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Do Cropland Diversion Programs Harm Rural Communities?

Evert Van der Sluis and Willis L. Peterson

Introduction

Acreage reduction programs have been used in the United States since the 1930s to reduce commodity production and improve the environment. These programs make use of three fundamental instruments: (1) acreage limitations, (2) set-asides, and (3) required diversions. Acreage-limitation programs restrict the planting of a specific crop; set-asides require the farmer to idle a specific proportion of all acreage; and required diversions might restrict either the planted acreage or the crop acreage base. (One additional policy measure is long-term conservation programs.)

While specific effects of acreage reduction programs vary by program (such as success in controlling production or cost-effectiveness), the land covered under the various programs is lumped together in the study reported here. What we call acreage-reduction programs are all those that take cropland out of production in return for a payment to the farmer. Both short- and long-term agreements are included.

In recent years, these programs have become increasingly controversial. Much of the debate over the next federal farm bill is expected to center on them.

The central question seems simple enough—should the government continue paying farmers to take cropland out of production? Program

advocates argue that the policies have been successful in lifting crop prices and in enhancing environmental quality. Others counter that large-scale land withdrawals have slowed the growth of U.S. agriculture and put American producers at a competitive disadvantage in global markets.

We examine here one aspect of these programs: their effects on rural economies. In particular we ask: Did these programs change the demand for the services of the rural nonfarm population?

The History of Production Controls

The Agricultural Adjustment Act of 1933 was the country's first attempt to raise prices by linking government support to a reduction in plantings for cotton, wheat, corn, rice, and tobacco (among others). Ensuing acts continued to require farmers to reduce their acreage as a condition for receiving higher

(See Cropland page 2)

Casinos and Income in Non-Metropolitan Minnesota

Jean Kinsey and Todd Gabe

Growth in Gambling

Gambling has been increasing rapidly in recent years. Concern about gambling, especially the growth in number and size of Indian gambling casinos, has led many to question the effect on local economies, on the welfare of the Indian people themselves, and on the social costs of addiction and crime. Indian casinos are part of the proliferation of

gambling ventures that have swept the country. By 1992, lotteries were legal in 33 states and Washington, D.C. Only Utah and Hawaii have no legalized gambling of any sort. Table 1 outlines a brief recent Minnesota gambling history.

The basis for the rapid development of Minnesota's tribal gaming industry was the federal 1988 Indian Gaming Regulatory Act. By 1991, 11 of the

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prices. During World War II, this requirement was temporarily shelved in favor of production enhancement, but production controls were reinstated after the war. Despite this, technological advances and changes in farm management practices contributed to a sharp rise in yields, leading to crop surpluses and lower prices.

The Agricultural Act of 1956 established the Soil Bank, which was made up of both an Acreage Reserve (ARP) and a Conservation Reserve (CRP) program. Under the ARP, farmers were paid to reduce plantings of certain crops (wheat, cotton, corn, peanuts, rice, and tobacco) below their annually permitted levels. Under the CRP, land was retired from agriculture and converted to long-term (5-10 years) conservation uses.

Despite these supply-control efforts, corn and wheat surpluses still reached record highs in the 1960s, while prices were at their lowest since the 1940s. To counter this, the 1961 Act established acreage diversion programs, and in 1965 price supports contingent upon acreage reduction were initiated. Also, a long-term general land conservation program was established, the Cropland Adjustment Program (CAP).

Starting in 1973, market conditions changed dramatically. Increasing export demand led to an emphasis on "market-oriented" agriculture, with limited supply controls and small government payments. Shortages and resulting high market prices provided farmers with sufficient incentive to put most previously idle land into production again.

But by the time the 1981 Act went into effect, foreign demand had once again declined, prices had weakened, stocks had increased, and program costs had grown. A combination of large acreage reductions by the Payment In Kind (PIK) program and a nationwide drought in 1983 temporarily reduced surpluses, but rapid subsequent stock buildups prompted legislators to again tie eligibility for farm programs to land conservation, as in the Food Security Act of 1985.

Currently, more than half of total government set-aside land is enrolled in the long-term (10 years) Conservation Reserve Program (CRP), originally established by the 1985 Act, and revised in 1990. The difference between the Conservation Reserve of the Soil Bank and the current CRP is

that the former allowed the enrollment of any land the farmer designated, whereas the latter is reserved for certain designated highly erodible and environmentally sensitive croplands.

Effect on Rural Areas

A great deal of economic research has gone into the market short-run effects of supply-reduction programs. Several studies have shown that acreage reduction schemes directly and indirectly lead to job losses. Earlier studies on the Soil Bank considered only economic impacts on farming itself, but more recent analysis has looked at impacts on entire rural communities. The PIK program and the present CRP have been shown, for example, to detrimentally affect farm input industries. Communities that serve as trade centers for agricultural inputs and products, and those with a high proportion of idled cropland, appear to be most affected.

Some of these studies even suggest that the net long-term impact on regional economic output and employment is negative. One of the first demographic groups affected by declining economic opportunities in rural areas is the relatively mobile group of young adults. As job opportunities decline, they move out. Also, the acreage diversions are thought to cause farmers to move out of rural areas, thereby further draining the local economy.

The smallest rural communities appear to be those most affected by the acreage reduction programs. Rural communities with fewer than 2,500 people decreased from 7.0 percent of the nation's population in 1950 to 4.3 percent in 1990. The decrease was greatest in the smallest communities (fewer than 1,000 people): they dropped from 2.7 percent of total population to 1.5 percent over the period (figure 1).

Despite declines as a percentage of total population of the country, the total population of small rural towns (fewer than 2,500 people) has been relatively stable since 1950. The decline in towns of 1,000 or less has been offset by increases in towns in the 1,000-2,500 range.

Decreased employment opportunities coincide with a slower growth in the rural nonfarm population. The nonfarm population is both pushed away from rural areas by a decrease in demand for their services, and pulled away by better earning opportunities elsewhere.

Many goods and services used in agriculture are supplied by rural nonfarm people. The **demand** for these goods and services by farmers is in a sense a demand for the people who supply them. The dynamics of this demand in turn depends on factors affecting the profitability of agriculture, as well as on cropland diversion programs.

There is also a supply of these goods and services from rural nonfarm people. The supply of these items, and thus the supply of the rural nonfarm population, also depends on the local earnings and on economic opportunities that exist elsewhere.

The negative side effects of land retirement programs may be offset by positive economic stimuli to local economies. First, the supply-controlling effect of the programs may lead to higher producer prices, leaving more finances for investments and creating additional employment opportunities in rural areas. Second, farmers may receive payments in return for idling their land. However, these new finances are less likely to spur investment, given the decreased need for inputs because of the acreage decrease. Third, cropland diversions encourage greater use of nonland inputs. Whether the positive or the negative forces dominate is the empirical question addressed here.

What We Expected

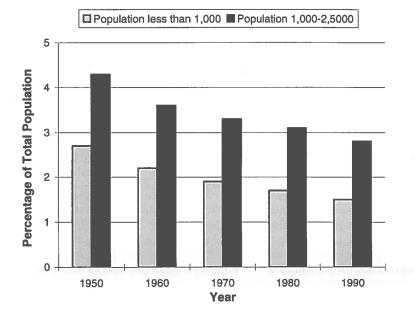
We expected diverted cropland to reduce the demand for services from the rural nonfarm population.

A reduced supply of rural nonfarm population services was expected as well, depending in part on the prevailing manufacturing wages in the region. The presence of a large urban population would also exert a pull on the supply of these services. Further, we would expect the educational level of rural nonfarm people to have a negative impact on their supply in local communities because of expanded opportunities elsewhere.

The Data

The data used in the study were drawn from 100 randomly selected farming-dependent U.S. counties over four decades—1950 to 1990. We define farming-dependent counties as those where farming contributes an annual average of 20 percent or more of total labor and proprietor income. With a

Figure 1. The Relative Importance of the Rural Nonfarm Population Has Declined.



Source: U.S. Population Census, respective years.

relatively high dependence on federal subsidies and few economic alternatives to agriculture, these counties are sensitive to farm policy changes.

The sampled counties are spread throughout the United States, but are heavily concentrated in the Great Plains from North Dakota to Texas. Five Minnesota counties are included: Lyon, Murray, Polk, Red Lake, and Redwood.

The study period spans several federal acreage reduction programs: the ARP and the CRP of the Soil Bank program; the CAP of the late sixties and early seventies; feed-grain, wheat, and cotton Production Adjustment Programs of the sixties and early seventies; the barley, sorghum, and corn Feed Grain Programs of the late sixties and early seventies; the Wheat Diversion Program of the early sixties; the Wheat Program of the late sixties and early seventies; the Cropland Conversion Program of the sixties and seventies; the annual acreage diversion programs since 1978; and the CRP since 1985.

Table 1 summarizes selected year enrollment in these programs in both

the United States as a whole and in the 100-county sample. Interestingly, a smaller percentage of the cropland was diverted in our farming-dependent counties than in the United States as a whole. It may be the case that where agriculture is the dominant industry, farmers have fewer occupational alternatives and so may be less willing to participate in voluntary cropland diversion programs.

What We Found

In order to capture the interdependence of the demand for and supply of goods and services produced by the rural nonfarm population, we estimated their effects simultaneously. On the demand side, the central and most important finding of this study is that the larger the number of diverted acres in a county, other things equal, the smaller the demand for the goods and services supplied by the rural nonfarm population. It appears, therefore, that the negative impact on rural communities of taking land out of production

Table 1. Cropland Diverted* as a Percentage of Total Cropland

Year	United States	100-County Sample	
969	16.5	11.2	
978	4.9	4.7	
1987	23.0	14.7	
1991	18.6	NA	

^{*}Includes both short- and long-term reserve programs.

more than offsets any positive effects of higher commodity prices resulting from the programs.

We also found that the larger the farm population in a county, the greater the demand for goods and services produced by rural nonfarm people in that county. Therefore, programs that hasten the migration of farm people to urban areas have the effect also of reducing the population in small rural communities.

On the supply side, the higher the wages in nonfarm employment in nearby urban labor markets, and the lower the unemployment rate in the economy, the smaller the supply of goods and services produced in small rural communities. As expected, higher wages in alternative occupations and better employment opportunities draw people out of these communities. The same is true of farm people.

As economic growth takes place, it is normal for rural to urban migration to occur. This results in a decrease in supply of labor in rural areas and an increase in rural wages, as well as an increase in average farm size.

Farmers have been able to increase the size of their operations by adopting larger machinery. This has enabled farm families to increase their incomes along with their city cousins. In the old days farmers with "40 acres and a mule" could earn as much as urban workers having similar skills. Now it takes more than 10 times this amount of land along with a complement of large and sophisticated machines.

We should not, therefore, attribute all of the rural to urban migration to farm programs. But as the findings of this study imply, the programs have contributed to this trend. How much?

Estimated Impacts

We used estimated rural nonfarm service supply and demand equations to calculate the impacts of changes in the number of cropland acres on the rural nonfarm population. Our study showed that the number of rural nonfarm people decreased by approximately 50 (per decade) for each 1,000 acres of cropland diverted. Without the cropland diversions, the average rural nonfarm population in each county would have been approximately 1,150 larger per decade. The crop cut-backs led to a population loss of 7.4 percent over a 10-year period, based on the average population of the sample counties.

Linearly extrapolating these results over the 1950-90 period suggests a reduction of the rural nonfarm population of about 30 percent in these 100 counties due to the various cropland diversion programs from what it would otherwise have been.

Whether cropland diversion programs decreased the total rural nonfarm population in the United States by a like amount is hard to say. The higher percentage of cropland diverted in the country suggests that the nationwide impact may be greater. On the other hand, where farming is less dominant, other industries can more readily provide alternative employment opportunities.

Conclusions

Cropland diversion programs have clearly contributed to the relative decline in the rural nonfarm population, due to nonfarm economic dependence on the farm sector. The relative decline of this population along with reduced farm numbers has meant a decrease in the size of the rural population as a whole. The declining population has contributed to the decline of the overall rural economy. Institutions serving rural communities including churches, schools, and hospitals have been weakened as well. Although cropland diversion programs may have attained their primary goalssupply reduction and environmental

protection—they may also be responsible for losses in the economic well-being of rural communities.

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(Casino continued from page 1)

state's Indian nations had signed compacts for blackjack and video machines and by early 1993, 16 casinos were in operation across Minnesota. Nationwide, 20 states have at least 225 casinos or high stakes bingo parlors owned by Indian nations.

Casinos in Minnesota employed 10,353 people in 1993, an addition of about 8,350 jobs to the state since 1988. Combined, the casinos would be the seventh largest private employer in the state, just behind Honeywell and just ahead of IBM. Twenty-nine percent of the jobs were held by Native Americans and 84 percent of these jobs were full time.

In Minnesota, gambling is a multibillion dollar industry. Wagers at Indian casinos were at least \$1.5 billion in 1993, not quite as much as the \$1.6 billion wagered on charitable gambling (mostly bingo and pull tabs) and the lottery combined. Out of the \$3.1 billion dollars wagered in Minnesota in 1993, it is estimated that about \$2.12 billion was paid out in prizes. This estimate is based on the total gross revenue after prizes (\$880 million) that was reported by charitable gambling (\$236 million), the lottery (\$124 million), plus an estimated \$500 million in casinos. Ignoring, for now, the fact that at least 20 percent of the gamblers

come from outside the state, the net spending on gambling (wagers minus payouts) in Minnesota was equivalent to \$530 per household, or roughly 1.5 percent of median household income.

Spending on gambling is unevenly distributed; many people do not gamble at all while some gamble compulsively. It has been estimated that 60 percent of adults nationwide buy at least one lottery ticket per year, but 50 percent of all lottery bets are made by only 10 percent of the gamblers.

An estimated 4-6 percent of the population are compulsive gamblers (Makela and Tucker 1993).

One researcher estimated that the social costs of compulsive gambling are roughly equal to one-half the casino's gross revenues. If this estimate is correct, the social cost of Minnesota casino gambling would be \$250 million per year.

At the same time, 22 percent of the gross wagers on the lottery were collected as state revenues. Ten percent of reported gross wagers for charitable gambling were also received by the state. The state's revenue from gambling was about \$195 million in 1992. Nationally, gambling tax revenues have increased 10 percent per year since 1980 and many states depend heavily on them. South Dakota, for example, now collects \$150 per person per year from taxes on more than 10,000 video gambling machines.

Table 1. Minnesota Gaming History

	Bingo law passed by Legislature Law requiring bingo licensing and reporting of finances to licensing authority Indian nations offered high stakes bingo on reservations State assumed control of non-Indian charitable gaming activities from local governments			
1945	Bingo law passed by Legislature			
1976				
Early 1980s	Indian nations offered high stakes bingo on reservations			
1984				
Mid to late 1980s	Indian gaming expanded to video games of chance			
1988	Indian Gambling Regulatory Act passed by U.S. Congress			
1989	Indian nations began to establish compacts with Minnesota state government			
1990	State Lottery sold its first tickets			
1990	Indian casino industry officially began in Minnesota			
1993-94	Sixteen Indian casinos in operation across the state			

Do Casinos Benefit Local Economies?

Very few studies have examined the effect of casinos on surrounding areas. One of these looked at Atlantic City, New Jersey. For the hotel/motel, nondurable manufacturing, construction, transportation and public utilities, trade, services, and total employment sectors, employment was greater than it would have been without the city's casinos. However, employment was lower in durables manufacturing, finance, insurance and real estate, and government (Hamer 1982).

The study reported in this article examined whether the presence of an Indian-owned casino increased per capita personal income in that county. (For details see paper by Gabe.) Per capita income was used as a measure of economic development both because it is the end result of local economic activity and because these data are readily available at the county level. We also looked at income earned by workers in industries seemingly complementary to casinos: the bar and restaurant industry, the hotel/motel industry, and the amusement industry (bowling alleys, golf courses, movie theaters, etc.).

Consumer demand theory suggests that per capita incomes should be positively related to the presence of a casino. As the number of buyers (local population or tourists) increases (or their incomes increase), the local demand for goods or services will also increase. Furthermore, an increase in the demand for one industry's goods will lead to an increase in the demand for other goods in a complementary industry. Economic theory also suggests that any money (such as casino revenue) added to an economy will lead to additional spending overall and a general increase in local economic activity.

The Analysis

In our study, we estimated the impacts of various economic indicators, including the presence of a casino, on four measures of per capita income in all rural Minnesota counties. The four measures of income were (1) overall per capita income, (2) income per person earned by workers in the bar and restaurant industry, (3) income per person in the hotel/motel industry, and (4) income per person in the amusement industry. We did not examine the effects

of casinos in the seven metropolitan counties because there were none at the time. Besides, their larger size would have overwhelmed (and hidden) the results from the non-metropolitan counties.

Table 2 shows the selected casinos and the nature and size of their operations. The "large" designation was used to indicate when casinos in the county employed more than 300 people. Casino size could impact per capita income.

The non-casino data for 1985-91 were from three sources: Regional Economic Information Systems (REIS) data from the United States Bureau of Economic Analysis, 1990 Census of Population and Housing data, and Minnesota Employment and Wages data from the Minnesota Department of Jobs and Training. The casino data were from the Minnesota Planning publications cited at the end of this article and were verified with the individual casinos.

Individual county characteristics were also taken into account. Four separate equations were estimated to determine how much of the variation in each per capita income measure was explained by the following determinants: the county's average educational level and its variance, percentage of residents who live on farms and in urban dwellings, percentage of minority residents, number of business establishments, a

time trend to account for normal inflation and economic growth, the region of the state, and whether or not the county had a casino. A second set of analyses used the size of the casino, rather than just its presence.

Study Findings

The results showed that the presence of a casino and overall per capita income were not significantly correlated in the 1990-91 time period. However, income earned by workers in eating and drinking establishments significantly increased in the casino's first year, and incomes earned by persons in the amusement industry increased in the casino's first and second year. Casinos were positively related to income earned by hotel and motel workers in both years as well.

Increased earnings by workers in the eating and drinking industry increased per capita income across the county \$2.25 per year. (Total increase in earnings by workers in this industry divided by the population of the county = \$2.25.) Increased earnings to workers in the hotel/motel industry increased per capita incomes about \$9.06 per year. Higher earnings by those in the amusement industry increased per capita incomes about \$2.29 per year.

Table 2. Casino Activity in Minnesota Counties

	Casino Name	High Stakes Bingo Before 1990	51 101	
County			1990 Size	1991 Size
Carlton	Big Bucks	Yes	NA	Small
Cass	The Palace Northern Lights	Yes No	Large*	Large*
Cook	Grand Portage	No	Small	Small
Goodhue	Treasure Island	Yes	NA	Large
Mille Lacs	Grand Casino	No	NA	Large
Redwood	Jackpot Junction	Yes	NA	Large
Roseau	Lake of the Woods	No	NA	Small
St. Louis	Fortune Bay Fond du Luth	Yes Yes	Large*	Large*
Yellow Medicine	Firefly Creek	No	NA**	Small

Source: Minnesota Office of Strategic and Long Range Planning, 1992-93; Carter, Irl, 1992; and interviews by Gabe, Todd M., 1994.

Casino size is defined as "small" if it employed fewer than 300 people, or "large" if it employed more than 300. Casino size is also classified as "large" in counties where there were multiple casinos.

^{*}Data from two casinos were combined for this county.

^{**}Firefly Creek Casino opened on December 26, 1990. Since it was only open for a short time in 1990, this study does not treat Firefly Creek as in operation during 1990.

Total earnings in these three sectors (bar and restaurant, hotel/motel, and amusement) combined were only 1.7 percent of total earnings in the counties. Overall, the increase in earnings amounted to less than \$14 per capita or 0.1 percent of all earned income.

Although the combined increase in earnings in the three sectors examined in this study was not enough to boost overall per capita income significantly, the distribution of the contribution is interesting. The contribution to total average countywide per capita income made by those working in the eating and drinking industry is at least twice as much as the other two sectors, yet they contributed only 17 percent of the increase due to the presence of a casino. Workers in the amusement industry, who contribute only about one-fifth as much to overall per capita income as those in the eating and drinking industry, contributed \$2.29, another 17 percent, to the increase after casinos. Those working in the hotel and motel industry contribute about one-third as much as those in the eating and drinking industry to overall per capita income, but they contributed almost two-thirds of the increase after casinos-\$9.06 per capita per year. Figure 1 provides a picture of this phenomenon.

Casino size was significant in explaining income variations. Small casinos were more likely to be corre-

lated with increased earnings in the eating and drinking and the amusement sectors. Both large and small casinos were associated with increased earnings in the hotel/motel sector. This implies that large casinos are less likely to complement and more likely to substitute for local businesses.

It appears that the presence of a casino was less significant than other factors in determining per capita income. Our study confirmed that the higher the average educational level and the lower its variance, the higher were all four per capita income measures. Overall per capita income was positively related to the percentage of the population who lived on farms, but income for eating and drinking establishment workers was less. The percentage who lived in urban dwellings increased overall income and also the incomes of workers in bars and restaurants, but earnings in the hotel/motel industry were less. Employment and the number of business establishments in the county were positively correlated with all four income measures.

Per capita income was negatively associated with the percentage of the population that was from a minority ethnic group. Minority population was, however, positively associated with higher earnings in the three sectors examined.

Economic activity in rural counties is related to the county's region and location relative to metropolitan areas and heavily travelled areas for commerce, transport, and tourism. In general, the regions in this study all had less economic activity than the reference area (counties that are located just outside the metropolitan area, in the central part of the state, and along interstate freeway corridors). The northeast and southwest regions both had lower per capita income than the reference region. The northeast and northwest regions had less income earned by eating and drinking workers, whereas the southwest had a higher level of income earned by workers in that sector.

Discussion

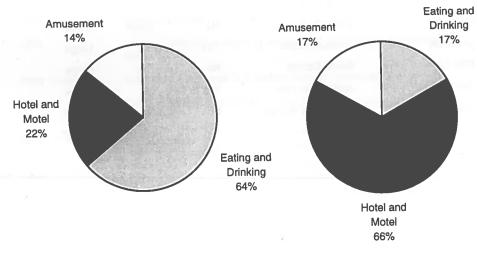
Other studies on Indian gaming in Minnesota found that between 1989 and 1991, gross taxable sales rose 3 percent more in the 10 casino counties than in the non-casino counties and increased sales in bars and restaurants were 5.3 percent more than in non-casino counties. Transfer payments to families with dependent children decreased 3 percent in the casino counties during that period, while they increased 15 percent in other counties.

These are all signs that casinos lead to additional jobs, income, and spending. This should be reflected in larger per capita incomes. But our empirical results indicate that there was no relationship between the presence of a casino and overall per capita personal income.

Why? Three explanations can be offered. First, it is likely that too few sectors in the economy were positively affected by casinos to significantly increase per capita incomes across an entire county. Only a small percentage of the typical rural county economy has been affected by casinos. For example, the mean per capita personal income in a rural Minnesota county was \$13,515 per year. The mean per capita income (across all residents) contributed by the eating and drinking, hotel/motel, and amusement sectors altogether was only \$236 per year. Since this is only 1.7 percent of the income earned, activity in these sectors had a limited effect on overall per capita personal income. Sectors such as agriculture, mining, and manufacturing, which make up a large portion of the income in many rural

Figure 1. Contributions to County-wide per Capita Income and Increases in Income After Casinos.





counties, were most likely unaffected by the casino industry.

A second possible reason is timing. This study included data from only the first two years of casino activity. There is likely a lag between the time when Native Americans and the casino employees began to earn income from the casino industry and when their spending starts to significantly affect local economic activity. This lag—if it exists—makes it difficult to conclude that the casino industry will not impact per capita personal incomes in the future.

Since 1991 some casinos have expanded their facilities and now attract even more visitors. These additional visitors may increase the future economic impact casinos will have on the counties' economies. Furthermore, some Indian nations have distributed significant sums of money (as dividends) to members who are just now starting to build new homes and purchase land and other goods. The investments by Indian nations that are not distributing dividends but are building local infrastructure such as water and sewer facilities and schools will probably show greater economic effects in the future. It is thus possible that a significant correlation will surface between the presence of a casino and per capita personal income once data for more recent years become available.

A third reason may be that income generated directly by casino owners and their employees is not being spent locally. Some payments to tribal members are in the form of trust funds held until the recipient is an adult. These funds might affect spending and investment in the casino counties, but not in the near future. Also, income that leaks out of the local area does not show up in the incomes of local residents. Payments for some large purchases by casinos such as professional management, construction, and capital equipment are likely to go outside and are not necessarily captured by the local community. And some money spent by community members for durable goods or travel or for other "imports" will also leak out of the county's economy.

Conclusions

It is too early to know the full economic implications of Indian gaming. The direction of change and the

winners and losers are yet to be identified. If casinos expand and add motel and restaurant facilities, these will likely become substitutes, rather than complements, to existing local establishments. These expansions may increase employment opportunities within the casino complex, but may lead to a decrease in the number of other local businesses.

Though gaming is attractive as a source of state revenue, its future in Minnesota and elsewhere is uncertain. It is generally a safe bet for the principals, in the short run, as long as the money comes from lenders or limited partners, and as long as the establishment has a relative monopoly on the market. But, since there is a great tendency to overbuild, it is risky for all parties in a rapidly expanding industry and for a community that can be left with a lower tax base, fewer jobs, and higher social costs. In Deadwood, S.D., for example, two-thirds of the 80 casinos are now reported to be in bankruptcy, and almost all of the other businesses have moved to a neighboring town. Some industry observers estimate that if more than half of the gambling is done by locals, the gambling facility is a sure loser. It needs outsiders to survive. Government revenues, though substantial, are believed to fall short of the social and community costs (Passell

Indian gambling facilities do not generate much direct state revenue because the states have no taxing authority over the sovereign Indian nations. Some Indian nations pay fees or contribute to local governments to help defray the costs of roads and police, but if this arrangement was not part of the compact, it is voluntary. Currently, state and federal income taxes, FICA, and unemployment insurance are paid by all casino employees (except state income taxes, which are not paid by those living on a reservation). Tribal members who receive dividends from the profits of the casino pay state and federal taxes if they live off the reservation and only federal taxes if they live on the reservation. Tribal governments pay no federal or state corporate taxes, and sales and state excise taxes collected on sales of merchandise on the reservation are rebated to the tribes. Federal excise taxes are paid on things like liquor and fuel. Tribally owned land off the reservation and privately held land on

the reservation are subject to local property taxes.

Pressure to expand gambling to non-Indian establishments has been resisted by the Minnesota Legislature. Many suspect that the industry is already overbuilt and that some casinos will close in a few years for lack of business.

When will the demand for gambling activities stop? Will the economics of supply and demand control its spread or does it require government sanctions? Will it end up costing taxpayers more than it contributes to the economy?

Anecdotal evidence suggests that the Indians whose nations own and operate casinos have increased their living standards. It is too early for the full benefits or the social costs of the Indian casino industry to be obvious. The results of this study show that for counties with Indian casino gambling, gains in per capita income have thus far been modest.

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