

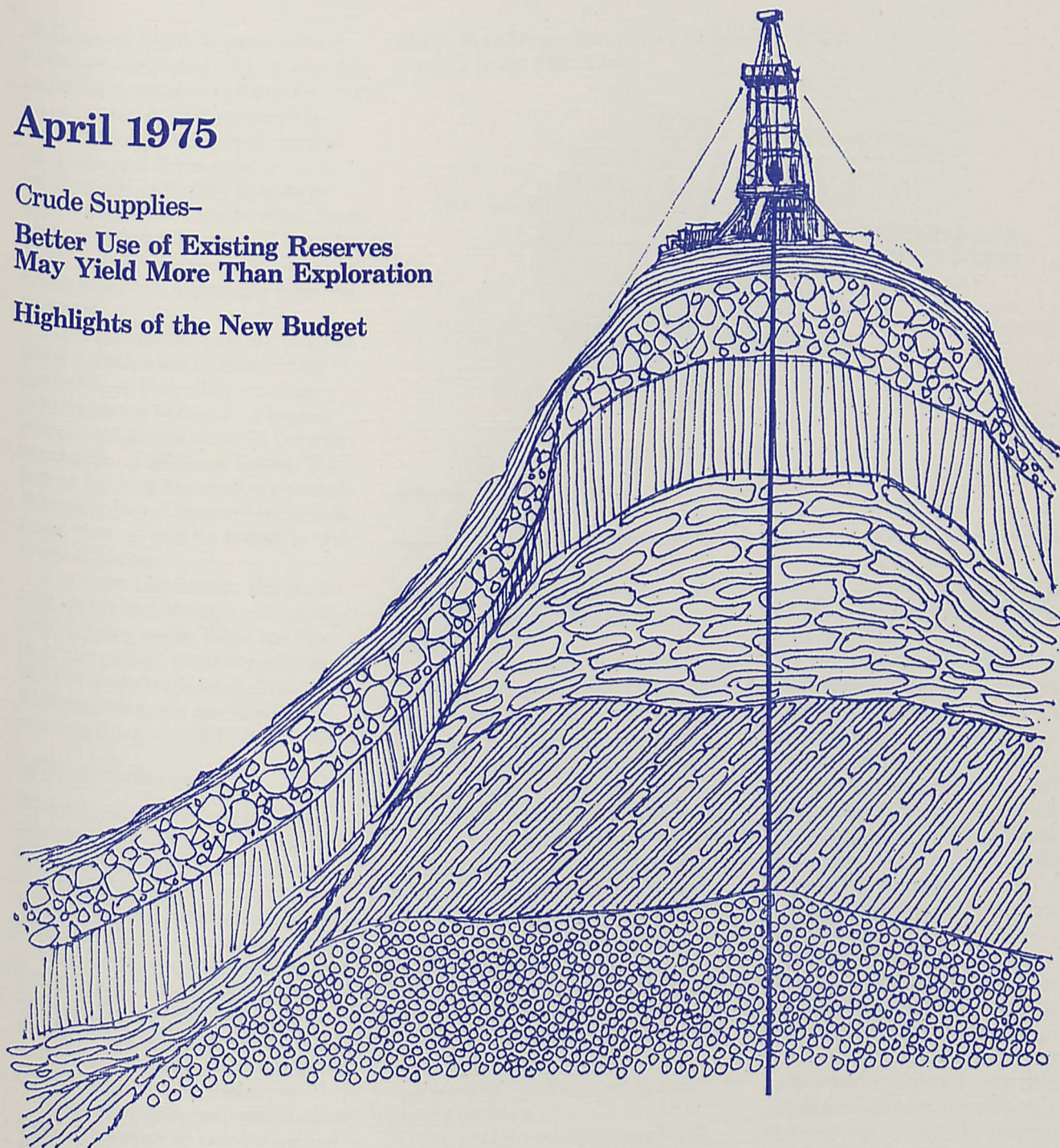
Federal Reserve Bank of Dallas

Business Review

April 1975

**Crude Supplies—
Better Use of Existing Reserves
May Yield More Than Exploration**

Highlights of the New Budget



Better Use of Existing Reserves May Yield More Than Exploration

With prices of all forms of energy at record highs and oil imports still insecure, domestic oil supplies must be increased as fast as possible.

Other fuel sources will have to be developed if the country is to become self-sufficient in energy again. For some time to come, however, primary reliance will have to be on the development of domestic crude reserves, especially existing reserves.

Exploration for new fields gives some promise for improving oil production. But while exploration has been boosted by higher prices and an increase in Government sale of offshore leases, the future for new reserves is clouded. It simply is not known how much more new oil can be found in the United States.

Far more certain are the possibilities for increasing recoveries from known wells. With the rise in crude prices, recovery efforts have already increased. And technological changes are vastly improving the potential for recovery.

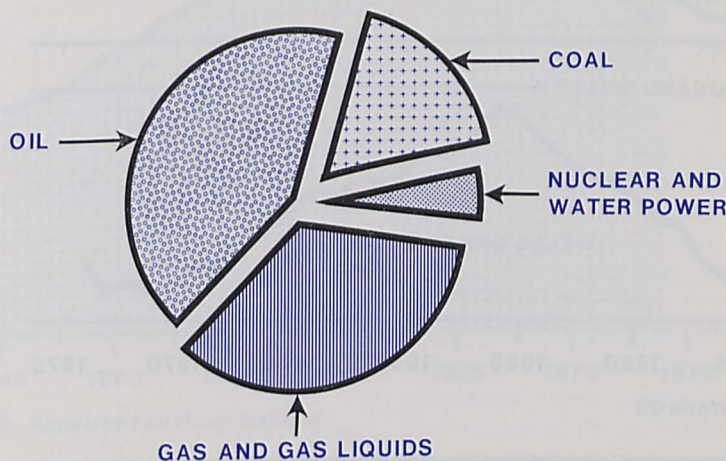
Lack of alternatives

Several energy sources hold promise for contributing to the nation's efforts to regain self-sufficiency. None of them, however, give any sign of helping reduce the dependence on oil and gas for some time.

Solar energy and nuclear fusion, for example, have a huge potential for reducing the need for petroleum. But it will take years of research before they can become significant sources of energy.

Properly harnessed, geothermal steam and even the movement of the oceans could be used to reduce the nation's dependence on oil and

More than three-fourths of nation's energy comes from petroleum



SOURCE: U.S. Bureau of Mines

gas. In terms of availability, however, they are further off than nuclear fusion.

In the meantime, the nation has vast coal reserves—enough, in fact, to meet almost all its current needs for as much as a hundred years. There are serious limitations to the use of coal, however.

Environmental considerations limit the use of most of the coal available near major consuming areas. Conversely, the most abundant sources of low-sulfur coal are far removed from the main points of consumption.

Steam generating plants nearer to the mines do not provide an immediate alternative to existing oil-burning capacity. Line losses are still too high to make most such plants feasible.

Thus, while coal has long been used as a primary source of energy and is in great supply, any marked

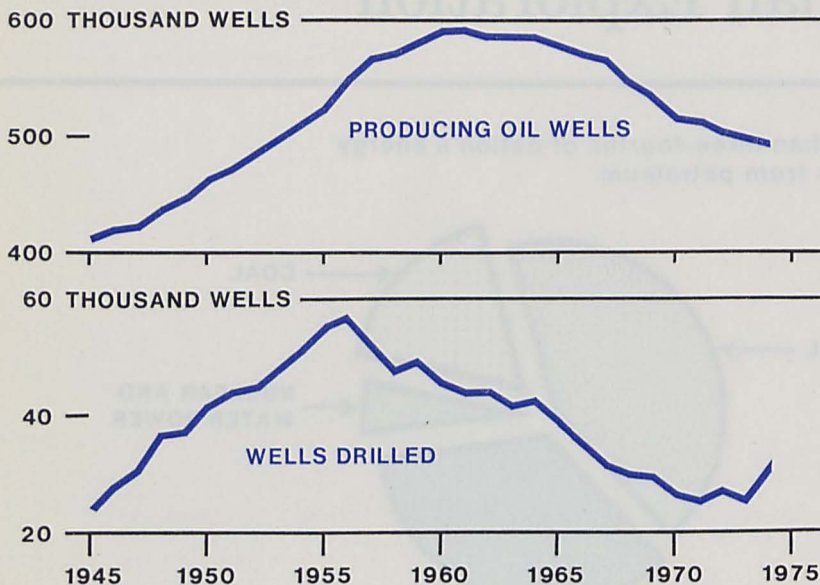
increase in its use waits, like the use of newer energy sources, on more research.

A partial answer could be the conversion of coal to oil and gas. Here again, however, it could take years to develop economical conversion processes. Even then, any lessening of dependence on petroleum would be paced by construction of large gasification plants that could take ten years or more to bring on stream.

Search for new oil . . .

Any immediate hope for relief from high-priced, politically insecure oil imports is pinned to prospects for increasing domestic production. But as the most promising possibilities for exploration are drilled, differences of opinion on how much more oil can be found grow wider. Most estimates reflect a concern that, after producing 100 billion

**Number of producing wells tapers off,
despite an upturn in exploration**



SOURCE: World Oil

barrels of crude oil and other petroleum liquids, the country simply may not have enough oil left to maintain current levels of output.

One Government estimate shows that with new discoveries, at least 200 billion barrels of crude and liquids could probably be recovered eventually—maybe as much as 400 billion barrels. While that is a large amount, it could take decades to develop this potential. Also, most estimates are considerably less.

One of the major oil companies, for example, has estimated that only about 88 billion barrels can be recovered. This industry estimate claims a 90-percent probability that the amount will fall somewhere between 50 billion and 150 billion barrels. Some estimates are even more pessimistic.

Estimates differ because of the uncertainties of exploration. Despite all the advances in the knowledge of geological structures, no one really knows oil can be found

in a particular formation without actually drilling it.

Whatever the extent of the gains that can be made from exploration, however, they will be limited for years by shortages of crews and equipment. Then, when oil is found, there are lags in the development of new fields.

After years of decline in drilling in the United States, the drilling industry is no longer in a position to undertake an exploratory effort of the scope the situation now calls for. Many rigs, in fact, have been broken up for spare parts over the past several years, leaving an outlook for the industry to be hard pressed to maintain its current level of drilling over the next few years.

Even with an increase in the availability of rigs, lags in the development of new fields could be reduced very little. Under the best circumstances, it can take years to find a new field and bring it into production. It usually takes a

couple of years of planning and preparation for a company to drill an exploratory well and, if there is no other production nearby, another two years for a discovery well to be put into production.

Part of the delay comes from the construction of pipelines and other facilities, such as storage tanks. Pipeline construction adds increasingly to the lag as production is moved into more remote areas.

One of the best examples is the long time that has been required to develop Alaskan oil and bring it to market. Although discovered as far back as 1968, reserves on the North Slope still go untapped, as they must for probably three years more before a pipeline can be laid to take the oil to the coast for shipment to the lower United States.

Offshore oil presents much the same problems. And these problems become more difficult as wells are moved further out into the ocean.

... and need for big pools

Until now, most production has been from large fields. And with the nation's enormous appetite for energy—oil consumption totaled some 6 billion barrels last year—huge discoveries are needed to halt the decline in reserves. But there are doubts if any large fields are left to be found.

As new reserves become harder to find, the search for oil becomes more expensive. As drilling has to go deeper and exploration is forced further offshore and into such remote areas as Alaska, costs go up, as do the risks.

The last major discovery in the continental United States was several years ago in Florida. And in spite of all the surge in exploration since, no new giants have been found ashore.

There are signs, in fact, that the size of discoveries may be falling.

More than 700 new-field wildcats were drilled in 1973, for example. That was nearly a fourth more than in 1972. But at 365 million barrels of oil and liquids, the total for these new-field discoveries was off 48 percent from the year before.

At that rate, reserves were being pulled down far faster than new reserves were being found. Production of crude and liquids exceeded 3.1 billion barrels in 1973.

Overall, exploration was remarkably successful in 1973. More than a fifth of the 7,466 wildcat wells drilled that year turned up either oil or gas.

That success rate—the best since 1955 and the third best since World War II—brought the number of dry holes to a record low of six for every discovery of a new field. In the past, the ratio of dry holes to new discoveries had ranged from more than seven to nearly 11.

Some of this success was the result, no doubt, of the increase in crude prices. Crude prices doubled in 1973, rising from \$2 a barrel to \$4—making small fields that once might have been abandoned suddenly profitable.

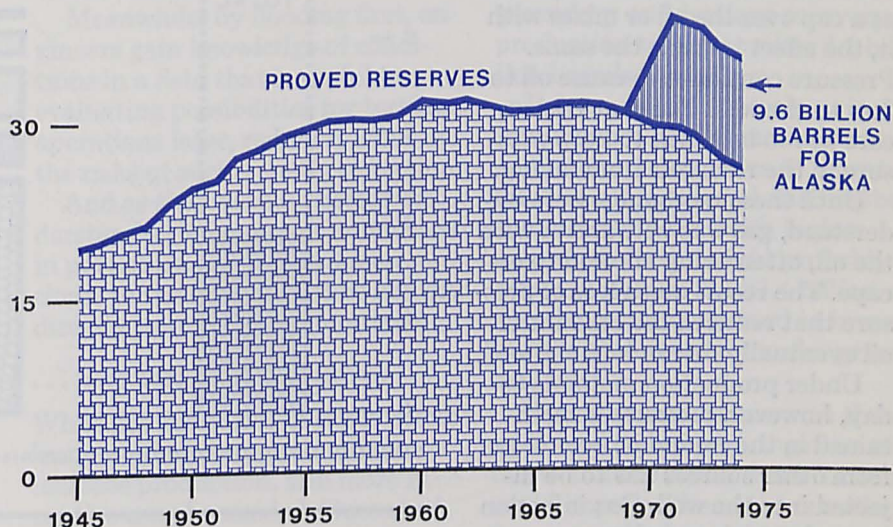
As prices continued to rise in 1974, exceeding \$10 a barrel, efforts to start exploration were spurred to fever pitch, limited only by the availability of crews and equipment. With the increase in the intensity of the search for oil and gas, additions to new reserves, which fluctuate from year to year, could be boosted by the discovery of a few large fields.

Another big discovery like the giant North Slope field in Alaska would make a vast difference in the outlook for slowing the decline in domestic reserves. Alaska and several areas off the Atlantic Coast offer some possibilities for such discoveries.

And the possibilities are improving—if only because more holes are being drilled. But the incalcu-

Discoveries on the North Slope will not increase supplies for years

45 BILLION BARRELS



SOURCE: American Petroleum Institute

lable uncertainties of exploration preclude any real dependence on that possibility.

Better use of old oil . . .

Although exploration improves the potential for building reserves—particularly in Alaska and the offshore Atlantic—much of the nation's oil will still come from areas that have always been major producers. And with improved but far more expensive methods than were used in the past, billions of barrels of additional oil can be drawn from known reservoirs. Higher prices—as much as technological improvements—make additional withdrawals possible.

One effect of higher prices has been to extend the life of stripper wells—wells with production that does not average more than 10 barrels a day. While that may not seem like significant production, seven out of ten of the nation's 500,000 producing wells are strippers. Together, they produced over

385 million barrels of crude oil last year—10 percent of the total.

Ordinarily, wells are abandoned when the costs of producing them reach the returns from sale of the oil. And because of the high cost of redrilling or reworking them, once abandoned, they have not been reopened.

But with oil selling at over \$10 a barrel, producers can afford to keep strippers in operation longer, recovering more oil. All told, the increase in domestic crude prices last year may have added another 2.2 billion barrels to the eventual recovery of oil from stripper wells.

Potentially more important than stripper wells, however, are improvements in recovery operations.

Only about a third of the oil in most reservoirs can be withdrawn through ordinary production methods—pumping or depending on natural forces to drive the oil to the well. Much more oil can be taken out by changing conditions in the reservoir.

Drive can come from gas or water. Where gas provides the drive, oil is forced to the area of low pressure created by a well penetrating the reservoir. Whether the gas sets as a cap over the oil or mixes with it, the effect is much the same. Pressure continues to cause oil to flow to the well. For that reason, care has to be taken to keep pressure in the reservoir from falling.

Until these mechanics were understood, gas was withdrawn with the oil, often being allowed to escape. The result was a loss of pressure that reduced the amount of oil eventually driven into the well.

Under production methods today, however, pressure is maintained in the reservoir, even if gas from other sources has to be injected into the well. Gas injection is one form of secondary recovery.

Where water provides the drive, oil is trapped between the underlying water and the overlying strata, forming a pool. As oil is removed from the pool, water forces more oil into the well.

Because water moves through strata easier than oil, care has to be taken to pace production so that the water will not bypass the oil, isolating pockets of oil that can never be recovered.

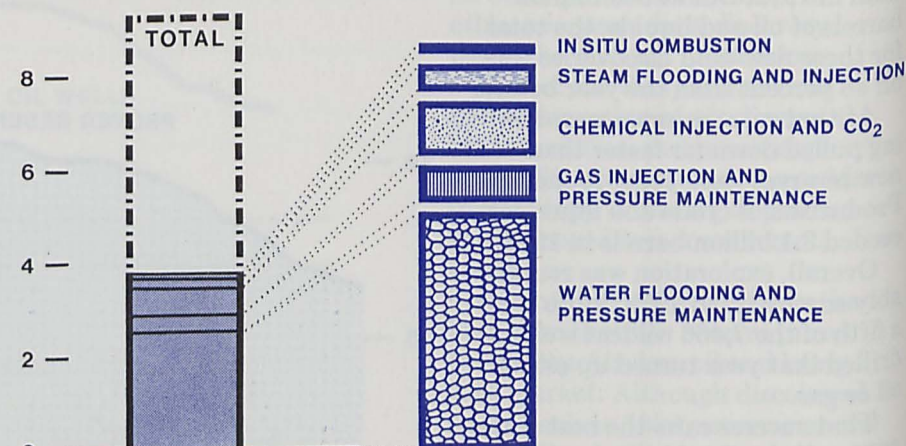
One production technique, therefore, is to inject additional water into the reservoir so that as much oil as possible can be flushed out. This is the other common form of secondary recovery.

Natural pressures—most often gas and water in combination—are usually strong in new fields. Blow-outs, in fact, were once fairly common, particularly with discoveries of new fields. And in the early life of a field, oil may flow up the well under its own pressure.

Later, however, when the pressure is reduced, wells have to be pumped. Eventually, even with the best conservation practices, pumping also becomes inadequate. But

Enhanced recovery accounted for nearly 40 percent of the crude oil produced in 1973

10 MILLION BARRELS A DAY —



SOURCE: Interstate Oil Compact Commission

as the flow tapers off, recovery operations can be started to stave off decline.

Already, 40 percent of the nation's production comes from wells stimulated by secondary recovery. And this proportion will increase as fields get older. With prices up, producers are watching the flow at wells much closer, starting secondary operations earlier than just a year or so ago.

... with tertiary recovery ...

Because this country has been a major oil producer so long, there are many fields that could be reworked even further, vastly improving prospects for output.

Probably some 434 billion barrels of crude have been discovered in the United States so far. Of that, only about 141 billion barrels can be recovered by conventional primary and secondary methods, leaving 293 billion barrels in known reservoirs as a target for improved recovery technology.

Estimates of how much of this residual can be added to the nation's reserves over a reasonable

length of time vary. There seems to be some consensus, however, that only about a fifth of the residual can be made available by the turn of the century. The estimates range from a practically assured 19 billion barrels to an optimistic 55 billion.

Only about 1 percent of all crude production in the United States comes from use of methods beyond conventional flooding and repressurization. But with continued incentives and further technological improvements, tertiary recovery—recovery spurred by the introduction of heat or chemicals to loosen oil from the sand and speed its flow through formations—could make an important contribution to the nation's crude supply by 1985.

That places crude produced by tertiary methods as far out as some of the other sources of energy to be developed over the next ten years or so. But there will still be a need for this oil as the nation moves to primary dependence on other energy sources.

Continued incentives are important in promoting further techno-

logical improvements. Tertiary recovery takes large amounts of high-cost chemicals and equipment. And though the location of the oil is known, because the processes involved in recovering it will still be new, initial costs could be high, making financial risks heavy. For the processes to be helpful, their costs will have to be kept below the value of the oil recovered.

How well costs match potentials for recovery depends on the fields. Since conditions in reservoirs vary from field to field, several types of tertiary methods are being studied. All, however, are devised to dislodge oil and move it to the well.

The viscosity of the oil, for example, and properties of the fluids used to cut it loose from the sand determine how much of the oil can be displaced. And the permeability and porosity of the formations determine how well the oil that has been displaced can be flushed into producing wells.

The problems involved in such projects can be highly complex. Processes designed to improve displacement, for instance, can hurt efforts to push the oil out of the formations.

An initial injection of both water and chemicals that accomplished all now done with flooding plus all that might be done with tertiary recovery would allow all stages of advanced recovery to be done in one step. While this scheme might not be practical for all fields, it could apparently be made workable for some. There would be marked advantages to recovery in one step.

For example, water now injected into a reservoir at the secondary stage of recovery later has to be produced along with any oil at the third stage. If these two stages could be combined into a single operation, all the oil would be cut loose at one time and flushed to the well by water that could be left in the ground.

Compression of a two-stage sequence into a single recovery operation is blocked mainly by difficulties in knowing physical conditions in reservoirs.

Meanwhile, by flooding first, engineers gain knowledge of conditions in a field that is useful in evaluating possibilities for tertiary operations later, reducing some of the risks of such a costly operation.

And as they develop better understanding of reservoir conditions in particular fields, they move closer to the day when they can go directly into tertiary operations.

... may take more incentives

While the sharp rise in crude prices has provided strong stimulus to increase production, still more incentive may be needed. Decontrol of oil prices, for example, could spur secondary and tertiary recovery over the next few years, in the long run, speeding development of the technology needed to bring out even more of the oil that has been left in reservoirs.

Under the two-tier system of price controls, most oil from fields produced at 1972 levels must be sold under a ceiling of \$5.25 a barrel. To encourage increases in production, new oil and oil produced at higher levels than in 1972 can be sold at the market price, which has been about \$10 a barrel.

Of the 3.8 million barrels of oil produced every day with enhanced recovery methods, about 63 percent is subject to the price ceiling. That is because much of the additional recovery effort could not increase production above 1972 levels. It could only prolong the output of declining fields.

Removal of controls could eliminate what may be a disincentive to take up enhanced recovery operations. With today's technology, enhanced recovery has been expected to provide a total of 5.4 billion barrels of crude by 1980.

That, however, has been under the two-tier system. According to estimates by the Interstate Oil Compact Commission, removal of controls would probably allow secondary and tertiary recovery production to rise another 3.1 billion barrels.

Released from controls, prices would go up. The commission expects the average price to rise at least 74 cents a barrel and maybe as much as \$1.81. With higher prices, producers could probably afford to double the \$3.4 billion they have been expected to invest in enhanced recovery under price controls.

But more experience with these advanced techniques, together with more effort to refine them further, could improve the nation's outlook for energy far beyond 1985.

Incentives, in fact, are apt to become increasingly important as primary reserves are drawn down in the years ahead. Included among the nearly 300 billion barrels of crude that cannot be recovered by conventional primary and secondary methods, for example, are close to 100 billion barrels of very heavy crude that could probably best be removed by some sort of thermal method. Fully half of this, in fact—most of it in California—is so heavy it could be removed only if some sort of heat was applied to thin it.

Since some of this oil occurs at shallow depths—much of it at less than 500 feet—other possibilities for reaching it include open-pit mining. There could be environmental problems with such an approach. That, in fact, with still higher production costs, removes mining as a possibility for several decades. But as the incentives and technology continue to change, chances improve for this oil, too, to be taken out.

—Stephen L. Gardner

HIGHLIGHTS OF THE NEW BUDGET

The federal budget for fiscal 1976 calls for record tax collections and record spending.

On February 3, the President presented to Congress the Administration's estimates and proposals for taxes and expenditures. Because the budget presented by the President is essentially a forecast of federal fiscal activity, his budget message outlined assumptions made in developing revenue and spending figures. Following are the major assumptions for the year beginning July 1:

- An increase in defense outlays to preserve force levels in the face of rising costs
- A one-year moratorium on all new spending programs except those dealing with energy
- A 5-percent ceiling on both pay increases for Government employees and benefits to individuals that had been tied to changes in consumer prices
- A tax reduction providing \$12 billion in tax relief to individuals and \$4 billion to corporations
- A fuel conservation program increasing oil and gas taxes by \$30 billion

The accuracy of the predictions in the budget, then, depends on the assumptions made in drawing up the budget. Some of the assumptions were based on legislation that will have to be passed. But Congress could pass legislation other than that proposed in the budget, causing the forecast to change. One such possibility would be a cut in taxes that was more than the \$16 billion requested by the President.

Other assumptions were based on general economic conditions, which could change. The Administration assumed, for example, that unemployment will average about 8 percent of the labor force. If economic activity does not come up to the President's expectations, tax and spending forecasts could go awry. If the unemployment rate were to average 9 percent, tax yields could fall below estimates as much as \$5.2 billion.

Receipts—The biggest increases in revenue are expected to come from corporate profit taxes and excise taxes. But the forecast for yields on excise taxes assumes passage of an excise tax on domestic

crude oil and natural gas. The Administration estimates \$15.2 billion from this new tax.

A big increase in social insurance taxes and contributions is also expected. This is based on previously enacted changes in Social Security tax laws calling for increases in taxable pay from \$13,200 in 1974 to \$14,100 in 1975 and \$15,300 in 1976.

The decline in receipts from individual income taxes reflects part of the proposed rebate on 1974 taxes, plus a special tax rebate associated with higher oil and gas taxes proposed by the President.

Other tax yields are expected to rise, largely on the strength of revenue from the special \$3-a-barrel tariff on imported oil. Receipts from this source were figured at \$3.8 billion.

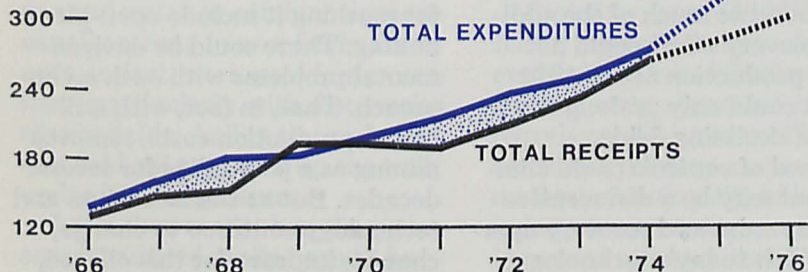
Revenue estimates are already off somewhat. As part of his energy package, the President intended to levy a \$3-a-barrel tariff on imported oil. The tariff was to have been imposed in monthly increments of \$1 a barrel starting in February. He has since agreed, however, to postpone the second and third monthly increases, cutting revenue from this source.

Expenditures—Spending is expected to surge more than 11 percent. Much of this, however, can be accounted for by increases in only two categories—defense and unemployment insurance benefits. Other increases are in health-related spending and interest payments on the national debt.

Spending on education, manpower, and social service programs is due to decline slightly. Expenditures on agricultural programs will have leveled off after several years of decline.

Outlook for deficit to grow

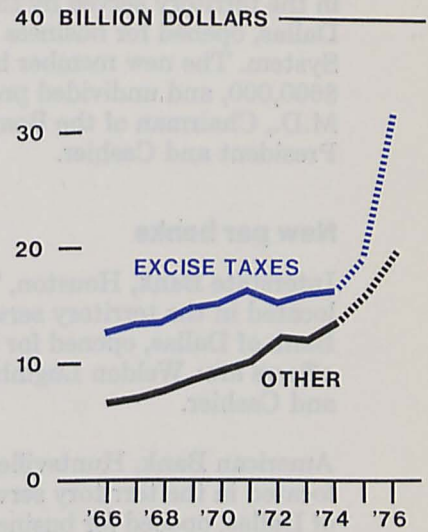
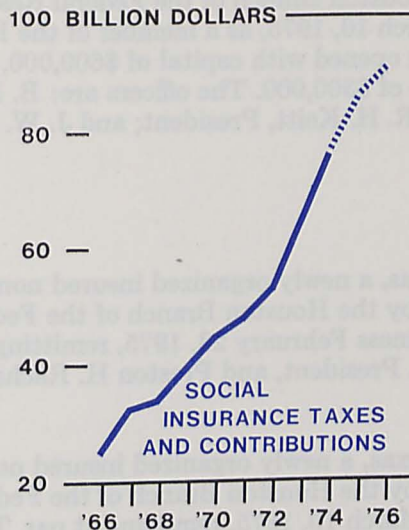
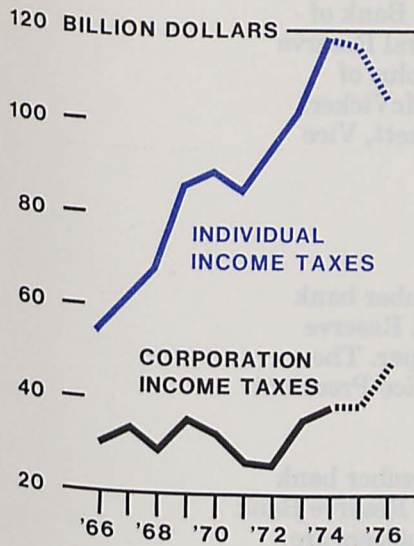
360 BILLION DOLLARS



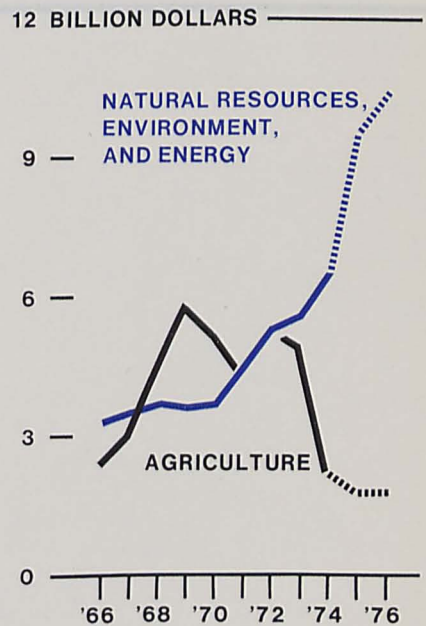
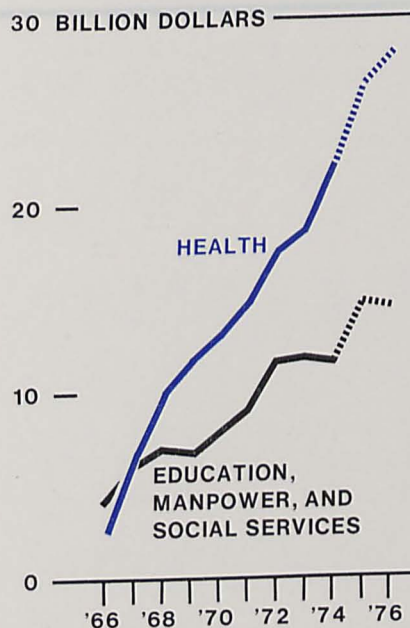
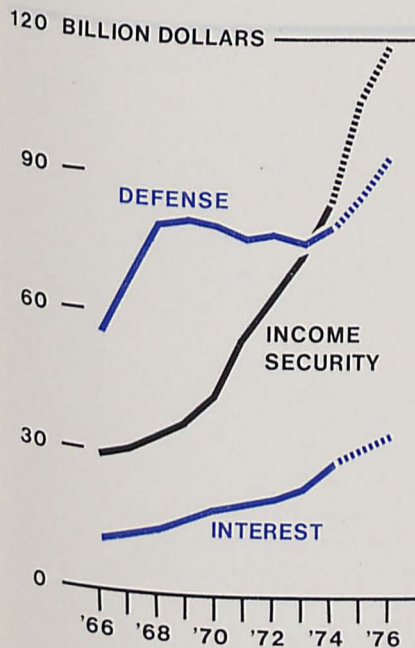
SOURCE: U.S. Office of Management and Budget

—Brian P. Sullivan

RECEIPTS



EXPENDITURES



SOURCE: U.S. Office of Management and Budget

New member bank

Security 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 March 10, 1975, as a member of the Federal Reserve System. The new member bank opened with capital of \$600,000, surplus of \$600,000, and undivided profits of \$300,000. The officers are: B. H. McVicker, M.D., Chairman of the Board; R. H. Keitt, President; and J. W. Pickett, Vice President and Cashier.

New par banks

Interstate Bank, Houston, Texas, a newly organized insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business February 28, 1975, remitting at par. The officers are: Weldon Luginbyhl, President, and Preston H. Rachal, Vice President and Cashier.

American Bank, Huntsville, Texas, a newly organized insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business March 10, 1975, remitting at par. The officers are: Ronald J. Mitchell, President, and Glen R. Reader, Vice President and Cashier.

Carmine State Bank, Carmine, Texas, an insured nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, began remitting at par March 12, 1975. The officers are: H. L. F. Doerr, Jr., President; Gus Krause, Inactive Vice President; and Leroy Levien, Cashier.



Research Department
Federal Reserve Bank of Dallas
Station K, Dallas, Texas 75222



Federal Reserve Bank of Dallas

April 1975

Statistical Supplement to the Business Review

Total credit at weekly reporting banks in the Eleventh District rose considerably more in the four weeks ended March 19 than in comparable periods of the past five years. The rise was in contrast to movements of recent months that showed total credit either expanding moderately or contracting.

All of the increase in bank credit reflected a sharp rise in bank holdings of securities. Holdings of Government securities rose considerably more than usual. And a more than sixfold increase in holdings of other issues exceeded the average gain for comparable periods of the past five years.

Weakness in loan demand prompted the significant expansion of bank investment portfolios. For the fifth consecutive month, loan demand was lower than in comparable periods of recent years. Demand was weak for all major types of loans except real estate. Recent increases in construction apparently led to an increased need for interim financing. The gain in real estate loans exceeded seasonal expectations for the first time in six months.

Loan demand from nonbank financial institutions declined contraseasonally. Thrift institutions used sizable savings inflows to make large loan repayments. Moreover, with the economy remaining sluggish, loan demand of businesses and consumers was weak for the third consecutive month.

A sizable drop in demand deposits led to a sharp fall in total deposits. In addition, for the second consecutive month, large CD's outstanding declined considerably more than in comparable periods of the past five years. But increases in other time and savings depos-

its—mainly accounts of individuals, businesses, and municipal governments—resulted in a slight gain in total time and savings deposits.

Industrial output in Texas fell in February, the third consecutive month of decline. The decline, the steepest in three months, was widespread among the state's major industries.

Output of petrochemicals was sharply curtailed. Manufacturers trimmed petroleum refining nearly 9 percent, as inventories of refined products were pressing storage capacities. And production of chemicals continued to trend downward, because customers made large purchases as a hedge against possible shortages last year and have reduced new orders this year.

Production of durable goods remained depressed, even though suppliers of oil field and electric-generating equipment continued operating near peaks. Output of utilities and mining showed little change from a month before.

The labor market in the five southwestern states deteriorated further in February. Seasonally adjusted, both total employment and the civilian labor force declined.

Jobless statistics rose further, with the unemployment rate climbing to 7.1 percent. Job losses continued to be centered in manufacturing, but payrolls in building trades were also substantially lower.

After increasing sharply in the previous four weeks, seasonally adjusted purchases at department stores in the Eleventh District leveled off from mid-February to mid-March.

Promotional campaigns designed to lower post-Christmas inventories produced an upturn in sales early in the year. But since retailers have been generally successful in reducing stocks, promotions, for the most part, have been suspended. And sales have returned to the sluggish pace that began last summer.

New car purchases were up in February, the third consecutive month of gain. Seasonally adjusted registrations of new cars rose 12 percent in the four largest metropolitan counties in Texas. As a result, February was the first month since mid-1973 that sales topped year-earlier levels. The gain exceeded the increases in the previous two months and reflected effects of the cash rebate program. Dealers reported cash rebates were generally successful in reducing inventories of new cars.

Preparations of land for spring planting were progressing well in states of the Eleventh District in March, as soil moisture was favorable. In South Texas, planting of cotton, corn, sorghum, peanuts, and rice was already under way.

Acreage of major crops this year is expected to be only slightly more than last year. Increases in acreage seeded to corn, sorghum, and soybeans would more than offset the fewer acres planted to cotton, rice, oats, and barley. Hay and peanut acreages, meanwhile, would change little from 1974. In Texas, farmers plan to expand sorghum plantings 13 percent to 8.5 million acres—but to reduce cotton acreage 19 percent to 4.3 million acres.

Cattle feeding was still depressed. Cattle on feed in Texas numbered
(Continued on back page)

CONDITION STATISTICS OF WEEKLY REPORTING COMMERCIAL BANKS

Eleventh Federal Reserve District

(Thousand dollars)

ASSETS	Mar. 19, 1975	Feb. 19, 1975	Mar. 20, 1974	LIABILITIES	Mar. 19, 1975	Feb. 19, 1975	Mar. 20, 1974
Federal funds sold and securities purchased under agreements to resell	2,002,272	1,929,698	1,948,101	Total deposits	15,904,458	16,139,768	14,536,196
Other loans and discounts, gross	10,316,946	10,345,094	9,872,802	Total demand deposits	7,251,846	7,519,495	7,110,196
Commercial and industrial loans	4,942,072	4,927,967	4,366,917	Individuals, partnerships, and corporations	5,221,944	5,364,897	5,077,322
Agricultural loans, excluding CCC certificates of interest	200,839	222,339	295,293	States and political subdivisions	414,349	479,988	451,602
Loans to brokers and dealers for purchasing or carrying:				U.S. Government	162,914	82,617	169,709
U.S. Government securities	15	15	445	Banks in the United States	1,280,374	1,410,475	1,252,077
Other securities	27,863	24,542	49,532	Foreign:			
Other loans for purchasing or carrying:				Governments, official institutions, central banks, and international institutions	3,385	3,959	2,560
U.S. Government securities	2,330	2,415	4,474	Commercial banks	70,289	65,553	52,367
Other securities	396,520	399,321	442,673	Certified and officers' checks, etc.	98,591	112,006	104,559
Loans to nonbank financial institutions:				Total time and savings deposits	8,652,612	8,620,273	7,426,000
Sales finance, personal finance, factors, and other business credit companies	141,071	163,352	118,389	Individuals, partnerships, and corporations:			
Other	564,316	604,281	765,903	Savings deposits	1,244,721	1,201,106	1,170,532
Real estate loans	1,492,484	1,474,414	1,466,405	Other time deposits	4,600,995	4,689,292	4,079,097
Loans to domestic commercial banks	67,339	48,111	42,714	States and political subdivisions	2,494,872	2,465,331	2,068,860
Loans to foreign banks	78,332	66,440	55,493	U.S. Government (including postal savings)	11,729	14,570	10,305
Consumer instalment loans	1,106,768	1,109,806	1,035,586	Banks in the United States	272,458	226,037	83,610
Loans to foreign governments, official institutions, central banks, and international institutions	5	5	203	Foreign:			
Other loans	1,296,992	1,302,086	1,228,775	Governments, official institutions, central banks, and international institutions	22,237	18,337	13,296
Total investments	4,682,276	4,475,772	4,155,073	Commercial banks	5,600	5,600	300
Total U.S. Government securities	1,121,114	1,094,721	1,031,514	Federal funds purchased and securities sold under agreements to repurchase	2,808,437	2,844,275	3,278,558
Treasury bills	146,352	175,649	164,945	Other liabilities for borrowed money	82,763	58,686	167,054
Treasury certificates of indebtedness	0	0	0	Other liabilities	657,913	603,391	492,505
Treasury notes and U.S. Government bonds maturing:				Reserves on loans	204,469	200,719	178,190
Within 1 year	209,582	152,329	152,452	Reserves on securities	21,279	21,307	24,252
1 year to 5 years	613,218	593,183	514,652	Total capital accounts	1,448,161	1,441,880	1,278,860
After 5 years	151,962	173,560	199,465				
Obligations of states and political subdivisions:				TOTAL LIABILITIES, RESERVES, AND CAPITAL ACCOUNTS	21,127,480	21,310,026	19,955,615
Tax warrants and short-term notes and bills	104,894	110,220	151,360				
All other	3,077,041	2,962,847	2,684,781				
Other bonds, corporate stocks, and securities:							
Certificates representing participations in federal agency loans	8,425	12,099	13,113				
All other (including corporate stocks)	370,802	295,885	274,245				
Cash items in process of collection	1,367,039	1,711,919	1,434,004				
Reserves with Federal Reserve Bank	1,119,420	1,160,055	1,048,484				
Currency and coin	130,442	130,156	125,094				
Balances with banks in the United States	469,653	534,899	505,113				
Balances with banks in foreign countries	30,354	37,543	16,482				
Other assets (including investments in subsidiaries not consolidated)	1,009,078	984,890	850,522				
TOTAL ASSETS	21,127,480	21,310,026	19,955,615				

DEMAND AND TIME DEPOSITS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. Million dollars)

Date	DEMAND DEPOSITS			TIME DEPOSITS	
	Total	Adjusted ¹	U.S. Government	Total	Savings
1973: February	13,270	9,516	379	12,811	2,817
1974: February	13,949	10,082	264	14,919	2,909
March	13,933	10,150	260	15,126	2,958
April	13,984	10,289	236	15,143	2,975
May	13,553	9,880	278	15,148	2,962
June	13,742	10,030	240	15,333	2,979
July	13,809	10,056	212	15,442	2,983
August	13,634	9,988	175	15,509	2,956
September	13,740	9,973	222	15,586	2,952
October	13,687	9,976	149	15,714	2,977
November	13,843	10,148	138	16,016	3,009
December	14,351	10,355	208	16,177	3,049
1975: January	14,180	10,353	166	16,842	3,079
February	13,956	10,245	150	17,052	3,124

1. Other than those of U.S. Government and domestic commercial banks, less cash items in process of collection

RESERVE POSITIONS OF MEMBER BANKS

Eleventh Federal Reserve District

(Averages of daily figures. Thousand dollars)

Item	4 weeks ended Mar. 5, 1975	5 weeks ended Feb. 5, 1975	4 weeks ended Mar. 6, 1974
Total reserves held	1,998,763	2,062,531	1,991,735
With Federal Reserve Bank	1,665,927	1,701,048	1,679,392
Currency and coin	332,836	361,483	312,343
Required reserves	1,992,523	2,036,179	1,982,945
Excess reserves	6,240	26,352	8,790
Borrowings	11,889	22,578	39,027
Free reserves	-5,649	3,774	-30,237

CONDITION STATISTICS OF ALL MEMBER BANKS

Eleventh Federal Reserve District

(Million dollars)

Item	Feb. 26, 1975	Jan. 29, 1975	Feb. 27, 1974
ASSETS			
Loans and discounts, gross	21,932	21,612	21,411
U.S. Government obligations	2,246	2,144	2,315
Other securities	7,123	7,067	6,408
Reserves with Federal Reserve Bank	1,888	1,814	1,646
Cash in vault	376	392	355
Balances with banks in the United States	1,373	1,377	1,466
Balances with banks in foreign countries ^e	43	53	20
Cash items in process of collection	1,758	1,625	1,813
Other assets ^e	1,706	1,736	1,619
TOTAL ASSETS ^e	38,445	37,820	37,053
LIABILITIES AND CAPITAL ACCOUNTS			
Demand deposits of banks	1,701	1,703	1,800
Other demand deposits	12,134	12,079	12,166
Time deposits	17,059	17,013	15,065
Total deposits	30,894	30,795	29,031
Borrowings	3,258	2,795	4,213
Other liabilities ^e	1,612	1,564	1,312
Total capital accounts ^e	2,681	2,666	2,497
TOTAL LIABILITIES AND CAPITAL ACCOUNTS ^e	38,445	37,820	37,053

^e—Estimated

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			
	Feb. 1975 (Annual-rate basis)	Percent change			Feb. 28, 1975	Annual rate of turnover		
		Feb. 1975 from		2 months, 1975 from 1974		Feb. 1975	Jan. 1975	Feb. 1974
		Jan. 1975	Feb. 1974					
ARIZONA: Tucson	\$16,845,271	4%	10%	7%	\$367,843	46.6	45.1	42.2
LOUISIANA: Monroe	5,594,198	0	8	7	125,230	45.0	46.9	43.2
Shreveport	21,220,210	10	21	21	333,900	62.5	54.9	52.7
NEW MEXICO: Roswell ²	1,305,805	-10	-10	-3	52,368	25.6	28.2	26.3
TEXAS: Abilene	4,172,837	4	8	2	149,444	28.9	28.0	25.0
Amarillo	10,030,145	-4	2	-1	243,687	42.5	43.7	41.4
Austin	20,133,362	-4	5	8	476,304	46.1	51.2	40.1
Beaumont-Port Arthur-Orange	10,744,008	-8	5	7	328,211	33.1	36.2	33.6
Brownsville-Harlingen-San Benito	4,017,384	8	19	14	127,065	32.3	30.6	27.7
Bryan-College Station	1,696,999	-7	9	3	60,148	28.5	30.9	25.2
Corpus Christi	12,482,480	7	0	3	304,618	41.0	39.8	41.9
Corsicana ³	752,782	2	9	3	41,813	18.2	18.0	16.2
Dallas	260,695,469	12	8	10	3,168,520	84.2	77.1	81.0
El Paso	13,721,005	13	-3	-4	348,988	41.5	38.7	43.8
Fort Worth	41,029,159	4	6	5	943,682	44.0	42.8	45.2
Galveston-Texas City	4,654,613	-16	15	28	141,762	32.7	38.2	29.8
Houston	260,925,944	6	29	28	3,999,755	66.0	63.3	57.0
Killeen-Temple	2,914,254	5	9	7	120,061	24.3	23.5	22.8
Laredo	1,906,193	-2	5	8	68,729	28.2	28.8	28.5
Lubbock	9,556,188	20	-9	-21	233,975	41.5	34.1	41.1
McAllen-Pharr-Edinburg	4,331,134	-9	20	23	166,167	26.3	28.5	22.7
Midland	4,141,823	-6	26	28	218,253	19.3	19.7	17.6
Odessa	3,342,466	5	27	30	138,696	25.0	24.3	23.9
San Angelo	2,891,818	6	19	12	96,332	30.1	28.1	26.6
San Antonio	32,196,293	6	9	8	920,036	35.4	33.5	32.9
Sherman-Denison	1,535,027	-8	0	2	87,445	17.7	19.1	18.4
Texarkana (Texas-Arkansas)	2,317,355	4	10	9	91,669	25.2	23.9	22.5
Tyler	3,856,345	-1	25	22	136,102	27.6	26.3	23.6
Waco	6,417,617	9	32	24	168,988	39.1	37.3	31.4
Wichita Falls	4,954,390	7	15	16	182,602	27.5	26.0	27.0
Total—30 centers	\$770,382,574	7%	14%	15%	\$13,842,393	56.6	53.7	52.2

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

CONDITION OF THE FEDERAL RESERVE BANK OF DALLAS

(Thousand dollars)

Item	Mar. 26, 1975	Mar. 27, 1974	Feb. 26, 1975
Total gold certificate reserves	609,918	437,029	464,998
Loans to member banks	9,166	138,378	12,600
Other loans	0	0	0
Federal agency obligations	220,710	93,280	214,277
U.S. Government securities	3,589,895	3,411,391	3,698,409
Total earning assets	3,819,771	3,643,049	3,925,286
Member bank reserve deposits	1,762,463	1,726,860	1,888,320
Federal reserve notes in actual circulation	2,648,081	2,414,055	2,615,229

VALUE OF CONSTRUCTION CONTRACTS

(Million dollars)

Area and type	January—February				
	Feb. 1975	Jan. 1975	Dec. 1974	1975	1974r
FIVE SOUTHWESTERN STATES ¹	693	770	673	1,463	1,613
Residential building	231	267	237	498	651
Nonresidential building	335	337	268	672	610
Nonbuilding construction	128	166	168	293	352
UNITED STATES	4,955	5,100	7,304	10,036	12,257
Residential building	1,583	1,562	1,715	3,146	4,746
Nonresidential building	2,199	2,233	2,451	4,413	4,487
Nonbuilding construction	1,172	1,305	3,139	2,476	3,024

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

BUILDING PERMITS

Area	VALUATION (Dollar amounts in thousands)							
	NUMBER				Percent change			
	Feb. 1975		2 mos. 1975		Feb. 1975 from		2 months, 1975 from	
	1975	1975	1975	1975	Jan. 1975	Feb. 1974	1975 from	1974
ARIZONA								
Tucson	398	847	\$4,209	\$10,407	-32%	-9%	-32%	
LOUISIANA								
Monroe	55	111	1,301	2,904	-19	-29	21	
Shreveport	438	928	3,867	6,798	32	-60	-45	
TEXAS								
Abilene	98	161	1,923	3,058	69	135	74	
Amarillo	151	358	3,258	6,233	11	-11	-25	
Austin	380	697	16,773	21,462	258	23	-34	
Beaumont	160	329	2,122	3,783	28	52	-24	
Brownsville	103	196	555	1,312	-27	-42	-82	
Corpus Christi	210	429	2,435	7,282	-50	-55	-13	
Dallas	1,407	2,766	11,528	49,487	-70	-40	16	
Denison	14	36	105	429	-68	-18	-8	
El Paso	341	683	4,830	26,056	-77	-32	25	
Fort Worth	311	620	4,714	8,388	28	-25	-44	
Galveston	36	86	129	1,431	-90	-73	-50	
Houston	1,809	3,516	39,276	93,613	-28	-18	-23	
Laredo	32	75	85	816	-88	60	389	
Lubbock	111	230	3,181	7,559	-27	-83	-79	
Midland	97	194	1,769	3,463	4	83	-73	
Odessa	98	170	2,731	3,653	196	53	-38	
Port Arthur	79	92	245	523	-12	31	15	
San Angelo	65	107	1,209	1,710	141	45	-29	
San Antonio	1,122	2,305	5,837	13,238	-21	-75	-70	
Sherman	18	42	102	954	-88	-56	65	
Texarkana	43	103	223	873	-66	-44	34	
Waco	163	316	785	2,889	-63	-72	-31	
Wichita Falls	76	130	1,404	1,847	217	159	48	
Total—26 cities	7,815	15,527	\$114,623	\$280,168	-30%	-34%	-31%	

DAILY AVERAGE PRODUCTION OF CRUDE OIL

(Thousand barrels)

Area	Feb. 1975	Jan. 1975	Feb. 1974r	Percent change from	
				Jan. 1975	Feb. 1974
FOUR SOUTHWESTERN					
STATES	5,973.0	6,043.2	6,542.4	-1.2%	-8.7%
Louisiana	1,904.5	1,945.7	2,194.7	-2.1	-13.2
New Mexico	267.0	267.5	273.6	-2	-2.4
Oklahoma	453.5	462.0	552.1	-1.8	-17.9
Texas	3,348.0	3,368.0	3,522.0	-6	-4.9
Gulf Coast	655.0	663.6	679.8	-1.3	-3.7
West Texas	1,786.5	1,787.7	1,853.6	-1	-3.6
East Texas (proper)	214.5	217.4	202.3	-1.3	6.0
Panhandle	53.5	54.4	59.6	-1.7	-10.2
Rest of state	638.5	644.9	726.7	-1.0	-12.1
UNITED STATES	8,495.5	8,583.7	9,155.9	-1.0%	-7.2%

r—Revised

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

LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT

Five Southwestern States¹

(Seasonally adjusted)

Item	Thousands of persons			Percent change	
	Feb. 1975p	Jan. 1975	Feb. 1974r	Jan. 1975	Feb. 1974
Civilian labor force	9,229.6	9,263.2	8,903.0	-0.4%	3.7%
Total employment	8,576.8	8,637.2	8,480.9	-7	1.1
Total unemployment	652.8	626.0	422.0	4.3	54.7
Unemployment rate	7.1%	6.8%	4.7%	2.3	2.4
Total nonagricultural wage and salary employment	7,594.4	7,631.2	7,479.0	-5	1.5
Manufacturing	1,260.0	1,282.7	1,315.1	-1.8	-4.2
Durable	709.0	720.8	743.4	-1.6	-4.6
Nondurable	551.0	561.9	571.8	-1.9	-3.6
Nonmanufacturing	6,334.5	6,348.5	6,163.9	-2	2.8
Mining	268.6	267.1	249.6	.6	7.6
Construction	517.7	532.4	521.6	-2.8	-7
Transportation and public utilities	507.8	512.9	515.9	-1.0	-1.6
Trade	1,808.6	1,808.7	1,766.3	.0	2.4
Finance	420.0	419.1	404.7	.2	3.8
Service	1,297.6	1,294.3	1,250.6	.3	3.8
Government	1,514.2	1,514.0	1,455.1	.0%	4.1%

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)

LIVESTOCK ON FARMS AND RANCHES, JANUARY 1

(Thousands)

Type	Texas		Five southwestern states ¹		United States	
	1975	1974	1975	1974	1975	1974r
All cattle and calves	16,600	16,250	27,822	27,020	131,826	127,670
Milk cows	350	350	701	705r	11,217	11,286
Beef cows	6,890	6,470	11,598	10,775r	45,421	43,008
Sheep	2,688	3,090r	3,877	4,372r	14,538	16,394
Stock sheep	2,484	2,700r	3,495	3,810r	12,480	13,744
Feeders	204	390	382	562	2,058	2,650
Hogs ²	940	1,050	1,590	1,686	55,062	61,106
Layer chickens ³	10,000	11,200	16,713	18,084	284,501	296,462
Turkey breeder hens ³	415	500	423	516	2,970	3,553

r—Revised

1. Arizona, Louisiana, New Mexico, Oklahoma, and Texas

2. Data as of December of preceding year

3. Oklahoma and Texas only

SOURCE: U.S. Department of Agriculture

INDUSTRIAL PRODUCTION

(Seasonally adjusted indexes, 1967 = 100)

Area and type of index	Feb. 1975p	Jan. 1975	Dec. 1974	Feb. 1974
TEXAS				
Total industrial production	132.9	136.1	138.6r	135.9
Manufacturing	138.7	143.1	145.1r	141.8
Durable	157.6	161.1	161.3	159.2
Nondurable	125.1	130.2	133.5r	129.3
Mining	109.7	110.5	114.8r	117.4
Utilities	168.4	168.0	169.4r	151.4
UNITED STATES				
Total industrial production	110.3	113.7	117.7r	124.6
Manufacturing	108.9	112.2	116.3r	124.5r
Durable	104.1	108.1	112.3r	119.4r
Nondurable	116.0	118.3	122.0r	131.5r
Mining	108.0	108.9	105.1r	111.7r
Utilities	145.8	145.7	150.7	146.1

p—Preliminary

r—Revised

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

1.1 million head on March 1—54 percent fewer than a year earlier. And in Arizona, 304,000 head were being fed—49 percent fewer than a year before.

Even with a drop in cattle feeding, however, beef production in Texas was up nearly 33 percent over a year earlier. By contrast, pork and lamb production was off substantially.

The index of prices Texas farmers and ranchers received in the month ended February 15 declined for the fourth consecutive month. Average

prices dropped 4 percent to a level 28 percent less than a year earlier—and the lowest in two years. A substantial decline in prices for crops combined with a slight reduction in prices for livestock and livestock products to produce the decline in prices in February.

The index of prices farmers paid remained unchanged from the previous month. An increase in consumption expenses was offset by lower production costs. The index of prices paid was 12 percent higher than a year before.