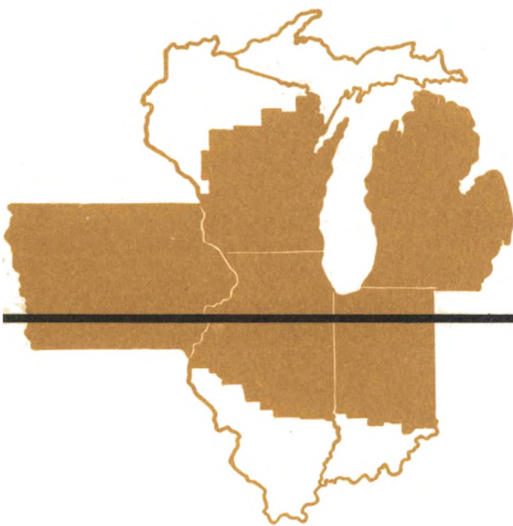


*A review by the* **Federal Reserve Bank of Chicago**

# Business Conditions

**1956 September**



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# THE Trend OF BUSINESS

As the steel industry began to push output back to capacity levels following the resumption of production in early August, most businessmen were facing the future with renewed confidence. The shutdown had lasted long enough to make heavy inroads on the large stocks of steel built up prior to the strike, but not so long as to seriously impede production in steel-using industries. In fact, the reduction in output during July was widely interpreted as accomplishing quickly an inventory adjustment which appeared inevitable in any case. Reassurance as to underlying strength of the business picture also was provided by the general absence of significant secondary effects from the continued weakness in autos, farm machinery and home building.

Employment and income remained at record levels during the summer. Total retail trade,

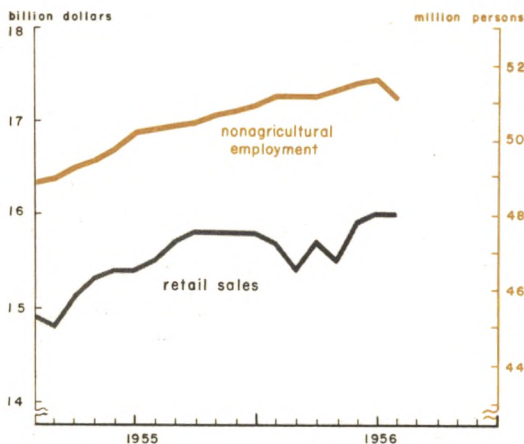
somewhat sluggish in the early months of the year, had moved up to new highs in May and June. In July, moreover, department store sales set a new record, exceeding the excellent year-ago results, and retailers were looking forward to continued record sales in the remainder of the year. Plant and equipment spending advanced further, and the demand for both long- and short-term loans has been strong enough to push interest rates up. But most significant for business and financial planning was the evidence that a mild but unmistakable rise in the general price level is under way.

Directly following the settlement of the strike, all major steel companies raised their prices an average of about \$8.50 per ton or 6½ per cent. This action, in itself, raises the average level of wholesale prices of all commodities by about one-half of one per cent. But that is only the start. Steel users are taking steps to pass the increases along.

Labor-management negotiations in aluminum also have resulted in wage and price boosts—one cent a pound or 4 per cent on pig aluminum. In July, copper prices were cut back by primary producers to 40 cents a pound from the 46-cent level posted in the spring, but custom smelters of secondary copper advanced their prices slightly. Prices of certain other nonferrous metals also have moved up.

Even before the settlement of the steel dispute, higher prices were being announced for a long list of goods in an attempt to improve profit margins in the face of rising costs. Typewriters, automobile tires, TV sets, beer and most household appliances were marked up by manufacturers—in most cases by 2 to 5 per cent. At the same time, there was softness in lumber and some textiles, but these price re-

## Employment, retail trade moved to new highs before steel strike



ductions were far outweighed by the boosts elsewhere. In July, almost half of the members of the Purchasing Agents Association of Chicago reported paying higher prices for their principal purchases.

One of the most vigorous developments on the price front has been in farm prices. From December through June, average farm prices increased by 10 per cent. In July they stood 3 per cent higher than last year. And the seasonal decline as 1956 crops are harvested apparently will be less than usual and substantially smaller than last year.

In the second half of last year sharply lower farm prices largely offset a 4 per cent increase in industrial goods with the result that the wholesale price index moved up only slightly. So far this year, however, both farm and non-farm prices have been rising with farm prices providing the main push.

The consumer price index, responding mainly to upsurges in meat and fresh fruits and vegetables, reached a record high in June, 1.6 per cent above a year ago. Further increases in July activated cost-of-living wage clauses for 1.5 million workers who will get up to 3 cents more per hour as a result. Although foods have been responsible for most of the rise in living costs this year, all major groups of consumer items have been creeping upward.

**Steel strike repercussions** became most important after the resumption of operations. Except for the items in tightest supply, such as heavy structural shapes, plates and pipe, substantial inventories had been accumulated during the first six months of the year. At least half of this gain in stocks was wiped out, as inventories were reduced during the strike. Some additional over-all reduction doubtless occurred in August.

The automobile industry, the largest steel customer, accounting for over one-fifth of total shipments, was reported to have enough steel on hand to complete 1956 model runs. Work on parts and components for the 1957 models, of course, is well under way, and the steel supply apparently will be adequate for planned fourth-quarter assemblies.

## Farm products provided main price push in first half

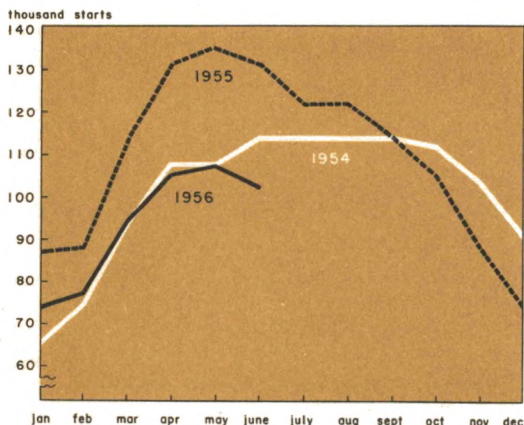
	1st half 1955	2nd half 1955	1st half 1956
(per cent change within the periods)			
<b>Wholesale prices</b>			
Farm products.....	+2.1	-9.7	+10.0
Industrial goods.....	+0.6	+3.6	+1.4
All commodities.....	+0.7	+0.9	+2.6
<b>Consumer prices</b>			
Foods.....	+0.8	-1.6	+3.4
All items.....	+0.1	+0.3	+1.3

The steel shutdown involved directly about 600 thousand workers. About 125 thousand were idled in activities closely related to steel production, such as mining, transportation, firebrick manufacture and so on. Additional layoffs have been quite limited. Through mid-August, the only large cutback announced by Midwest firms due to steel shortages has been the Caterpillar Tractor Company (19,000 workers at Peoria, Joliet and Decatur for two weeks). Obviously, some building is being held up by lack of structural steel, and other delays will be encountered due to unbalanced inventories and forced stretching out of delivery schedules.

Although retail buying was affected adversely in Gary, Indiana, and some other steel centers, there were no drastic reductions in sales. Many merchants have been willing to liberalize credit terms for workers who will return to "steady" jobs at higher rates of pay. Steel spokesmen now look forward to capacity operations for the remainder of the year.

**Home-building** activity has not improved as the year moved on. In the first seven months of the year new private starts for the nation were estimated at 658,000—18 per cent less than last year, and the margin between the two years had widened during the late spring. In large Midwest cities the number of housing

## Housing starts rose seasonally in second quarter but trail 1955 by wide margin



starts, as indicated by permits issued, was as follows:

	First-half change from corresponding period in:	
	1955	1954
Chicago .....	-14%	+3%
Detroit .....	-11	-6
Milwaukee .....	+18	+18
Indianapolis .....	-3	+1

Milwaukee, the Midwest's boomtown in 1956, is showing strength in housing as in most other measures of activity.

Dollar volume of home building generally has performed better than the number of starts because of the tendency toward larger and more completely appointed homes. But Midwest residential building awards, reported by F. W. Dodge, were off 9 per cent in the first seven months of the year compared with a slight gain for all of the other states for which data are available.

Lenders and builders report that the demand for mortgage money is strong, and financing difficulties, doubtless, are playing a part in holding down new starts. Some institutional lenders currently favor industrial bonds over home mortgages because of a greater relative improvement in yields. Average interest rates on

conventional loans are up  $\frac{1}{4}$  to  $\frac{1}{2}$  per cent as compared with last year, and discounts are one or two points greater on guaranteed loans.

Increasingly, builders throughout the country are plagued by the shortage of improved land. In several Chicago suburbs the price of improved residential frontage has doubled in the past few years—in some cases since last year. In the Detroit area, new zoning requiring wider lots, higher permit and inspection fees together with builders' contributions to local improvement funds are said to be adding 500 to 1,000 dollars per lot to development costs.

Insofar as house building is being held back by tighter money, it is probable that a significant easing in the situation must await either lessened demand from competing uses of funds such as industrial expansion and municipal improvements or a higher level of personal saving. At the present time, many building materials, including cement and metals, are being fully utilized.

**Employment** continued to improve through mid-June. At that time the situation was as follows:

	Change from June 1955	
	thousands	per cent
Total nonfarm .....	+1,565	+3.1
Nonmanufacturing .....	+1,351	+4.0
Manufacturing .....	+214	+1.3
Construction machinery....	+24	+18.5
Industrial machinery.....	+70	+9.7
Electrical goods.....	+83	+7.4
Primary metals.....	+34	+2.6
Farm machinery .....	-11	-6.9
Motor vehicles.....	-190	-20.0

Nonfarm employment declined by 700,000 in July. Part of this was seasonal. The rest was accounted for, almost entirely, by the steel strike. Business firms, generally, expect to increase their hirings moderately in the months ahead. Auto industry payrolls are near their low for the year and should rise substantially in the fourth quarter. There is hope that conditions in some of the Midwest centers classified as "substantial labor surplus" by the Labor Department in the summer will improve. These include South Bend, Terre Haute, Detroit, Flint, Lansing, Muskegon and Kenosha.

# Harder working dollars

Overtime hours, part-time workers and unemployed persons are all familiar parts of the labor scene. Moreover, these terms may be applied to the nation's money supply. Unemployed money is the cash stashed away in mattresses or safe deposit boxes and the minimum balances in checking accounts. Part-time funds are those that must wait in line in a checking account or cash box before being spent. Persons receiving their income in monthly or quarterly instalments, for example, probably will draw down this money gradually until their next payday, leaving some funds idle over most of the period. Overtime money is that moving out of the hands or accounts of individuals or businesses as fast as it moves in, so that even temporarily unemployed balances are seldom accumulated.

Just as the proportion of workers in the unemployed, part-time or overtime categories varies with changes in business activity, the share of the money supply lying idle or working overtime fluctuates with economic conditions. Consumer and business spending over the past two years, for example, has risen at a considerably more rapid rate than has the stock of money. Hence, on the average, the money supply has been used more intensively. Money has passed from hand to hand at a faster pace—"turnover" of money has increased.

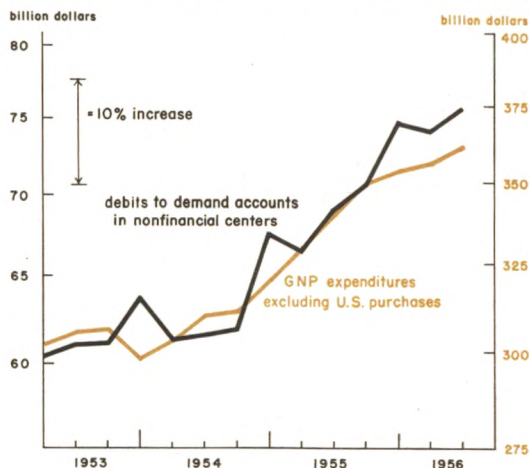
## Measuring turnover

At best, we have only indirect or incomplete estimates of the rate of use of money. There is, for example, no practical means of telling how rapidly coin and paper money change hands. Although the 30 billion dollars in currency outstanding are equal to one-fourth of the balances in checking accounts, it is commonly assumed that less than 10 per cent of the dollar volume of all transactions involves the use of "pocketbook money."

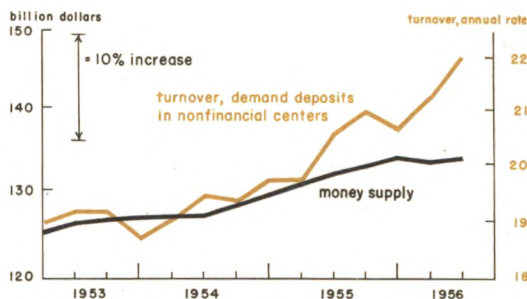
Payment by check has become the typical

method by which business, governments and many individuals settle their bills. To keep abreast of the pace of such spending, the Federal Reserve compiles figures on the volume of checks drawn on demand deposits in a sample of banks throughout the nation. These banks hold about two-thirds of all outstanding de-

## Rise in expenditures since 1954 . . .



has been financed in part by a modest growth in the money supply, accompanied by sharp gains in money turnover



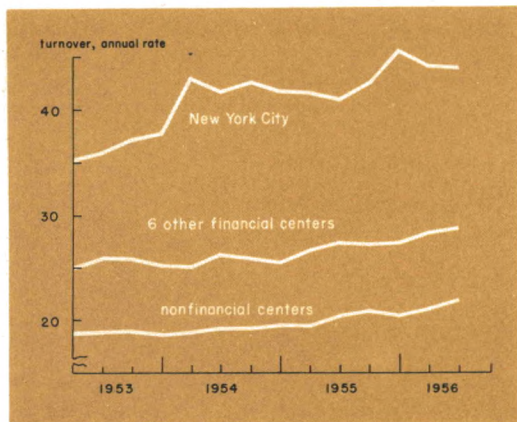
mand accounts. Outlays by the U.S. Treasury, although a readily available figure, are excluded from the data on "checkbook spending."

### Money uses

Using the charges to the accounts of business, consumers, and state and local government, we find a dollar on deposit in banks outside the major financial centers changed hands 20 times during 1955. Some of these outlays were to pay for goods and services "consumed." Last year, such expenditures accounted for 2½ of the 20 times each dollar was spent. Intermediate transactions required for the manufacture, processing and marketing of the nation's output and services, however, were vastly more important in providing work for the money supply, accounting for about 7 of the 20 times deposits turned over. Thus, expenditures involved in the production, distribution and final consumption of the nation's product resulted in an average turnover of demand deposits of around 10 times per year.

Over and above these uses of money there is the huge volume of expenditures associated with financial dealings. Almost all purchases of stocks or bonds and real estate and other property transfers, for example, involve at least

### More rapid deposit turnover in New York City mainly reflects large-scale financial activity



one transfer of funds. Moreover, credit extended as well as the repayment of debt by business and consumers multiplies the use of demand deposits. Last year consumers alone made payments totaling about 50 billion dollars on their mortgage and instalment debt. The importance of financial transactions in expanding checkbook spending is indicated by the fact that in New York, the center for a large part of the nation's investment dealings, the deposit turnover rate is double that of the rest of the country.

### Recent trends

The intensity of use of demand deposits has increased sharply over the recent boom. Whereas expenditures by individuals, businesses and state and local governments for final products have risen by 19 per cent since early 1954, the stock of money has increased by only 6 per cent. Hence, the money turnover for such GNP purchases has grown by about 13 per cent over the past two-and-a-quarter years.

The over-all turnover of checkbook money, however, has increased at a slightly more rapid pace. This is a result no doubt of the 1954 and 1955 surge both in security transactions and credit activity. The velocity or "rate of travel" of demand deposits in centers in which financial and investment deals play a relatively small part is now 16 per cent ahead of the early 1954 pace. As the chart indicates, a large part of the rise has come since the first quarter of 1955.

### Cyclical changes

Changes in the intensity of use of money tend to mirror movements in over-all economic activity. In a period of business pickup, for example, many firms respond to the brightened outlook by activating idle deposit balances in order to build up inventories and expand plant and equipment outlays. Moreover, consumers, with more optimistic employment prospects, boost their purchases of goods and services either by "employing" their savings or adding to their debt.

As business activity continues to rise, the

expanding demand for credit may outrun the available supply, with the result that those companies and individuals that are unable to borrow all the funds they would like will economize even further on their cash balances. Furthermore, higher interest rates will coax previously idle funds into short-term investments, transferring deposits into the active "working force."

On the other hand, just as the demands associated with high and rising levels of business activity can be expected to generate more efficient use of money in the aggregate, so can low or falling levels of business activity be expected to result in a less intense use of the money supply. With the dampening of demand in such periods, many consumers and businesses shift funds from active to idle balances, with the result that average turnover decreases. Moreover, the unwillingness of individuals and firms to add materially to their indebtedness reduces

the rate of use of demand deposits and currency.

Shifts in the intensity of money use, closely associated as they are with changes in over-all business activity and the demand for loanable funds, play an important role in Federal Reserve decisions to encourage or limit growth in outstanding bank credit and hence in the nation's money supply. The System in its policy deliberations must be concerned with the combined effects of changes in the stock of money and fluctuations in the rate of use of that money on total spending. The recent increases, for example, in money turnover that accompanied the build-up of inflationary pressures in the economy made it necessary for the Federal Reserve to restrict the expansion in the money supply more than would otherwise be called for. Likewise, a fall in the rate of money use during a period of declining business would require System effort to expand further the stock of money.

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## Upturn due in farm income

**T**he descent of farm income has halted after almost five years of irregular but persistent decline. Despite large programs to stem the downward trend, the drop was substantial. Running at a war-borne annual rate of 16.8 billion dollars in the fourth quarter of 1951, net farm income had slid to an 11.3 billion rate in the second quarter of this year. However, the figure has remained essentially stable for the last four quarters, and the outlook strongly indicates an uptrend through the next 12 months at least. In the first half of this year prices received by farmers were already rising faster than the usual movement for that season.

### **Supply and demand, 1951-55**

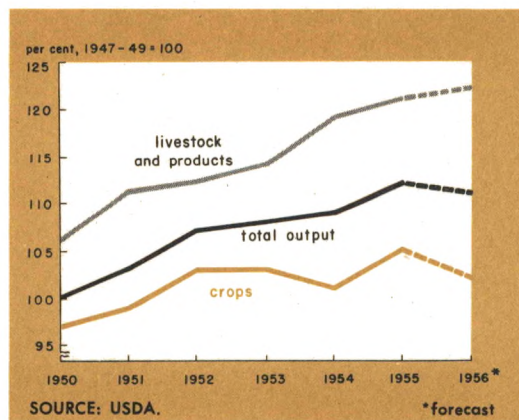
Farm output increased rapidly between 1951 and 1955. The volume of marketings mounted

11 per cent in those four years, and this pressed downward on prices.

On the demand side diverse influences were operating. Population grew 7 per cent; disposable income *per person* rose about 11 per cent, but the share of income spent on food dipped. Thus, total consumer expenditures at retail for food and other processed farm products increased only 10-12 per cent although aggregate disposable income climbed more.

While a rise in retail expenditures can usually be expected to strengthen demand and prices at the farm level, during the last five years this influence was more than offset by the increased supply, rising marketing costs and, in 1952-53, shrinking exports. Even the large acquisitions by the Commodity Credit Corporation failed to stem the tide. Prices re-

## Lower crop output to reduce total farm production this year



ceived by farmers declined an average of 22 per cent, as compared with the 11 per cent gain in volume of commodities marketed. Since production costs remained relatively stable, total net farm income tumbled over 30 per cent.

### Income prospects improve

In the period immediately ahead it seems likely that the demand for farm products will continue to expand gently, as in recent years. And, as the expansion of supply was the crucial factor in the recent deterioration of farm prices and income, so also the prospective improvement in farm income is attributed to a likely reduction in output.

In the second half of this year total output of livestock products probably will be no higher than a year ago. Although production of milk and poultry products may exceed year-earlier quantities, output of meat animals will be lower than in the last six months of 1955—due largely to reduced supplies of hogs. Hence, after eight years of steady uptrend, it appears that production of livestock products is leveling off, for the time being at least.

Total crop acreage harvested this year is expected to be somewhat below 1955. The July 1 crop report estimated a 1 per cent reduction from last year, and the “deposit” of 12.3

million acres in the soil bank resulted in further reductions. Feed grains—corn, oats, barley and sorghums—especially important to the Midwest farm economy, showed a reduction of about 9 million acres at midseason, and this was only partly offset by a 5 million acre rise in wheat and soybeans.

In addition, yields per acre will be lower than last year for cotton, wheat, oats, sorghums and hay, and these reductions will not be fully offset by the indicated higher yield for soybeans. Thus total crop production this year may dip from 3 to 5 per cent below 1955. This would have the effect of reducing aggregate farm output somewhat for the first decline in six years. Since prices usually rise faster than marketings decline, incomes should rise as a result of this curtailment of supply.

Another factor in the income situation this fall will be soil bank payments. Although the 261 million dollars in payments will amount to less than 3 per cent of total net farm income, the amount will be almost entirely a net addition to income since the 1956 program was inaugurated too late to have much effect on crop output. In 1957 and subsequent years soil bank payments presumably will be in lieu of crop production and sales.

### The Midwest

In general, the Midwest fared slightly better than the country as a whole in the farm income slide between 1951 and 1955. However, the two broad areas that make up Midwest agriculture—the Corn Belt and the Dairy Belt—exhibited dissimilar income patterns within that period. In the Corn Belt states of Illinois, Indiana and Iowa net farm income dipped only 3 per cent from 1951 to 1954, whereas the drop amounted to 33 per cent in the Dairy Belt states of Michigan and Wisconsin. In 1955, however, net income declined much more in the Corn Belt than in the Dairy Belt.

### Dairy Belt

Reasons for these diverse income trends can be found in price movements of the principal commodities produced in the two belts. Milk



is by far the most important farm commodity produced in Michigan and Wisconsin. Between 1951 and 1954 the average price received by U.S. farmers for wholesale milk slid from \$4.58 per hundred pounds to \$3.97. However, in 1955 the price had inched back to \$4.00, and cash receipts from farm marketings in the Dairy Belt states showed only a 2 per cent decline.

In the first seven months of 1956 milk prices averaged 13 cents per hundredweight above the year-earlier figure. In turn, cash receipts by farmers in Michigan and Wisconsin ran slightly above levels of a year ago.

For the remainder of this year gross and net income probably will continue to exceed year-ago levels in the Dairy Belt. The support price for manufacturing milk is 10 cents per hundredweight higher than last year, and the volume of production undoubtedly will extend its upward trend of recent years.

### Corn Belt

In the Corn Belt, hogs, beef cattle, corn and soybeans are, in that order, the most important sources of farm income. Together they account for about 70 per cent of total cash receipts.

Between 1951 and 1954, when Corn Belt cash receipts held up remarkably well, hog prices received by farmers actually increased from an average of \$20.00 per hundredweight to \$21.60. Although prices of beef cattle fell precipitously from their record 1951 level, the effect of this drop was not borne fully by Midwest farmers. Corn Belt cattlemen typically buy range cattle and fatten them; hence their profits are affected by changes in the margin between prices of feeder cattle and fat cattle, and this margin declined much less than the over-all price of beef cattle during the period. Prices of both corn and soybeans dropped sub-

stantially, but the effects of this on gross and net income were partly offset by larger and more efficient production of those crops. Consequently, net income in the Corn Belt dipped very little between 1951 and 1954.

However, 1955 told a different story. Hog prices plunged from \$21.60 per hundredweight to \$15.00. The feeding margin for beef cattle shrank. Corn and soybean prices skidded about 10 per cent. Cash receipts declined about 11 per cent, and net income apparently slumped by at least double that percentage.

The shrinkage of Corn Belt farm income halted about year-end, and it remained essentially stable (on a seasonally adjusted basis) in the early part of this year. In the first five months of 1956 cash farm receipts in Illinois, Indiana and Iowa ran 2 per cent under year-ago.

In July the price of grain-fed beef cattle rose from 2 to 4 dollars per hundredweight, depending on grade, and the feeding margin widened. In August the rise was extended further. The price spurt was the result of a reduced supply. It is expected that the supply of high-quality fed cattle will remain relatively small through most of the remainder of this year. Consequently, prices and feeding margins should continue above a year earlier.

The spring pig crop, which will be marketed largely during the next six months, was 8 per cent smaller than a year ago. Hog prices moved

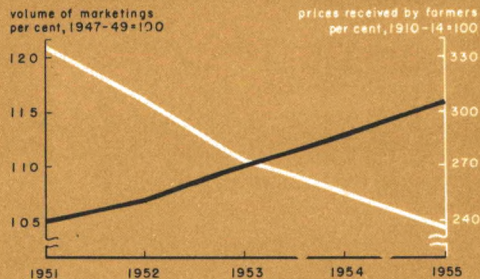
### Meat animals and crops contribute bulk of cash receipts in Corn Belt; milk most important in Dairy Belt

	Total cash receipts, 1955 (million dollars)	(percentage of total cash receipts from various commodities, 1955)						
		Cattle	Hogs	Dairy	Poultry	Corn	Soybeans	Other
Illinois	1,713	20.2	22.0	9.3	5.7	16.9	11.6	14.3
Indiana	1,039	13.6	27.1	11.4	11.8	12.0	9.2	14.9
Iowa	2,071	27.9	34.4	6.4	8.1	12.2	5.2	5.8
Michigan	640	11.3	6.7	28.5	9.9	*	*	43.6
Wisconsin	975	11.0	11.6	52.1	9.2	1.6	*	14.5

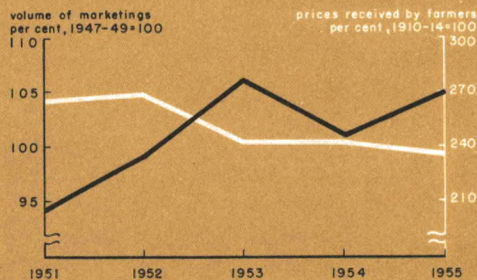
\*Included in "Other."

SOURCE: U. S. Department of Agriculture.

## Prices respond to supply changes livestock and livestock products



## crops



above year-earlier levels last month and should remain above at least through the winter.

Government crop reports forecast excellent harvests of corn and soybeans this year in the Corn Belt. The price support level for soybeans is \$2.15 per bushel compared with \$2.04 in 1955. Consequently, even if, as seems likely, this year's crop is much larger, the price at harvesttime should not be far different from a year ago.

The 1956 price support for corn grown in compliance with acreage allotments is moderately under a year ago, but this year for the first time price support loans will be available at \$1.25 a bushel for corn not grown in compliance with allotments. Consequently, even if this year's corn crop is as large as last year's, the price should not slip nearly as far below the support level as it did in 1955 when much corn sold for \$1.00 per bushel at year-end.

Thus, the income picture for each of the

Corn Belt's four major commodities looks more favorable for the remainder of the year. In addition, Illinois, Indiana and Iowa will receive relatively large shares of the soil bank payments, owing to the fact that two-thirds of the total will be made on corn land. The result could be a substantial gain in Corn Belt farm income in the last half of this year.

## Next year

Current income trends should hold through the first half of next year. Beyond that time, 1957 crop conditions and Government programs will largely dominate the picture. If support is maintained at the current level for milk, Dairy Belt income should be at least as high as this year, especially in view of the likelihood that volume of output will expand further.

Since cutbacks in hog production usually last about two years in the typical hog cycle, it seems probable that hog supplies will follow a downtrend all through next year, and prices should be very favorable. The cattle-feeding situation can change quickly and will be determined largely by the number of cattle placed on feed this fall.

The income prospects for corn and soybeans are heavily dependent on Government programs and whether Dame Nature smiles or frowns during the critical growing season. But since additional funds are being channeled into farm assistance programs and the Midwest in all probability will be favored with reasonably good harvests, the current improvement in farm income stands a good chance of being extended beyond mid-1957.

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# Midwestern economies

Some general characteristics of “the Midwest economy” stand out to the most casual observer—its prosperity, the dominance of a few types of industries and its ability to hold its own, that is, to maintain its share of the nation’s economic activity over the years. Yet these generalizations, while valid, conceal variations in Midwest economic life that are fully as significant as the common features. This is because, realistically speaking, there is no such thing as “the Midwest economy.” What we do have is a collection of smaller economies: close to three dozen distinguishable urban areas in the Seventh District states and two broad agricultural economies—Corn Belt farming in most of Iowa, Illinois, Indiana and Missouri and substantial portions of Nebraska and Ohio and Dairy Belt farming in Minnesota, Wisconsin and Michigan.

What makes a distinctive single economy? This is a question economists often ponder, at length, in technical jargon. Briefly, in any one “economy,” the various industries and geographic sections intimately depend on each other. The nation’s major industries are complexly interconnected with their suppliers and markets throughout the country. For smaller areas, interdependence is of a different kind. Much economic activity in an area specifically depends on the needs of local consumers. Many small establishments in a community exist to service the larger local plants which sell throughout the nation, with both large and small firms depending on each other.

Moreover, in a single economy, the economic process goes on within a framework of common institutions and homogeneous factors of production, that is, a common labor supply, a common capital market, similar industries and the like. For the United States as a whole, this homogeneity is clearly present. We have free movement of labor, capital and goods within our boundaries, a common monetary system,

a common framework of laws and institutions for foreign economic dealings, and many other common governmental institutions, not the least of which is a uniform nationwide fiscal system which bears far more heavily on economic activity than the many diverse local fiscal systems. Areas of less than nationwide scope have homogeneity, though it differs in character. For example, although there are no legal barriers to individual movement and hence our labor supply is truly a national one, in the short run people generally are reluctant to move from place to place. So there are local labor markets within the national one.

Thus, a metropolitan area’s economic mechanism is usually distinctive for it has within itself major elements of homogeneity—notably a common labor market and a common market for locally produced consumption goods and services. On the other hand, the broad farm belts have in common similar products which in turn are the result of similar natural conditions—soils, temperature and precipitation. In short, the Midwestern economic landscape could be pictured as distinctive urban islands in two major agricultural seas.

## Charting the rural seas

What are these economies like? Nearly all derive their prosperity from specialization in high-value production—farm or industrial. Take the rural economies with a third of the region’s population first. A combination of fertile soils—90 per cent of the nation’s land described by soil technicians as excellent lies here—level topography, generous rainfall, favorable temperatures, the proximity of large and growing markets for farm products, and energetic and technologically advanced farmers make the Midwest the world’s greatest agricultural area.

Corn Belt farmers concentrate on the production of corn for feeding to the cattle and

hogs which provide the bulk of the country's meat. Hogs, cattle and calves and corn together provide two-thirds of Corn Belt farm income. With some obvious exceptions like cotton, tobacco and citrus fruits, Corn Belt land and climate are such that Corn Belt farmers get first choice among the crops. If farmers elsewhere grow these same crops, they do so at a distinct competitive disadvantage. Not only are there a number of alternative crops among which Corn Belt farmers get first choice, but these alternatives are relatively close to one another in profitability. This tends to stabilize farm income from year to year and, incidentally, provides a readily available fund of technical know-how to facilitate shifts between crops whenever conditions warrant them. Yet another source of long-term strength and stability is the fact that Corn Belt agriculture is well attuned to the basic trends associated with economic growth since consumer demand for high-quality meat increases as the national economy expands and consumer incomes rise.

### **Dairy Belt differs**

Dairy Belt farmers, in the northern tier of the Midwest, are not so well off. The land and climate are such that the area's advantage over other areas extends to the production of only a few widely grown crops. The area cannot compete with the Corn Belt in corn-hog-cattle production, so these farmers do the next best thing. They grow hay, oats and grasses for feeding to dairy cows, and they get over two-fifths of their income from the sale of dairy products. Actually, the Corn Belt could produce much more milk per acre of land than the Dairy Belt because it can better produce feeds suitable for dairy cows. However, grains and meat animals are more profitable than a milk and roughage economy would be. Hence, farm incomes in the Dairy Belt average well below those in the Corn Belt. And there are other disadvantages. The substantial fixed investment required for dairy farming permits far less year-to-year change in the composition of farm output in response to market conditions. Moreover, the demand for dairy

products is less responsive to rising income than the demand for meat, and there are more close substitutes — for example, vegetable oils for milk fat. On the other hand, the profitability of milk production is more stable through boom and depression than that of producing meat animals.

### **The urban islands**

The character of Midwest agricultural resources has made its mark on Midwest urban economies as well. Of the 31 Census-defined metropolitan areas in the Seventh District (cities of 50,000 or more and their environs), eight specialize heavily in the processing of the output of Midwest farms or in making equipment for farmers. As one might expect, the notable farm product processing industries involve meat, corn and soybeans. Nearly all of the smaller cities derive significant portions of their livelihoods from providing neighboring farmers with a wide variety of services.

Midwestern cities, aside from farm product processing, are not important centers of non-durable manufactures. In the Great Lakes urban communities, metals and things made of metal rule. It all but a few of the 31 metropolitan areas, the manufacture of steel and nonferrous metals themselves, machinery, motor vehicles and parts, or other fabricated metal products is the predominant local specialty. So much so that the region, with only a sixth of the country's urban population, accounts for a third of the country's output of metals and metal products.

### **Farms and cars crucial**

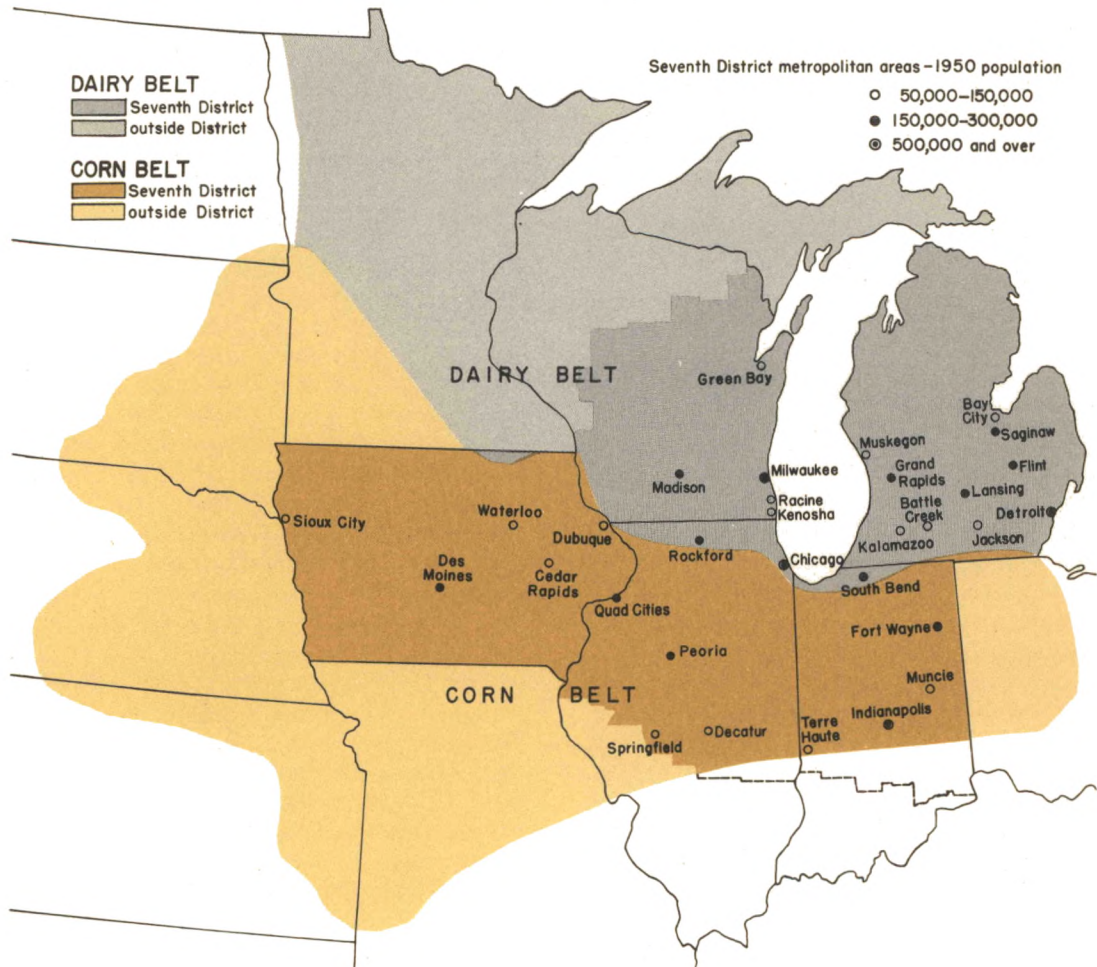
Actually, Midwestern cities are more dependent on agricultural prosperity and the demand for motor vehicles than these figures indicate, since many firms in the machinery and metal products industries sell much of their output for use by firms which themselves manufacture motor vehicles and farm machinery or process farm products. Last year the Federal Reserve Bank of Chicago put the economies of five medium-sized prosperous Midwest cities under the microscope and closely examined the

source of their “export” earnings, that is, their earnings from the sale of goods and services outside their own metropolitan areas. Cities specialize in “export” industries, while production for local consumption is more or less similar in all cities of a given size. Hence “export” earnings measure the relative importance of local specialties. Currently, similar studies are under way for Indianapolis and Milwaukee.

In all seven of these cities, manufacturing activities related to the Midwest’s most impor-

tant functions—making motor vehicles and supplying farmers with machinery, fertilizer and similar items, and processing their output—yielded at least a fifth of the total “export” earnings. In Fort Wayne, a mature and seemingly diversified industrial city, automotive-related manufacturing industries provide about 30 per cent of the area’s “export” earnings. In Indianapolis, a much larger and considerably more diverse community now being studied, auto-related and farm-related manufacturing

### Seventh District rural and urban economies



## Sources of "export" earnings in seven Midwest cities recently studied by the Federal Reserve Bank of Chicago

City	Automotive and related manufacturing	Farm product processing and farm machinery manufacturing	Other manufacturing	All other activities (government, utilities, trade, etc.)
	(per cent of total)			
Decatur, Illinois	14	29	37	20
Fort Wayne, Indiana	29	4	52	15
Waterloo, Iowa	1	73	13	13
Flint, Michigan	95	*	1	4
Madison, Wisconsin	4	25	21	50
Indianapolis, Indiana <sup>1</sup>	15	6	57	22
Milwaukee, Wisconsin <sup>1</sup>	14	11	63	12

\*Less than 1 per cent.

<sup>1</sup>Figures are tentative; cities now under study.

appears to account for over a fifth of the area's "export" earnings, despite the apparent heterogeneity.

### Why durables

Just as the rural economies have advantages which make the Midwest the world's greatest agricultural area, the urban economies have a combination of natural, human and man-made resources and markets which together make the region the world's greatest durable goods producer. Historically, and logically, the output of finished and semifinished durables has depended on the output of the basic metals themselves. The Midwest is pre-eminent in metals output. And this is to be expected, for within 500 miles of Chicago close to two-thirds of the nation's coal production, four-fifths of its iron ore output and over a third of its limestone production occur. These are the basic raw materials for iron and steel production, and by and large they reach Midwest metals centers via relatively inexpensive water transport. Thus the Midwest, broadly conceived, accounts for close

to half the country's primary metals output; the five Seventh District states themselves account for a fourth of the total.

Along with proximity to the basic natural resources, Midwest producers of durable goods have the advantage of closeness to markets. The important fact here is that, despite the recent migrations to the West and Southwest, half the country's population still lives in the northeastern quarter of the United States. This directly aids Midwest consumer goods industries—notably automobiles—and indirectly helps the equally important Midwest producer goods manufacturers who supply other manufacturers serving the vast consumer markets in the North Atlantic and Great Lakes states.

These factors explain the emergence of Midwest durables industries and to some extent the area's continued predominance. To a large degree, a developed industrial area persists through its own momentum. That is, modern large-scale industry requires not only good access to the basic raw materials and markets, but also the presence close-by of a wide variety of supplying and servicing businesses. Once these suppliers have developed, the area is even more attractive for durable goods production. This is the case in the Midwest. Durable goods producers can find not only the basic metals here, but also an unequaled array of the semifinished products they need and an abundance of small subsidiary businesses. For example, the five Seventh District states have about a fourth of the nation's 10,000 small machine shops. There is something of a chicken-and-egg question here, but Midwestern cities now have both hens and eggs in abundance.

All this has added up to considerable prosperity for Midwesterners, although perhaps at the price of somewhat greater exposure to business fluctuations. Their personal incomes are

on the average about a tenth higher than in the nation as a whole. Midwest farmers earn about one-third more than the average of farmers elsewhere. Moreover, with the exception of southern Illinois and possibly the northern cut-over areas, there is little "spot" distress in the Midwest; that is, there are few communities in the region which have experienced chronic unemployment in the midst of national prosperity.

### The local economic process

The critical role of "exports" in local economies has been touched on earlier. To some extent, a city's way of making its living is a circular process. People "take in each other's washing"—that is, a fair proportion of the workers in every community earn their keep by producing goods and services for each other. This kind of local specialization has existed in cities for centuries. However, ours is an interdependent national, not local, economy. No modern city produces within its own borders all the building materials, clothing, home appliances, automobiles, machinery and equipment its citizens want to buy. In highly developed countries, the advanced state of technology permits cities and regions to specialize in the production of the things which they can make most efficiently.

To buy the "imported" goods and services its residents need, a community must produce goods and services which it can sell outside its own borders. In other words, it must "export," and in substantial volume, if its citizens are to enjoy the great variety of goods which go to make up a high standard of living. And since a large proportion of sales within a city are to

individuals and firms deriving their earnings from "export" activities, enterprises which primarily serve the local market, like trade and service establishments, depend for their success ultimately on the community's "exporters."

Moreover, with infrequent exceptions, the activities that comprise a city's "taking in its own washing" are similar from place to place. Services rendered by laundries, lawyers and doctors, bakeries and a variety of retail establishments are roughly proportionate in different cities in the same part of the country. A city's well-being, therefore, depends mainly on the external markets for the products in which it specializes and on the effectiveness with which its producers compete for these markets. For example, payrolls, employment, retail sales and bank deposits in Detroit and most eastern Michigan cities are closely related to the sales of their principal "export" products—motor vehicles and parts.

### A 500 million dollar city

Now follow this approach in Fort Wayne, a representative Midwest city studied last year. Here local activities yielded earnings of about 185 million dollars and "export" earnings

### Farm-related manufacturing activities are more important in most Midwest cities than elsewhere

Per cent of manufacturing employment in farm product processing and farm machinery industries

Less than 5	5 — 10	10 — 25	25 — 50	over 50
Detroit	Rockford	Chicago	Decatur	Quad Cities
Flint	Fort Wayne	Peoria	Springfield	Sioux City
Kalamazoo	Indianapolis	Green Bay	Terre Haute	Waterloo
Muskegon	Muncie	Milwaukee	Cedar Rapids	
Kenosha	South Bend	Racine	Des Moines	
	Bay City		Dubuque	
	Grand Rapids		Battle Creek	
	Jackson		Madison	
	Lansing			
	Saginaw			

U.S. average, excluding Seventh District states=8 per cent.

**In Fort Wayne, local activities —  
"taking in each other's washing" —  
provide**

part of the community's income . . .

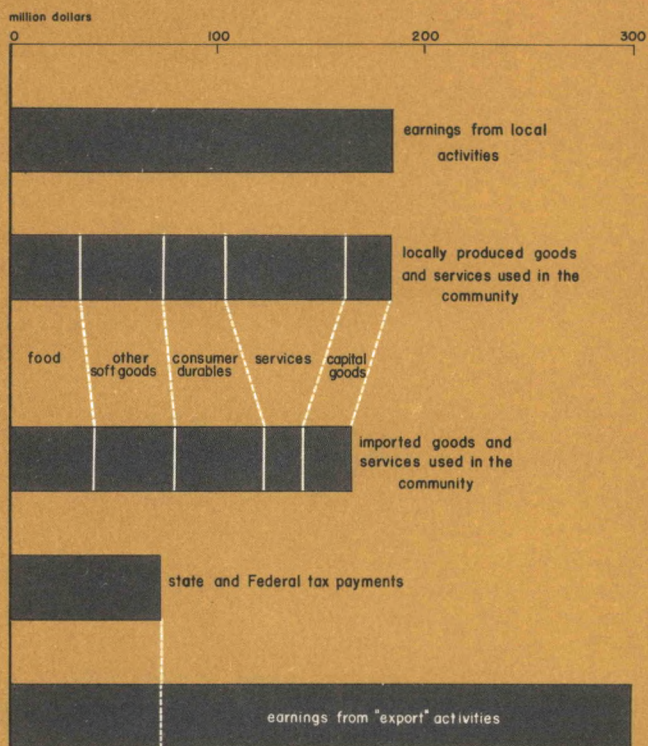
and part of its needs.

**The rest of the goods and services  
it needs must be "imported"  
from other places.**

It pays for these "imports" . . .

and makes its contribution to  
the state and Federal governments . . .

out of its earnings from "exporting"  
to the rest of the country and the world.



amounted to close to 300 million dollars. These local activities provided the bulk of the services needed by the community, slightly less than half the food consumed, just about half the other soft goods and appreciably less than half the consumer durables. The rest of the community's consumption bill was accounted for by goods and services produced elsewhere and "imported"—a total of nearly 165 million dollars. The area's residents paid for these "imports" and made their contributions (in the form of taxes) to the state and Federal governments out of their earnings from "exporting" to the rest of the country and the world. They also paid interest, rent and dividends to outside creditors and to outside owners of assets—real estate and equity interests—located in the community and received income from their hold-

ings of similar assets elsewhere. On balance, they probably had some capital surplus.

To further improve its position, Fort Wayne might sell more goods and services outside (increase its "exports") or produce more of its own needs locally. It might experience an influx of residents—say retired people—who get income from outside assets. For most Midwest communities, "export" earnings are apt to be the most variable element in the picture. Since American industries are free to locate where they can produce most efficiently and American consumers and businesses are free to purchase their needs where they can strike the best bargains, Midwesterners will continue to prosper as long as Midwest communities retain their present advantages as producers of durable goods and finished farm products.