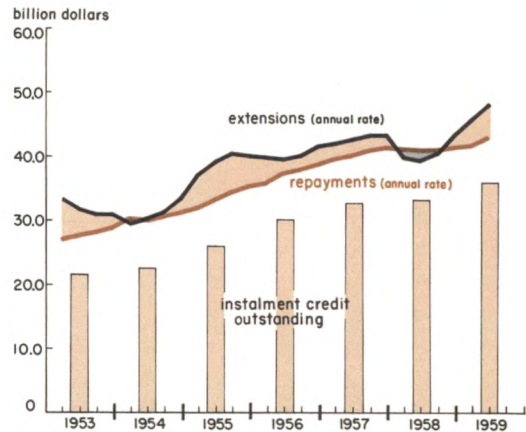
Aside from the Gary area, where the major steel plants are located, only 4,500 *manufacturing workers* had been laid off in the Chicago area because of steel shortages through the end of September. About 2,500 more were expected to be added to this number during that month. This is a small number in an area which employs about 1 million manufacturing workers. In Milwaukee, which employs about 200,000 in manufacturing, it was anticipated that the number of layoffs would reach 5,300 by the end of October. In Indianapolis, the effects were relatively minor. Harder hit relatively than the large cities were such centers as Peoria and Flint, which have high proportions of their employment in lines using large quantities of steel.

These developments, serious as they are to those affected directly, are not as important as might have been anticipated at the start of the strike in mid-July. One reason is that the quantity of steel on hand was probably underestimated. Secondly, steel-using firms have shown a good deal of ingenuity in shifting supplies among alternative uses.

Employers have attempted to avoid layoffs in the face of a decline in production which is expected to be temporary. It is costly and time-consuming to rebuild a staff of selected and trained workers once it has been dissipated through layoffs. Furthermore, there is a desire to avoid the higher liability for unemployment compensation insurance which results from fluctuations in numbers of employees.

In some cases, workers have been shifted from a division short of steel to other jobs within the firm. Another technique has been to eliminate overtime or reduce the number of days worked in the week. Typically, metal-using firms have ceased to hire new workers during the steel strike and have al-

## Instalment credit rising sharply



lowed normal attrition to reduce the size of their work forces.

When steel begins to flow again, some quantity will be available almost immediately because it is finished and ready for shipment. But it will take several weeks before the mills reach their maximum rate of output. Even then, availability of particular types of steel needed by individual firms will depend on the place the steel user has on the order books of the steel producer and the place the particular kinds of steel he needs occupy in the production schedule. Not all types of steel are being produced at a given time. As a result, many steel users have spread their orders among several producers hoping to obtain the kinds of steel they need at the earliest possible time.

## Residential construction declines

Except for home building, the drop in business activity during recent months can be attributed largely to the direct and indirect effects of the steel strike. New housing starts declined from a seasonally adjusted

annual rate of over 1.4 million in the spring to 1.325 million in September. This is a relatively small decline considering the high level of starts last spring. However, housing starts are commonly based on financing commitments made several months earlier. Since midyear, the volume of new commitments has declined.

Demand for mortgage funds continues strong, reflecting the current high, if somewhat reduced, level of construction. The 5 per cent notes issued by the Treasury in October were attractive to many individuals and resulted in some withdrawal of funds from time deposits and savings and loan shares, important sources of mortgage loans. High-grade, long-term corporate bonds issued in early October carried yields of around 5 per cent. Because of servicing costs, rates on mortgages must be higher

than those on corporate bonds to maintain a large volume of new commitments. In recent weeks, new conventional mortgages in the Midwest have commonly been made at 6 and 6½ per cent. Many lending institutions have been quoting these rates as their minimums. On the West Coast, rates of 7 per cent and higher have been reported.

### **Consumer debt rises sharply**

An area of spending where the effects of tighter credit are less certain is consumer instalment credit. In July and August, instalment credit was rising (and thereby adding to consumer buying power) at a 6 billion dollar annual rate. Retail sales of autos and other consumer durables were at or near record levels. In the same months of 1958, consumer instalment credit outstanding did not rise at all.

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## Shift in meat packing

The closing down of slaughtering plants at Chicago by the major meat packing firms has brought into bold relief the steady evolution in the location of livestock production and slaughter. The abandoned, half-century-old structures at the Union Stock Yards, and at some other markets, were victims of technological progress, both in terms of their efficiency and their location.

### **Historical sketch**

A century ago, animals were "trailed" from farms and ranches to the cities, often hundreds of miles. Slaughter took place close to the ultimate consumers because of the

impossibility of storing fresh meat or shipping it any considerable distance, except possibly during the winter in the northern areas. Local butchers predominated in the meat business.

Initially, commercial pork packing was confined to the production of cured products during the winter months, but, with the introduction of ice for cooling, the activity was extended to the summer months. Thereafter, pork packing, which had developed earlier around Cincinnati, began expanding further west.

By 1870, mechanical refrigeration was being generally adopted in the industry,



making possible meat packing in its modern form. With effective refrigeration and improved rail transportation, perishable meat products could be moved great distances without suffering serious deterioration. In response to the rapid industrialization and urbanization of the East, increases in livestock production in the Middle West and Southwest and extension of railroads in these regions, large livestock markets and packing plants had developed at the major railroad centers in the Middle West at the time of the first World War.

Chicago, an early giant among terminal markets, reached its peak as a slaughtering center in 1918. In that year, Chicago accounted for 17.4 per cent of all commercial slaughter of cattle in the United States and 15.7 per cent of all hogs—proportions never again reached. That was the record year also for number of cattle slaughtered, but it wasn't until 1923 that the number of hogs slaughtered reached its highest mark.

### **Trucks, terminals and technology**

The basic reason for the decline in relative importance of livestock markets and meat packing plants located at a number of the major railroad terminals was the introduction of the motor truck and the extension of hard surface roads. These changes in transportation set the stage for important changes in the marketing of livestock and meats.

The locational advantage of the rail terminal began to fade. Farmers no longer were "tied" to the railroads as the most convenient means of shipping livestock to market. The location of terminal markets, which had been convenient for rail shipments, proved to be inconvenient for shipment by truck. Traffic congestion and distance were important handicaps. On the other hand,

reduced "shrinkage" of animals in transit, together with reduced expenses in marketing, made the "interior" markets attractive to both packers and farmers. Similarly, on the distribution side, refrigerated trucks lessened dependence of the packers on rail transportation, and freight rates in some areas favored local slaughter at interior points and shipment of dressed meats in preference to live animals.

While changes in transportation and geographic shifts in livestock supplies were affecting the optimum location of meat packing plants, technological changes in the packing processes and equipment began making the old, multistory plants obsolete. Assembly line techniques of new, single-floor plants were replacing the top-to-bottom material flow of the earlier buildings. Quicker chilling methods reduced the needs for huge refrigerated meat coolers, and fast, new curing methods reduced the space and time needed for that purpose. Mechanization of many operations permitted more to be accomplished within a given space and called for changes in layout of plants.

Manufacturing employment in Chicago and other large cities has expanded greatly in the war and postwar periods and put heavy pressure on wage rates and the supply of labor for the packing plants located at terminal markets in these cities. Location of packing plants at interior points has been advantageous both in terms of wage rates and dependable supplies of competent labor. Even where union contracts call for uniform wage rates, in high wage areas these rates may attract less competent labor than in low wage areas.

As a result, local markets increased in relative importance, and plants located at interior points became more important as outlets for farmers' livestock.



The shift to interior markets has been far more important in the case of hogs than cattle. Of those hogs slaughtered under Federal inspection, 77 per cent<sup>1</sup> were sold through terminal public markets<sup>2</sup> in 1923. By 1951, this proportion had declined to 42 per cent with most of the decrease taking place prior to 1940. For cattle, the decline was far smaller—from 90 per cent to 73 per cent. Since 1951, evidence indicates these trends continued, but, in contrast with earlier years, the rate of decline has been greater for cattle than for hogs.

The types of marketing channels which have developed to supplement terminal markets have quite pronounced regional variations. In the North Central region—including Kansas, the Dakotas, Ohio and Kentucky and the intervening states—over one-half of the hogs marketed in 1955 were sold direct to “local” packers or country buyers. In the South, over half the hogs were sold at auction.

This shift from terminal to interior markets has been accompanied by a decline in distance traveled to market. In Indiana in 1956, over 90 per cent of the hogs sold on local markets originated within 25 miles of these markets, while only 7 per cent of hogs sold on terminal markets came from within that distance. Farmers also marketed more frequently, selling smaller lots—a practice encouraged by the shorter distance to market and the trend toward a more uniform distribution of farrowings throughout the year.

In addition, improved market news services have permitted farmers to compare price

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<sup>1</sup>These proportions would be smaller if non-Federally inspected slaughter were included.

<sup>2</sup>Terminal public markets in 1951 included 65 livestock trading centers for which the U. S. Department of Agriculture assembled information.

quotations at various interior as well as terminal markets and have placed an additional premium on flexibility in transportation and selling of livestock.

In the case of cattle, the shift away from the terminal markets has been greatest in the marketing of feeder cattle and calves. By 1940, the proportion of feeders shipped into the eight major feeding states of the Corn Belt which were marketed through terminal markets had declined to 65 per cent from over 85 per cent in the late 1920's. The proportion increased temporarily during the war, but, by 1956, over half of the feeder cattle were marketed through direct sales by ranchers to Corn Belt farmers or dealers, or through local markets.

One result of this is that the proportion of calves purchased at terminal public markets for slaughter under Federal inspection has declined more than that of any other kind of livestock—from 85 per cent in the early 1920's to less than 40 per cent in recent years.

The North Central region has had the highest proportion of cattle marketed through terminal public markets. This region accounts for well over half the total number of cattle marketed in the United States. Unlike hogs, marketings of high-grade fat cattle have not shown a sharp diversion from the terminal markets. Apparently, with subjective judgment of paramount importance in determining the value of these animals, farmers prefer to offer them for sale at the larger public markets.

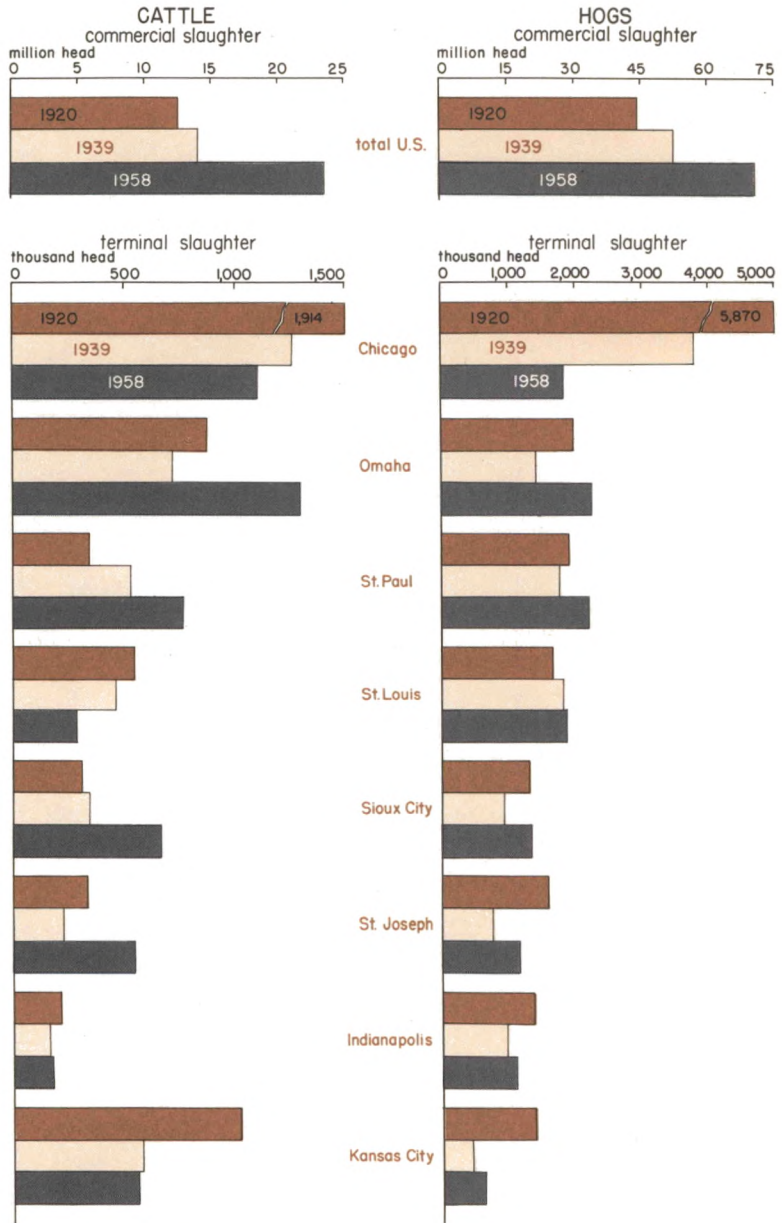
### **Production and slaughter**

As the points at which livestock is sold have moved closer to the areas where livestock is produced, the place of slaughter has tended to move away from the midpoint be-

tween the source of livestock and the market for meat. Thus, the decline in marketings at terminal markets has been accompanied by a decline in slaughter at those points.

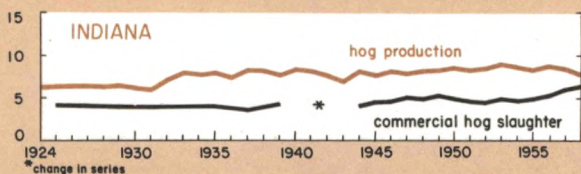
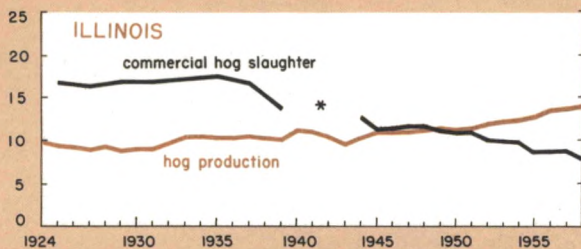
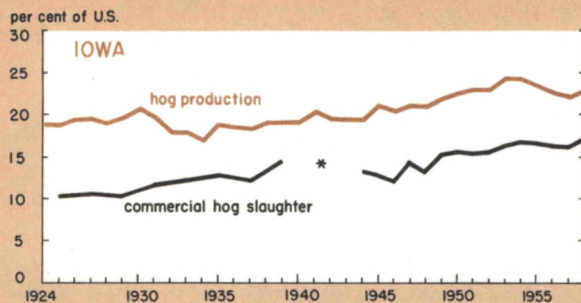
Probably the greatest impact of these changes has been on the Chicago terminal market. During World War I, Chicago was more than three times as large a hog market as its nearest competition — Omaha, East St. Louis, Indianapolis and St. Paul, which at that time were all about equal in volume. In 1958, Chicago ranked third behind South St. Paul and East St. Louis and was barely ahead of Omaha and Indianapolis. In cattle, Chicago has maintained its position as the largest market, primarily due to its growth as the largest shipping market for the top grades of slaughter cattle. However, the relative importance of markets other than Chicago has increased greatly since World War I.

### Omaha replaces Chicago as leading meat packing center





## Hog production climbs in Illinois, as well as Iowa, but slaughter drops in Illinois



Omaha was only half as large as Chicago at that time, but in recent years has been a very close second. And, as packers at Chicago have taken a declining proportion of cattle marketed there, Omaha has replaced Chicago as the leading slaughtering center for cattle as well as hogs in recent years.

As the truck has loosened the tie between terminal markets and slaughtering plants and

as location of livestock production has become much more important in influencing location of slaughtering plants, a notable change has been the sharp decline in importance of Illinois as a place of slaughter of both hogs and cattle. At the time of World War I, Illinois had more than 20 per cent of the U. S. slaughter of both cattle and hogs. By last year, the proportions had both fallen to less than half that figure (see charts).<sup>3</sup> Iowa, on the other hand, has gained sharply in hog slaughter and, in recent years, in cattle slaughter as well. In the past thirty-five years, Iowa and Illinois have almost completely reversed positions in hog slaughter. In cattle and calf slaughter, Iowa exceeded Illinois for the first time last year; whereas, thirty years ago, Iowa ranked fourth.

In the 1920's, half again as many hogs were slaughtered in Illinois as were produced on the farms in that state. Last year, the number of hogs slaughtered was 55 per cent of marketings. Iowa farmers, on the other hand, used to ship out of the state 55 per cent of their hogs but now ship only 30 per cent as live animals for slaughter in other states. Nebraska, interestingly, has become a net importing state for hogs; that is, more hogs are slaughtered in the state than are produced there. This reflects the westward movement of hogs from Iowa.

A similar pattern emerges for cattle. Illi-

<sup>3</sup>Data based on Census of Manufacturers through 1939, on commercial slaughter since 1944.

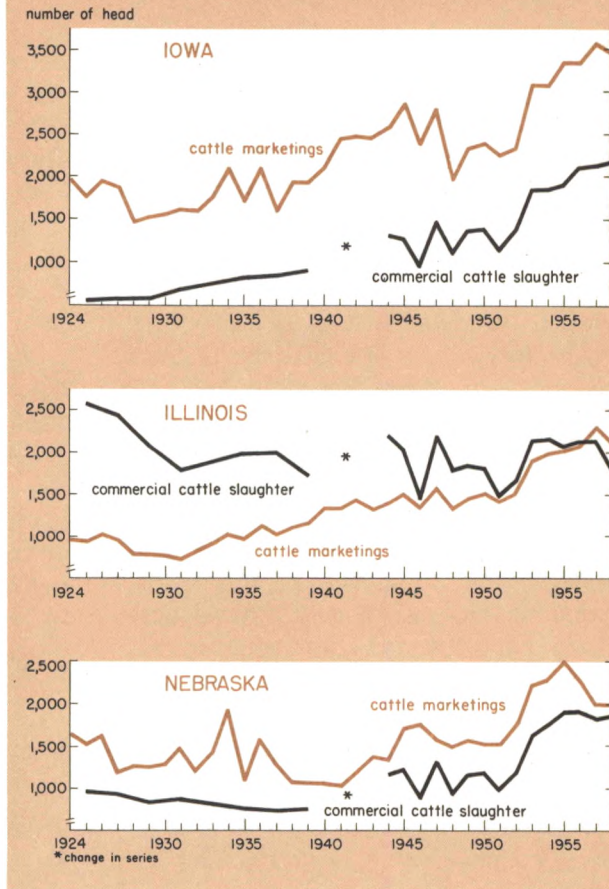


nois farmers marketed only one-third of the total number slaughtered in that state in the 1920's, but, in recent years, slaughter has fallen below farm marketings. And cattle slaughter as a proportion of farm marketings in Iowa has climbed from one-third to 62 per cent in the past 35 years. In Nebraska, cattle slaughter has nearly caught up with farm marketings in recent years.

Hog production in Indiana has remained a fairly constant proportion of the United States total, but slaughter has climbed in the postwar years. Part of this growth in slaughter in Indiana may be explained by the increasing tendency for hogs to be moved eastward from Illinois farms in the general direction of the large consumption centers for slaughter, bypassing Chicago. Such movement, of course, would reflect a pattern of market prices favorable to that trend.

Rapid population growth on the West Coast has also had an important impact on livestock movement and location of slaughtering. With the rapidly growing demand, the supply area for West Coast markets has been pushed eastward. In the case of hogs, shipments of live animals are made to California from as far as Illinois. Iowa and Missouri account for nearly 40 per cent of live hogs shipped into California for slaughter. However, most of the pork consumed in California is shipped in as dressed meat. With more western Iowa production supplying the West Coast, both marketing and slaughtering of

### Cattle slaughter drops below marketings in Illinois, climbs in Iowa and Nebraska



hogs at a nearby terminal market become logical developments and may help explain the growth of Omaha as a hog market in recent years.

In the case of cattle, the decline of slaughter in Illinois as a proportion of slaughter in the U. S. has not been offset by the growth in Iowa and Nebraska. Further, when account is taken of the decline of cattle slaugh-

ter in Kansas and Missouri as a proportion of the U. S. total, the Midwest as a whole has declined significantly in cattle slaughter. Part of the explanation lies, of course, in the development of cattle production in other areas of the country. The South has had an important shift to grassland beef production as acreage controls have forced alternative uses of land formerly in cotton. The growth of grain sorghum production on diverted wheat acreage in the Southwest has similarly encouraged beef production in that area. California, Colorado and some other areas have had great increases in cattle feeding based on by-products of crops such as sugar beets and citrus fruits. Yet the proportion of cattle marketed in the midwestern states has remained nearly constant over the years, as feed grain production and cattle feeding have kept pace with increases in total cattle production. The rest of the explanation must be found, then, in the movement of some slaughtering previously done at the midpoint between production and consumption closer to consumption centers.

Illinois has been the exception to the growth of slaughtering in the surplus livestock areas. In spite of the downward trend in slaughter in Illinois in recent years, the meat packing industry still has considerable strength in the state. Swift and Company, the nation's largest meat packer, recently announced plans to build a packing plant at Rochelle, Illinois, about 75 miles west of Chicago. Armour and Company, the second largest, has continued operating full force at Peoria, midway between closed plants at East St. Louis and Chicago. And John Morrell and Company, the fourth largest packer, has acquired plants at both Chicago and East St. Louis, its first slaughtering operations in these two areas. If these moves should prove to be indicative of a trend, they would indicate that the decline of meat packing in Illinois has about run its course, and, given time for needed adjustments, the industry would stabilize or even show some expansion based upon the "local" slaughter of a larger proportion of livestock produced in the state.

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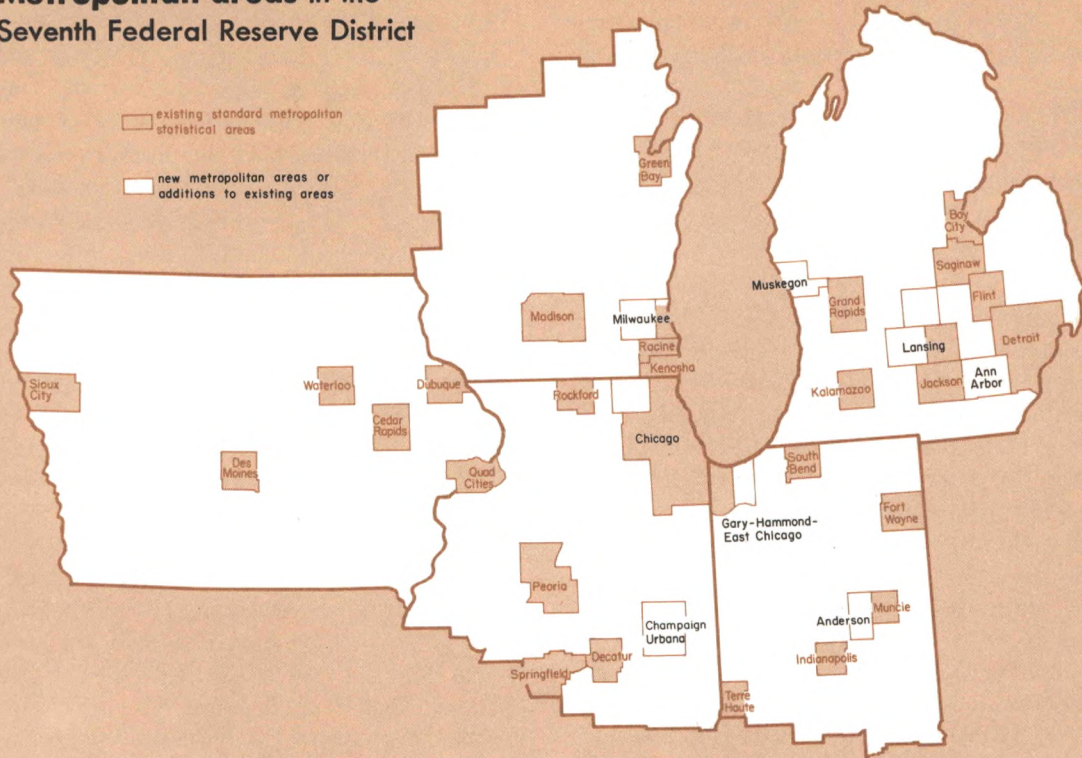
## Metropolitan areas, additions to the family

**T**he past year has brought a number of changes in the list of Midwest communities which qualify for the label, "standard metropolitan statistical area." Four communities have been added: Anderson, Indiana; Ann Arbor, Michigan; Champaign-Urbana, Illinois; and Muskegon, Michigan (see map).

The boundaries of two other areas, Milwaukee and Lansing, have been enlarged to include counties adjoining those in which the central cities are located. What was formerly the Chicago metropolitan area has been divided into two areas, Chicago and Gary-Hammond-East Chicago, and an additional



## Metropolitan areas in the Seventh Federal Reserve District



county has been included in each of the newly defined areas. These latest changes bring to 34 the number of communities in the Seventh Federal Reserve District which have been specified as standard metropolitan areas.

### What is a metropolitan area?

The standard metropolitan area is essentially an integrated economic unit with a large population in a relatively small area and with a labor force primarily engaged in nonagricultural pursuits. As defined by the U. S. Bureau of the Budget, a metropolitan area must have as its "hub" a central city (or cities) with a population of 50,000 or more.

However, to be a meaningful economic unit, the area may need to include more than the city itself. Economic and social characteristics, unlike speed limits, do not change abruptly at the city boundaries. Nonagricultural economic activity and residential areas frequently are outside the city limits, yet are closely related to the central city. Thus, the boundaries of standard metropolitan areas follow county lines rather than the more restrictive city boundaries. If counties adjacent to that in which the central city (or cities) is located serve as places of residence or employment for a concentration of nonagricultural workers, these counties may be included in the metropolitan area. The extent



of integration, or interdependence, typically is measured in terms of the volume of inter-county commuting between residences and jobs.

#### **Why define metropolitan areas?**

Studying areas with similar characteristics can frequently be an aid to understanding current and prospective trends. The "Corn Belt" and the "Wheat Belt" are examples of definitional areas, helpful in describing agricultural activity. The standard metropolitan area serves a similar purpose in the examination of nonagricultural activities.

The 34 areas shown on the accompanying map, for example, account for about 67 per cent of the population in the Seventh Federal Reserve District, but they have had roughly 81 per cent of the total population *growth* over the past decade. The metropolitan areas' shares of District nonagricultural employment and income are even greater and have been increasing. In the past decade, then, metropolitan areas have been the foci of District growth.

Although metropolitan areas are similar in terms of integration and relatively large populations and labor forces, they are *not* necessarily alike in other respects. For example, Midwest areas differ greatly in their economic specialization. Some are primarily producers of manufactured commodities, while others engage primarily in the provision of services. Within the services sector, some are seats of state governments or universities, while others are primarily trade centers. The metropolitan areas also differ widely in absolute size and in current and prospective rates of growth.

Much statistical information is assembled on a standard metropolitan area basis. Two purposes are thus served. First, this is a convenient and useful way of breaking up national data to show the diversity in both levels and trends among areas. In addition, a good deal of indispensable data are provided for analyses of local problems and developments that may not have any particular counterpart in national figures or those for some other areas.

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## Plateau in defense spending?

**I**n recent months, the nation has been spending at an annual rate of 41 billion dollars to maintain and strengthen its armed forces. Total defense-related expenditures—including atomic energy, military aid and stockpiling—have been at a rate of 46 billion dollars. Except for a temporary interruption in late 1957, these outlays have been trending upward for two and one-half years under the pressure of rising prices and the

development and introduction of new weapons.

Ever since the capitulation of France in the spring of 1940, the United States has been channeling a substantial portion of its total output of goods and services to defense. Both the large volume of military expenditures and fluctuations in this total have importantly affected movements in general business activity. At the conclusion of each



previous war, the nation's armed forces had always been slashed to the point of relative insignificance.

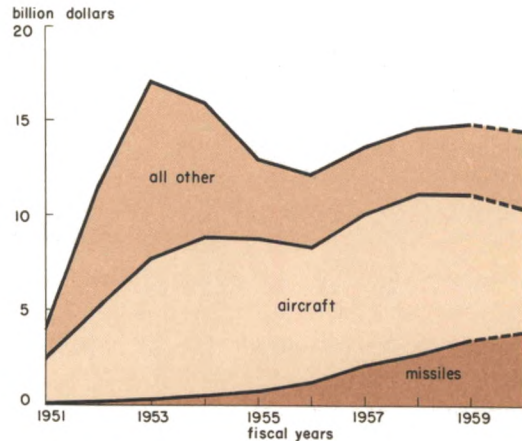
### A matter of magnitudes

The magnitude of an annual expenditure totaling 46 billion dollars probably can be visualized only in comparative terms. It is approximately equal to the rate of spending by state and local governments for all purposes; it is double the current rate of outlays for new residential construction; it is three times as large as consumer expenditures for new automobiles; and it accounts for one dollar in every ten spent on goods and services by consumers, business firms and governments combined.

Although expenditures on military preparedness have remained significantly large since 1940, there have been substantial variations during the period. These outlays reached a high of 89 billion dollars in 1944, the year which marked the beginning of the end of World War II. In that year, such expenditures accounted for 42 per cent of the nation's total output of goods and services. In the early postwar years, this proportion declined sharply, dropping below 5 per cent in 1948. The development of nuclear weapons by Russia and the outbreak of hostilities in Korea sent the proportion up to 13.5 per cent in 1953. Then, a re-evaluation of defense needs and the ending of the Korean War brought a reduction in military outlays. For the past five years, national security outlays have accounted for between 9.6 and 10.1 per cent of the total output of goods and services.

If the current dollar level of military outlays were to be maintained, as present plans indicate, the proportion of total output going for defense purposes would gradually decline as the over-all economy continued

### Missiles taking larger share of defense procurement



to grow. In five years, the current proportion of 9.5 per cent would decline to less than 7 per cent if the economy were to grow at the average rate of the postwar years.

Another way to evaluate the defense burden is through the volume of employment. About 70 million persons are now employed in activities of all types, including the military. Of these, 2.5 million are in the armed forces. Another million are civilian employees of the Defense Department. Perhaps 1.5 million factory workers are engaged in production for military needs, along with some hundreds of thousands of nonfactory workers in private employment. Altogether, at least 5 million persons—about 7 per cent of the total work force—are engaged in the defense effort in some capacity.

### Who gets defense dollars?

The budget of the armed forces is divided about equally between operating costs—including personnel, supplies and maintenance—and outlays for procurement, construction



and research and development. The second group of expenditures might be thought of as capital outlays for defense purposes. In other words, about half of the outlays made by the Department of Defense relate to the nation's present ability to wage war and the other half is related to the future.

At least three-fourths of the expenditures on major procurement and construction are related directly or indirectly to missiles and aircraft. Missiles were a small item only a few years ago, but expenditures in that field have been accelerating rapidly and are expected to reach and surpass the declining aircraft component within a few years.

For fiscal 1960, spending for missile procurement is budgeted at 3.9 billion dollars, 13 times as much as was spent in fiscal 1953 when the over-all budget was larger. Research and development outlays, in which the missile influence is dominant, are expected to total 2.6 billion as compared with 1.4 billion in the earlier year. These trends are believed likely to continue.

The de-emphasis on conventional arms since 1953 and the discontinuation of contracts with secondary suppliers of military aircraft and engines have greatly reduced the relative share of defense business going to firms located in the Midwest.

In fiscal 1953, the general procurement category, including tanks and motor vehicles, totaled 7.2 billion dollars. In fiscal 1960, this category will be only 1.4 billion dollars. The aircraft and missile categories combined totaled 7.7 billion in the earlier year and will be 10.4 billion in the latter. Obviously, the Midwest, which has a relatively small stake in the production of aircraft and missiles, has seen the dollar amount of military hardware on order decline substantially.

Published data do not permit pinpointing

of the locus of defense work. However, compilations have been made of procurement contract awards by the location of the head office of the prime contractors. During the Korean War, Michigan, Illinois, Indiana, Wisconsin and Iowa firms received 22 per cent of the prime contracts. In the three years ending last July, these states accounted for less than 9 per cent of the total. Michigan witnessed the largest decline between these periods—from almost 10 to less than 3 per cent.

Nevertheless, many Midwest firms engage in important defense work. Various components for aircraft and missiles are manufactured in this area, along with processed foods and other items. Electronics firms supply defense equipment and components and play important roles in research and development work. But the large producers of planes and missiles are located primarily in the West, the Southeast and the East.

#### **Disarmament and business activity**

The Soviet Premier, during his recent visit to the United States, proposed a complete abolition of military forces throughout the world. No concrete plans for achieving such a goal were offered and, reflecting past experience, the idea has been received with considerable skepticism. Nevertheless, the mere suggestion of universal disarmament has centered attention on the relationship of military spending to general economic activity.

Our past experience indicates that a large cutback in defense outlays need not pose a serious threat to the general economic health of the nation. Wholesale cancellations of Government contracts began immediately after the World War I armistice in November of 1918. For a few months, activity slumped and unemployment rose. Recovery



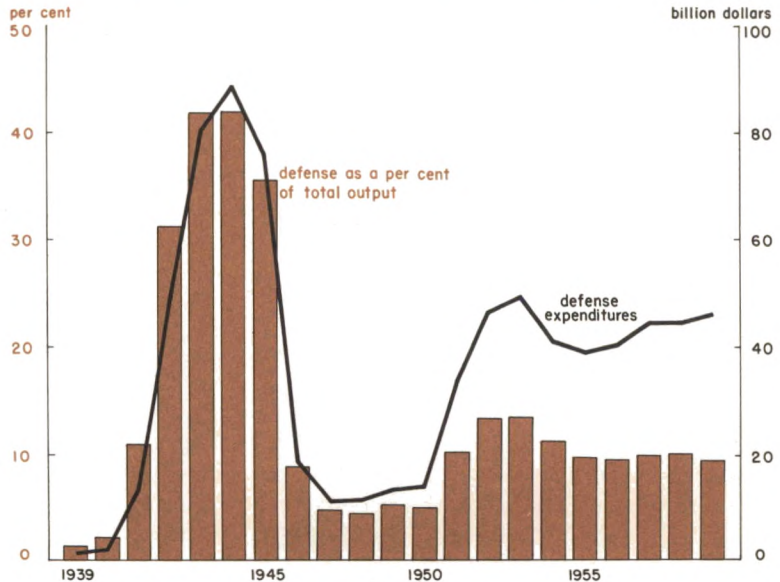
was rapid in 1919, with total output of goods and services about as large as in 1918. This recovery was followed by a second postwar recession beginning in the late spring of 1920.

A painful adjustment was anticipated after World War II. National defense outlays dropped from 76 billion dollars in 1945 to 19 billion dollars in 1946. However, private spending rose sharply as goods became available, and a major adjustment was made with surprisingly mild repercussions on total output or employment.

After reaching a low point in the spring of 1947, at an annual rate of 10 billion dollars, defense outlays began to move up once again. In the third quarter of 1949, the rate of expenditure was 14 billion per year. Then, an economy drive reversed the trend. The rate was back down to 12 billion dollars when the Korean War began in June of 1950: Nevertheless, coincident with the reduction of defense expenditures in late 1949 and the first half of 1950, general business activity was rising vigorously.

In the spring of 1953, plans called for a further rise in defense spending of perhaps 10 billion dollars from the 50 billion dollar level then in effect, and business planning was commonly based on the likelihood that this rise would occur. However, instead of the contemplated rise, there was a 10 billion

### Defense outlays have risen since 1955, but proportion of total spending has been stable



dollar reduction which was largely accomplished within the space of a single year.

The impact of the reduction in defense spending in the 1953-54 period was felt throughout the economy, and a recession did follow. But the duration and extent of the decline were moderated by substantial reductions in tax rates, which were made at the start of 1954, and other actions. Therefore, while the Federal Government was slowing the flow of "defense dollars" into the economy, it was also taking fewer dollars out via taxes. The adjustment, as measured by changes in aggregate output or employment, once again was relatively mild.

The experience of 1919, 1946, 1949 and 1954 indicates that the natural resiliency of the United States economy, aided by appropriate tax and monetary policies, is such as to withstand the impact of large and rapid

changes in military outlays. There is no need to support an excessive military establishment merely to maintain prosperity, or an inadequate establishment to avoid inflation. Rather, defense expenditures, by and large, can be viewed as a subtraction from the potential output available to supply civilian markets.

Although a reduction in military outlays would be desirable, if it could be achieved without endangering the nation's security, it should not be supposed that a millennium would result. As stated above, these expenditures currently account for less than 10 per cent of total output of goods and services. It is generally believed that the economy can be expected to grow at an average rate of 3 to 4 per cent per year. Therefore, total abolition of the defense outlays would provide the possibility of doubling the growth rate in output of nonmilitary goods and services for only about four years, even assuming that the resources released by defense cutbacks would be absorbed smoothly in other uses.

In contrast to the pleasant thought that a substantial reduction in armament outlays may be realized in the future, there is the possibility also that the world situation could deteriorate and that a large increase in these expenditures would be deemed necessary. Various proposals have been made in recent years to increase outlays to modernize and enlarge the armed forces, provide for civil defense, increase anti-submarine defenses, enlarge the programs for the delivery of nuclear weapons and similar actions. In total, these suggestions add up to many billions of dollars.

If military outlays were as large relative to total production today as they were in 1952 and 1953, the current rate would be 65 to 70 billion dollars. Such a proportion could be achieved only by diverting output from non-

military purposes. To do this without intolerable inflationary pressures would require additional transfer of purchasing power from the private sector to Government, preferably in the form of increased taxes.

A rather successful attempt to neutralize buying power during a defense build-up occurred in late 1952 and early 1953. Despite a rise in defense expenditures from a rate of 12 billion dollars in the second quarter of 1950 to over 50 billion dollars in the second quarter of 1953, increased tax receipts held the cash deficit in fiscal 1953 to 5 billion dollars. Inflationary pressures had been so well contained that it was possible to abandon price controls in April of 1953 without an appreciable rise in the general price level.

In summary, defense expenditures absorb a sizable slice of the nation's output of goods and services. Probably, this will continue to be the case for many years to come. Nevertheless, there is no assurance that the total will not decline or rise appreciably in relation to total output. It would perhaps be complacent to suggest that these changes can be taken "in stride." But the record of the past indicates that the impact of shifts in defense spending need not undermine the basic strength of the economy nor seriously deter its growth.

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