Federal Reserve Bank of Dallas

Business Review

Railroad Commission–
With Loss of Spare Reserves, Role of Commission Changes

Bank Credit Cards–
Do Grocery Stores Provide a Potential New Market?

October 1972

With Loss of Spare Reserves, Role of Commission Changes

Oil allowables in Texas, after moving sharply upward for several months, finally reached maximum production in April. With demand for petroleum products continuing to rise faster than domestic reserves, production is very apt to remain at this level. And without a drastic change in price conditions or import policies, there is little likelihood that the Texas Railroad Commission will again be called on to limit the output from fields in the state because of insufficient markets.

For nearly a quarter century, the commission held production in Texas at less than capacity. During that time, the nation's demand for crude oil more than doubled, surging from less than 2.2 million barrels a day in 1948 to more than 5.3 million in 1971. But while demand for crude increased, the discovery of new reserves slowed. Where 21,519 wells were completed in Texas in 1956, for example, only 8,114 were completed in 1970. As the gap between demand and reserves closed, production in Texas came closer to its peak–which it may have already passed.

Texas has long been the nation's leading oil-producing state, supplying at least a third of all domestic crude. By regulating the flow of wells in Texas, the Railroad Commission was able to smooth out fluctuations in the nation's oil markets. In the 1950's, the state accounted for about three-fourths of the nation's reserve capacity and shut-in capacity was believed to amount to as much as 38 percent of production.

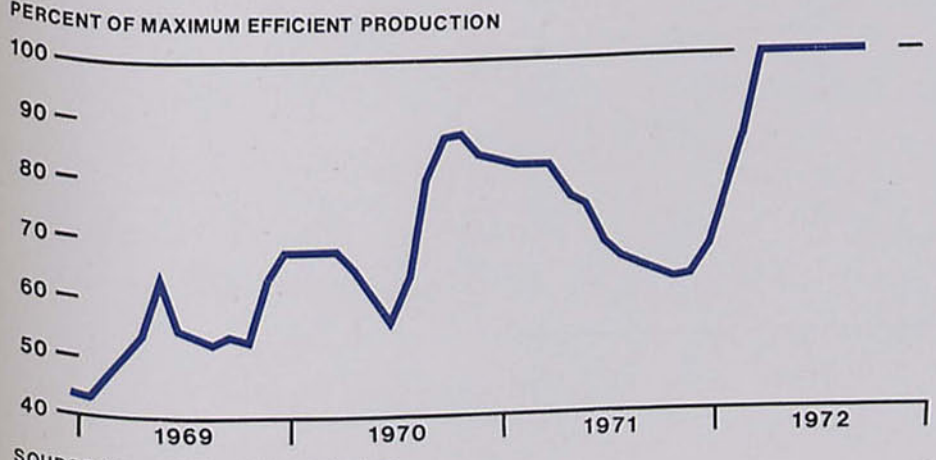
This spare capacity gave Texas the flexibility needed to stabilize markets–a capability that sometimes stood the United States and other countries in good stead. In the Suez crisis of 1957, for example, interruption of the flow of oil from the Middle East could have left Europe in dangerously short supply had Texas' spare capacity not been used to help narrow the gap.

In Louisiana, where production has been increasing (from about a tenth of the domestic crude in 1950 to about a fourth in 1970), the Department of Conservation has followed a stabilization strategy similar to that of the Texas Railroad Commission. But since prorationing on the basis of demand was instituted first in Texas and this state has continued to be the major producer, the Railroad Commission has been generally recognized as the agency shouldering the burden of curtailing output. With spare capacity also stretched to the limit in Louisiana, that state's regulatory agency is in no position to take over the stabilization function that the Railroad Commission has performed since the oil glut in the East Texas field in the early 1930's.

The matter of the nation's crude production being regulated by an agency of one of the states has not been without controversy. With most of the country's production concentrated far from its major consumption areas, differences in regional interests were to be expected. But even so, the prorationing of production in Texas on the basis of market demand has long been part of a broad though informal federal policy regarding crude markets, prices, and imports.

Capacity production from Texas fields leaves no spare capacity for smoothing out short-term fluctuations in demand for crude. As a result, a major change in the role of the Texas Railroad Commission has become almost certain. The implications of the change, however, are much greater for the U.S. Gov-

Texas allowable soars to 100 percent



SOURCE: Texas Railroad Commission

ernment than for the Texas Railroad Commission.

How controls are set . . .

Two basic but closely related considerations have been taken into account in regulating the flow of oil from Texas fields. One has been conservation. The other has been market demand–or was, at least, as long as the state had spare reserves.

The matter of conservation is handled in terms of the maximum production considered efficient for each field. This barrel-per-day rate–called *maximum efficient production*–is the limit at which wells can be produced without damaging the field. Once established, the rate is ordinarily left unchanged until producers show that the field can be produced at a higher rate without eventual damage to the field.

The matter of market demand is decided monthly. On the basis of projected demand for Texas crude, the Railroad Commission prorations production for the coming month as a percentage of maximum efficient production. This proration rate is the *allowable*.

Conservation controls are needed to maintain pressure in a field. If the field is produced too fast, it loses the pressure that drives oil through the formations to the well. Where water provides the pressure, there is the added danger that water might push past the crude and isolate large amounts of oil that could otherwise have been produced.

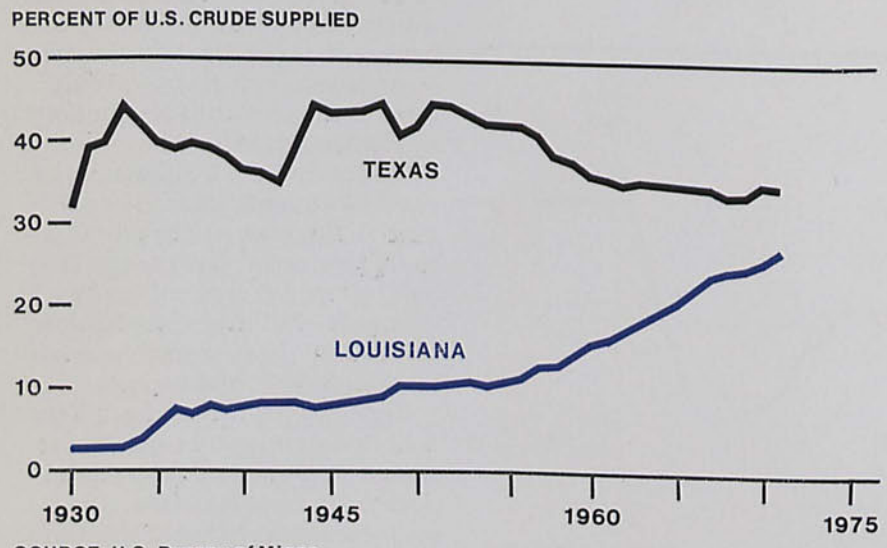
In new fields, where the pressure is usually good anyway, producers are assigned special *discovery rates* for the first two years or until the eleventh well is drilled. Use of these special rates gives the discoverer time to determine the production characteristics of the field and an opportunity to recover some of his exploration costs. The rapidity of this early flow apparently does no damage to the potential of the field and provides an incentive for further exploration.

When the discovery rate no longer applies, the commission sets the maximum rate of production it will allow for that field, based on characteristics of the field and experience with other Texas fields of similar spacings and depths. Rates arrived at in this manner are called *yardstick allowables*. Producers can ask the commission for a higher rate, and special hearings are held for that purpose. But the producer has to show that an increase in output will not eventually reduce the field's potential, and the final decision is up to the commission.

When production begins to fall off enough to show that the field is about depleted, wells are classed as *strippers* and, to encourage production of all the oil accessible, the commission removes its production controls. All told, Texas strippers produce as much oil as the state's largest field.

To determine market demand, the commission holds monthly meetings at which refiners estimate

Louisiana increasingly important to nation's crude production . . .



SOURCE: U.S. Bureau of Mines

the amounts of Texas crude they expect to buy over the following month. In addition to these estimates–called *nominations*–the commission considers crude inventories and stocks of petroleum products and reviews demand forecasts prepared by the Bureau of Mines.

Then, an allowable must be determined that will provide the production needed to meet demand. As one step in its determination, the commission estimates the production from wells exempt from prorationing. Most of these are, of course, discoveries and strippers, neither of which are subject to market demand prorationing but which, together, account for a considerable amount of production and a large number of wells. Nearly half the wells in the state last year, for example, were strippers, but they produced only about a tenth of the state's crude.

As another step, the commission takes into account the production of wells that are not subject to *effective* prorationing. These wells are in fields that cannot be produced at market demand levels–either because of their depletion or because of conservation problems that develop when they move toward the maximum rates of production originally set for them.

Successive increases in allowables over the past few years have brought increasingly weaker responses in production–primarily because of fields that cannot be held at high rates of output. Some older fields, while still far from ready for the stripper category, simply no longer have the potential to reach the rates of output originally set as their maximums. As a result, full flow from many fields is less than the allowable.

Output of other fields is held back by the conservation problems that full production would create. Output from three of the state's largest fields–the East Texas field, the Kelly-Snyder field in West Texas, and South Texas' Tom O'Connor field–is being held back because of difficulties in processing the volume of natural gas that flows as a byproduct of their oil production and because of special reservoir problems that did not become evident until the fields were pushed to their maximum outputs.

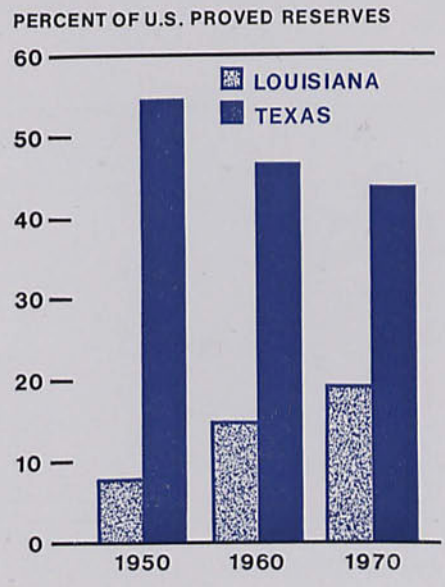
Altogether, only 13 percent of the state's 178,500 wells were subject to effective prorationing in June 1971–when allowables were still little more than 75 percent of maximum efficient production. But those wells produced nearly four-fifths of the state's crude. In fact, wells in fewer than 100 of the state's more than 8,000 fields provided about two-thirds of its production.

With nominations established for the following month and a fairly close estimate of the production exempt from effective stabilization controls, the commission has been in a position to announce the new allowable as a percentage of maximum efficient production. But with most wells operating too far below maximum efficiency for the allowable to apply and nominations running close to the state's total capacity, the commission has had to allow practically maximum production. Without a reversal in the situation–which seems highly unlikely–the commission can no longer regulate output in terms of market demand. Conservation has again become the commission's primary function–maybe its only function.

. . . and why

Concern for conservation was the reason for prorationing on the basis of market demand in the first place. Resources were wasted if they were underpriced, as oil was in the depression. And in those early days of the Texas fields, conservation was difficult. In the absence of production controls, producers pumped oil as fast as they could, regardless of the future of the

. . . but Texas still holds commanding lead in reserves



SOURCE: U.S. Bureau of Mines

field. Producers owning only part of a field could not be kept from draining off their neighbors' reserves. As a result, even though prices were low, the drive was to deliver oil before the price–or the reservoir–fell further.

The concept of a rate of maximum efficient production is an outgrowth of the first efforts in Texas to protect owners' correlative rights to oil by preventing withdrawals so rapid they damage the recovery of oil from the field as a whole. In the heat of cutthroat competition in early Texas fields, oil was withdrawn at damaging rates–often faster than companies could transport, refine, or even store the oil. Earthen dams were often used to hold crude, wasting oil, damaging the land, polluting water, and creating fire hazards.

Prorationing on the basis of market demand, on the other hand, emerged in response to the closely connected problem of price cutting that accompanied overproduction. As demand fell off during the depression and the supply ballooned with discovery of the East Texas field (which suddenly pushed Texas reserves far in excess of the nation's total demand for crude), crude prices fell to 10 cents a barrel. Martial law had to be declared to keep peace among producers competing for markets. With prices falling, market allocation of resources failed.

The first efforts to introduce some stability into the crude market were undertaken at the federal level–in the same spirit that the Government sought to help other depressed industries. But with the striking down of the National Recovery Administration–which had adopted a petroleum code calling for import restrictions, minimum crude prices, control of new reservoirs, demand limitations, and the allocation of production among states and producers–the burden of control passed to the states.

Congress moved to encourage production control at the state level by passing legislation supporting controls in producing states. The Connally Hot Oil Act prohibited interstate shipment of oil to escape state regulation. And although the Interstate Oil Compact Commission had no authority for limiting production, this federally sponsored agency gave producing states a forum for considering regulatory problems.

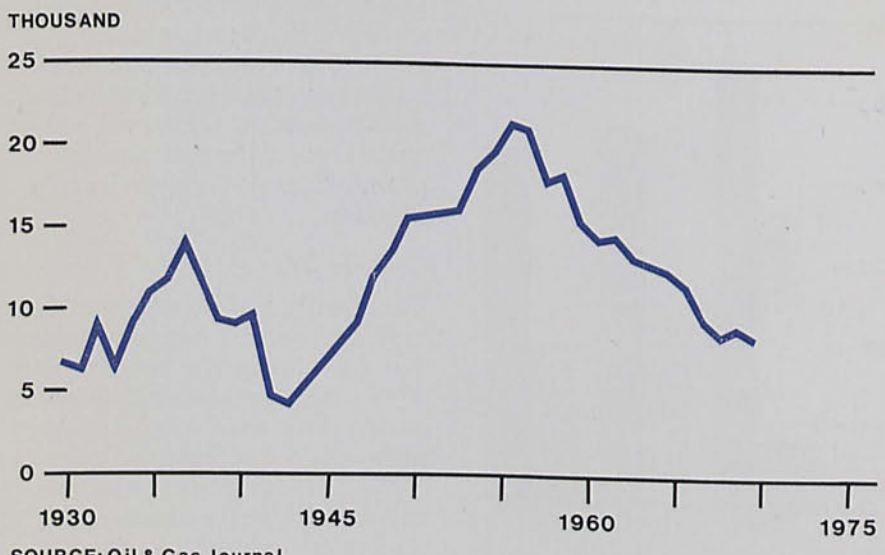
Temporary federal controls were imposed during World War II, and by the end of the war, many state officials and industry leaders were convinced that production control filled an economic and conservation need and that controls could be effectively administered. Several states passed conservation regulations for the first time, and some states that had controls strengthened them.

As spare capacity increased in the early postwar years, producers in Texas shared only modestly in the increases in production and heavily in the decreases, opening the Railroad Commission to criticism that its procedures were used to manipulate prices. The commission, however, mindful that its regulations were always conservation-oriented, has answered that prorationing was never used except to prevent the accumulation of unstable inventories and to meet seasonal, and occasionally emergency, demands. It merely accepted prices set in the crude market.

Some of the problems of regulating Texas oil have related to imports. Except for a few years in the 1920's, the United States was a net exporter of oil until 1948. Tariffs were applied to imports in the early 1930's, and import quotas were used for a while. But with the development of low-cost reserves in the Middle East, imports began to rise in the late 1940's, reaching the point where they accounted for nearly a fourth of the 5.5 billion barrels of petroleum products used in the United States last year.

Voluntary restraints were tried to slow the inflow of foreign oil in 1955. Such restraints could not be relied on, however, and as the flow

Number of wells completed in Texas shows sharp and steady decline



SOURCE: Oil & Gas Journal

continued, the Railroad Commission absorbed the impact on domestic markets by cutting back on allowables in Texas, adding further to the nation's reserves.

The Suez crisis and accompanying shutoff of oil from the Middle East delayed any Government action on imports until 1959, when quotas were imposed. Two policies were adopted. On the West Coast, where producing areas were operating at capacity, imports were simply allowed to make up the difference between production and consumption. But on the East Coast, which is linked to the rest of the country by an interlacing of pipelines as far west as the Rockies, imports were held to 9 percent of domestic production in hopes of stimulating the further development of domestic reserves.

But as demand for energy continued to rise relative to reserves, quotas had to be eased. Since 1962, the Government has tried to hold imports at 12.2 percent of the domestic production of oil and gas liquids. Residual oil for heating and industrial purposes has been imported with very few restrictions, especially since 1966.

A shift in decision making

With demand leaving little (if any) reserve capacity and the country depending increasingly on imports, the Texas Railroad Commission can no longer effectively regulate production to meet market demand. Responsibility for regulating market conditions and the adequacy of supply has passed essentially from state to federal government. Only through a coordination of imports, offshore lease sales, and taxing and pricing practices can an effective policy any longer be administered.

The Texas commission will, of course, continue its efforts to conserve the state's crude resources. In fact, with allowables at 100 percent, its efforts at conservation are more difficult than ever, especially in preventing wasteful reservoir conditions. The commission's responsibility for seeing that salt water is reinjected into original formations or allowed to evaporate under control conditions, for example, becomes increasingly difficult at high levels of production. So does its responsibility for restricting the flaring of byproduct gas. When production levels were lower, prorationing took care of most problems of conserving natural gas.

The commission's concern with conservation has not changed with fields running at full capacity. What has changed is national policy.

–Stephen L. Gardner

New member bank

The Metropolitan National Bank, Houston, Texas, a newly organized institution located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business September 7, 1972, as a member of the Federal Reserve System. The new member bank has capital of $2,000,000, surplus of $500,000, and undivided profits of $500,000. The officers are: Erich J. Brann, Chairman of the Board and President; William M. Hancock, Vice President; Jon Pat Mullican, Vice President; Dorothy McSpadden, Cashier; and Effie Kearns Ratcliffe, Assistant Cashier.

New par banks

The Banco de las Americas, Tucson, Arizona, an insured nonmember bank located in the territory served by the El Paso Branch of the Federal Reserve Bank of Dallas, was added to the Par List on its opening date, August 18, 1972. The officer is Morris Herring, President.

The Bank of Socorro, Socorro, New Mexico, an insured nonmember bank located in the territory served by the El Paso Branch of the Federal Reserve Bank of Dallas, was added to the Par List on its opening date, August 21, 1972. The officers are: Ellis McPhaul, Chairman of the Board; Robert T. McNiel, President; and Mrs. Lucille Page, Cashier.

The Texas Bank & Trust Company, Houston, Texas, an insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, was added to the Par List on its opening date, September 6, 1972. The officers are: George W. Gist, Jr., President; T. Frank Bartle, Vice President; and Mrs. Maxine Van Dusen, Cashier.

The First State Bank, Deanville, Texas, an insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, was added to the Par List on September 21, 1972. The officers are: M. G. Murphy, President; Ervin L. Moore, Vice President; and Mrs. Betty Brinkman, Cashier.

Do Grocery Stores Provide A Potential New Market?

The very size of the nation's retail grocery market–$130 billion was spent at grocery stores last year–makes it the natural candidate for any further expansion in bank credit-card programs. Consideration of such an event–restoring grocery credit to a place of prominence in household accounts–results from a recent Eleventh Federal Reserve District study indicating that the profitability of bank credit-card programs may depend on their achieving scale economies through further expansion. Expansion of these programs has slowed markedly as markets with the greatest potentials for growth and profit have become saturated. The only major consumer market credit cards have not tapped is retail groceries.

Americans have about 35 million bank credit-card accounts that can be used to buy almost anything but groceries, which are rarely available under credit cards. In the Eleventh Federal Reserve District alone, there are well over 1.7 million accounts. Deflated for business accounts and multiple-account families, that still leaves probably more than a million families with bank cards in the Southwest.

With about a million of the nation's merchants (including suppliers of services) accepting bank cards, the lack of general acceptance in retail food stores becomes increasingly conspicuous. The possibility for their acceptance in this market depends, however, on the attitudes of three groups: banks operating credit-card programs, supermarkets dominating the retail grocery business, and consumers themselves. The attitudes of each will help determine whether bank cards eventually spread into the only remaining market of significance that has not been penetrated by credit cards.

Attitude of bankers

Use of bank credit cards has spread rapidly in recent years. Started as a regional instrument, primarily in California and some northern states, cards were issued by only 390 banks at the end of 1967. By the end of 1971, more than 1,000 banks operated credit-card programs and maybe as many as 8,000 others were associated with credit-card programs. During those years, the amount of debt outstanding under bank-card programs increased from $826 million to $4.5 billion–an advance from 1.5 percent of total consumer credit at commercial banks in 1967 to 8.1 percent in 1971.

Growth was even faster in states of the Eleventh District–possibly because of the late start of bank-card programs in the Southwest. Although two of the earliest banks to issue credit cards were in Dallas, their essentially local programs changed little from their initiation in the early 1950's until their incorporation into nationwide programs in the late 1960's.

Even after broad-based programs were well established in the rest of the country, there were still few credit-card plans in the Southwest. With a total of $41.1 million outstanding in credit at the end of 1967, they accounted for far less than 1 percent of the consumer credit at commercial banks in states of the District.

But by the end of 1971, 88 banks in these states held receivables under bank-card programs. And although only about two-thirds of these banks issued cards, several hundred other banks were associated with them. The total debt outstanding under bank-card programs in states of the District had reached $404.4 million to account for close to 7 percent of all bank consumer credit in these states. This tenfold increase in credit-card debt over a four-year period and proliferation of credit-card programs indicate the District was rapidly reaching a par with the rest of the country in the use of bank cards.

In spite of this growth, however, credit-card programs have still not reached the profitability that the volume of credit would seem to indicate. Nationwide, only about a third of the programs surveyed were profitable in 1970. And while a more recent survey of programs in the Eleventh District showed a slightly better profit picture last year, fewer than half the programs in the Southwest were profitable.

Several explanations have been offered for this lack of performance. Fully implementing programs seems the most commonly mentioned problem. Although credit losses, frauds, and the high cost of money have been contributing factors, the most prevalent problem seems to be difficulties in achieving economies of scale. Analysis of the 41 programs in the District shows substantially more facilities and staff than needed to process the volume of credit tickets. This excess capacity contributes to a high fixed cost of tickets, resulting, as might be expected, in a fairly significant inverse relationship between the profits of a program and a bank's excess capacity.

Every program manager reported that he could handle more tickets without adding to his

equipment and facilities. Estimates of the possible increase in workload that could be absorbed without increases in facilities or equipment ranged from one-tenth to three times the current flow of tickets. Estimates of the increase that could be handled without adding staff varied from a tenth to 1½ times the current volume.

All the managers believed they could handle twice the number of tickets without doubling the cost of their operation. Their estimates of the increase in cost required to handle a twofold increase in volume ranged from zero to 50 percent. These estimates, which clustered around 25 percent, indicate significant improvements in the profit potentials of programs in the Southwest if the volume of tickets could be increased. With an increase in volume, the average fixed cost would almost certainly decline and very probably without significantly increasing the average variable cost.

Interviews with six program managers in Dallas and Houston drew mixed responses to the idea of credit cards being accepted for purchases of groceries, however. In spite of the profit potential that might be developed in such an undertaking, only one manager was wholly in favor of the idea, compared with two that were clearly opposed. The other three considered the idea an important possibility for the development of new business, but they had serious reservations. Of the six, three had investigated the potential for grocery use, but only one had a major grocery outlet under contract.

Opposition to the idea resulted mainly from the belief that bank cards are not appropriate for the purchase of necessities. Managers opposing the idea felt that people would have to be financially desperate to use credit cards to buy food. They were worried that such purchasers, who they envisioned as typically having low incomes, might buy more than they could afford and feel the pinch later. Others, however, thought this possibility remote, considering the screening required for the issuance of a bank card.

All six managers noted the large amounts consumers spend on groceries and the regularity of their purchases. Those interested in the possibilities for developing this new line of credit business but with reservations about its suitability were concerned on two counts. While they were not worried that large numbers of cardholders might default in payment, they thought many cardholders might either (1) use their entire line of credit on groceries, and thereby be unable to use their cards for other purchases, or (2) consistently pay their accounts off every month, and thereby deprive the bank of service charges.

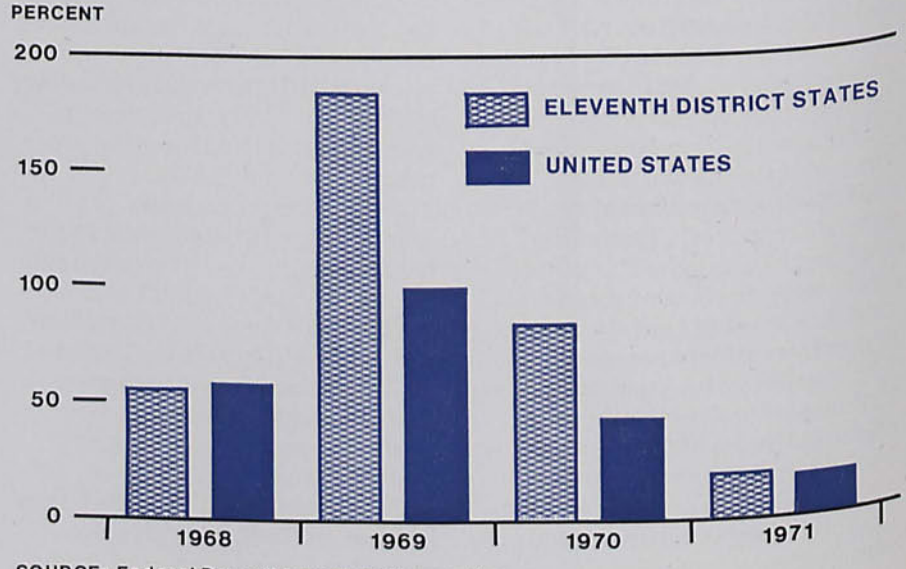
Pursuing the likelihood of such eventualities, however, some managers pointed out that bank cards are issued without regard for specific use, as are cards for use at particular department stores or gasoline stations, for example. Use of bank cards for grocery purchases, they reasoned, might be more dependable than some purchases that go unquestioned, such as at restaurants and nightclubs. Managers taking this line of reasoning again pointed out that cards are issued on the basis of creditworthiness. That in itself, they thought, would provide some protection against collection problems becoming major.

All six managers indicated a belief that, on the whole, grocers are not interested in implementing charge programs. That belief, coupled with their own doubts, has largely inhibited their aggressiveness in promoting credit-card programs for food purchases.

Attitude of grocers

Recent years have seen considerable discussion in the retail food industry about the possible need for following other retailers in

Growth in bank cards slows markedly as consumer markets are saturated



SOURCE: Federal Deposit Insurance Corporation

offering some form of consumer credit. And much of the discussion has centered on bank credit cards. But although several chains and some independent stores have experimented with bank cards, the discussion has been inconclusive.

Generally, grocers see little advantage to accepting credit cards or extending any other form of credit. They, in fact, see several disadvantages.

This, of course, is a considerable change from only a few years back. Until World War II, much of the nation's retail food was bought on credit–as it had been for generations. More than half the groceries sold in 1930, for example, were bought on open-book accounts. And the prevalence of this practice continued with only slight diminishment until the war.

After the war, however, use of grocery-store credit declined sharply. This decline–to possibly as little as 1 percent of sales in 1968–coincided with the development of supermarkets and the spread of cash-and-carry selling. Also, with increases in wages and welfare after the war, the need for grocery credit dwindled, and with freer migration, local credit ties were broken.

But even as open-book credit was passing from neighborhood scenes, multiple-use credit cards were starting to emerge as a major instrument of consumer credit. Grocers are well aware that since their burst of growth in the late 1960's, these cards have reached into almost every other consumer market. Generally, however, grocers seem to feel that they would implement credit-card programs in their stores only if (1) the cards could be used to increase profits or (2) consumer demand was such that they would otherwise lose business. So far, neither condition has arisen.

Grocers see no way that credit cards could increase their profits –or, indeed, might not cut into them. As retail food outlets have become larger, they have grown more dependent on increased volumes of sales. As a result, the orientation of the industry has been to comparatively low margins of net profit. Although the gross markup on merchandise at these stores averages about 20 percent, the gross profit margin before taxes tends to be only about 2.5 percent of sales and net profit is usually only about half that. With merchants' discounts under bank-card plans in the Eleventh District ranging from 2 to 5 percent of sales, the before-tax profit is hardly enough to allow the acceptance of credit cards.

Also, since most of the items people buy at grocery stores are considered necessities, grocers could hardly expect the introduction of credit cards to make any significant change in their total sales. One store or chain of stores might gain some initial advantage over its competitors by introducing credit cards. But this advantage would probably dissipate quickly as competitors followed suit, especially if credit cards were adopted industrywide.

Many grocers, nevertheless, feel that although credit cards have not been significant in nonprice competition–as, say, trading stamps have been–and consumers have given few signs that they might begin to expect this service, it is only a matter of time. Meanwhile, they argue that consumers are not interested in using credit cards to buy food. But that, of course, is something for consumers to decide.

Attitude of consumers

To gauge consumer reaction to the idea of bank cards being used for groceries, 440 householders were interviewed in Dallas in 1971.[1] Reactions varied considerably. Only about 40 percent of those interviewed were not clearly opposed to the idea. And of these, only 11 percent were wholly in favor, the other 29 percent being only somewhat favorably disposed. But the distribution of reactions varied significantly with age, income, and race.

- *Reaction by age*–Of respondents under 30 years of age, 20 percent were in favor of buying groceries with a credit card and another 32 percent were somewhat in favor. Of those between ages 30 and 44, about 9 percent were in favor and about 33 percent were somewhat in favor. Of those 45 and over, only about 7 percent favored the idea and only 21 percent were even somewhat favorable.
- *Reaction by income*–Of those with annual incomes between $5,000 and $10,000, nearly 17 percent were in favor of using credit cards for food and about 50 percent were opposed. Of those earning between $10,000 and $15,000, only 6 percent were in favor and about two-thirds were opposed. Among those with incomes over $15,000, the proportion in favor moved up again, reaching 10 percent, but the proportion opposed was still about two-thirds.
- *Reaction by race*–Of responses from nonwhites, nearly 22 percent were in favor of using credit cards at grocery stores, compared with about 7 percent of the responses from whites. Nonwhites were also less inclined to oppose the idea: 34 percent were opposed, compared with nearly 70 percent of the whites.

There seemed to be a positive correlation, however, between knowledge of credit operations and favorable responses. Nearly half the consumers that rated medium to high in their knowledge and understanding of credit were at

1. This survey was conducted by Gary F. Fairchild and Thomas L. Sporleder *(Consumer Credit in the Retail Food Industry: Attitudinal Analysis and Market Segmentation*, Technical Report 71-7, Department of Agricultural Economics and Rural Sociology, Texas A&M University).

least somewhat favorable to the use of cards at grocery stores. Of those that rated low in their knowledge of credit, less than a third favored the idea.

At the same time, people that had some sort of credit card favored the idea less than those that had no card–a seeming inconsistency. There was no significant difference between people that held cards and those that did not in their understanding of credit. The group without credit cards, however–about 15 percent of the sample–was dominated by low-income groups and nonwhites. These are the people most in favor of using credit cards for groceries.

The reasons people gave for their reactions were revealing. More than 90 percent of those interviewed saw distinct disadvantages to the use of credit cards for food purchases. More than 70 percent expressed a fear of overspending. But surprisingly, the highest income group was the one most concerned with problems of overspending. About 20 percent of the people interviewed made such remarks as "increased cost," "won't work," "another bill with nothing to show for it," and "people won't pay their bills." Still others simply said they did not like the idea.

Roughly 58 percent of the sample, nevertheless, saw some advantage to the idea. Convenience–cited by 23 percent–headed the list. More than 17 percent of those interviewed thought credit cards would be useful "when you run short of money." Nearly 10 percent thought credit cards would help them "keep up with the grocery bill." And some 8 percent thought cards would allow them to take better advantage of special sales.

In spite of the mixed and often negative attitude of consumers, 16 percent said that, given the opportunity, they would use a credit card frequently to buy food. Another 25 percent thought they would use a card at least occasionally. Taken as a whole, these responses indicate that the idea of using bank cards at grocery stores has enough credibility with consumers that it cannot be dismissed as unworkable.

Findings for the future

Pointed up essentially by studies of the attitudes of bankers, grocers, and consumers was the newness of bank credit cards, especially the newness of the idea of their being used for food purchases. Nearly every manager of bank credit-card programs, for example, cited consumer education as a major problem in the development of the credit-card business. Many accounts that managers felt should have been good had gone bad, they said, and primarily because of the extreme flexibility and convenience of credit cards. Some of the fault they attributed to their own organizational problems in implementing programs, but most of the trouble, they thought, was due to users not being more familiar with bank-card programs.

Most of these problems will probably be worked out in time–probably only in time–and whether grocery stores are included in the credit-card market or not. Consumers are apparently already becoming concerned about overspending. What data are available on the actual use of credit cards at grocery stores indicate, in fact, that most people are fairly careful when shopping for groceries with credit cards.

Long accustomed to viewing consumer credit in terms of instalment accounts, many banks evidently have still not made a clear distinction between more traditional loans and the revolving credit extended through bank-card programs. Some program managers noted the difference, however, commenting on the need to view bank-card accounts not on an individual basis but as part of the total volume of credit extended under a program. Accounts that might not be individually profitable can, nevertheless, cover variable costs, contribute something to fixed costs, and help the bank achieve economies of scale.

Although many managers have not taken this volume-oriented approach to their programs–whether because of restraints from their superiors or the constraints of their own views regarding consumer credit–their concern about the use of bank cards for necessities has not prevented them from extending their programs to include the purchase of clothing and gasoline and, in some cases, even the payment of rent. As for the complaint–of bankers, grocers, and consumers–that there is nothing to show for the bill when cards are used for food, bank cards are already used extensively for travel, entertainment, and food away from home.

Banks could benefit from an extension of credit cards into the grocery trade–and on two fronts. First, such an extension would almost certainly increase the volume of tickets handled, improving the efficiency of their programs and lowering per-ticket handling costs. Second, extension into groceries would provide a potent marketing tool for attracting new accounts, further contributing to the program expansion bank cards need. Each new market has brought new card users, and as bank cards become a better substitute for cash and checks, more people find them useful. Once people start using a bank card for one purpose, they are inclined to use it for others.

The matter of volume also relates to the operations of grocers. Shopping patterns show increased traffic in the latter part of the week –a pattern coinciding with paydays. Use of credit cards would presumably tend to smooth out the flow of shoppers, lowering overhead costs and cutting shelf losses during what is now the slow part of the week.

Furthermore, although their principal business is still food, with the development of supermarkets, grocers have increasingly become general merchandisers. Last year, for example, sales of nonfood items at grocery stores reached $40 billion to account for 30 percent of all the items sold at grocery stores. As their proportion of nonfood sales increases, grocers come more into competition with other general retailers, many of whom offer credit-card services.

Not only could the higher profit margins on nonfood merchandise support credit-card discounts to banks–as they do at other retailers –but credit-card programs would most likely increase the volume of nonfood sales–conceivably, high enough to support the discount on food sales. Grocery stores are in a unique bargaining position. Because of their high volume of sales, their ordinary banking business is very much sought after by bankers. They could very probably bargain for broader arrangements regarding credit-card discounts than merchants with smaller volumes. Such bargains might be struck with advantages to both the grocer and the bank.

The grocery industry's discussions of credit cards result mainly from recognition of its situation–not only the volume of sales at grocery stores, the bargaining position this volume gives stores in their dealings with banks, and the advantages of spreading customer traffic over the week but also the importance of customer service in successful food retailing. One of the most essential components of this service is now check cashing, which, because of the large number of bad checks, has become very expensive. Although people that chronically write bad checks may not be those that ordinarily have credit cards, there is a possibility that credit cards would reduce the number of checks cashed and, to an extent, the incidence of bad checks.

The advantages of using credit cards at grocery stores are less clear from the standpoint of consumers. The convenience of such a practice is obvious. Any increase, in fact, in the ways credit cards can be used enhances their attractiveness to consumers. But any change in life-style under a revolving credit plan is limited to the line of credit extended. And even then, the infusion is for one time only.

It is clear, nevertheless, that people would use bank cards to buy food. Considering the credit investigations required for the issuance of cards, this in itself could be argument enough for implementing credit-card programs for grocery stores.

The rapid expansion of bank credit cards has stimulated broad speculation about a cashless-checkless society. Some two-thirds of the consumers interviewed thought this country is moving toward such a society. Several bankers had similar views, although they expected the financial instrument to be something different from current credit cards. Many grocers were also reconciled to the eventual entry of credit cards into the retail food industry, despite their reluctance to hasten such an entry.

Again, the final determinant seems to be experience with this new and increasingly popular instrument. Whether bank cards are eventually used at grocery stores, only time can tell. And time in this case may be very important, not only because more and more people expect credit-card service but also because the strongest support for credit cards at grocery stores is among young consumers–who will make up the future market.

–Dale L. Stansbury

Federal Reserve Bank of Dallas
October 1972

Statistical Supplement to the Business Review

Total credit rose substantially at weekly reporting banks in the Eleventh District in the four weeks ended September 20. Both loans and investments increased more than usual for that time of year. And in line with the expansion in credit, there was a sharp rise in total deposits.

The rise in loans was due mainly to greater demand from consumers and nonbank financial institutions, probably reflecting the recent increase in retail sales of durable goods. Business loans were fairly sluggish. Real estate and security loans increased about in line with normal expectations.

Total investments rose substantially as banks added to their holdings of Government and other securities.

A decline in large CD's outstanding brought a moderate reduction in total time and savings deposits. This reduction was more than offset, however, by a sharp increase in demand deposits. As a result, banks were left with a net gain in total deposits sufficient to finance the rise in credit demand with only a slight increase in Eurodollar borrowings.

Seasonally adjusted total employment in the five southwestern states rose to a record high in August as the unemployment rate eased slightly from 4.6 percent of the labor force to 4.5 percent. All categories of nonfarm employment continued to show significant improvement over a year before. The sharpest gain over July was in durable manufacturing, where employment was up 0.7 percent. Although construction and transportation and public utilities showed slight declines from July, most nonmanufacturing industries reported employment gains. The largest advances were in mining, up 0.5 percent, and government, up 0.4 percent.

Registrations of new passenger automobiles in Dallas, Fort Worth, Houston, and San Antonio dropped an average of 3 percent in August. Registrations varied widely, however. San Antonio reported the greatest increase–12 percent–while Houston, at the other extreme, reported a decrease of 10 percent. Total registrations were 20 percent more than in August 1971, and cumulative registrations for the first eight months of 1972 were 13 percent more than in the same period last year.

Crop prospects in states of the Eleventh District were generally improved in August, as harvests progressed about the same as last year. Cotton production for the five states was estimated on September 1 at nearly 5.7 million bales–40 percent more than last year. Grain sorghum production in Texas will be 10 percent greater than in 1971 if the expected record yield is realized.

A drop in meat animal prices in the month ended August 15 brought the index of prices received by Texas farmers and ranchers down 2 percent from a month before. A moderate increase in crop prices held the index 18 percent higher than a year before, even though livestock prices were off an average of 4 percent.

With nearly 2.1 million head of cattle on feed September 1–an increase of nearly a third over a year before–Texas remained the number-one cattle feeding state. With more than half a million head on feed, Arizona feedlots were operating 18 percent ahead of a year earlier. The expanding feeding industry in District states now accounts for about a fifth of the fed cattle in the nation.

Department store sales in the Eleventh District were 10 percent greater in the four weeks ended September 23 than in the corresponding period last year. Cumulative sales through that date were also 10 percent greater than in the comparable period a year before.

The seasonally adjusted Texas industrial production index slipped slightly in August from a revised record high in July. At 131.4 percent of its 1967 base, the index showed monthly declines in every major category.

Output in most manufacturing industries turned downward in August. The largest declines were in petroleum refining, off 3.7 percent, and fabricated metals, off 2.3 percent. Of the few manufacturing industries showing increases, the lumber and wood products group reported the strongest–a rise of 2.3 percent. Despite this general decline, however, the apparel industry was the only manufacturing group not showing a gain over a year before.

Mining also was off from July, as was the output of utilities. Production of crude oil was down 3.6 percent. The only gain in mining was a 0.8-percent increase in the production of metal, stone, and earth minerals. Utilities dropped for the second consecutive month. The August decline was due primarily to a 3.9-percent drop in the distribution of electricity.

CONDITION STATISTICS OF WEEKLY REPORTING COMMERCIAL BANKS

Eleventh Federal Reserve District

(Thousand dollars)

ASSETS	Sept. 20, 1972	Aug. 23, 1972	Sept. 22, 1971
Federal funds sold and securities purchased under agreements to resell	914,050	948,629	1,214,238
Other loans and discounts, gross	8,183,490	8,126,998	7,011,139
Commercial and industrial loans	3,635,246	3,625,408	3,252,758
Agricultural loans, excluding CCC certificates of interest	193,508	188,709	121,493
Loans to brokers and dealers for purchasing or carrying:			
U.S. Government securities	1,166	1,165	512
Other securities	85,227	93,235	54,019
Other loans for purchasing or carrying:			
U.S. Government securities	6,429	5,694	5,682
Other securities	454,692	453,719	429,785
Loans to nonbank financial institutions:			
Sales finance, personal finance, factors, and other business credit companies	131,919	129,968	137,143
Other	686,753	661,439	484,769
Real estate loans	1,092,046	1,083,357	855,208
Loans to domestic commercial banks	16,120	16,365	16,467
Loans to foreign banks	30,846	32,538	31,259
Consumer instalment loans	925,273	907,874	792,040
Loans to foreign governments, official institutions, central banks, and international institutions	0	0	0
Other loans	924,265	927,527	830,004
Total investments	3,647,053	3,605,184	3,094,553
Total U.S. Government securities	1,000,772	993,212	984,791
Treasury bills	166,736	158,934	108,301
Treasury certificates of indebtedness	0	0	0
Treasury notes and U.S. Government bonds maturing:			
Within 1 year	135,193	136,008	156,875
1 year to 5 years	492,360	490,847	589,651
After 5 years	206,483	207,423	129,964
Obligations of states and political subdivisions:			
Tax warrants and short-term notes and bills	142,818	84,172	57,138
All other	2,253,818	2,293,071	1,904,233
Other bonds, corporate stocks, and securities:			
Certificates representing participations in federal agency loans	15,004	15,135	15,834
All other (including corporate stocks)	234,641	219,594	132,557
Cash items in process of collection	1,445,180	1,394,412	1,243,645
Reserves with Federal Reserve Bank	926,969	901,559	837,268
Currency and coin	104,447	106,962	94,789
Balances with banks in the United States	400,564	372,515	414,904
Balances with banks in foreign countries	12,354	12,629	9,302
Other assets (including investments in subsidiaries not consolidated)	606,350	602,546	477,515
TOTAL ASSETS	16,240,457	16,071,434	14,397,353

LIABILITIES	Sept. 20, 1972	Aug. 23, 1972	Sept. 22, 1971
Total deposits	12,438,720	12,299,829	11,033,079
Total demand deposits	6,800,275	6,642,554	6,274,815
Individuals, partnerships, and corporations	4,738,032	4,730,117	4,386,249
States and political subdivisions	374,337	386,807	257,209
U.S. Government	264,431	81,800	236,306
Banks in the United States	1,302,538	1,312,871	1,270,532
Foreign:			
Governments, official institutions, central banks, and international institutions	3,336	2,789	2,137
Commercial banks	36,370	36,838	33,241
Certified and officers' checks, etc.	81,231	91,332	89,141
Total time and savings deposits	5,638,445	5,657,275	4,758,264
Individuals, partnerships, and corporations:			
Savings deposits	1,194,620	1,154,668	1,065,072
Other time deposits	2,942,334	2,937,792	2,572,961
States and political subdivisions	1,370,267	1,429,924	1,021,053
U.S. Government (including postal savings)	22,945	26,881	26,140
Banks in the United States	93,779	93,010	56,638
Foreign:			
Governments, official institutions, central banks, and international institutions	13,400	13,900	15,300
Commercial banks	1,100	1,100	1,100
Federal funds purchased and securities sold under agreements to repurchase	1,953,034	1,979,174	1,685,217
Other liabilities for borrowed money	100,236	51,935	77,746
Other liabilities	449,724	450,516	376,073
Reserves on loans	139,681	139,763	119,899
Reserves on securities	19,159	18,184	34,639
Total capital accounts	1,139,903	1,132,033	1,070,700
TOTAL LIABILITIES, RESERVES, AND CAPITAL ACCOUNTS	16,240,457	16,071,434	14,397,353

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. Thousand dollars)

Item	5 weeks ended Sept. 6, 1972	4 weeks ended Aug. 2, 1972	4 weeks ended Sept. 1, 1971
RESERVE CITY BANKS			
Total reserves held	917,589	911,366	831,626
With Federal Reserve Bank	852,995	846,390	774,002
Currency and coin	64,594	64,976	57,624
Required reserves	918,036	917,076	844,014
Excess reserves	—447	—5,710	—12,388
Borrowings	0	1,178	4,268
Free reserves	—447	—6,888	—16,656
COUNTRY BANKS			
Total reserves held	991,849	984,647	885,831
With Federal Reserve Bank	783,263	773,762	685,758
Currency and coin	208,586	210,885	200,073
Required reserves	972,712	960,375	860,128
Excess reserves	19,137	24,272	25,703
Borrowings	3,092	1,774	7,350
Free reserves	16,045	22,498	18,353
ALL MEMBER BANKS			
Total reserves held	1,909,438	1,896,013	1,717,457
With Federal Reserve Bank	1,636,258	1,620,152	1,459,760
Currency and coin	273,180	275,861	257,697
Required reserves	1,890,748	1,877,451	1,704,142
Excess reserves	18,690	18,562	13,315
Borrowings	3,092	2,952	11,618
Free reserves	15,598	15,610	1,697

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(Million dollars)

Item	Aug. 30, 1972	July 26, 1972	Aug. 25, 1971
ASSETS			
Loans and discounts, gross	16,033	15,719	13,648
U.S. Government obligations	2,310	2,287	2,347
Other securities	5,228	5,225	4,291
Reserves with Federal Reserve Bank	1,501	1,507	1,562
Cash in vault	314	309	291
Balances with banks in the United States	1,190	1,242	1,185
Balances with banks in foreign countries[e]	16	13	11
Cash items in process of collection	1,514	1,655	1,360
Other assets[e]	1,180	1,118	959
TOTAL ASSETS[e]	29,286	29,075	25,654
LIABILITIES AND CAPITAL ACCOUNTS			
Demand deposits of banks	1,689	1,739	1,749
Other demand deposits	10,557	10,657	9,695
Time deposits	11,498	11,383	9,610
Total deposits	23,744	23,779	21,054
Borrowings	2,094	1,929	1,574
Other liabilities[e]	1,467	1,402	1,139
Total capital accounts[e]	1,981	1,965	1,887
TOTAL LIABILITIES AND CAPITAL ACCOUNTS[e]	29,286	29,075	25,654

e—Estimated

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(Thousand dollars)

Item	Sept. 20, 1972	Aug. 23, 1972	Sept. 22, 1971
Total gold certificate reserves	258,294	330,313	490,264
Discounts for member banks	37,500	7,010	36,040
Other discounts and advances	0	0	0
U.S. Government securities	3,197,050	3,240,709	3,024,791
Total earning assets	3,234,550	3,247,719	3,060,831
Member bank reserve deposits	1,624,810	1,569,344	1,460,866
Federal Reserve notes in actual circulation	2,177,107	2,169,330	2,080,440

BANK DEBITS, END-OF-MONTH DEPOSITS, AND DEPOSIT TURNOVER

SMSA's in Eleventh Federal Reserve District

(Dollar amounts in thousands, seasonally adjusted)

Standard metropolitan statistical area	DEBITS TO DEMAND DEPOSIT ACCOUNTS[1]				DEMAND DEPOSITS[1]			
	August 1972 (Annual-rate basis)	Percent change: August 1972 from July 1972	Percent change: August 1972 from August 1971	Percent change: 8 months, 1972 from 1971	August 31, 1972	Annual rate of turnover: August 1972	Annual rate of turnover: July 1972	Annual rate of turnover: August 1971
ARIZONA: Tucson	$10,257,048	9%	30%	26%	$317,099	32.6	30.0	28.6
LOUISIANA: Monroe	4,321,800	14	16	18	114,210	38.1	34.7	36.5
Shreveport	14,287,488	19	8	16	291,916	47.1	39.8	47.7
NEW MEXICO: Roswell[2]	929,172	0	—13	2	43,256	21.0	21.2	25.0
TEXAS: Abilene	2,688,432	5	7	12	121,203	21.7	20.7	23.0
Amarillo	8,035,980	6	20	18	186,628	42.6	39.6	38.3
Austin	12,650,724	3	7	17	418,014	29.3	26.6	32.8
Beaumont-Port Arthur-Orange	7,148,172	5	3	3	264,876	26.6	25.2	26.6
Brownsville-Harlingen-San Benito	2,556,552	9	51	19	102,685	25.6	24.0	20.5
Bryan-College Station	1,590,261	21	29	24	51,883	30.2	24.5	27.6
Corpus Christi	7,472,964	2	15	15	271,205	28.0	27.6	23.8
Corsicana[2]	554,040	7	13	1	35,827	15.2	14.4	14.7
Dallas	157,527,780	7	16	11	2,845,428	56.2	53.8	56.6
El Paso	10,581,648	9	22	16	293,841	35.5	31.4	31.8
Fort Worth	30,321,324	5	2	7	778,830	38.1	36.5	42.3
Galveston-Texas City	3,383,772	16	15	1	124,794	26.9	23.7	25.6
Houston	146,231,220	6	21	22	3,026,265	46.6	43.8	43.4
Laredo	1,240,032	5	15	10	51,819	24.5	23.7	24.3
Lubbock	5,593,836	3	—9	9	197,582	28.6	28.6	34.2
McAllen-Pharr-Edinburg	2,550,780	9	48	32	138,258	18.5	17.1	15.8
Midland	2,405,892	15	11	7	145,122	16.3	14.0	15.4
Odessa	1,837,212	—4	5	11	107,362	17.3	18.2	17.5
San Angelo	1,652,520	—4	7	12	78,479	21.1	22.0	20.4
San Antonio	23,156,916	8	5	7	828,403	27.8	25.9	29.5
Sherman-Denison	1,345,500	10	13	10	76,099	17.7	16.2	16.9
Texarkana (Texas-Arkansas)	1,807,740	2	14	15	82,093	21.2	20.3	21.0
Tyler	3,139,788	13	26	15	114,879	26.6	23.6	23.8
Waco	4,591,728	20	23	17	148,242	30.6	26.1	27.8
Wichita Falls	2,885,460	—2	2	13	131,296	21.8	22.1	22.4
Total—29 centers	$472,745,781	7%	15%	15%	$11,387,594	41.1	38.5	40.1

1. Deposits of individuals, partnerships, and corporations and of states and political subdivisions
2. County basis

BUILDING PERMITS

Area	NUMBER: August 1972	NUMBER: 8 mos. 1972	VALUATION (Dollar amounts in thousands): August 1972	VALUATION: 8 mos. 1972	Percent change: August 1972 from July 1972	Percent change: August 1972 from Aug. 1971	Percent change: 8 months, 1972 from 1971
ARIZONA							
Tucson	574	6,062	$6,697	$130,334	—62%	61%	109%
LOUISIANA							
Monroe-West Monroe	63	820	997	18,275	26	—35	33
Shreveport	544	3,832	6,414	42,318	62	—19	—2
TEXAS							
Abilene	80	561	2,649	13,360	49	384	66
Amarillo	176	1,415	4,415	22,175	2	230	20
Austin	585	4,484	19,490	168,358	11	100	66
Beaumont	210	1,709	1,174	18,455	—31	—6	53
Brownsville	101	845	1,554	10,061	1	—26	52
Corpus Christi	379	3,242	6,275	45,609	31	34	7
Dallas	1,935	13,824	24,939	292,069	38	—39	43
Denison	37	278	318	2,281	119	47	—1
El Paso	696	4,732	9,163	122,012	—32	0	58
Fort Worth	406	3,401	7,838	56,963	—26	—1	—31
Galveston	88	599	516	8,164	121	63	—5
Houston	2,863	29,743	55,166	446,750	—15	—8	—1
Laredo	75	395	630	10,284	158	97	79
Lubbock	174	1,520	4,307	37,719	6	—3	—13
Midland	103	796	4,103	15,657	523	594	94
Odessa	100	739	2,421	20,646	94	156	260
Port Arthur	96	733	461	4,327	—35	—3	5
San Angelo	52	543	1,030	5,858	9	64	—32
San Antonio	1,588	12,291	25,646	157,491	96	182	94
Sherman	39	388	396	5,196	—26	38	22
Texarkana	70	437	371	5,418	—2	—23	—17
Waco	195	1,797	3,697	25,888	—14	301	51
Wichita Falls	87	678	2,766	11,383	174	58	—21
Total—26 cities	11,316	95,864	$193,433	$1,697,051	3%	13%	27%

TOTAL OIL WELLS DRILLED

Area	Second quarter 1972	First quarter 1972	Percent change	1972 cumulative	Percent change from 1971 cumulative
FOUR SOUTHWESTERN STATES	1,697	1,802	—5.8%	3,499	2.9%
Louisiana	226	256	—11.7	482	—9.2
Offshore	50	64	—21.9	114	—26.9
Onshore	176	192	—8.3	368	—1.9
New Mexico	123	144	—14.6	267	24.2
Oklahoma	235	305	—23.0	540	—11.2
Texas	1,113	1,097	1.5	2,210	7.9
Offshore	1	1	—	2	—
Onshore	1,112	1,096	1.5	2,208	7.8
UNITED STATES	2,884	2,981	—3.3%	5,865	.8%

SOURCE: American Petroleum Institute

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. Million dollars)

Date	GROSS DEMAND DEPOSITS: Total	Reserve city banks	Country banks	TIME DEPOSITS: Total	Reserve city banks	Country banks
1970: August	10,530	4,816	5,714	7,783	2,926	4,857
1971: August	11,468	5,246	6,222	9,615	3,714	5,901
1972: March	12,118	5,563	6,555	10,978	4,255	6,723
April	12,407	5,676	6,731	10,938	4,180	6,758
May	12,268	5,652	6,616	11,075	4,262	6,813
June	12,320	5,689	6,631	11,233	4,323	6,910
July	12,468	5,708	6,760	11,304	4,365	6,939
August	12,420	5,608	6,812	11,441	4,473	6,968

VALUE OF CONSTRUCTION CONTRACTS

(Million dollars)

Area and type	August 1972	July 1972	June 1972	January—August 1972	January—August 1971r
FIVE SOUTHWESTERN STATES[1]	1,149	817	1,076	7,915	6,043
Residential building	635	468	567	3,972	2,974
Nonresidential building	246	219	338	2,084	1,872
Nonbuilding construction	268	129	171	1,860	1,197
UNITED STATES	8,875	8,067	8,478	61,513	54,257
Residential building	4,671	3,864	4,375	30,236	22,554
Nonresidential building	2,458	2,461	2,447	18,042	17,251
Nonbuilding construction	1,746	1,741	1,655	13,234	14,452

1. Arizona, Louisiana, New Mexico, Oklahoma, and Texas
r—Revised
NOTE: Details may not add to totals because of rounding.
SOURCE: F. W. Dodge Division, McGraw-Hill Information Systems Company

INDUSTRIAL PRODUCTION

(Seasonally adjusted indexes, 1967 = 100)

Area and type of index	August 1972	July 1972	June 1972	August 1971
TEXAS				
Total industrial production	131.4	133.0	131.6r	120.9
Manufacturing	133.7	134.3	133.1r	123.1
Durable	142.2	142.3	144.7	132.2
Nondurable	127.5	128.5	124.7r	116.6
Mining	120.8	124.1	121.7r	111.2
Utilities	150.9	155.8	156.4r	138.0
UNITED STATES				
Total industrial production	114.3	113.7	113.4r	105.6
Manufacturing	113.6	113.0	112.8r	104.2
Durable	108.4	107.2	106.8r	97.4
Nondurable	121.3	121.1	121.3r	114.0
Mining	106.0	107.1	107.5r	106.3
Utilities	140.2	141.1	141.8r	134.1

p—Preliminary
r—Revised
SOURCES: Board of Governors of the Federal Reserve System
Federal Reserve Bank of Dallas

LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Five Southwestern States[1]

(Seasonally adjusted)

Item	Thousands of persons			Percent change Aug. 1972 from	
	August 1972p	July 1972	August 1971r	July 1972	Aug. 1971
Civilian labor force	8,495.8	8,480.5	8,273.3	0.2%	2.7%
Total employment	8,115.7	8,092.9	7,867.6	.3	3.2
Total unemployment	380.1	387.6	405.7	—1.9	—6.3
Unemployment rate	4.5%	4.6%	4.9%	[2]—.1	[2]—.4
Total nonagricultural wage and salary employment	6,602.2	6,586.9	6,360.5	.2	3.8
Manufacturing	1,148.5	1,144.5	1,118.6	.4	2.7
Durable	624.0	619.8	604.2	.7	3.3
Nondurable	524.4	524.6	514.4	.0	2.0
Nonmanufacturing	5,453.8	5,442.4	5,241.9	.2	4.0
Mining	227.1	225.9	222.8	.5	1.9
Construction	428.0	428.8	393.9	—.2	8.7
Transportation and public utilities	455.5	455.8	447.0	—.1	1.9
Trade	1,570.9	1,568.7	1,509.0	.1	4.1
Finance	354.5	353.4	337.2	.3	5.2
Service	1,069.1	1,067.0	1,025.0	.2	4.3
Government	1,348.7	1,342.8	1,307.1	.4	3.2

1. Arizona, Louisiana, New Mexico, Oklahoma, and Texas
2. Actual change
p—Preliminary
r—Revised
NOTE: Details may not add to totals because of rounding.
SOURCES: State employment agencies
Federal Reserve Bank of Dallas (seasonal adjustment)

DAILY AVERAGE PRODUCTION OF CRUDE OIL

(Thousand barrels)

Area	August 1972	July 1972	August 1971r	Percent change from July 1972	Percent change from August 1971
FOUR SOUTHWESTERN STATES	7,042.7	7,150.5	6,832.5	—1.5%	3.1%
Louisiana	2,608.9	2,546.6	2,675.3	2.4	—2.5
New Mexico	310.0	309.8	322.8	.1	—4.0
Oklahoma	564.5	567.5	602.0	—.5	—6.2
Texas	3,559.3	3,726.6	3,232.4	—4.5	10.1
Gulf Coast	731.7	771.3	618.7	—5.1	18.3
West Texas	1,727.5	1,798.1	1,617.6	—3.9	6.8
East Texas (proper)	249.8	258.8	177.4	—3.5	40.8
Panhandle	67.1	73.0	70.3	—8.1	—4.6
Rest of state	783.2	825.4	748.4	—5.1	4.7
UNITED STATES	9,622.9	9,727.0	9,478.6	—1.1%	1.5%

r—Revised
SOURCES: American Petroleum Institute
U.S. Bureau of Mines
Federal Reserve Bank of Dallas