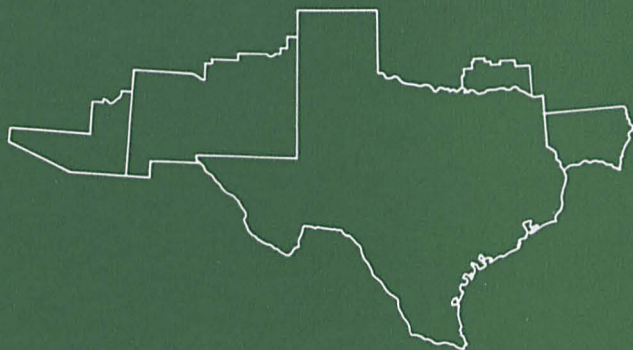


business review



may 1970

**FEDERAL RESERVE
BANK OF DALLAS**

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The changing banking structure

The structure of the American banking system is one of the world's most complex. There are almost 14,000 commercial banks in the United States — a tremendous number compared with most countries. The United Kingdom, for example, has less than 30 banks, and five of them dominate British banking. Canada has only nine chartered banks to serve its far-flung population.

The difference is due mainly to the reliance other countries place on very large branch systems. Americans still depend heavily on a large number of unit banks and small branch banks. Most American banks — almost 10,000 of them — are single-office institutions with no branches. And those that operate branches have an average of only five each.

Thus, American banks are typically small. About 85 percent of them hold deposits of less than \$25 million, and more than 60 percent hold deposits of less than \$10 million. But the nation's banks are far from homogenous, since they also include some of the world's largest. And these giants control a major proportion of the country's banking resources. The 100 largest banks hold close to half of the nation's commercial bank deposits. The ten largest banks hold nearly a fourth of the deposits.

And so, while the system is dominated by many small banks, there is also a heavy concentration of market power in the hands of only a few banks. This appears true not only at the national level but also at many local levels. A recent study shows, for example, that communities outside metropolitan areas contain, on the average, less than one bank apiece.

The structure has been shifting lately, however, continuing trends evident before World War II but, in some cases, at a much faster

rate. Changes since the war, in fact, have been so fast and so pervasive that many count them as a near-revolution striking at the very character of the American banking system. The restructuring has been essentially a consolidation of bank resources into fewer but larger bank organizations offering an ever-widening range of services.

This movement toward consolidation has been evident both in the nation as a whole and in the five states of the Eleventh Federal Reserve District: Arizona, Louisiana, New Mexico, Oklahoma, and Texas. While changes in these southwestern states have not been as rapid as those in the nation, they have been in the same general direction. And the changes have been fast enough, not only in the nation but also in the Southwest, to suggest a developing trend that could lead to a banking system far different from the traditional American system made up primarily of small unit banks. This article examines these changes and the forces behind them, first in the nation and then in the Southwest.

A consolidating trend

Unit banks were clearly dominant in the United States at the end of the war. Totalling more than 13,000 at the end of 1945, they outnumbered branch-banking offices (including their head offices) more than two to one. But by the end of 1968, more than 3,000 unit banks had disappeared, most of them caught up in the massive postwar merger movement.

Meanwhile, branch-banking offices increased nearly fourfold, expanding to a point where they accounted for almost 70 percent of the nation's nearly 33,000 banking offices. Where branch-banking offices totaled about 5,000 in late 1945, the number had climbed to nearly

23,000 by late 1968. About four-fifths of this increase resulted from the creation of new offices. The rest resulted from mergers.

Moreover, in states that limit or prohibit branch banking, holding companies and chain-bank organizations continued to grow rapidly, bringing together many small banks through a variety of formal and informal arrangements and further reducing the number of independent banking units. Multibank holding companies registered with the Board of Governors of the Federal Reserve System in late 1968, for example, controlled 629 banks and 2,262 branches holding over 13 percent of the deposits at insured banks. This represented over a 50-percent increase in the number of banks and more than a 75-percent gain in the share of deposits controlled by registered bank holding companies since 1957.

On balance, the number of banks gradually declined, slipping (despite a brief increase in 1963-65) from 14,142 at the end of 1945 to

13,678 at the end of 1968. This slow downward drift in bank numbers was more than accounted for by the absorption of over 3,100 banks in mergers. More than 90 percent of these absorptions were in states allowing branch banking. An increase in new banks partially offset the decline due to mergers, however, holding the decline in number of banks to about 3 percent.

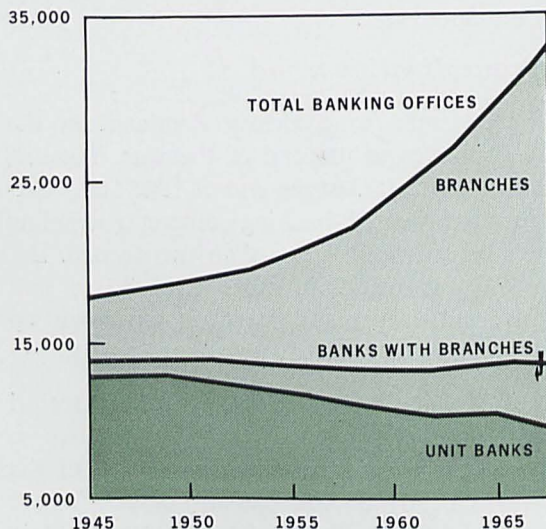
Most of the decline was in states allowing limited branching. The number of banks in unit-banking states increased. With the broad-based growth of the economy and even this slight decline in number of banks, average bank size rose sharply. In fact, deposits per bank nearly tripled between 1945 and 1968.

Economic developments

Several factors were behind these changes, but probably most important were the growing demands for bank services and the rising costs of bank operations. The rapid growth of income and population after the war sharply increased the need for additional banking facilities, particularly in suburbs, where the demand for checking accounts and consumer loans mushroomed. Many large city banks followed their customers into the suburbs either by opening new branches or, where the law allowed, by merging with existing institutions. The growth of large-scale industrial and commercial enterprises, much of it also into suburban areas, further increased the demand for services that could often be provided only by large banks with high lending limits, relatively stable deposit structures, and efficient asset management.

As operating costs rose after the war, many banks came under pressure to expand and seek new sources of revenue. With interest-bearing time deposits growing rapidly and the need to automate increasing, many banks shifted from their traditional position as business lenders to a more aggressive brand of retail banking. New techniques for attracting deposits and increased

The nation — more banking offices come with continued shift to branches and slow decline in number of unit banks



SOURCES: Board of Governors, Federal Reserve System.
Federal Deposit Insurance Corporation.

activity in mortgages and consumer loans marked banking operations, accelerating the growth not only of large branch systems but also of elaborate group-banking arrangements.

Regulatory changes

The banking structure was also influenced by changes in its legal environment. Under the dual banking system unique to this country, it has been left to the states to decide whether they will permit branch and holding company activity. Since the war, a few states have changed their positions on branching. New York, Virginia, Kentucky, New Hampshire, and New Jersey, for example, have liberalized their branching laws. Michigan, on the other hand, has switched from statewide to limited branch banking.

Most states have taken no statutory stand on bank holding company activity. Some, however, including Oklahoma and Louisiana, have moved to restrict or prohibit the formation of new holding companies. Others, such as New Jersey, have increased the potential for holding companies by changing their laws to allow statewide expansion.

Changes in Federal banking laws also influenced the shift in the banking structure, sometimes dampening the rate of change by slowing merger and holding company activities. In the early years after the war, bank mergers were still regulated primarily by state laws — a fact that contributed to the rapid increase in mergers, particularly in the midfifties. But with the Bank Merger Act of 1960, Congress required that all mergers involving insured banks have the prior approval of their principal Federal supervisory agency — that is, the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, or the Federal Deposit Insurance Corporation. The act also enunciated the factors regulatory agencies were to consider in approving a merger, only one of which was the impact of the merger on competition.

It was widely thought at the time that as part of a regulated industry, banks were exempt from antitrust laws. This belief was dispelled in 1963, however, when the courts began holding that competition, defined by the existing market structure, was the controlling factor in determining the legality of a bank merger. A 1966 amendment to the Bank Merger Act provides for the approval of a merger if its anti-competitive effects are clearly outweighed by a probable improvement in convenience to the community served. The courts, however, continued to emphasize the competitive aspects of a proposed bank merger.

More restrictive legislation was also applied to regulate holding company activity. Until 1956, holding companies were required to register with the Federal Reserve only if they controlled as much as half the stock of a single bank and wanted to vote the stock. This requirement, dating from the 1930's, did little, however, to restrain or regulate the postwar expansion of holding companies. The result was the Bank Holding Company Act of 1956.

Under this act, as amended in 1966, a holding company that controls either as much as a fourth of the voting stock of two or more banks or the election of a majority of the directors of two or more banks must secure the approval of the Board of Governors of the Federal Reserve System and register with it. Having become a "registered" bank holding company, it must divest itself of control of corporations with interests not related to banking, submit to Federal Reserve regulation and examination, and have Federal Reserve approval before acquiring more than 5 percent of the stock in another bank.

Significantly, a holding company controlling only one bank does not come under this law. This exemption, coupled with the increase in banks wanting to diversify into new product and geographic markets, has brought a sharp increase in one-bank holding companies in re-

cent years. As a result, Congress has recently taken renewed interest in the spread of bank holding companies.

Differences in the Southwest . . .

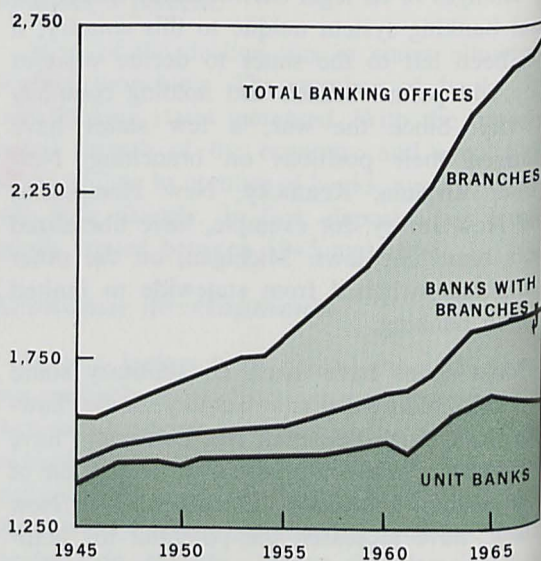
States of the Eleventh District shared in most of the major postwar changes in American banking. Between late 1945 and late 1968, branch-banking offices increased even faster in Arizona, Louisiana, and New Mexico than in the nation as a whole. And while mergers were less prevalent in these southwestern states than in the nation, they were nevertheless important to changes in some areas, especially Arizona. Holding companies increased their share of the region's banking offices and deposits, although they were still less important in the Southwest than in the nation. Stock and loan links between small banks and large metropolitan banks became more important in Texas and Oklahoma, both unit-banking states.

There were important differences, however, resulting mainly from the unique characteristics of banking in the Southwest. The biggest difference was in changes in numbers of banks. Where the number of banks in the nation fell slightly, the number in the Southwest rose more than 400, or almost as many as the nation lost. The gain was about equally divided between new unit banks and new banks operating branches. But the number of branches and related facilities also rose rapidly, increasing more than 700, or almost sixfold, compared with a fourfold increase for the nation. Following the pattern set for the nation, well over half the new banks and branches appeared in metropolitan areas, scenes of the greatest gains in personal income and population.

The increase was particularly rapid in the 1960's, with far more banks and branches being established in those years than in the 15 years before. From 1945 through 1959, the number of banks increased 174, while from 1960 through 1968, they increased 254. Sim-

ilarly, from 1945 through 1959, the number of branches and related facilities rose 282, while from 1960 through 1968, they spurted upward 431.

The Southwest — more banking offices come with increase in branches but unit banks also increase



SOURCES: Board of Governors, Federal Reserve System.
Federal Deposit Insurance Corporation.

Although the number of banks increased, deposits per bank increased even faster. In 1945, there were 1,452 banks in the five southwestern states, holding total deposits of \$9.7 billion, or \$6.7 million per bank. By the end of 1968, there were 1,880 banks, but they held deposits of \$38.1 billion, or \$20.3 million per bank. Of course, the median-sized bank in the region in 1968 was still much smaller than these figures might imply. In fact, well over half of the region's banks still hold less than \$10 million each in total deposits.

Despite these changes, unit banks were still dominant in the Southwest in 1968, primarily because of the large number of banks in Texas and Oklahoma. Together, the more than 1,600 unit banks in the five states at the end of 1968

accounted for about 85 percent of the region's banks and 60 percent of its banking offices. By contrast, unit banks represented only about 30 percent of the nation's banking offices.

After two decades of almost continuous growth, however, the number of unit banks in the Southwest began falling after 1965, slipping from 1,637 to 1,604 by the end of 1968. All five southwestern states reported slight declines between 1965 and 1968.

While trends in the Southwest were generally upward, there were marked differences in the gains states made, due to many factors but primarily to differences in state branching laws. All three main types of branching law are represented in the Southwest: statewide branching, limited branching, and unit banking.

Texas and Oklahoma prohibit branching, except on military bases. Limited-service facilities can be operated on military bases in both states, although courts have held that in Texas this form of branching applies only to national banks and not state banks.

The other three southwestern states allow full-service branching, but with marked differ-

ences. Louisiana allows practically unlimited branching in the parish where the bank's head office is located but only one branch in other parishes. Even there, a branch can be opened only if no state bank, savings bank, or trust company already operates in the parish. Arizona, on the other hand, allows branching without any significant limitations on location, provided public need for additional banking facilities can be demonstrated. New Mexico limits branching to the county where a bank's head office is located, an adjoining county, and a radius of 100 miles from the head office, with the further provision that no branch can be established in another county where some other bank has already established its head office.

... and within the Southwest

Nearly two-thirds of the new postwar banks established in southwestern states opened in Texas. By late 1968, a total of 355 new banks had been started in the state, with more than half of them in metropolitan counties. Meanwhile, 58 banks had been eliminated by mergers and 11 had undergone voluntary liquidation. The net effect was 286 new banks in Texas, a one-third increase over 1945.

**CHANGES IN NUMBER OF COMMERCIAL BANKS AND BRANCHES
IN THE SOUTHWEST AND UNITED STATES**

Item	Arizona	Louisiana	New Mexico	Oklahoma	Texas	Total Southwest	United States
Banks							
Total number, end of 1945.....	13	151	41	382	865	1,452	14,142
New banks	17	82	27	64	355	545	2,886
Mergers and absorptions.....	15	4	5	19	58	101	3,145
Voluntary liquidations and suspensions	2	0	0	3	11	16	205
Total number, end of 1968.....	13	229	63	424	1,151	1,880	13,678
Net change	0	78	22	42	286	428	-464
Branches and facilities							
Total number, end of 1945.....	34	61	7	4	20	126	3,954
New branches	259	274	102	55	43	733	13,068
Conversions, new facilities, and replacements	21	18	14	5	25	83	3,160
Branches and facilities discontinued	36	24	9	9	25	103	1,169
Total number, end of 1968.....	278	329	114	55	63	839	19,013
Net change	244	268	107	51	43	713	15,059
Additional banking offices.....	244	346	129	93	329	1,141	14,595

SOURCES: Board of Governors of the Federal Reserve System.
Federal Deposit Insurance Corporation.

Despite the many small banks in Texas, the postwar merger movement had little impact on Texas banking. In fact, even though one out of every 12 commercial banks in the nation is in Texas, the state accounted for less than 2 percent of the nation's postwar bank mergers. But since the merger of two banks operating under unit-banking laws ordinarily means one must close, the infrequency of bank mergers in Texas was in line with developments in other states prohibiting branching. Taken as a whole, unit-banking states accounted for less than 10 percent of the nation's postwar bank mergers.

Although Texas prohibits full-service branching, FDIC was able to count 43 new branch facilities opened in the state between 1945 and 1968. This was because of exceptions in the use of limited-service facilities in Texas. In addition to branch facilities on military bases, Texas banks can operate drive-in facilities, provided the facilities are within 500 feet of the bank building and connected to it — a requirement sometimes met merely by the use of a pneumatic tube.

Branch offices increased rapidly in the states that allow full-service branching — Arizona, Louisiana, and New Mexico. As in the case of new banks, most of the branching was in metropolitan areas. Of the 713 additional branches in the Southwest, 268 were in Louisiana. That represented an increase from 61 branch offices operated by 31 banks in 1945 to 329 branches operated by 114 banks in 1968. By contrast, Arizona, which had only five branch banks in 1945, still had only seven in 1968. But these banks operated 278 branches, compared with 34 in 1945. Since Arizona had far fewer branch banks than Louisiana, they were obviously much more active in branching. The average branch bank in Arizona had nearly 40 branches at the end of 1968, compared with only about three per bank in Louisiana.

Developments in Arizona were marked by sharp contrasts between formations of new

banks and the establishment of additional branches. While 17 new banks were formed during those years, 17 were also dissolved (15 through mergers and two through voluntary liquidations), with the net effect that the number of banks was left unchanged. This meant that Arizona's net gain of over 240 banking offices was accounted for by new branches.

Although branching spread rapidly in Louisiana, the restrictions on branching in that state apparently also contributed to the formation of new banks. Despite the strong tendency in branching states for the potential growth of existing banks to restrain the formation of new ones, Louisiana had the second largest number of new banks — more than 80 — of any of these five states. The restrictions on branching in Louisiana also seem to have had a strong dampening effect on mergers. There were only four mergers in that state between 1945 and 1968, and three of them were in 1954-55.

Compared with the other three states, New Mexico and Oklahoma registered the smallest gains in new banking offices. As with the other states, this was closely related to their economic development. Together, these two states accounted for a little more than 12 percent of the population increase in all five states and 17 percent of the gain in personal income.

From 1945 through 1968, 27 new banks were established in New Mexico and five banks were eliminated through merger. The state gained 129 new banking offices, due primarily to the establishment of 102 *de novo* branches. There were no voluntary liquidations in New Mexico, but nine branches and related facilities were closed.

In Oklahoma, where full-service branching is prohibited, new banks were formed more than twice as fast as in New Mexico. There were 64 new banks started in Oklahoma during those years, but 19 banks were absorbed through merger and three were liquidated.

GROUP BANKING IN THE SOUTHWEST AND UNITED STATES

Area	Registered bank holding companies		Affiliated banks		Branches of affiliated banks		Offices of affiliates as percent of all offices		Deposits of affiliates as percent of all deposits	
	1968	1957	1968	1957	1968	1957	1968	1957	1968	1957
Arizona	1	1	2	2	99	52	35.3	40.9	34.2	38.2
Louisiana	0	0	—	—	—	—	—	—	—	—
New Mexico	1	1	5	5	21	8	14.9	15.1	14.3	13.5
Oklahoma	0	1	—	1	—	—	—	.3	—	.1
Texas	3	3	13	8	2	—	1.3	.8	5.0	3.0
Southwest	5	6	20	16	122	60	5.2	3.9	6.1	4.3
United States	80	50	629	417	2,262	851	8.9	5.9	13.2	7.5

SOURCES: Board of Governors of the Federal Reserve System.
Federal Deposit Insurance Corporation.
Federal Reserve Bank of Dallas.

Oklahoma's restrictions against branch banking are similar to those in Texas. Limited-service facilities can be established on military bases, although, unlike Texas, it does not matter whether the banks are state or nationally chartered. Also, a bank can operate detached drive-in and walk-up facilities within 1,000 feet of its building. These special facilities increased 51 in Oklahoma during the postwar years, bringing the total change in bank offices in that state to 93.

Spread of group banking

Banking offices can also be linked together through common ownership of separate banks. This system of multiple-unit banking, as distinct from the multiple-office operations of branch systems, can take the form of either chain-banking or group-banking arrangements. Chain banking usually means the control of more than one bank by an individual or informal group. While the relationship is very informal, making the extent of the increase in chain operations hard to gauge, there is apparently substantial chain banking in the Southwest, particularly in Texas.

In group banking, a holding company owns or controls the voting shares of at least two banks. Since a holding company controlling either as much as a fourth of the voting shares of two or more banks or the election of a

majority of the directors of two or more banks must register with the Board of Governors, holding company activity can be measured more easily than activities of chain banks.

Registered bank holding companies have been an important factor in southwestern banking, but they have by no means been a dominant factor. There were five registered bank holding companies in the five states at the end of 1968. Together, they controlled 20 banks and 122 branches, or about 5 percent of the banking offices. These 20 banks held total deposits of \$2.3 billion at year-end 1968, or slightly more than 6 percent of the deposits in all five states.

There was actually one less holding company registered in 1968 than in 1957, although there were four more banks under holding company control. The number of branches controlled by holding companies more than doubled between 1957 and 1968, increasing from 60 to 122. While total deposits at banks affiliated with holding companies increased substantially after 1957, the rate of increase was not significantly greater than for all commercial banks in the Southwest.

The importance of holding companies varies state to state. In Arizona at the end of 1968, one registered bank holding company controlled more than a third of the banking offices

and more than a third of the deposits. The same company was also active in New Mexico, controlling nearly 15 percent of the banking offices and deposits in that state. A second bank holding company has since been registered in New Mexico and now controls four banks in that state and about 3 percent of the deposits. There were three registered companies in Texas in 1968, controlling about 1 percent of the banking offices and 5 percent of the deposits. There were no holding companies operating in Louisiana or Oklahoma in 1968, and both states now prohibit the formation of new bank holding companies.

Impact on bank services

The increase in banks and branches improved the availability of banking services in the Southwest, even after an increase of 60 percent in the population of these five states. The ratio of population to bank offices shows that offices in the Southwest served an average of 7,300 people in 1968, compared with 7,900 in 1945. By contrast, the national average in 1968 was 6,100 people per bank.

The most marked improvement in availability was made in branch-banking states. Population per office was cut almost in half in Arizona and New Mexico. Where the ratio was 12,800 in Arizona in 1945 and 11,200 in New Mexico, it had fallen to about 5,700 in both states by 1968. Louisiana also showed a significant improvement, from 11,500 in 1945 to 6,700 in 1968. By contrast, availability changed little in Oklahoma, remaining at about 5,300, and dropped in Texas from 7,700 people per bank in 1945 to 9,000 in 1968.

Although the size of the average southwestern bank increased considerably, there was little change in the concentration of deposits. Small banks grew generally apace with larger banks, with the result that their relative positions changed little. Where the three largest banks in these five states held 10.5 percent of the de-

posits at the end of 1945, they still held only 11.4 percent at the end of 1968.

There were wide differences, however, in the share of deposits held by the three largest banks in each state. As expected from this measure of concentration, deposits were more concentrated in branch-banking states than in unit-banking states. But the concentration seemed to have eased in branch-banking states and, even more unexpectedly, the only increase in concentration was in Texas, one of the nation's leading unit-banking states.

Concentration was most pronounced in Arizona, the southwestern state with the fewest restrictions on branching. There, the three largest banks held 82.9 percent of the deposits in that state in 1968. This was actually a slight decline in deposit concentration, however. In 1945, the three largest Arizona banks had held 84.4 percent of the state's deposits.

The three largest banks in New Mexico held 35.5 percent of that state's total deposits in 1968, compared with 38.4 percent in 1945. But in Louisiana, where the three largest banks had held almost 38 percent of the deposits in 1945, their share slipped to about 23 percent in 1968. At that level, concentration in Louisiana was less than in Oklahoma, a unit-banking state.

The share held by the three largest banks in Oklahoma also dropped, from 32.0 percent in 1945 to 25.5 percent in 1968. Only in Texas, where concentration was least, did the share of deposits held by the three largest banks increase. Even there, the increase was only from 14.5 percent in 1945 to 17.4 percent in 1968.

Outlook for the Southwest

Although changes in bank structure have varied from state to state, reflecting underlying economic forces and differences in state banking laws, there is some evidence of a national drift toward consolidation of the banking sys-

tem into fewer but larger bank organizations offering a wider variety of services. While this trend has not been as obvious in the Southwest as in the nation as a whole — the Southwest, in fact, gained in numbers of banks during the postwar period while the nation lost banks — the growth of banks in the region has slowed markedly in the last few years and the

number of unit banks has declined. These emerging developments, together with the rapid growth of branches and spread of group-banking activities, suggest that the five states of the Eleventh District may also be entering a period of consolidation.

PETER S. ROSE
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ELEVENTH FEDERAL RESERVE DISTRICT



The 1970's: Decade for plastics

Part 2: Vinyls

Plastics, after rapid and sometimes chaotic growth in the 1960's, is emerging as one of the nation's most important industries. By all indications, the 1970's will be a pivotal decade in the development of this rapidly expanding industry. As plastics continues its dramatic inroads into markets formerly dominated by steel, aluminum, lumber, glass, and paper, production is expected to more than double by 1980.

With most of its raw materials coming from petroleum and most of its production facilities on the Gulf Coast of Texas and Louisiana, the plastics industry is a matter of continuing im-

portance to the economy of the Southwest. Last month, the *Business Review* focused an article on polyethylene — the most widely used plastic. This month, attention shifts to vinyls — the second most important family of plastics. Next month, styrenes will be examined.

With an output totaling 3.6 billion pounds last year, the vinyl industry accounted for roughly a fifth of the plastics produced. Of the vinyl output, polyvinyl chloride, called PVC, made up more than 80 percent (almost 3 billion pounds), finding ready outlets in such varied uses as rainwear, floor tile, garden hoses, shower curtains, upholstery material, inflatable toys, auto seat covers, and phonograph records. Other vinyls, such as the polyvinyl acetate used in adhesives, polyvinyl butyral used in safety glass, and polyvinylidene chloride used in packaging film, are considered specialties with limited applications.

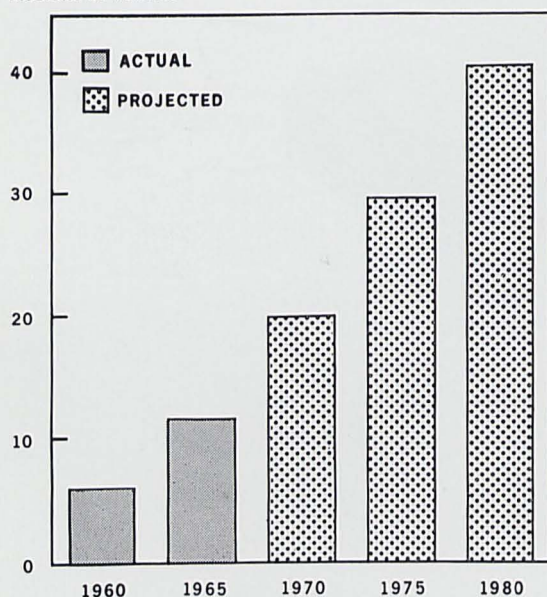
The PVC industry

Although some PVC is made from acetylene, most is derived from ethylene. Unlike polyethylene, which is produced directly from ethylene, PVC is made from ethylene that has first been combined with chlorine to form vinyl chloride monomer. The monomer is then polymerized, by the application of heat and pressure and the use of a catalyst, to form PVC, a tough resin with a molecular structure of linear chains more dense than most polyethylene.

Because of its high density, untreated PVC resin is very rigid. But with the addition of softening agents called plasticizers, the resin becomes more flexible and can be easily processed into final products. Generally, the more

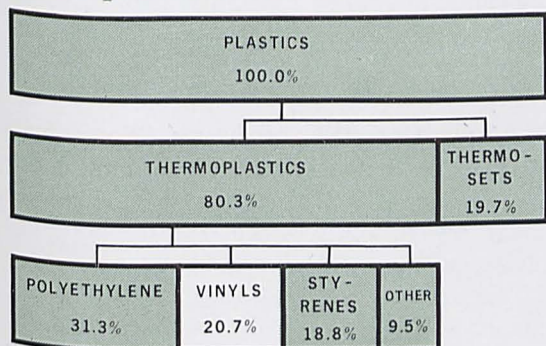
Production of plastics expected to more than double over next ten years

BILLIONS OF POUNDS



SOURCES: Chemical and Engineering News.
Standard & Poor's.
U.S. Tariff Commission.
Federal Reserve Bank of Dallas.

Three major thermoplastics accounted for over two-thirds of plastics production in 1969



SOURCE: U.S. Tariff Commission.

plasticizer used, the more flexible the resin becomes. Other additives, such as stabilizers, lubricants, and fillers, are also blended into the resin to achieve the properties needed for particular applications. By combining other monomers with vinyl chloride monomer to make copolymers, still more properties can be obtained, further broadening the markets for PVC.

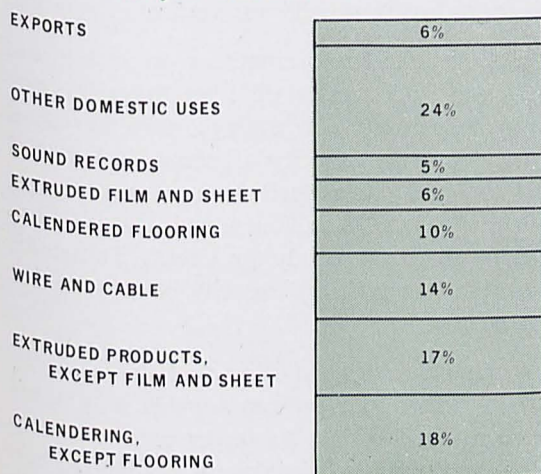
The skill producers have achieved in varying the properties of PVC compounds makes the

markets for these compounds more diverse than those for other large-volume plastics. Such products as upholstery fabrics, waterproof sheeting, and flooring, for example, are made by calendering, a process of forcing a PVC compound between counterrotating rollers and pressing it into sheets of plastic. With adjustable rollers, the thickness of sheets can be carefully controlled. Where rigid sheets are required, such as in floor tile, PVC is used without plasticizers. Where flexible sheets are needed, such as in shower curtains or plastic tablecloths, plasticizers are added.

Polyvinyl chloride compounds are also extruded into such products as plastic pipe, window awnings, and garden hoses. And they are coated on wire and cable, paper, and textiles. Less frequently, they are used in molding such products as bottles and phonograph records.

Demand for PVC has increased rapidly. On the average, sales have doubled every seven years since the beginning of extensive marketing in 1945. For some PVC applications, especially those using rigid materials, such as clear bottles and plastic wall and ceiling coverings, sales have grown even faster, doubling every two or three years.

Polyvinyl chloride reached a wide variety of markets in 1969



SOURCE: U.S. Tariff Commission.

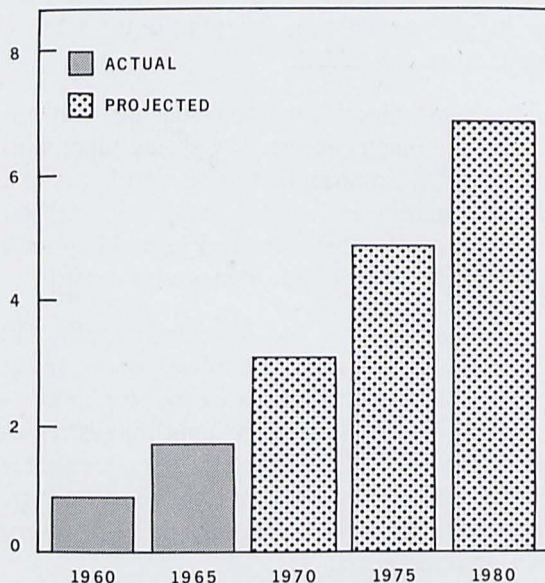
Growth of the market has recently slowed, however — not from a weakness in demand but from a shortage of vinyl chloride monomer. With 3.9 billion pounds of monomer capacity available last year, production totaled 3.7 billion pounds — about 95 percent of capacity. The monomer market may be even tighter this year, with the capacity utilization rate approaching 100 percent. Not until 1971, when both Shell and PPG Industries bring new plants on stream with capacities of more than 600 million pounds, are conditions in the vinyl chloride monomer market expected to ease.

Polyvinyl chloride plants also operated near capacity last year. Although total PVC plant capacity reached 3.7 billion pounds by the end

of the year, the average for the year was only 3.2 billion pounds. To bring production to almost 3 billion pounds, a capacity utilization rate of 93 percent was required. With the PVC market tight, resin prices were firm throughout the past year.

Polyvinyl chloride sales to more than double by 1980

BILLIONS OF POUNDS



SOURCES: Standard & Poor's.
U.S. Tariff Commission.

Demand for PVC is expected to increase rapidly throughout the 1970's, with sales of PVC and its copolymers reaching 6.9 billion pounds by 1980. Much of the prospect for growth has been spurred by the Food and Drug Administration's recent approval of clear PVC bottles for use in food packaging. Some forecasts show a sixfold increase in sales of PVC bottles in the next five years, with sales of the PVC resin used for bottles reaching 150 million pounds by 1975. Other markets expected to stimulate PVC growth include new plastic building materials, flooring, and pipe, as well as new uses in automotives.

Structure of the industry

There are 23 producers of PVC resins. Most are large, diversified companies and, as in the case of polyethylene, often leading chemical or petroleum producers. Unlike the polyethylene industry, however, large tire manufacturers are also important PVC producers. The nation's five largest tire manufacturers account for a third of the PVC capacity. Half of this is owned by B. F. Goodrich, the leading PVC producer. Chemical companies control about 30 percent of the capacity, and oil companies about 16 percent.

Although PVC plants are spread throughout the country, those producing vinyl chloride monomer, the basic input to PVC production, are heavily concentrated in Texas and Louisiana. Again, as in the case of polyethylene production, this concentration along the Gulf Coast results primarily from the availability of pipelines carrying ethylene.

Vertical integration is not as widespread in PVC as in the other large-volume thermoplastics. Of the 23 companies producing polyvinyl chloride, only ten make their own vinyl chloride monomer. Moreover, as the production of vinyl chloride monomer from ethylene replaces an older process based on acetylene, the trend seems to be toward still less vertical integration.

As ethylene-based monomer production has increased, economies of scale have become more important. The average monomer plant has an annual capacity of about 350 million pounds, and the newest plants have capacities of more than 500 million pounds. Dow Chemical's new plant at Oyster Creek, Texas, for example, has a rated capacity of 800 million pounds.

With efficiency requiring such large plants, the monomer industry can support only a few efficient-sized plants. As larger units are built, many of the less efficient plants are phased out. Until this year, for example, Union Carbide

PVC plant capacity spread across the United States . . .

Producer and plant location	Annual capacity, beginning of 1970 (Millions of pounds)
Airco	
Calvert City, Kentucky	120
Allied Chemical	
Painesville, Ohio	200
American Chemical (Stauffer-Atlantic Richfield)	
Long Beach, California	70
Atlantic Tubing	
Cranston, Rhode Island	100
Borden	
Illioopolis, Illinois	250
Leominster, Massachusetts	(combined total)
Continental Oil	
Aberdeen, Mississippi	155
Diamond Shamrock	
Delaware City, Delaware	240
Deer Park, Texas	(combined total)
Escambia Chemical	
Pensacola, Florida	50
Ethyl Corp.	
Baton Rouge, Louisiana	150
Firestone Tire & Rubber	
Perryville, Maryland	115
Pottstown, Pennsylvania	125
General Tire & Rubber	
Ashtabula, Ohio	75
B. F. Goodrich	
Long Beach, California	630
Henry, Illinois	(combined total)
Louisville, Kentucky	
Pedricktown, New Jersey	
Niagara Falls, New York	
Avon Lake, Ohio	
Goodyear Tire & Rubber	
Plaquemine, Louisiana	140
Niagara Falls, New York	80
Great American Plastics	
Fitchburg, Massachusetts	40
Hooker	
Burlington, New Jersey	270
Keyser Chemical	
Saugus, California	60
Monsanto	
Springfield, Massachusetts	150
Olin	
Assonet, Massachusetts	125
Pantasote	
Passaic, New Jersey	120
Point Pleasant, West Virginia	(combined total)
Stauffer	
Delaware City, Delaware	80
Tenneco	
Burlington, New Jersey	140
Flemington, New Jersey	75
Union Carbide	
Texas City, Texas	320
South Charleston, West Virginia	(combined total)
Uniroyal	
Painesville, Ohio	135
ALL PRODUCERS	3,715

¹ Goodyear is expected to expand the Plaquemine plant to 80 million pounds in late 1970.

² Hooker is expanding the Burlington plant to 120 million pounds.

³ Stauffer is expected to expand the Delaware City plant to 150 million pounds by the end of 1970.

SOURCE: Chemical and Engineering News.

. . . but vinyl chloride monomer capacity centered on the Gulf Coast

Producer and plant location	Annual capacity, beginning of 1970 (Millions of pounds)
Allied Chemical	
Geismar, Louisiana	300
American Chemical (Stauffer-Atlantic Richfield)	
Watson, California	170
Continental Oil	
Lake Charles, Louisiana	500
Diamond Shamrock	
Deer Park, Texas	50
Dow Chemical	
Plaquemine, Louisiana	250
Freeport, Texas	200
Oyster Creek, Texas	750
Ethyl Corp.	
Baton Rouge, Louisiana	270
Houston, Texas	150
B. F. Goodrich	
Calvert City, Kentucky	700
Monochem (Borden-Uniroyal)	
Geismar, Louisiana	310
PPG Industries	
Lake Charles, Louisiana	330
Tenneco	
Houston, Texas	200
ALL PRODUCERS	4,180

produced its own monomer for use in its PVC operation. The company has recently phased out its acetylene-based vinyl chloride monomer plant at Texas City, however, and now purchases monomer. Diamond Shamrock is also expected to shut down its acetylene-based monomer plant at Deer Park. This will leave only Monochem and Tenneco with acetylene-based plants in operation by 1971.

While some PVC producers are integrated forward into end-use markets, their participation in these markets is usually confined to large-volume applications, such as calendered film and sheet. There remains an important place for small PVC fabricators competing in the broad range of end-use markets. In fact, the success of a PVC producer depends largely on his ability to make a wide variety of resins in response to the growing needs of the market—a market that has grown rapidly with the discovery of new uses for PVC.

WILLIAM H. KELLY

District highlights

The seasonally adjusted Texas industrial production index rose moderately in March to 181.5 percent of the 1957-59 base. All major categories except utilities — which were unchanged — advanced. Manufacturing increased 0.5 percent, with production of nondurables rising at twice the rate of durable goods. Output of transportation equipment advanced nearly 1.0 percent, and mining rose slightly.

The total index in March was up 6.0 percent from the year-earlier level. The only major category registering a decline was utilities, which dropped nearly 8.0 percent. Total manufacturing was up 6.7 percent from a year before. The higher level of manufacturing output was primarily attributable to a 10.6-percent rise in nondurable goods production. Durable goods output was up only 1.9 percent from March 1969. Mining was up substantially.

New passenger car registrations in the four largest metropolitan areas of Texas (Dallas, Fort Worth, Houston, and San Antonio) increased 4 percent in March. Registrations were 8 percent below a year earlier. Cumulative registrations for the first three months of 1970 remained 10 percent below the same period last year.

Department store sales in the Eleventh District for the four weeks ended April 25 were 3 percent lower than in the corresponding period last year. Cumulative sales through that date were 2 percent higher than for the comparable period in 1969.

Total nonagricultural wage and salary employment in the five southwestern states advanced to 6,311,700 in March. The increase was less than seasonally expected and was

concentrated in the nonmanufacturing sector. Manufacturing employment declined 0.2 percent, marking this sector's third consecutive monthly drop. Of the nonmanufacturing categories, transportation and public utilities, trade, finance, and services rose but mining, construction, and government declined.

The year-to-year gains in employment continued to be somewhat moderate in March. Total nonagricultural wage and salary employment was up 3.9 percent from a year earlier, and the nonmanufacturing sector was 4.5 percent ahead of last year. All nonmanufacturing categories advanced, with the greatest strength in transportation and public utilities. Manufacturing employment was up only 1.6 percent.

Primarily in response to seasonal influences, all major balance sheet items increased at weekly reporting banks in the Eleventh District in the five weeks ended April 15. Large negotiable certificates of deposit rose, increasing the funds available to banks.

Reflecting increases of \$59 million in loans to brokers and dealers to purchase or carry securities and \$56 million in loans to institutions other than banks, total loans adjusted increased \$140 million. Business loans dropped, however, falling \$13 million, which was in sharp contrast to a year earlier, when business loans accounted for \$70 million of the \$109 million increase in total loans adjusted. Real estate loans were up \$1 million, compared with \$8 million a year earlier, and consumer installment loans were up \$8 million, compared with \$13 million a year earlier.

As a result of an \$89 million advance in holdings of municipal securities, total investments increased \$80 million during the five-

week period. Holdings of U.S. Government securities declined \$24 million. An increase of \$10 million in Treasury notes and bonds maturing within a year was more than offset by declines of \$15 million in Treasury bills and \$18 million in intermediate- and long-term bonds. During the corresponding period a year earlier, total investments increased \$7 million.

On the liability side, total demand deposits advanced \$406 million. Deposits of individuals, partnerships, and corporations rose \$282 million, and interbank deposits rose \$48 million. In the comparable period a year before, total demand deposits were up \$304 million.

Total time and savings deposits rose \$75 million, in sharp contrast to a \$59 million decline a year before. The increase can be attributed primarily to increases of \$39 million in deposits of individuals, partnerships, and corporations and \$27 million in deposits of states and their political subdivisions. Large certificates of deposit increased \$64 million.

March crude oil production of 6,796,400 barrels per day in Louisiana, New Mexico, Oklahoma, and Texas was essentially unchanged from the February level. Production increased 2.6 percent over February in New Mexico but declined less than 1 percent in each of the other states. Compared with March 1969, production increased 5.8 percent in Louisiana, 3.4 percent in New Mexico, 0.4 percent in Oklahoma, and 11.4 percent in Texas. Nationally, March production was 1.4 percent over February and 6.2 percent over March 1969.

The Texas Railroad Commission reduced the May production allowable in the state from the recent record of 68 percent to 64.5 percent of maximum efficient production. High inventories and greater than expected production at the 68-percent rate were given as reasons for the reduction. In New Mexico, the Oil Conservation Commission retained the rate of 75 barrels per well per day for the southeastern part

of the state. Demand for oil was described as strong, but producers were experiencing difficulty marketing the casinghead gas produced with the oil.

Louisiana officials increased the April allowable from the originally announced 48-percent rate to a 50-percent rate after part of the state's offshore production was shut down. The big offshore oil spill was cited as a reason for the shutdown. This higher rate will be continued for May. The Oklahoma Corporation Commission increased the production rate from 100 percent for April to 125 percent for May.

Agricultural activity in much of the Eleventh District has been slowed by the continuation of cool, wet weather. Following are the proportions of major crops planted in Texas by the second week of April compared with plantings in early April last year: cotton, 13 percent versus 16 percent last year; sorghum, 30 percent versus 33 percent; corn, 47 percent versus 62 percent; and rice, 36 percent versus 52 percent. Pasture conditions, which are slightly better than a year earlier, continue to improve. But grass is still short in some areas.

In Texas, there were 1,243,000 head of cattle and calves on feed on April 1 — 4 percent fewer than a month earlier but 22 percent more than a year earlier. There were 454,000 head on feed in Arizona — 8 percent fewer than on March 1 but 8 percent more than on April 1, 1969. The number of cattle and calves on feed in the nation's 22 largest cattle feeding states totaled 11,565,000 head — 5 percent more than a year earlier.

There were indications on April 1 that production of winter wheat in states of the District would total 189 million bushels this year — 4 percent less than in 1969 and 14 percent less than in 1968. In Texas, indications were for a 5-percent increase over the state's below-average crop last year. This gain, based on expectations of better yields this year, was seen

pushing production to more than 72 million bushels. Oklahoma was expected to slip 14 percent from the level of its large crop last year but still produce more than 101 million bushels. In the other three District states, where winter wheat production is considerably less, there were indications of gains ranging from 94 percent to 17 percent. Arizona is expected to produce nearly 9 million bushels, Louisiana over 1 million bushels, and New Mexico almost 6 million bushels.

Prices Texas farmers and ranchers received for their products on March 15 averaged vir-

tually the same as a month earlier. They were 9 percent higher than a year earlier, however. The all-crops price index was 2 percent lower than in mid-February but 2 percent higher than in mid-March last year. Although prices for hogs, sheep, and lambs were down from a month earlier, beef cattle prices were almost 5 percent higher.

Cash receipts from farm marketings in the five District states were 9 percent higher in the first two months of the year than in the same months last year. Livestock receipts were up 17 percent, but crop receipts were down 3 percent.

**new
par
bank**

The Citizens Bank of Las Cruces, Las Cruces, New Mexico, an insured non-member 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, April 6, 1970. The officers are: Edward Triviz, Chairman of the Board; Albert Armiso, President; James Martin, Vice President; William Fisher, Cashier; and Albino Gonzales, Assistant Cashier.

STATISTICAL SUPPLEMENT

to the

BUSINESS REVIEW

May 1970



**FEDERAL RESERVE BANK
OF DALLAS**



CONDITION STATISTICS OF WEEKLY REPORTING COMMERCIAL BANKS

Eleventh Federal Reserve District

(In thousands of dollars)

Item	Apr. 29, 1970	Mar. 25, 1970	Apr. 30, 1969 ¹
ASSETS			
Federal funds sold and securities purchased under agreements to resell.....	408,750	328,350	6,388,576
Other loans and discounts, gross.....	5,983,676	5,994,269	
Commercial and industrial loans.....	2,927,480	3,000,519	3,117,771
Agricultural loans, excluding CCC certificates of interest.....	106,784	106,206	110,766
Loans to brokers and dealers for purchasing or carrying:			
U.S. Government securities.....	500	500	28,176
Other securities.....	43,067	39,459	60,401
Other loans for purchasing or carrying:			
U.S. Government securities.....	1,183	1,230	339
Other securities.....	392,312	387,955	392,832
Loans to nonbank financial institutions:			
Sales finance, personal finance, factors, and other business credit companies.....	135,654	132,845	148,320
Other.....	365,705	342,679	391,417
Real estate loans.....	596,669	587,795	623,396
Loans to domestic commercial banks.....	9,617	10,222	129,732
Loans to foreign banks.....	9,872	10,329	6,621
Consumer instalment loans.....	731,077	729,816	661,359
Loans to foreign governments, official institutions, central banks, international institutions.....	175	425	0
Other loans.....	663,581	644,289	717,446
Total investments.....	2,629,679	2,484,670	2,754,561
Total U.S. Government securities.....	904,134	892,650	1,057,422
Treasury bills.....	48,276	44,226	71,582
Treasury certificates of indebtedness.....	0	0	0
Treasury notes and U.S. Government bonds maturing:			
Within 1 year.....	173,303	166,647	118,950
1 year to 5 years.....	605,152	598,375	669,636
After 5 years.....	77,403	83,402	197,254
Obligations of states and political subdivisions:			
Tax warrants and short-term notes and bills..	69,585	5,906	64,099
All other.....	1,516,691	1,458,205	1,385,434
Other bonds, corporate stocks, and securities:			
Certificates representing participations in			
Federal agency loans.....	69,492	56,828	144,183
All other (including corporate stocks).....	69,777	71,081	103,423
Cash items in process of collection.....	1,100,895	1,016,240	1,252,329
Reserves with Federal Reserve Bank.....	711,340	818,805	768,242
Currency and coin.....	85,814	84,080	81,034
Balances with banks in the United States.....	422,271	449,748	485,789
Balances with banks in foreign countries.....	8,322	8,672	5,233
Other assets (including investments in subsidiaries not consolidated).....	516,502	506,796	396,044
TOTAL ASSETS.....	11,867,249	11,691,630	12,131,808
LIABILITIES			
Total deposits.....	9,107,418	8,866,268	9,742,404
Total demand deposits.....	5,705,180	5,549,339	5,957,042
Individuals, partnerships, and corporations....	3,942,047	3,909,984	3,985,348
States and political subdivisions.....	340,336	258,789	364,737
U.S. Government.....	173,876	142,610	298,162
Banks in the United States.....	1,136,881	1,129,544	1,180,165
Foreign:			
Governments, official institutions, central banks, international institutions.....	2,729	3,051	4,204
Commercial banks.....	25,719	24,594	25,318
Certified and officers' checks, etc.....	83,592	80,767	99,108
Total time and savings deposits.....	3,402,238	3,316,929	3,785,362
Individuals, partnerships, and corporations:			
Savings deposits.....	914,233	919,840	993,021
Other time deposits.....	1,667,716	1,625,228	2,006,770
States and political subdivisions.....	775,292	740,174	737,729
U.S. Government (including postal savings)....	7,254	1,823	11,446
Banks in the United States.....	23,173	15,314	28,906
Foreign:			
Governments, official institutions, central banks, international institutions.....	13,220	13,200	7,000
Commercial banks.....	1,350	1,350	490
Federal funds purchased and securities sold under agreements to repurchase.....	855,176	978,055	1,047,908
Other liabilities for borrowed money.....	326,610	274,468	268,280
Other liabilities.....	435,449	437,455	119,415
Reserves on loans.....	134,422	134,804	n.a.
Reserves on securities.....	13,275	13,277	n.a.
Total capital accounts.....	994,899	987,303	953,801
TOTAL LIABILITIES, RESERVES, AND CAPITAL ACCOUNTS.....	11,867,249	11,691,630	12,131,808

¹ Because of format revisions as of July 2, 1969, earlier data are not fully comparable.
n.a. — Not available.

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In thousands of dollars)

Item	4 weeks ended Apr. 1, 1970	4 weeks ended Mar. 4, 1970	4 weeks ended Apr. 2, 1969
RESERVE CITY BANKS			
Total reserves held.....	732,912	726,216	738,083
With Federal Reserve Bank.....	681,714	675,374	687,347
Currency and coin.....	51,198	50,842	50,736
Required reserves.....	748,574	725,816	743,829
Excess reserves.....	15,662	400	5,746
Borrowings.....	39,943	23,355	43,800
Free reserves.....	55,605	22,955	49,546
COUNTRY BANKS			
Total reserves held.....	771,344	785,303	758,203
With Federal Reserve Bank.....	592,429	604,640	583,037
Currency and coin.....	178,915	180,663	175,166
Required reserves.....	751,860	756,076	731,720
Excess reserves.....	19,484	29,227	26,483
Borrowings.....	6,567	13,388	13,078
Free reserves.....	12,917	15,839	13,405
ALL MEMBER BANKS			
Total reserves held.....	1,504,256	1,511,519	1,496,286
With Federal Reserve Bank.....	1,274,143	1,280,014	1,270,384
Currency and coin.....	230,113	231,505	225,902
Required reserves.....	1,500,434	1,481,892	1,475,549
Excess reserves.....	3,822	29,627	20,737
Borrowings.....	46,510	36,743	56,878
Free reserves.....	42,688	7,116	36,141

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(In thousands of dollars)

Item	Apr. 29, 1970	Mar. 25, 1970	Apr. 30, 1969
Total gold certificate reserves.....	270,478	413,719	279,326
Discounts for member banks.....	123,585	61,950	122,172
Other discounts and advances.....	5,040	2,240	0
U.S. Government securities.....	2,393,357	2,404,603	2,214,592
Total earning assets.....	2,521,982	2,468,793	2,336,764
Member bank reserve deposits.....	1,240,413	1,328,659	1,271,674
Federal Reserve notes in actual circulation.....	1,717,920	1,692,526	1,536,775

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(In millions of dollars)

Item	Mar. 25, 1970	Feb. 25, 1970	Mar. 26, 1969
ASSETS			
Loans and discounts, gross ¹	11,456	11,434	11,054
U.S. Government obligations.....	2,029	2,054	2,403
Other securities.....	3,230	3,215	3,237
Reserves with Federal Reserve Bank.....	1,329	1,140	1,274
Cash in vault.....	255	260	255
Balances with banks in the United States.....	1,174	1,118	1,184
Balances with banks in foreign countries.....	11	10	9
Cash items in process of collection.....	1,161	1,089	1,115
Other assets ²	854	893	698
TOTAL ASSETS².....	21,499	21,213	21,229
LIABILITIES AND CAPITAL ACCOUNTS			
Demand deposits of banks.....	1,463	1,406	1,484
Other demand deposits.....	8,655	8,611	8,770
Time deposits.....	7,258	7,186	7,732
Total deposits.....	17,376	17,203	17,986
Borrowings.....	1,294	1,184	980
Other liabilities ²	1,077	1,088	591
Total capital accounts ²	1,752	1,738	1,672
TOTAL LIABILITIES AND CAPITAL ACCOUNTS².....	21,499	21,213	21,229

¹ Before July 2, 1969, this item was published on a net basis.
² — Estimated.

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

(Dollar amounts in thousands, seasonally adjusted)

Standard metropolitan statistical area	DEBITS TO DEMAND DEPOSIT ACCOUNTS ¹				DEMAND DEPOSITS ¹			
	March 1970 (Annual-rate basis)	Percent change			March 31, 1970	Annual rate of turnover		
		March 1970 from		3 months, 1970 from 1969		March 1970	February 1970	March 1969
		February 1970	March 1969					
ARIZONA: Tucson.....	\$ 5,949,564	2	20	20	\$ 232,292	25.7	25.7	23.3
LOUISIANA: Monroe.....	2,620,260	-7	1	11	79,963	32.2	33.4	31.6
Shreveport.....	9,692,460	-1	30	40	237,812	41.9	42.8	32.7
NEW MEXICO: Roswell ²	855,648	-5	9	16	40,169	22.7	25.2	22.9
TEXAS: Abilene.....	1,991,532	-3	1	4	100,771	20.3	21.5	20.1
Amarillo.....	5,979,780	6	20	17	158,388	37.7	35.6	33.6
Austin.....	9,852,156	25	13	4	295,111	34.8	29.1	31.7
Beaumont-Port Arthur-Orange.....	6,061,560	-3	7	6	238,180	25.6	26.2	24.6
Brownsville-Harlingen-San Benito.....	1,814,268	-1	15	14	76,147	24.1	25.4	21.9
Corpus Christi.....	5,141,136	6	19	10	208,937	25.1	24.4	21.1
Corsicana ²	438,684	-2	7	7	31,040	14.1	14.8	12.8
Dallas.....	123,806,988	7	14	13	2,161,380	57.6	54.5	50.6
El Paso.....	6,933,312	6	12	9	224,208	30.8	28.7	29.0
Fort Worth.....	21,203,640	-1	10	12	647,992	33.5	34.2	30.8
Galveston-Texas City.....	2,743,740	-15	10	17	104,026	25.7	29.4	24.3
Houston.....	96,489,444	-4	9	12	2,488,900	39.2	41.3	36.6
Laredo.....	941,496	5	13	11	39,800	23.6	23.1	21.6
Lubbock.....	4,361,052	10	8	4	150,542	29.0	27.0	27.2
McAllen-Pharr-Edinburg.....	1,661,688	4	8	5	99,357	17.0	16.6	17.2
Midland.....	1,978,284	-5	-2	1	132,811	14.7	15.6	15.5
Odessa.....	1,655,952	-2	12	16	80,580	20.8	22.0	19.2
San Angelo.....	1,220,292	-4	0	9	69,944	17.9	18.9	18.6
San Antonio.....	16,588,056	-3	7	12	628,441	27.0	28.7	25.5
Sherman-Denison.....	1,091,064	1	9	11	65,104	17.0	18.3	16.8
Texarkana (Texas-Arkansas).....	1,429,812	-4	-9	-9	70,024	20.5	21.4	22.1
Tyler.....	2,115,456	-2	8	10	94,683	22.8	24.0	21.0
Waco.....	2,941,200	-4	16	15	115,987	25.8	27.3	22.4
Wichita Falls.....	2,072,724	-8	-4	-3	117,016	17.8	19.6	18.4
Total—28 centers.....	\$339,631,248	2	12	12	\$8,989,605	38.2	38.2	34.8

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

GROSS DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. In millions of dollars)

Date	GROSS DEMAND DEPOSITS			TIME DEPOSITS		
	Total	Reserve city banks	Country banks	Total	Reserve city banks	Country banks
1968: March.....	9,510	4,388	5,122	6,935	2,863	4,072
1969: March.....	10,268	4,781	5,487	7,722	3,042	4,680
October.....	10,306	4,726	5,580	7,223	2,646	4,577
November.....	10,373	4,750	5,623	7,268	2,690	4,578
December.....	10,692	4,947	5,745	7,203	2,628	4,575
1970: January.....	10,793	4,910	5,883	7,108	2,568	4,540
February.....	10,256	4,625	5,631	7,145	2,554	4,591
March.....	10,284	4,727	5,557	7,231	2,581	4,650

WINTER WHEAT PRODUCTION

(In thousands of bushels)

Area	1970, indicated April 1	1969	1968
Arizona.....	8,760	4,526	2,704
Louisiana.....	1,092	874	2,112
New Mexico.....	5,940	5,088	7,625
Oklahoma.....	101,262	118,275	122,383
Texas.....	72,086	68,856	84,150
Total.....	189,140	197,619	218,974

SOURCE: U.S. Department of Agriculture.

BUILDING PERMITS

VALUATION (Dollar amounts in thousands)

Area	NUMBER				Percent change		
	March 1970	3 mos. 1970	March 1970	3 mos. 1970	March 1970 from		
					Feb. 1970	Mar. 1969	3 months, 1970 from 1969
ARIZONA							
Tucson.....	653	1,724	\$ 5,828	\$ 13,871	73	92	75
LOUISIANA							
Monroe-West							
Monroe.....	73	179	572	3,990	70	-19	15
Shreveport.....	420	1,090	1,625	8,346	33	-67	-27
TEXAS							
Abilene.....	31	102	176	2,095	-82	-94	-52
Amarillo.....	696	1,759	2,414	17,718	80	162	257
Austin.....	404	989	10,363	23,662	109	-40	-44
Beaumont.....	132	401	1,716	2,859	258	77	-7
Brownsville.....	74	191	229	866	6	-63	-78
Corpus Christi.....	411	928	3,393	8,828	-14	-3	40
Dallas.....	2,234	5,402	58,419	90,411	213	139	22
Denison.....	40	74	441	1,372	-42	7	-9
El Paso.....	432	1,194	10,524	26,778	143	79	7
Fort Worth.....	362	1,016	3,853	20,010	-54	-44	-24
Galveston.....	89	204	895	1,919	116	-82	-68
Houston.....	3,896	8,881	27,219	97,195	-20	-35	-21
Laredo.....	62	130	487	1,260	-16	227	6
Lubbock.....	244	514	2,483	9,973	-62	-55	-4
Midland.....	49	108	534	836	324	40	-37
Odessa.....	77	180	1,422	3,130	244	-45	-27
Port Arthur.....	83	201	100	652	-69	-96	-78
San Angelo.....	53	156	1,013	4,261	-62	346	233
San Antonio.....	1,244	3,234	13,360	23,488	175	69	-4
Sherman.....	72	154	898	4,338	-71	18	147
Texarkana.....	29	84	274	2,421	-86	-82	19
Waco.....	222	525	6,963	8,610	663	255	68
Wichita Falls.....	61	178	1,419	2,053	297	166	-58
Total—26 cities..	12,143	29,598	\$156,620	\$380,942	49	9	-6

Area and type	March 1970	February 1970	January 1970	1970	1969
SOUTHWESTERN STATES					
Residential building.....	1,011	552	633	2,140	1,667
Nonresidential building.....	254	210	193	655	687
Building construction....	332	214	231	723	525
Building construction....	425	129	209	761	456
STATES					
Residential building.....	6,140	5,249	4,928	16,166	15,060r
Nonresidential building.....	1,974	1,482	1,475	4,890	5,505
Building construction....	2,191	2,269	2,252	6,620	5,767
Building construction....	1,975	1,498	1,201	4,656	3,788r

Arizona, Louisiana, New Mexico, Oklahoma, and Texas.
 Revised.
 E. — Details may not add to totals because of rounding.
 SOURCE: F. W. Dodge, McGraw-Hill, Inc.

NONAGRICULTURAL EMPLOYMENT

Five Southwestern States¹

Type of employment	Number of persons			Percent change Mar. 1970 from	
	March 1970p	February 1970	March 1969r	Feb. 1970	Mar. 1969
Nonagricultural					
Wage and salary workers..	6,311,700	6,296,200	6,071,900	0.2	3.9
Manufacturing.....	1,171,400	1,173,200	1,152,900	—2.1	1.6
Manufacturing.....	5,140,300	5,123,000	4,919,000	.3	4.5
Mining.....	229,300	230,500	228,100	—5.5	.5
Construction.....	400,500	402,200	381,200	—4.4	5.1
Transportation and public utilities.....	461,700	460,800	418,800	.2	10.2
Trade.....	1,446,900	1,433,400	1,382,300	.9	4.7
Finance.....	320,000	318,600	299,500	.4	6.8
Service.....	1,003,200	997,500	956,900	.6	4.8
Government.....	1,278,700	1,280,000	1,252,200	—1.1	2.1

Arizona, Louisiana, New Mexico, Oklahoma, and Texas.
 p — Preliminary.
 r — Revised.

SOURCE: State employment agencies.

Area	March 1970	February 1970	March 1969	February 1970	March 1969
FOUR SOUTHWESTERN STATES					
Louisiana.....	6,796.4	6,794.5	6,301.5	0.0	7.9
New Mexico.....	2,442.4	2,444.0	2,308.1	—1.1	5.8
Oklahoma.....	360.7	351.4	348.8	2.6	3.4
Texas.....	613.5	619.1	611.1	—9.4	.4
Gulf Coast.....	3,379.8	3,380.0	3,033.5	.0	11.4
West Texas.....	677.8	676.0	595.3	.3	13.9
East Texas (proper).....	1,621.0	1,624.0	1,436.0	—2.2	12.9
Panhandle.....	185.0	182.0	143.4	1.6	29.0
Rest of state.....	84.6	85.0	82.9	—5.1	2.1
Rest of state.....	811.4	813.0	775.9	—2.2	4.6
UNITED STATES	9,598.0	9,469.7	9,034.3	1.4	6.2

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

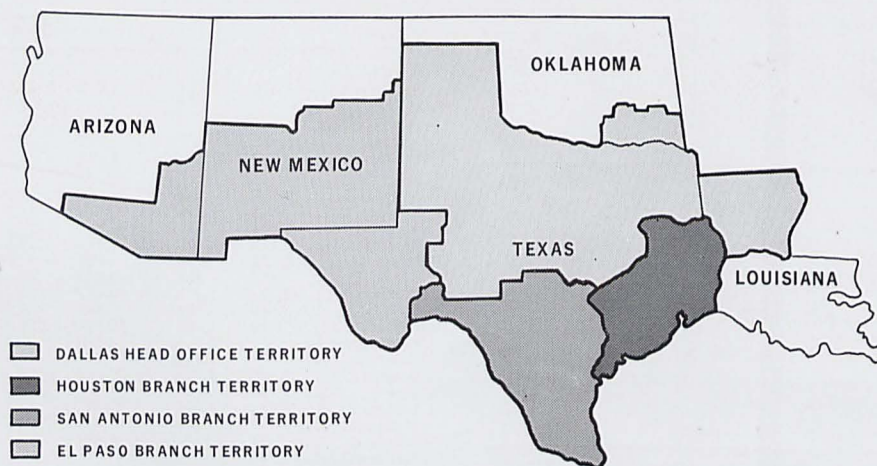
INDUSTRIAL PRODUCTION

(Seasonally adjusted indexes, 1957-59 = 100)

Area and type of index	March 1970p	February 1970	January 1970	March 1969
TEXAS				
Total industrial production.....	181.5	180.8	181.1r	171.2
Manufacturing.....	206.1	205.1	205.6r	193.1r
Durable.....	220.9	220.3	226.5	216.7
Non-durable.....	196.2	195.0	191.6r	177.4r
Mining.....	131.6	131.2	130.7r	120.1
Utilities.....	258.5	258.5	262.0r	280.3r
UNITED STATES				
Total industrial production.....	170.2	169.8	170.2	171.4r
Manufacturing.....	169.8	169.5	170.0	173.1r
Durable.....	170.0	169.0	169.3r	175.9r
Non-durable.....	169.7	170.0	171.0r	169.5
Mining.....	136.1	134.0	132.5r	126.7r
Utilities.....	230.5	232.6	230.1r	215.1r

p — Preliminary.
 r — Revised.

SOURCES: Board of Governors of the Federal Reserve System.
 Federal Reserve Bank of Dallas.



ELEVENTH FEDERAL RESERVE DISTRICT