

TEXAS

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Talking About Texas

Texas Business Review and 75 Years of Change

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Among the projects listed in 1926 for the newly established Bureau of Business Research (BBR) at the University of Texas at Austin was the “issuance of a publication setting forth the economic health of the state.”

And so began *Texas Business Review (TBR)* in April 1927. In the 75 years since its inauguration, *TBR* has monitored the heartbeat of the Texas economy, charting the changes that have transformed the state from an agricultural and petrochemical center into a highly diversified economy. As important, however, *TBR* has anticipated trends and encouraged the exploration of new markets and innovative technologies.

The archives of *Texas Business Review* represent primary research in the economic history of twentieth-century Texas. By recalling 75 years of economic development through the pages of *TBR*, we hope this special anniversary issue provides an insightful and enjoyable look back that perhaps will enhance our view of where we are going in the twenty-first century.

The 1920s: Building on Promise

Volume 1, Number 1 of *Texas Business Review* reported that “the general business situation throughout Texas showed some improvement in March. Business now as compared with the end of 1926 shows an upward trend.”

“The general business situation”—especially as it related to oil and agriculture—formed the focus of the *TBR* of the 1920s. Continuous oil price cuts in the first quarter of 1926 curtailed the drilling of new wells. Nevertheless, “new gushers coming in, largely from the ‘wild-cat’ territory, are ample to offset the loss.” More than 21 million barrels of oil were produced in March. As for agriculture: “The largest surplus of cotton on record is disappearing at a rate beyond the expectations of the most optimistic, resulting in

prices near the 15 cents level for the new crop.” Shipments of fruits and vegetables from the Rio Grande Valley were “very heavy in March,” and “range stock came through the winter in good flesh.”

In 1928, *TBR* began to track the growing tenuousness of the national economy: “developments over the past few years have led business directors to adopt a cautious policy regarding a too-rapid expansion program.” The editors concluded, “barring any unforeseen calamity, the outlook is hopeful.”

The 1930s: Coping with Catastrophe

Calamity did indeed strike, and it is interesting to note the contrast between selected economic factors noted in the October 26, 1929 *TBR*—published before the October 29 stock market crash—and those of July 26, 1930 (see sidebar, page 2).

Throughout the Depression, the monthly kept close tabs on the national economy, particularly the possible effects of the troubled political situation in Europe. *TBR* covered, for example, FDR’s efforts to substitute international economic cooperation for the “extreme nationalism of recent years.” In support, the *Review* noted, “Progress in the removal of existing restrictions upon international trade should be hailed with great enthusiasm since the broadening of markets for Texas products is one of the biggest problems which must be met by the business interests of the state.”

The deep budgetary cutbacks that resulted from the crashed economy threatened the survival of the Bureau of Business Research. However, the state legislature, aware of the great potential of the organization and its monthly publication, granted its first appropriation to the BBR at a time when many branches of government were losing funding.

The Bureau set about the business of collecting and disseminating statistical data on the state economy and conducting basic research in resources, “the foundation of Texas wealth.”

The 1940s: “Where Does Texas Come In?”

This was the explicit and implicit question in the pages of *Texas Business Review* in the months after the nation’s entry into World War II. In January 1942, *TBR* observed, “It is only necessary to name a few strategic war materials, actual and especially potential—such as petroleum, magnesium, various fibers, food products, and vegetable oils—to see how Texas automatically appears in the center of the picture in war production.”

The state maintained that central position throughout the 1940s. From 1939 to 1947, industry in Texas experienced a historic boost with the public and private investment of almost \$1.3 billion, chiefly in defense plants. During this period, oil refinery operations constituted the largest manufacturing industry in the state, and *TBR* followed the “almost revolutionary” transformations of the industry, particularly the large-scale manufacturing of new wartime products derived from petroleum, including toluol for high explosives, high-octane aviation gasoline, butadiene and styrene for synthetic rubber.

The struggles with the conversion from a wartime economy are well documented in the *TBR* of that era. Credit helped create a boom in retail trade following V-J Day in 1945, but this surge quickly receded. Predictably, manufacturing declined with the closing of wartime industries, and strikes throughout Texas (maritime workers in Galveston, bus drivers in Beaumont/Port Arthur, telephone workers in Houston, among others) affected the state’s labor picture.

Until 1949, the trend in the economy was definitely upward and, sometimes, even a little startling. When compared to the average prewar month, employment in January 1947 increased 19.4 percent, but payrolls exploded by 110.5 percent. Electric power consumption jumped 174.1 percent; department and apparel store sales, 205 percent. As *TBR* indicated, “it is easy to see here the effects of inflation and industrialization intermingled.” Predictably, the building industry boomed, with construction contracts increasing 84.2 percent between 1946 and 1947.

Times were definitely good, and *TBR* flourished as well. The now 28-page *Review* reported in September 1947 that “the market for durable goods of all types has been large and firm, industrial production and employment to meet this demand have been

high and have moved higher, agricultural production has increased at high prices to meet the foreign demand for foodstuffs, incomes of farmers and factory workers have steadily risen, new enterprises have sprung up, and credit has been gradually expanding with the relaxation of credit controls in the face of boom conditions. The present prospect of Texas business is in large measure genuine.”

The 1950s: Texas on the Move

“Slight” recoveries and declines defined Texas business in early 1950. A small readjustment—what *TBR* referred to as a “well-bred recession”—followed the boom of the immediate postwar years. During the 1954-1955 “golden biennium,” business activity, especially in the chemical and refining industries, reached all-time record high levels, and by 1956, the state, with almost 11,000 manufacturers, was in the midst of a production boom.

As early as the 1950s, *TBR* advocated diversification, citing “too much emphasis on raw materials-oriented industries,” such as the refining and extraction of petroleum. In this vein, it offered periodic studies of less well-established industries. In the early 1950s, for example, it touted the great potential of Texas, “the dusty paradise of western movies,” as a tourist destination and urged the fledgling travel industry to increase lodging capacity, improve services, and launch a statewide campaign to take advantage of the “benign revolution” called “vacation” sweeping the United States. By 1956, Texas was playing host to 8.4 million visitors. This “golden horde” spent \$7.71 per person per day, creating a \$379 million business. The favorite destination of the Texas tourist was, of course, the Alamo.

The dramatic growth in Texas industries was tempered by the equally dramatic problems facing Texas agriculture, not the least being a growing shortage in farm labor as more workers moved from farm to factory. (For example, the number of farm workers dropped by one million between 1951 and 1952.) At the same time, a severe and long-lasting drought, accompanied by high winds, created a “baby dust bowl” in parts of West Texas. As it had with the industrial sector, *TBR* recommended diversification, paying special attention to drought-resistant crops. The February 1957 *TBR* reported that after six rain-starved years “farm income has sagged to the lowest point since 1946.” In typical Texas all-or-nothing fashion, rain made a torrential reappearance in spring 1957. The break in the drought was to raise farm incomes by the end of the decade.

October 26, 1929

Favorable Factors	Unfavorable Influences
Few commercial failures	Considerable stock speculation
Sound financial conditions	Little industrial expansion
Well employed labor	Continued high interest rates
Ample funds for fall expansion	Declining bank debits

July 26, 1930

Favorable Factors	Unfavorable Influences
Low interest rates	Further industrial curtailment
Favorable crop prospects	Decline in employment
Large vegetable & fruit shipments	Many commercial failures
Adjournment of Congress	Low farm & livestock prices

The linchpin of this growth was industrial expansion, especially in the chemicals sector. In 1956, for the first time, capital investment in the chemical industry exceeded that in petroleum refining.

Texas Population
Bureau of Business
Research Projections in
1957 and Actual Census
Numbers for 1957-2000
(millions)

Year	BBR projections 1957	Actual population
1957	9.0	9.0
1960	9.3	9.6
1965	10.4	10.4
1975	12.1	12.6
2000	16.7	20.8

Note: 1965 and 1975 Census numbers are estimates for July 1 of each year.

Sources: *Texas Business Review*, January 1957, and Bureau of the Census, Washington, D.C.

The growing industrialization of the state drew more Texans than ever from rural locations into the state's cities. Following the general pattern of the U.S. population, the urban population of Texas increased 58 percent between the 1940 and the 1950 census, which revealed Texas to be, for the first time, a state of city-dwellers, with nearly 63 percent of residents classified as "urban."

Despite the incremental nature of its growth, the Texas economy of the 1950s maintained high levels, the volume of business having doubled in the ten years after World War II. The linchpin of this growth was industrial expansion, especially in the chemicals sector. In 1956, for the first time, capital investment in the chemical industry exceeded that in petroleum refining. As noted in the March 1958 *TBR*, "industrial development is serving as the primary leverage in the distribution and concentration of the state's population."

Texas was growing, both in population and prosperity. As *TBR* predicted in its final issue of 1959: "The 1960's will be a decade in which industrial applications of discoveries in the fields of atomic energy, electronics, nucleonics, and space vehicles will quicken. Economic growth of the nation will benefit the state's economy to an equal degree. There will be more Texans, and they will be living better than ever before."

The 1960s: To the Moon

There were, in fact, more Texans in the 1960s, and they did indeed seem to be "living better than ever before." Despite the continuing gap between U.S. and Texas per capita incomes, the state economy prospered as never before. Starting in 1961, the line on the business activity chart began to inch upward in what was to be the longest period of expansion in state history at the time.

Nevertheless, early on in this expansion, *Texas Business Review* discerned an approaching economic transition. In October 1960, the monthly suggested that "the Texas economy is entering a new phase that will generate important relative changes within the industrial sector and will require a certain psychological reorientation on the part of observers who may have assumed that the future will represent a simple extension of past developments." Not just rethinking, but *new* thinking was required. "The kinds of industry that appear to offer the best growth potentials are those for which very active interstate competition exists," specifically, electronics. Additionally, most industries, *TBR* posited, would show "an increasing demand for high-level skills." Investment in higher education,

in other words, was an investment in the continuing economic growth of Texas.

The "old faithful" of Texas industries, the oil business, was showing signs of fatigue by the early 1960s. The Texas oil producer faced increasing pressures from the substantial rise in the volume of crude petroleum imports; the competition from natural gas and natural gas liquids in the space heating market; the relatively rapid growth of production in other states; and a reduction in the growth rate of domestic demand brought on by the shift of large numbers of motorists to economy cars.

Simultaneously, other Texas industries showed new or renewed momentum. Petrochemicals enjoyed continued "massive" investment, especially in research and development. Led by industry giant Texas Instruments, the state electronics industry kept pace with the rapid expansion of the industry nationwide. The construction industry began to record one banner year after another. With 80,000 workers (13.2 percent of the manufacturing work force in the state) reported in 1964, food processing remained the largest employer among Texas manufacturers. Agriculture emerged from the drought-ravaged 1950s much changed: the number of farms decreased dramatically, but the size of the average farm increased by more than 25 percent. As significant, mechanization and irrigation became the rule in Texas farming.

No new developments in industry, however, created as much excitement in Texas as the 1962 selection of Houston as the site for the new NASA space research laboratory. The construction of the Manned Aircraft Center launched enormous industrial growth in the Houston metropolitan area and beyond. The race to the moon was on, and Texas was at the starting line.

In another race—the competition for industrial development—the state lagged far behind. Texas was the last state to appropriate funds to the job of attracting new industries. In a continuing refrain, *TBR* advised in April 1964, "the effort to raise incomes in the state must go deeper than economic development. The very clear, positive correlation between per capita income and educational level points to the need for continued effort to improve the educational level of all Texans."

The long cyclical upswing that began in 1961 was, by 1968, faltering. A high-flying decade, both in social and economic terms, the 1960s ended on a much less optimistic note than the decade preceding. In blunt terms, the August 1969 issue cautioned, "the outlook for business in Texas and the nation is bleak. Tight credit must continue until

In the 1970s, “the development of telecommunications will bring a new series of services to Texans. They will begin to see more economical telephone, closed-circuit television, and telefacsimile services. Additionally, large business organizations will make increasing use of interconnected networks of electronic memory banks and computers.”

inflationary forces are noticeably reduced in strength. Sufficient abatement may not occur until next year. In the meanwhile business will experience little or no expansion.”

The 1970s: From High Flying to High Anxiety

Indeed, the economic surge that would not quit in the 1960s finally stalled in 1970. Business activity that was once described as operating at “all-time highs” was now depicted as “lackluster,” as personal income declined while prices, interest rates, and the national debt burden increased. As the nation plunged into recession, the Texas economy, with its solid base of petroleum and petrochemicals, agriculture, and light industry, proved more resilient, but only slightly so. Energy shortages and the threat of inflation were to remain constants throughout the decade.

Now in its fourth decade, *Texas Business Review* continued to record the effects of changes in the economy as well as explore future prospects. In the 1970s, “the development of telecommunications will bring a new series of services to Texans. They will begin to see more economical telephone, closed-circuit television, and telefacsimile services. Additionally, large business organizations will make increasing use of interconnected networks of electronic memory banks and computers.”

In the environmentally-conscious 1970s, the nation’s heavy reliance on nonrenewable resources and the state’s continuing development of oil-gobbling industries were matters of growing concern. Energy demands were doubling every seven years in the state, consumption raced ahead of the development of new supplies, and the protests over the environmental effects of energy use grew more clamorous. *TBR* considered such short-term solutions as increasing imports of natural gas and developing alternate energy sources in order to avoid more dependence on uncertain foreign supplies.

The population shift that came to be known as “Sunbelt phenomenon” drew public attention during this period. The 1970 census revealed that, for the first time, cities in the Northeast were losing population and metropolitan areas in the South were gaining. Texas was both growing and becoming urbanized faster than the rest of the nation. At the same time, the urban pattern shifted as the state developed both decentralized city clusters with the greatest growth in the suburbs and a network of urban corridors stretching along vast lengths of interstate highways.

These rapid changes brought increased employment opportunities for women. The female labor force in Texas increased by more than one million between 1940 and 1970, but, according to a study published in *TBR*, although the status of women had improved since 1940, the status of men had improved more rapidly, resulting in an overall decline in the status of women relative to men in Texas and the nation. Although 37 percent of the total labor force in 1973, women remained basically segregated by occupation, and, in fact, Texas was slightly more segregated by sex occupationally than the nation.

The economic struggles—“the worst recession since the thirties”—that created so much anxiety in the early 1970s finally abated in 1975. Although the Texas economy suffered setbacks during this time, it proved less sensitive overall to fluctuations in the business cycle than the national economy. Unlike the GNP, Texas gross state product did not decline during the recessions in 1969-1970 or 1973-75. In fact, the Texas economy managed to accelerate while that of the nation slowed down during the rough ride of the 1970s. This buoyancy left Texans feeling confident about the next decade. However, as *TBR* put it in a look at state productivity in late 1980, “the long-run growth of Texas will largely be determined by factors not fully anticipated today.”

The 1980s: Oil, “A Rather Gigantic Tail that Wags the Texas Dog”

Those unanticipated factors included recession and a bottoming-out of the oil industry. Although 1981 was the first year that per capita personal income in Texas had ever approached par with the national per capita income level, the good news for the state economy was short-lived. The U.S. recession that began in mid-1981 hit the Texas economy even harder than the economic downturns of the 1970s. High interest rates and slow national growth contributed to a general slowdown in Texas economic expansion, as did the sharp decline in oil-drilling activity beginning in 1981. Weak world oil prices and low national demands for energy caused the number of active drilling rigs in the state to fall from a high of 1,449 in December 1981 to 784 in September 1982, a 46 percent decline. This drop in drilling halted the growth of Texas oil and gas fields, oil and gas services, and oil-drilling equipment industries.

This reversal in fortunes in the energy sector served to amplify the call for diversifi-

cation, and in April 1981, then-Governor William P. Clements created the Texas 2000 Commission to make recommendations on long-term development strategies. In its report, the commission called for diversifying the state economy by expanding the industrial base through technological advances. Forecasters saw great growth and export potential for high-tech and information systems, and, indeed, by 1982, Texas ranked near or above the national average for most indicators of scientific and technological activity, was listed fourth (after California, New York, and Massachusetts) in total university R&D, and was recognized as the next frontier in high-tech manufacturing.

Despite the Mexican peso devaluations in 1982, which seriously cut the state's trade with Mexico, Texans were looking more and more beyond their borders in the 1980s. Many articles in the *Texas Business Review* of that time examined the prospects for greater foreign investment in the state, for trade with other nations, and for means of effective competition in world markets. Although foreign direct investment had been increasing rapidly in Texas in the early years of the decade, foreign firms made up a relatively small part of the state economy and tended to concentrate in manufacturing industries such as chemicals, nonelectrical machinery, and petroleum. On the other hand, exports turned in a strong performance: in early 1987 exports from Texas amounted to \$7.4 billion, second only to the \$10.3 billion from California. The rapid increase in the size of the maquiladora industry from 454 in 1975 to more than 1,300 in 1987—contributed significantly to this export growth.

The recession gave way to recovery in 1983, but, by mid-1984, the “euphoria about the present and optimism about the future are beginning to fade.” Paralleling national trends, the rate of Texas economic growth slowed. Oil and gas drilling declined as oil prices fell again. In its outlook for 1985, *TBR* forecasted: “If oil prices are cut by more than two dollars, perhaps by five dollars a barrel or more, the state's economy could be brought to near recession.”

As it happened, 1985 saw a decrease in employment as jobs were lost in both the oil and gas and manufacturing sectors, and the stagnation in the energy industry produced a ripple effect in other industries, especially construction, banking, and real estate. In February 1986, world oil prices collapsed. Although the state economy began to recover in early 1987, the lesson had finally been learned, and the recommendation to diversify the state economy became an imperative.

The 1990s and Beyond

The Texas economy indeed underwent a major structural transformation, beginning in the late 1980s and picking up ample steam in the 1990s. The state economy moved away from resource-based industries toward services and manufacturing. Although the energy industry retained its importance, relatively speaking, it declined as a percentage of the state GDP.

Not so with the Texas high-tech sector. As a result of the rapid growth of this industry, particularly in Dallas, Houston, and Austin, the state grew to prominence as one of the most productive high-tech regions in the country. Steadfastly following this growth, *TBR* now focuses on emerging trends in the sector, such as income inequality in high-tech regions, e-government spending, and new ways that information technology can streamline business processes and open new markets.

Considering that about one-third of all U.S. exports to Mexico were produced in Texas and almost half passed through the state, *TBR* noted in 1991, “almost everyone agrees that Texas will be the primary U.S. beneficiary of NAFTA.” Although the full impact of the agreement has yet to be measured, Texas has undeniably benefited: exports from the state to Mexico and, interestingly, Canada have increased dramatically since the agreement went into force in 1994.

“The general business situation” in Texas in the 2000s shows prosperity and promise. What is to come for the Texas economy is anyone's guess (or forecast), but what has passed is a matter of record in *Texas Business Review*. As BBR research associate, Elizabeth M. Turpin, wrote on the occasion of the publication's 35th anniversary, to read through the archives of *TBR* “is somewhat of an adventure in Texas and national history. Represented are the ups and downs of the economic and business activity of a state and nation, reflecting the feats and foibles of individuals, corporations, agencies, and governments. The writers are economists and businessmen, professors and students—and they talk about everything from building to borrowing, from oil to onions, from ports to peanuts. They tell of depression and recession, of recovery and expansion, of war and peace, of gold and silver, of wholesale and retail. In short, they fill in the mosaic and record the heartbeat of an economic system that has in this nation and this state produced better living for more people than anywhere else in the world.”◆

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Texas in Tables Selected Data from 75 Years of *Texas Business Review*

Women's Jobs in Texas, 1970

Detailed Occupation	Total employed, 16 years and over	
	Number	Percentage
Secretaries	148,065	9.7
Sales clerks, retail	81,642	5.3
Bookkeepers	75,145	4.9
Teachers, elementary	67,906	4.4
Maids/servants, private households	55,748	3.6
Cashiers	44,643	2.9
Waiters	42,310	2.7
Typists	41,026	2.7
Cooks, excluding private households	38,251	2.5
Registered nurses	37,875	2.5
Teachers, secondary	32,089	2.1

Detailed occupations employing at least one percent of total 1970 female employment 16 years or older.

Source: U.S. Department of Commerce, Bureau of the Census, 1970.

Per Capita Personal Income, Texas and the United States, Selected Years, 1930-2000

Year	Texas	United States	Texas as % of U.S.
1930	412	620	66
1940	438	595	74
1950	1363	1510	90
1960	1955	2276	86
1970	3646	4095	89
1980	9957	10153	98
1990	17446	19572	89
2000	27752	29469	94

Source: U.S. Department of Commerce.