Country bank participation in the federal funds market

Managing cash for better profits is a subject that commands interest among all business firms, and particularly at banks where cash positions often fluctuate sharply and unexpectedly from day to day. New customer deposits, for example, the magnitude and timing of which can seldom be anticipated with precision, increase a bank's cash position as well as its liabilities. And the additional cash generated by the deposit inflow remains idle, providing no revenue, until a decision is made concerning its allocation. If a decision is to be made, what should it be? Should short-term Treasury bills or other cash substitutes be purchased? Or perhaps new loans should be extended? Or indebtedness reduced? A similar set of questions arise when a bank's cash position is drawn down. Should steps be taken to immediately acquire new cash? If so, how? Through the sale of an earning asset? Or perhaps an increase in borrowing? Whatever the course of action or inaction, revenues and costs are affected, and ultimately profits.

Bank management, however, does not have full discretion in handling its cash position. Banks which are members of the Federal Reserve System, for example, must adhere to the legal reserve requirements specified by the Board of Governors in Regulation D, requirements which state the proportions of demand and time deposits that must be maintained in acceptable forms of cash — coin and currency (vault cash) and deposit balances at the Federal Reserve. In addition, member banks ordinarily hold deposit balances with correspondent banks to indirectly compensate their correspondents for services provided. The average minimum balance that one bank must keep with another as well as the length of the averaging period are matters agreed upon by the banks involved.

Many larger banks, in order to keep an optimal amount of funds "working," attempt to keep only the minimum amounts of cash required by law and by the obligations of their correspondent relationships. They devote considerable attention each day to their cash position, dispatching any surplus that develops to profitable employment and covering any deficit through borrowing or the sale of earning assets. Of the variety of outlets and sources of cash, none is more important than the federal funds market, particularly so if the cash surplus or shortage appears to be temporary in nature.

What are "federal funds"

The term "federal funds" refers to deposit balances held at Federal Reserve banks. Member banks hold most of these balances, and the balances held count toward the fulfillment of their legal reserve requirements. A member bank with more in its reserve account than needed to meet its current requirements may lend the excess, at an agreed-upon rate of interest, to a second bank that wishes to increase the amount in its reserve balance. In the terminology of the market place, the lending bank is selling funds, and the bank that borrows is buying or purchasing funds. Ordinarily, purchases and sales are for one day only, with the selling bank regaining its funds on the business day that follows the original sale.

A transaction in federal funds might proceed as follows: Suppose the "Northstar bank", a hypothetical Ninth district member of the Federal Reserve System, reviews its Thursday morning clearing figures, estimates the changes in its reserve account that are likely to occur during the remainder of the day, and then estimates that it has approximately $1 million more than needed to cover requirements. After considering the alternatives, a federal funds sale is decided upon. The Northstar then calls a correspondent, the "Beta National" of New York City, to determine whether the correspondent either needs funds or knows of another bank that may be willing to purchase funds. Beta National, needing additional cash in its reserve account, agrees to purchase $1 million for one day at 5 per cent interest and then confirms the agreement by wire or letter. The Northstar then calls the Federal Reserve Bank of Minneapolis and requests that a wire transfer of $1 million be made to Beta National through the Federal Reserve Bank of New York. This telephone instruction is later confirmed in writing. Within a few minutes after receiving the call from Northstar the Minneapolis "Fed" wires the New York "Fed" to credit $1 million to the account of Beta National. At the same time, of course, the reserve account of the Northstar at the Minneapolis "Fed" is reduced. On the following morning, Friday, upon instruction from the Beta National, the funds are returned through a reversal of the debit and credit entries on the books of the Federal Reserve banks involved. The interest payment, totaling $139, may be paid by a cashier's check from Beta National. Ordinarily, interest would not be returned with the funds, since the Federal Reserve levies a charge on wires involving amounts that are not multiples of $1,000.

Volume expands five-fold

Though the federal funds market originated in the early 1920s, it was not until the close of World War II that it began to thrive as an important means of adjusting cash balances. Since then, the volume of activity has shown substantial expansion. In the period 1951-53 average daily purchases are estimated to have totaled some $350 to $450 million. In contrast, purchases during the years 1960-63 averaged $1.5 to $2.5 billion per day, approximately five times the volume of the earlier period.[1]

[1]Parker B. Willis, **The Federal Funds Market**, Federal Reserve Bank of Boston (October, 1964), p. 34.

Growth in activity has been accompanied by, and in part attributable to, the entry of smaller banks into the market as buyers and sellers. A special survey in the Philadelphia Federal Reserve district revealed that the participation rate among country member banks in the federal funds market rose from about 5 per cent at the beginning of 1960 to 34 per cent at the beginning of 1965.[2] Similar results were found in the New York Federal Reserve district: the proportion of all country members trading funds grew from about 15 per cent at the beginning of 1960 to 49 per cent in November, 1965.[3]

The increase in small bank participation has in some areas been encouraged and facilitated by larger city correspondents. These city banks, both as a means of providing better correspondent service and of contributing to their own growth and importance, have familiarized their smaller bank customers with the mechanics of the federal funds market and the benefits to be derived from participation. Further, they have been willing, within limits, to meet the needs of their bank customers for funds, thus providing reliable outlets for surplus cash and supply points from which to obtain cash for shortages. The larger city correspondents have in turn relied on the "national" federal funds market as a means of acquiring resources when their customers' requirements were more than could be supplied from their own positions and of selling funds when their customers' surplus balances were in excess of their own needs.

To gain information about the participation of small Ninth district banks in the federal funds market, information that could contribute to a better understanding of current bank practices and be useful in the administration of the discount window, the Federal Reserve Bank of Minneapolis in September 1965 sent questionnaires to all country

[2]Jack C. Rothwell, "Federal Funds and the Profits Squeeze — A New Awareness at Country Banks," **Business Review**, Federal Reserve Bank of Philadelphia (March, 1965), p. 4.

[3]William G. Colby, Jr., and Robert B. Platt, "Second District 'Country' Member Banks and the Federal Funds Market," **Monthly Review**, Federal Reserve Bank of New York (May, 1966), p. 115.

member banks in the district. All questionnaires were returned — a total of 488.

Summary of survey results

Seventy-four banks, representing about 15 per cent of the 488 Ninth district banks surveyed, stated on their replies that they had either purchased or sold federal funds prior to September 1965. Most of these trading banks were quite new to the market: only 10 traded funds prior to the start of 1961; the remaining 64 entered the market for the first time subsequent to that date.

The breakdown by deposit size (Table 1) shows that the vast majority of relatively small member banks in the district had, at least until the time of the survey, no direct experience with the funds market. Only two of the 187 banks with less than $4 million in total deposits were trading banks. Among larger banks, on the other hand, participation was relatively more significant. In the category of banks with between $16 and $32 million in deposits, for example, 22 of the 48 banks traded funds, a participation rate of about 46 per cent.

Not all of the 74 trading banks operated on both sides of the market. Twelve indicated that they only purchased funds while five stated that they only sold. The remaining 57 both bought and sold. (In what follows the term "buying banks" will refer to the 12 that only purchased plus the 57 that operated on both sides of the market; correspondingly, the term "selling banks" will refer to the five that only sold plus the 57 that operated on both sides.)

"With whom do you usually trade?" This question brought forth the replies summarized in Table 2. Surprisingly, few banks checked their Ninth district correspondents. Most indicated that they usually traded with banks located outside the district, predominantly noncorrespondents. Three of the selling banks reported that they ordinarily sold to nonbank government securities dealers. Such dealers acquire funds in order to finance their security positions; the funds purchased are transferred to the reserve accounts of the banks that handle dealers' transactions.

TABLE 1 — NINTH DISTRICT COUNTRY MEMBER BANKS, BY SIZE AND BY PARTICIPATION IN THE FEDERAL FUNDS MARKET

Deposit size (millions of dollars)	Number Percentage distribution: Market participant	Nonparticipant	Total
Under 2	—	56	56
	—	100.0	100.0
2 to under 4	2	129	131
	1.5	98.5	100.0
4 to under 8	9	121	130
	6.9	93.1	100.0
8 to under 16	26	77	103
	25.2	74.8	100.0
16 to under 32	22	26	48
	45.8	54.2	100.0
32 and over	15	5	20
	75.0	25.0	100.0
All banks	74	414	488
	15.2	84.8	100.0

Note: Banks were grouped into size classifications on the basis of total deposits held at the end of December 1964.

TABLE 2 — BUYING AND SELLING BANKS, BY TYPE OF TRADING PARTNER

Number of buying banks which usually buy from . . .

Correspondents in 9th district	Correspondents outside 9th district	Other commercial banks	Government securities dealers	Total
10	24	35	0	69

Number of selling banks which usually sell to . . .

Correspondents in 9th district	Correspondents outside 9th district	Other commercial banks	Government securities dealers	Total
7	21	31	3	62

Note: The number of buying banks totals the number of banks that only buy federal funds plus the banks that both buy and sell; correspondingly, the number of banks that only sell funds plus the number that both buy and sell.

To gain some perspective on the level of activity, several questions were included concerning the size and frequency of federal funds transactions during the first half of 1965. The replies indicated that some of the trading banks were inactive during this period. Six of the buying banks — those who had purchased funds at least once in the past — reported that no purchases were made in the first half. Similarly, five of the selling banks reported no sales. Several of these inactive banks, however, volunteered the comment that they planned to purchase or sell funds sometime later in the year.

Banks that actually traded funds during the first half of 1965 were asked to give the size of their typical transaction. The replies, summarized in Tables 3 and 4, show that most banks made individual purchases and sales of less than $1 million in size. They also show a direct though imperfect relationship between size of bank and size of transaction. For example, of the eight buying banks with total deposits of between $4 and $8 million (Table 3), two reported that their typical purchase was under $200,000 and five that it was between $200,000 and $600,000. (One bank in this group made no purchases.) At the other extreme, all of the buying banks with $32 million and over in total deposits reported a typical purchase of $1 million or better.

Transaction frequency during the first half of 1965 indicates that the federal funds market is an important outlet and source of cash for trading banks. Among the 63 banks that actually made purchases during 1965's first half, the average number of individual fund acquisitions was 25.2 (Table 5). The average frequency of purchase, like size of transaction, varied by size of bank: small banks made fewer purchases than large banks. For example, each of the seven banks with total deposits of between $4 and $8 million that entered the market on the buying side made an average of 7.6 purchases. On the other hand, each of the largest-sized buyers, $32 million and over, averaged 48.6 purchases.

The average number of sales among the banks that were active on the selling side of the market was somewhat lower, 17.4, than the number of purchases per bank. Average sales were pulled down by the behavior of larger banks, those with $16 million and more in deposits; on the average, each of the larger banks made fewer sales than purchases. This may reflect the seasonal buying and selling pattern of these larger country banks. Additional data, covering a much longer span of time, would have to be gathered before a determination could be made.

The amount of interest paid out and the amount earned on purchases and sales depends on the size and frequency of transaction and the rate of

TABLE 3 — NUMBER OF BUYING BANKS, BY SIZE OF TYPICAL PURCHASE DURING THE FIRST HALF OF 1965

Deposit size (millions of dollars)	No purchases made in first half	Size of purchase (thousands of dollars): Under 200	200 to under 600	600 to under 1,000	1,000 and over	Total
2 to under 4	1	—	—	—	—	1
4 to under 8	1	2	5	—	—	8
8 to under 16	2	3	17	1	—	23
16 to under 32	2	—	11	4	5	22
32 and over	—	—	—	—	15	15
Total	6	5	33	5	20	69

Note: Deposit size classification based on total deposits held at the end of December 1964.

TABLE 4 — NUMBER OF SELLING BANKS, BY SIZE OF TYPICAL SALE DURING THE FIRST HALF OF 1965

Deposit size (millions of dollars)	No sales made in first half	Size of sale (thousands of dollars): Under 200	200 to under 600	600 to under 1,000	1,000 and over	Total
2 to under 4	1	—	—	—	—	1
4 to under 8	—	—	1	3	—	4
8 to under 16	4	2	13	1	1	21
16 to under 32	—	2	10	6	4	22
32 and over	—	—	1	—	13	14
Total	5	4	25	10	18	62

Note: Deposit size classification based on total deposits held at the end of December 1964.

interest.[4] During the first half of 1965 the federal funds rate fluctuated about an average of slightly more than 4 per cent, dropping as low as 2 per cent on two occasions and rising to a high of 4⅛ per cent on many of the days in the latter half of the period. The total amount of interest paid out and earned by active Ninth district participants is shown in Table 6. On average, each of the banks that purchased funds paid out a total of $3,840 during the period, and each of the active sellers received $2,889. The smaller income on sales apparently resulted from the lower frequency of sales transactions.

TABLE 5 — PURCHASES AND SALES OF FEDERAL FUNDS DURING THE FIRST HALF OF 1965

	Buying Banks		Selling Banks	
Deposit size (millions of dollars)	Number active in the market*	Number of purchases per active bank	Number active in the market**	Number of sales per active bank
2 to under 4	—	—	—	—
4 to under 8	7	7.6	4	12.0
8 to under 16	21	14.6	17	23.5
16 to under 32	20	32.5	22	18.2
32 and over	15	48.6	14	15.9
All banks	63	25.2	57	17.4

*Only the banks that actually purchased funds during the first half of the year are included. Six buying banks were inactive.

**Includes only the banks that actually sold funds. Five of the 62 selling banks were inactive during the first half of the year.

Note: Deposit size classification based on total deposits held at the end of December 1964.

Summary and conclusions

The results of the survey indicate that only a limited number of Ninth district member banks made use of the federal funds market. Among those that did enter the market, size and frequency of transaction seemed to be directly related to size of bank. Exceptions to this rule were found among the larger country participants where sales were less frequent than the sales at their smaller-sized neighbors during the first half of 1965.

One result of the survey deserves special comment: As noted, only 74 country member banks, 15.2 per cent of all country members in the district, trade federal funds. Is this a low or high participation rate? The answer would seem to be that it is low. Surveys taken in other Federal Reserve districts have shown considerably higher participation rates among country member banks.

Why is the Ninth district rate relatively low? First is the factor of size of bank. Evidence from other districts indicates a direct relationship between the participation rate and the proportion of small banks. In the New York Federal Reserve district the 1965 participation rate of country member banks in the federal funds market was 49 per cent and the proportion of country banks with less than $10 million in deposits was 42 per cent.[5] In the Chicago district, where country members with less than $10 million in deposits represent about 61 per cent of all country banks,

TABLE 6 — INTEREST PAID AND EARNED ON FEDERAL FUNDS TRANSACTIONS BY ACTIVE MARKET PARTICIPANTS DURING THE FIRST HALF OF 1965.

Deposit size (millions of dollars)	Total interest paid per active buying bank	Total interest received per active selling bank
2 to under 4	—	—
4 to under 8	$ 429	$ 641
8 to under 16	661	1,641
16 to under 32	3,226	2,948
32 and over	10,700	4,956
All banks	$ 3,840	$2,889

Note: Deposit size classification based on total deposit held at the end of December 1964.

[4]The number of days each purchase and sale is outstanding is also relevant. Generally, Ninth district participants made one-day transactions during the first half of 1965.

[5]William G. Colby Jr., and Robert B. Platt, "Second District 'Country' Member Banks and the Federal Funds Market," **Monthly Review**, Federal Reserve Bank of New York (May 1966), p. 115.

actual participation in the market during 1965 was about 25 per cent.[6] And in the Minneapolis district, where about 15 per cent of country members stated that they traded funds (though not all did so in the first half of 1965) over 70 per cent of all country banks have deposits of less than $10 million.

The answer to the original query which these numbers suggest, then, is that participation in the federal funds market is relatively low in the Ninth district because there are a relatively larger number of small banks. Unfortunately, this does not answer the question, but it replaces it with a new unknown: Why should small banks not participate in the market? The explanation may be that small banks have little knowledge of the funds market. This view is not without foundation — several banks returned their questionnaire with the comment that they had never heard of federal funds. An alternative explanation may be that participation is low because the net gains to be realized by close management of cash balances are small compared to the gains from devoting limited management resources to other activities. This too is plausible, though difficult to evaluate.

The relatively low participation rate may be partially explained by bank size and the characteristics closely associated with size, but at least one other factor should be considered. As noted earlier, in some areas large city banks have promoted and facilitated the development of regional markets in federal funds. This has not been the case in the Ninth district, though it is true that large city banks have made occasional trades with smaller district banks. The negative attitude of some city banks may in part be explained by their status as members of one or another of the several holding companies that exist in the district. Members of the same company cannot lend to or borrow from one another. This in itself discourages intra-district trading and, in addition, places the large city banks that are members of a holding company in the position of legally being able to trade funds with some of the country banks they serve as correspondent but not with others. Their attitude towards trading funds with country banks *may* reflect a desire to avoid having to discriminate among customers.

The factor or combination of factors that provides the best explanation of the relatively low participation rate in the Ninth district remains to be found. The points put forward can only be considered as suggestive. For more definite conclusions, additional evidence would be required.

— J. N. Duprey

[6]Dorothy M. Nichols, "Marketing Money: How 'Smaller' Banks Buy and Sell Federal Funds," **Business Conditions**, Federal Reserve Bank of Chicago (August 1965), pp. 9-11.

Selected readings: federal funds

Booklets:

The Federal Funds Market: A Study by a Federal Reserve System Committee, Board of Governors of the Federal Reserve System, May 1959.

The Federal Funds Market: Its Origin and Development, Federal Reserve Bank of Boston, October 1964.

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Jack C. Rothwell, "Federal Funds and the Profits Squeeze — A New Awareness at Country Banks", **Business Review**, Federal Reserve Bank of Philadelphia, March 1965, pp. 3-11.

Dorothy M. Nichols, "Marketing Money: How 'Smaller' Banks Buy and Sell Federal Funds," **Business Conditions**, Federal Reserve Bank of Chicago, August 1965, pp. 8-12.

William G. Colby, Jr., and Robert B. Platt, "Second District 'Country' Member Banks and the Federal Funds Market," **Monthly Review**, Federal Reserve Bank of New York, May 1966, pp. 114-118.

Current conditions . . .

Most of the district's economic indicator series continued favorable at or near the mid-year point. Farm product prices were relatively high; agricultural production prospects were rated good; industrial production had expanded; employment had increased with low unemployment rates; and retail sales were booming. Money and credit, however, had become relatively tight as the demand for loans was strong in relation to the available supplies of credit. The ratio of loans to deposits at Ninth district member banks had advanced moderately from year-earlier levels, particularly at the larger city banks, but with a sharp increase in the use of federal funds and of borrowings from the Federal Reserve bank.

Although crop predictions at mid-year are somewhat speculative, prospects are bright for a bumper grain crop, assuming near normal conditions during the critical July and August period. District farm cash receipts during April (there is about a 2-month lag in the data) were at an all-time high for the month — up 20 per cent from the year-earlier level. Practically all of the gain was in livestock and livestock product receipts. Cash income from grain had changed little, but at this season of the year grain sales contribute a relatively smaller proportion of total receipts. More recently, sharp advances in grain prices, particularly soybeans and wheat have helped to maintain improved farm incomes.

The industrial use of electric power in early 1966 registered about a 12 per cent rate of increase over a year earlier with the production worker man-hour series up around 7 per cent. The evidence from these two series supports the view that the machinery and primary metals industries have provided the main impetus for the district's industrial production expansion thus far this year.

The district's May employment data show a big 4.0 per cent increase from a year earlier with even stronger advances in manufacturing and construction employment of 5.8 per cent and 10.2 per cent respectively. Although building permits for single family houses have lagged in recent months, contracts for nonresidential building have expanded sharply.

The available data on new hirings and "quit" rates indicate a tight labor market within the district with average weekly earnings and weekly hours in manufacturing just slightly below the national rates. The district's unemployment rate in May was estimated at 3.9 per cent compared with 4.0 per cent for the nation.

With business expanding, more people working, and a bright farm picture, it might be expected that people would be spending more — and apparently they are. District bank debits in April and May were up 20 and 22 per cent respectively from year earlier levels and April retail sales spurted 11 per cent over April 1965.

The following selected topics describe particular aspects of the district's current economic scene:

Wheat supplies tighten, prices move upward

Current speculation over this year's wheat harvest has focused attention on what could be one of the major problems facing the agricultural economy — the stocks of wheat. The success of recent farm programs in reducing wheat supplies together with a strong demand for wheat and an added emphasis given to food in foreign aid policy has made it clear that the era of production cutbacks is near an end. The turnabout, however, appears to be approaching with unexpected rapidity and concern over wheat supplies during the next two years or so is becoming increasingly evident. Some adjustment to this situation has already occurred, as shown in the recent 15 per cent expansion in the national wheat acreage allotment.

Two recent developments have underlined the concern over wheat supplies. Of prime importance was the June 1 crop estimate that forecast a national 1966 wheat output of 1.2 billion bushels, a figure 7 per cent below that of 1965. An output of only 1.2 billion bushels, more importantly, falls considerably short of the production estimates used prior to the crop report in making judgments as to the carry-over at the end of the 1966-67 marketing year. The drop in production plus the not overly comfortable current carry-over of some 550-600 billion bushels means that the carry-over next year could reach an extremely low level of 300 million bushels or less, if current consumption estimates materialize.

The expected decline in this year's output reflects generally lower output throughout the wheat producing areas. Winter wheat is expected to fall to 975 million bushels, 5 per cent under 1965, because of drought and freezing weather during May in the central and southern Great Plains.

Spring wheat production, granting a more speculative crop estimate at this stage of the season, is expected to total only 259 million bushels, down 14 per cent from 1965. The decline is due largely to unfavorable weather in the Pacific Northwest.

In the Ninth Federal Reserve district the total wheat crop is forecast at 307 million bushels, a 7 per cent decline from last year but 1 per cent larger than the 1960-64 average. District winter wheat is at 71 million bushels, down 5 per cent, as reduced acres offset generally higher expected yields. Spring wheat is forecast at 237 million bushels, down 14 per cent.

A second development that is bound to have side effects on U. S. wheat supplies is Canada's recent commitment to sell at least 336 million bushels of wheat to the U.S.S.R. over the next three years. This new commitment together with previous Canadian sales agreements with other nations should push total Canadian exports above the 600 million bushel level. Export sales of that magnitude might well extend Canadian processing and handling facilities to the limit. Thus, the U.S. can expect additional foreign demand that will spill over from the Canadian market.

These two events, the crop report and the Canadian sale, have had a market effect on U. S. wheat prices. The June futures contract in Minneapolis jumped from \$1.81 per bushel on June 14 to \$1.95 per bushel on June 21, as old crop wheat supplies were slow in moving to markets. The June contract had sold for as low as \$1.65 per bushel earlier in the year. Expectations for continued tight supply during the coming months were reflected in the prices for new crop futures contracts. The March futures price moved upward from \$1.84 on June 14 to a high of \$2.09 during the third week in June after having opened in April at less than \$1.70 per bushel.

Action taken to moderate credit, deposit growth

The Board of Governors of the Federal Reserve System has taken two actions to moderate growth of bank credit and deposits. The Board has raised from 4 per cent to 5 per cent the requirements on time deposits in excess of \$5 million at Federal

Reserve member banks and also moved to place promissory notes of less than two years maturity under regulations governing reserve requirements and payment of interest on deposits.

The increase in reserve requirements became effective July 14 for reserve city banks and July 21 for all other member banks. The action regarding shorter-term bank promissory notes will become effective September 1 and will apply to all promissory notes covered by the action that are issued on or after June 27, 1966 and are outstanding on or after the effective date.

The reserve requirement increase is expected to raise required reserves by more than $400 million — aproximately $350 million at reserve city banks and $70 million at other member banks. All told, about 950 larger member banks throughout the nation — primarily those issuing savings certificates and other certificates of deposit (CD's) in large volume — are expected to be affected by the increase in requirements. The action should exercise a tempering influence on bank issuance of time certificates of deposit. The measure will also serve to apply a moderate additional measure of restraint upon the expansion of banks' loanable funds and thus reinforce the operations of other instruments of monetary policy in containing inflationary pressures.

The purpose of the new regulations on shorter-term bank promissory notes is to prevent future use of these instruments as a means of circumventing statutory and regulatory requirements applicable to bank deposits.

Recent articles Board of Governors and Federal Reserve banks

Board of Governors of the Federal Reserve System, Washington, D.C. 20551	Recent changes in U.S. trade and payments **Federal Reserve Bulletin, April 1966**
	Construction and mortgage markets **Federal Reserve Bulletin, May 1966**
	Developments in consumer credit **Federal Reserve Bulletin, June 1966**
Federal Reserve Bank of New York, New York 10045	Recent developments in the capital markets **Monthly Review, July 1966**
Federal Reserve Bank of Boston, Massachusetts 02106	Cash management in state and local government **Business Review, June 1966**
Federal Reserve Bank of Chicago, Illinois 60690	Rising prices — a sign of stress **Business Conditions, June 1966**
Federal Reserve Bank of St. Louis, Missouri 63166	Total demand, prices, and real growth **Review, June 1966**
Federal Reserve Bank of Dallas, Texas 75222	Food marketing costs **Business Review, June 1966**

Economic Briefs

1. Lead smelter expands

Plans for the construction at the East Helena, Montana, custom lead smelter of a $1.5 million roasting plant for ore refining have been announced by American Smelting & Refining Company. Work on the project should be completed by September, according to a company spokesman.

2. Improvements at Zap mine

Capital expenditures of nearly $2 million are being made by North American Coal Corp. on its Indian Head lignite mine near Zap, North Dakota. Included are a new stripping shovel, a 120-ton capacity coal truck, increased tipple facilities, and electrical and supporting equipment. The company supplies coal to the United Power Association's power plant at Stanton, North Dakota.

3. Generating plant "tops out"

The metal superstructure is at full height and concrete is being poured for the smokestack for Northern States Power Company's Allen S. King electric generating plant at Oak Park Heights near Stillwater, Minnesota. The 550,000-kilowatt, $63 million facility is expected to be in operation in May 1968.

4. 80-mi. pipe line underway

Michigan Consolidated Gas Company is owner of a new pipeline being constructed in Upper Michigan to bring natural gas service to Munising and Forsyth, Michigan. The 80-mile line, being constructed by Ohio Pipeline Company, originates at Gladstone. Completion is expected in 1966.