

5-16-2001

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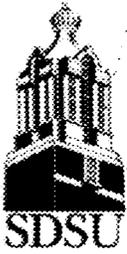
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Recommended Citation

Taylor, Gary and Diersen, Matthew A., "Power Deregulation: Blessing or Curse; South Dakota's Hog Market" (2001). *Economics Commentator*. Paper 388.

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ECONOMICS COMMENTATOR

South Dakota State University

No. 420

May 16, 2001



Power Deregulation: Blessing or Curse

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The plight of California has been a topic of much discussion in the last few weeks. The problems there have become almost synonymous with the evils of market deregulation. Is this comparison justified? Was the California power market truly deregulated or is the current situation a result of excessive government intervention? A clear understanding of the situation that exists in California is necessary to make an informed decision regarding the future of power deregulation in other parts of the U.S.

The California Situation

The problem in California was born in 1996 when the state legislature enacted a regulatory plan that **partially** deregulated the price of electricity. This process allowed consumers access to power from out of area, and out of state, suppliers. This policy change was forced by a demand increase of 30% over the last ten years while supply only increased 6%. During this same time period consumer/ environmentalist activism prevented the building of any new power generating facilities. These groups of activists were dubbed BANANAS - Build Absolutely Nothing Anywhere Near Anyone - by former Delaware Governor Pete du Pont.

This increase in competition should, in theory, drive prices down. The problem is that while wholesale electricity prices were allowed to fluctuate, consumer prices were frozen. This meant that while the producers of electricity were allowed to pass along the increases in their costs of production, the prices that utilities were allowed to
(Continued on p.2)



South Dakota's Hog Market

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Producers, lenders, and others have expressed interest in the future profitability of hogs and in marketing issues such as basis and hedging effectiveness. In this *Commentator*, a couple of issues related to South Dakota's hog market are examined. Raising hogs and pigs is generally South Dakota's second largest livestock enterprise based on sales revenue, lagging behind raising beef cattle. The number of farms producing hogs has declined in recent years, but South Dakota ranked 11th among U.S. states in hog inventory and ranked 12th in pig crop size in 2000.¹

Despite a decline in the number of sows in South Dakota, the number of hogs marketed has increased. The pig crop declined, but inshipments, presumably of feeder pigs, have made up the difference as shown in Figure 1. The ability to use existing facilities and relatively inexpensive feed are potential causes. An industry-wide trend toward specialization is perhaps another factor explaining the trend. Is there room for growth in South Dakota's hog markets? Recent growth from inshipments of feeder pigs implies that South Dakota may have a comparative advantage where finishing hogs is concerned. Feed cost should be relatively low, as the price of corn is typically the lowest in the U.S. along the I-29 corridor in South Dakota.

Another issue is basis, the difference between cash and futures prices. Basis is important because it determines how the futures prices should be adjusted for planning purposes and for comparing futures and options with any
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(Deregulation ... contd. from p.1)

charge consumers were frozen for six years. This law was written at a time when generation costs for electricity were decreasing. The unforeseen increases in the costs of producing electricity could not be recouped by the utility companies, forcing them to the verge of bankruptcy. State rules forced companies to buy power at \$.15 to \$1.00 per kilowatt hour but retail prices were capped at \$.067 per kilowatt hour. (Taylor)

The Theory of Deregulation

In most cases the local power company operates in a monopoly situation. Since they are the only supplier of electricity, the usual market response is to produce less than the optimal amount of electricity and charge a price higher than the free market equilibrium. This misallocation of resources and transfer of consumer surplus to producers are the usual reasons for regulation. The job of the regulatory body is to try to balance the interests of the consumer (low prices, product variety, and quality of service), while still maintaining the economic viability of the producer. (Fisher and Dornbusch) In order to satisfy these interests some guidelines should be followed. First, marginal cost pricing should be followed as closely as possible. Second, the pricing and service requirements should allow the utility to obtain a "normal" rate of return on the capital it has invested. Finally, power should be produced in an efficient manner. This rate of return should be approximately what could be earned by investing the capital in the next most attractive alternative. A competitive rate of return is necessary to allow producers to update generating facilities and lines and maintain a reasonable return to their investors.

History shows that deregulation of a market allows the influx of new competitors who see an opportunity to reap profits and introduce a condition where the forces of supply and demand determine prices. As supplies increase, prices are driven down and as consumer demand increases, prices increase. Such an increase in competition will force utilities to become more efficient producers and reduce the prices customers pay. Freeing the market in California would have initially resulted in increased consumer prices but it would have also brought consumer demand closer to actual supplies, encouraging conservation measures and new construction of power plants. As new participants enter the market, prices would have gone down and consumers would have gained new choices for their power supply. The partial

deregulation plan that was pursued in California resulted in deteriorating service and rolling blackouts, and has caused severe economic hardship to both businesses and private individuals.

Lessons for the Future

As we look at the problem of deregulation and its effect on markets, there are some lessons to be learned. The results of the partial deregulation in California should be no surprise. We have seen the same results in the former Soviet Union. Maintaining price controls in the domestic market while paying free market prices for goods and resources needed for production and consumption drove the USSR into bankruptcy. We are seeing the same situation being replayed in California. Paying high prices for inputs and having output prices capped is a recipe for failure. The second thing to be learned here is that giving consumers what they want may be politically expedient in the short run, but may be very costly in the long run. Consumers in California have demanded cheap electricity. However, at some point the bills for providing cheap power will come due. The laws of economics cannot be suspended. We are seeing the results now. Consumers are facing disruptions in power supplies as well as a future of higher power prices as the state bails out the floundering utility companies. The final lesson from this process is to take the time to thoroughly examine a problem before proposing a solution and examine both the intended and unintended results of the policy. The externalities created must also be accounted for. The intended result of the law, low power prices for consumers, was achieved. However, the unintended results, utilities on the verge of bankruptcy and lack of generation facilities, were not anticipated. This doesn't mean that deregulation will not work; it just needs to be carefully evaluated on a case by case basis.

Due to different resource allocations, managerial abilities, and consumer needs, what fails in one situation may be a great success somewhere else. Adequate study and analysis prior to implementation is much easier than trying to solve a preventable problem later. The problems facing California should not deter other states, including South Dakota, from pursuing deregulation. There are also examples of successful utility deregulation. Pennsylvania is a good example. By truly deregulating the electricity market in that state, consumers have been the recipients of lower prices and better service. Markets that are allowed to work freely do a better

job of allocating resources and discovering prices than regulated ones. The key is to allow them sufficient freedom and time to achieve a stable equilibrium and to allow consumers to make informed decisions regarding their purchases.

Sources

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(SD's Hog Market ... continued from p.1)

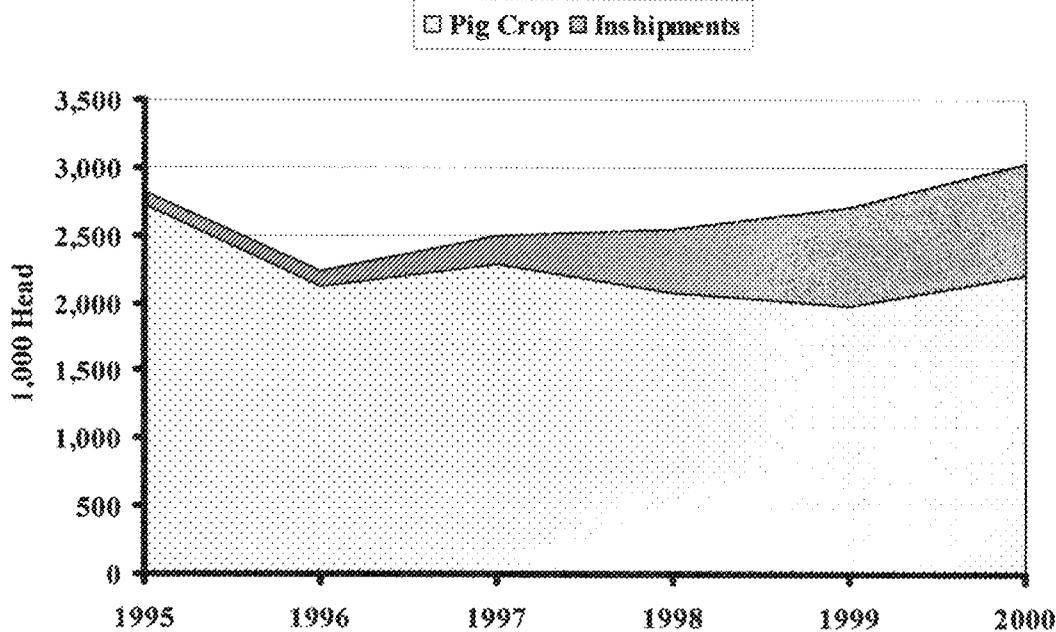
forward prices. The difference between cash prices can also be compared, giving a location basis. The weekly average price for market hogs in Sioux Falls, reported by USDA-AMS, was compared to the CME Lean Hog index on expiration dates from 1997 to 2000. For months without a contract, the index value was from the 10th business day of the month, the day futures contracts typically expire. As shown in Table 1, the basis in Sioux Falls was usually negative, but ranged from -\$7.27 to \$4.22. A basis level of -\$2.00 implies that for any observed futures price, the implied Sioux Falls' cash price is

obtained by subtracting \$2.00, then converting to a cash price by multiplying the result by 0.74. (The index is on a dressed basis and the dressing percentage for butcher hogs is about 74 percent of its live weight).

Sales revenue from hogs in South Dakota climbed back to around \$280 million in 2000. What that means in terms of future profitability is difficult to assess, given the equity-draining prices of late 1998. The prospects seem to raise as many questions as answers.² However, given the move toward year-round, continuous operations, there is possibly a niche to exploit given the continued seasonal demand fluctuation (and higher prices) for pork.

¹ USDA-NASS annually reports numbers such as inshipments, farm slaughter, and deaths in the *Meat Animals Production, Disposition, and Income* report.

²For a more detailed discussion see Diersen, M.A. *South Dakota's Hog Market: Developments and Prospects*. Economics Staff Paper 2001-2, Economics Department South Dakota State University, Brookings, South Dakota, March 2001.



Source: USDA-NASS

Figure 1. South Dakota marketable hogs by year

Table 1. Basis at Expiration for Sioux Falls' Cash and CME LH Index

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Note: Cash is lean equivalent of U.S. 1-2, 230-250# slaughter barrows and gilts price.

ECONOMICS COMMENTATOR

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