

Financial Stress in the Oil Patch: Recent Experience at Energy Banks

By *Tim R. Smith*

Dramatic changes in the world oil market in 1986 profoundly affected the domestic energy industry, general economic conditions in energy-producing states, and financial institutions in those states. In particular, financial problems in the energy sector have adversely affected many energy lenders, directly and through their indirect effect on other sectors. Although the general decline in the profitability of banks in energy states is well known, little information has been available about the relative performance of banks specializing in energy loans.

This article provides evidence on the performance of "energy banks" compared with other banks in the energy belt—a region of seven energy-producing states.¹ The first section reviews the origins of energy-related financial problems. Attention is focused on recent events

in international oil markets and their economic effects on the energy belt states. The second section explores the recent deterioration in the performance of energy banks. These banks are compared with all banks in the region and the nation on the basis of overall profitability and loan quality. Conclusions regarding the outlook for energy lenders and their capacity to withstand future losses are presented in the third section. In brief, the evidence suggests that energy lenders can expect substantial problems to carry over from 1986.

Origins of energy-related financial problems

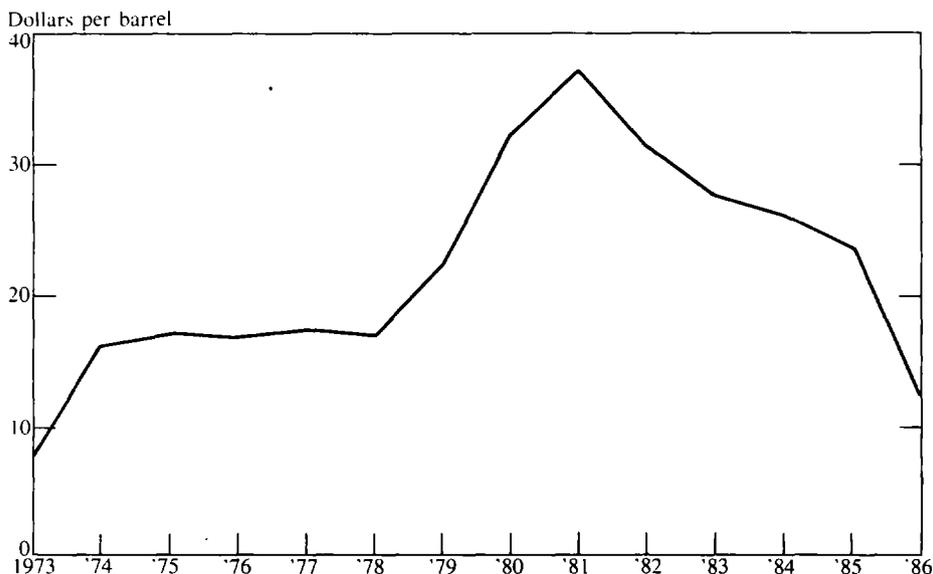
The boom in the 1970s and early 1980s

Many of the financial troubles plaguing energy-related businesses and their lenders are rooted in

¹ For the purposes of this study, the "energy belt" is defined as seven states—Colorado, Kansas, Oklahoma, New Mexico, Wyoming, Louisiana, and Texas. The first five states are Tenth Federal Reserve District states. Together, these seven states account for about two-thirds of the total U.S. employment in oil and gas exploration.

Tim R. Smith is an economist at the Federal Reserve Bank of Kansas City. Katherine M. Hecht, a research associate at the bank, provided assistance.

CHART 1
Refiner acquisition cost of crude oil*
 (annual average, 1982 dollars)



Source: Department of Energy

*Constant dollar cost calculated using GNP Price Deflator, 1982=100

the 1970s and early 1980s, when bullish expectations for oil prices directed substantial economic resources to the energy belt. Both the Arab oil embargo in 1973 and the growing influence of the Organization of Petroleum Exporting Countries (OPEC) caused world oil prices to rise sharply in the 1970s (Chart 1).² Many in the energy industry and banks serving the industry believed oil prices would continue to rise for an extended period. Expectations of still higher oil

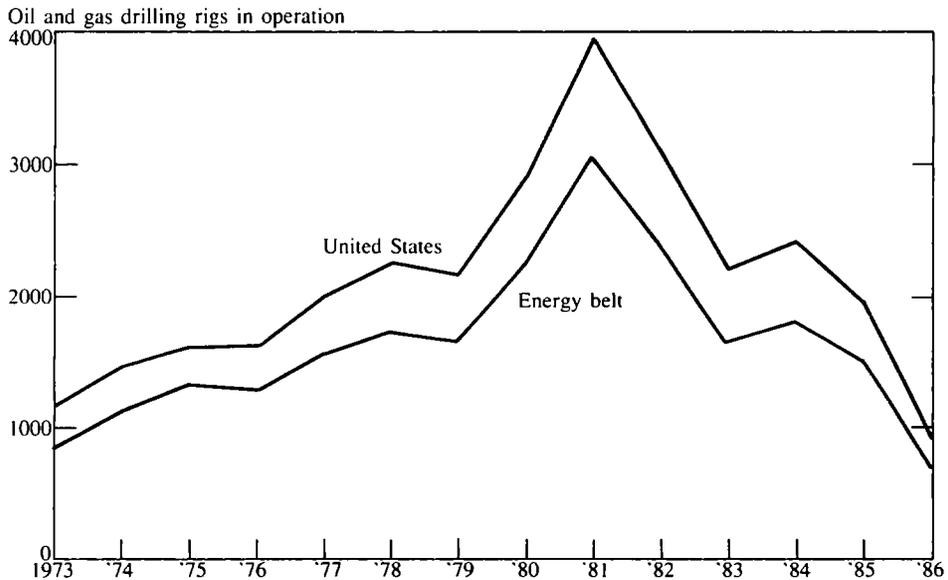
prices in the future were necessary to make high-cost domestic sources economical to develop because of the long lags involved in discovering and developing petroleum reserves.

The domestic petroleum industry grew by leaps and bounds in the 1970s and early 1980s. The average number of oil and gas drilling rigs operating in the United States increased more than threefold between 1973 and 1981 (Chart 2). The nation's employment in oil and gas extraction doubled between 1973 and the end of the decade and rose 163 percent by 1982, when employment in the industry peaked at nearly a million workers (Chart 3).

Much of the growth in the domestic energy industry was concentrated in the energy belt. Together, the seven energy belt states—Colorado, Kansas, Oklahoma, New Mexico, Wyoming,

² The average cost to refiners of domestic and imported crude oil is used in this article to measure changes in world oil prices. This series of real annual average spot and contract prices gives a broad indication of relative price movements from year to year. Spot prices of key crude oils, such as Saudi Arabian Light and West Texas Intermediate, generally mirror the average refiner acquisition costs.

CHART 2
Drilling activity, energy belt and the United States



Source: Hughes Rig Count, *Oil and Gas Journal*

CHART 3
Employment in oil and gas extraction, energy belt and the United States

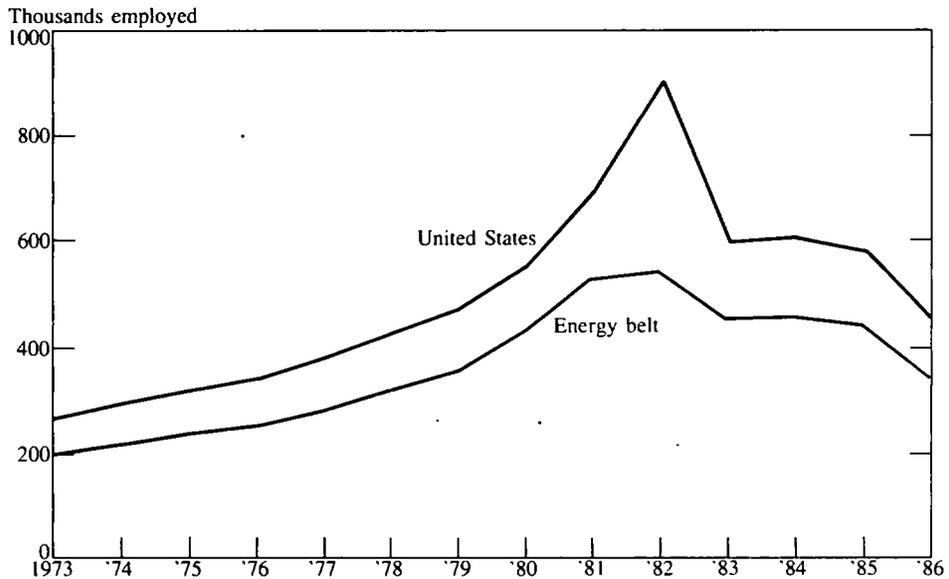
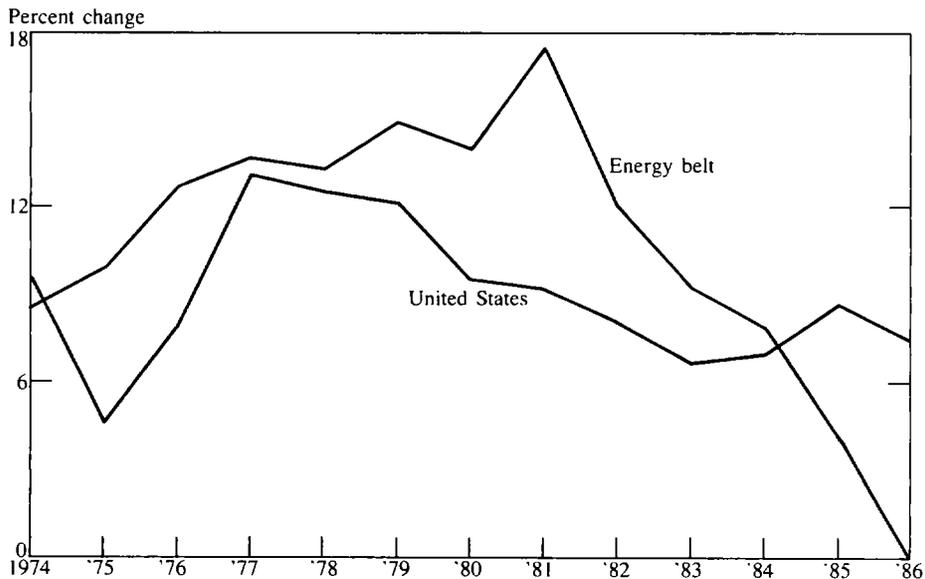


CHART 4
Growth in assets at insured commercial banks*



*Growth rates are calculated using end-of-year assets, fully consolidated net of loan losses, except for 1974. For 1974, asset growth is estimated using domestic assets only.

Louisiana, and Texas—together represent about two-thirds of the U.S. total of both oil and gas drilling activity and employment. Therefore, the expansion in oil and gas drilling and employment in the 1970s and early 1980s, while national in scope, was centered mostly in the energy belt (Charts 2 and 3).

The general economic effect of the energy boom was especially strong in the energy belt. The oil and gas industry accounted for a much larger share of total economic activity in those states than in the United States as a whole. At its peak in 1982, oil and gas extraction accounted for 4.6 percent of the employment in the energy belt. In the nation as a whole, the proportion was only 1.0 percent. Thus, the energy-driven economies of these seven states were also more exposed to the adverse economic effects of the energy downturn.

Although banks outside the region—including some large money center banks—participated in the energy-lending boom, the thriving energy industry fueled a rapid rise in assets at energy belt banks (Chart 4). Assets at commercial banks in the energy belt tripled between 1973 and 1982. And the annual growth in assets at energy belt banks exceeded growth at all U.S. banks during that period. Much of this growth in assets likely came from the addition of energy loans and loans to nonenergy businesses that expanded as regional economic activity picked up.

Banks in the region made many types of energy loans, each with a different level of risk. Portfolios included many sound production loans secured by proven reserves. But they also included many risky loans that were secured by undeveloped energy properties and other loans to oilfield service companies, oilfield equip-

ment manufacturers and suppliers, contract drillers, and refiners. Many loans made during the boom were considered well secured at the time. No one predicted the events that would push large numbers of energy loans into troubled categories and lead eventually to numerous bank failures.

The oil price declines in the 1980s

World oil prices came under substantial downward pressure in the early 1980s from increasing non-OPEC supplies, especially from Britain, Norway, and the United States, and weak world demand for energy. OPEC's official prices were undermined by barter deals and other price concessions by member nations. In the face of these supply and demand pressures, OPEC lowered its official price in early 1983 from \$34 a barrel to \$28.50. Average world oil prices slid further to the \$27 level in 1985.

The initial declines in oil prices between 1981 and 1985 led to a significant softening in economic conditions in the energy belt. Exploration and development activity slowed considerably. The average number of active drilling rigs in the energy belt was cut in half between 1981 and 1985. By the end of 1985, regional employment in oil and gas extraction had fallen about 20 percent from its peak in 1982. In addition to these direct effects on the region's energy industry, indirect effects on other parts of the regional economy, such as manufacturing and construction, caused economic growth in the region to lag far behind the nation after the 1982 recession.

Matters worsened in late 1985, when Saudi Arabia began aggressively expanding its market share. World petroleum prices fell when it became clear that OPEC's price and output agreement had become ineffective. The energy industry was still coming to grips with comparatively modest price declines when prices plummeted in the first few

months of 1986. By midyear, the average cost of crude oil to domestic refiners had fallen to close to \$11 a barrel with some spot market prices less than \$10. Although Saudi Arabia later changed its oil policy and OPEC returned to a quota system to shore up prices, prices for the year averaged only \$14.55 a barrel.

The domestic energy industry scaled down significantly as it adjusted to the break in prices in 1986. The consolidation of major oil companies picked up, as did the trimming of capital budgets that had started when prices began softening. Many independent producers went out of business. Drilling in the energy belt ground almost to a halt. The average number of active drilling rigs in the region fell almost 50 percent in 1986 to less than one-fourth the peak in 1981.

The employment effects were also large. Employment in oil and gas extraction in the energy belt fell 21 percent from the 1985 level. Again, the energy sector was a drag on overall regional economic performance, with large adverse effects on banks in the region.

Recent experience at energy banks

The downturn in the energy industry placed enormous stress on banks in the energy belt. The failure of Penn Square Bank in Oklahoma City in 1982 was the beginning of numerous bank failures. In 1985, 52 banks failed in the seven energy belt states. Bank failures in these states increased to 84 in 1986. Losses on energy loans were, of course, not solely responsible for all the bank problems. Indirect effects of the downturn in regional economic conditions and burgeoning financial difficulties in the agricultural sector also beset regional banks with loan losses and earnings difficulties. And all banks were having to cope with a decline in net earnings due to financial deregulation and a general decline in market interest rates.

The energy bank panel

The direct and indirect effect of the energy downturn on banks can be assessed by analyzing data from a sample of banks specializing in energy loans. In January 1986, the Federal Deposit Insurance Corporation (FDIC) identified 563 "energy banks" through a nationwide survey of FDIC-insured banks. Energy banks were identified generally as those with energy loans in excess of 25 percent of primary capital on December 31, 1985.³ Energy banks outside the important energy belt region were excluded from the sample. Banks identified as energy banks but not reporting energy loan totals were also excluded. Therefore, the resulting panel of 321 energy banks can be considered only a regional sample.⁴ The sample does not include all energy banks in the region. Nor does it consider participation in energy lending in the energy belt by banks outside the region. Nonetheless, the panel does provide a useful vehicle for comparing

³ The FDIC list of energy banks was compiled from quarterly special energy loan data from national banks compiled by the Office of the Comptroller of the Currency (OCC) and a survey of FDIC regional offices. Since energy loan totals are not available from the banks' regular call reports and have not been rigorously verified by the collecting agencies, the list can be considered only a tentative and partial estimate. Disaggregated energy bank data from the FDIC and the OCC are examination data and, therefore, are not available to the public. Special permission was granted by the FDIC and OCC to use the individual energy bank data to compile the aggregate data reported in this article. For a general description of the FDIC and OCC energy bank data, see testimony by Robert V. Shumway, director, Division of Bank Supervision, FDIC, and Jonathan L. Fiechter, director, Economic and Policy Analysis, OCC, before the Senate Committee on Energy and Natural Resources, March 25, 1986. Also, see *Washington Financial Reports*, Vol. 46, No. 14, April 7, 1986, Bureau of National Affairs, Washington, D.C.

⁴ As an updated list of energy banks and their energy loans was not available when this article was written, banks identified as energy banks at the end of 1985 were assumed to be energy banks at the end of 1986. Of the 321 energy banks identified in 1985, 304 remained at the end of 1986.

average loan quality and profitability data for a sample of energy banks with all banks in the region and in the nation.⁵

An examination of the loan portfolios at energy banks in the energy belt shows some important differences from the portfolios at all banks in the region (Table 1). Overall, energy loans account for 20 percent of the total loans outstanding at energy banks. On average, agricultural loans are less important to these banks than to other banks in the region. Real estate loans represent a somewhat larger proportion of loans at all banks than at energy banks, but nonresidential real estate loans are more important at energy banks. Consumer loans are a much larger proportion of loans at all banks than in energy banks alone.

Significant variation exists across energy banks of different size (Table 2). As a percent of total loans, energy loans are most important at the largest banks in the panel. At banks with more than \$1 billion in assets, energy loans accounted for nearly 23 percent of the total loans. The largest 25 banks accounted for more than three-fourths of the \$16.9 billion in energy loans outstanding at banks in the panel. The smallest size category, banks with less than \$100 million in assets, included the largest number of banks but accounted for only about 5 percent of the energy loans represented by the panel. Agricultural operating loans were much more important at the small banks in the panel than at medium or large-size banks.

Profits at energy banks

Profits at energy banks declined sharply in 1986 (Chart 5). One common measure of bank prof-

⁵ The energy bank sample is compared with all banks in the energy belt because the sample does not include all energy banks. Since energy banks have not generally performed as well as other banks, such a comparison may understate the differences between energy and nonenergy banks.

TABLE 1
Loan portfolios at energy banks, December 31, 1985

	Level, Billions of Dollars		Percent of Total Loans	
	Energy Banks	All Banks in Energy Belt	Energy Banks	All Banks in Energy Belt
Agricultural operating loans	1.4	8.1	1.7	4.1
Real estate loans	26.1	67.9	30.9	34.4
Residential	5.6	23.1	6.6	11.7
Nonresidential	20.1	42.8	23.8	21.7
Farm	0.4	2.0	0.5	1.0
Consumer loans	8.2	32.2	9.7	16.3
Commercial and industrial and all other loans	48.9	88.9	57.8	45.1
Energy*	16.9	—	20.0	—
Total†	84.6	197.2	100.0	100.0

*Energy loan data are available only for banks in the energy bank sample. Other banks are not required to report energy loans.
†Individual loan categories may not add up to total due to rounding.

itability is return on assets (ROA)—net income divided by total assets.⁶ ROA at energy banks fell from 0.32 percent in 1985 to -0.64 percent in 1986. This 0.96 percentage point drop was much larger for the group of energy banks than the 0.70 percentage point drop recorded for all banks in the energy belt. The negative ROA's at both energy banks and all banks in the region compare markedly with an ROA at U.S. banks of 0.65 percent in 1986.

⁶ Assets are net of loan loss reserves. Regional data are based on averages of assets at the end of the year and the end of the preceding year. All data except energy loans were taken from Reports of Condition and Income filed by insured commercial banks. National data are from *Banking and Economic Review*, Federal Deposit Insurance Corporation, March/April 1987.

The primary factor accounting for the larger decline in profitability at energy banks than at all banks in the region was an increase in loan loss provisions (Table 3). Net interest margin (NIM)—the difference between the yield on earning assets and the cost of funding them—dropped almost a half percentage point at energy banks and all banks in the energy belt in 1986. The increase in loan loss provisions was much greater, however, at energy banks than for all banks in the region.

Loan loss provisions increased dramatically at energy banks in 1986. The increase in loan loss provisions had a major adverse affect on the profitability of energy banks because these additions to the banks' loan loss reserves are subtracted from net interest income to determine profits.

TABLE 2
Loan portfolios at energy banks by size category
 (percent of total loans, December 31, 1985)

	Size of Energy Bank*			
	Less than \$100 million	\$100 million to \$300 million	\$300 million to \$1 billion	Over \$1 billion
Agricultural operating loans	7.4	2.2	2.6	0.9
Real estate loans	31.9	35.2	32.5	29.6
Residential	15.5	12.7	9.7	4.1
Nonresidential	14.5	21.8	22.3	25.2
Farm	1.9	0.6	0.5	0.3
Consumer loans	18.9	16.6	13.0	6.9
Commercial and industrial and all other loans	41.7	46.0	51.8	62.5
Energy	17.7	14.8	12.7	22.9
Number of banks	162	92	42	25
Percent of total energy loans in panel	4.8	8.4	10.4	76.3

*Based on end-of-year assets

Relative to assets, loan loss provisions at this group of energy banks increased 0.79 percentage points in 1986, 0.23 percentage points more than at all banks in the energy belt.

Although energy loan problems emerged when oil prices first began to fall, the quality of loan portfolios at energy banks clearly continued to deteriorate in 1986. Some of the increase in loan loss provisions was to cover higher chargeoffs of problem loans, and some of the increase was to cover future losses.

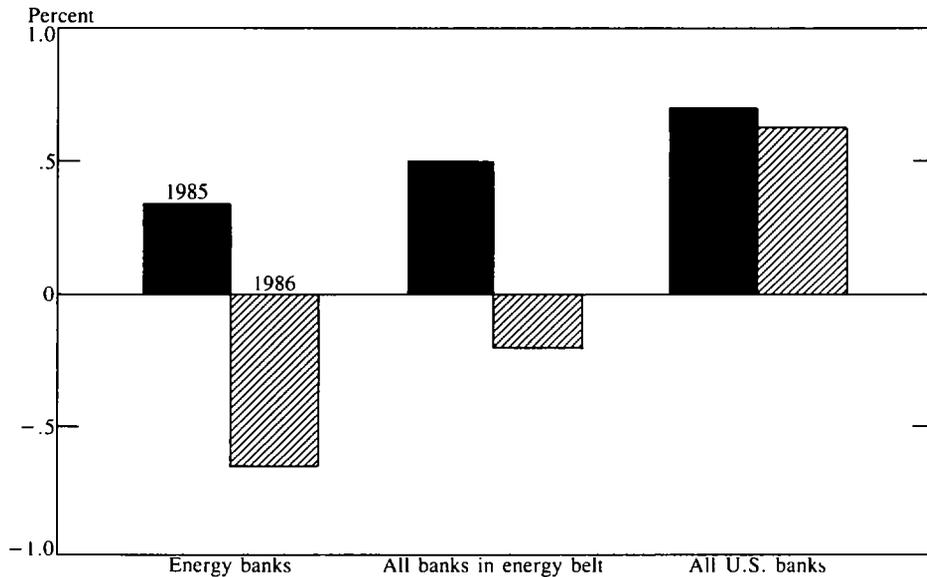
Credit quality problems

The average quality of loans at energy banks fell significantly in 1986. Net chargeoffs and

nonperforming loans at energy banks increased substantially. Although the increase in total chargeoffs was about the same at energy banks as at all banks in the energy belt, chargeoffs at both groups increased more than at all U.S. banks (Table 4). And nonperforming loans increased more at energy banks than at all banks in the region and the nation (Table 5).

The deterioration in loan quality was due to both problem energy loans and the indirect effects of weak regional economic conditions. Falling oil prices impaired the ability of many energy borrowers to service their debt as cash flows and collateral values declined. Banks first encountered problems with loans to oilfield service companies and other exploration-related concerns. But as oil

CHART 5
Return on assets at energy banks*



*Net income divided by average assets

TABLE 3
Factors affecting bank profits
 (percent of average assets)

	Energy Banks			All Banks in Energy Belt			United States		
	1985	1986	Change	1985	1986	Change	1985	1986	Change
Return on assets	0.32	-0.64	-0.96	0.49	-0.21	-0.70	0.71	0.65	-0.06
Net interest margin*	3.01	2.55	-0.46	3.89	3.43	-0.46	4.09	4.01	-0.08
Loan loss provisions	1.06	1.85	0.79	1.00	1.56	0.56	0.68	0.78	0.10

*Net interest margin is calculated on a taxable-equivalent basis

TABLE 4
Net chargeoffs by loan category*
 (percent of total loans in category)

	Energy Banks		All Banks in Energy Belt		United States	
	1985	1986	1985	1986	1985	1986
Total net chargeoffs	1.7	2.3	1.5	2.2	0.9	1.1
Agricultural	3.1	5.8	2.7	3.4	3.7	3.9
Real estate	0.6	1.2	0.5	1.0	0.3	0.4
Consumer	1.3	1.7	1.1	1.6	1.0	1.4
Commercial and industrial and all other loans	2.3	3.1	2.2	3.2	1.2	1.3

*Net chargeoffs as percent of total loans in category on December 31

TABLE 5
Nonperforming loans by loan category*
 (percent of total loans in category)

	Energy Banks		All Banks in Energy Belt		United States	
	1985	1986	1985	1986	1985	1986
Total nonperforming	4.8	7.0	3.9	5.7	2.6	2.8
Agricultural	8.4	7.0	5.5	6.0	6.0	6.3
Real estate	4.4	7.8	3.8	6.3	2.7	3.0
Consumer	1.1	1.6	1.1	1.5	1.0	1.1
Commercial and industrial and all other loans	5.4	7.4	4.9	6.7	3.1	3.2

*Nonperforming loans include loans 90 days or more overdue, nonaccruing, or renegotiated on December 31

prices fell, many production loans that had been made when oil prices were not expected to fall below \$25 soon fell into problem categories. The downturn in the energy industry, continuing problems in the agricultural sector, and the generally weak regional economy also brought an increase in nonperforming nonenergy loans.

Loan losses increased sharply at energy banks and all banks in the energy belt in 1986. As a percent of total loans, net chargeoffs increased markedly at energy banks, from 1.7 percent in 1985 to 2.3 percent in 1986 (Table 4). While these chargeoff rates were slightly greater than at all banks in the energy belt, the increase was about the same as at all banks in the region. But both chargeoff rates for energy banks and all banks in the region were about twice the rates for all U.S. banks in 1986.

The broader effects of the downturn in the energy industry show up in significant losses in other loan categories. After agricultural loans, commercial loans had the next highest chargeoff rate. The commercial loan chargeoff rate was much higher in the energy banks and all banks in the region than at all banks in the nation. Although commercial loans include energy loans, this category also includes loans to nonenergy businesses that were adversely affected by financial problems in the energy sector.⁷ Chargeoffs of real estate loans also increased in 1986. At 1.2 percent of total real estate loans, the chargeoff rate on these loans at energy banks was twice the rate in 1985.⁸ The real estate loan chargeoff rate

at energy banks was three times the rate at all U.S. banks. Consumer loan losses also increased at energy banks in 1986. Although losses on consumer loans increased nationwide, the loss rate at energy banks was 0.30 percentage points higher than at all banks.

The effects of the sharp decline in oil prices in 1986 are more evident in the increase in nonperforming loans at energy banks. Total nonperforming loans—loans 90 days or more overdue, nonaccruing, or renegotiated—increased significantly at energy banks in 1986 (Table 5). Credit problems at these banks worsened in nearly all loan categories. The only exception was in agricultural loans. And a sharp rise in nonperforming loans suggests that energy banks may encounter bigger loan losses in the future. Of total loans at these banks at the end of 1986, 7.0 percent were nonperforming, compared with 4.8 percent a year earlier. For all banks in the energy belt, nonperforming loans increased from 3.9 percent of total loans at the end of 1985 to 5.7 percent at the end of 1986. In contrast, nonperforming loans increased only slightly relative to total loans at all banks in the United States.

Although credit problems increased for most types of loans, the most striking increase at energy banks was in real estate loans. Nonperforming loans accounted for 4.4 percent of the total real estate loans at the end of 1985 and 7.8 percent by the end of 1986. This dramatic 3.4 percentage point increase far exceeded the increase in problem real estate loans for all banks in both the region and the nation.

Despite the high overall level of nonperforming loans in 1986, there was substantial variation in problem loans among energy banks. A distribution of energy banks by the proportion of nonperforming loans illustrates the scope of the credit

⁷ Although chargeoffs of commercial loans (including energy loans) increased only 0.8 percent, compared with 2.7 percent for agricultural loans, commercial loans accounted for more than 70 percent of the total chargeoffs at energy banks in 1986 while agricultural loans accounted for only about 3.4 percent of total chargeoffs. Moreover, commercial loan chargeoffs accounted for a smaller proportion of total chargeoffs (about 64 percent) at all banks in the energy belt than at energy banks.

⁸ For a discussion of the downturn in the Texas real estate market and its effects on banks, see Christine Blair and Frederick S.

Carns, "After the Energy Downturn: Texas Real Estate," *Banking and Economic Review*, Federal Deposit Insurance Corporation, January/February 1987.

TABLE 6

**Percentage distribution of energy banks by proportion of nonperforming loans
December 31, 1985 and 1986**

<u>Percent of Nonperforming Loans to Total Loans at Banks</u>	<u>1985</u>	<u>1986</u>
Below 2	25.2	13.2
2 to 4	34.0	28.0
5 to 9	27.1	35.2
10 to 14	8.7	15.1
15 to 19	2.8	4.6
20 to 24	2.2	1.6
25 to 29	0	1.3
30 to 34	0	1.0
Total number of banks	321	304

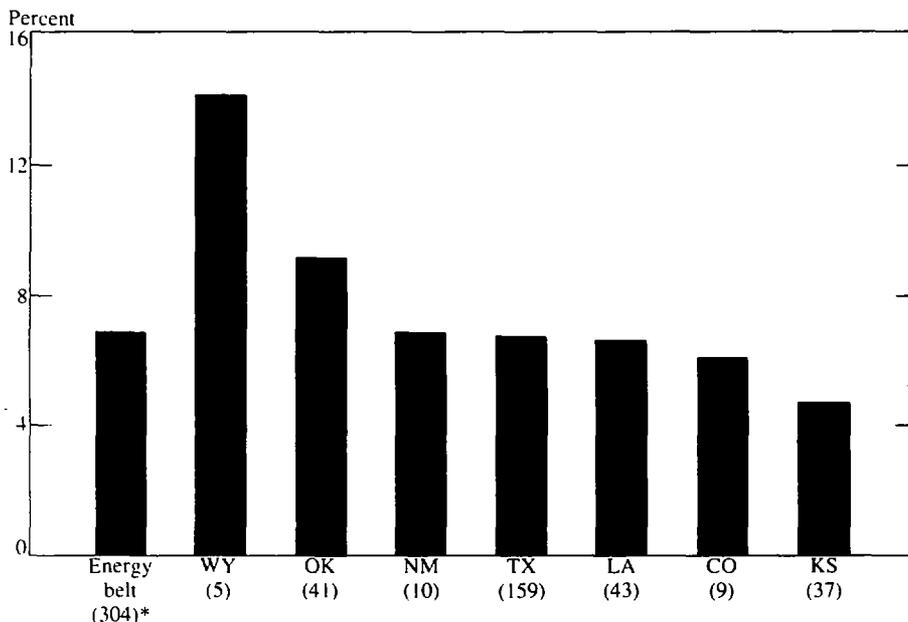
quality problem (Table 6). More and more energy banks with relatively high-quality loan portfolios developed problems as 1986 unfolded, and problems with loan quality worsened at energy banks that already had problems. Only 13.2 percent of the energy banks had less than 2 percent of their total loans nonperforming in 1986, about half the proportion of banks in this favorable category in 1985. The proportion of energy banks with nonperforming loans between 5 and 9 percent of total loans was 35.2 percent, compared with 27.1 percent in 1985. And the proportion of energy banks with more than 10 percent of their loans in troubled categories was 23.6 percent, up from 13.7 percent in 1985.

The outlook for future loan losses at energy banks varies somewhat across energy belt states.

At the end of 1986, nonperforming loans at energy banks varied significantly, from 14.2 percent of total loans in Wyoming to 4.8 percent in Kansas (Chart 6). The proportions of nonperforming loans at energy banks in Texas and Louisiana were slightly less than the proportion for all energy banks. However, nonperforming loans were a much larger percentage of total loans for the large number of energy banks in Oklahoma.

The large increase in energy banks' nonperforming loans in 1986 calls into question the current condition of these banks and the course of profitability and bank failures in 1987. Since future loan losses are closely related to the current level of nonperforming loans, the increase in nonperforming loans in 1986 foreshadows likely increases in loan losses in 1987.

CHART 6
Nonperforming loans at energy banks, by state
 (percent of total loans, December 31, 1986)



*Number of banks in parentheses.

Condition and outlook for energy banks

What is the outlook for energy banks, and how well prepared are they to withstand future losses? Loan losses in 1987 will result directly from ongoing weakness in the energy industry and indirectly from the ripple effects on other borrowers. The firming in oil prices in the first part of 1987 has improved cash flows for some oil producers. Though loans to some producers could be serviced, production loans made to high-cost producers on expectations of prices in excess of \$20 to \$25 a barrel will face ongoing difficulties.

Exploration and development loans that have not been written off also will remain under pressure. Although oil prices have firmed, uncertainty over how long OPEC's production agreement will hold and wide swings in crude oil inventories make prices somewhat volatile and a

significant rebound in domestic drilling activity in 1987 unlikely.

The indirect effects of problems in the oil patch will probably be large at energy banks, with these indirect effects spilling over increasingly to other banks in the region. Some nonenergy commercial loans will be further impaired by the generally weak condition of the regional economy. The largest indirect losses will probably be associated with real estate loans. The relatively high levels of nonperforming real estate loans at energy banks in 1986 points toward additional real estate losses in 1987. This outcome is made more likely by the large proportion of nonresidential real estate loans at these banks. The value of commercial real estate in most of the energy belt has been under continual downward pressure as office, retail, and industrial vacancy rates have soared during the energy downturn.

TABLE 7

Distribution of energy banks by nonperforming loans as a percent of primary capital, December 31, 1985 and 1986

	Number of Banks					
	Less Than 50 Percent		50 to 100 Percent		More Than 100 Percent	
	1985	1986	1985	1986	1985	1986
Energy Belt	229	183	65	79	27	42
Colorado	4	3	2	5	3	1
Kansas	29	24	7	9	3	4
New Mexico	7	6	2	2	1	2
Oklahoma	26	20	13	9	8	12
Wyoming	2	3	1	1	2	1
Louisiana	28	24	10	11	6	8
Texas	133	103	30	42	4	14

The ability of energy banks to weather additional losses can be measured by the banks' capital positions. Primary capital—equity capital plus loan loss reserves—provides a cushion against losses. Primary capital at energy banks increased slightly from 6.76 percent of assets at the end of 1985 to 6.94 percent of assets at the end of 1986. Also, the 1986 capital-asset ratio at energy banks was a modest 0.10 percentage point less than the ratio for all U.S. banks.

Despite a stable overall capital-asset ratio for energy banks, the number of banks with problem loans in excess of primary capital rose in 1986. Of the 304 energy banks, 183 had more than twice as much primary capital as nonperforming loans (Table 7). However, 42 of the energy banks had less primary capital than nonperforming loans,

up from 27 at the end of 1985.

The number of energy banks with weak capital positions varies across states in the energy belt (Table 7). Of the 42 energy banks with more nonperforming loans than primary capital at the end of 1986, 34 were in three states—Texas, Oklahoma, and Louisiana. Almost 30 percent of the energy banks sampled in Oklahoma have problem loans in excess of primary capital. In Texas, banks in this category accounted for about 7 percent of energy banks sampled in that state.

Increased levels of nonperforming loans in 1986 likely mean additional loan losses at energy banks. Several of these banks do not appear to have sufficient capital to sustain prospective losses. As a result, failures and mergers involving energy banks are almost certain to continue.

Conclusions

The recent downturn in the energy industry caused the performance of energy banks to decline in 1986. Profitability declined sharply as energy banks set aside additional reserves to cover mounting chargeoffs and nonperforming loans. Energy banks also did not perform as well as other banks, in either the energy belt or the United States.

Energy banks are almost certain to incur additional losses in 1987. The large numbers of nonperforming loans on the books of these banks at the end of 1986 portend loan losses in 1987 that could exceed those in 1986. The cash flows of some borrowers will improve from firmer oil prices, but oil prices are still lower than many bankers expected when the loans were made—and more uncertain. Although exploration and development-oriented borrowers would benefit from a significant turnaround in drilling activity, such a turnaround is not expected in 1987. And nonenergy loans at energy banks are almost certain to be impaired by the generally sluggish con-

dition of the regional economy. Real estate loans appear to hold the next wave of problems.

While the overall outlook for energy banks is not good, energy banks appear headed for more problems in some states than in others. Texas, Oklahoma, and Louisiana not only have the largest total numbers of energy banks, but they also appear to have the largest numbers of banks with nonperforming loans in excess of primary capital. While many of these energy banks will be able to work through their problems, the incidence of bank failures and mergers could be highest in these three states.

Although any conclusions drawn from a limited sample of energy banks must be considered tentative, the sample does provide some information about the recent performance of these banks relative to all banks in the region and the nation. This information suggests that the problems that plagued energy banks in 1986 will continue in 1987 as the banks write down more direct energy loans and as regional economic adversity imperils increasing numbers of real estate loans and other nonenergy loans.