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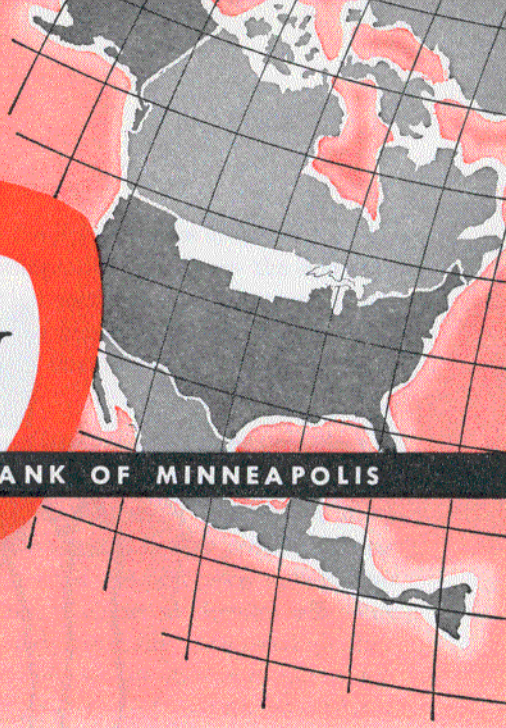

Monthly Review
OF THE FEDERAL RESERVE BANK OF MINNEAPOLIS

Strikes and drouth cut income

The two most-in-the-news elements on the district's economic scene during September have been farm drouth and labor disputes. To be sure, their impacts will take a number of months to accurately assess, yet some effects of income loss, actual and potential, have already appeared. These impacts so far are more localized than general. Both drouth and strike developments are superimposed on the slowing rate of improvement identified last month. Effects of these two elements on earnings, spending and credit needs may persist well into next year.

Idled by the steel strike are some 28,500 workers in the iron mining regions in the eastern part of the district, and an estimated 8,500 persons are out of work because of labor disputes in copper industries in the western part of the district. More than $4 million a week in wages has been cut off as a result of the disputes; this has been felt strongly in the localities where mining and metal working is concentrated—on the iron ranges of Minnesota, Wisconsin and Michigan, the ore shipping ports of Lake Superior, and the copper mining and milling centers of Montana.

Because of drouth, district farm income during the 1959 crop year will show a large reduction from last year—perhaps as much as 13 percent. The impact, though substantial to agriculture as a whole, will not be evenly distributed around the district. The reason, of course, is that some areas (particularly the Dakotas) have suffered much greater production losses than have others. It is worth noting that carryover of grain stocks are high and that livestock numbers are large, thus assuring a high volume of raw materials for the region's farm processing and service industries.

Viewed against the total district flow of income, however, the effects of both strike and drouth should be fairly well masked by the generally

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Vertical integration in agriculture: a discussion of its prospects

Cut unit production costs! This is perhaps one of the most widely applied directives of modern business; it has also hit agriculture with life or death force. Not only has the competitive drive for lower unit costs stimulated a great many technological innovations in agriculture, but it has set off a rapid evolution of new organizational arrangements aimed at streamlining the whole length of the farm to market flow of foodstuffs. Some of this streamlining has taken the course of 'vertical integration,' as we've discussed in earlier issues of our Monthly Review.

The integration of farm production with the activities of firms in allied agricultural fields is both old and new. Contract farming arrangements in vegetable and sugar crop production have had long and successful records while in animal agriculture, the area of most recent interest, the developments are relatively new, and their full implications unknown.

It is the purpose of this concluding article to consider some of the implications that vertical integration may hold for agriculture and the agriculturally allied industries in the future.

Integration and the farming unit

In some lines contract production arrangements may speed the adoption of new technology. Integrated production programs may increase the scale of operations and raise the level of management by bringing in professional management that will be well informed and alert to adopting new cost reducing techniques at a rapid rate. And, in so doing integration works to apply increased pressure on all producers to either reduce costs through increasing scale and improving the organization of operations or drop out of the production race. These are the developments that characterize the broiler and turkey industries—some producers have increased production in the face of declining product prices because they have been able to reduce unit production costs while others have left the industry (see chart on page 4).

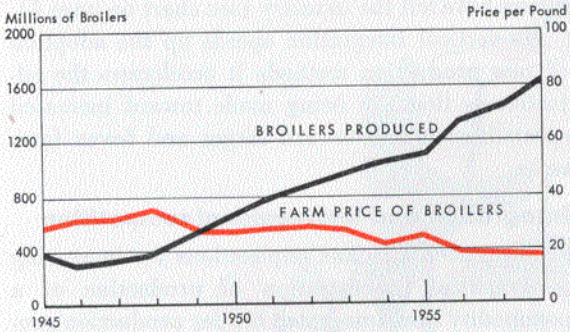
As vertical integration speeds up the adoption of new production methods it accelerates the adjustments that are being made toward increased specialization and toward larger and fewer farm units.

Integration and interregional competition

Integration also has implications for increasing geographical concentration of production of a commodity line. Integrated broiler production programs have intensified the cost-price squeeze facing that industry. Greater production efficiency introduced through vertically integrated production in broilers reduced per unit cost and simultaneously, resulting increased supplies have placed downward pressure on product price. Integrated commercial broiler production concentrated in the southeast on the basis of a production cost advantage, and in the East on the basis of a market price advantage. Commercial broilers have essentially replaced the Midwest's farm-produced young chickens even in the Midwest markets.

In hog production and cattle feeding enterprises, the economic advantage will likely continue to rest with the source of the lowest cost feed supply—the corn belt. In broiler production, cost advantages in labor and housing in the South overcome a feed cost disadvantage. However, because the cost of feed grains constitutes such a large proportion of the total production cost in the case of hog production and cattle feeding, a repeat of the developments in broiler production is not expected in these enterprises. Additional feed resources have been made available in the South and fringe areas of the corn belt through improved crop production techniques and through shifting of acres from wheat and cotton to feed grains under the government price support program. Increased feed resources have resulted in increased hog production and cattle feeding in those areas. A larger number of integrated livestock production programs is in evidence in the South and corn

Broiler production and prices



belt fringe areas than in the corn belt proper. A lack of feeding "know-how" or a lack of financing may be reasons for a greater use of an integrated production arrangement in those areas. But, it is unlikely that production cost advantages in hog production and cattle feeding will be achieved in those areas compared with the corn belt, even through integrated production arrangements.

Integration and the markets

As integration develops it accelerates the trend toward direct marketing; a trend which received its initial impetus in many commodity lines with the advent of the motor truck and the hard-surfaced roads in the farm sector. Production contracts involve the movement of products directly under contract from farm to processor to retail market. In a setting of increased contracting of farm production, traditional marketing organizations, such as the country assemblers, the central markets and associated businesses, the wholesalers and the jobbers would suffer a declining business volume. In marketing eggs, for example, the direct movement of eggs from country points to city supermarkets is rapidly becoming the common trade practice; in some cities, wholesale trading in eggs has almost ceased.[1]

[1] Pritchard, Norris T., **Pricing Eggs in Central Markets**, Agricultural Marketing Service, U. S. Department of Agriculture, AMS-287, January 1959.

Often production contracts provide a pricing plan based on price premiums for a specified quality of product in relation to selected reported market prices. And, to the extent that supplies decline in the basing point markets, the reported market price becomes less and less reliable as a basing price for these production contracts. Ultimately, in some commodity lines contract pricing of products will likely depend more directly on the bargaining of farmers with contracting firms. And, pricing as well as other contracting problems may arise in areas and commodity lines where there may be only one or a few firms with which a farmer could contract. Problems of bargaining power in negotiating contracts if they develop may be met through time in a number of ways, possibly including the formation of farmer contract bargaining associations and possibly government activity in the area of reporting contract prices and terms. Also, farmers' supply and produce cooperatives may increase their activity as integrators; this would provide a 'yardstick' in respect to contract terms and prices.

Integration as an avenue for product improvement

Over the years the consumers' pork buying habits have changed. The emphasis has shifted away from lard and fat pork cuts to the leaner pork cuts. And, the price relationships of fat cuts and lard have changed in response to these changes in consumer demands. Over the last fifty years there has been a rather constant widening gap between the prices of lean cuts and the price of fat cuts for lard; at the turn of the century fat cuts for lard and lean cuts were about equal in value, while fifty years later fat cuts for lard were only one-third the value of lean cuts. The changing price relationships between lean cuts and fat have called for a change in the production of the relative proportions of pork and lard. To date the change has not occurred—we are producing the same proportion of lard to lean cuts as we did at the beginning of the century,

about one pound of lard to four pounds of pork.[2]

A farmer sees little incentive to produce a lean hog; at any one time the farmer finds himself with a mountain of corn and a limited number of hogs. And, with the exception of periods of heavy hog supplies the farmer finds that the relatively small price discounts made for heavy hogs combined with continued favorable feeding efficiency to somewhat heavier than desirable weights provides incentive to the farmer to market as much of his corn through the number of hogs he has at hand as possible—the result is that he markets fat hogs. The problem becomes particularly acute during the summer months of low hog volume and the result is that premiums for meat type hogs essentially vanish as packers bid heavy for volume.

PRICE DIFFERENTIAL 240-270 POUND HOGS FROM 200-220 POUND HOGS, CHICAGO 1958

	Dollars Per Hundredweight
January	— .82
February	— .50
March	— .31
April	— .66
May	— .75
June	— .77
July	— .29
August	+ .10
September	— .06
October	— .27
November	— .69
December	—1.14

In addition to the fact that the price differentials do not fully reflect value differences between fat and lean hogs, particularly in the summer months, it is also important to recognize that farmers are not adequately informed of why they received a certain price for their hogs. The farmer's payment statement does not usually contain information on grades; he may not realize that his hogs were too fat or underfinished.[3]

Briefly, this is the heart of the pricing and quality problem in hog production. Vertically integrated pork production programs may be one way in which this hog problem could be solved. Of course, there are also other methods. It may be possible to solve this problem within the traditional hog marketing framework with increased emphasis on liveweight grading, and increased attention paid to informing farmers of the reasons for being paid certain prices for their hogs.

Another possible solution to the hog pricing problem would be compulsory grading of all hogs. The quality pork development in Canada can be traced to compulsory live grading of hogs and the following of carcass grading.[4]

Vertical integration is one method which may serve as the vehicle for the individual processor to improve the quality of the pork moving through his plant. The possibility of achieving a constant supply of quality hogs through a contract arrangement exists and many packers are currently experimenting with contract hog production.

Two-thirds of the major meat packers have integration programs for hogs, some of which are on an experimental basis and have not been announced. Some of the larger packers are trying out programs in only one region of the country without any change in their operations throughout the rest of their organizations.[5] Interest in integrated pork programs was also indicated recently by the Western States Meat Packer Association; they formed a committee to develop an integrated program for hog production in the western states.

Integration to overcome dislocations of government policies

A pricing problem also currently exists in wheat. The government price support program has not, until recently to a very limited degree, taken account of quality differences in wheats. Thus, wheat farmers to maximize profits have shifted

[2] Engelman, Gerald and Gaarder, Raymond O., **Marketing Meat Type Hogs,** Marketing Research Report No. 227, U. S. Department of Agriculture, April 1958.

[3] Blakeley, R. A. and Fienup, D. F., "The Hog Marketing Challenge," Minnesota Farm Business Notes, No. 406, May-June 1959, page 2.

[4] Engelman and Gaarder, op. cit., page 5.

[5] Kramer, Robert C., **What is Integration and Its Current Status,** Paper presented to the National Institute of Animal Agriculture, Purdue University, April 21, 1958.

toward emphasizing maximum output of wheat with little concern for quality. Flour millers in many areas where the wheat price relationships have been upset by the government price support program are faced with the problem of securing adequate supplies of quality wheat without incurring excessive transportation costs. The problem may be resolved in a number of ways such as a change in the government price support program, or a shift in the location of flour mills. Among the range of possible solutions to the problem of these flour millers also exists the possibility of contracting with growers to produce the needed quality wheat at a price premium that would be advantageous to both the producer and the miller.

The allied industries

In effect contract farming may open a new dimension of competition among firms in the food and farm supply industries; contract farm production programs enable firms in allied agricultural industries to better plan their own processing or production operations; to stabilize supplies; to reduce unit processing costs; to exert more influence over product quality; and to reduce procurement and selling costs. These are reasons why firms may find it advantageous to develop contract farming arrangements. However, although apparent advantages exist to contract production, limitations of ability or limitations of willingness on the part of food processors and farm suppliers to assume the very large financial risks involved in many vertically integrated programs such as cattle feeding and hog production may effectively limit the expansion of vertical integration in those lines.

If, on balance, economic advantage can be achieved through integrating farm production into the operations of the processors and farm suppliers, individual firms will come under increasing pressure to develop integrated programs to hold or enlarge their respective market shares. Because many of the contract programs involve the extension of credit and the assumption of risk in farm production the larger processing and farm supply firms and particularly those in more favorable working capital positions may gain larger shares in their respective markets.

Integration and the financial community

The country bankers and other lenders supplying agricultural credit may also be affected by vertical integration. In many of the contract farming programs the contracting firm or "integrator" is a supplier of capital. And, these large contracting firms will secure financing from profits, the capital markets, or the commercial banks with which these contracting firms have developed lines of credit. Thus, contract farming may cause a shift in the demand for financing farm production credit from the country credit sources to the large financial centers.

A banker may be in a better position to extend large amounts of credit to a farm supplier or processor on the basis of the financial position of that firm rather than to extend very large amounts of credit to individual farmers, particularly where risks are relatively great. The financing of turkeys is a case in point: Bankers and other lenders were unwilling to expand their financing of turkey production as the "know-how" to handle larger units developed. The financial risks were too great in relation to the financial position of growers. Many turkey enterprises involve production credit extensions which are in excess of the growers' net worth position. Feed companies, which received financing from commercial banks and other sources stepped in to fill the gap; they provided the production credit to finance the large units, and supplied management to hedge their financing risks. Today a very large share of the turkeys produced in Minnesota are financed through some type of integrated production program.

A major shift to feed company financing is less likely to happen in hog production or beef feeding, however, because bankers and other lenders have had more experience in financing these enterprises than was the case in turkeys. And, with this

background experience in hogs and beef the lenders will likely facilitate the necessary expansions to enable qualified producers to make full use of their managerial capacities as new techniques develop. In addition, the relatively large contribution of home grown grains to the total production cost picture of hogs and beef enterprises reduces the size of the loan needed in relation to the total value of the products produced, and thereby reduces the risks to the lender. The fact that the feed company would be able to provide a lower proportion of the total feed inputs in cattle feeding and hog production would also discourage feed companies from assuming the important role in financing these enterprises that they did in turkey production.

Integration and the consumer

The consumer will likely benefit. It would appear logical to assume that integration will only flourish to the extent that it can improve on the efficiency of the existing production and marketing arrangements. And, the consumer will likely share in the benefits in the form of a lower price and/or an improved product. The results of integration in broiler production have resulted in recognized price-quality benefits to consumers.

Conclusion

Vertical integration gained recent attention in the agricultural industries as a device for gaining cost and product quality advantages. The need for improvements in operating efficiency and in product quality in the farm to market food chain will continue. And, only to the extent that those improvements can best be made through integration will integration increase. Contracting is not a panacea for all production problems facing the agricultural industries—it may be an answer to a few of them. Even if integration provides a successful route of adjustment to some of the problems facing farmers, processors, farm suppliers and retailers, it is likely that the developments will come slowly; they will not envelop agriculture overnight.

—ARVID C. KNUDTSON

STRIKES, DROUTH . . .

(Continued from page 1)

rising activity of other sectors. Barring unexpectedly severe and generalized manufacturing and construction curtailments, the combined effect of strike and drouth may represent at most a 1 or 2 percent offset to total district income—the bulk of this from the farm drouth situation.

Looking at other developments, the district economy as a whole is continuing to perform at better than year-ago levels of activity. Many sectors of the economy were still moving upward in August. For example, department store sales were up 4 percent from July. Bank debits, a measure of general spending, in 24 centers in the Ninth district were down 3 percent from July, but they were still 11 percent over August 1958. Minnesota nonfarm employment for August showed a slight drop from the previous month, but the employment in all industries other than the strike-affected metal mining and primary metals showed a slight increase. In Upper Michigan, total nonfarm employment for the same period was up slightly; the industries unaffected by labor disputes showed an average increase of 6 percent. Insured unemployment in the Ninth district was down in August by 4 percent from July. Steel users in general had no difficulties with supplies through mid-September.

In the banking sector, an increasing demand persisted for loans as shown by a 1 percent increase in loans and discounts at Ninth district member banks in August. Total average deposits of district member banks were unchanged from July to August this year compared to an average seasonal increase in recent years of ½ percent.

Within this setting, here are some details:

STEEL STRIKE HITS HARDEST IN DISTRICT MINING REGIONS

As of mid-September an estimated 29,000 persons were out of work in the Ninth district as a direct result of the steel strike. Secondary effects, of small proportion at the time, seemed headed

for a rapid buildup in the near future.

Of the total jobless, about 21,500 were miners and 3,000 were steel workers. All had been on strike since July 15. Ineligible for unemployment compensation, most strikers picked up their last regular paycheck the third or fourth week in July. Since then, something of the order of $2.9 million per week had been lost to the trade channels of the area. Through the end of September total wage losses reached $30 million.

Tax revenue, too, will be appreciably affected, not only via lost income taxes, but also from lost mining production taxes. The State of Minnesota had estimated tax losses at $1.7 million a week.

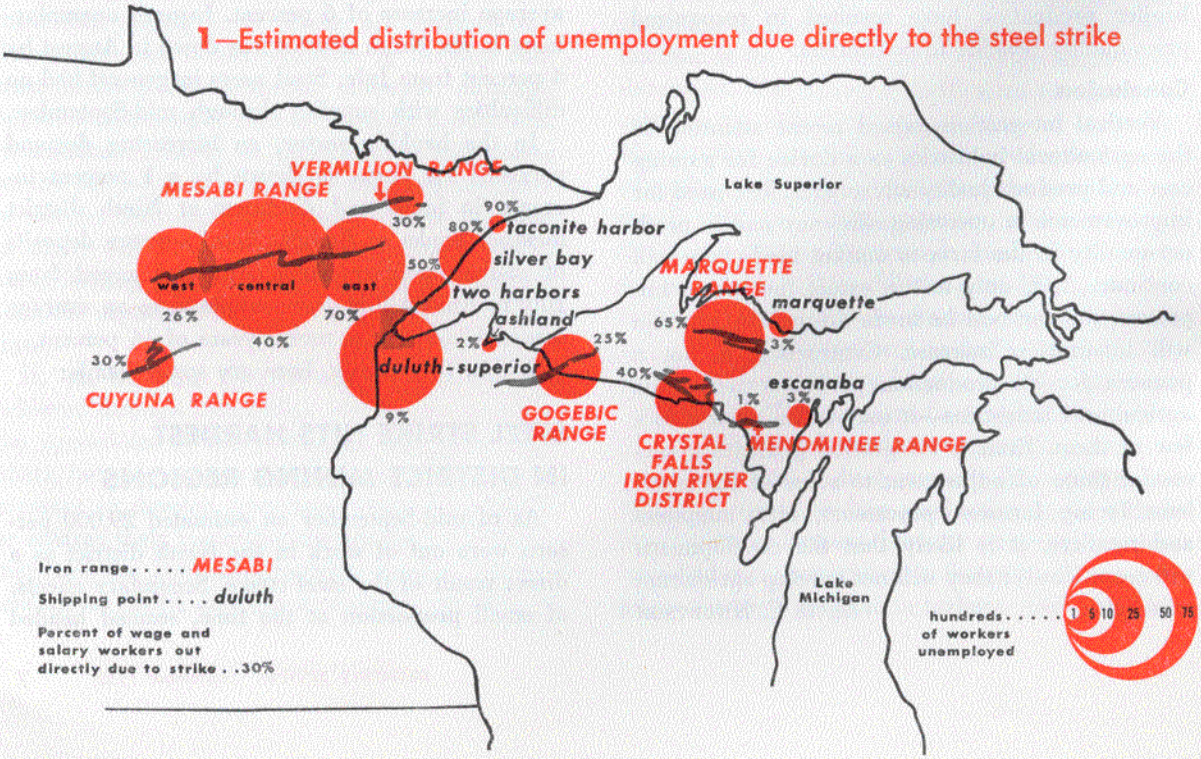
In addition to those on strike, more than 4,000 transportation and other workers had been idled by the near collapse of ore movement—with the number building up daily. Many of these, in contrast to the striking miners, were eligible for unemployment compensation.

Yet, considered district-wide, the proportion of jobs directly involved was not large—for example, about 2.5 percent of wage and salary employment in Minnesota and about 7.5 percent in Upper Michigan. Relatively few layoffs showed up in the district's steel using industries because of supply shortages. This was true through mid-September. Later developments indicated the pinch was beginning to be more widely felt. But the direct and early effects of the steel strike had been felt principally in the mining communities that dot the district's iron ranges and in its ore shipping centers.

Location of strike impact

An approximate geographic distribution of the 29,000 jobless is shown in chart 1. Biggest share of the jobs affected was in the Mesabi range area, where dozens of open pit mines and two large taconite operations account for most of the district's ore output. Other iron ranges (mostly underground operations) with smaller job totals have equally great proportions of local employment in mining. Most iron range communities are 'one industry' towns, as are those associated with new taconite facilities along Lake Superior's north shore. At these points the impact of lost income was most marked. A few 'peripheral' localities, such as Ely on the Vermilion range, Grand

1—Estimated distribution of unemployment due directly to the steel strike



Rapids at the extreme west end of the Mesabi range, and Iron Mountain on the fringe of the Menominee range, have more diversity from pulpwood operations, tourist trade, or other industry. Consequently the impact was less than that at the typical range communities.

The district's only steel mill is located in Duluth where the 3,000 or so strikers from the plant accounted for most of those out of work because of the strike in the Duluth-Superior area. Remainder of the strike-caused unemployment in the twin ports consisted of some 1,500 railroad and shipping workers. As indicated on the chart, most ore shipping ports, Duluth and Superior included, were far less severely hit than iron range communities. Two Harbors, which has little diversification, was an exception.

Secondary effects are more difficult to measure. Layoffs in service and retail firms in the iron range areas had not reached large proportions by mid-month, but cuts in hours worked had been rather widely reported. All in all, the strike represented well over a $3 million a week dent in primary income in the range areas during September, with secondary and tertiary industries beginning to show more effects as the dispute continued.

Mining areas did surprisingly well

If attention is confined to developments up to mid-September, one of the most common reactions in the range areas seemed to be one of surprise—surprise that conditions hadn't been worse considering the lengthy period that mining payrolls had been cut off. And there is at least scattered statistical evidence to support this observation. Available data indicate that department and general store sales in the northeastern part of the district were in advance of last year through July, and in some parts of the area this relationship held even through August, though the direction of movement was clearly downward. (Of course year-ago comparisons get an abnormal boost by virtue of last year's recession effects.)

Bank debits, which offer a general measure of spending, pretty well held in advance of last year's levels through August, even in mining communities, as is indicated in chart 2. However, a sharp downward 'kick' is detectable for August of this year in most of the centers graphed.

Another 'surprising' thing is the frequent observation by bankers in range communities that savings deposits, even after six to eight weeks of strike, were as high as or higher than last year at the same time. Deposits of business firms, too, at a number of range localities were reported to have held up well.

The number of applications for welfare assistance also seemed relatively light. In general this tended to run about 10 percent of the number of miners on strike by the first week or two in September. Assistance has been limited largely to food payments.

Factors that helped ease the effects

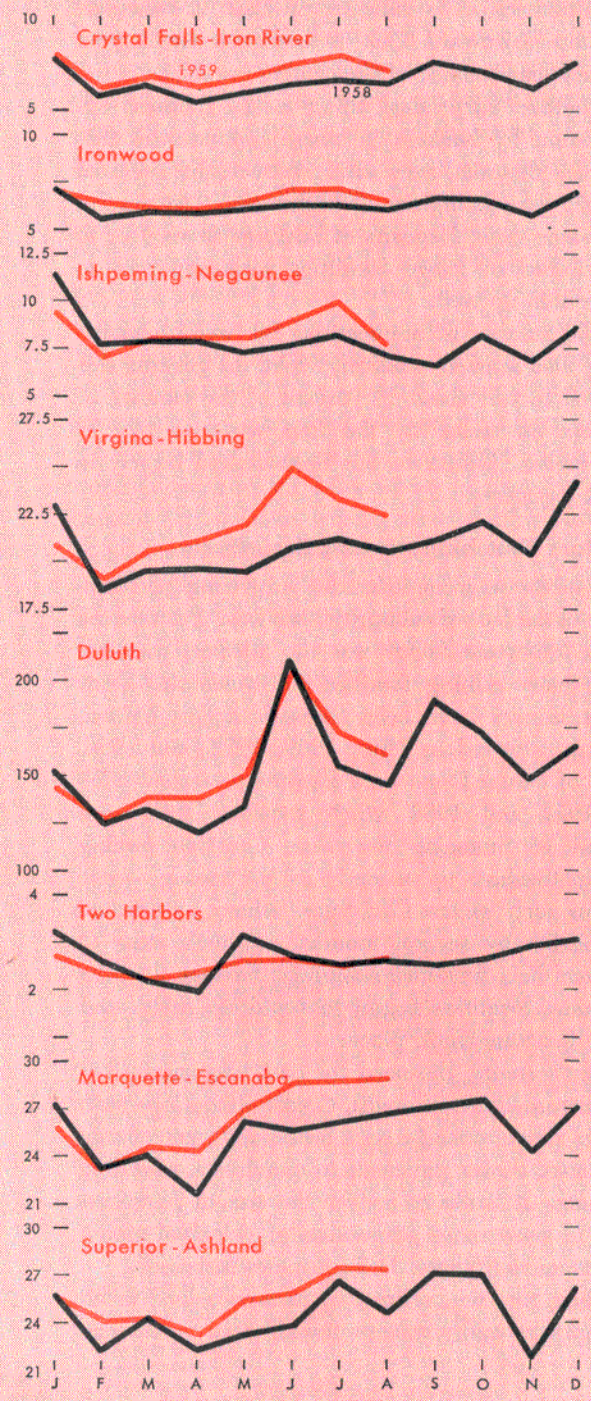
How do we account for the 'surprising' performance in the face of substantial job loss? Perhaps the most important factor was the advance preparation many mining families had made this year. Most miners have been through strikes before; strikes occurred in 1946, 1949, 1952, and 1956. And of course there were also the recession years of 1954 and 1958 which required their own brand of financial discipline. Cautious buying began to show up as early as last spring—some say as early as last Christmas. Miners anticipated the strike by several months and took steps to bolster their financial resources. Savings deposits at many localities began to build up early, and cash hoarding took place.

Furthermore, the need for cash was minimized by increased use of credit. Credit obligations built up in range areas in such forms as larger charge accounts, slower payments to merchants, rewriting of notes at banks to reduce the size of payments and in some cases suspension of principal repayments on mortgages. Delinquencies increased.

Then, too, new sources of income helped to fill the gap as many miners found other work tem-

2—Bank debits at selected mining and shipping centers, 1959 through August compared with 1958

Millions of dollars



porarily. It's hard to say how many. Some, particularly skilled craftsmen, left for jobs at industrial centers several hundred miles from the range. Others found work nearby as expanded seaway activity and the general business recovery offered other opportunities. Tourist business, up this year throughout the Lake Superior area, helped not only to provide additional jobs, but also to buoy up local trade. 'Labor slips' handed out by governmental units helped some.

Thus by seeking outside sources of income, trimming their spending and resorting to greater use of credit (and in a relatively few cases to county assistance) the strikers managed to sustain themselves through several weeks of dispute. Indeed, as some bankers pointed out, many miner customers had gotten along through September without touching their deposited savings and even kept up well on loan repayments.

Transportation workers idled by the strike received some unemployment compensation. The Railroad Retirement Board office in Duluth reported that of about 3,000 railroad men laid off in the northern Minnesota-northwestern Wisconsin area, about 2,000 were receiving unemployment benefits. Many of the remainder had found other work.

Some families, although relatively few of them, packed up to move out permanently.

Mid-September saw problems accelerate

The foregoing were some of the measures that had helped to infuse a surprising economic vitality into limping 'one-industry' areas. But by the early part of September, it seemed clear that increasing difficulties were in store. Many of the ameliorating elements of summertime, the influx of tourist trade dollars and lower living costs, were gone. However carefully conserved, the financial resources of many miners were being used up. Iron-range bankers reported more frequent, small withdrawals of savings deposits, along with increasing signs of repayment difficulties. The rate of application for welfare assistance had jumped

materially in most localities in the first weeks of September—and a requisite was no savings.

Prospects for the winter

Weather is the big factor in this region. Freezing of the Great Lakes—which typically occurs from December to April each year—puts a stop to all ore boat movement. Only minor shipments, at great expense, are made by rail. Even before lake shipments end, freezing weather in the mining areas forces the closing of some ore treating plants—particularly the ore washing plants common in the western Mesabi. In spite of these seasonal demands, the mines of the district, both open pit and underground, normally provide a fairly constant year-round level of employment. This is accomplished in open pit operations by shifting work to repair and maintenance of equipment and to the task of 'stripping' overburden from the orebodies that will be mined in the following year. No stockpiling takes place. In underground mines, mining goes on uninterrupted through the winter and the ore is stockpiled at the surface.

The problem this year is that, as of the end of September, some two and one half months worth of ore has gone unshipped. Excessively large stockpiles carried over into winter at underground mines, or stripped but unmined ore left at open pit mines may reduce potential winter work. Less winter repair work is also a possibility.

The extent to which winter layoffs add to the area's problems, then, depends in part on how much ore can be shipped out before winter closes in. If work resumes by mid-October, something over a month and a half of shipping would be possible. Maximum monthly shipments of district iron ore for the late season months are as follows:

Month	Tonnage	Year
October	12,774,813	1952
November	9,124,546	1952
December	1,550,999	1956

Earliest closing date	November 28 (1953)
Median closing date	December 8
Latest closing date	December 19 (1956)

Based on this experience a shipping effort equivalent to the best on record might move as much as 17 million tons between October 15 and a late closing date. Since total shipments so far this year have been about 34 million tons, this year's output at best could do little more than match last year's postwar low of 51 million tons.

It appears that the industry could reasonably need all that could be shipped. Present stocks of ores from this district on hand at steel centers total about 33 million tons, while a 'normal' January 1 stockpile at lower lake ports would be about 45 million tons. Judging from other recent years, something over 10 million tons of the district's ores would be consumed by full November-December operations at blast furnaces. Given these figures, more than 22 million tons of this district's ores would have to be shipped to assure 'normal' year-end stockpiles, assuming no increase in relative amounts from sources outside the Lake Superior district.

General feeling on the range has been that some operations would have difficulty reopening in the event of a prolonged strike, but most facilities would be pushed intensively to move out a maximum of ores. Shipments of the scale still possible this year could appreciably aid the winter situation.

DISTRICT FARM SITUATION

It is now clear that crop production in the Ninth district will be down substantially in most lines. Reductions of the magnitudes indicated will have a sharp impact on farm income and, in turn, on other sectors of the district's economy.

September 1 estimates of the district's crop output are substantially unchanged from a month earlier with two exceptions; the U. S. Department of Agriculture revised its estimates of the district's oat production upward by 19 percent, while their estimates of corn production reflect a 7 percent downward revision.

Impact on farm income

Ninth district farmers are realizing lower incomes mainly because of the sharp cuts in crop

NINTH DISTRICT* CROP PRODUCTION

	1958	1959**	Percent change from year ago
	(thousands of bushels)		
Winter wheat	81,580	51,322	—37
Spring wheat (other than Durum)	225,060	146,764	—35
Durum	22,077	20,454	— 7
Barley	204,403	154,979	—24
Oats	417,801	268,954	—36
Corn	445,876	467,629	+ 5
Soybeans	60,585	45,169	—26
Flaxseed	37,225	21,252	—43

*Ninth district includes only the four full states.
**Estimated, USDA Crop Reporting Service.

production. This is particularly true in the Dakotas where drouth conditions have been most severe and extensive.

The sharpest decline in farm income is expected in South Dakota where the 1959 small grain crop is estimated to only equal one-fourth to one-third of last year's crop. The impact of reduced crop production is likely to be substantial in North Dakota also; in that state the output of small grains will approximately equal 60 to 70 percent of the previous year's production. Montana has fared better as a whole than the Dakotas this year; the combined winter and spring wheat crops in Montana are expected to total an amount equal to 80 percent of last year's production. Minnesota, which accounts for half of the district's farm income will also likely experience a small decline in farm income. A reduced small grain crop and a smaller soybean crop combined with expected lower hog income will be the major factors contributing to the decline in Minnesota. District farm income this crop year may drop an average of 13 percent below a year ago; the reduction probably will be most severe in South Dakota and least in Minnesota.

Business activity

The incomes generated during the 1959 cropping season will determine to a considerable extent the spending actions of farmers at least through mid-1960. Thus, with reduced incomes, purchases by farmers of production and household consumption goods can be expected to be somewhat curtailed. The largest impact of reduced farm spending can be expected in the area of farm production supplies. For example, reports from bankers indicate that machinery sales have been very slow throughout the district and at a near standstill in the drouth areas of the Dakotas and Montana.

District bankers, particularly those in the Dakotas, also report that farmers have reduced purchases of automobiles and larger household items such as furniture and appliances in expectation of lower incomes.

The short 1959 crop and the resulting lower farm incomes are expected to adversely affect the district's farm supply businesses but are not likely to affect the food processing and related industries in the district. Although 1959 small grain crop production is far below the level of 1958, record stocks of wheat, feed grains and soybeans will assure processors of sufficient volumes.

Livestock processors will enjoy expanded activity during the months ahead as heavy volumes of pork are expected to continue flowing to market and heavier beef slaughter is anticipated. Increased livestock volumes will result in increased payrolls paid by livestock processors.

Agricultural loans

Farmers in general throughout the Ninth district emerged from the 1958 crop year in excellent financial condition, and as a result many farmers have been able to draw on reserves to meet commitments. Thus, bankers as a whole feel that in spite of the situation this year their loan portfolios will be in relatively good shape. However, in some of the most severe drouth areas of the Dakotas, bankers estimated they will have to rewrite and carry over 15 to 40 percent more of their loans than would be normally expected. Bankers report agricultural loan levels equal to or above a year ago quite generally, except in the eastern Dakotas where reduced feed supplies have led to a sharp drop in feeder cattle loans.