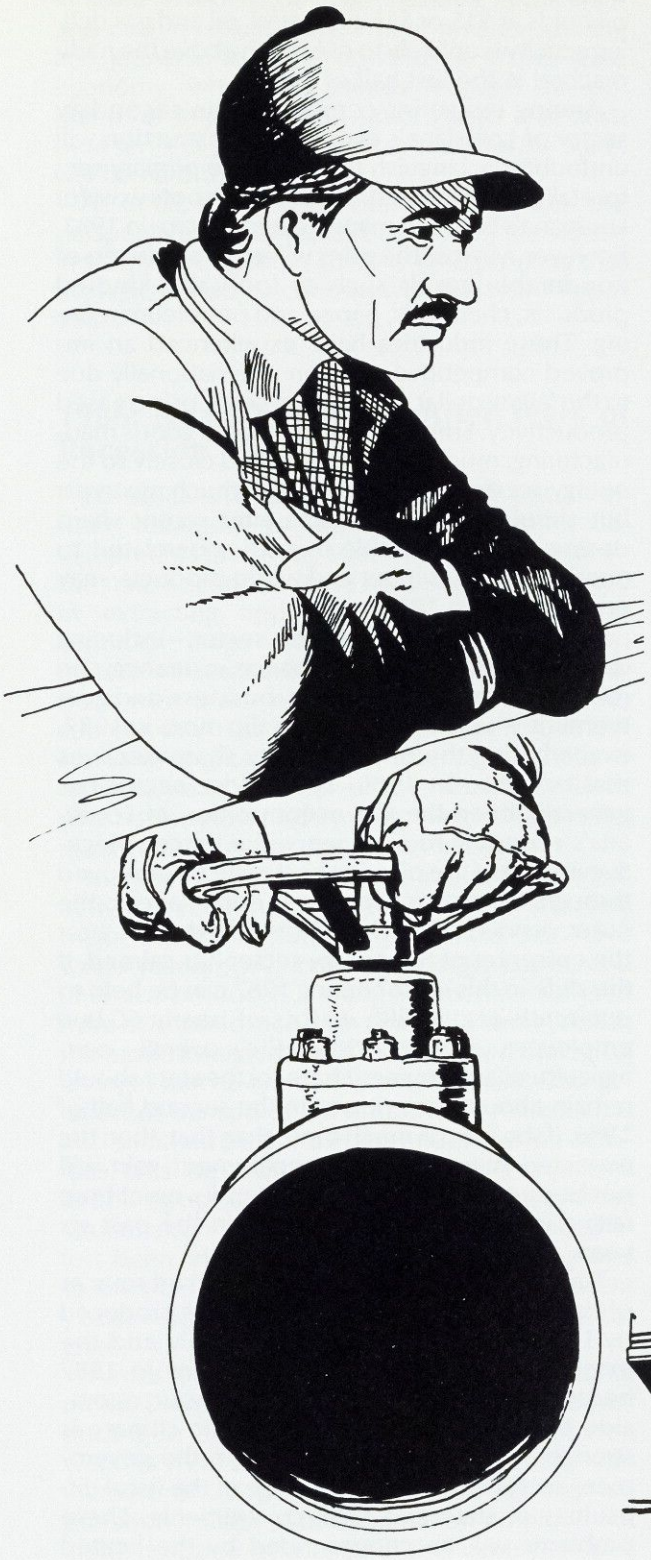


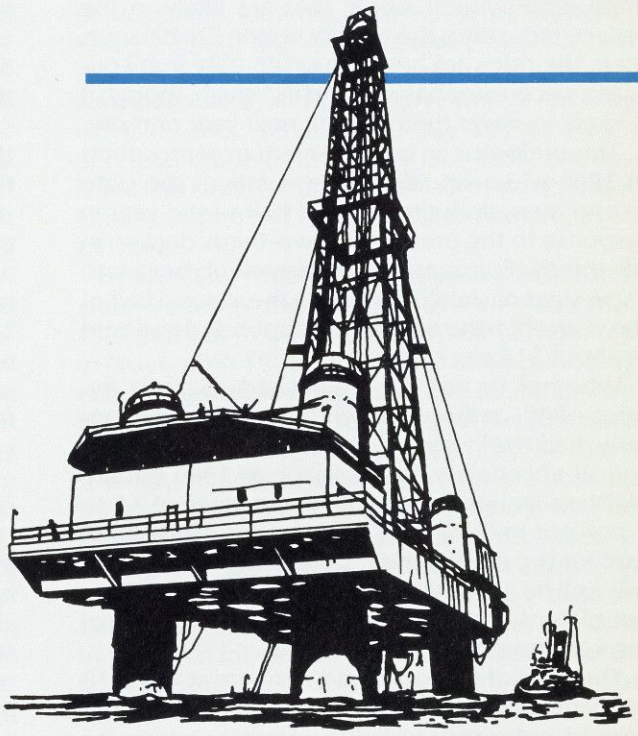
Louisiana: The Worst May Be Over

William J. Kahley
and Gustavo A. Uceda

The good news for Louisiana is that less bad news lies ahead—as long as oil prices stay fairly stable.

Louisiana's economic outlook remains subdued compared with prospects for the United States as a whole, but a continuation of last year's dramatic skid is unlikely in 1987. Over the last five years, deterioration of Louisiana's economically crucial energy sector has caused an almost continuous widening of the gap between the state's jobless level and that of the United States as a whole,

The authors are, respectively, an economist and a research assistant in the regional section of the Atlanta Fed's Research Department.



culminating in unemployment rates double the nation's. In 1987, however, world energy prices are expected to be more stable than in previous years of this decade, and this stability will help to halt the local economy's slide into recession. Nevertheless, chronic fiscal problems have necessitated state and local government spending cuts and tax increases that dim the prospect for overall employment growth; and, if oil prices should fall, the state's economy surely would ratchet downward again.

Lack of diversification links the entire Louisiana economy to the fortunes of the oil and gas extraction and petrochemical industries, and the impact of the drop in oil prices has affected different sectors of the economy at different times. The state's industrial strengths and weaknesses are also shifting within the broad, energy-sector-determined movement of the general state economy in response to market changes in the national economy. In 1987 overall employment as well as the number of jobs is likely to remain flat in primary or raw materials-producing industries such as agriculture, forestry, fishing, mining, and oil and gas extraction. Modest employment growth is in store for Louisiana's secondary sector, which includes manufacturing industries and construction. Manufacturing job gains should offset moderate employment losses that are likely in the service industries, the tertiary sector. On balance, then, the odds are better than fifty-fifty that Louisiana's economy has reached its trough, though it is likely to linger there for the next year or more.

This outlook is an improvement over prospects in 1986 when virtually all segments of the state economy sank during the first half of the year in response to the precipitous two-thirds decline in oil prices. Fortunately, employment began to show signs of stabilizing during the second half of the year when the price of oil rebounded and held at about $15 per barrel.

Whether or not the downward spiral in the price of oil, and consequently in the state economy, had finally run its course continued to be a critical uncertainty for Louisiana as 1986 ended. National growth anticipated in the range of 2.5 to 3 percent in 1987, though it bodes moderately well for the employment outlook in most states, will not be sufficient to fuel overall advances in Louisiana. Local industries producing for national markets nevertheless will benefit.

The price of oil would have to rise to at least $18 per barrel and be expected to stay there for some time in order for the Pelican State economy to expand more than marginally in 1987. As long as oil holds at $15 or $16 per barrel, oil and gas drilling activity is unlikely to rise much above the nadir reached in the first half of 1986.

Among industries comprising the secondary sector of Louisiana's economy, construction will undoubtedly languish in 1987 if the primary sector stalls as anticipated. Some bright spots exist for Louisiana's battered manufacturing sector in 1987, however. Most of the gains will go to producers of nondurable goods such as food and kindred products, chemicals, paper, and petroleum refining. These industries have experienced an improved competitive position internationally due to the falling dollar, lower input costs, or increased productivity. Employment in durable goods manufacturing, much of which is linked closely to the energy sector, is not likely to rise much next year but should at least stabilize after recent sharp declines. A few durable industries unrelated to energy, such as lumber and wood products, may see job gains in 1987.

Employment in the service sector—including wholesale and retail trade; finance, insurance, and real estate; health, education, business, and government—is probably going to slip more in 1987, exacerbating the unexpectedly sharp declines that occurred in 1986. The service sector has generally been the last major portion of Louisiana's economy to experience the fiercely negative impact of the oil price bust, which has moved through the economy with a ripple effect: the outer, service sector is still disturbed even after the epicenter of the energy sector has calmed. If the slide in this sector during 1987 can be held to one-tenth or one-fifth its loss of nearly 50,000 employees during 1986, the overall nonagricultural employment base for the state should remain about where it was in the second half of 1986. If the drop is much more than that, then the expected manufacturing employment gain will not be enough to keep overall employment from falling in 1987 for the fifth time in the past six years.

Tourism and port activity, two important sources of demand for the goods and services produced by Louisiana industries, will probably add the most strength to the state's economy in 1987 because they are driven primarily by sources outside the state where the economic climate is stronger. In contrast, demand from the government sector will be slow because of the fiscal difficulties of state and local governments. These problems will be compounded by the limited

increase in federal defense spending in the state and cuts in federal government revenue sharing and grants-in-aid. The downsizing of the state economy, which has already reduced the demand for important consumer goods and business services produced and sold within the state, will be hard to reverse.

All in all, then, when viewed either from the perspective of final purchases or from the side of industrial production, there is little promise that the Pelican State's economy will climb very high in 1987.

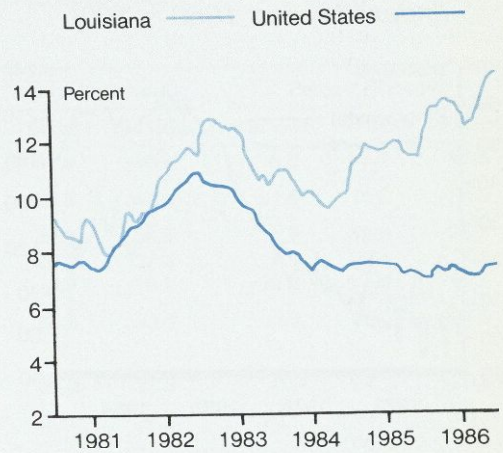
1986: Near Depression After Years of Recession

Historically Louisiana's economy has been more vulnerable to international economic developments than most state economies, because the state's economic base has been concentrated in extracting and processing primary commodities. Large volumes of these goods and materials have traditionally gone to foreign nations with fewer energy, food, and forestry resources than the United States. New Orleans' status as a great port and international city is attributable to the flow of the Mississippi River, which serves as a mighty integrating vehicle to the global waterway transportation network.

In most years of this decade international trade activity overall has eroded, seriously affecting major Louisiana industrial producers that serve world markets. Agricultural, energy, paper, and chemical producers, among others, have suffered from economic recession abroad, a strong dollar, increased foreign competition, and technological changes that have reduced employment. Deregulation of transportation and energy markets has also shocked port and energy transmission activities, creating new competitive problems (as well as new opportunities). Adjusting to these cyclical, structural, and institutional changes has nonetheless been relatively easy for Louisiana compared to the pain of falling oil and gas prices in recent years, which caused the economy to disintegrate.

Almost 90,000 jobs, or one out of twenty, came off the payrolls of Louisiana employers in the year ending in November 1986, while 2.3 million workers were added to payrolls nationally—an increase of 2.5 percent. Louisiana's energy exploration collapsed and extraction employment alone dropped by 22,300 in the same year-long period—accounting for nearly half of the 47,000 jobs lost in mining during the entire past five years of its decline. Other major losers were manufacturing (-7,000) and construction (-15,500), both industries that supply and support exploration activities; state and local government employment (-7,200); services (-6,700); and wholesale and retail trade (-16,100). By late 1986, employment had been dropping in all but a few segments (such as health and educational services) for a year or more.

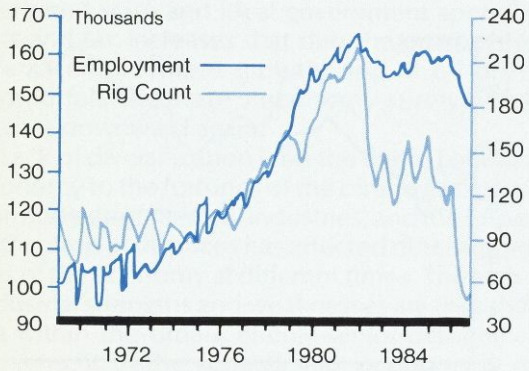
Chart 1.
Unemployment Rate
(Seasonally adjusted)



Source: U.S. Department of Labor and Lousiana Department of Labor, seasonally adjusted by the Federal Reserve Bank of Atlanta.

The drilling shutdown prompted a leap in the state's already high unemployment rate, from 11.3 percent in December 1985 to 13.9 percent in November 1986. During the same period the nation's unemployment rate held near 7 percent (Chart 1). Another consequence of the shutdown was that in 1986, for the first time in recent memory, industrial employment fell across the board in Louisiana. Nationally employment declined in mining and manufacturing but increased throughout the service sector, in construction, and in many individual manufacturing industries. Louisiana's economic performance was so dismal in 1986 that for months it claimed headlines as the state afflicted with the highest unemployment rate in the country. The unfavorable spread between Louisiana's unemployment rate and that of

Chart 2.
Louisiana Oil Rig Activity and Nonfarm Employment
(Indexed series, 1969 = 100)



Source: Louisiana Department of Labor, *Louisiana Labor Market Information,* and Hughes Tool Company, *Monthly Rig Count.*

the nation has been climbing by one percentage point per year since 1981.

1981-1986: Employment Change from Peak to Trough

Louisiana's economy peaked in 1981 when the price of a barrel of oil topped out at $35. Since then a series of downturns in the price of oil and in drilling activity have pulled the entire Louisiana economy downward (Chart 2). Employment in the state now is not much different from what it might have been without the oil boom of the 1970s. In the first five years out of the last ten, Louisiana payrolls grew by 24 percent compared to 13 percent for the nation; in the last five years, jobs declined by 8 percent in Louisiana versus an 11 percent gain nationally. For the entire 1976-1986 period, employment rose only 13 percent in Louisiana compared to 26 percent nationally.

The magnitude of employment decline in Louisiana since 1981 is enormous (Table 1). Over 150,000 jobs have been lost in mining, construction, and manufacturing, most due to a slumping energy sector. Transportation and wholesale trade employment, crimped by the troubled energy sector and dwindling port activity, are also down substantially.

The boom-and-bust pattern shown by Louisiana's recent industrial change is similar whether measured by absolute or percentage changes in industrial employment or income or by changing industrial shares. Durable goods producers expanded employment by one-fifth in the 1976-81 period. Industries that are closely linked to energy exploration and production such as primary and fabricated metals, electronic and non-electronic machinery, and electrical and transportation equipment fared best, while nondurable goods producers expanded employment by only 5 percent. By contrast, in the most recent five-year period employment dropped 34 percent for durable goods producers compared to half that for nondurable goods producers. Moreover, income generated in the nondurables industries (such as food, paper, printing, and publishing) has actually grown over the past five years.

The changing employment pattern nationally over the past ten years has been one of moderate oscillation compared to Louisiana's volatile performance. Both economies are marked by a long-term shrinkage in manufacturing's employment share and a rise in service's share, but the more subdued national pattern reflects a diversified economic structure as opposed to Louisiana's undiversified, energy-based economy.

Local Labor Market Developments

The geographic pattern of employment change in Louisiana appears to correspond roughly to the overall pattern of industrial weaknesses. The unemployment rate tended to rise more for the entire state than it did for metropolitan areas during 1986 (Table 2). (Unemployment rates are generally lower for metropolitan areas of the state than for nonmetropolitan areas.)

It is reasonable to suppose that these disparities indicate healthier, more diversified economies in service-based metro areas and shaky economic structures in rural areas that are mired in dependency on natural resources currently selling at low prices. This explanation is in part sound because relatively stable and fast-growing service industries cluster in urban areas due to obvious location advantages. The economies of metro areas are, however, by no means uniformly healthy. Alexandria and Baton Rouge are the only places

Table 1.
Louisiana Nonfarm Payroll Employment[1]

	Percentage Share			Absolute Change (thousands)			Percent Changes		
	1976	1981	1986	1976-86	1976-81	1981-86	1976-86	1976-81	1981-86
Mining	4.7	6.3	3.8	-5.0	41.8	-46.8	-8.0	66.7	-44.8
Construction	8.6	8.3	5.9	-25.1	21.9	-47.0	-21.8	19.0	-34.3
Manufacturing	14.9	13.6	11.1	-31.6	24.9	-56.5	-15.9	12.5	-25.2
Durable	6.7	6.6	4.8	-17.4	20.0	-37.4	-19.4	22.4	-34.2
Nondurable	8.2	6.9	6.3	-14.2	4.9	-19.1	-12.9	4.5	-16.7
Transportation and Pubic Utilities	7.9	8.2	6.7	-3.5	29.5	-33.0	-3.3	28.0	-24.5
Wholesale Trade	6.3	6.3	5.5	-0.7	20.3	-21.0	-0.8	24.3	-20.2
Retail Trade	17.1	16.2	19.5	66.5	39.2	27.3	29.1	17.1	10.2
Finance, Insurance, and Real Estate	4.7	4.7	5.5	20.9	15.2	5.7	33.2	24.1	7.3
Services	16.6	17.9	21.0	95.5	73.2	22.3	42.9	32.9	7.5
Government	19.4	18.8	21.2	61.6	51.5	10.1	23.8	19.9	3.3
Total (Absolute)	(1,339.5)	(1,657.0)	(1,518.1)	(178.6)	(317.5)	(-138.9)	13.3	23.7	-8.4

[1]Data for November

Source: Computed by Federal Reserve Bank of Atlanta from data released by the Louisiana Department of Labor, *Louisiana Labor Market Information*, various issues.

where employment and the labor force have grown, and even their gains have been meager.

In New Orleans, where the jobless rate declined briefly despite a drop in employment, the misleading statistical gain shown by the unemployment figures resulted because some laid-off workers went to other states and other jobless individuals left the work force as they became discouraged and stopped looking for work. A shrinking labor force—composed of both those working and those looking for work—also helped the Lake Charles unemployment rate hold its ground. Shreveport, Houma-Thibodaux, and Lafayette experienced extremely hard times as their labor force and employment bases dropped and their unemployment rates and number of unemployed rose. In Lafayette the unemployment rate was 15.5 percent in November, more than six percentage points higher than a year earlier.

A few salient facts provide stark evidence of the poor conditions in smaller Louisiana labor market areas. By late 1986, 22 out of the 45 nonmetro parishes registered unemployment rates above 15 percent (compared to 12 areas in 1985); unemployment rates dropped below 1985 levels in only five parishes, and their rates still ranged between 10 percent and 18 percent. Only two parishes had unemployment rates under 10 percent, and only the Ruston area (Lincoln parish) registered an unemployment rate lower than the nation's.

Put together in a geographic composite, these statistics reveal that the economy has gone from bad to worse for virtually all areas of the state. The southern parishes once benefited dramatically from energy sector activity. Now, rural parishes there must depend more heavily on fishing activity or on cultivation of traditional crops such as rice or sugar cane that are aided by government programs. In the metro areas, some slight economic support comes from tourism or other services, or from nondurable manufacturing industries like chemicals. Northeast delta parishes heavily reliant upon farming had another tough

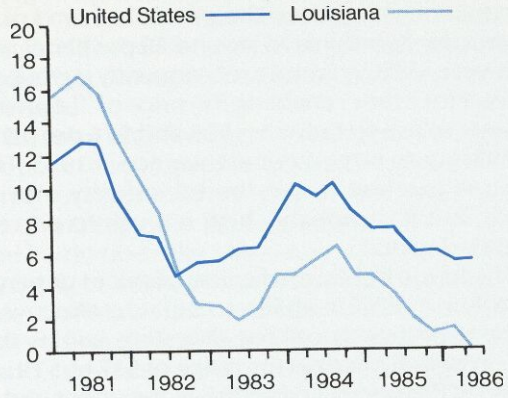
Table 2.
Labor Market Conditions, United States Versus Louisiana*
(Thousands)

Area and Employment	November 1986	November 1985	Percent Change 1985-1986
United States			
Civilian Labor Force	118,623	116,097	2.2
Employed	110,751	108,282	2.3
Unemployed	7,872	7,815	0.7
Rate (percent)	6.5	6.6	—
Louisiana			
Civilian Labor Force	1,968.6	1,987.5	-1.0
Employed	1,703.9	1,763.1	-3.4
Unemployed	264.7	224.4	18.0
Rate (percent)	13.4	11.3	—
Alexandria			
Civilian Labor Force	59.6	58.6	1.7
Employed	53.1	53.0	0.2
Unemployed	6.5	5.6	16.1
Rate (percent)	10.9	9.6	—
Baton Rouge			
Civilian Labor Force	260.4	259.9	0.2
Employed	232.5	232.8	-0.1
Unemployed	27.9	27.1	3.0
Rate (percent)	10.7	10.4	—
Houma-Thibodaux			
Civilian Labor Force	75.6	79.1	-4.4
Employed	61.0	70.2	-13.1
Unemployed	14.6	8.9	64.0
Rate (percent)	19.3	11.2	—
Lafayette			
Civilian Labor Force	105.8	110.5	-4.3
Employed	89.4	100.4	-11.0
Unemployed	16.4	10.1	62.4
Rate (percent)	15.5	9.2	—
Lake Charles			
Civilian Labor Force	72.1	74.0	-2.6
Employed	61.5	63.9	-3.8
Unemployed	10.6	10.1	5.0
Rate (percent)	14.7	13.7	—
Monroe			
Civilian Labor Force	68.9	68.6	0.4
Employed	61.5	62.0	0.8
Unemployed	7.4	6.6	12.1
Rate (percent)	10.8	9.6	—
New Orleans			
Civilian Labor Force	592.9	605.5	-2.1
Employed	526.8	542.1	-2.8
Unemployed	66.1	63.4	4.3
Rate (percent)	11.1	10.5	—
Shreveport			
Civilian Labor Force	164.7	167.9	-1.9
Employed	143.5	150.3	-4.5
Unemployed	21.2	17.6	20.5
Rate (percent)	12.9	10.5	—

*Data not seasonally adjusted.

Source: U.S Department of Labor, Bureau of Labor Statistics, *The Employment Situation,* and Louisiana Department of Labor, *Louisiana Labor Market Information,* December 29, 1986.

Chart 3.
Personal Income Growth
(Annual percent change)



Source: Computed by Federal Reserve Bank of Atlanta from data in the U.S. Department of Commerce, *Quarterly Personal Income*, various issues.

year as did agricultural communities across the nation, and the situation for lumber production in the north central and western areas deteriorated as Canadian softwood heightened competition for southern pine growers.

Population, Income, and Consumer Spending

The loss of 139,000 payroll jobs in Louisiana over the past five years, a decrease of 8.3 percent, reflects the woeful condition of the local economy. It is little wonder that employment declines of this degree have adversely affected consumer spending, business investment, and state and local government fiscal positions.

A smaller rate of increase in personal income compared to that of the nation was the initial indication that Louisiana's economy was misfiring five years ago. Since mid-1982 Louisiana's personal income growth has been consistently below the nation's, and, over the most recent 12 months for which data are available, even its nominal increase has been barely positive (Chart 3). Taking into consideration the inflation rates of 2 percent or more during 1986, total real personal income in the state has fallen significantly.

More unfortunate yet, real income per capita may also be lower now because natural population increase (births minus deaths) has outpaced the loss of population attributable to migration, thus lowering the amount of real income available for each person. Even if per capita income has not fallen as a consequence of population growth, laid-off workers who previously received unemployment compensation have migrated from the state. Although they were not earning paychecks in Louisiana, these jobless workers did receive unemployment compensation from a "kitty" provided by Louisiana employers, which was then spent locally on food, housing, transportation, and other goods and services. When they departed, these consumers took spending dollars with them, leaving the shelves of Louisiana retailers stocked with items that would now turn over at a slower rate, further depressing retailers' cash flow and incomes.

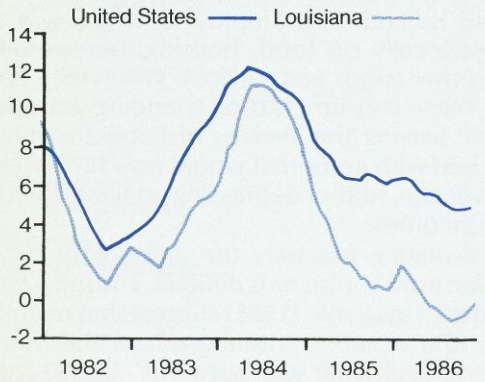
Calculating precisely the amount of out-migration from Louisiana is difficult. The most recent estimates available (1985) suggest that net migration (the number entering minus the number leaving Louisiana) was between -21,000 (based on Internal Revenue Service income tax filing data) and -27,000 (based on a U.S. Bureau of the Census survey). Given the extent of the economic slump in the state, it would not be surprising if net migration from the state in 1986 ends up being twice the figure for 1985, representing about 1 percent of the state's population. That amount would be sufficient to offset natural population increase.

The upshot of these population and income movements for Louisiana retailers has been distressing. Total retail sales in Louisiana were off 1.3 percent in the first ten months of 1986 compared to figures a year earlier. Nondurable goods sales of items such as food and clothing have been flat while durable goods sales have slumped sharply. New vehicle registrations were down 13 percent from the January to October 1985 period. Car sales were, however, stimulated at the end of the model year by auto manufacturers' rebates and cheap financing programs. Even so, sales were lower than in September 1985.

Looking ahead, it is hard to imagine that sales activity could be robust, even though retailers are selling from a weakened sales base. Louisiana's sales performance has been below the nation's since 1982 and is likely to lag again in 1987 (Chart 4). Some retailers selling into selected markets, such as the New Orleans tourist and conventioneer trade, will gain sales at a moderately healthy pace, but the overall climate for retailers is poor.

Basically, the consumer spending outlook is gloomy. The degree of spending strength is determined largely by the number of buyers and the

Chart 4.
Retail Trade
(Annual percent change)



Source: U.S. Department of Commerce, Bureau of the Census, *Monthly Retail Trade*, various issues.

amount of money they have to spend. In Louisiana, employment and income growth are both sputtering along, and too few industries in the state's primary, secondary, or tertiary sectors will be strong enough to serve as engines for growth in 1987.

Primary Sector Activities

Oil and Gas. Louisiana's drilling rig count rose to 487 in December 1981. Since that time the number of working rigs dropped fitfully until 1986, when the count collapsed to between 105 and 110 around mid-year. Drilling has since rebounded somewhat from depths not reached in decades, but increases in activity during the second half of 1986 can by no means serve to stimulate the general oil patch economy. The major benefit of renewed drilling will be to keep employment from falling more severely than it would otherwise.

The pace of drilling towards the year's end in 1986, as measured by the rig count, was only half the level of the previous year. But even the level at the year's end in 1985, around 250, was only about half as much as the peak in 1981. Thus, instead of recovering in 1986 from a rather lackluster performance in 1985, the Louisiana oil and gas industry was virtually swamped in the worst scenario imaginable. An early 1986 pricing and production war caused the price of a barrel of oil to drop by two-thirds to around $9 per barrel near mid-year. OPEC countries subsequently regrouped, at least for a time, enabling the price of "Louisiana sweet" to rise to between $15 and $16 per barrel in 1986, or to 60 percent of the price in 1985. This price is too low to get the oil industry moving again, but it is probably high enough to prevent further decline.

The future behavior of crude oil prices depends heavily on OPEC's ability to collude effectively. Current proposals call for allocating quotas that would put oil prices in the range of $17 to $19 per barrel. If the price of oil settles in the upper part of that range in 1987, then this could be the year the oil industry stabilizes and starts to recover from its highly depressed condition. Whether or not that will happen is open to question, but 1987 is likely to be a better year than 1986.

Agriculture. Agriculture is Louisiana's second most important natural resource industry after energy. The good news for 1986 was that the severe drought which affected the Southeast largely bypassed Louisiana. As a consequence, yields for major crops equaled or exceeded those of 1985.

The bad news is that farming is diminishing in Louisiana as it is elsewhere in the country largely due to sluggish markets and yet another wave of productivity-enhancing technological improvements in farming. Greater international competition continues to erode the return on investment in U.S. agriculture, and farmers have responded by cutting acreage or going out of business. Louisiana farmers idled another half-million acres in 1986, lowering crop acreage to a level nearly one-quarter less than in the peak year of 1981, before commodity prices began their five-year decline.

For farm suppliers, acreage reductions mean less demand for fertilizer, pesticides, and other farming materials as well as farm labor. Downsizing the agricultural sector also lowers farm land values. The U.S. Department of Agriculture estimates that farm land asset values dropped 20 percent in 1986, costing the state's farmers $2.5 billion in losses.

There are some indications that land values and the amount of planted acreage have reached a plateau. Stabilization of agriculture probably will not have much of a positive impact on the general economy, however. Federal government farm programs will help supplement farm income,

especially for sugar cane producers, and the outlook is improved for producers of soybeans and cotton, two of the state's leading crops. Nevertheless, it will be some time, if ever, before agriculture again becomes a source of state economic strength.

Forestry and Fishing. Most of the demand for products from Louisiana's forests originates from three sources: southern pine is used in construction, primarily for framing residential buildings, and hardwoods like oak are used by the oil industry for rig building and related activities or by furniture manufacturers. In 1986 demand for hardwoods from the oil industry was nil. On the other hand, demand from furniture manufacturers tended to be relatively strong. As a result of these offsetting forces, prices showed little movement but offered profits for some sellers; producers who usually sell to the oil industry were struggling, while suppliers to furniture makers fared well.

During the first half of 1986 unfavorable weather kept southern pine production down while housing-related demand for the wood remained satisfactory. However, after mid-year the cumulative economic impacts of the depressed oil industry, continuing competition from Canadian producers, and a seasonal production increase led to a substantial fall in prices during the third quarter.

Prospects for 1987 remain mixed. If recovery in the oil industry is limited, as expected, demand for hardwoods from that source would increase only slightly. The demand for hardwoods by furniture manufacturers is not likely to increase much either, because abatement of the nation's home building boom is reducing the need for their product. Depression in the Louisiana and Texas housing industries, which are important buyers of Louisiana lumber, will probably limit growth for southern pine producers, too, although a new 15 percent Canadian tax on exports of softwood will help boost demand in other U.S. housing markets.

Louisiana's shrimp industry, which accounts for over half of Louisiana fishermen's revenues, fared well in 1986 for the second year in a row. Not only were costs substantially lower as a result of cheaper fuel, but catches set a new record. During the first nine months of the year nearly one-fifth more shrimp were harvested than in the same record-breaking period in 1985. Prices also tended to be relatively stable despite the supply increase. Because so much of the nation's shrimp is imported at high transportation cost, local production enjoys a strong natural comparative advantage.

The outlook for forestry and fishing in 1987 depends on the same factors that will affect agriculture: commodity price, amount of production, and fuel costs. As in agriculture, weather plays a large role in determining production and cannot be forecast with great accuracy; other factors determining profits are positive but not strongly so.

Secondary Sector Activities

Construction and manufacturing activities have lost more jobs over the past five years (47,000 and 57,000, respectively) than mining has, although their percentage declines have not been quite as large. Weakness in the secondary sector is linked largely to the failing energy sector, but until recently other international economic crosscurrents such as the strong dollar and the slow pace of world economic growth have been working against the secondary sector as well. These forces are now turning in favor of manufacturing and offer hope for expansion of important Louisiana industries during the year ahead. Because it is produced and consumed locally, construction unfortunately will not benefit from improved conditions for U.S. suppliers to world markets.

Construction. Construction accounts for a larger share of employment in Louisiana employment than it does in the nation (6 percent versus 5.1 percent), even though construction has fallen for the last three years in the state while booming nationwide. In 1981, when Louisiana construction was prospering along with the rest of the state economy, its employment share was 8.3 percent compared to 4.9 percent for the nation. In 1987, construction's share of Louisiana's nonagricultural payrolls could drop yet again for the fourth consecutive year, but the odds are better that its share will be roughly the same as in 1986.

The new U.S. tax law will sap certain construction markets, such as office, industrial, and multifamily housing structures,that are already in cyclical decline. Construction in Louisiana must cope not only with less generous subsidies and tax shelter provisions but also with above-average office building vacancy rates and the out-migration of people and businesses. The above-average vacancy rates signal a glut of buildings that must be occupied, and out-migration makes

office, industrial, and residential space harder to absorb.

Though evidence is not conclusive, some information supports the view that Louisiana's building may have reached the bottom of its precipitous drop. Permit and construction contract data show that the pace of construction is at its slowest in fifteen years; construction employment is also no higher now than it was back in 1973 before the energy-prompted construction boom. In addition, residential construction, at least, has rebounded in the areas hardest hit by the energy slump. Houma and Lake Charles both show higher residential contract values (as reported by F. W. Dodge) through November 1986 than through the same period in 1985.

Although construction's downslide may be ending or due to end soon, it is hard to imagine much rebound, if any, in 1987. Important segments of the energy exploration, drilling, and production processes that directly or indirectly influence construction are not likely to strengthen significantly in the year ahead. The standstill in the energy sector directly limits construction of pipelines and industrial and commercial buildings used by related suppliers of goods, materials, and services. Indirectly, construction is further hindered by the absence of a positive spillover from the energy sector to the general economy. Moreover, tax reform has stripped away many of the advantages for building, and less infrastructure is needed in Louisiana's downsized economy. These factors suggest that, while construction may stabilize in 1987, this sector will not have the power to pull the state's economy forward.

Manufacturing. The 57,000 jobs lost in Louisiana's manufacturing industries over the past five years accounted for 7 percent of the shrinkage in manufacturing employment nationally over that period. Many of these job losses, like those in construction, were due to weakness in the energy sector. Some jobs were also shed as manufacturers lost share in foreign and domestic markets to rivals from other countries. In the important chemical and allied products industries, for example, world market share declined for several reasons—a strengthening dollar, recession, and slow growth of markets, and increased production from new competitors. Other jobs were lost as producers adopted new labor-saving technologies and processes.

As chemical producers lost sales, say, to German manufacturers because of exchange rate changes or to Saudi Arabian producers who were opening up new plants, Louisiana producers responded by shutting down less efficient and more labor-intensive plants along the Mississippi River between Baton Rouge and New Orleans as well as in the Lake Charles area. Demand for agricultural chemicals also slackened as a result of the debt-servicing problems and economic recessions in South America and in developing nations elsewhere. Similar problems hampered Louisiana manufacturers of food and kindred products, lumber and wood products, paper, petroleum, primary metals, and other goods for sale in export or domestic markets.

Two-thirds of the drop in manufacturing employment since 1981 came in the durable goods industries. By contrast, durable goods jobs increased sharply in the five years before 1981 and reached about the same number as the 114,000 workers in nondurable goods industries. Fortunately, the drop in jobs in both types of manufacturing appears to be nearing an end, and the outlook for several nondurable goods industries actually is fairly bright. September marked the first month in 1986 that employment increased for durable and nondurable goods producers. Even so, on a year-over-year basis, employment in major manufacturing sectors remained below levels a year earlier, and only a few specific industries gained workers during 1986 (Table 3).

Looking ahead to 1987, industries that produce food, paper, chemicals, petroleum, and other nondurable goods (chiefly leather, rubber, and textile products) should finally begin to benefit from the decline in the foreign exchange value of the dollar. Some durable goods industries, such as lumber, metals, machinery, and electronic equipment, will also benefit, though lingering malaise in the energy sector probably will limit employment gains in these industries to very modest increases.

Louisiana's Service Sector

The service sector in Louisiana is large and diverse, accounting for four out of five jobs among the 1.5 million workers on all payrolls in the state. Nationally, three out of four workers, or 75 million, are employed in service sector jobs. These service jobs run the gamut from government positions to work in all the various establishments that provide consumer goods or personal services. They also include all of the jobs in finance, transportation, and public utility industries

Table 3.
Manufacturing Wage and Salary Employment in Louisiana
(Thousands)

	November 1986	November 1985	Absolute Change 1985-1986
Manufacturing	167.7	174.7	-7.0
Durable Goods	72.1	76.9	-4.8
Lumber and Wood	13.0	12.9	0.1
Furniture and Fixtures	0.5	0.6	-0.1
Stone, Clay, and Glass	6.3	6.7	-0.4
Primary Metals	3.0	3.4	-0.4
Fabricated Metals	11.9	13.4	-1.5
Machinery, except Electrical	8.1	9.6	-1.5
Electrical and Electronic Equipment	7.2	7.8	-0.6
Transportation Equipment	19.8	19.9	-0.1
Other Durable Goods	2.3	2.6	-0.3
Nondurable Goods	95.6	97.8	-2.2
Food	23.4	23.5	-0.1
Apparel	8.4	9.1	-0.7
Paper	11.3	11.3	0.0
Printing and Publishing	10.2	10.3	-0.1
Chemicals	25.9	27.6	-1.7
Petroleum and Coal	12.0	12.2	-0.2
Other Nondurable Goods	4.4	3.8	-0.6

Source: Louisiana Department of Labor, *Louisiana Labor Market Information*, December 29, 1986.

that accommodate businesses and consumers, as well as legal, health, education, accounting, and other professional services.

Louisiana's concentration of service employment, which is higher than the nation's, is due in part to the dominance of the state's energy sector and in part to the prominence of New Orleans as a port and tourist center. The predicament facing Louisiana's service sector and the well-being of its workers may be summed up simply: the health of this crucial sector depends on the vitality of the energy sector and on international economic conditions affecting port trade. With most of its eggs in too few baskets, Louisiana's service industry, like its nonservice employment, depends on a narrow range of economic activities. Because neither its manufacturing nor its service sectors are diversified, Louisiana experiences volatile booms and busts associated with raw material or commodity price cycles. By contrast, Florida and Georgia supply more varied manufactured goods and services to buyers from other states or nations and thus experience faster and less volatile growth.

Aside from wholesale and retail establishments, the largest service industries in Louisiana are related to port or tourism activities, finance, insurance, and real estate activities, or government. Port and tourism services are driven largely by demands from outside the local economy, while government and financial services meet mostly demands for local services. Because of the sources of demand, prospects in 1987 for tourism and port activities are understandably brighter than prospects for government and finance, insurance, and real estate activities.

Tourism. Tourism is a significant industry in Louisiana, third after oil and agriculture. In 1986,tourism indicators, such as visitor center and park registrations, hotel occupancy, and airline

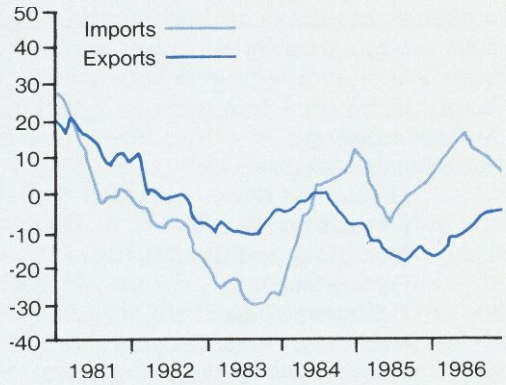
travel increased compared to 1985 levels. Depressed travel within the oil patch states (from Texas to Louisiana, for example) due to layoffs and reduced local spending limited overall tourism increases in Louisiana, despite healthy vacation travel gains from other states.

Long a mainstay of New Orleans' economy and second only to port activity in jobs generated, tourism is now targeted to provide even stronger support. As a legacy of the ill-fated Louisiana World's Fair, New Orleans now has an expanded convention infrastructure with more hotel rooms, convention space, and retail establishments. A new convention center, site of the state pavilion for the fair, reportedly is booked at half its capacity into the next century. Proposals have been made to add a riverfront aquarium, a theme park and science center, casino gambling in the French Quarter, and to double current convention center facilities to encourage more tourism and generate more jobs. Tourism can probably become a more important source of growth, creating new jobs and businesses that will, in turn, spawn others. Traveler surveys consistently show that New Orleans remains a favorite spot for visitors, and proposals have been made to develop the tourist potential of outlying, "Cajun Country" areas.

The 1987 outlook for tourism in New Orleans and the state is mostly positive. An increase in activity will depend in part on recovery of employment in Texas, the number one supplier of visitors to the state. (California, New York, and Florida are the three states next in importance.) One negative factor is that state government's money crunch has forced a reduction in the tourism budget and closing of some highway rest stops and state attractions. However, Louisiana has also instituted new advertising campaigns that may be effective in attracting visitors, especially in light of the fact that domestic travel will be less costly in 1987 than vacations abroad and does not present the same potential dangers. Finally, business, government, and convention travel should strengthen in response to the pricing promotions that accompanied tourism ad campaigns. New Orleans operators, in particular, are pricing their many new hotel rooms aggressively. As a result, overall occupancy is likely to rise somewhat in 1987.

Port Activity. The New Orleans Customs District was the nation's largest in terms of cargo volume at the beginning of the 1980s. It has been rebounding for two years now following sharp declines in activity during the recession years earlier this decade (Chart 5). Even so, sluggish export growth for agricultural and energy commodities, along with still-shrinking manufactured exports, continues to cause port-related employment to drop. The drop in the dollar's exchange value against other currencies will help boost export shipment levels in 1987, but increasing competition from other U.S. ports will hold down both shipments and employment gains.

Chart 5.
New Orleans Customs District Shipments
(Annual percent change)



Source: U.S. Department of Commerce, *Highlights of U.S. Export and Import Trade*, various issues.

The recent trade performance figures for the Port of New Orleans, the state's largest port by far, are revealing. Over the past five years, the port's total tonnage has fluctuated sharply between 15 and 19 million tons and the cargo mix has changed dramatically. The volume of export shipments has dropped by 2.1 million tons to 11 million, while import volume has increased from 4.3 million tons to 5.9 million. The loss of bulk shipments of grain and other commodities has not been a major setback for the state's economy though. Much of the flow of commodities represents production from outside the state, and the movement of these goods down the Mississippi River generates relatively few jobs in transportation and port-related service industries.

A modest decline in general cargo shipments and relatively slow growth of container shipments have hurt the Port of New Orleans. Manufactured

goods that comprise general cargo shipments usually boost port revenues because of their relatively high value compared to bulk commodities. General cargo and container shipments also create more employment. Since 1980, about 9,000 of the 22,000 water transportation jobs in New Orleans have been lost as a result of reduced trade activity and lost oil industry servicing jobs.

In search of an economic cure, the Port of New Orleans has developed a $38 million strategic plan to revitalize port facilities and improve the basic economic character and value of the port. The plan calls for management and marketing changes that will help the port compete more effectively and generate an improved product mix which emphasizes general cargo shipments. The decision by the U.S. government to pay for much of the cost of deepening the Mississippi River channel to 55 feet from Baton Rouge to the Gulf will also certainly improve long-run prospects for trade activity in Louisiana.

In 1987 trade shipments with Latin America, Asia, and Europe should continue to improve and perhaps accelerate. The falling dollar and faster economic growth should boost commodity trade, as will elements of a new U.S. farm program that uses subsidies to encourage exports. However, increased exports of agricultural commodities, energy products, and derivatives such as chemicals will not create many port jobs.

Finance. Troubled economic times frequently result in acceleration of industry adjustments that would have to be made over the long haul in any event. Often this process of adjustment brings new opportunities that enable an industry to bounce back stronger than ever. Just as Port Authority and state officials hope that their strategic planning will revitalize port prospects, bankers hope that changes in the state banking law will revitalize the troubled financial industry in Louisiana. Lenders, under stress because many of their energy, agricultural, and real estate borrowers are illiquid and threatened by insolvency, may get much-needed flexibility from new laws that make mergers across parish and state lines possible.

Louisiana's finance, insurance, and real estate employment grew at a faster pace than the nation's in the 1970-83 period. Over the past three years, however, employment growth in this sector has been accelerating nationally but decelerating in Louisiana. Indeed, in several months this year employment in finance, insurance, and real estate dropped in Louisiana compared to last year's levels.

Thus far, financial industry troubles in Louisiana have been manageable, and the state legislature has passed an interstate banking bill that will allow banks from fourteen southern states to acquire or merge with Louisiana banks. This legislation, like the 1984 law enabling bank holding companies to cross parish boundaries to merge and seek deposits from around the state, gives banks more options to diversify both assets and liabilities on their balance sheets.

Debt servicing problems of borrowers from banks and thrift institutions have contributed to bank failures and shrinking net worth of financial institutions around the state. Eight bank failures were recorded by the year's end in 1986 compared to only one in the 1983-1985 period, and regulatory net worth at Louisiana's thrifts has been declining for three years. Banks, because they concentrate on commercial loans, are faced with problem loans in all types of businesses, but agricultural, energy, and commercial real estate loans head the queue. Savings and loan associations' problems stem chiefly from residential lending or commercial lending secured by real estate. Many of these loans have turned sour in the state's shrinking economy.

Lenders will continue to be burdened with the need to restructure problem loans in 1987. Some of the weaker financial institutions in the state are likely to be acquired by more financially secure ones in Louisiana or other states as loan burdens become overwhelming. For the short run this will mean stagnating employment in the industry while consolidations occur. However, the opening up of banking markets on a statewide and regional basis improves the prospect that the necessary partnerships and workout agreements will be made in a timely and efficient manner.

Government. The poor fiscal condition of Louisiana's state and local governments is a topic that has received widespread attention from national and local news media. The growing danger exists that local government's fiscal feebleness in New Orleans, Baton Rouge, Shreveport, and other metro areas, as well as in the entire state government, will cause employment in the state to drop substantially more. The situation is compounded by limited increases in federal defense spending in Louisiana and curtailment of federal government revenue sharing and grants-in-aid. Additional cuts in government spending and employment, combined with tax hikes, threaten to

drag the economy down into a vicious circle, exacerbating the state's economic recession.

On numerous occasions over the past five years state and local government budgets have had to be revised downward in response to new and lower estimates for revenues that resulted from a narrowing tax base and falling energy prices. Since 1981, the severance tax on oil and gas has fallen from one-third of total state revenues to about 11 percent in the current fiscal year projection. Even at the year's end in 1986, the state government was grappling with the effects of a budget that had been knocked out of kilter by even lower revenues than anticipated just a few months before.

Anticipated severance tax receipts on oil were calculated at the beginning of the current fiscal year (FY1987 that began July 1) on the assumption that the price of Louisiana oil would be $15.50. By September, a projected $255 million deficit prompted Governor Edwards to slash most state agency spending by 10 percent (5 percent for education). The budget cuts, which were expected to cause the layoff of more than 2,000 state workers, still left the state with a $30 million general fund deficit. To make matters worse, new deficit figures produced by the Legislative Fiscal Office in December put the shortfall much higher; in response, a special session of the legislature was called to consider where further savings could be made in the budget. Shifting some tax revenues from planned construction to use in covering operating expenses was one solution along with still more sharp spending cuts. A statewide lottery proposed as a way of raising as much as $150 million per year was not adopted.

The huge deficit projected by the fiscal office resulted only in part from overestimating the average oil price for the fiscal year. Louisiana loses up to $50 million in annual revenue for every $1 drop in the price, and by the end of October Louisiana oil was selling for a little over $14 a barrel before climbing to $16 near the year's end. The gap in the forecast price of oil, then, does not account for the major portion of the higher deficit projection. Instead, the deficit is largely due to the negative "multiplier" impact on the entire state economy that results from a debilitated energy sector. The ailing energy industry causes the state economy as a whole to shrink, lowering corporate and individual income tax receipts along with sales tax collections.

Besides these state government fiscal difficulties, local governments have also been forced to curtail locally funded services. Cutbacks have been mandated across the state by cities and municipalities. The most highly publicized measures have been undertaken in New Orleans. There, virtually all city services closed on Fridays for the last quarter of 1986, and the city's 5,600 workers earned 20 percent less salary for the short work week. This latest action followed earlier layoffs of more than 1,400 city employees to help combat a $30 million deficit at the beginning of 1986.

In light of the severe fiscal problems in the state and local government sector, overall government employment is bound to weigh down rather than stimulate Louisiana's economy in 1987. Worse yet, there is the possibility that government fiscal problems will destabilize the economy further. Uncertainty concerning this possibility coupled with uncertainty over the future price of a barrel of oil give ample cause for worry about Louisiana's employment prospects in 1987.

Conclusion

If the national and international economies grow at 1986 rates and if the price of oil stabilizes, then Louisiana's economy has a good chance to begin a slow recovery from recession by the second half of the year. Another drop in the price of oil, however, or a slowdown in the United States or abroad, would probably mean further employment declines in a state economy already threatened by a deteriorating government sector.