### science news

OF THE WEEL

# The dying small town is alive and well

## Economic and cultural factors combine to produce a rural revival

How You Gonna Keep 'Em Down on the Farm After They've Seen Paree? In 1919 this was more than the title of a popular song. It was a fact of life in the United States. The 1920 census showed, for the first time, that more people were living in the cities than in rural areas. And ever since then, the trend has been for young people to leave the farm and move to the big city. But this situation might be changing. Recently compiled statistics indicate a population turnaround. There seems to be a significant economic and population rebirth going on outside of the metropolitan areas.

Gay Paree wasn't the only magnet pulling people off the farms. With little new land to settle and with the mechanization of farms, there were fewer and fewer opportunities for farmers. With industry growing in the cities and with immigration halted, there were more and more opportunities for employment in urban areas. Except for a slight dip during the Depression, this trend continued and even accelerated after World War II. Farming, mining and wood industries the major rural economies—became even more mechanized while urban job expansion continued. The Department of Agriculture estimates that from 1940 to 1970, 28.5 million people left farms and abandoned farming. The result is that all of the nation's net 71 million population growth went into urban population. Rural population rounded off at 54 million and stayed there in every census since 1940.

Calvin L. Beale of the Population Studies Group of the U. S. Department of Agriculture's Economic Research Service says the decline in rural areas has finally stopped—and much sooner than he expected. The number of farmers, for instance, reached a certain point (3.5 million) and could not go any lower. Then, in the 1960's industries began relocating in rural areas and small towns. These factors were expected to stabilize rural populations. But other economic trends and cultural attitudes came together to produce what might be a boom for rural

areas. The nation will not become rural again, says Beale, but small towns and cities may stop shrinking and begin to live again.

Employment data from the spring of 1970 to the spring of 1973 show that the rate of total employment increase has been higher in nonmetropolitan areas than in metropolitan areas (including their suburbs). This was especially true in manufacturing where not only the rate of growth but absolute growth was larger. Beale estimates that as many as 500,000 people have moved out of the large cities since 1970 and found new homes in small towns. Because of the industry, Beale says, a well-defined niche has opened up in the small towns for people with urban backgrounds. Openings increased in management positions as well as in the area of trade and service.

The cultural and attitudinal changes that are part of this trend are not hard to spot. City people have always retreated to the country for recreation. Now they are going there for good to escape urban crime, pollution, traffic and high costs. They are finding rural areas healthy, friendly and free of stress and tension. In addition, rural areas are catching up on some of the city conveniences they previously lacked hospitals, junior colleges, communications. And urban people no longer have to be embarrassed about being the only city slicker in town. As of 1973, 20 percent of the people in small towns and rural areas have an urban back-

Beale admits that the energy crisis might slow down the rural revival. Shortages of gasoline and heating fuel will make life in the country a little harder. But, he says, the fuel shortage is also bringing more people to the country. Coal mines, for instance, are looking for workers, and farm production is being increased for the export market. The energy shortage, says Beale, is only a temporary threat to the overall move to the country. "The trend," he says, "is very dramatic and very real. It will probably last for the rest of the decade."

#### The oil crisis:

"When you have eliminated the impossible," Sherlock Holmes used to say, "whatever remains, however improbable, must be the truth." How Holmes would have loved The Great Energy Caper, with its Sheiks of Araby, its hosts of intriguing suspects—each with a different alibi—and, of course, the missing booty, all trillion dollars (or so) of it.

The impossibilities seem so numthe entire industrialized world driven to the brink of economic chaos by a tiny group of developing countries, the most powerful international cartel unable to deliver its product and the most sophisticated government planners caught by surprise and at a loss to know what to do next. Close examination, however, reveals disturbing discrepancies in each of these widely accepted propositions, and ferreting out the improbable truth begins with exposing the fictions that have kept the world's petroleum flowing for the last decade, and determined its price.

The first fiction is that petroleum is produced, refined and delivered by independent, competing companies. According to the Federal Trade Commission, a few large companies run the industry "much like pursuing a "common a cartel.' course of action of using their vertical integration to keep profits at the crude level artificially high and profits at the refining level artifically low, thereby raising entry barriers [to independent refiners]." Vertical integration means the controlling of all stages of preparation and delivery of the petroleum, from wellhead to refinery to neighborhood gas stations. Some integration occurs in individual companies, but increasingly the oil giants are coordinating their efforts through joint ventures and interlocking boards of directors.

While it is illegal for any individual to sit on the board of directors of two supposedly competing companies, a bank can appoint one of its officers to the board of one oil company, and another officer to the board of a competitor. First National City Bank of New York, for example, in 1968 had directors on the boards of Exxon (then Standard Oil, N.J.), Mobil and Sinclair and owned substantial stock of Phillips and Tenneco. Again, for the officers of any two of these companies to meet to agree on product prices is a Federal offense, but First National could hardly be ex-

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#### A whodunit for the great Holmes

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pected to advise its representatives to urge a course of action on one company that would seriously disadvantage another.

Joint ventures bring "competing" companies into even closer contact. The Colonial Pipeline Co., for example, which carries refined petroleum products from Houston to New York City, is owned by ten companies, including Amoco, Mobil, Gulf, Texaco and Phillips. The line connects to one half the storage capacity for home heating fuels on the East Coast, and, according to Sen. Frank E. Moss (D-Utah), this storage space was apparently used last winter to hold fuel that had previously gone to the Upper Plains states, for later sale in the lucrative Northeastern market.

The trouble with joint ventures is that they can be used to exclude smaller, truly independent companies from a piece of the action. Federal offshore drilling policy seems designed to encourage just this end. The president of one independent company testified in a Federal Power Commission hearing that even a modest-sized independent, with say \$100 million in assets, cannot afford to bid for Federal offshore leases. As a result, the majors keep them among themselves. During 1970-72, the Continental Oil Co., for example, made only 27 independent bids for leases, but made 114 joint bids with Atlantic, 163 with Cities Service, 102 with Getty and 5 with Tenneco (with some overlap). According to Senate testimony last June by John W. Wilson, then an economist with the Federal Power Commission, the whole offshore drilling program "has become one of the most onerous anticompetitive cartelization devices at work in our domestic gas-producing industry.'

The cozy relationship among the



great oil companies directly affects the second fiction to be exposedthat petroleum prices are somehow the result of free market forces. Interstate prices are Federally controlled, but sales within a state are exempt from such control, and these "market prices" then form the basis for setting interstate rates. But suppose the buyer and seller within a state are essentially the same company, which is also engaged in interstate commerce. It could then bid up the local price at no loss and use this price to establish higher interstate rates. John W. Wilson cited the following example for SCIENCE News: The largest intrastate pipeline in Louisiana is the Monterey Pipeline Co. a wholly owned subsidiary of Exxon. When Monterey pays a high price for gas at the wellhead-perhaps an Exxon wellthe high cost is passed directly to the utilities that are the company's customers and, at the same time, it helps establish a higher rate for Exxon's interstate gas sales.

If domestic prices are artificial, internationally they are purely fictitious. A recent "posted price" of Arabian oil was \$11.65 a barrelthree or four times its price of a year ago. The cost of producing the barrel of oil had remained relatively constant at a mere 13 cents. Under existing contracts, Saudi Arabia could charge only a 12.5 percent royalty and a 55 percent tax on the oil, but suddenly it wanted that to amount to at least \$7 a barrel. Rather than renegotiate the rates, the Arabian American Oil Co. ("Aramco"-a joint venture of Exxon, Texaco, Socal and Mobil) simply raised the "posted price" high enough to assure the Arabian government its minimum. The markup exists only on paper, but the constituent companies can now charge off the new royalties against their U. S. income taxes. In 1972, three of the companies had a U. S. tax rate half that of a blind widow over 65 with an income of \$5,000!

With this background in mind, one can begin to look for the improbable realities of the current situation. The first reality is that because of the fictitious nature of the international "posted price" of oil, the great international oil companies have nothing to lose by seemingly astronomical price increases of Arabian oil. Paper losses can be translated into U. S. tax savings, real losses can be passed on to the con-



sumer, and any price rise in the Middle East will eventually be reflected in an appreciation of the value of the companies' holdings elsewhere. Not surprisingly, between the third quarter of 1972 and the third quarter of 1973, oil industry profits rose 63 percent. Only if prices rose so high that the economies of the oil consuming nations took a nose dive would these profits be endangered.

The same is true for the Arabs. The last thing they want to do is to cause a worldwide depression. The "oil weapon" is an economic equivalent of the atomic bomb-once demonstrated, its greatest strength lies in not being used. Since prices cannot rise indefinitely without bankrupting the West, the alternative to believing that the oil sheiks are simply money-mad fiends is to believe they want what their money has not yet been able to buy them -industrialization. And sure enough, Japan has just offered to dredge the Suez Canal and is reportedly looking at ways to help Egypt develop its steel and textile industries. Germany is talking about a \$400 million loan to Egypt for general development. France has reportedly bartered Mirage planes, industrial machinery and technical assistance to Saudi Arabia in return for a promise of crude oil.

One mystery remains—why was so little done by consumer governments, who must have seen danger signals long before the Yom Kippur war? Congress is very likely to ask that same question when it returns from recess Jan. 21, reportedly ready for blood.

—John H. Douglas