Casino Development

How would casinos affect New England's economy?

Proceedings

June 1, 1995

A Symposium Sponsored by the
Federal Reserve Bank of Boston

Robert Tannenwald, Editor

Special Report No. 2
Published in October 1995

Contents

Panel III: Social Costs

The extent to which casinos impose costs on society is one of the most controversial issues surrounding casino development. How will casino development affect costs of law enforcement and regulation? Do casinos require expansion of municipal services at taxpayers' expense? Can one quantify the economic costs associated with an increase in compulsive gambling behavior?

Preface

In 1992, Connecticut became the first New England state to allow casino gambling within its borders. Since then, the region's other states have seriously considered whether to follow Connecticut's example. One of the most controversial, unresolved issues in these debates has been the economic effects of casino development. While interest in this issue is intense, relevant empirical evidence is scant. For this reason, the Federal Reserve Bank of Boston held a one-day Symposium on Casino Development on June 1, 1995, bringing together experts from academia, government, Native American nations, and the gaming industry. This special report summarizes the participants' remarks.

Since the Symposium, regional interest in casino development has remained high. Although Connecticut still has the only casino in New England--Foxwoods in Ledyard, CT--several proposed casinos in a number of states are on the drawing board. We hope that this report will help to inform the continuing debate over this important issue.

The editor would like to thank Lynn Browne, Jeannette Hargroves, Sue Rodburg, Jim Sharpe, and other members of the Research Department of the Federal Reserve Bank of Boston for helping to plan the conference, Joan Poskanzer for editorial assistance, and Maria Mason for preparing the report.

The final panel will examine the extent to which casinos impose medical, legal, and other social costs on society--potential social costs with an economic dimension. There has been much discussion about the extent to which the spread of casinos will raise the incidence of problem and pathological gambling behavior, for example. Victims of these disorders tend to be unproductive workers and may commit crimes to support their habit. If casino development exacerbates these problems, then society as a whole pays the price. The panel will discuss evidence concerning the extent of these problems, and how potential social costs should be weighed against the economic costs imposed by constraints on casino development.

We at the Federal Reserve Bank of Boston hope, by putting on this program, to inform the public policy debate in New England and to promote constructive, informed discussion of one of the key issues now confronting New England.

Welcome and Introduction

Cathy E. Minehan*

I am pleased to welcome you to our symposium on Casino Development. Eight years ago, only two states, Nevada and New Jersey, allowed casinos to operate within their borders. Today, 24 states, Connecticut among them, permit some form of casino gambling within their borders. Now other New England states are considering whether to follow suit, and this has become an unusually controversial issue in the region. State policymakers from Augusta to Hartford have debated casino gambling's economic effects, yet few independent researchers have evaluated them. They are difficult to quantify and casino development is, after all, a fairly recent phenomenon. This symposium aims to bring together experts to discuss what we know and do not know about the economic impact of casinos. The symposium has been organized into three panels, each focusing on a different set of potential economic effects.

The first panel will discuss the impact of casinos on jobs and income at the state and local levels. Proponents argue that casinos can dramatically improve the economic conditions of the jurisdictions in which they operate. By contrast, opponents argue that casinos simply alter the mix of employment and income among industries, without stimulating aggregate economic growth. This panel will critique existing evidence and identify key assumptions policymakers must make to assess the casino's macroeconomic effects.

The second panel will consider the implications of casino development for public sector revenues. Many casinos pay substantial taxes and fees to state and local governments. The issues examined by this panel will include the importance of these taxes and fees in the total revenue collections of states and municipalities, the extent to which casino taxes displace public revenue generated by other forms of state-sponsored gambling, and who ultimately bears the burden of casino taxes.

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Introduction to Panel I: Impact on Income and Jobs

Robert Tannenwald*

Clearly casinos employ people. In fact, big casinos employ a lot of people and pay their employees benefits and salaries; casinos also buy goods and services from other firms that also have payrolls. But are many casino employees simply hired away from other employers? Would people obtaining a job attributable to casino development have eventually found a job anyway, with or without casinos? If so, in the absence of casinos, how much longer would it have taken them to obtain employment?

Under what conditions do casinos exert the strongest impact on jobs and income within a state or local area? To what extent do these conditions obtain in New England? How would the economic stimulus provided by casinos change if they were to proliferate throughout the region? How do casinos affect the employment and income of Native American communities? These are some of the questions that this panel will broach.

This symposium is addressing these questions first because, in considering any public policy, its impact on jobs and income is always an intense, widespread concern. Yet, in some ways, these questions should be considered last. The underlying issue in legalizing any forbidden activity is whether the attendant social costs outweigh the gain in economic satisfaction resulting from greater economic freedom. Until recently, most states prohibited casino gambling because, according to widespread belief, it bred crime, corruption, compulsive gambling, and other behavior detrimental to society. Avoiding these social costs was considered to be worth the dissatisfaction of potential casino gamblers forced to divert their dollars to other uses.

Ironically, the impact of casinos on jobs and income becomes most significant in the special case where some jurisdictions within a region

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permit casino gambling while others forbid it. Such has been the situation in New England since Foxwoods casino opened its doors in Ledyard, Connecticut in 1991. Because Foxwoods has enjoyed a regional monopoly, some allege that Connecticut, or at least its southeast quadrant, is siphoning off dollars from the economies of other New England sub-regions. According to this view, casino patrons from areas outside the vicinity of Foxwoods are forgoing purchases of goods and services to gamble in southeastern Connecticut. As a result, so the argument goes, the communities around Foxwoods are gaining jobs and income at the expense of many other communities throughout New England. How much southeastern Connecticut is gaining as a result of Foxwoods' regional monopoly is one of the questions that this panel will address.

In short, Foxwoods has allegedly created a border problem for much of New England. If so, the only way to alleviate this problem is to permit casino gambling to spread. How much would other jurisdictions gain? How would the magnitude and distribution of the gains vary with the extent of proliferation? Our panelists will address these questions.

The Impact of Casino Gambling on Income and Jobs

Earl L. Grinols*

From the national perspective, the economics of gambling can be summarized as a cost-benefit question: Is it worth adding another social problem for another form of entertainment? Were gambling to be introduced everywhere in the country, for example, the social costs would be roughly equivalent to the costs of an additional recession every decade. Sometimes it helps to ask the question in reverse: If we could eliminate either alcoholism, drug addiction, or crime, would we be willing to give up, forever, bowling or bird watching? Gambling becomes a public policy matter because, unlike most entertainment, it creates costs that must be paid by everyone, including those who do not gamble.

From a local perspective, those wanting to own casinos promote gambling as economic development. Gambling, however, is a fairly ordinary, low-technology industry. Shifting a large number of American workers into gambling jobs does not provide them with particularly competitive or useful skills for their future in the twenty-first century. A sufficiently small region can take money from its neighboring regions through gambling, as Las Vegas does from California, but it is a logical impossibility for every region or city to gain at the expense of its neighbors.

Since my remarks are directed primarily to the economic aspects of gambling, I will first provide a framework for evaluating gambling as an economic endeavor and then turn to the development question. As will be seen, job creation is not the primary economic issue with respect to gambling.

Gambling: The Pocketbook Issues

The main economic and political objections to gambling derive from

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its harmful externalities, its induced reduction of national income, and the political climate of rent-seeking it engenders.

Costs of Addiction

Studies indicate that between 1.5 and 5 or 6 percent of the adult population will become addicted to gambling if it becomes commonly available. Gambling addiction is just as serious as drug addiction or alcoholism.[1] Measuring just the apprehension, adjudication, incarceration, direct regulatory, and lost productivity costs of gambling implies that costs are in the neighborhood of $110 to $340 per adult per year, figured over the entire population of an area where gambling is prevalent. Figures from a recent Florida study using Florida Department of Corrections data place the lower bound for costs at $192.[2] In terms of those who must pay for these costs, $290 to $510 would be required annually per member of the work force. In comparison, gambling industry figures suggest that where gambling is readily accessible, the average adult will lose somewhere between $100 and $200 per year gambling. Current gambling tax rates imply tax collections of between $12 and $40 per adult each year. Figure 1 displays the unfavorable relative magnitudes of these numbers.

While the gambling industry publicly expresses concern for gambling addiction, a little-publicized fact is that the industry relies heavily on the revenues of compulsive and problem gamblers. A study by the accounting firm Deloitte & Touche (which has produced studies favorable to gambling) commissioned by the state of Michigan implies that fully 22.3 percent of casino revenues in that state would come from

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[1] See Valerie Lorenz, Robert Goodman, testimonies before the Committee on Small Business, U.S. Congress, September 22, 1994. Serial No. 103-1-4, US GPO, 1995, Congressional Hearings, pp. 59-70, 82-86. See also John Warren Kindt, "The Economic Impacts of Legalized Gambling Activities," *Drake Law Review*, vol. 43, 1994, pp. 51-95.

[2] Florida Office of Planning and Budgeting, *Casinos in Florida: An Analysis of the Economic and Social Impacts*, 1994, Executive Office of the Governor, pp. 28, 72-73.

compulsive and problem gamblers.[3] Deloitte & Touche's numbers are probably too low, since they imply that the average compulsive gambler loses less than $4,826 per year. When one finds compulsive gamblers seeking treatment, their average debts are over $70,000, and they do not take 15 years to get there. If the gambler's annual loss is placed instead at $10,000, the share of casino revenues due to compulsive and addicted gamblers rises to 46 percent. Professor John Kindt makes the point with respect to market entry into gambling that casinos are aware of the temporary potential available to them when they move into an area for the first time from "mining" the revenues of those who will become compulsive and problem gamblers.[4]

Reduced National Income

Those who gamble for reasons other than entertainment, and those who provide this gambling, engage in what economists call "directly unproductive profit-seeking activities." In one study, only 39 percent of gamblers reported that they gambled for recreation, while fully 27 percent claimed they did it to "get rich."[5] Directly unproductive profit-seeking activities have no direct social product, but nevertheless use the time and resources of firms and households and therefore reduce national income. The more such activity a society has, the lower its national income. Other forms of entertainment generally do not lower national income.

Influence-Buying

The third reason gambling is a significant policy issue has to do with the rent-seeking and improper influence-buying engaged in by the industry and by those who want to be casino owners. The Chicago Tribune recently reported an influence-buying attempt in which a casino company offered to pay $20 million to two government insiders if they could

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[3] Deloitte & Touche, "Economic Impacts of Casino Gaming on the State of Michigan," April 1995.

[4] Kindt, pp. 77-78, 83-85.

[5] Von Brook, P., M. Siegel and C. Foster, "Gambling: Crime vs. Recreation," *Information Plus: The Information Series on Current Topics*, 1994, cited in *Casinos in Florida*, p. 69.

obtain a state casino license. The Michigan Attorney General recently reported his state's experience with gambling in the 1940s. He said that a special grand jury found:

> such widespread bribery and corruption, all of which was done by gamblers to influence public officials, that we had indictments and convictions for felonies of the Mayor...the superintendent of police...the sheriff of the county...and the prosecutor of the county....And in the police department of the city at that time...the following numbers of officers were indicted for taking bribes: 15 inspectors, 18 lieutenants, 67 sergeants, 9 detectives, 39 patrolmen and 2 superintendents.

Lest his hearers think that somehow, things are different today, he went on to say:

> The last Michigan legislator who went around the state advocating the legalization of gambling, a person whom I debated, was Casmer Ogonowski. Thirteen years ago he was indicted, convicted of bribery and extortion, and sent to prison for accepting illegal money from gamblers.[6]

In addition to the direct social costs, reduced national income, and rent-seeking, gambling often leads to other social costs. Nevada has the highest suicide rate in the nation, more than double the national average, and one of the highest suicide rates in the world.[7] Nevada has the highest divorce rate, the highest rate of child death by abuse in recent years,[8] and among the highest rate of accidents per vehicle mile driven.[9] Nevada also shows up prominently in other problem statistics, including school dropout rates and crime. Figures 2 and 3 compare Nevada

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[6] Frank Kelley, Attorney General, State of Michigan, testimony given before the Governor's Committee on Gaming, Lansing, Michigan, March 3, 1995.

[7] In response to problems created by their gambling, addicted gamblers are five to ten times more likely to commit suicide than the general population.

[8] This figure applies for the period 1979-88 when casino gambling was illegal in other parts of the nation, except Atlantic City.

[9] Alcohol is frequently a promotional tool of casinos.

in violent crime to other western states ranked near it in population, and to the nation in suicide and child abuse.

Economic Development

Why would anyone knowingly promote gambling, in view of its problems and costs? The answer is partly that the costs do not appear instantaneously, partly that those who make money from gambling do not bear the costs they impose on others, and partly that gambling creates a classic regional Prisoner's Dilemma problem: Everyone is best off if no one has gambling, but one region can sometimes gain at another's expense if it deviates from the agreement to prohibit gambling everywhere.

To counteract the inherent negatives associated with gambling, the gambling industry regularly promotes gambling as an economic development tool. Figure 4 shows that gambling attracts dollars into a region when gamblers are tourists from distant locations. However, as Figure 5 illustrates, it can also take dollars out of an area when local residents lose to the casino. Whether the flow in or out of the community is bigger determines whether gambling expands the local economic base or shrinks it. Because government-granted regional monopolies earn artificially high profits that may be taken out of town for sourcing, taxes, to pay investors, and to finance projects elsewhere, it is not automatic that a casino will expand the local economy, even when it attracts some tourists among its clientele. Casinos in Minnesota, for example, cater to patrons who are more than 93 percent from Minnesota. Gambling revenues that do come from residents of neighboring states must be balanced against the losses of Minnesotans to casinos in Wisconsin, South Dakota, Iowa, Illinois, and other locations.

Casinos: Restaurants, Tollhouses, or Factories?

What should we expect when a local casino begins operation? An analogy is useful. Let a casino open within the boundaries of Central Park, New York City. An observer will see people dealing cards, operating roulette wheels, and doing jobs where there were none before (because it was a park). If the money earned by the casino employees and owners is spent in Central Park, then other businesses will also spring up in the park to supply food, clothing, and other products to them. This is the multiplier process of net export multiplier models.

Would we say that the economy has been "developed"? In addition to the activity at the casinos, we would probably want to take a look at what goes on in the rest of the city, because the money earned by the casino probably is coming from the residents of New York. A diversion of spending to Central Park means less money spent in the rest of the city, less output there, and fewer jobs. Some of the firms that supply food in the park may even have moved to their park location from a few blocks away, removing jobs from the rest of the city. If the increase of jobs in Central Park is matched by the loss of jobs in the city (a negative multiplier applies there), true net development is zero. The presumed development gains to counterbalance the social costs of gambling would be a mirage. Since the same kind of outcome would be expected if a new restaurant opened in New York--transfer, shifting of revenues maybe, but no net increase in jobs--let us call this the "restaurant effect."

Two other things might happen instead, the first of which we will call the "tollhouse effect." The casinos bring a lot of money into Central Park but remove just as much, because the employees and owners take their wages and profits outside the Park to spend. In other words, Central Park has just been used as the platform site for a casino, with no real effects on the city other than the dedication of some parkland for a sort of tollhouse to those who pass by. If the owners earn a high profit and use their toll money to finance their next tollhouse in Los Angeles or Chicago, then New York City could even see a net loss in jobs. The third outcome will be termed the "factory outcome." The casino sells gambling services exclusively to residents outside the city, much as a factory sells its product to the rest of the country.

The development question in a particular case, therefore, depends on whether the casino will operate more like a restaurant, a tollhouse, or a factory. Las Vegas, for example, gains at the expense of California because it takes in more gambling dollars from outsiders than it removes from area residents. As noted, however, other experiences are possible, both because of the dollars removed from the area and because of the effect that gambling has on the community. Atlantic City was a town of about 45,000 before gambling was introduced. Though it was small relative to the much larger cities nearby and might have expected to gain because of gambling, gambling did nothing to prevent its population from falling to 35,000 today. Many observers, including former city councilman Pierre Hollingsworth who brought gambling to Atlantic City, publicly say they regret their decision because of the effect it has had.

In public, the gambling industry generally portrays itself as a factory, optimistically estimating the revenues to be earned from outsiders relative to local residents and focusing on jobs and activity near the casinos. Gambling studies uniformly avoid discussing the details critical to determining whether the local effects will be positive or negative, such as where the revenues and profit flows will be taken once they are earned. Since regional casinos frequently serve mostly local patrons, the opponents of gambling expansion point instead to the tollhouse and restaurant effects.

Jobs

Figure 6 shows employment and unemployment data for the counties containing Aurora and Joliet, Illinois, relative to state data, for the period January 1987 to February 1995. Both communities are near the suburbs of Chicago and the gambling industry points to both as good examples of economic development. In each case, data for the state have been scaled to the size of the local labor market in the month before the casino opening and subtracted. Deviations from the state baseline, therefore, represent the differential labor market experience of each location due to factors such as the introduction of casinos. The plain solid lines in the figures show the size of the potential impact of the casinos, assuming that all revenues came from gamblers outside the area and, except for state taxes, were spent inside the area. Casinos opened in Joliet in June 1992 (month 66) and in June 1993 (month 78) in Aurora. For both cities, the data show no discernible pattern after casino opening compared to before. If anything, both areas had growing employment relative to the state that seems to have leveled out when the casinos were opened, in the case of Joliet, or in the 18 months before, in the case of Aurora.

Figure 7 presents a similar story for Peoria and Rock Island. In this case both cities are located far from Chicago, Peoria in the central part of the state and Rock Island on the Iowa border across from Davenport. Peoria employment was growing relative to the state before introduction of its casino in November 1991 (sample month 59) and Rock Island's employment was declining (casinos were introduced in March 1992, sample month 63). In the case of Peoria, employment growth relative to the state appears to have stopped at about the same time that riverboat gambling was introduced in Iowa, while the trend in Rock Island appears to have abated before the casino opening. In both cases, the month of casino opening shows no obvious positive impact. This is consistent with the observation that 92 percent of the gamblers in Peoria, for example, are reported to be from within the state and, for Rock Island, with the fact that Iowa has competing casino riverboats.

Similar stories emerge from examination of the data for other casino locations in Illinois. Econometric regressions confirm the lack of importance of casino revenues as an explanatory variable for local employment and unemployment conditions. A notable exception, however, is Metropolis (Massac County), where county employment is under 6,000 and the casino hires close to 800 directly. Metropolis is on the border near larger Paducah, Kentucky. While the number of individuals who were unemployed did not seem to respond to the casino introduction in February 1993 (sample month 74), Figure 8 shows that employment rose significantly at the time of introduction of the casino. Not all of the initial employment increase was maintained in succeeding months, but Metropolis has stayed above the state baseline in each of the months after casino introduction, whereas it was below in most months before.

Conclusions

The ostensible economic rationale for establishing many of the more recent regional casinos has been to give a boost to the economies of lagging towns or cities. The most important objective was job creation. This was the public justification for the original riverboat casinos in Illinois, for example. As time passes, however, that rationale has been replaced with an argument that fairness requires other communities to be given the opportunity for casinos of their own. The evidence that the casinos have had little or no impact in increasing employment in their host areas relative to the rest of the state is largely ignored in the debate, despite the fact that economic theory would predict such an outcome in most circumstances. Also ignored is the fact that adding more casinos will work against the interests of the original locations with casinos.

Convenience gambling must be differentiated from tourist gambling in order to distinguish the development effects of a tollhouse casino or restaurant-like casino from the effects on local output of a casino that acts like a factory. The data that we have from casinos of the type examined here show that they do not attract customers from very far away, and most customers come from within 50 miles. Unless the casino is located in an area with a relatively small local population and a much larger population nearby from which to draw gamblers, it is unlikely to have much impact on employment and unemployment. This is because the casino both attracts dollars to and removes dollars from the local economy.

Where casinos have had a positive effect, unemployment appears to have been little affected even as employment gained. This suggests that few of the jobs at casinos are filled by individuals who are unemployed at the time of opening. Some casino employees quit other jobs to take casino jobs, and some jobs are filled by individuals from outside the local area.

In conclusion, economic development does not appear to be the primary economic consideration relating to the introduction of a casino. Instead, pressure for casino expansion derives more from the economic attractions of high profits to would-be casino owners, who use the economic development device as an *ad hominem* argument to public officials who face their own political pressures to want to believe them.

SOCIAL COSTS VERSUS REVENUES AND TAXES: PER ADULT CAPITA

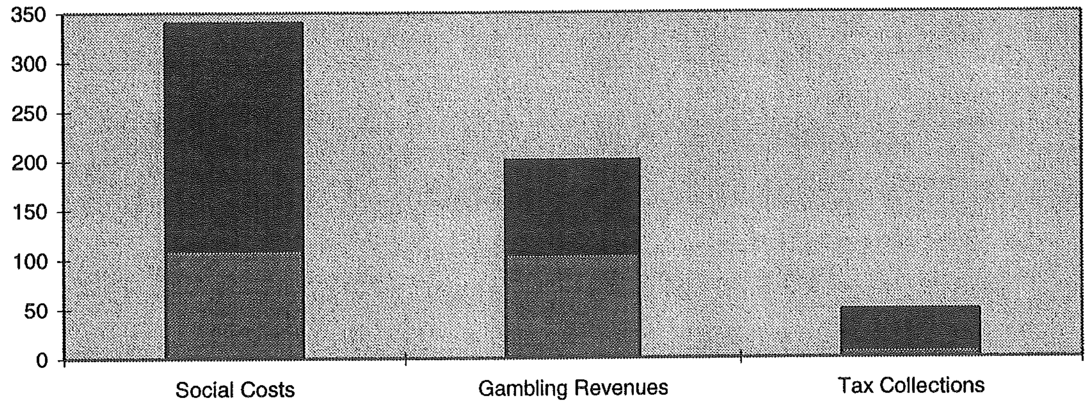
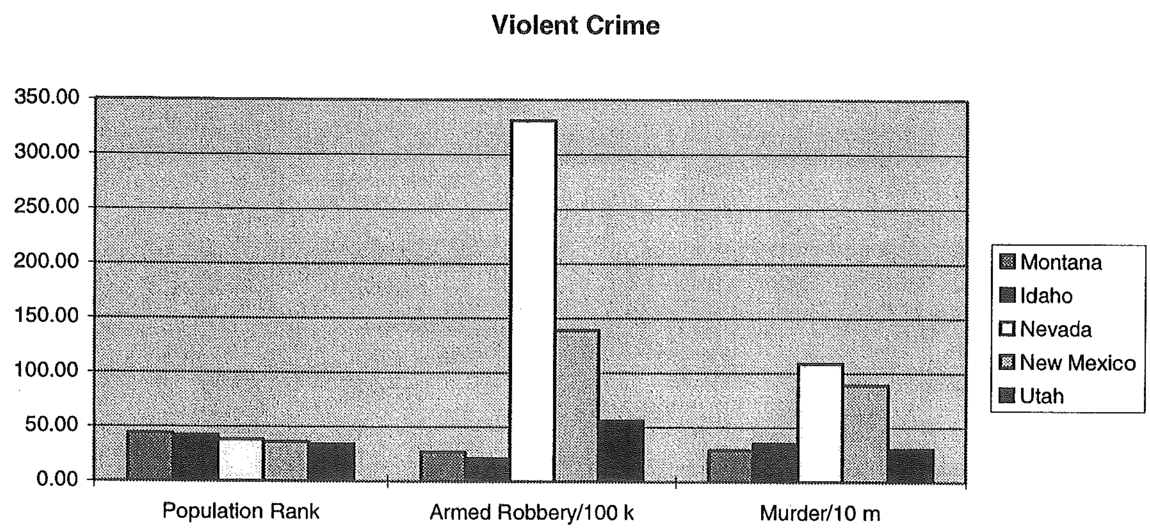


FIGURE 1



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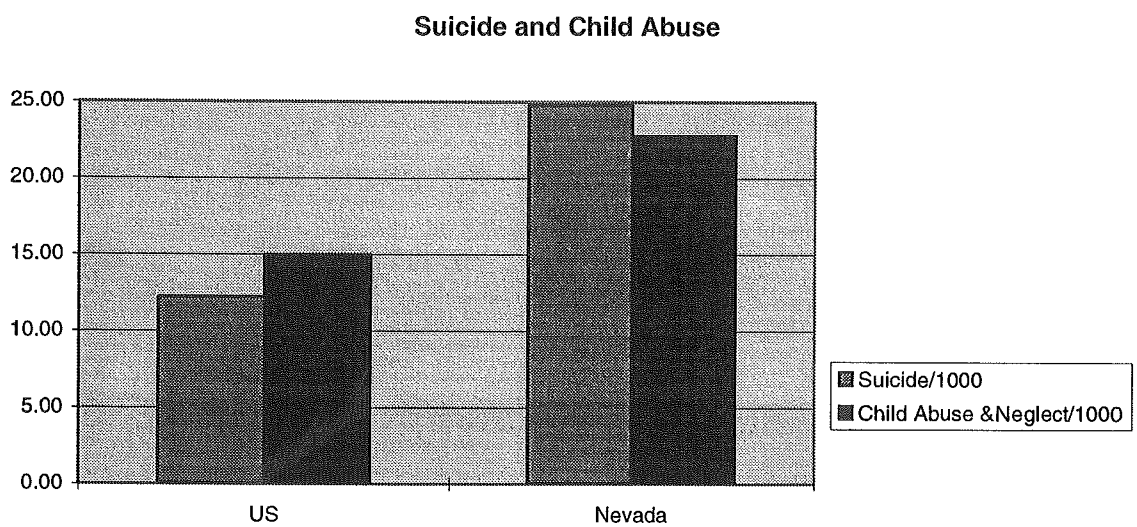

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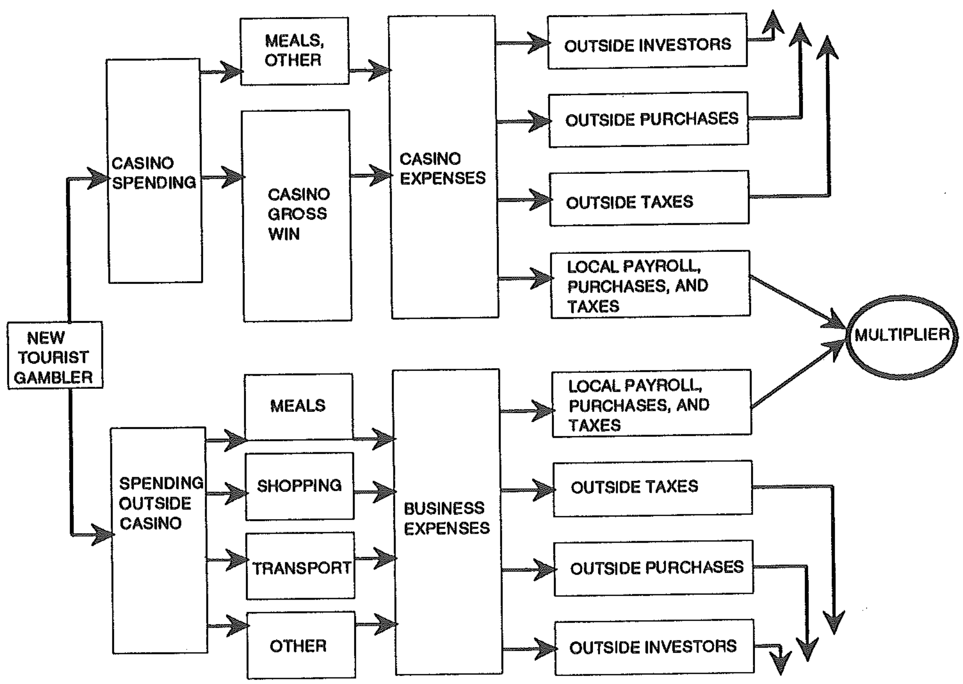

FIGURE 4: CASH FLOWS AND MULTIPLIER EFFECTS OF A TOURIST GAMBLER

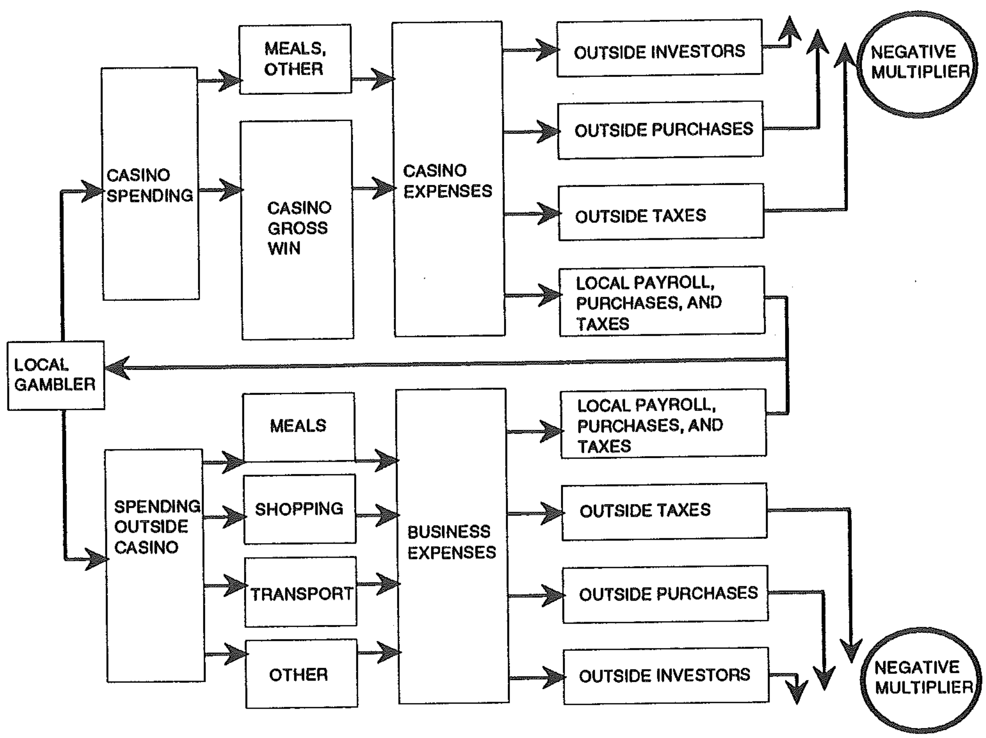

FIGURE 5: CASH FLOWS AND MULTIPLIER EFFECTS OF A LOCAL GAMBLER

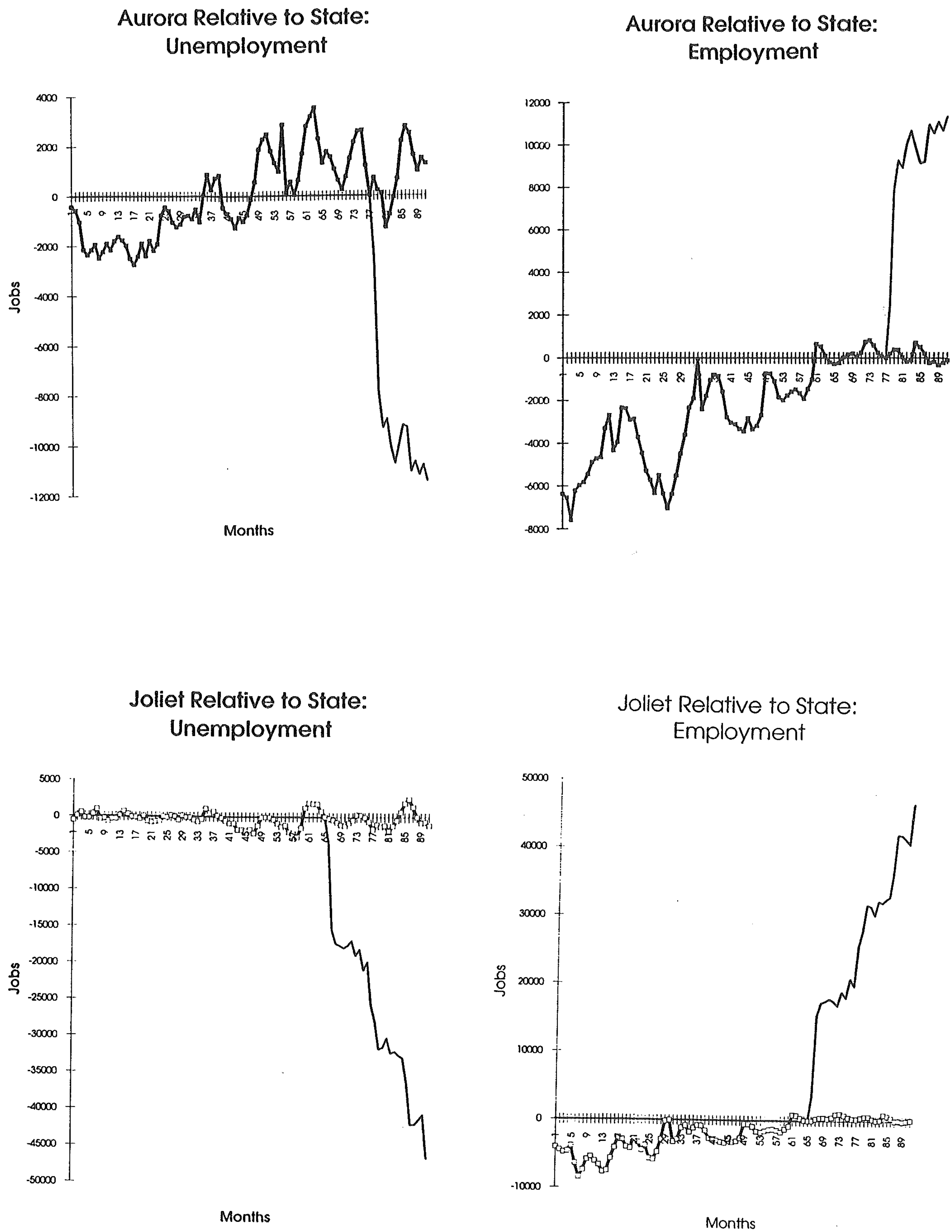
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FIGURE 6


Peoria Relative to State:
Unemployment
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Peoria Relative to State:
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Rock Island Relative to State:
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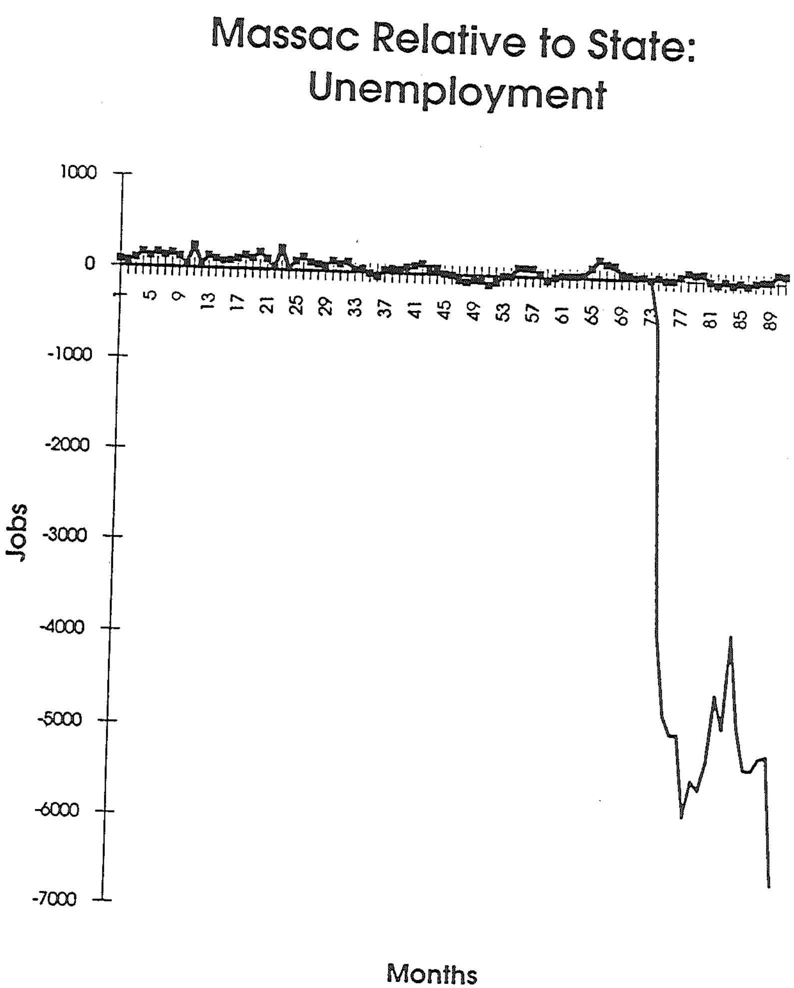
FIGURE 7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Months

FIGURE 8

Gambling and the Law®: Endless Fields of Dreams©

I. Nelson Rose*

Gamblers like to make predictions. Of course, some predictions are easier to make than others. Predicting what will happen to legal gambling in the United States today is a relatively easy bet, because it has happened twice before.

Legal commercial gambling is one of the fastest-growing industries in the United States and throughout the world. In part, this is because it is starting from a base of virtually zero, so the percentage increases year-to-year are spectacular. But in absolute dollars, the numbers are equally impressive.

Every year Americans spend about $8 billion at the nation's 25,000 movie theaters. This includes all ticket sales ($5.4 billion in 1994), plus popcorn, sodas, and confectioneries (*Washington Post* 1995). A little more, about $9 billion to $10 billion, is spent on all forms of recorded music, including music videos (*Atlanta Constitution* 1994). By comparison, in fiscal year 1994, the 36 operating state lotteries sold $34.47 billion in lottery tickets. Add in pari-mutuel betting on horses, dogs, and jai alai; total "action" in casinos and slot machines; wagers on sports; bets made in card rooms; and expenditures before prize payments in charity gaming and Indian bingo, and the total amount bet

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legally in the United States is estimated to be $482 billion (Christiansen 1995).[1]

Looking just at revenue, Americans spent more money on gambling, $39.9 billion, than they did on all live events, concerts, plays, all movie theaters, all spectator sports, and all forms of recorded music, combined (Christiansen 1995). It may say something about us as a nation, or it may just be that baby boomers' children are growing up, but in 1994, for the first time, adults in America spent more money on their gambling games than they did on toys for their children: Sales of durable toys and goods totaled $39.0 billion, compared to the $39.9 billion of gambling gross revenue (Christiansen 1995).

Gambling's History

Twice before, legal gambling has swept across America. The earliest settlements of America were funded, in part, by lotteries (Ezell 1960, pp. 30-32, 177, 204-405). Lotteries, both government-approved and private, were not only allowed but actively encouraged during the Colonial period. This era of widespread legal gambling ended with the spread of Jacksonian morality, aided by numerous well-publicized scandals (Ezell 1960, pp. 204 et seq.). By 1862, Missouri and Kentucky were the only states that had not banned lotteries altogether (Sullivan 1972, pp. 50-51).

The Civil War and the expansion of the western frontier brought about the second wave. The states of the old South needed a way to raise money to rebuild their devastated economies; they turned briefly to lotteries as a voluntary tax (Ezell 1960, ch. 12; National Institute of Law Enforcement and Criminal Justice 1977, pp. 282 et seq.). However, the great Louisiana Lottery scandal of the 1890s led to the passage of

[1] However, this number is inflated, because it includes all wagers, called the "handle": If a player bets $25 and wins and then $25 and loses a total of $50 has been bet. A more accurate number for making comparisons with other industries is the gross revenue or "win," the amount players lose. Since this money is left behind after the gambling transaction, it corresponds nicely with gross revenue from other retail businesses.

strong federal anti-lottery laws (which are still on the books) and a complete prohibition of state lotteries, which lasted nearly 70 years (18 U.S.C. §§ 1301 - 1307; Ezell 1960, ch. 12).

Throughout the Wild West, gambling was ubiquitous. Sometimes, law enforcement ignored the casinos, because it was difficult to outlaw this typical frontier diversion (Findlay 1986, ch. 3). Frequently, gaming houses were explicitly made legal, so that governments could raise revenue through licensing and avoid the problem (later epitomized by Prohibition) of having criminal statutes on the books that no one obeyed (Peterson 1949 and 1950).

The rise of Victorian morality, accusations of cheating, and the desire for respectability brought down the legal casinos in the West. At the same time, betting on horse races fell into disfavor and the tracks were closed. By 1910, the United States once again was virtually free of legalized gambling (Dombrink and Thompson 1990, p. 11; Weinstein and Deitch 1974, pp. 13-14).

The Third Wave began with the Great Depression. Nevada re-legalized casino gambling in 1931. Twenty-one states opened race tracks with pari-mutuel betting in the 1930s, with additional states allowing pari-mutuel betting in every decade since (Dombrink and Thompson 1990, p. 11). The big boom began with the first legal state lottery opening in New Hampshire in 1964. By 1994, every state except Utah and Hawaii had some form of permitted commercial gambling; social gambling had been decriminalized everywhere in law or in practice; charity gambling was the rule, not the exception; and it became impossible to keep up with the various proposals for additional legalization being discussed in every state. All of this leads to the inevitable question: Why now?

A Speculative Bubble?

It is widely believed in the 1990s that anyone, including government, can "get rich quick." All one needs to do to grab a piece of the action is to own, operate, or tax some form of legal gambling. An endless flow of instant, unlimited wealth will follow. This delusion is a typical symptom of a classic speculative bubble.

Americans have an especially hard time understanding speculative bubbles, since we have little feel for history. When we think of historical eras characterized by wild speculation, such as the 1920s, we might imagine a toy balloon being overinflated: a market expanding unceasingly, until it explodes. The reality is more like watching a film of a roller coaster in reverse: a sustained runaway ride upward, with unexpected dips and bounces, followed by a relatively rapid descent to reality.

Even our view of crashes such as the stock market collapses in October 1929 and October 1987 reflect our hindsight view, compressing time and history into isolated great events, "Black Tuesdays." However, the recent collapse of the Japanese real estate and stock market bubbles, wiping out over $3 trillion in paper assets--63 percent of the value of the shares traded on the Tokyo Stock Exchange--took three years (*The New York Times* 1992).

The craze to legalize gambling is not like a stock market bubble. All bubbles grow out of unrealistic expectations, but pure market bubbles, like the one preceding the Great Crash of 1929, also need easy money for leveraged buying (Galbraith 1961). For connoisseurs of money mass manias, the current craze is more like the infamous South Sea Bubble than the equally infamous Dutch Tulipmania. In the 1720s, the government of England actively encouraged companies to exploit new opportunities created by the opening of the tropics, "the South Sea." By contrast, the Dutch craze for trading in tulip bulbs in the 1630s was purely a runaway market; government played no role (Bulgatz 1992, p. 101). In America in the 1990s, it is states as often as individual entrepreneurs who are trying to legalize keno, video lottery terminals, or riverboat casinos.

There may be little difference in practice. At the height of the speculative fever in England, one company was able to do very well selling stock "For an Undertaking which shall in due time be revealed" (Galbraith 1961, p. 54). In the Dutch tulip markets, futures were created, aptly called "trading in the wind" (Bulgatz 1992, p. 81).

Speculators paid enormous sums for contracts for future delivery, hoping to sell them to a greater fool. While a small house in town cost about 300 guilders, a single tulip bulb sold for the outrageous price of 5,500 guilders (Bulgatz 1992, pp. 88-89; but see Garber 1989).

Fortunes really can be made during such wild speculation. The word *millionaire* came into use for the first time during France's Mississippi Company bubble of 1716 to 1720 (Dreman 1979, p. 63). The dream of instant, unending riches is not limited to Americans. Canada, Australia, and Europe have the legal gambling bug as bad or worse. And nothing compares to the percentage growth of lotteries, casinos, and pari-mutuel betting in the newly freed former Soviet bloc.

Unlike tulip bulbs, commodities, or stock index futures, legal gambling can, in fact, generate revenue, but not on the scale imagined and not endlessly in the face of direct competition. As much as they might wish, not every town can become the next Las Vegas. There is a big difference between being the only legal casino on the East Coast and owning a riverboat in Iowa with $5 limits when a competing riverboat in Illinois with unlimited stakes is a 10-minute drive away.

Why is there such a rush to legalize gambling in the 1990s? Speculative bubbles can be seen as a tiny bit of real value being blown all out of proportion. Gambling has boomed exactly because the law of supply and demand works.

What Happens When Prohibition Is Repealed?

There is general agreement in the casino industry that North America can support a third major gambling center, between Nevada and Atlantic City. Unfortunately, many jurisdictions in the United States and Canada would like to believe they are going to be that center. People in both countries are working to bring about more legal gambling, in the belief that casinos will solve all of their locale's financial problems.

The reason for this grand self-delusion is relatively simple. We are coming out of a period of nearly complete prohibition. At the end of the Second Wave, legal casinos disappeared with the closing of the frontier. At the turn of the twentieth century, the territories of New Mexico and Arizona were told by Congress to outlaw their gambling in order to be admitted as states (Currie 1908). Even Nevada outlawed all its casinos in 1909. Lotteries had already been eliminated by federal legislation, passed in response to the great Louisiana Lottery Scandal of the 1890s (Sullivan 1972, pp. 58, 98). By 1910, one could bet legally in the United States at only three places: racetracks in New York, Kentucky, and Maryland. In that year New York outlawed racing (King 1969, p. 26). A few years later came Prohibition.[2]

Seventy years ago Americans could not bet or drink legally. In the 1990s, in states like Oregon, adults can bet on state-run video lottery terminals (virtually indistinguishable from slot machines), purchase parlay cards from the state on National Football League games, and play the casino game of keno through the State Lottery, in bars licensed by the state. What happened?

Suppose Prohibition had just been repealed. The hypothetical owner of the first and only liquor store in a state would make a fantastic return on investment. But soon, with no government controls, liquor stores would appear throughout the state, as there are few barriers to entry. Excess profits would disappear; returns on investment would descend to normal levels.

Government makes the situation worse. The fantasy that an endless supply of cash is available, an infinitely elastic demand for gambling--this newly legalized vice--seems to hit politicians harder than entrepreneurs. Sin taxes are always the easiest to raise. Casinos, like liquor stores and tobacco retailers, are easier targets than more politically acceptable businesses. Government's thinking is that people should not be gambling anyway and they will continue to make wagers, no matter how much the cost. So, even though half the gaming establishments

[2] The era from 1900 to 1925 is a striking example of moral issues changing the law. Not only was virtually all gambling outlawed and prohibition of liquor enacted, but the first effective restrictions on illegal drugs and prostitution were imposed.

in a jurisdiction might go bankrupt, the state continues to consider raising taxes on gaming.

The Explosion of Legal Gambling

Resorts International opened the first legal casino on the East Coast on May 26, 1978, spending $45.2 million to refurbish the old Chalfonte-Haddon Hotel in Atlantic City (Satchell 1979). A first-year gross revenue of $224.6 million made it the most profitable casino in the world (N.J. Casino Control Commission Annual Report 1979, pp. 3; Janson 1979). The state of New Jersey, for merely allowing the casino to open, collected $18 million in taxes that first year (N.J. Casino Control Commission Annual Report 1979, p. 3).[3]

Twelve more casinos quickly followed. The Trump Taj Mahal, the thirteenth and last Atlantic City casino to open, cost over $1.1 billion. Its 120,000 square foot casino expanded the supply of casino floor space in the market by 18 percent. It had to win over $1 million per day on average just to break even (Sloan 1990). The Taj opened in April 1990; it declared bankruptcy in July 1991.

Although fiscal mismanagement, especially junk bond financing, played a role, inevitable competition and increased taxes dragged under half the new businesses. Of the thirteen casinos opened in Atlantic City since 1978, seven have been involved in formal bankruptcy proceedings: the Atlantis; Trump's Castle, Plaza, and Taj Mahal; Bally's Park Place; Bally's Grand; and Resorts International, which filed twice in five years (*Los Angeles Times* 1985, p. IV1; Hancock Institutional Equity Services 1992, p. 4; *Los Angeles Times* 1989, p. D1; AP 1994).

The pace of change picked up in the early 1990s. Colorado opened limited stakes casinos in three small mountain towns in October 1991. By July 1992, the original 25 casinos had grown to 68. Taxes on casinos were raised, winter hit, and within five months, by December 1992, more than 21 casinos had closed their doors (Grogan 1993, pp. 3-4). Worse,

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[3] In their first 15 years in operation, the casinos of Atlantic City, which never numbered more than 13, paid a total of $6 billion in local, state, and federal taxes.

taxes were raised on all real property, because so many non-casino stores had also been boarded up.

In January 1993, the small Mashantucket Pequot tribe, owners of the Foxwoods High Stakes Bingo & Casino in Connecticut that had opened in February 1992, began operating the only legal slot machines between Atlantic City and Canada. The initial 260 machines produced slightly over $2 million that first month. In July of the same year, the casino had 1,471 operating machines, earning $26.2 million for the month, for a daily average win of $575 per machine per day. That was twice as much as Atlantic City's daily average of $275 and four times the $140 per day won by $1 slot machines on the Las Vegas strip (*Reno Gazette-Journal* 1993, p. 8B). By October, the numbers had doubled again: The tribe now had 3,137 slot machines generating $1.625 million per day (Diamond 1993, p. 2F).

Political and economic pressure to break the Foxwoods monopoly in the Northeastern U.S. market made competition inevitable. In 1993, an Indian casino without slot machines was opened by the Oneida tribe in the middle of New York state; casino ships with slots started operating out of ports in Connecticut; an Indian tribe in Rhode Island won a court order allowing it to open a casino; and legislation for slot machines, video lottery terminals, and more casinos on riverboats and on land was introduced in state legislatures in Massachusetts, Pennsylvania, Connecticut, and nearly every other jurisdiction north of Atlantic City.

The latest boom area with new casinos is Mississippi, along both the Mississippi River and the Gulf Coast. However, concern is arising over what will happen to the gaming business in Biloxi/Gulfport when Louisiana, and possibly Texas and Alabama, open up casinos closer to the Gulf Coast's customers. Tunica, Mississippi--one of the poorest counties in this poorest state--also happens to be the county with riverboat casinos closest to the large Memphis market. How much business would survive if Tennessee legalizes casino gaming? The current return on capital investment is substantial enough that investors might not care too much about potential competitors in other jurisdictions opening five or more years in the future. However, there are serious concerns about other riverboats in Tunica saturating the regional demand for casino gaming.

The Demand for Gambling

The explosion of legal gambling has finally settled the question of whether availability creates demand. The traditional argument for legalizing gambling, or any vice, is that people are going to do it anyway, so it is better for the state to run it or regulate it than to have the money go to organized crime. Of course, some people are going to gamble, even if the criminal penalties are enforced, which they are not. But people who live in cities with casinos nearby do gamble more than others. Take Minnesota, for example.

The first large, publicly released studies of casino customers found that the residents of Minneapolis-St.Paul became major consumers of legal casino gambling after casinos were opened nearby. Prior to 1990, with virtually no convenient casinos, the Twin Cities area was only the fourteenth largest feeder market in the country. By 1993, Minnesota had opened more legal, wide-open, full-scale casinos than Atlantic City, all on Indian land. That same year, Minneapolis-St. Paul had grown to be the fourth largest source of casino patrons (*St. Paul Pioneer Press* 1994). The number of casino gambling trips made by residents more than tripled in one year (MN Planning 1992).

The most startling illustration of how availability creates demand is the rise of Biloxi as a major source of casino patrons. The metropolitan area of Biloxi-Gulfport-Pascagoula ranks eighth in the nation as an important feeder market for casino gaming, above San Francisco-San Jose and Milwaukee, and far above Houston, San Diego, Detroit, Dallas, Phoenix and Seattle, which did not even make the top ten (*Casino Journal* 1995). According to the Census Bureau, the combined population of the cities of Biloxi, Gulfport, and Pascagoula (112,993) is less than the population of Newport News, Virginia, (171,439), the 100th smallest city in the nation (*World Almanac* 1995, pp. 381, 403).

Some operators will always do well. Because people do not want casinos in their own backyards, quirks in the law will continue to give some operators virtual monopolies. But it is wrong to think of the boom in casino gambling as being limited to isolated mining towns and riverboats. The states themselves could conceivably become the largest operators of slot machines.

Video Lottery Terminals and Other Gaming Devices

A Gallup Poll taken in November 1992 found an overwhelming majority of Americans opposed using video poker as a revenue raiser: Only 38 percent approve of the machines (Gallup Poll News Service 1992). Yet, an election held that same month in South Dakota resulted in a nearly two-to-one vote in favor of the machines (South Dakota 1992). The reason for this seeming reversal of opinion is clear: The state's voters were never asked whether they wanted "video poker machines" put in. They were asked only whether they wanted "Video Lottery Terminals" taken out. To underscore the fiscal implications of removing the ubiquitous money-makers, a companion referendum asked voters whether they wanted to institute a state income tax.

The vote totals in South Dakota to remove video lottery terminals were 62.8 percent opposed (and therefore voting to keep them) and 37.2 percent in favor of getting rid of the gaming devices. Politicians, who have to study election results for their livelihood, have two different definitions of a landslide: winning by over a 10 percent margin or receiving over 60 percent of the total vote. By either definition, this state voted by a landslide to keep its gambling.

The South Dakota election was the first statewide vote ever taken on the question of video lottery terminals. These results, if duplicated elsewhere, could mean that by the end of the century, state-owned slot machines and near-slots might be found in bars, liquor stores, and restaurants that serve alcoholic beverages across the country and perhaps, eventually, in convenience stores and supermarkets, as is now the case in Nevada.

It is likely that video gaming machines are about to saturate the nation. In fact, they are already legal in many jurisdictions. They need only to be perceived as being politically acceptable to spread even further. Traditional slot machines and video lottery terminals are already allowed under the law in 23 states. (The appendix to this paper provides a state-by-state rundown; states allowing machines under the law are marked with an asterisk.)

The rapid acceptance of gaming devices has created bizarre legal situations. To give an example, South Carolina's Supreme Court ruled that video poker machines are legal, but it also upheld a law allowing losers to sue to get their money back (State v. Blackmon 1991; S.C.Code Ann. §32-1-10,1991; Berkebile v. Outen 1993). In June 1993, the state legislature enacted a new law clarifying that these "video game machines" are legal, so long as they are approved by local voters, and pay no more than $125 per day (South Carolina 1993).[4]

During this transitional period, when government moved from complete prohibition to widespread promotion, some states severely limited the availability of gaming devices. For example, the only place in the state of West Virginia allowed to have gaming machines was Mountaineer Park racetrack. Further, the only machines allowed there were video lottery terminals; coin pay-outs are prohibited.

The machines also can be found on Indian reservations throughout the country. Under federal law, states that have legalized gaming machines and that have Indian tribes within their borders find themselves forced to allow the tribes to set up untaxed casinos. Arizona, for example, allows charities to run occasional low-stakes casino games, or "Las Vegas Nights." Thus, the state has been forced to sign compacts with its tribes to allow them to operate thousands of slot machines. Even if a state thinks it has outlawed slot machines, federal law and politics have sometimes led to tribal gaming. Slot machines are legal and operating on Indian land in four states that do not otherwise allow gaming devices: Minnesota, Wisconsin, Connecticut, and Michigan.

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[4] Section 12-21-2791 reads: "[T]he operation of coin-operated machines... shall limit the cash payout for credits earned for free games to two thousand five hundred credits per player per location during any twenty-four hour period. The cash value of credits for each free game shall be limited to five cents."

Alaska, which has no slot machines, has signed a compact allowing a tribe to open a full casino.

In other states, tribes have won the right to have gaming machines through the courts. Texas has a law allowing true slot machines, so long as they dispense only coupons redeemable for merchandise worth less than $5 wholesale. A federal judge ruled in November 1993 that this meant the state had to negotiate with its Indian tribes for true casinos. In early 1994, the Supreme Court of Kansas upheld the Kickapoo Nation's right to operate casino games, because the state operates a lottery. Tribes have failed to win the right to operate gaming machines in only two states: Florida and Idaho.

Suits are pending in every other state that has Indian land. In a case involving Alabama, the U.S. 11th Circuit Court of Appeals threw all of the remaining states into doubt. The Court ruled, in 1994, that the governor did not have to negotiate with Alabama's Poarch Creek Band. However, the Court also held that the tribe could go directly to the Secretary of the Interior for regulations to operate Class III gaming. The Secretary of the Interior has never issued such regulations, because nobody ever thought he had that power. The case is on appeal to the U.S. Supreme Court.

Nevada, which for some time had a monopoly on casino-style gaming in the western United States, now has new worries. In July 1993, a federal judge in Sacramento ruled that the state must negotiate to allow video lottery terminals on Indian land in California (Rumsey Indian Rancheria of Wintun Indians 1993). In October 1993, a state judge went further, holding that the California State Lottery was exempt from all state gambling laws (Western Telcon, Inc.). This means, according to federal Indian gaming law, that tribes in California can operate true casino games. The Court of Appeal first affirmed the decision, including certifying the opinion for publication, then, on the last possible day, granted a rehearing and removed the decision from the case books.

The future of gaming devices may very well be demonstrated by South Dakota. True slot machines are supposedly limited to the city of Deadwood and the state's Indian reservations. But, video lottery terminals are everywhere--8,000 throughout the state. In the early

1990s, hundreds of bills were entered in various state legislatures to legalize video lottery terminals or other gaming machines. Politicians, it seems, have learned the secret: If states want to bring in casino gambling, they should not ask the voters for permission. State legislatures and lottery commissions appear to have convinced themselves that the majority of people are in favor of legal gambling. In a major reversal of public policy, 12 state lotteries introduced the casino game of keno in the 1980s and early 1990s, all without a vote of the people. And once the gaming revenue starts pouring in, little incentive remains to put the question on the ballot.[5]

Although the United States seems to be in an era of perpetually rising taxes, the voters still must be appeased. One way the federal government can raise more money is to give less aid to states. But most states are already hurting. Governors or state legislators may be willing to raise state taxes, but only if they are seen as voluntary taxes--particularly if voters have shown they are in favor of the idea. However, experience has shown that voters should not be asked to actually vote for video poker machines. Rather, such machines should be introduced by the legislature or state lottery under the alias "Video Lottery Terminals."

"Accidental" Indian Casinos

It is often said that Congress is responsible for the creation of the hundreds of Indian gaming operations that are flourishing, free from state taxes, across the country. Legally, the picture is much more complicated. In 1987, the United States Supreme Court ruled in the

[5] South Dakota introduced video lottery terminals in October 1989. In fiscal year 1988, the state sold $26 million in lottery tickets. *Gaming & Wagering Business* magazine estimated that the lottery's gross handle in calendar year 1991 rose to $359.4 million, including $338.9 million from video lottery terminals. Put another way, before video lottery terminals, the South Dakota Lottery generated revenue, after expenses and payment of prizes, of $7 million per year. In 1993, the $7 million had grown to $50 million per year: $3 million from lotto, $2 million from scratch-offs, and the remaining $45 million from video lottery terminals.

Cabazon case that Native American tribes had the power to offer any form of gambling offered by the state in which they had their reservation, with one important qualifier: The tribe, not the state, would regulate the gambling (California v. Cabazon Band of Mission Indians 1987). The U.S. Congress' 1988 Indian Gaming Regulatory Act actually took away some of the tribes' power by setting up mandatory regulatory systems (IGRA 1988; Rose 1990).

The legal issues are clearer than most people realize. The law that Indian tribes are sovereign nations, subject only to federal rule, is settled beyond dispute. To give an extreme example, defendants in Indian criminal courts do not have the Sixth Amendment constitutional right to a lawyer; Congress had to pass the Indian Civil Rights Act to make sure tribal governments followed America's tenets of due process. But politically, Congress never intended high-stakes casinos to be on Indian land simply because a state allows charities to have "Las Vegas Nights." However, that is what has happened. Foxwoods High Stakes Bingo & Casino, on a reservation near Ledyard, Connecticut, may have become the most successful casino in the world in its first two years of operation. It was an easy mistake for Congress to make. Members of Congress usually do not go to bingo halls, nor do they play paper pull-tabs. Few realized that dozens of states allowed low-stakes casinos and other gambling for charities when they voted for the Indian Gaming Regulatory Act.

Nevada, of course, would like to eliminate Indian gaming. The Nevada Resort Association's campaign against Indian casinos had nothing to do with race--rather, it was a purely economic fight against potential competition. The movement failed in 1993 when some casino companies decided to join what they could not beat. Many Nevada-based casino companies sought contracts to manage Indian gaming operations.

Legal gambling on Indian land has been an overwhelming financial success. By any standard, Native Americans are among the most impoverished of any ethnic group in America. The law has given them an advantage over potential competitors. Gaming revenues for tribes have saved state and federal governments billions of dollars that used to be required for health care, public assistance, and social services. On some reservations, unemployment has gone from 85 percent to zero. Perhaps more importantly, the Indian Gaming Regulatory Act has restored Native Americans' dignity by forcing the states to negotiate with tribes as equals.

Reservations are often located in desolate wastelands. Tribes had hoped that with the new law they would be able to acquire land near cities to establish more profitable casinos. Tribes can buy new "after-acquired land" (acquired after the enactment of the Indian Gaming Regulatory Act), which can be taken into trust. However, the legal and political reality of the federal law is that "after-acquired land" cannot be used for gambling without the approval of the governor. Since the governors have made it clear that they are against any expansion of Indian gaming, Indian casinos will not be sprouting inside major cities.

Riverboats and Other "Casinos by Subterfuge"

Riverboat casinos have inflamed the current gambling craze in America. National television coverage of the picturesque Iowa casino riverboats being launched in April 1991 brought the image of wholesome legal gambling into the minds of voters and politicians everywhere.

In Missouri, another landslide election occurred in November 1992. The final results of Proposition A, to allow high-stakes riverboat casinos, were 62.5 percent in favor of casinos. This was a nearly two-to-one vote in favor of a legal gambling issue, whereas the typical two-to-one votes in the past 200 years have been to keep gambling out, not to bring it in. That is still the overwhelming pattern, with cities in California and Colorado going two-to-one to three-to-one against legalizing local gambling in 1992. The vote in Missouri is even more significant, if one stretches the facts a little to say the voters approved "high-stakes" casinos.

As best this author can determine, no state in American history has ever voted for high-stakes casino gambling, with the sole exception of New Jersey, which approved casinos for Atlantic City in 1976. Even including the Atlantic City vote, it is safe to say that no state has ever voted for high-stakes casinos in the face of active opposition.

The New Jersey victory can be viewed as a fluke. It was on the third attempt and the opposition--the churches--did not actively campaign because of overconfidence from their prior victories (Dombrink and Thompson 1990).

All of the casino-style gambling in America in the 1990s has been created by one or more of the following political means:

1. Legislative action. Examples include high-stakes casinos authorized by state legislatures in Nevada, Mississippi, and Louisiana, and Illinois riverboats.

2. Court rulings, most significantly casinos on Indian land.

3. Administrative decisions. Examples are California State Lottery's keno game, or West Virginia State Lottery's proposed statewide video lottery terminals.

4. Referenda and initiatives, in which the voters were told the casinos would be restricted, isolated, low-stakes tourist attractions. Examples of this are mountain towns in Colorado; Deadwood, South Dakota; and riverboats in Iowa and Missouri.[6]

The 1992 vote in Missouri shows that casino gambling has become so acceptable, so much a part of American society, that people will vote for it by a landslide, but only so long as it is carefully camouflaged. Casino riverboats were to be limited to the Mississippi and Missouri Rivers, with no more than 50 percent of the boat's floor space devoted to gambling. Although the law technically allowed high-stakes bets, the State Tourism Commission was given the interesting, and impossible, duty

[6] Other political players have been involved. In the case of Indian casinos, for example, tribal governments, state governors, federal agencies, and the U.S. Congress have given their approval, often because of adverse court rulings.

to "regulate the wagering structure . . . including providing a maximum loss of $500 per individual player per gambling excursion."

What can be expected in the future? Riverboat casinos may be merely a transition phase. Already, Mississippi's law requires that riverboat casinos be permanently docked, with no engine or crew. They are not even required to look like boats. "Casino Magic" is a 300-foot by 74-foot casino-barge so merged into a land-based building that it is impossible to determine where the water begins. From the air, Mississippi's casinos look like warehouses surrounded by moats.

Local Casinos

The best and safest gambling operation is one designed for tourists, taking disposable income from nonresidents. Indian casinos are simply following the Las Vegas precedent. Ontario, Canada is building its casinos on the U.S. border to capture American dollars.

This is not to say that local casinos cannot make money. They absolutely can, and can exist for years, so long as two vital points are understood:

1. Casinos, and this includes casino-style gambling like the state lotteries' keno and video lottery terminals, can hurt a small but significant number of local citizens; and

2. A community with casinos cannot become another Las Vegas unless it is closer than its competition to a major population center.

Everywhere throughout history and throughout the world, where casinos have catered to local people, they have been outlawed in a few years. A casino acts like a black hole sucking money out of the local economy. No one cares if you suck money out of tourists, but large-scale casinos that do not bring in more new tourist dollars than they take away from local players and local businesses soon find themselves outlawed. There has been virtually no serious study on the topic, but it is highly likely that large increases in problem and under-age gambling will occur in communities with casino-style gaming, particularly if machines become omnipresent.

The other fear is federal intervention. So far, the federal government has left control of gambling to the states unless it had to become involved, as occurred with interstate horse racing and Indians, or unless there was a fear of organized crime. A large, nasty scandal in an almost wide-open state like Louisiana could bring federal oversight into every gambling operation, even casinos in Nevada.

The Future

America's waves of legal gambling seem to last about 70 years--about as long as a human lifetime. This is probably not a coincidence, since we do not have memories of what life was like before we were born. Human beings have the remarkable ability to transmit information through the written word, even after we are gone, but we cannot as easily convey emotions linked to events and institutions of other times. What did it feel like to live during George Washington's time, when, it is said, it was easier to buy a lottery ticket than it is today?

What will the world look like in 10 years? It is possible that every major population center of the United States and Canada, including Alaska and Hawaii, may soon have a casino-style resort within a two-hour drive. More casinos will create more customers, but at some point, perhaps relatively soon, the operators simply will be fighting for the same market.[7] The market for machines is greater, since the country could support video lottery terminals on every street corner, at least for a few decades.

And then there is Las Vegas. While Atlantic City sees its market being eaten away by the opening of closer casinos of convenience, Las

[7] The impact of having casinos open closer to your feeder market can be seen by looking at the decline in passengers flying from Minneapolis/St. Paul to Atlantic City following the opening of nearby Indian casinos. In 1989, there were 7,675 passengers on all direct chartered and scheduled flights from the Twin Cities to Atlantic City. In 1990 the number had fallen to 1,556. In 1991 the number was zero (MN Planning 1992).

Vegas is reinventing itself. By the turn of the century, it will be one of the world's leading family-oriented destination resorts, comparable to Orlando. Las Vegas has reached a critical mass of major attractions, a must-see unnatural wonder of the world. The buildings themselves have become the lures: the Excalibur, built as a castle; the Luxor, as a pyramid; the Mirage, with its fiery volcano and white tigers; Treasure Island, a block-long set for staged pirate ship battles; and the MGM, a billion-dollar center of adult amusements. Las Vegas has changed from a gambling town to one of the very few man-made artifacts worth a trip across a continent: the Eiffel Tower and the Taj Mahal rolled into one. But, while Las Vegas is becoming an artificial Grand Canyon, Atlantic City is a slum by the sea with casinos. Atlantic City is stuck in the casino business; Las Vegas understands it is in the entertainment business.

Without a major change of attitude on the part of the casino operators and regulators, Atlantic City may suffer the same fate as the nation's railroads. A hundred years ago, the railroad industry was confronted with the invention of the internal combustion engine. The train operators' universal response was to say they were in the railroad business, not the transportation business. And so they remained, until they all went bankrupt (Levitt 1960).

The best business to be in over the next few years is ***not*** to be an operator, unless a company has a particular niche or a protected market close to a major population center. Rather, the best opportunities are for suppliers to the gaming retailers. The companies that flourished during the California Gold Rush were rarely the miners; rather, they supplied food, clothing (Levi Strauss), and banking and shipping services (Wells Fargo). Of course, it is not wise to be the Pony Express when the telegraph and railroad come in; a company that makes ruboff lottery tickets also has to be able to make video gaming devices.

When will the proliferation of legal gaming come to an end? We are still years away from the crackdown phase. The few scattered movements to limit the spread of gambling have so far been almost universally unsuccessful. A few pauses in the runaway growth of gaming have occurred, such as in Iowa, but these were more the result of regional competition than of public pressure. Even the collapse of large operators will not signal an end to proliferation. As many as half the race tracks in this country are about to go out of business, yet no one is talking about the end of gambling because of the tracks' demise.

We will know the end is near when we reach the silly phase, where any company can go public merely by saying it is going into the casino business. Scandals involving sports figures or public officials will begin to have an impact. Major candidates will run on platforms of putting an end to legal gambling.

State lotteries at first might retrench, by limiting their keno and video lottery terminals to age-restricted locations. The enactment in 1919 of the Eighteenth Amendment--Prohibition--shows that even the largest commercial ventures can be outlawed, if they offend public morals enough. But some state lotteries might suffer an even more inglorious end: They might just be ignored.

In two or three decades, most of the casino experiments on riverboats and in mountain towns may suffer the fate of all failed experiments, defeated by better-located, large, land-based competitors. But the collapse of commercial gaming is years away. Today the smart bet is on the side of more legal gambling. Investment money will keep pouring in, giving the craze the feel of inevitable, continuing growth. For money managers, who must show greater growth of their funds than their competitors, it is as dangerous to be out of the growth stages of a national bubble as it is to be in when the bubble finally bursts. But the money will continue to pour in long after the market is saturated. For the amazing thing about speculative bubbles is that you can tell people that they are building on a foundation of soapy water and they simply will not believe it.

Appendix

Gambling and the Law®: Status of Casino Enabling Laws*

The following states have recent legal activity concerning casino gambling. States allowing gaming devices under the law are marked with an asterisk.*

<u>Alabama</u> - No casino gambling is allowed, so the Governor refused to negotiate with Poarch Band of Creek Indians. The tribe appealed and won the right to go directly to the Secretary of the Interior for casino regulations. The case has been consolidated with a case pitting the Seminoles against Florida and is on appeal to the U.S. Supreme Court.

<u>Alaska</u> - Casinos are prohibited by state law; however, the Governor has been negotiating to allow the Klawock Band of Tlingit Indians to open a full casino on remote Prince of Wales Island.

*<u>Arizona</u> - In 1994 the law was changed to allow charities to once again have occasional casino nights with slot machines; Indian tribes can, and do, operate slots all year round.

<u>Arkansas</u> - The state Supreme Court pulled from the ballot proposed constitutional amendments to legalize casinos. Proponents undoubtedly will try again and are expected to fail at the ballot box, owing in part to the state's active religious organizations.

<u>California</u> - Indian casinos offer video pull-tabs, including true slot machines, under a stand-still arrangement: The U.S. Attorneys agreed not to raid, so long as tribes do not acquire any more gaming devices. In November, the 9th Circuit held that tribes cannot have casino table games, but remanded to the trial judge to decide whether the State Lottery is operating gaming devices that are actually slot machines.

*<u>Colorado</u> - Five-dollar maximum blackjack, poker, and slot machines are in casinos in three mountain towns and on two Indian reservations. Widespread gray market video gaming devices pay off, when police are not around. On November 8, 1994, voters overwhelmingly turned down proposals to expand casino gambling, including rejecting having slot machines in every airport.

*<u>Connecticut</u> - Outgoing Governor Weicker signed compacts giving a monopoly on slots to two Indian tribes, for a guaranteed minimum payment of $160 million. Foxwoods now has more gaming devices than any other casino in the world -- 3,875 slot machines. A political battle is raging over Steve Wynn's proposal to build a commercial casino in Bridgeport, which would automatically cut off the state's share of the Indians' slot winnings at Foxwoods.

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*Delaware - A bill became law in 1994, without the Governor's signature, allowing each racetrack to have up to 1,000 video lottery machines.

Florida - A federal judge ruled the Seminole cannot open casinos, yet the Court of Appeals said they can go directly to the Secretary of the Interior for casino regulations. The U.S. Supreme Court will rule on the appeal in the Fall of 1995. Separately, an initiative to open casinos lost on a November 1994 ballot.

Georgia - Nothing beyond a lottery and charity bingo and raffles.

Hawaii - All gambling outlawed, but over 30 bills have been introduced in the state legislature to legalize gambling.

Idaho - The state constitution was amended in 1992 to specifically prohibit casinos, with one target in mind: Indian casinos.

*Illinois - Slots are legal and in use on riverboat casinos, pursuant to a constitutional amendment of 1990.

*Indiana - In November, the state Supreme Court reversed a trial court and held the riverboat casino law constitutional. There will soon be 11 riverboat casinos.

*Iowa - Slots are legal on riverboat casinos, at racetracks, and in three Indian casinos.

Kansas - Governor Bill Graves signed compacts with three tribes, allowing them to operate full casinos, but specifically excluded are electronic gaming devices.

Kentucky - Lots of discussion, but there is no chance of casinos clearing legislative hurdles until 1996.

*Louisiana - Gaming machines are everywhere. Truck stops used to have hundreds of video poker machines. Now they are limited to 50 maximum, and they have to sell gasoline! Any liquor licensee can have machines. Casinos galore: 15 on riverboats, two on Indian land, and one authorized for New Orleans.

Maine - Nothing yet, but if the federal court rules the Maine Land Settlement Act has been preempted by IGRA, the state will be forced to negotiate for full Indian casinos.

*Maryland - Charities are allowed to run casinos, including slot machines. The state has no recognized Indian tribes. Bills to allow riverboat and land-based casinos have been introduced. Governor Parris Glendening said in February 1995 he would veto any expansion of gambling, but in June he appointed a task force to report in December on the feasibility of legalizing casinos, saying he will "keep an open mind" until then.

Massachusetts - Governor Weld signed a memo of understanding in August 1994 that would allow the Wampanoag Tribe to open a casino with slots, sanction one privately owned casino in the western part of the state, and let each horse and dog track have up to 400 slot machines. In November, voters in Springfield and Agawam said they did not want a casino in their neighborhood. The casino plan has been delayed in the state legislature.

*Michigan - Slots are legal and operating in Indian casinos throughout the state.

*Minnesota - Slots are legal and operating in 17 Indian casinos (more than Atlantic City) throughout the state.

*Mississippi - Law allows an unlimited number of dockside casinos with slots.

*Missouri - Because of a state Supreme Court decision, riverboat casinos could have only games with some skill. The November election amended the state constitution to allow slot machines, keno, bingo, and other games of pure chance.

*Montana - Video poker machines are everywhere. Indian tribes operate casinos.

Nebraska - Tribes are negotiating for full casinos. They are suing on the argument that Nebraska allows keno, and keno is a casino game. The outcome will turn on whether the federal court applies the Cabazon standard that looks to the state's public policy, or the new 9th Circuit standard that limits tribes to exactly the same games allowed by state law. Slot machine bills are under consideration in the state legislature.

*Nevada - Slots are in casinos and in many retail establishments throughout the state.

New Hampshire - A movement to open a casino at a race track near the Massachusetts border has gotten nowhere.

*New Jersey - Slots are in 12 casinos in Atlantic City. Although the legislature is holding hearings on video lottery terminals, New Jersey will not have gaming devices statewide.

*New Mexico - In July 1995, the state Supreme Court held that the Governor had no power to sign the compacts he had, for tribal casinos. They remain open, with blackjack and slots. A bill has been introduced to give the race tracks the same rights as the tribes. Charities can run video bingo pull-tabs. Video games of chance were approved by voters in November 1994 but declared unconstitutional in January 1995.

New York - One Indian casino is open; the Oneida tribe is fudging with gaming devices designed to circumvent the restriction against slot machines. In July 1995, the state legislature passed a resolution to amend the state constitution to allow privately owned casinos. To take effect, the resolution must be approved again next year by both houses of the legislature and then by the voters, which will not happen.

*North Carolina - In August 1994 the Governor signed a compact allowing Cherokees to offer video gaming at one bingo hall. Machines must require some skill. The compact specifically states the devices cannot be video poker, but they are.

*North Dakota - State law allows charity blackjack; four Indian tribes have full casinos, with slots.

Ohio - Casino bills and initiative failed, again.

Oklahoma - The federal Court of Appeals has ruled the state must negotiate for tribal Class III gambling, but not slot machines.

*Oregon - The State Lottery runs video poker machines, maximum of five per location; Indian tribes have full casinos.

Pennsylvania - Nothing yet, but riverboat casinos are a very hot issue. The Governor has called for a statewide referendum, which could kill the bill, because no state has ever voted in favor of high-stakes casinos in the face of active opposition.

*Rhode Island - The state runs video lottery terminals at racetracks. The Governor signed a compact for an Indian casino with slots, but a referendum for casino gambling failed to pass in November. Local voters disapproved of casinos in their cities by margins as high as 84 percent against. The tribe now has to fight the state Attorney General in court over what games it can offer and is stuck with a fairly inaccessible piece of land.

*South Carolina - Video poker machines are everywhere, with low limits, under strange law. In November, local voters decided to let their local slots give cash payouts, in 30 of 46 countries.

*South Dakota - Casinos ($5 maximum bet) in one city, Deadwood, and on 10 Indian reservations have true slots. The State Lottery's 7,959 VLTs were declared unconstitutional by the state Supreme Court on June 22, 1994, but voters reinstated the gaming devices by amending the state constitution in the November election.

Tennessee - Lots of talk, but no chance of casinos until 1998 at earliest.

Texas - A federal trial court had ruled the Ysleta del Sur Pueblo near El Paso could have a full casino with slots; but the Fifth Circuit reversed the decision in October, ruling the federal act recognizing the tribe controlled. Now, no one knows what games are allowed. Elsewhere, the Texas Attorney General ruled casinos would require amending the constitution; Texans cannot vote to amend until 1997, at the earliest.

Vermont - A bill to allow casinos on railroads did not leave the station. A race track in the southern part of the state is campaigning hard for slot machines and a bill to allow full casinos is pending.

Virginia - In 1994 a riverboat casino bill sank under the weight of excess baggage: Disney's proposed historic theme park got tacked on. The bills were reintroduced in 1995, for the third time, and have already been defeated.

Washington - Some Indian casinos have slots. The federal courts ruled the slots illegal, yet the state has been ordered to negotiate. The legislature is debating the issue.

*West Virginia - State law allows video lottery terminals only at Mountaineer Park Raceway and three other race tracks. Riverboat casino legislation was defeated, but has been reintroduced.

*Wisconsin - Slots are legal and operating in 15 Indian casinos throughout the state. The legislature voted in 1993 to prohibit further casino expansion.

Wyoming - An initiative to allow full casinos was defeated by a two-to-one margin on November 8th. The electoral defeat means fewer jobs for lawyers: The initiative was so poorly written that it was legally unclear whether bets would have been limited to $25 maximum or whether there would have been no limits.

American Possessions:

*Commonwealth of the Northern Marianas - Casinos with slots are allowed.

District of Columbia - Riverboat casino initiative failed to get enough legitimate signatures: Of 45,000 signatures gathered, fewer than 15,000 were from voters.

*Guam - Gaming devices are legal.

*Puerto Rico - Full casinos with a strange twist: The government owns the slot machines.

Virgin Islands - Local voters approved the concept of legalized casinos in a non-binding referendum in November 1994.

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Indian Gaming's Impact on Income and Jobs

S. Timothy Wapato*

The National Indian Gaming Association (NIGA) is a trade association and advocacy organization that provides education and information about the Indian gaming issue. The nonprofit association was formed in 1985 but did not become extremely active until 1993. Its membership now comprises 135 Indian tribes along with nonvoting associate members representing organizations, tribes, and businesses engaged in tribal gaming enterprises. As an association, we are supportive of tribes in their compact negotiations, although we are never directly involved. NIGA operates as a clearing house and educational, legislative, and public policy resource on Indian gaming issues and tribal community development. We also provide public information in an area if we are requested to do so by the local tribe or tribes, because a lot of misinformation goes around about Indian gaming.

Indian tribes are sovereign nations, not special interest groups. England and Spain originally acknowledged this fact by the treaties and alliances they sought with the nations on this continent. The United States Constitution, from its inception, has acknowledged the sovereign status of Indian tribes. By virtue of treaties and executive orders, the U.S. government has contracted obligations with Indian tribes, including responsibility in perpetuity for a number of things such as the economy and health care of Indian tribes. Why? Because title for the state you are in and most of the states in the Union passed from Indian nations to the federal government in exchange for the trust status and the federal obligation to the tribes. That obligation has never been carried out; in fact, the past 200 years have seen the abysmal failure of the federal government to live up to its responsibility to the tribes. Even today, many reservations have unemployment rates of 80 to 90 percent. A number of schemes have been tried for economic development over these past 200

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years. Most have failed, and the institution of Indian gaming has been the only successful revenue-raising and job creation device found by the Indian governments.

Historically, gaming always existed in Indian communities, taking the forms of betting on lacrosse games and horse races. The first tribe seeking to raise revenue through gaming was the Seminole tribe in Florida, with high-stakes bingo, followed soon by the Oneida tribe in Wisconsin in the late 1960s. These tribes took their cues from churches that raised funds through bingo games. Other tribes followed their example, and state governments soon filed cases against the tribes engaging in high-stakes bingo, in an attempt to protect their "crown monopoly." Finally, a U.S. Supreme Court decision handed down in 1987 stated that if a state permits or allows gaming by any person, at any time, at any place in that state, then the Indian tribes can offer the same game. State governments protested to the Congress, which refused to prohibit or dramatically restrict Indian gaming. Instead, the Congress in 1988 passed the Indian Gaming Regulatory Act, which required as one of its provisions that an Indian tribe sign a compact with the governor of the state before engaging in commercial gaming activities. The Indian tribes vigorously fought that requirement in the Act because it went against Indian tribal sovereignty, but they lost that battle in Congress because of the influence of the 50 states' governors and attorneys general. Since then, 24 states have signed compacts with Indian tribes, the first Minnesota and Wisconsin in 1991, Kansas the most recent, with four tribes, just six weeks ago. Governors have refused to negotiate compacts with Indian tribes in a number of states, among them California, Florida, Oklahoma and Texas, in effect violating the Indian Gaming Act. So, the battle is ongoing.

Attempts to amend the Indian Gaming Regulatory Act and further regulate Indian gaming, most recently an effort driven by Donald Trump in 1993, have claimed that organized crime had infiltrated Indian gaming, that casinos were no more than fronts for the Mob and the Mafia, all of which is patently untrue. The FBI has testified five times in congressional hearings that no instance is known of any infiltration of Indian gaming by organized crime. The real reason for these attempts to control Indian gaming is of course economic protectionism. This is strange to us, because as successful as Foxwoods has been, for example, the casinos in New Jersey have increased their returns also.

By law, proceeds from Indian gaming go into the community and are used for infrastructure. Tribes use them to build water systems, sewage systems, and school systems, and to strengthen other parts of their infrastructure that the federal government has neglected for over 200 years. Gaming has been a tremendous economic boon on Indian reservations. Since 1991, over 120,000 jobs have been created in Indian casinos. Economic studies show that for every direct job in a casino, from 1.1 to 1.4 indirect jobs are created in that community and the surrounding geographic region. That means upwards of 290,000 jobs created across the nation. In most cases, reservations with casinos have no unemployment -- a truly remarkable fact. Any tribal member who wishes to work, can work in the casino. In Wisconsin, for example, more than 50 percent of casino employees, Indian and non-Indian, have come off unemployment rolls, more than 25 percent off welfare rolls. Of course, many of these casinos are in areas more rural than the region around Foxwoods in Connecticut. Two major casinos in Wisconsin and Minnesota also might be considered "metropolitan": the Mystic Lake Casino at the Shakopee Indian community just outside Minneapolis, and the casino just outside Green Bay, which belongs to the Oneida Tribe of Wisconsin. That tribe is now the biggest employer in the county and a bigger tourist draw than the Green Bay Packers.

Repeatedly, attempts are made to tax Indian gaming because individuals forget that Indian tribal governments are governments, not publicly traded companies. The profits of Indian gaming go back to the tribe as revenues and must be compared to state lottery proceeds. Where a tribe has a contractor or a management company or an investment company, these companies are taxable, and should be.

The argument is also made that Indian gaming is running rampant and driving the expansion of gaming in the United States. This is untrue: The tribes are merely following along with the trend of expanded gaming nationwide. Five years ago, only two states allowed gaming: Now 24 allow it. The expansion really started with the state lottery in New Hampshire in 1963. Now 37 states and the District of Columbia use lotteries as revenue-raising devices. Indian gaming makes up only an estimated 5 to 7 percent of total legal gaming in the United States.

Three types of gaming exist under the Indian Gaming Regulatory Act. Class I gaming is cultural gaming, those games that Indian tribes have always played. Class II gaming covers things such as bingo and the pull tabs, tip jars, and punch boards seen for years, particularly in bars. Class III delineates so-called casino gambling. Indian casinos usually have slot machines and blackjack, not the wide array of games available in New Jersey or Nevada casinos. About 113 tribes or 18 percent of tribes engage in casino gambling; 33 percent engage in some form of class II or class III gaming.

Indian gaming revenue is not taxable, but many tribes voluntarily have entered into agreements for what amounts to revenue-sharing--the most prominent being the Foxwoods agreement, where the Mashantucket Pequot tribe has agreed to provide $100 million or 25 percent of slot machine revenues to the state of Connecticut in return for exclusivity. The contribution this year is expected to be $130 million. Under the compacts in Michigan, 8 percent of Indian gaming revenue goes to local governments and 2 percent to the state, both for economic development funds, again voluntarily. In California, where the governor has been reluctant to come to the table, the tribes have offered to enter into a Michigan-type arrangement to provide a part of the revenue to the state as a part of the compact.

Public opinion surveys done across the United States show that the public supports Indian gaming. At the lower end of the range of support, a survey by the Fields organization found that 62 percent of Californians supported Indian gaming; at the top, 76 percent of Nebraskans supported it in a similar survey. The public supports Indian gaming for two important reasons: first, they see it as a benefit to the economic development of the tribe; and second, they see it as an occasional entertainment option for themselves. In these surveys, the public generally opposes the expansion of commercial gaming and commercial casinos in their states. Pressure for the establishment of commercial gaming or slot machines or video terminals comes not from the public but usually from the horse and dog track interests, whose revenues have been declining for the past 15 years or more. Thus, the public supports the expansion of Indian gaming, but opposes the expansion of any other types of gaming.

High-Stakes Casinos and Economic Growth

Arthur W. Wright*

Casino gaming is remarkable in the context of economic growth only because (until recently) it was illegal in most parts of the United States. Otherwise, it does not differ markedly from the many other forms of recreational services. The spectacular growth of the Mashantucket Pequots' Foxwoods casino may lend a certain aura to gambling as a spur to growth, but the hazards in generalizing from the Foxwoods experience should be evident to everyone involved in this conference.

Now that the nation has stumbled, almost by accident, into permitting casinos outside Nevada and New Jersey, we find ourselves debating the terms and conditions of entry into the high-stakes gaming market. Debates over market entry always involve economic efficiency and distributive equity. Down one level are methodological issues about what to measure and how to measure it. This paper will address these two sets of issues, avoiding or leaving to others such less tractable matters as politics and morality.

Economic Efficiency and Distributive Equity

Recent developments in casino gambling represent a move away from a total ban, with all its distortions (deadweight losses, enforcement costs, and incentives to lobby and bribe). But we are nowhere near the open entry that governs most other goods and services. Rather, we have merely extended to high-stakes gaming the crown-monopoly status that other forms of gambling already enjoyed. Thus, gambling (like other "victimless crimes" such as cigarette smoking and alcohol use) is an extension of state revenue departments. The Pequots' fiscal year 1995 payment of $136 million to Connecticut for the rights to their slot-machine monopoly is in fact a form of "sin tax." A crown monopoly is, of

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course, still a monopoly and thus implies continuing distortions, compared with allowing open entry into the high-stakes gaming market.

Open entry would minimize the allocative distortions of monopoly. But more important for present concerns, it would also maximize the economic growth effects of casino development.[1] Connecticut may have reaped a big growth harvest from having the sole high-stakes casino in New England. But unfettered regional casino development could certainly have had a greater total impact (even allowing for any net loss to Connecticut). The same applies to full national development, inclusive of net losses in growth to Nevada and New Jersey.

Turning to distributive equity (in the vernacular, fairness), we may extend to high-stakes gaming the well-known result from microeconomic theory that weakening monopoly power benefits buyers of the good or service, at the expense of sellers. The rank order is the same as with efficiency: Open entry would be fairest for gamblers, followed by what we have now, with a total ban bringing up the rear.

A different cut at fairness is the argument that legalizing gambling weighs disproportionately on the poor, especially if they are more given to trying their luck than are the well-off. We hear talk that permitting gambling is like imposing a regressive tax. Strictly speaking, of course, so long as no one is forced to gamble, the only tax here is the portion of the prevailing price that is above the competitive, open-entry price because of government controls. Thus, any regressive effect of gambling must originate from banning it (which reduces information in the market and adds a risk premium to the supply price), or from exploiting crown-monopoly power. Especially if the poor do wager more than the rich, the only way to avoid taxing them regressively is to allow open entry into gaming and not impose "sin taxes" on it.

Yet a third cut at fairness is the question of whether Native Americans should (or do) have preferential access to the casino business. This paper will sidestep the complex of arguments centering on

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[1] By "growth effects," I mean (as usual) gains in per capita income, net of real social costs.

using casino rights as compensation for past mistreatment.[2] The narrow facts seem to be that, by an odd combination of legal accident, serendipity, and shrewd entrepreneurship, a handful of Native Americans have managed to add casino gaming to their peoples' still-slim portfolio of opportunities to amass wealth. To change the existing crown-monopoly rules ex post, as Trump and others have sought to do, would strike me as unfair. But would it be unfair to those Native Americans now in the business to remove all restrictions on entry into high-stakes gaming? I would argue no, but I also admit to nagging doubts about whether Native Americans have equal access to non-casino activities, and whether they would realize a "fair" share of the net social gains from open entry into the casino business.

Methodological Issues

The basic task in impact analysis is to compare the economic performance of a model of an economy (nation, region, state, county) with and without a given activity such as casino development. The underlying models can be quite complex, so it is often convenient to express the modeling results in terms of simple-sounding "multipliers" that incorporate indirect as well as direct effects. Proponents of any controversial activity want big multipliers, opponents the reverse. Simplicity and self-interest are the twin sources of much mischief in the market for multipliers. Thus, transparency and full disclosure of assumptions are at a premium in measuring the growth effects of any activity.

Anyone studying growth impacts will face at least three methodological problems: (A) a tension between analytical power and data availability; (B) the consequent "partial equilibrium" nature of many analytical techniques; and (C) the incorporation of "non-economic" costs. I shall focus on problem (A) and illustrate it, along with (B) and (C), with results from a study of Foxwoods.

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[2] My main contribution to these arguments as an economist would be to invoke the profession's well-known preferences for never restricting entry and for direct over indirect payments of transfers.

The weapon of unconstrained choice for most economic-impact analysts is input-output analysis. By design a general-equilibrium tool, input-output analysis captures indirect and secondary effects through an interindustry tableau of flow coefficients that link the various sectors of the economy. One can easily couple an input-output table with a macroeconomic-forecast "driver." For state-level studies, the U.S. Commerce Department will provide a proto-input-output tableau for any state at a modest price.[3]

The bottleneck constraint on using input-output analysis is the availability of reliable data in the requisite sectoral detail. Such data are not generally available for areas smaller than states (for example, counties). Hence, it may be necessary to fall back on less sophisticated techniques that are compatible with less detailed data--but which yield less robust (for example, partial- instead of general-equilibrium) results.

One approach that I have used successfully at the sub-state level is "economic base analysis." This tool is to input-output analysis what a Saturday-night special is to a semi-automatic weapon: plenty dangerous in the wrong hands but useful on small targets, especially if all one has is .22-gauge ammunition. Economic base analysis starts by distinguishing *non-basic* employment, which serves local consumption needs, from *basic* employment, which produces goods and services for "export" outside the locale. New basic employment supports additional non-basic employment, but not vice versa.[4,5]

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[3] In essence, Commerce creates state input-output tableaux by scaling the national sectoral coefficients to reflect the sectors' importance in the state relative to the nation. With colleagues (D. Heffley, R. Leonard, and S. Ray), I have applied a Commerce proto-input-output model for Connecticut in an unpublished study of the impact of the University of Connecticut on the state's economy, for example.

[4] The "Wizard of Id" (by Johnny Hart and Brant Parker) captured the basic/non-basic distinction in its September 8, 1993, strip. A pottery vendor says to the knight, "I hate to see the tourist season end." "Why?" asks the knight. The merchant replies, "Then it's back to fleecing each other."

The second step is to estimate the basic and non-basic shares of employment for each sector in the local economy. These shares come from comparing employment (usually, per capita) in the local economy, sector by sector, with that in the larger "benchmark" economy of which it is a part. All activity in the benchmark economy is by definition non-basic; thus, the portion of a given sector's activity in the local economy that exceeds the benchmark average is basic.

The final step is to compute a weighted, aggregate, non-basic employment multiplier that expresses the amount of additional non-basic employment created in the local economy by each basic job added there. The total employment effect per new basic job is thus one (basic) plus the non-basic multiplier.

For a 1993 consulting report (cited in footnote 5), several colleagues and I applied economic base analysis to gauge the impacts of Foxwoods Casino on employment and earnings in New London County, Connecticut, on the rest of the state, and (to a limited extent) on Massachusetts and Rhode Island.[6] For New London County, we found a non-basic multiplier of 1.23 per basic job, or 1.107 per Foxwoods job (assuming that 90 percent of casino business originates outside the county). Foxwoods employment of 10,000 full-time equivalents, then, would yield an estimated 11,070 *additional* non-basic jobs in the county (home also to the rapidly shrinking Electric Boat submarine yard). Applying average earnings (including house tips) at Foxwoods and in the county (excluding Foxwoods), the estimated additional annual payroll

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[5] This text gives a highly condensed précis of economic-base analysis. The full consulting report, "The Economic Impacts of the Foxwoods High-Stakes Bingo and Casino on New London County and Surrounding Areas," September 1993, by the writer, J. Clapp, D. Heffley, S. Ray, and J. Vilasuso, gives a fuller treatment (especially in Vilasuso's chapter, "Economic Base Analysis for New London County"), as do most textbooks on local or regional development.

[6] The consulting team also used regression analysis to measure the effects of employment gains on welfare rolls (AFDC) and on single-family house prices. In brief, we found significant reductions in welfare rolls and increases in house prices (both ceteris paribus).

from the 10,000 Foxwoods jobs would exceed half a billion (1993) dollars per year.

With an extension worked out by Vilasuso, we further estimated that every new Foxwoods job supports 0.74 additional non-basic jobs in the rest of Connecticut (itself hard hit by defense procurement cuts). The 10,000 casino jobs then imply 7,400 more non-basic jobs in other parts of the state. The payroll increases associated with these jobs come to $200 million to $250 million per year (in 1993 dollars).

Conclusion

The findings just described are partial-equilibrium: They do not include any secondary effects of Foxwoods' phenomenal growth -- for example, cannibalization of other forms of recreation, or enhanced tourism in southeastern Connecticut, or the effects of successful casino entry in Massachusetts or Rhode Island. Displacements would erode, and enhancements reinforce, the strength of the reported findings. To incorporate such effects would require separate analyses. Note that sins of omission become serious only if one wants a full cost-benefit comparison, or if secondary effects matter to policy decisions (for example, revenue estimates for a tax cut or budget decision).

Also excluded from the Foxwoods study were "externalities" -- that is, costs or benefits deriving from the casino but not reflected in the prices of its services. Sometimes labeled (oxymoronically) "non-economic" costs, externalities and their effects must be handled with great care. It may well be that, despite Foxwoods' efforts at good citizenship (such as contributions to gambling-abuse programs and the hiring of extra police to manage traffic jams), external effects from increased gambling activity are net drags on the positive growth impacts described above. Careful students of gambling externalities must, of course, keep in mind the findings of modern welfare economics about (for example) the moral neutrality of who should compensate whom, if a harm is identified.

Introduction to Panel II: Implications for Public Sector Revenues

Gary S. Sasse*

Casino gambling has become a cutting-edge public policy issue as our states and local communities seek new sources of revenue. Is it a panacea--an economic jackpot communities can bet on to solve their fiscal problems--or a mirage for revenue-hungry state and local officials? Our panel will attempt to shed light on many questions about the effects of casino gambling on public sector revenues and about whether casino gambling is a financial winner or loser for state and local governments.

- To begin, is casino gambling a winning way to address fiscal stress?
- Can casino revenues produce enough money to reduce tax burdens or solve structural and fiscal problems? And to what degree should a state rely on casino revenues to finance essential services?
- Will casino revenue substitute for, or displace, revenues generated by state consumption taxes and/or by state lottery profits, which now largely go into state treasuries?
- Who ultimately bears the burden of casino taxes? Do casinos make our tax structure more or less regressive?
- What impact will casino revenues have on local property tax levies? Can they make a fiscal difference to cities, towns, and counties?
- What impact can casinos have on intergovernmental fiscal systems, in terms of

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revenue-sharing, equalizing school outlays, local revenue efforts, and interstate and intercommunity economic competition?

- Have we found the optimal way to tax casinos and to allocate the proceeds?
- Do New England states need casino gambling in order to nourish the tourist industry and remain competitive with our neighbors, or is the opposite the case?
- Given economic cycles, will tax dollars generated by casinos prove to be a predictable and stable source of state and local government revenue in New England, a relatively compact region where maintaining a casino monopoly or oligopoly will be politically difficult at best?
- Will gaming policies in neighboring New England states affect each state's casino proceeds? Does the region need some kind of cooperation or interstate compact, if casinos spread?

The Promise of Public Revenue from Casinos

Charles T. Clotfelter*

The question posed by this conference can be restated something like this: "Are casinos a good way for states, especially the New England states, to raise revenue?" To view casinos as a source of state revenue is a bit like viewing a recreational vehicle as a means of transportation. While an RV will get you there in the same way that a car will, it also comes with a lot of extra baggage. In deciding to develop casinos, states will certainly be able to raise some revenue but, like the RV, casinos come with a change in lifestyle as well. My remarks will focus on the obvious attraction of this potential source of public revenue, aspects of the industry relevant to its use for revenue, and considerations that come into play in assessing casinos as a source of public finance.

The Attraction of Using Casinos to Raise State Revenue

Gambling continues to be one of the fastest-growing forms of consumer spending in the United States, and state governments have been instrumental in fostering this growth. In 1993, consumers spent some $35 billion on legal, commercial gambling, over three times as much as the total spent for amusement parks and professional sports together.[1] The three largest forms of commercial gambling are lotteries, casinos, and pari-mutuel games (the last encompassing betting on horse and dog racing as well as jai alai).

Of these three major forms of commercial gambling, the state governments have played the dominant role in the state lotteries which, taken together, now represent the largest form of commercial gambling in

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[1] Statistical Abstract of the United States 1994, Table 395, p. 252; Gaming and Wagering Business, August 5, 1994.

the country, boasting gross revenues of $12.8 billion in 1993. In all of the 37 states that operate lotteries, the state itself -- in the form of a state government agency or some entity created by the state acting just like a state agency -- is the provider or operator that supplies the gambling service. By contrast, state governments play a more limited, though crucial, role in casinos and pari-mutuel betting. In these areas, the functions of the state are to legalize, regulate, and tax, but not to operate.

The most casual perusal of statistics on the growth of gambling in this country will suggest a big reason for states to take seriously the idea of tapping casinos as a possible source of state revenue. There is money. And the money is there because the demand is there. Of the three major forms of commercial gambling, casinos now are on the steepest trajectory of growth. The most recent statistics I have seen show that gross revenues to casinos increased 18 percent between 1992 and 1993, compared to a 12 percent increase for lotteries and a slight decline for pari-mutuel games.[2] We know, of course, that gambling has been around for a long time; many observers would say that there is a natural human tendency to want to take a chance and that the many forms of commercial gambling have developed over time to meet that demand. But the growth in the casino as a form of commercial gambling in this country has nonetheless been quite impressive, expanding from one state in 1975 to 21 states today in which some form of casino operations is legal.

States in the New England region have been quite slow in catching the casino wave, but there is every reason to believe this will change. Whereas the region has 5.1 percent of the nation's population and

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[2] All of the figures cited here are taken from issues of <u>Gaming and Wagering Business</u>, and they refer to gross revenue, the amount of revenue collected by operators of commercial gambling. In the case of lotteries, this is equivalent to "handle," the total amount of ticket sales. In the case of casinos, however, it is much less than handle, since winnings in casino games can be re-bet many times before any winnings are collected. In terms of accounting, gross revenues must equal the sum of prizes paid, taxes, profits, and operating expenses.

accounts for 9.6 percent of the nation's lottery business,[3] it has had only one casino until recently. But what a casino it is! Foxwoods, operated by the tiny Mashantucket Pequot tribe near Ledyard, Connecticut, is the Moby Dick of casinos. Covering some four and one-half acres and employing over 10,000 workers, it is the largest casino in the country. It has more slot machines (3,800) than any other casino, and it is said to attract 40,000 visitors a day. By virtue of its enviable status as the only casino in New England, Foxwoods has been a gold mine for the 318-member tribe, transforming it into something like the Kuwait of North America. This monopoly position has been protected in part by a deal the tribe made with Connecticut, to exchange annual payments that are now in the range of $130 million for the exclusive right to operate slot machines in the state.

Dazzled by the success of Foxwoods, other New England states have, not surprisingly, been giving serious thought to having casinos themselves. Among those mentioned in recent newspaper articles are Massachusetts and Rhode Island. The possibility of building a casino in Bridgeport, Connecticut, has also received a great deal of attention in recent months. By all appearances, then, more casino gambling is coming to New England.

How Casinos Become a Source of State Revenue

Reaping state revenue from casinos is a two-step process. First, the casinos must be brought to life; then their profits can be taxed. To accomplish the first objective requires getting the necessary approval to operate a casino as well as selecting private operators. Casino gambling has two distinct forms: first, the traditional commercial variety that is associated with Nevada, New Jersey, and so-called riverboat casinos; and, second, casinos operated by tribes of American Indians. Once inside the door of a casino of either variety, a bettor is unlikely to know or to care which type it is. From the standpoint of

[3] Statistical Abstract of the United States, Table 26, p. 27; Gaming and Wagering Business, August 5, 1994, p. 22.

considering the potential impact on state revenues, however, a huge distinction exists between casinos operated by an Indian tribe and any others. By virtue of federal legislation and the autonomy it guarantees, the states have no taxing authority over Indian gaming in what otherwise might be seen as their state. Thus the casinos run by tribes -- about one-fifth of the 557 recognized tribes in the United States operate some form of commercial gambling[4]--have importance for states only when they are a form of competition or, as in the case of the Mashantucket Pequots, when the state strikes a deal to accept payments in return for monopoly or other concessions. Because of their greater revenue potential for states and because only they would be under direct state control, I focus on the commercial variety of casinos.

Like state lotteries, casinos have a double attraction to states as a form of revenue. Not only do they offer a service much in demand by consumers, but also no pre-existing suppliers of the service are around who can object to new taxation. In a world of hard choices, it is not hard to see why state lawmakers might view this prospect as one of the last of the "win-win" legislative opportunities. (Objections, of course, to both forms of gambling serve to darken this rosy scenario, but I will skip these for now.) And economists would tend to agree. Ignoring those pesky social costs, this bundling of legalization and taxation does indeed lead to a net improvement in social well-being, since consumers voluntarily consume a service that did not previously exist.

There are two important differences between casinos and lotteries, however. For whatever reason, states have chosen to operate lotteries themselves, whereas none of them have opened and run their own casinos. The distinction is not quite that stark, of course, in that state lottery agencies do buy off-the-shelf games, suitably customized, including the necessary software, hardware, and marketing to operate them, which effectively turns their vendors into partners. By retaining control over their lotteries, though, the states have achieved a reputation for honestly run games that is essential for success in that

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[4] Remarks of Tim Wapato at this conference, June 1, 1995.

business. By contrast, the operation of casinos evidently demands such a level of expertise and interaction with private developers that states have decided to leave their operation to private firms. States also may simply have been reluctant to become directly implicated in the operation of gambling parlors. In this difference between lotteries and casinos lies one of the potential disadvantages of casinos as a form of public revenue. In their recent history, casino games have been much more prone to unsavory influences than have lotteries. And unless someone comes up with an entirely new kind of casino, it is likely that those who legalize them will turn to experienced suppliers to operate them.

A second distinctive feature of casinos is their locational effect. Since each casino by its nature has a single location, a casino operation creates strong demand for land and labor around it as well as fostering the growth of hotels, restaurants, and recreation in the vicinity. Local merchants will prosper, but local infrastructure will be strained.

Assessing Casinos as a Revenue Source

What can be said about the state revenue part of the casino package? One could imagine any number of variants by which states might tax casino income. For purposes of discussion, it is probably most useful to take as a specific example a straightforward form of revenue such as a percentage excise tax on gross revenues. Who would bear the burden of such a tax? If casinos had previously existed and they were somehow limited in number, economists would conclude that a tax of this sort would fall both on consumers and the casino owners. But because casinos will in fact be created at the same time they are taxed, such a tax will not place any "burden" on suppliers, except to the extent that the suppliers might wish to be treated more favorably. It will be in the states' best interest to set their tax rates so that casino operators earn no more than a normal market rate of return on capital, in the same way that they might set utility rates. In any case, the full tax will effectively be borne by casino players, just as the implicit tax in lotteries is borne by lottery players.

Who are these players? The only existing data I have seen about who plays casino games is based on a national survey of gambling in the 1970s. This survey showed that casino players tended to be more affluent than any other class of gambler, but this result was largely influenced by the fact that casinos were limited to Nevada. The cost of getting to Nevada effectively prevented most with lower incomes from becoming players. But looking only at Nevada residents, the proportion of sales accounted for by lower-income residents was comparable to lotteries.[5] This pattern suggests that taxes on casinos would be roughly comparable to those on lotteries, and thus distinctly regressive in comparison to other state taxes.

Besides its efficiency and equity effects, a tax on casinos may be judged also on grounds of exportability and stability. One advantage the early entrants to New England casinos could enjoy is exportability: To the extent that residents of other states are your casino's customers, that portion of the tax burden is "exported" to other states, although for the region as a whole this will not be a large plus. Stability is certainly a virtue, since revenues will be used and thus depended on. I am not aware of research on how casino play varies over the business cycle, but judging from the experience of other forms of commercial gambling, I would not think that this will present a major disadvantage.

In my opinion a much more serious set of issues surrounds the social costs, discussed in other presentations at this conference. One of these arises from the state's identification with gambling. While casinos do not carry nearly the degree of implicit state approval that lotteries do, one does not have to be a Christian Fundamentalist to believe that such endorsement has no impact whatever. The states that incorporate them into their revenue structure will become identified to some real extent with casinos and everything that comes with them.

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[5] See Daniel B. Suits, "Gambling Taxes: Regressivity and Revenue Potential," National Tax Journal, vol. 30 (March 1977), pp. 19-36 and Charles T. Clotfelter and Philip J. Cook, Selling Hope: State Lotteries in America (Cambridge, MA: Harvard University Press, 1989).

Casinos Are No Panacea for Ailing State Budgets

Steven D. Gold*

My message is a simple one: A state should not allow establishment of a casino industry in order to bail out its general state budget or to reduce its general taxes significantly. Casinos do contribute to state revenue, but the revenue they produce directly and indirectly will not be great enough to make a large difference in the overall fiscal situation of a state on a sustained basis.[1]

There will never be another Nevada. Casinos account directly or indirectly for close to half of its state tax revenue,[2] but they cannot contribute anywhere near that much to any other state. The increase in state tax revenue from casinos and video lotteries in some states during recent years has been very impressive. But it needs to be seen in perspective.

The Fiscal Significance of Gaming

My comments are divided into two parts: first, a review of recent data on how much revenue states are deriving from gaming in general and casinos in particular; second, a discussion of the economic realities that limit the fiscal importance of casinos and other forms of gaming, now and in the future.

Pari-mutuel Wagering

The oldest continuing source of gambling revenue to states is pari-mutuel wagering, especially on horses but also on dogs and jai alai.

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[1] This analysis is an update and expansion of an earlier report, Steven D. Gold, "Gambling Is No Panacea for Ailing State Budgets," State Fiscal Brief 13 (October 1993). That report had a more complete discussion of some of the points covered here.

[2] The estimate that casinos and related tourism accounted for nearly half of Nevada's revenue may be out of date, in view of the rapid population growth that has occurred in that state and the diversification of the economy.

This has also been the slowest-growing source of state tax revenue since 1980. In 1992, pari-mutuel taxes brought in $604 million. State pari-mutuel tax revenue is actually diminishing from one year to the next and revenue is now lower than it was in 1980, for several reasons. Horse racing is not as popular as it used to be. Competition from lotteries and other forms of gaming is also an important factor. Revenue has been hurt not only by slow growth of the betting handle but also by cuts in tax rates, as states attempted to help their race tracks to remain in business.

Lotteries

Lotteries are the largest source of gaming revenue for most states. Some media accounts talk about the total amount of lottery tickets sold, which was more than $28 billion in 1994. But from the point of view of state budgets, what is important is the $9.98 billion lotteries contributed to state coffers after paying administrative expenses and prizes.

Certainly $10 billion is a great deal of money, but it pales beside the volume of total state tax revenue, which is now approximately $390 billion. The accompanying table provides some perspective on lottery yields in each state. If 1994 lottery revenue is compared to 1993 state tax revenue, one can see that it represented less than 3 percent of tax collections. This percentage would be even lower if lottery revenues were compared to state tax revenues in 1994, but such figures are not available yet for every state.

The two states with the highest ratio of lottery revenue to total tax revenue, Oregon and South Dakota, include not only conventional lotteries but also so-called video lotteries, which are no different from some types of electronic slot machines typically found in casinos. On a per capita basis, Massachusetts is the national leader among states, exceeded only by the District of Columbia, where many of the lottery tickets are purchased by non-residents. Even in Massachusetts, lottery revenue was only 5.6 percent of 1993 tax revenue.

Video Lotteries

Oregon and South Dakota continue to experience substantial growth of state revenue from video lotteries. Oregon expects to take in $175 million from video lotteries in the current fiscal year, nearly $60 per capita. South Dakota's revenue is even higher, with $86 million of video lottery revenue from a population of about 700,000.

Casinos

The limited fiscal contribution of casinos is demonstrated by New Jersey. In 1991, that state took in $246 million from its casino gross revenue tax and another $50 million from licenses for casinos and slot machines. This represented only 2.5 percent of the state's total tax revenue in that year ($11.6 billion). Even if taxes paid indirectly through spending at hotels, restaurants, and other establishments are included, casinos accounted for less than 4 percent of state taxes.

The experience in Mississippi and Louisiana is more impressive. During the past several years, Mississippi has had a huge casino boom that has materially improved the state fiscal picture. During the current fiscal year, casino revenue is expected to be about 8 percent of state tax collections, including not only the taxes paid directly on casino revenue but also the taxes paid on purchases of slot machines and other equipment for new casinos and the economic activity stimulated by casinos. Some of this revenue is temporary, related to construction of new gaming palaces, and use tax revenue has weakened in the past several months.[3]

Louisiana has numerous riverboat casinos, a temporary land-based casino that recently opened in New Orleans, and many video poker outlets throughout the state. Although this activity has all developed over the past several years, it is projected to raise $334 million this year and $464 million of state tax revenue in the fiscal year starting in July 1995; next year's yield represents nearly 5 percent of major state revenue.[4] Clearly, in the short run, casinos are making a significant difference in tax revenue in Louisiana and Mississippi.

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[3] The 8 percent tax on casino winnings is projected to produce $123 million, and $110 million is estimated to result from higher income and sales taxes (including a multiplier effect). The total of $233 million compares to estimated tax revenue of $2.625 billion. This information was provided by Phil Pepper of the Mississippi Research and Development Office.

[4] Major state revenue includes most taxes, licenses, and fees collected by the state. This discussion does not count $114 million paid as a sweetener this year by the developers of the land-based casino.

Of course, much of the recent expansion of casinos has been on Native American reservations. The fantastically profitable casino in Connecticut has resulted in an annual payment of $120 million to the state. Again, this needs to be placed in perspective. It represents less than 2 percent of total state tax revenue of nearly $8 billion.

Local Taxes

This discussion has focused on state taxes. Of course, casinos also contribute to local tax revenue. In a small city or county, the effect can be very significant. As discussed below, however, the revenue must be compared to the public service costs associated with casino development.

Why Casinos Are No Panacea

1. *Casinos will remain a small part of the economy.* Casinos dominate Nevada, not only because so many large ones are there but also because Nevada has a small population and a relatively small economy. Even if casinos proliferate in other states, their contribution to state revenues is destined to remain small.

2. *Competition will divide the market.* As more and more states and Native American tribes develop casinos, gamblers will have ever more options about where to bet. Although the market is growing rapidly, new casinos will divert some action from old ones.

3. *Casinos cannibalize other revenue.* The figures cited above do not consider the fact that casinos reduce wagering at race tracks and purchases of lottery tickets.[5] Nor do they consider that some of the money lost at casinos would have been spent on purchases that would have generated revenue from the sales tax or excise taxes.

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[5] Casino companies correctly point out that the typical casino customer is not the same as the average lottery player, being more educated and having a higher income. This reduces but does not eliminate the trade-off between the two forms of gambling. Nor do statistics that look at whether lottery revenue rose or fell after casinos started operations prove anything. Lottery revenue fluctuates for many reasons, only one of which is the presence of casinos. For an analysis that purports to show that casinos have no significant effect on lottery revenue, see Promus Companies Inc., Effects of Casino Gaming on State Lotteries (1994).

4. Local and regional casinos are not as lucrative for states as destination resort casinos. The cannibalizing phenomenon is much less severe if most casino customers are from other states and if they remain for several days, taking advantage of recreational activities outside of the casinos. In fact, however, new non-Nevada casinos typically cater heavily to day-trippers, who do much less to stimulate economic activity outside the casino.

5. Costs need to be considered as well as revenues. Offsetting the taxes generated by casinos are the governmental costs of serving their customers and employees as well as social costs. For example, considerable infrastructure is needed, as well as more extensive police services.

A Florida Case Study

A detailed 1994 study by Florida's Office of Planning and Budgeting provides a sober estimate of the benefits and costs of casino development in that state.[6] Its conclusions were as follows:

- State gaming revenue would range from \$324 million to \$469 million per year.
- Pari-mutuel and lottery revenue would fall by between \$14 million and \$86 million per year.
- Recurring sales tax revenue would decrease at least \$85 million per year.
- Crime and social costs attributable to casinos would total at least \$2.16 billion per year.
- Annual projected state revenues related to casinos would cover only 8 to 13 percent of annual minimum projected costs related to casinos.

Of course, such estimates rely on many assumptions that are difficult to verify. Besides, the situation in Florida, where a successful tourism industry already exists, may differ from that elsewhere. But these estimates should give pause to those who look only

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[6] Florida Office of Planning and Budgeting. 1994. Casinos in Florida: An Analysis of the Economic and Social Impacts. Tallahassee.

at the gross revenue produced by casinos without also considering their social and crime costs and their cannibalizing of other revenue.

Conclusion

Perhaps this analysis is about a straw man. Even Promus, one of the leading companies in the casino industry, does not claim that casinos can make the difference between a healthy and an ailing state budget:[7]

> Despite casino gambling's promise as a source of economic development and tax revenue, gaming should not be viewed as a panacea for the fiscal woes of a state or local jurisdiction. Casino gaming is more appropriately viewed as an amenity that in smaller metropolitan areas can be a cornerstone in the local tourism/entertainment market, and in larger metropolitan areas as simply another component of a regional tourism/entertainment package.

That modest claim puts casinos in the best possible light. In my opinion, a state's decision about casino development must balance possible economic development gains with prospective social costs. If Florida's study is close to being correct, the proliferation of casinos would do more harm than good for a state. In any case, casinos are not a no-strings-attached pot of gold for state treasuries.

Even though the gaming industry itself admits that casinos are no panacea for ailing state budgets, that reality is not universally understood. With states in a fiscal bind because of rising service demands, taxpayer resistance to tax increases, and falling federal aid, there is a temptation to look to gambling as an easy solution.[8] It is not.

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[7] Promus Companies Inc. 1994. The Do's and Don'ts of Casino Legislation: Lessons from the Field, p. 3.

[8] According to The New York Times, New York State's large budget deficit is one reason why the state is expected to authorize keno games this year. They are projected to generate $100 million for the state budget.

Net State Revenue from Lotteries, Fiscal Year 1994

State	As a Percent of 1993 State Tax Revenue	Dollars Per Capita
Arizona	1.5%	$22
California	1.4	21
Colorado	1.9	21
Connecticut	2.9	57
Delaware	2.5	49
D.C.	2.8	115
Florida	5.7	63
Georgia	4.4	54
Idaho	1.1	14
Illinois	3.8	47
Indiana**	2.3	29
Iowa	1.2	20
Kansas	1.4	20
Kentucky	2.1	33
Louisiana	2.8	29
Maine	2.6	37
Maryland	5.1	77
Massachusetts	5.6	101
Michigan	4.3	55
Minnesota	1.0	18
Missouri	1.9	21
Montana	.9	12
Nebraska	.7	9
New Hampshire	4.6	34
New Jersey	4.7	78
New York	3.2	56
Ohio	4.6	56
Oregon*	5.4	71
Pennsylvania	3.8	53
Rhode Island	4.0	56
South Dakota*	11.3	97
Texas	4.7	53
Vermont	2.1	29
Virginia	3.9	47
Washington	1.2	19
West Virginia	1.7	24
Wisconsin**	2.1	33
Total -	**2.8**	**38**
Total - Lottery States	**3.2**	**45**

Note: Lottery revenue, for 1994, is after payments for administrative expenses and prizes. Total state tax revenue is for January - December 1993.
*Includes video lotteries.
**State tax revenue only available for 1992.

Source: 1992 tax revenue: U.S. Bureau of the Census, Government Finances: 1991-92. 1993 tax revenue: U.S. Bureau of the Census, Quarterly Summary of Federal, State, and Local Tax Revenue, Oct. - Dec. 1993. 1994 lottery revenue: La Fleur's Lottery World, vol. 2, no. 6, February 1995.

Implications of Legalized Gambling for State and Local Finances: The Case of New Jersey

Ranjana G. Madhusudhan*

Casinos account for the bulk of wagering in the United States--for instance, over two-thirds of the total wagering in 1993, nearly $297 billion. Prior to 1990, only two states had legalized "on-land" casino gaming. In 1931, Nevada became the first state to legalize casinos statewide. In 1977, New Jersey became the second state, but unlike Nevada, New Jersey legalized casinos only in Atlantic City and did not allow them statewide.

Casino Fever

Since 1991, the number of states with some form of casino gaming has increased dramatically, to 21. Riverboat casinos and tribal gaming are rapidly spreading the casino fever. More than one-half of the states that currently have some form of casino gaming offer Indian gaming exclusively.[1] Foxwoods, at Ledyard, Connecticut, provides the most successful example of tribal gaming in the country. Operated by the Mashantucket Pequot Indian tribe, Foxwoods generated $136 million in revenues for the state of Connecticut in 1994.

The year 1991 marked the first time that riverboat casinos began plying the waters of the upper Mississippi, in Iowa and Illinois. The casino riverboat industry has been growing since at an extraordinary pace, generating $3.2 billion in casino win and accounting for one-fifth of the casino market in 1994.[2]

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[1] The discussion on tribal gaming is based on Connor, M. "Casino Catalyst? Has Tribal Gaming Spurred Casino Legislation Nationwide?" International Gaming & Wagering Business, March 1, 1995.

[2] See Johnson, Craig R. "Riverboat Gaming: The First 1,000 Days." Gaming & Wagering Business, October 5, 1994.

Industry analysts expect the riverboat casino wave to continue, particularly where there is limited licensing.[3] Indian gaming also appears to be surging. Plans are under way to launch a second Indian casino in Connecticut, one in Rhode Island, and one in Massachusetts.[4] The Mohawk tribe proposes to expand Indian gaming in upstate New York. Given these forces, the casino fever is likely to continue.

Casino Gaming in New Jersey

These remarks will concentrate on the casino-legalization experience in New Jersey. Casino gambling in New Jersey was legalized in 1977 as an economic development tool, charged primarily with revitalizing Atlantic City. With the passage of 17 years, it is now time to review what role the casino industry has played in the state so far.

The first casino, Resorts International, opened in 1978. The Taj Mahal, which opened in 1990, marked a significant addition to the casino industry. By 1994, twelve casinos were operating in Atlantic City. The industry offered 1,310 table games (Blackjack, Craps, Roulette, Big Six, Baccarat, Minibaccarat, Red Dog, Sic Bo, Pai Gow Poker, Poker, Double Down Stud Poker, and Caribbean Stud Poker) and 27,041 slot machines ($0.05, $0.25, $1.00, $5.00, $25.00, $100.00, and other slot machines) in 1994.[5] Slot machines contributed 67 percent of casino revenues or "win" in 1994, with the remaining 33 percent accounted for by table games. Among slot machines, the $0.25 slot machines were the single most important category, contributing nearly 50 percent of total casino win attributable to slot machines in that year. Among table games, Blackjack was most popular, generating 41 percent of the win attributable to table games. Overall, game facilities increased between

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[3] Mississippi, which has unlimited licensing, is experiencing declining revenues from riverboat casinos due to market saturation.

[4] Massachusetts has an option to develop a non-Indian casino in the state. See International Gaming & Wagering, March 1, 1995, pp. 66-68, for details.

[5] There were also 70 keno facilities in 1994.

1993 and 1994, particularly the number of slot machines. Casino square footage in 1994 was 839,882, up by 5.4 percent over 1993. The number of hotel rooms increased by 267 to 9,227 in 1994.

The industry invested nearly $5.3 billion in fixed assets in Atlantic City during 1994, an increase of $145 million over the previous year. In 1994 alone, the industry added over 31,000 in Simulcasting square footage and 42,727 feet of additional casino space.[6] The 1994 results appear still more impressive when compared to the first-year values in 1978. When the first casino opened in 1978, 504 sleeping rooms were available and 34,000 square feet of casino space. Today, 12 hotels have 9,227 sleeping rooms and there is close to 840,000 square feet of casino floor space.

Casino Taxes in New Jersey

Over $872 million of gaming revenues were generated in New Jersey during FY1994, of which 30 percent came from casinos. Lotteries contributed around $602.8 million and the balance of approximately $5.3 million came from pari-mutuel and other gaming sources. During its first 17 years of operation in Atlantic City, the casino industry has paid close to $4.5 billion in direct taxes and fees to state, county and local governments (Table 1).

The current structure of casino taxes in New Jersey is presented in Table 2.[7] Casinos are subject to the Casino Revenue Tax and the Investment Alternative Tax. The former is levied at 8 percent of gross gaming revenues, defined as the total sum received from gaming operations minus the amount paid out as winnings, adjusted for uncollectible patron checks. The tax is administered by the Casino Control Commission. Revenues from this tax are deposited into the Casino Revenue Fund and dedicated for use in supporting programs for the

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[6] New Jersey Casino Control Commission. 1995. Annual Report 1994.

[7] Based on Madhusudhan, Ranjana G. 1988. "New Jersey Gaming Revenues: Issues & Options," a report prepared for the New Jersey State and Local Expenditure and Revenue Policy Commission.

elderly and for disabled persons. The tax yield was nearly $265 million in FY1994, and over $277.5 million was disbursed from the Fund to benefit eligible senior and disabled citizens in New Jersey. The largest expenditure category during FY1994 was around $163 million for physical and mental health care programs (Table 3).

The Investment Alternative Tax, designed to encourage investments by casinos, is imposed at the rate of 2.5 percent of gross revenues. Alternatively, the casinos have the option of allocating 1.25 percent of gross revenues either to purchase Casino Reinvestment Development Authority (CRDA) bonds or to invest directly in CRDA-approved projects. Proceeds of this tax are to be used to revitalize the Atlantic City and Atlantic County regions and then distributed under a formula to other areas of the state. Approximately $42.5 million of investment alternative tax obligations were incurred during 1994, an increase of 3.4 percent over the 1993 level.

The casino industry is also subject to various licensing fees. Table 2 indicates the existing fee structure, which yielded nearly $55 million in FY1994. Fees are assessed and collected by the Casino Control Commission. All proceeds are deposited into the Casino Control Fund and are used to pay for the operating expenses of the Casino Control Commission and the Division of Gaming Enforcement.

The casinos also are the major revenue source of the Atlantic City luxury sales tax, levied only in Atlantic City on entertainment, hotel rooms, and alcohol sold by the drink. Close to $200 million was collected between FY1981, the first year the tax was levied, and FY1994. The tax is dedicated to support debt service and operating deficits of the Atlantic City Convention Center and other projects undertaken by the Atlantic County Improvement Authority. In FY1994, $16.6 million was collected under this tax.

As of July 1993, casinos are required to impose a minimum parking fee of $2.00 per motor vehicle using casino parking facilities. The revenues are dedicated for the redevelopment of the Atlantic City corridor area, through the administration of the CRDA. During 1994, a total of $13.9 million was collected in Atlantic City casino parking fees.[8]

In addition to the above taxes and fees, the casino industry also pays other state and local taxes. As indicated in Table 1, the casino industry paid nearly $155 million in 1994 in other state and local taxes. The bulk, $116.6 million, was for local property taxes, and the remaining amounts were for state corporate and unemployment taxes. New Jersey casinos also paid $111.2 million in Social Security, federal corporate, and unemployment taxes.[9]

Casino Revenues -- Growth Trends, Importance in Revenue Mix, and Sensitivity to Business Cycle

Overall, gaming revenues increased more than sevenfold between FY1978 and FY1994. Casino tax revenues experienced the most dramatic growth, from $1.5 million in FY1978 (when the first casino opened) to $263.3 million in FY1994. Lottery revenues also increased substantially during this period. Pari-mutuel tax revenues, however, have been a steadily declining component of gaming revenues in New Jersey. State pari-mutuel taxes have been abolished since December 1993, to help the industry survive. Now fines, fees, and uncashed tickets contribute to pari-mutuel revenues.

However, gaming revenues in general, and casino revenues in particular, constitute a limited revenue base. Despite their popularity, being interpreted as a voluntary and painless tax, gaming revenues have accounted for only 3 to 7 percent of state general revenues in New Jersey. Lottery revenues, the prime component of gaming revenues, contributed around 4 percent of state general revenues in FY1994. The casino revenue tax contributed only around 2 percent of state general revenues in that year. The casino percent share increases by nearly a percentage point when other state and local taxes and fees are included. Other gaming sources, including pari-mutuel taxes, accounted for an

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[8] From CRDA.
[9] From the Casino Association of New Jersey.

insignificant percentage of state revenues. Thus, gaming revenues represent a limited source of state financing. Gambling is not a fiscal panacea, and it would be foolish to expect it to provide much in the way of budgetary relief.[10]

Gaming revenues, particularly casino revenues, have been unstable and appear to be cyclically sensitive as well. The casino industry, for instance, was adversely affected during the national recession years in the eighties and nineties, when the Northeast region took a big hit. This is clearly reflected in the wide fluctuations in the annual percentage change in casino revenues during this period.[11] The lottery is another unstable and cyclically sensitive source of gaming revenues in New Jersey.

Lessons for Other States

There are lessons to be learned from the casino experiences of Nevada and New Jersey, the two major land-based casino states. Nevada's case illustrates that casinos can play a major role in developing tourism, which is the prime mover of the Nevada economy. However, the gaming industry is playing a lesser role now, with the advent of diversification of the Nevada economy.

Lessons from the New Jersey experience are probably more relevant to other states considering the casino option. This is because New Jersey has restricted casino gaming; statewide casino gaming makes Nevada unique. It is difficult to envision any other state introducing casinos on such a large scale, at least in the near future. Thus, only small-scale casino gaming, as in Atlantic City, is likely to be introduced in other states. This trend is reflected in recent legislative bills passed by states. Another factor that makes the New Jersey case more informative is that casinos were legalized after the introduction of lotteries. Most states that are considering the casino

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[10] Suits (1977, p. 34).

[11] This is also reflected in the fluctuating volume of annual visitors to Atlantic City.

option also have lotteries, and they have the New Jersey experience to learn from.[12] Nevada is not yet a lottery state.

In the 17 years since legalization, casinos have had a significant economic impact in New Jersey, particularly in Atlantic County. Casino-related employment represents over two-thirds of total gaming-related employment in the state. The industry employed more than 40,000 direct, full-time employees and spent over $1 billion in total wages and benefits in 1994. The industry's annual purchases of more than $2.2 billion of goods and services generate indirect income and benefits to the state. The casino industry also contributes significantly to tourism in New Jersey. With over 33.1 million visitor-trips, Atlantic City remains the most-visited tourist destination in the United States. Visitors are estimated to have plunked down in excess of $2.7 billion in the Atlantic City casinos.

Nevertheless, given the existing infrastructural and environmental constraints, including the lack of modern airport facilities and the absence of non-gaming tourist attractions, Atlantic City is far from being revitalized into a major tourist destination resort. The Atlantic City casino industry market is limited to a 150- to 300-mile radius, with most visitors arriving by car as day-trippers.[13] The rate of growth in the annual volume of visitors to Atlantic City has been declining steadily since 1989, increasing by 3.6 percent in 1994 after five years of consecutive declines. The original goal of revitalizing the city has not yet been accomplished.

The cost to build a casino in Atlantic City has increased significantly and profitability has been declining. Only two casinos have opened since 1985. The last casino, Taj Mahal, opened in 1990 and cost over a billion dollars to complete. In part, the drop in profitability is due to the rising cost of doing business and to the

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[12] Mississippi, which has legalized riverboat casinos, is an interesting exception.

[13] In contrast, Nevada caters to a much bigger market in the western region with visitors to Las Vegas staying for at least four days on average.

falling market shares of casinos in the city. Eight of the 12 casinos experienced either a decline or no gain in market share in 1994.

There has been no coordinated approach between the state and local governments and the casino industry in tourism planning and development. Greater public-private coordination will be needed if tourism is to be strengthened in the City. Casinos are no magic wands.[14] The city needs diversification, development of non-gaming tourist attractions, and improved amenities in order to be revitalized.

However, recent changes in gaming laws and the regulatory climate may turn things around for Atlantic City. The City appears to be more business-friendly, with a less oppressive regulatory environment. Provisions under the new gaming laws include 24-hour gambling, the introduction of new games such as keno and poker, permission for larger casinos, and the elimination of registration for non-casino or hotel employees. Recent data indicate that casino industry profitability has begun to improve and is generating new interest in the City. Heavy-duty investors who have recently applied for casino licenses include billionaires Marvin Davis, Ronald Perelman, and Steve Wynn of Mirage Resorts Inc.

Concerted efforts are also being made to plough back some of the casino revenues into Atlantic City to support its much-needed redevelopment. The upcoming Convention Center and the Corridor projects are examples. Several existing casino hotels have launched major renovation or expansion projects.[15]

Policymakers have to decide on the tough question of how much the state should rely on gambling to provide state revenues. As noted earlier, casino revenues currently contribute only a small fraction of New Jersey's general revenues. In recent years, the share of casino

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[14] It has been observed that the impact of casinos on tax revenue depends on the extent to which casinos attract gamblers from out of state. See Steve Gold (October, 1993). "Gambling Is No Panacea for Ailing State Budgets" in State Fiscal Briefs, p. 4.

[15] For example, in 1994, Showboat undertook a $54 million expansion, adding 800 hotel rooms and 15,000 in gaming square footage.

revenues has been actually declining in Nevada. Even though casino taxes are an attractive source in that the burden is easily exported,[16] this potential will get weaker if more states legalize casinos. Competition among different forms of gambling may limit efforts to promote any one form, and regulatory costs would rise with the introduction of more casinos. An unlimited license environment, as in Mississippi, may cause a decline in returns to the state. The regressivity associated with gaming activities is another important policy concern.

While considering the casino option, states must also weigh the prospective revenue gains against social costs such as increases in compulsive and juvenile gambling and crimes associated with gambling in general. Available evidence shows an increase in certain types of crimes in Atlantic City and some increase in compulsive gambling in the state. There is also a fear of an increase in induced gambling, as states enter into the provision and promotion of gaming activities to meet their revenue needs.

Social acceptance of gambling has increased, and gaming is more institutionalized today. The casino fever is likely to continue. However, the success of introducing casino gaming as an economic development tool in any state hinges on a well-coordinated development plan, involving the state and the private sector, and it requires the provision of non-gaming tourist attractions as well. Above all, and regardless of the motivation behind the legalization of gambling by states, the first objective should be to keep the integrity of the gambling industry intact.

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[16] For a discussion on how tourists contribute to gaming revenues in Nevada, see James Mak's chapter on the "The Tourist Industry" in Robert D. Ebel (ed.), A Fiscal Agenda, 1989.

Table 1

Casino Industry Taxes, Regulatory Fees and Reinvestment Obligations, Selected Years

Millions of Dollars

Direct Taxes	1978	1993	1994	1978 to 1994
Casino Revenue Tax[a]	10.7	262.9	272.3	2,859.3
Atlantic City, Atlantic County, and School Property Taxes	2.3	107.8	116.6	1,077.8
Federal Corporate Tax	36.4	21.4	23.9	800.9
Social Security Tax	2.2	83.3	84.5	850.9
State Corporate Taxes	6.5	8.5	7.7	262.9
State Unemployment Tax	1.3	25.1	30.4	251.9
Federal Unemployment Tax	.1	2.9	2.8	41.4
Total Direct Taxes	59.5	511.9	538.2	6,145.1
Regulatory Fees[b]	3.1	54.5	55.4	682.6
Reinvestment Obligations	.0	41.1	42.5	438.2
Total Taxes and Fees	62.6	607.5	636.1	7,265.9

Source: Casino Association of New Jersey.

[a] Excludes interest.

[b] Includes casino and employee licensing fees. Amounts refer to fiscal years.

Table 2

The Structure of Gambling Taxes and Fees in New Jersey[a]

Tax/Fee and Yield	Base	Rate	Disposition of Revenues	Administration
Casino Revenue Tax FY94: $263.3 M	Gross gaming revenues of casinos[b]	8% of gross revenues	Revenues are deposited into the Casino Revenue Fund (CRF) and are dedicated for use in supporting programs for the elderly and the handicapped[c]	Taxes are collected by the Casino Control Commission. The state legislature approves the disbursements through programs they create for eligible elderly and disabled persons.
The Investment Alternative Tax FY94: $42.5 M[d]	Gross gaming revenues of casinos	2.5% of gross revenues to the CRF, or alternatively, the casinos have the option of allocating 1.25% of gross revenues to purchase CRDA bonds or invest directly in CRDA approved projects earning tax credit	Proceeds to be used to revitalize the Atlantic City and Atlantic County regions and then distributed under a formula to other areas of the state[e]	Casino Reinvestment Development Authority (CRDA)
License Fees FY94: $54.9 M	Casinos[f]	Initial license fee minimum of $200,000; Renewal fee minimum of $200,000	Proceeds from all fees assessed and fines, if levied, are deposited into the Casino Control Fund to pay for the operating expenses of the Casino Control Commission and the Division of Gaming Enforcement	Fees are assessed and collected by the Casino Control Commission
	Slot Machines	$500 per machine		
	Casino key and Casino gaming employee	Minimum $750 per year; Initial fee $350, renewed every four years at $250		

See next page for sources and notes.

Table 2 continued

[a] Casinos are subject to the Atlantic City Casino Parking fee of at least $2 a day for use of a casino parking space (P.L. 1993, C. 159). Effective December 1993, state pari-mutuel taxes were abolished. Currently, uncashed tickets and revenues from license fees and fines constitute state pari-mutuel revenues. Bingo, raffle and amusement games are subject to different fee schedules depending on the number of games, value of retail prize, or type of license. These fees are administered by the Legalized Games of Chance Control Commission. These fees account for a very small fraction of state gaming revenues (FY94 yield was less than $1 M).

[b] "Gross Revenue" is defined as the total sum received from gaming operations minus the amount paid out as winnings, reduced by the lesser of 4 percent of the remainder or a reasonable amount for uncollectible patron checks.

[c] These revenues are used for the reduction of property taxes and utility and rental charges of the elderly and handicapped. The Casino Revenue Fund monies are also used to assist eligible senior citizens and disabled persons with pharmaceutical costs, community services for the blind, community care, and low-cost transportation programs.

[d] For calendar year.

[e] Based on a complicated formula adopted by the legislature, proceeds from the sale of the bonds are to be used exclusively for the rehabilitation of the Atlantic City for the first three years. After that, parts of the proceeds from the sale of the bonds will be used to fund projects in other parts of the state. In 1994, the allocation was changed and a special Atlantic City Fund was created.

[f] The first two renewals are due annually, after that every four years.

Sources: Ranjana Madhusudhan (1988). "New Jersey Gaming Revenues: Issues & Options," a report prepared for the New Jersey State and Local Revenue and Expenditure Commission; state budgets; the Casino Control Commission; the Casino Reinvestment Development Authority; the Casino Association of New Jersey; the Racing Commission; and the Legalized Games of Chance Control Commission.

Table 3

Allocation of Casino Revenue Fund to Dedicated Programs for the Elderly and Disabled: Selected Items

Millions of Dollars

Program Type	FY1993	FY1994
Total Funds Available	293.0	321.0
Ending Balance	38.8	24.0
Expenditure Program[a]		
a. Lifeline credit	36.5	43.0
b. Property Tax Exemption	17.2	17.2
c. Pharmaceutical Assistance	88.5	116.8
d. Transportation Assistance	18.6	19.2
Total Expenditure	254.3	297.0

Source: New Jersey Office of Management and Budget and the Casino Control Commission.

[a] These refer to appropriation amounts which may not have been expended. During FY94, nearly 59 percent was spent on physical and mental health programs.

Perspective of the Treasurer of Massachusetts

The Honorable Joseph D. Malone*

In the past four and one-half years as Treasurer of the Commonwealth of Massachusetts and as Chairman of the Lottery Commission, I have learned a great deal about gaming issues. Foremost among the lessons learned is that the debate or decisions over expanded gaming should not be defined or driven by the need to generate more revenues. If new revenues are the prime reason for the development of casinos or any other form of expanded gaming, then there will never be an end to the number of new forms of gaming we allow, because government's appetite for revenue is limitless.

Unfortunately, revenue does appear to be driving the debate over casino gaming on Beacon Hill. I am concerned that if our elected officials know of a so-called "painless" way to raise revenue through gambling--which is, after all, voluntary--they will no longer want to make tough decisions on reducing government spending. That in turn will increase the need for new revenue and put further pressure on government to adopt new forms of gaming necessary to provide these revenues: a never-ending spiral of gaming and spending.

We have studied the potential impact of casino gaming on the Lottery in Massachusetts, and I will discuss our findings in a moment. But first I want to point out that when the legislature considers new forms of legalized gambling, it is not often that we consider carefully all the ramifications. For example, the Massachusetts legislature is just now going through a very difficult reassessment of the extent to which keno should be introduced around the state, because the proponents did not have a well-thought-out plan for its implementation when it was hastily approved as part of the budget two years ago.

I was opposed to keno because so many questions were unanswered at the time, and I warned that citizens would feel "culture shock" once the

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game was fully rolled out. This is one case where I am not happy to have been proven right. Now that the state has become addicted to the $60 million to $70 million net profit generated annually by keno, people are beginning to realize it is not a simple thing to repeal the game, as some would like to do. We have become reliant on the "new" keno revenue stream, and to roll back keno means that substitute revenues must be found or some form of spending must be cut. There are no happy choices in the political arena these days.

I have also noticed that, rather than considering quality-of-life issues that affect all the people of the Commonwealth, when it comes to gaming, the legislature finds itself reacting to the demands of special interests. For instance, because it now appears that the Wampanoag Indian tribe will get a casino in southeastern Massachusetts, the racetrack owners are saying that without the ability to install thousands of slot machines they will not be able to compete. For some reason, the racetrack owners have come to believe that the Commonwealth owes them a living.

No one suggested upon the invention of the automobile that government should subsidize the buggy whip industry. If the racetracks cannot compete on their own against newer or more popular forms of gaming, then perhaps their time has come and gone - just like the buggy whips of yesteryear.

All this discussion of casinos and slot machines and riverboat gambling reminds me of the movie "It's a Wonderful Life." In a memorable scene in the film, a distraught George Bailey wakes up in Potterville wondering what ever happened to lovely little Bedford Falls. If we allow a casino in every county of the Commonwealth, and slot machines at every racetrack, how long will it take for people to wonder what ever happened to Massachusetts?

As the head of the Massachusetts Lottery, I have an interest in protecting the Lottery's revenues for the benefit of all 351 cities and towns in the Commonwealth. The Massachusetts Lottery is widely recognized as one of the most successful lotteries in the world. Our research indicates that about two-thirds of the adults in Massachusetts play the lottery on a regular basis. Per capita sales are in excess of eight dollars a week.

Last year, the Lottery's total sales reached almost $2.5 billion. Charitable gaming, which is regulated by the Lottery, grossed $233 million in 1994. The pari-mutuel racing handle in the Commonwealth exceeded $400 million for the same period. That's over $3 billion of legal gambling this past year in Massachusetts.

I do not have any moral objections to legalized gaming. I have not opposed the casinos that are part of the Governor's agreement with the Wampanoag tribe, so long as local residents are in favor of them. The question, I repeat, is how much is enough?

Two years ago, Deloitte & Touche examined for us the potential impact of water-based gaming on the Massachusetts Lottery. The study assumed that water-based gaming would attract between five and six million patrons annually, who would generate between $350 million and $480 million in adjusted gross revenues, that is, what is left of the money wagered after prizes are paid.

Based on those assumptions, the study concluded that the negative impact on the Lottery's gross revenue could be up to 4 percent off our sales. So, if Lottery revenues total $2.7 billion for the current fiscal year 1995 as we expect, then that 4 percent translates into a loss of $108 million. Furthermore, if Lottery net revenues are assumed to be one-quarter of gross revenues, that 4 percent decline means $27 million less that is available for distribution to the cities and towns.

We have extrapolated those findings to approximate what effect a proposed Indian casino in New Bedford would have on the Lottery. Since the Indian casino is expected to generate revenues after the payment of prizes of $375 million, which is within the revenue range used in the Deloitte & Touche study, we estimate a similar negative impact on Lottery sales of up to 4 percent.

Obviously, if still another casino comes into existence in Hampden County and the Commonwealth's four racetracks each install 400 slot machines, as called for in the memorandum of understanding that the Governor signed with the Wampanoags, the impact on the Lottery would be even greater. In fact we currently foresee, under this last scenario, a potential impact on the Lottery roughly double the impact of the New Bedford casino alone, or up to 8 percent off gross sales. For fiscal year 1995, this would translate into a gross revenue loss of $216 million, and a net revenue loss of $54 million. Any increase in the number of machines at the tracks could drive the negative impact even higher.

While the negative impact of casino gambling on the Lottery is of concern, evidence from states in similar situations suggests that the impact can be minimized or even neutralized. One need only look to the experience of New Jersey, where there has been little appreciable effect on lottery revenues in that state since casinos were first introduced there in 1978.

Before we plunge headlong into the casino gambling craze, however, we need to develop an overall strategy for the Commonwealth that sets out exactly where we want to go in this area. We need to consider quality-of-life, law enforcement, and economic issues. We need to take into account any cannibalization that may occur with Lottery revenues, which are, after all, part of a "social compact" with our cities and towns. Only then can we accurately assess the pluses and minuses of casino gambling and thereby avoid the mistakes that were made with the hasty introduction of keno.

Evaluating a State's Gambling Strategy: The Relationship between Lottery Sales and Casino Gambling

Richard A. McGowan, S.J.*

Since the early 1990s, the movement authorizing various forms of "localized" casino gambling has picked up a great deal of momentum. "Localized" casino gambling aims to capture a limited geographic market, while Las Vegas and Atlantic City are considered "national" casino destinations. The rationale offered by state officials as they approve these operations is to make sure that their states are getting their "fair" share of possible gambling revenue. States have three types of "localized" casino gambling options to choose from: limited-wager casino gaming, riverboat casino gaming, and Indian casino gaming.

But adding new forms of casino gambling may prove to be a trickier business than merely getting public approval or tolerance. Cannibalization is a common problem for firms when they introduce new products in a market segment where they already have an existing product. Cannibalization is the deterioration of one product's sales as a result of the introduction of another product or, conversely, the increase in sales of one product (game) at the expense of another. If this "cannibalization" effect exists between lottery games and other forms of gambling (such as casino gambling), then the introduction of new forms of gambling will negatively affect existing lottery sales, thereby diminishing any additions to revenue that these new casino ventures will bring to the states.

The lottery sales of five states will be analyzed for possible cannibalization of lottery sales following the introduction of these new forms of localized casino gambling: (1) limited stakes casino gambling in Colorado; (2) riverboat casino gambling in Louisiana and Illinois; and (3) various Indian casinos in Minnesota and California. A year's

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worth of weekly data will be examined for each case. Sales for 26 weeks before the introduction of a new form of gambling will be compared to the sales for 26 weeks after the introduction of the new form of gambling. The statistical methodology employed in order to determine these outcomes is ARIMA (Autoregressive Integrated Moving Average) Intervention Analysis. The interested reader can contact the author for the detailed statistical results.

The Findings

Colorado: Limited-Stakes Casino Gambling and Lottery Sales

In November 1990, Colorado's voters approved a statewide referendum that legalized limited-stakes casino gambling. Three small, historic mining towns (Blackhawk, Central City, and Cripple Creek) were given permission to open up casinos, in order to make these cities attractive tourist sites. Casino operations began in these various sites in mid 1992.

Before examining the effect that these casinos had on Colorado lottery sales, it will be helpful to look at the makeup of the Colorado state lottery. In the 1992-93 period studied, average Colorado state lottery sales were distributed in the following manner:

Lotto Sales	Instant Game	Total Lottery Sales per Capita
$.726	$.857	$1.583

These figures show that lottery sales were nearly evenly split, with instant tickets sales accounting for a bit more at 54 percent of total sales. It should be possible to measure quite well the effect that casino gambling had on different types of lottery games in the case of the Colorado lottery.

Figure 1 and Figure 2 show Colorado's instant game sales and Colorado's lotto sales for the period 8/20/92 (26 weeks before the opening of Central City/Blackhawk) to 8/15/93 (26 weeks after the opening of Central City/Blackhawk). It appears that instant game sales in Colorado did decrease with the advent of casino gambling. However, the ARIMA Intervention modeling also showed that this decrease was only temporary and instant sales eventually rebounded, although not to the level before limited-stakes casino gambling. Meanwhile, lotto sales showed a typical pattern, with occasional spikes in sales when jackpots became large. The imposition of limited casino gambling does not appear to have affected lotto sales.

Overall, Colorado's venture into limited-stakes casino gambling appears to have paid off, at least in the short run. While sales of the instant games on which more than half of its sales depended went down temporarily, these sales did rebound and the state was more than compensated for any loss by the additional revenue that limited-stakes casino gambling brought into Colorado's coffers.

Louisiana: Riverboat Casino Gambling and Lottery Sales

In July 1991, Louisiana's legislature authorized 15 riverboat licenses throughout the state (Baton Rouge and Shreveport/Bossier City) and one land-based casino in New Orleans. Most of the riverboats began operations by early 1993.

In the 1992-93 period, average Louisiana state lottery sales were distributed as follows:

Lotto Sales	Instant Game	Total Lottery Sales per Capita
$.49	$.84	$1.33

These figures show that 63 percent of Louisiana's lottery revenue was dependent on instant game sales, so if casino gambling had a negative impact on this form of lottery sales, then overall lottery revenue would also be adversely affected. The ARIMA Intervention Analysis for the time series describing Louisiana's instant game sales during this time period shows that the advent of riverboat gaming did have a negative impact on instant game sales (Figure 3). Up to 1992, instant game sales had been increasing, but riverboat gaming seems to have put an end to this increase and in fact contributed to a decline in instant game sales. Meanwhile, sales of lotto tickets do not appear to have been affected by the imposition of riverboat gaming (Figure 4). The lotto game appears to have a small but fairly steady customer base, which grows occasionally as jackpots grow but does not appear to overlap riverboat customers in any significant numbers.

Overall, Louisiana's riverboat gambling does appear to have "cannibalized" instant game sales, its most profitable lottery line. However, this strategy makes sense as long as the revenue from riverboat gaming is greater than the decline in instant lottery sales. So far, this has certainly been the case, just as it was in Colorado; casino revenue in Louisiana is estimated to surpass $300 million per year for the state. This revenue stream is quite dependent upon the course of gaming legislation in Texas. But given that the Texas legislature has refused to legalize riverboat or any other type of casino gaming and the issue is not likely to come before it again until 1997, it appears that Louisiana has taken a bold and profitable step into the world of localized casino gambling.

<u>Illinois: Riverboat Casino Gambling and Lottery Sales</u>

In July 1992, the Illinois legislature authorized 10 riverboat licenses throughout the southern part of the state (Joliet, Peoria, and so on). Unlike Louisiana, Illinois allows only riverboat gambling and permits no dockside or land-based casino operations. Most of these boats started operations in mid-1993. For the year 1993, average Illinois state lottery sales can be broken down in the following manner:

Lotto Sales	Instant Game	Total Lottery Sales per Capita
$1.49	$1.03	$2.52

Unlike Louisiana's lottery, in which instant games are the primary source of sales, the Illinois lottery depends upon lotto games for nearly 60 percent of its revenues. Hence, the relationship between lottery sales and riverboat gaming may be far different from what it was in the Louisiana case.

Lotto sales (Figure 5) show a typical pattern, with occasional spikes in sales when jackpots become large. The imposition of limited casino gambling does not appear to have affected lotto sales, even in a state where lotto accounts for the largest percentage of lottery revenues. Instant games also appear to be unaffected by the advent of riverboat gaming (Figure 6). Overall, the Illinois venture into casino gambling appears to have paid off, at least in the short run. Lottery sales appear to be unaffected with the coming of riverboat gaming, while the state has received additional revenue with the advent of this form of gambling, which is taxed at a 20 percent rate.

Minnesota: Indian Casino Gambling and Lottery Sales

In 1991, Minnesota was faced with a virtual explosion of Indian casino gambling petitions. Since the passage of the Indian Gaming Regulatory Act in 1988, Minnesota has had to negotiate with its many tribes, and eventually the state approved 11 Indian casinos. These casinos were not Class III or full casinos, but they did offer video machines as well as blackjack. Minnesota has become the capital of Indian casino gambling. Once again, the question to be examined is: How did this explosion in casino gambling affect lottery sales and revenue? A crucial difference in this case is that no provision was made for the state to be compensated for any loss of revenue as a result of a decrease in lottery sales. The majority of these Indian gaming halls began operations by early 1993.

The breakdown in Minnesota's lottery sales is quite similar to that in Louisiana. In the 1992-93 period, average Minnesota state lottery sales were divided as follows:

Lotto Sales	Instant Game	Total Lottery Sales per Capita
$.43	$.90	$1.33

These figures show that 68 percent of Minnesota's lottery revenue was dependent on instant game sales, so if casino gambling had a negative impact on this form of lottery sales, then overall lottery revenue would also be adversely affected.

The ARIMA Intervention Analysis for the time series describing Minnesota's instant game sales during this time period shows that the advent of Indian gaming did have a negative impact on instant game sales (Figure 7). While sales of instant games had already been declining, the opening of the 11 Indian casinos during the years of 1992 and 1993 certainly "speeded up" this decline in instant game sales.

Once again, sales of lotto tickets were not affected by the imposition of casino gaming (Figure 8). This game appears to have a small but steady customer base that grows occasionally as jackpots grow, but these consumers do not appear to overlap Indian casino customers in any significant numbers.

There is a key difference between Minnesota's experience and that of the other states that have been examined. Whereas in the previous cases, the state was compensated for its losses in lottery revenue, Minnesota clearly lost revenue as a result of Indian casino gambling. The instant lottery game that had provided 68 percent of lottery revenue was adversely affected. Moreover, Minnesota had not negotiated with the various tribes for any sort of compensation for its loss in lottery revenue. This appears to have been a major mistake on the part of Minnesota public policymakers.

California: Indian Casino Gambling and Lottery Revenues

California also has had to face the prospect of greatly increased Indian gaming. In 1993, five different Indian tribes opened some form of gaming. So far, Indian gaming has been restricted to bingo and off-track betting, but these tribes are now petitioning the state to negotiate with them in order to establish Class III or full casino gambling. Once again, we will examine how the increase in bingo and off-track betting has affected existing lottery sales. The majority of these Indian gaming operations began in mid 1993.

At the beginning of 1993, California's lottery sales had the following breakdown:

Lotto Sales	Instant Game	Total Lottery Sales per Capita
$.76	$.31	$1.07

These figures show that only 29 percent of California's lottery revenue was dependent on instant game sales, so if casino gambling were to have a negative impact, it would have to affect lotto sales significantly.

Figures 9 and 10 show that both instant and lotto lottery sales have been increasing. Obviously, Indian gaming has not adversely affected lottery sales. Ironically, one reason for this might be the notable lack of success of the California lottery in the past. It is certainly the least successful lottery (at least in terms of per capita sales) of the five lotteries examined in this study.

As noted earlier, California is still faced with the question of whether to grant the request of the various tribes to establish Class III casinos. However, California legislators could also choose to legalize casino gambling for private operators such Caesars, Circus, Harrah, or Hilton. As California faces growing financial pressures, state officials are increasingly envious of Nevada's casino revenue, and it appears only a matter of time before they authorize either Indian or privately operated full-scale casino gaming.

Conclusion

Clearly, these results show that states must be quite careful as they go headlong into the casino gambling craze. Every state that used instant games as the building block of its lottery experienced decreases in instant sales as a result of the start of casino gambling. In one case (Colorado), sales of instant games then rebounded somewhat, but not to the level before the imposition of limited casino gambling. Meanwhile, in the two states with unlimited casino gaming, the instant lottery suffered a permanent decrease in sales.

The advent of casino gambling has not affected sales of lotto tickets, but sales of these tickets are becoming increasingly less important in the operations of a lottery. The data also show the difficulty that lottery officials would have in trying to make lotto sales a consistent source of revenue for the state.

This analysis shows that, as states enter the casino gambling arena, they must be willing to sacrifice the most lucrative part of their current lottery operations, namely instant game sales. A state that can still control its own destiny concerning casino gambling needs to take these factors into account: the policies of neighboring states, the state of its own lottery operations, and its long-term revenue needs. Both Colorado and Louisiana decided that the long-term benefits of casino gambling far outweighed the negative effect that these casino operations would have on its current lottery operations.

Meanwhile, states that are faced with the prospect of Indian casino gambling must seek to negotiate a deal with the tribes that will compensate them for the loss of lottery revenue. Clearly, Minnesota did not take into account the negative effect that Indian casino gambling would have on its lottery sales. Some states, such as Connecticut and California, have insisted on being compensated by the tribes that are opening casinos and have actually gained revenue as a result of approving Indian casino gambling.

These results show that states need to develop an overall gambling strategy. As more and more states turn to gambling as a source of revenue, they need to be aware that cannibalization does take place, and hence the revenue resulting from their various gambling operations will not be as great as first projected. The other factor that needs to be taken into account is the casino gambling policies of neighboring states. So far, states such as Louisiana and Connecticut have profited greatly by being the first state in their regions to enter the casino gambling market, but this "success" obviously will decrease once other states decide to enter the market in order to "reclaim" this revenue.

Appendix

Intervention analysis requires the identification of an Auto-Regressive Integrated Moving Average (ARIMA) model which replicates each time series analyzed. In ARIMA notation, a model is specified with two shorthand descriptors (p,d,q) and (P,D,Q). The first element (p) delineates the auto-regressive term, the second element (d) is the degree of differencing required to achieve stationarity, and the third term (q) is the extent of moving average associated with the random shocks. The second notational array (P,D,Q) designates analogous terms, except where these are associated with seasonality. The ARIMA model is tested against observed series until a statistically adequate model is identified. Adequacy of the model is confirmed after an examination of the autocorrelation function and partial autocorrelation function of the series and when a statistical analysis of the residuals indicates that they constitute a time series of white noise (Ljung and Box 1978). When an appropriate ARIMA model is specified, it is used to filter that series. At this point, a dynamic model, consistent with the postulated intervention effect, is formulated. This dynamic model corresponds to the hypothesis, because its formulation specifies the configured change in the level of white noise produced by the intervention. Once formulated, the dynamic model is fitted to the residual series, its parameters are estimated, and each is evaluated using the technique suggested by Box and Tiao (1975).

References

Box, G.E.P. and Tiao, G.C. 1975. "Intervention Analysis with Applications to Economic and Environmental Problems." Journal of the American Statistical Association, vol. 70, no. 349, pp. 70-79.

Ljung, G.M. and G.E.P Box. 1978. "On a Measure of Lack of Fit in Time Series Models." Biometrika, vol. 65, p. 297

Figure 1: Colorado Instant Sales
(1992 - 1993)

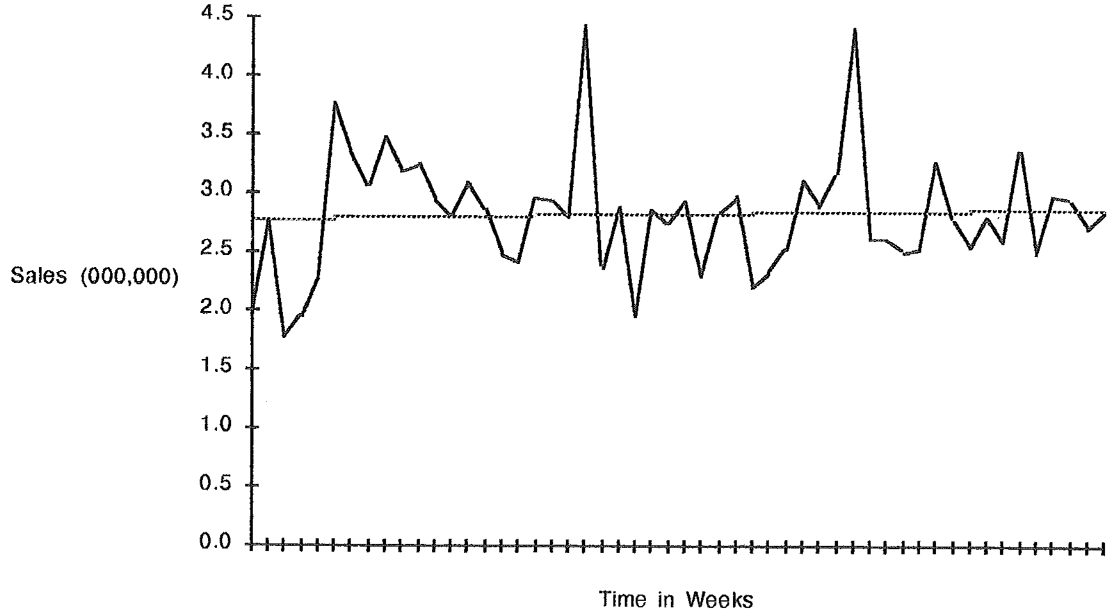


Figure 2: Colorado Lotto Sales
(1992 - 1993)

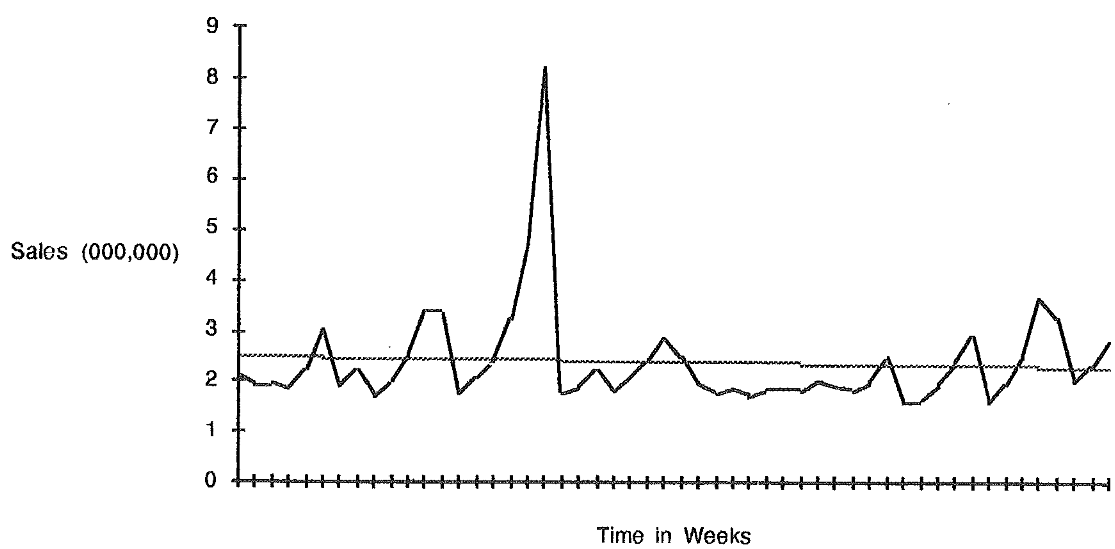


Figure 3: Louisiana Instant Sales
(1992 - 1993)

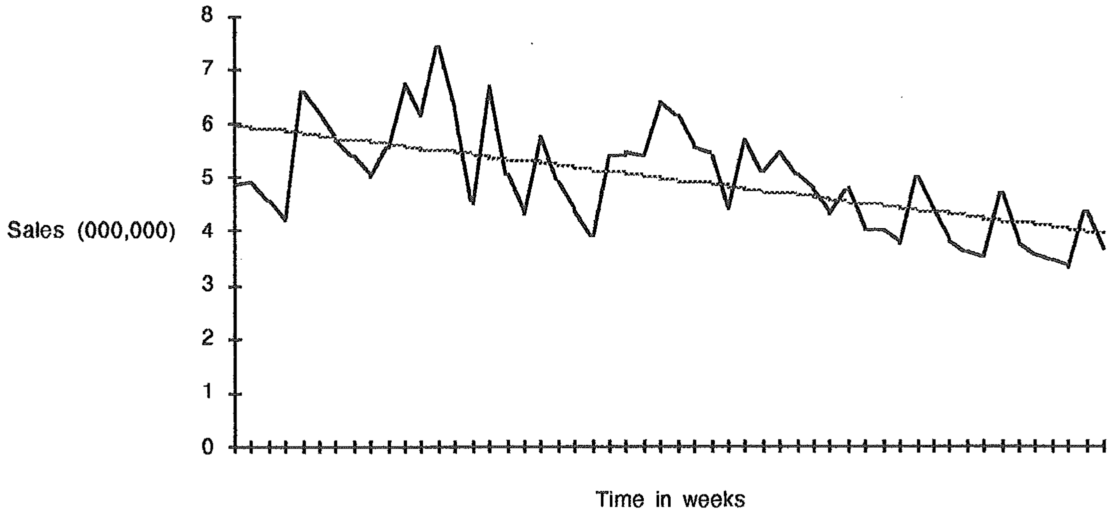


Figure 4: Louisiana Lotto Sales
(1992 - 1993)

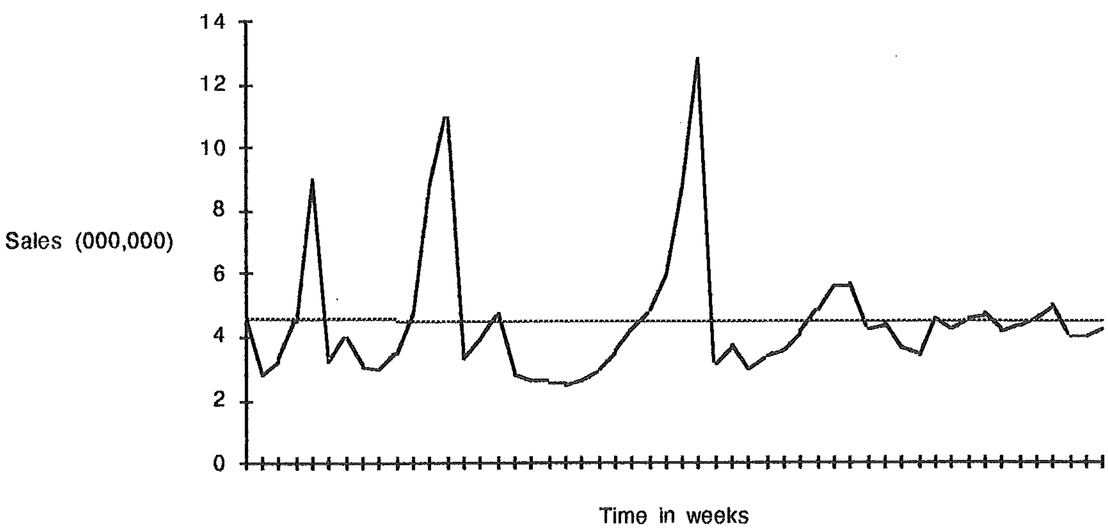


Figure 5: Illinois Instant Sales
(1993)

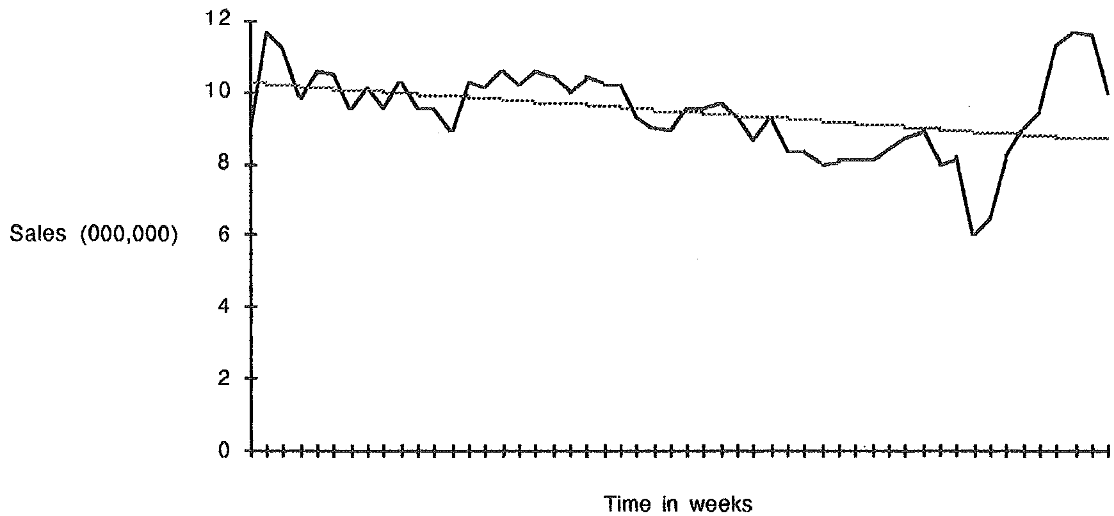


Figure 6: Illinois Lotto Sales
(1993)

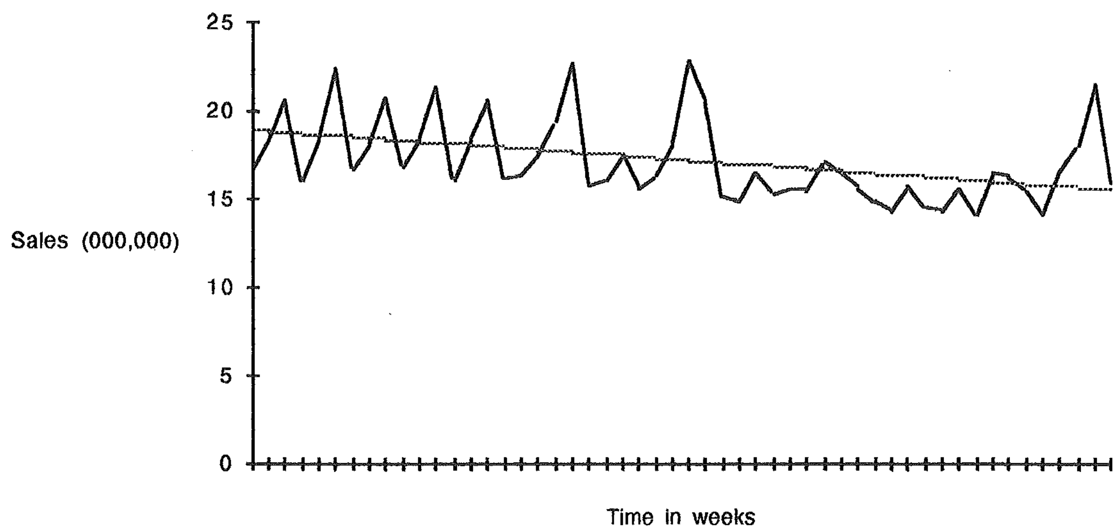


Figure 7: Minnesota Instant Sales
(1992 - 1993)

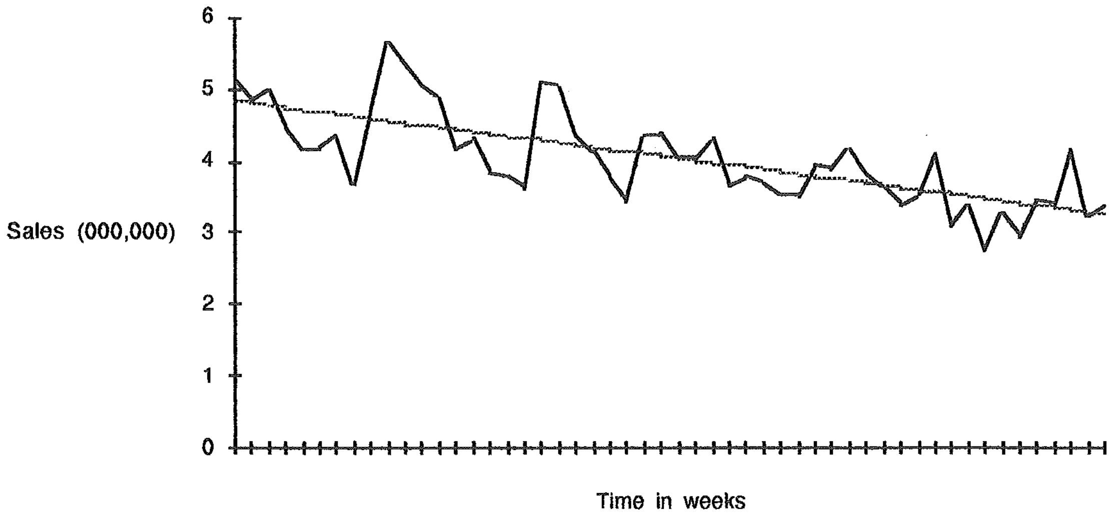


Figure 8 : Minnesota Lotto Sales
(1992 - 1993)

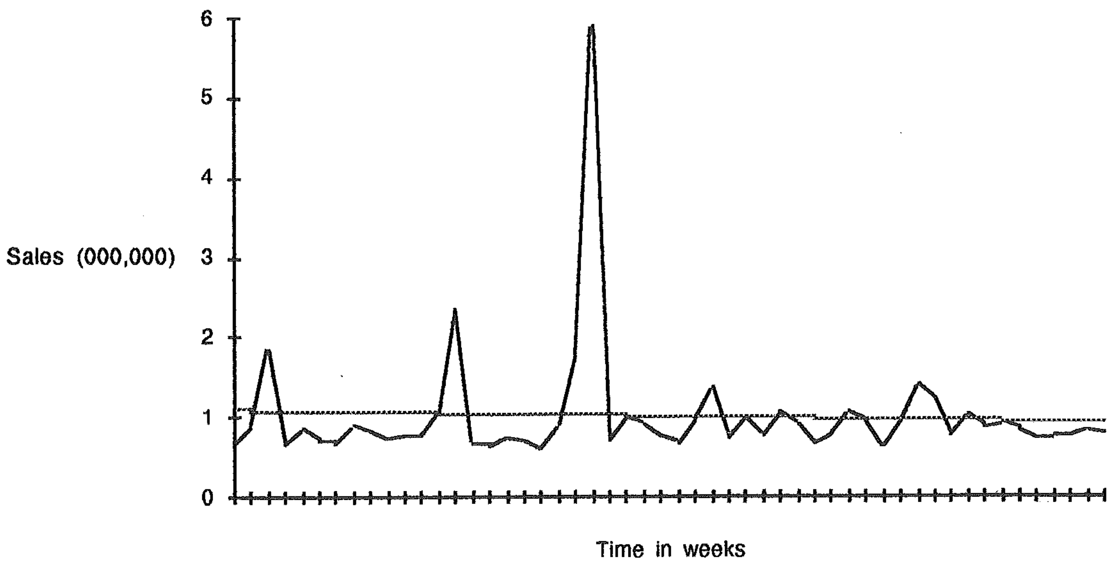


Figure 9: California Instant Sales
(1993)

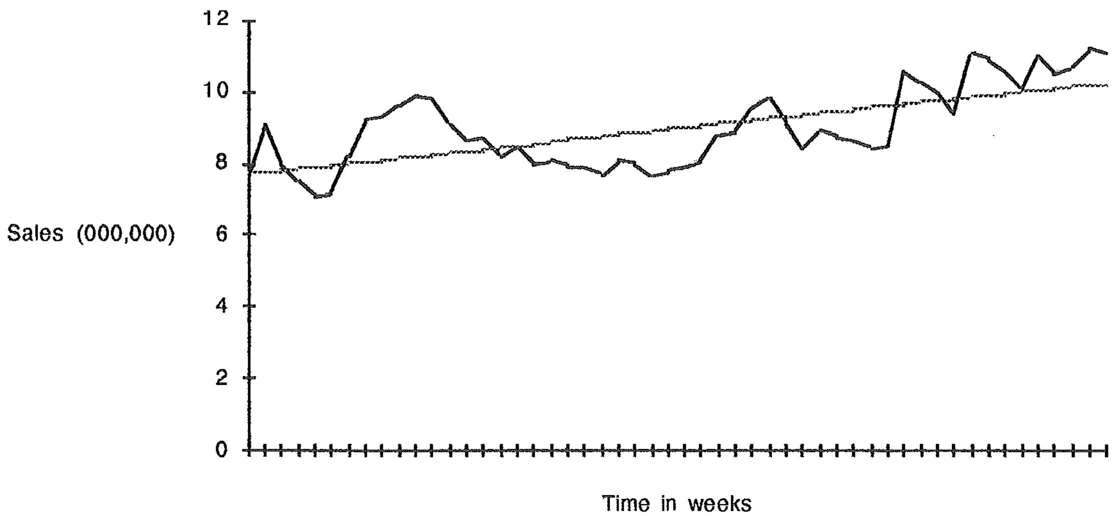
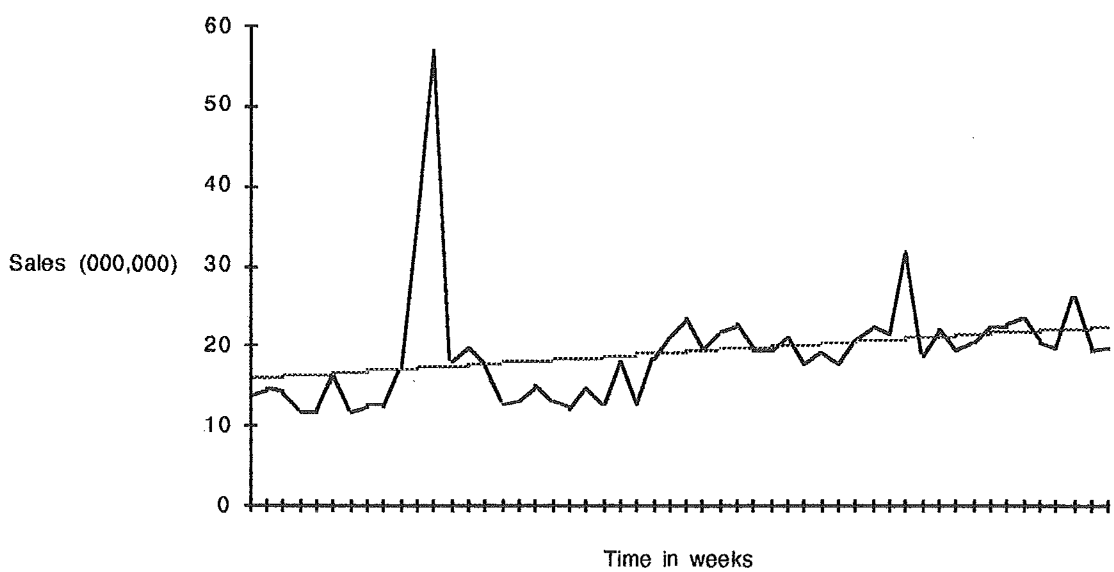


Figure 10 : California Lotto Sales
(1993)



Introduction to Panel III: Social Costs

Helen F. Ladd*

From the perspective of an individual state, the major potential benefit of casino development is the additional revenues or additional jobs that accrue to the state as a consequence of attracting new visitors away from other states. From a national perspective, potential benefits arise, not from moving activity from state to state, but from the legalization of a service that previously was illegal. Economists use the technical term "consumer surplus" to refer to these benefits. Even from a national perspective, we would want to weigh these benefits against costs. These social costs are the subject of this panel's discussion.

The term social costs refers to the costs that casino development imposes on society that are borne neither by the casinos themselves nor directly by their customers in the price they pay to gamble. Frequently cited examples include an increase in the incidence of problem and pathological gambling associated with casino development, increases in crime and the cost of law enforcement, decreased worker productivity and increased business costs, interference with the sound education and development of young people, possible corruption of public officials, involvement of organized crime, traffic congestion, the strain on public services, and the burden of regulation.

These potential social costs have sparked some of the most controversial and emotional exchanges in the ongoing debate about casino gambling. Those who support casino development tend to play down the social costs and to emphasize, instead, the social gains of making available goods and services that consumers value. Opponents of casino development believe the social costs are sufficiently great to offset any economic benefits.

*Professor of Public Policy Studies and Economics, Duke University.

This panel will sort out some of the arguments about the magnitudes of these social costs and their expected distribution across groups of individuals. Three sets of questions should be kept in mind. First, what, in fact, do we know about the nature and the magnitude of social costs of casinos and, importantly, how do we know it? Is our information based just on anecdotal reports or have there been studies using control groups or sophisticated empirical studies? What is the nature of the empirical evidence we have? How valid is it to apply information from our more extended experience with lotteries to what is likely to happen with casino development?

The second set of questions goes one step further, to the relationship between various characteristics of casino operation and the magnitude of the social or external costs. We must consider whether the casino operation is small or large; whether it is in a rural or an urban area; whether we are talking about riverboat gambling or land-based casinos; old, established casinos or newly developed ones; heavily regulated casinos or less regulated ones; and perhaps even the types of games themselves. We need to know more than just the general magnitude of social costs: We need to link up what we know with the characteristics of different types of casino operation.

This leads into the third set of questions: How, if at all, can the social costs of gambling casinos be minimized? Assume for a moment that New England decides to proceed with additional casino development: What ought public policymakers to be thinking about with respect to social costs? They might, for example, regulate the types and the nature of the casinos permitted, or negotiate concessions from the casino operators for higher taxes or payment for most of the needed infrastructure and the additional costs related to problem gambling. A lot of issues need to be addressed as we grapple with the question of social costs, issues important for the general public policy discussion and for the actions that public policymakers in New England will be taking.

Social Costs of the Casino Industry

G. Michael Brown*

Foxwoods Resort and Casino is owned and operated by the Mashantucket Pequot Tribe in Mashantucket, Connecticut. Surrounded by the towns of Preston, North Stonington, and Ledyard, Foxwoods is located seven miles west of Route I95, approximately halfway between New York and Boston. Twenty-two million people live within 150 miles of Foxwoods. By comparison, Atlantic City has 30 million people living within 150 miles. Atlantic City has 12 casinos, while Foxwoods is the only casino in New England.

The Development of Foxwoods

Let me give you some background on the history of this three-year-old project, and an overview of the existing operation. In July 1986, the Mashantucket Pequot Tribe opened a high-stakes bingo hall, built at a cost of $4 million and financed through a loan from the Arab American Bank, guaranteed by the U.S. Bureau of Indian Affairs. In 1988, the U.S. Congress passed the Indian Gaming Regulatory Act, which provided in part that federally recognized Indian Tribes could conduct casino gaming on their reservation if the reservation was located within a state that "allowed gaming by any person for any purpose." After some litigation in the federal courts, which held that the state had an obligation to negotiate with the Tribe in good faith, the State of Connecticut and the Tribe participated in drafting a Compact, which was implemented on February 15, 1992, when the original casino, poker room, race book lounges, and restaurants opened.

The original casino was built at a cost of $60 million, the funds borrowed from Genting Berhad, a publicly traded Malaysian Corporation that operates casinos in Malaysia, Australia, and the Bahamas. The loan

*President and Chief Executive Officer, Foxwoods Resort and Casino, Ledyard, Connecticut.

was secured after applications were denied at 23 American lending institutions. The original facility, which had 125 table games and no slot machines, opened with 2,300 employees.

Phase 2 expansion began 10 days after the opening of the original casino. Since that time we have built and opened two hotels, 12 restaurants, retail shops, a showroom, a health club, convention and meeting rooms, a Cinetropolis entertainment center, a special events arena, and a new bingo hall.

Today, the structure totals 2.5 million square feet, with 592 rooms and suites in two hotels; 12 restaurants, which on an average day serve 17,000 meals; four lounges, and 12,000 square feet of retail space. On the gaming side, we now have 194,753 square feet of gaming space, in which are located 234 table games, 3,864 slot machines, keno, race book, and a bingo hall that seats 3,200 people for bingo and can be converted into an arena with 3,800 seats. This hall was opened by Luciano Pavarotti on August 27, 1994.

Today, Foxwoods Resort employs 9,300 people and sees an average of 45,000 visitors per day. That adds up to 16,425,000 visitors per year. During the recent Memorial Day weekend, new attendance records were set on Sunday, May 28, 1995, when 70,471 people came through our doors within a 24-hour period. Our visitor base is made up as follows: 50 percent from Connecticut, 20 percent from Massachusetts, 15 percent from Rhode Island and 5 percent from New York to the south, with the remaining 10 percent from other areas.

The Social Costs

Social costs are involved in developing any major entertainment facility, including a casino resort. Let me review with you some of the possible social costs related to Foxwoods and explain how we address those potential problems.

When you introduce 16 million people per year into an area, a proportionate increase in crime occurs. Check the statistics on increased crime at Orlando, Florida after Disney World opened. (Note, however, that the crime rates used in the crime index are based on the number of residents, and not on the number of visitors.) Foxwoods operates under a Compact negotiated between the State of Connecticut and the Mashantucket Pequot Tribe, which provides safeguards to ensure the highest level of integrity within the operation and among our employees, and to protect our guests.

Following the format of the "social costs" segment of this conference, I will address and respond to each issue, beginning with the implications of casino development for the costs of law enforcement and regulation and for the adequacy of local services and public infrastructure. Following are the regulatory expenses for the State of Connecticut for the fiscal year ending June 30, 1995:

State Police	
Fees	$2,492,763
Traffic Control	1,151,516
Department of Special Revenue	1,077,325
Liquor Control Board	669,842
Tribal Gaming Commission	2,124,527
Total	$7,515,973
Internal Audit (FY 95 Budget)	$403,902

What are the functions of those agencies? Pursuant to the Compact, the Connecticut State Police have jurisdiction to enforce all Connecticut criminal laws on the Reservation, in and around the Casino. The State Police have access to all locked and secured areas of the gaming facility and may station troopers at the gaming facility to coordinate law enforcement in and around the Casino. The Connecticut State Police may undertake such investigation of gaming employees and non-gaming employees as they deem appropriate and shall also investigate the backgrounds of gaming service companies. They are stationed on Foxwoods property 24 hours a day, 7 days a week.

Under the Compact, the Tribe agreed to establish a regulatory commission to enforce a detailed system of management controls and oversight. The Tribal Gaming Agency, the Mashantucket Pequot Gaming Commission, was created by Tribal Ordinance on February 25, 1992. The Commission has primary responsibility for on-site regulation of the gaming operation and utilizes uniformed inspectors, who are present in the gaming facility during all hours of operation and who are accountable only to the Tribal Gaming Agency. Tribal Gaming inspectors are licensed to the same standard as gaming employees of the State Gaming Agency. The Tribal Gaming Agency must disclose to the State Gaming Agency its program of instructional and on-the-job training and its system of internal organization, including a compendium of all positions for dealers and supervisory positions in each table game. The Tribal Gaming Commission ensures the proper training and qualifications for each person occupying a designated position in the gaming facility. The Commission has approved and adopted standards of operation and management, which are included in the Compact as Appendix A.

The Commission maintains oversight by surveillance, security, cashier cage, credit, and complimentary services logs, which are made available to the State Gaming Agency upon request. The Commission also maintains a list of persons barred from the gaming facility because of their criminal history or association with career offenders, including the Nevada and New Jersey blacklists. The Commission approves the rules of each game and notifies the State Gaming Agency of any changes.

We have met with the State Police, the F.B.I., and other federal, state, and local law enforcement agencies to coordinate a law enforcement strategy that will ensure the casino is as rigorously controlled as any gaming enterprise in the world. The Tribal Gaming Commission has also consulted with state agencies to reach consensus on the resources needed by the state government to adequately police the casino and investigate the backgrounds of casino employees and suppliers.

Under the Compact, tribal ordinances and regulations governing health and safety standards applicable to the gaming facilities are no less rigorous than standards generally imposed by the laws and regulations of the State of Connecticut relating to public facilities with regard to building, sanitary, and health standards and fire safety. Service of alcoholic beverages within the gaming facility is subject to the laws and regulations of Connecticut applicable to the sale or distribution of alcoholic beverages. Connecticut Liquor Control agents work on-site during all hours that liquor is served. The Tribe must provide access from the gaming facility located on the Reservation onto public highways of the State of Connecticut that is adequate to meet standards of the State Traffic Commission. The tribe has entered into agreements with the State Traffic Commission for the provision of such access by the state, including provisions for compensation by the Tribe for costs incurred by the state in constructing such improvements to the public highways, including traffic control signals, as may be necessary.

The costs of all these services, by agreement, are paid by the casino operator, the Tribe. This is not a new idea. In New Jersey, the industry pays the cost of regulation. They pay for the state troopers, the accountants, and the lawyers, for example.

We are located on a rural highway surrounded by 3,200 acres of forest. We have no walk-in traffic. One factor to be considered in designing the physical safety and security of such a resort, and protecting its perimeter, is to ensure that the gaming facility is removed from the urban population.

Questions have been raised about possible increases in business costs, reductions in worker productivity, and higher medical costs associated with a rising incidence of compulsive gambling behavior. We saw the possibility of an increase in the population of compulsive gamblers and took the affirmative step of working with the Connecticut Council on Compulsive Gambling, which last year had a budget of $200,000, the entire amount paid by Foxwoods. No contributions are made to that agency by the State Lottery, jai alai, or the dog tracks. We utilize the services of the Council to instruct our floor supervisors in how to identify compulsive gamblers, and we take action to remove them from the gaming floor.

As legalized gaming expands in this country, the population of compulsive gamblers will increase. The solution is not to restrict or eliminate a form of adult entertainment because a small percentage of the population is incapable of controlling or enjoying that form of entertainment. The solution is to acknowledge the problem and take appropriate steps to assist those who are affected by compulsive gambling and minimize the availability of gambling to them. If it were otherwise, we should stop selling cigarettes and beer, close down all the discos, and bar public attendance at NFL games.

In reference to the adequacy of local services and public infrastructure, Foxwoods Resort Casino put in a state-of-the-art water filtration and sewage treatment plant. We provide emergency medical services, Tribal police, and Tribal fire department services. Since they were established and upgraded, these services have formed mutual aid cooperative agreements with surrounding towns for first responders. We provide a Tribal tort court system to handle claims against the Resort. Improvements were made to Routes 2 and 214 at the request of the State Traffic Commission in the amount of $13 million, all at the expense of the Tribe.

Foxwoods' Contribution to Employment and Tax Revenues

The week Foxwoods opened, in February 1992, Electric Boat Division of General Dynamics laid off 2,000 people. We put 2,300 people on the payroll; 1,750 of them are still employed at Foxwoods. Our employee benefit package provides for free medical insurance, free pharmaceuticals, free eye care, 401K plans, short-term disability coverage, paid sick leave and vacation time, and an extensive employee assistance program, utilized by about 5 percent of our employees. We also provide free meals to all 9,300 employees. Some of those services might otherwise be provided as municipal services, at taxpayer expense, if those people were not employed by the Mashantucket Pequot Tribe. Eighty percent of our employees are Connecticut residents, 19 percent are from Rhode Island. Foxwoods' total 1994 annualized payroll cost was $206,630,786, of which health and other paid benefits amounted to $62,827,258. We spent $105,789,078 on goods and services in fiscal year 1994 and paid the following taxes:

State:	
State Unemployment Tax	$2,591,141
State of CT Sales Tax	2,056,175
State of CT Sales Tax - Two Trees Hotel	337,090
Boxing Tax	46,261
Room Tax - Two Trees Hotel	887,585
Total	$5,918,252

Local:

Property Tax - Two Trees Hotel	$23,932
Real Estate Tax - Two Trees Hotel	205,393
Real Estate Tax - Harris Building	60,730
Total	$290,055

Federal:

FICA and Medicare - Employer Cost	$12,858,737
Federal Excise Tax	14,708
Federal Unemployment Tax	579,282
National Indian Gaming Tax	40,255
Total	$13,492,982

We are the largest single contributor to the State of Connecticut's budget. In the fiscal year ending in September 1994, we made contributions of $120,548,838 from slot machine revenue-sharing to the State of Connecticut. This payment was made under a separate Memorandum of Understanding between the State and the Tribe, signed January 13, 1993, whereby the Mashantucket Pequot Tribe agreed to pay the State $100 million in exchange for the exclusive right to operate slot machines at Foxwoods. The State of Connecticut is free, at any time, to introduce slot machines elsewhere in the state, but if that happens, the Tribe discontinues the slot revenue-sharing. The revised Slot Memorandum of Understanding calls for a payment to the State of Connecticut of 25 percent of slot revenues or a guaranteed minimum of $100 million as long as we enjoy exclusivity. An interesting bit of information: Since becoming part of Foxwoods gaming in January of 1993, slots have paid back to our gaming guests over $9.5 billion, won $806 million, and generated $230 million in revenue for the State of Connecticut. Just part of the "social" cost of doing business as a casino.

We also absorb social costs that have nothing to do with the gaming industry. The Mashantucket Pequot Tribe is the major sponsor of the Special Olympic World Games beginning next week--a financial donation of $2 million to $3 million. The Smithsonian Institution has received $10 million worth of generosity from the Tribe. We raise money for, and contribute to, the March of Dimes, the YMCA, and literally hundreds of other charitable organizations.

Today, some form of legalized gaming is permitted in every state except Utah and Hawaii. I would hope that we have come to a level of intellectual honesty where the scare tactics of assuming that increased crime rates, organized crime, drugs and prostitution must be "by-products" of legalized gambling are not seriously advanced to an intelligent audience.

Findings of Recent Studies of the Effects of Gambling

Robert Goodman*

This kind of meeting is an important opportunity for people on all sides of the issue to discuss, in an open way, the real implications of the expansion of gambling in the New England region and in the United States. I want to talk briefly today about our study, what it is, what it is not, and how it has been characterized.[1] Some people have described it as the most definitive study of gambling in the United States. It is not that. I have been characterized as a person who is morally opposed to gambling. That also is not true. I have gambled in casinos and elsewhere.

When the study was released last year, I said my hope was that it would become obsolete within a year. Essentially what we did was collect and evaluate what we considered to be the relevant research available about the social and economic impacts of the recent expansion of gambling in the United States. Our hope was to stimulate debate and to encourage more research, especially independent research, which could be relied upon for a better understanding of the actual impacts that accompany gambling expansion. In terms of debate, especially, the study succeeded beyond my wildest expectations.

At first, I expected our study might simply sit on a shelf somewhere. Its notoriety probably has much to do with the confluence of its publication and the increased debate about using gambling as a form of economic development. And indeed, much more research is going on now.

*Lemelson Professor of Environmental Design and Planning, Hampshire College.

[1] Professor Goodman recently completed a two-year study of the economic impact of legalized gambling in the United States, funded by The Ford Foundation and The Aspen Institute, and issued a report, Legalized Gambling as a Strategy for Economic Development. Currently he is conducting a study of the economics of gambling in Massachusetts, funded by the U.S. Economic Development Administration (Ed.).

You have heard about some of it here today and probably you will hear more about it in the future. This work is being carried out by people like Earl Grinols at the University of Illinois, Don Cozzetto at the University of North Dakota, Howard Shaffer on this panel, Bill Thompson at the University of Nevada at Las Vegas, and others.

These research efforts are extremely important and I welcome them. I also welcome criticism of our own work, so long as this criticism is about facts, as opposed to invective and personal attacks. In this respect, I should like to publicly thank both John Mullin, Head of the Department of Landscape Architecture and Regional Planning at the University of Massachusetts, and David Scott, Chancellor of the University, who have supported my right to do the Massachusetts study in the face of unprecedented attacks on it by the gambling industry and some legislators.

The U.S. study looked at the expansion of gambling in terms of who wants it, how we actually get or do not get into it, and what the impacts have been. There were three major findings (actually many others, but I have only a short time here today). First, no popular movement is working for the expansion of gambling for the sake of gambling. That is, we could find popular groups and organizations arguing for the legalization of marijuana, against the use of fur coats, for and against the distribution of condoms, and so on. But not a single popularly based organization in the entire United States was arguing for the expansion of gambling because they wanted more gambling opportunities.

The second point is that gambling involves very serious economic and social costs that have not been considered. Gambling has been an important economic benefit to many tribal communities, and you have heard something about that here this morning. But the costs of compulsive gambling to the state's private and public sector economies are enormous. And gambling also cannibalizes dollars from other existing nearby businesses. These substitution effects have not been considered in most of the research--research that for the most part is carried out by the gambling industry itself or by consultants who work for it. This is quite all right for the gambling industry. The problem is, that same research is being relied upon by government leaders, as well as the media, for their analysis and decisionmaking,

The third, and probably in some ways most important finding is that the expansion of gambling is having a devastating impact on our political processes. In many states, it is fundamentally changing the role of government.

Public Opinion about Gambling

On the first point, about where support for new gambling operations is coming from, a U.S. Gallup poll in 1993 showed that close to 60 percent of the population was against the expansion of casinos. If you look at statewide votes throughout the United States, casino gambling has been overwhelmingly rejected. I am not talking about individual cities, where desperate economic conditions can lead to a positive vote. But even many economically depressed communities, including Indian communities, have voted against the expansion of gambling when given an opportunity to do that.

The recent examples of Rhode Island, Florida, and other states in last November's elections show a clear rejection. And in many cases where people have had gambling for a while, reaction against it has grown. A poll in Louisiana at the beginning of this year indicated that two-thirds of those questioned were against the expansion of gambling in that state. Actually, the gambling industry's own research shows the same results. Harrah's Casinos, a division of the Promus Co., published the results of a survey in 1994. The question was asked, "Do you think casinos are an acceptable form of entertainment?" The acceptance of casinos, which they said was 51 percent in 1993, had gone down a relative 8 percentage points from the year before. The drop was even greater in some parts of the country, especially in the South, where gambling had been expanding quite rapidly. A more recent poll by the G-Tech Corporation, another gambling industry firm, showed similar results.

Economic and Social Costs

Clearly, there is no popular movement working to expand gambling. Expansion has been the result of using casinos as an economic development strategy, that is, in an attempt to create jobs and bring in public revenues. This brings me to my second point about the negative results. We asked ourselves the question, "Does it do that? Does it generate jobs and revenues?" What we have found in the available research is that there are clear substitution effects by which the local economy is being cannibalized. This morning, Earl Grinols talked about this shift. In a report completed just last year, the Illinois Economic and Fiscal Commission, a bipartisan group of the Illinois Legislature, studied the riverboat communities in their state and found that, with the exception of the increase in jobs in the casinos themselves and in the industries directly related to them, there was no net benefit to those communities. There have been a number of other similar findings. On this matter, I also refer you to Richard Syron, a former president of this Federal Reserve Bank, who said about the expansion of gambling two years ago, "You're just taking money from one area and putting it somewhere else. That's not an economic strategy."

Using previous studies, we identified enormous costs related to increases in problem gambling. The minimum estimated average cost to the combined public and private sector economies of a state is about $13,200 per problem gambler, per year. We have also seen, as Earl Grinols mentioned, cost estimates upward of $30,000. We recently looked at Massachusetts. Taking our lowest possible cost figure of $13,200, an increase in problem gambling of just one-half of 1 percent of the adult population in this state means a yearly minimum additional cost of $220 million.

Impact on the Political Process

I will talk briefly in closing about what is perhaps our most significant and disturbing finding--the changing role of government--and raise the question, Do we want this role for our government? We now have governments that, in response to no popular movement of their citizens, are aggressively expanding and promoting their gambling offerings. They claim to do this as a way to avoid raising taxes and to create jobs. We have governments that do focus group and behavioral studies and carry out research projects, all designed to try to get people to gamble more. They have, in essence, become predators upon their citizens.

I have no problem with governments doing behavioral studies. In fact, I wish they would do more studies on the reasons for the growth of violent behavior and other problems of that sort. But the idea that governments commission psychological studies to try to get people to gamble more is somewhat problematic, to say the least.

There is also the problem of influence peddling. Earl Grinols spoke earlier about some of the political lobbying techniques being used by the gambling industry. He described the case in Illinois of $20 million being offered by lobbyists for obtaining casino licenses. Lobbying campaigns for casinos have been the largest ever in the histories of many states. You heard this morning of casino promoters spending six to seven times the amount spent by their opponents in the case of the state of Vermont.

What we should be looking for from our governments, I believe, is not an involvement in the illusion of economic development, but more involvement in the reality of protecting jobs, minimizing needless public spending, and stimulating real economic development. Rather than becoming predators upon the citizens of their states, governments should help expand their economic opportunities.

Perspective of the Attorney General of Massachusetts

The Honorable L. Scott Harshbarger*

As Attorney General, I have the opportunity to consult with other Attorneys General on a variety of issues. On the topic of gambling, the response from the other Attorneys General has been: "Don't do it." Each Attorney General who has faced the issue of casino gambling has cautioned me that there is a range of public safety, regulatory, and social costs that are never addressed before the introduction of casino gambling, and the promised economic benefits are greatly exaggerated. Moreover, the advent of casino gambling is an important quality of life issue for Massachusetts: It will inalterably change our communities and the legacy that we leave our children.

I will concentrate my remarks on the public safety and social issues raised by casinos. I will endeavor to relate to you some of the information that I have acquired through my interaction with other members of the law enforcement community, in hopes of helping people realize the serious issues that we will confront as casino gambling attempts to make its way into our region.

Street Crime

One of the most noted consequences of casino gambling has been the marked rise in street crime. Across this nation, police departments in cities that maintain some form of casino gambling have recorded surges in arrests due to casino-related incidents. In many cases, towns that had a decreasing crime rate or a low crime rate have seen a sharp and steady growth of crime, once gambling has taken root. The most storied turnaround is, without a doubt, Atlantic City. Atlantic City's crime rate had been *on the decline* before casinos came to New Jersey. However, between 1977 and 1990, a 230 percent increase in crime occurred in

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Atlantic City, including:

- a 156 percent increase in rapes;
- a 316 percent increase in aggravated assaults; and
- a 451 percent increase in the number of larcenies.

Three other states that have legalized, land-based casino gambling, Nevada, Colorado, and South Dakota, have similar stories. After gambling came to Cripple Creek, Colorado, the town police chief noted that emergency service calls to his department went from 40 calls a month to 45 calls per day. Driving-under-the-influence arrests increased from four per year to one per week. The story was much the same in Deadwood, South Dakota, where criminal cases rose from 1,259 to 3,295 during the three years after gambling was introduced to the area. And in the heartland of American wagering, Laughlin, Nevada (a town of only 6,000), 1,228 of their 2,198 criminal calls in 1988 were attributed to casinos. The number of calls has increased steadily since gambling was introduced.

The indications are that Ledyard, Connecticut, is following the trend. In an article three weeks ago, The Boston Globe reported that Ledyard's crime rate has doubled each year that Foxwoods has been open. Arrests for forgery, bad checks, credit card fraud, vandalism, drunken driving, and the like rose from 299 in 1992 to 496 in 1993 and 1,155 in 1994. The area around Ledyard experienced one case of counterfeiting in the year before the casino opened; last year 98 cases were reported. According to the Secret Service, this is because the casino is "an obvious place" to try to pass counterfeit money. Retailers in the Ledyard area reportedly are now unwilling to accept bills over $20.

While the elevation of criminal activity cannot be attributed solely to the nature of casinos and is due in part to the increased numbers of visitors, an increasing number of crimes are being committed on casino property. In fact, in one year, Atlantic City Police Department crime statistics showed that 67 percent of all crimes in the city were committed within the confines of the casinos. Unfortunately for the host state, the fact that the crime occurs on casino property does not mean that the state does not pay. On the contrary, the taxpayers pick up the cost for police, prosecutors, judges, probation, and prisons.

The most distressing aspect of these crime waves is that they extend beyond the petty larceny and writing of bad checks that make up a majority of the incidents; prostitution, youth gangs, and street-level narcotics dealing followed gambling into Atlantic City. That trend is not restricted to Atlantic City but has been recognized by law enforcement agencies in other casino cities. The rise in drug trafficking, youth gangs, and prostitution is not surprising, given that casinos are magnets for individuals with pathological gambling disorders. And given that 40 to 50 percent of all compulsive gamblers are substance abusers, drug distributors are able to sell to customers who not only are willing to buy but have disposable income.

The rise in prostitution is also a function of disposable income. In Ledyard, Connecticut last October, an Everett, Massachusetts man was arrested for running a prostitution ring just outside the casino. He had started the Ledyard "massage parlor" a few years after Foxwood opened.

Again, the point is that none of the casino proponents ever mention these costs or ways to address the problem.

Organized Crime

Apart from basic, street-level crime, organized crime is a second danger that accompanies casino gambling. While proponents might argue that organized crime's connection with casinos stopped with Bugsy Siegal in Las Vegas, the facts do not bear that out. In 1994 in Louisiana, 17 individuals associated with the Marcello, Genovese, and Gambino crime families were indicted for RICO violations for profit-skimming through video poker machines that had recently been legalized.

The attractions of casinos for organized crime members are many:

- Money laundering--Casinos are a perfect medium for exchanging large sums of cash acquired through loan sharking, prostitution, drug trafficking, and the sale of stolen property.

- Sports booking--Casinos and sports tables provide bookies with a pool of potential "numbers" bettors and sports wagerers who may be looking for better odds or a larger pot of winnings.
- Support services--While strict regulation and licensing may keep organized crime's connection with the casino itself to the minimum, mob infiltration of the construction industry and support services such as those providing food, linens, and liquor has been noted by both former U.S. Attorney William Weld and current U.S. Attorney Donald Stern.
- Profit-skimming--The high volume of transactions during a single night of gambling at a casino provides the perfect cover for skimming small amounts from table winnings. A moderate 40-table operation can provide as much as $5 million in hidden revenue.

Public Corruption

In nearly every state that has casino gambling, instances of public corruption have occurred. No tale is more telling than the practices of individuals involved with casino regulation in New Jersey. As then-U.S. Attorney William Weld cited, public corruption is a "natural corollary" of legalized casino gambling. Then-Deputy U.S. Attorney Mark L. Wolf noted:

> within the five years after casinos came to Atlantic City about 50 local public employees and officials were reported to have real estate transactions with casinos, own stock in them, or have other financial ties to them. These individuals included the chief of police, the city commissioner for public safety, and five of the nine planning board members. A few weeks before a prohibition against hiring public officials went into effect in New Jersey, 150 state and local officials left for gambling industry employment.

When a state, city, or town agrees to allow legalized casino gambling within its borders, not only must the jurisdiction prepare for a possible rise in street-level and organized criminal activity, but it must also prepare to deal with the challenges these groups will make to the existing political structure. In Mississippi, for example, after riverboat casinos opened, the Gambling Commission lost five Executive Directors in 15 months. All of them had been lured away by the large salaries offered by the casinos. The same happened to members of the local police force, elementary school teachers, and the local librarian. In Wisconsin and South Dakota, the advent of casino gambling "turned politics upside down," according to their Attorneys General; the casino lobbyists and the casino-related bills flooded the state houses.

Law Enforcement Cost

The easy response to these problems is that, by increasing the number of police officers or allocating more money for law enforcement agencies, the crime problems can be averted. To local officials prone to give in to this quick-fix solution, I would point to the example of Atlantic City: Recognizing the dramatic increase in crime, Atlantic City increased the police officer-to-inhabitant ratio twofold and their budget threefold. Nevertheless, since these increases, the crime rate has nearly tripled.

Apart from having to make increased outlays for the operation of local law enforcement agencies, cities and towns will have to absorb other law enforcement expenditures such as the costs for prosecution and incarceration. The City of New Orleans' commissioned study on gambling revealed that the cost of increased criminal activity from one casino was just under $5 million. The study projected that increased legalized gambling opportunities in the region could introduce an additional 10,000 criminal cases, at a cost to the city of $1.4 million.

Gambling comes with high administrative and regulatory costs as well. The State of New Jersey expends $57 million just to regulate casino activity. They have 300 state troopers and over 30 Assistant Attorneys General working solely on casino investigations.

The question for elected officials and policymakers is whether the supposed benefits have taken into account all of these costs.

Compulsive Gambling

The foregoing cost estimates do not include the other social costs that the city and state will have to bear. The advent of casinos in any city signals an increase in pathological gamblers. Not only will the host city see a rise in the number of compulsive gamblers due to the tourist influx, but it will, more importantly, witness an increase in problem gambling in its native population. Several studies, including Professor Robert Goodman's, suggest that problem gambling is a function of the number of gambling opportunities available. Anyone who doubts this should contact Gamblers Anonymous and ask where their largest offices are located. In Atlantic City alone, Gamblers Anonymous chapters have increased from 5 to 47 since the passage of the casino referendum in 1977.

Compulsive gambling is not a problem to be taken lightly. It is this country's third largest addiction and affects between 1.5 and 6 percent of the adult population and 8 percent of the teenage population. Professor Goodman provides estimates in his study that the cost to the public (accounting for lost wages, arrest, cost of prosecution, and so on) is $13,200 per compulsive gambler per year. Even if we assume Massachusetts has *below* the minimum range of compulsive gamblers, at around 1 percent, the cost to the Commonwealth would be several hundred million dollars per year. The most frightening example of how costly this addiction can be is found in the study done by Rachel Volberg on gambling in Connecticut, which showed that the costs of gambling (taking into consideration arrest, prosecution, treatment, prevention, and the like) ran at one and one-half times more than the benefits (total gambling revenues).

Conclusion

I hope that the foregoing will start people thinking about the true costs of casino gambling and whether casinos are really the solution to our fiscal woes. We must continue to question how casinos will affect our communities. What will be the increase in street crime? Will organized crime take root? Will there be an unbearable strain on city services? What will be the cost to the community of pathological gambling? Will any benefits outweigh the fiscal and social costs? In sum: What will be the effect on the quality of life in our cities and towns if casinos come to Massachusetts?

Let us learn from the keno debacle. When I and other public officials suggested studying the possible problems with keno, no one listened, no one tried to ask any questions. Instead, the legislation authorizing keno was rushed through the Legislature, signed by Governor Weld, and aggressively implemented, without any study or regulation. Eighteen months later we are beginning to see the problems with keno--especially how it has changed the quality of life in some neighborhoods--and people are calling for a moratorium. We can put a freeze on keno, but you cannot unplug casinos.

My hope is that we err on the side of caution and avoid the problems that other states have experienced. I would not like to see Massachusetts added to the growing list of states that have confronted the gambling giant and lost.

Perspective of the Attorney General of Rhode Island

The Honorable Jeffrey B. Pine*

I view casino gambling as an environmental issue. What impact would casino gambling have on Rhode Island's living environment? As the top law enforcement official in the state, I remain concerned about the safety and security of our citizens and young people.

Casino gambling is not the cure-all for any economic problems, nor should it be the basis for long-term economic planning. It feeds off people who can least afford to lose the money--people on public assistance, the unemployed, and senior citizens. Not everyone is a winner, except for the casino. Consequently, gambling can have direct, negative impacts on families, on privately owned businesses, and on our young people.

We do have gambling in Rhode Island--keno, video poker, dog tracks, and jai alai, for example--but efforts to make the jump from these accepted forms of gambling to casino gambling have been voted down consistently in various locations. Rhode Island voters oppose casino expansion, both Indian and non-Indian sponsored, having voted down six state and local referenda on the issue in 1994. Furthermore, we amended our state constitution recently to require the voters, not just the legislature, to approve any casino gambling in our state. A proposed casino on tribal land in Charlestown, Rhode Island, under an alleged compact signed by former Governor Sundlun, has been challenged on legal grounds as beyond his authority as governor to bind the state, a violation of the separation of powers doctrine.

Since the opening of the Foxwoods Casino, crime has increased in neighboring communities. Theft, larceny, forgery, counterfeiting, vandalism, drunk driving arrests, and domestic violence all have risen. In neighboring North Stonington and Preston, local police report a sharp increase in larcenies, bad checks, credit card fraud, shoplifting, and

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prostitution. Assaults and car theft have doubled in just the past three years in these towns.

These increases in crime have not been confined to Connecticut but have extended to neighboring Rhode Island, my jurisdiction. In Westerly, a beautiful seaside town, police report an increase in offenses such as shoplifting and burglary, as well as an increase in juvenile crime and domestic violence. The police associate the increase in some of these calls with the opening and expansion of the Foxwoods casino. This demonstrates the consequences gambling can have on the family: One of the most important social costs we must pay is the effect on the children and spouses who must live with the problem gambler.

A bit closer to Foxwoods, in the small community of Hopkinton, Rhode Island, police report an increase in drunk driving charges and the type of domestic complaints Westerly has experienced. Here the problem is more complicated, as local and state budget constraints make it impossible for these towns to increase the size of their police departments, despite the increases in criminal activity since Foxwoods opened.

A casino affects the local work force as well. In a poor county in Mississippi, the opening of six riverboat casinos brought 6,500 jobs, although many of them paid low wages. But local activists now claim the casinos have made it difficult for low-income families to find affordable housing--they are priced out of the market. The increased tax revenues from the casinos have been spent on new roads and improvements to the local high school and hospital, necessary changes with new development. The number of people who have failed to pay their rent or bills has doubled, however, and drunk driving arrests are up by almost 500 percent. Furthermore, we have all heard real-life stories, about the 43-year-old poultry worker who lost $20,000 in three months at the slot machines, or the successful businessman who gambled away a quarter of a million dollars: a home, two cars, and $60,000 in retirement savings. Make no mistake, the compulsive gambler is a real issue in this entire matrix, bred by the increase in access to casinos that not only will result in terrible individual stories, which have a devastating impact on families, but also will result in other economic difficulties such as reduced labor productivity and increases in white collar crime, violence, and crime within the workplace.

Concern is also growing about saturation of the market, about casinos overbuilding and falling into bankruptcy. The industry has demonstrated a tendency to overbuild. What happens, then, to those jobs and those families who have been affected, to the communities that have experienced dependence on the gambling industry? As my colleague Attorney General Harshbarger has urged, before you go forward, consider not only the short-term impact but also the effect over the long term. I would predict that any state that seeks to develop economically on the back of casino gambling will see its problems only multiply in the years to come, as the trend goes the other way.

Finally, we keep hearing about how successful Foxwoods Casino is, making millions of dollars a day. That may be true, but we must think seriously about the consequences of this success, the impact it has had on the communities and families of Connecticut, Rhode Island, and elsewhere. The question for casino owners and those who will decide whether to allow a casino in the community is, Just how are we going to measure success? What is its definition in these times? At what cost to society will this so-called success be achieved?

The Psychosocial Consequences of Gambling

Howard J. Shaffer,* Matthew N. Hall, Jennie S. Walsh and Joni Vander Bilt

During the past decade, the proliferation of American gambling has been extraordinary (Eadington 1992). In addition to the recent availability of riverboat, Native American, and urban casinos, the lottery has become a staple of American gambling. In spite of warnings from scholars (Eadington 1992; Shaffer 1989) and social policymakers as to potential adverse consequences, the lure of state-sponsored gambling's capacity to generate revenue without requiring a tax has shifted American morality not only to tolerate but to endorse legalized gambling. Between 1974 and 1992, the total amount of money legally wagered nationwide increased from $17.3 billion to $329.9 billion (Christiansen 1993). Between 1975 and 1985, the national per capita sales of lottery products alone increased from $20 to $97 (Clotfelter and Cook 1989). As of 1993, Massachusetts had the second highest per capita lottery sales in the country, with an annual average of $335 per person (International Gaming and Wagering Business 1995).

Given the increasing access to gambling in general and state lotteries in particular, public health researchers, clinicians, and policymakers have the opportunity to begin studying the impact of legalized gambling on the development of children and adolescents. Currently, there is a paucity of scientific research focusing on the psychosocial consequences of gambling, particularly among youth. This article will provide basic information about the extent of gambling

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This research was supported, in part, by funds provided by the Massachusetts Council on Compulsive Gambling, a grant from the National Institute on Drug Abuse (#1R25DA0928801), and a grant from the Center for Substance Abuse Treatment (#1U98TI00846). Please send any correspondence regarding this article to Dr. Howard J. Shaffer, Director, Division on Addictions, Harvard Medical School, 220 Longwood Avenue, Boston, Massachusetts 02115.

activities and some of the social and psychological consequences that accrue to children who gamble.

Shifting Patterns of Gambling: The Social Setting

Almost every state now obtains revenue from some form of gambling. Whereas the state once restricted gambling on moral grounds, the state now endorses and publicizes gambling for economic reasons. Initially, policymakers focused only on the perceived benefits of legal regulated gambling. Although gambling is still seen as an entertaining recreational activity, numerous studies show the serious consequences of addiction to gambling (Lesieur and Rosenthal 1991). As the popularity of legalized gambling grows, greater attention is being directed to the public health risks and the economic, legal, and social costs of expanded gambling (Eadington 1994).

Now that the social costs of gambling are being recognized, states should seriously consider how the costs and benefits of state-sponsored gambling compare to the costs and benefits of other alternatives. For example, when a state is interested in increasing revenue and economically revitalizing a geographical area, building a casino is a serious consideration. However, few people would see legalizing prostitution or psychoactive substance use as revenue-raising alternatives, although these options are legitimate possibilities in this country. A minority of states have legalized these activities in one form or another to resolve economic and fiscal affairs, but the majority of states have not, because of moral objections. In fact, legalizing and expanding gambling is a similar proposition: Recognized social costs are tied to the economic gains.

To identify and measure the social costs of gambling, carefully controlled studies must be conducted. Although researchers have conducted prevalence studies and literature reviews (for example, Lesieur 1989; Volberg 1994; Volberg and Steadman 1988), there are almost no carefully controlled studies in the field. In addition, this relatively new field of study has no standard nomenclature, necessary to communicate the precise nature of gambling problems: The literature is filled with references to pathological gambling, compulsive gambling, problem gambling, and probable pathological gambling. In different research publications, the same terms sometimes mean very different things. In an effort to unify the field, Shaffer and Hall (in press) conducted a meta-analysis of youth prevalence studies and developed a new guide to help resolve the conceptual confusion and help researchers describe more precisely the continuum of gambling problems.

A Conceptual Guide to Gambling Nomenclature: The Five-Level System

Shaffer and Hall (in press) developed a five-level system to distinguish the various levels of gambling problem severity. The first level (Level 0) consists of those people who have never gambled. Level 1 consists of those who do not have any problems associated with gambling. Level 2 gamblers, sometimes called "at-risk" or "in-transition" gamblers, are those who have some subclinical level of problems associated with their gambling. Level 3 gamblers can be classified as gamblers whose behavior meets a level of pathology according to one of the many diagnostic coding systems. Level 4 gamblers -- a subset of Level 3 gamblers -- are those who meet some diagnostic code and also are willing to enter treatment for their gambling problems.

Shaffer and Hall also developed a meta-analysis of all the youth prevalence studies done in North America up to the time their article entered the publication pipeline. By aggregating all of the different methods and criteria used to classify respondents, this study generated estimates of the gambling problems among adolescents throughout North America.

Level 1 respondents, those who experience no symptoms, range from 77.9 to 83 percent[1] of the young people studied, regardless of where in North America they live or which diagnostic criteria are used. The data reveal that the majority of adolescents do not experience psychological or social symptomatology.

Level 2 gamblers represent a group of young people who rarely gain the attention of the general population. Level 2 gamblers -- those

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[1] This range represents a 95 percent confidence interval.

people who have some symptomatology but do not meet the diagnostic code -- can be moving toward or away from more severe gambling problems. Within a 95 percent confidence interval, this group is found to consist of 9.9 to 14.2 percent of young people. Presumably, these young people who have some gambling problems but are not identified by a diagnostic screen are distracted from their homework, family chores, or social activities because of their gambling: They are not fully engaged in the kinds of things that ultimately would lead them to make scientific, professional, or other contributions to society. Society can no longer afford to pay attention only to those few people diagnosed as pathological gamblers, and then dismiss them because their morals are considered corrupt. We must also attend to gamblers who have symptoms that compromise their ability to experience a productive and satisfying life.

A 95 percent confidence interval reveals that between 4.4 and 7.4 percent of adolescents can be classified as Level 3 gamblers, those who can be classified as "compulsive" or "pathological" gamblers. Only a minority of young people, about 1.7 percent, enter treatment (Level 4). The economic costs associated with gambling cannot be estimated with precision because the vast majority of adolescent gamblers have not entered any treatment system; therefore, they remain to be evaluated. Since their gambling-related behavior patterns remain unknown, the cost to society also is difficult to estimate.

Recent Prevalence Data on Adolescent Gambling and Substance Use

Two recent studies conducted on Massachusetts adolescents examined the levels of involvement in various illicit activities, including the lottery (Shaffer 1994; Shaffer, Walsh, Howard, Hall, Wellington, and Vander Bilt 1995). Figure 1 reveals that, of six illicit activities investigated among students in grades 7 to 12, lifetime prevalence of involvement with the lottery (that is, involvement at any time during a student's life to date) is exceeded only by lifetime prevalence of alcohol use. Figure 2 illustrates a similar pattern for current (within the past 30 days) involvement with these six activities.

Current prevalence rates are more accurate indicators of existing psychosocial problems than are lifetime prevalence rates. A recent Harvard Medical School study of middle-school students (5th through 8th grades) reveals that among younger children, both the current and lifetime rates of involvement with gambling (sports betting, card games, sport cards, or other activities) are higher than the rates of involvement with seven other illicit activities, including the lottery (Shaffer et al. 1995). Figures 3 and 4 illustrate this pattern. Sports betting, card games, sport cards, and other gambling activities exceed the lottery and may, in fact, provide the gateway activity not only to other gambling experiences but to substance abuse as well.

Psychosocial Consequences of Adolescent Gambling

Shaffer (1994) also examined the adverse social and emotional consequences of gambling for adolescents. The pathological student gamblers in this study's sample experienced a variety of problems. Specifically, 64 percent felt pressure to gamble when they did not gamble; 61 percent felt pressure to begin gambling if they had never gambled; 43 percent felt guilty about their gambling; 64 percent were unable to stop when they wanted; 71 percent had problems at home, work, or school; 68 percent neglected their home, work, or school-related obligations for at least two consecutive days because of gambling; 71 percent got in trouble because of gambling; 39 percent sought help for their gambling problems; 54 percent were arrested for gambling; 89 percent were preoccupied by gambling; 83 percent increased the amount that they were gambling to get the same effect as they had experienced at a lower level of betting. Finally, 77 percent of the student gamblers got restless and irritable and had difficulty concentrating when they stopped gambling. (See Figures 5 and 6.)

These symptoms represent neuro-adaptive patterns much like those observed among people with substance dependence disorders. Pathological gamblers can make their symptoms go away by gambling again, just as the chemically dependent can rid themselves of withdrawal signs and symptoms by drug use. Like psychoactive stimulant abuse, gambling influences the central nervous system in a powerful way. Pathological gamblers can escape feelings of depression by gambling. They often chase their losses (85 percent), lie (79 percent), engage in illegal behaviors (79 percent), and lose their jobs (68 percent). Figures 5 and 6 illustrate the symptom patterns often experienced by pathological gamblers as a result of their disorder.

However, as noted previously, Level 3 gamblers are not the only people who experience problems due to their gambling. Figures 5 and 6 also reveal the levels of these very same problems among young people who are not pathological gamblers. For example, 28 percent of youthful gamblers who do *not* meet diagnostic codes report "chasing" their losses. An alarming 16 percent of these young people report having experienced some physiological symptoms (for example, tolerance) related to their gambling. For *non-pathological* student gamblers (that is, youngsters unlikely to be identified by screening or other diagnostic programs) the prevalence of psychological distress related to gambling is similar to the rates of alcohol dependence -- yet the resources allocated to gambling-related problems are sparse by comparison.

Lack of Treatment Skills among Providers

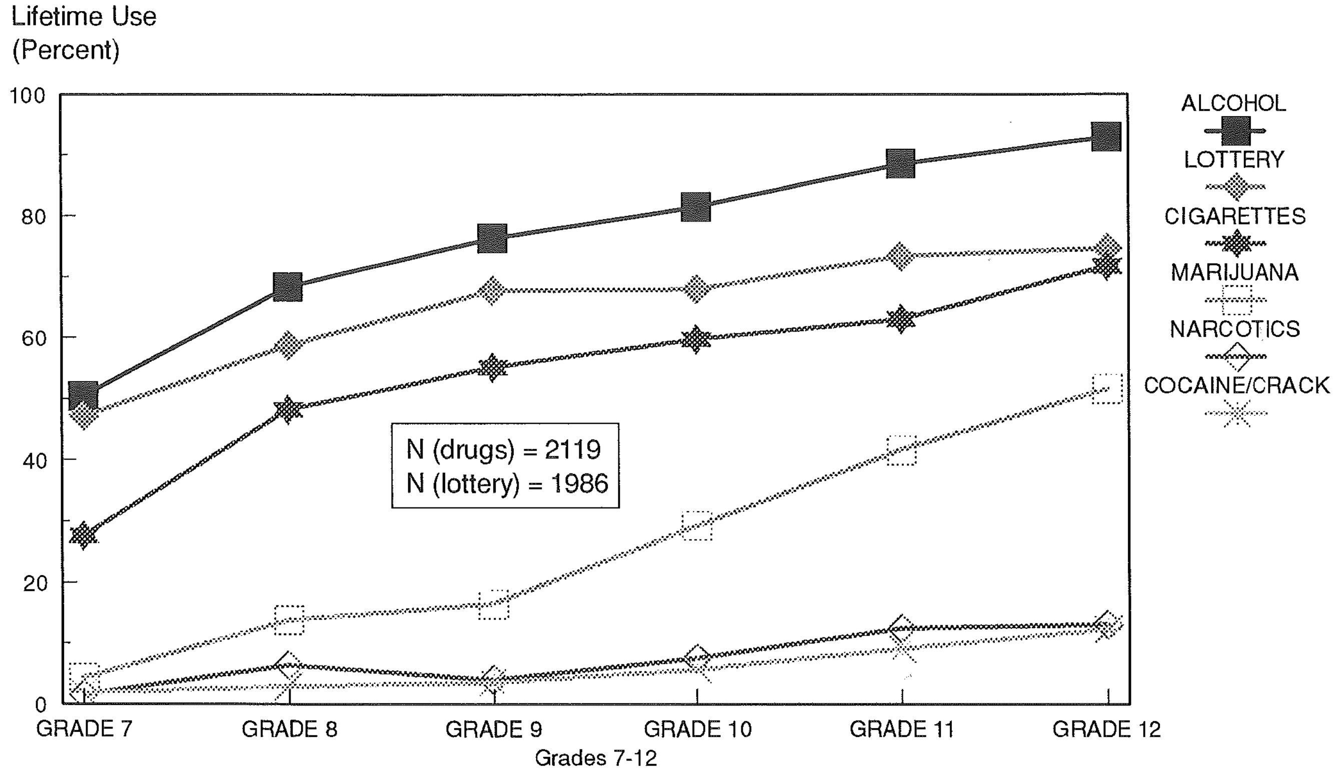
Recently we randomly selected a sample of licensed addiction treatment facilities in New England for a study on training needs. This research revealed that both addiction specialists and treatment providers who are not addiction specialists know less about the treatment of gambling disorders than they do about all other addictions (Shaffer, Hall, and Vander Bilt 1995). Perhaps even more frightening is the fact that these clinicians know more about referral skills than they do about treatment. The apparent intractability of addictive disorders may have more to do with treatment providers than it does with the behavior of patients.

Conclusion

The array of psychosocial problems that people experience as a result of gambling may hold great impact for the economic, educational, health, social, and vocational future of America. These consequences also may be the result of the way American leaders have shifted their strategy toward solving fiscal problems, by revising contemporary social policies toward gambling. Americans are no longer making decisions based on the values promoted by our founding fathers regarding the kind of life that we want for our children and our families. If America did still subscribe to this value system, communities like New Bedford, Massachusetts more likely would choose a Disney World theme park instead of a casino to revitalize their city. Disney World, for example, has expressed interest in developing a historical theme park, and this sort of development would create jobs and improve the surrounding economy just as -- or perhaps even more than -- would a casino. However, New Bedford and Massachusetts are selecting the pursuit of a casino as if no other option existed.

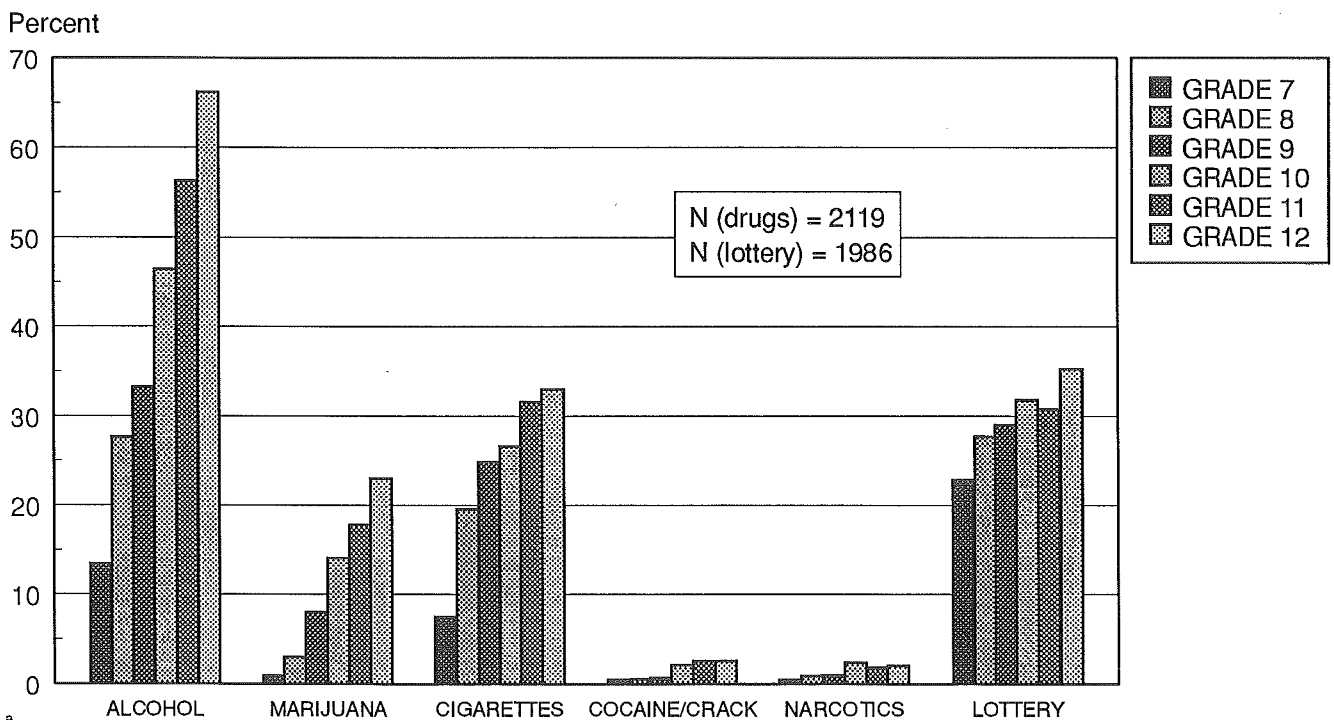
Failing to consider options is one sign of emerging addiction. We fear that America is becoming dependent on gambling-generated revenues to solve economic problems. Consider the words of Charles Baudelaire, French poet, who wrote, "I have to confess that I had gambled on my soul and lost it with heroic insouciance and lightness of touch. The soul is impalpable, so often useless and sometimes such a nuisance that I felt no more emotion on losing it than if, on a stroll, I had mislaid my visiting card" (1864). Our concern, of course, is that Americans are reacting as if they were mislaying their visiting cards.

Figure 1
Lifetime Prevalence of Drug and Lottery Use



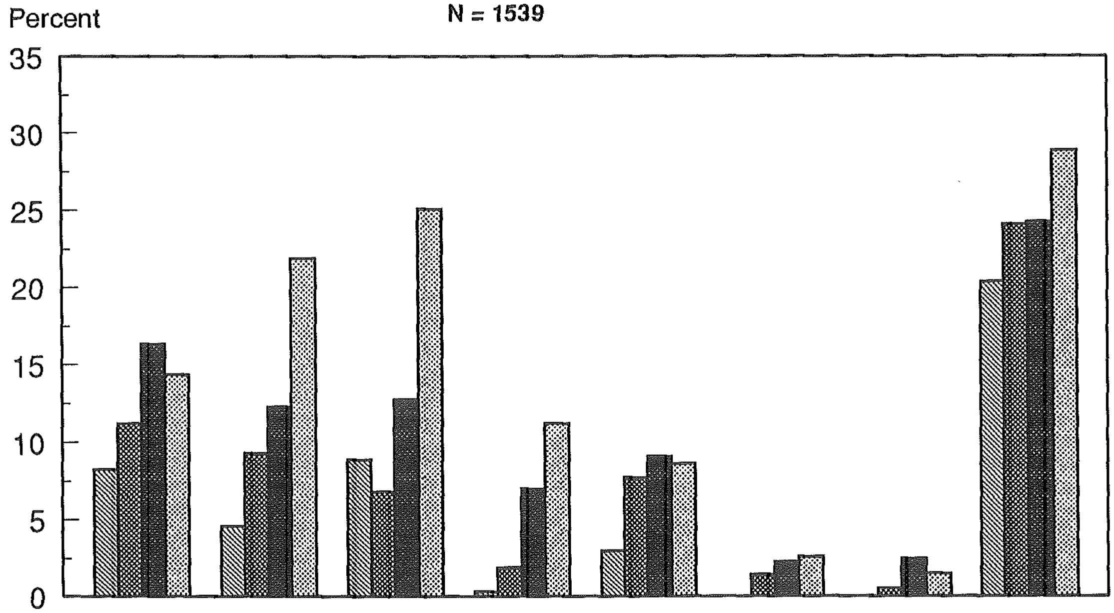
Massachusetts Department of Public Health,
Health & Addictions Research and Massachusetts Council on Compulsive Gambling.

Figure 2
Current[a] Drug and Lottery Use Patterns



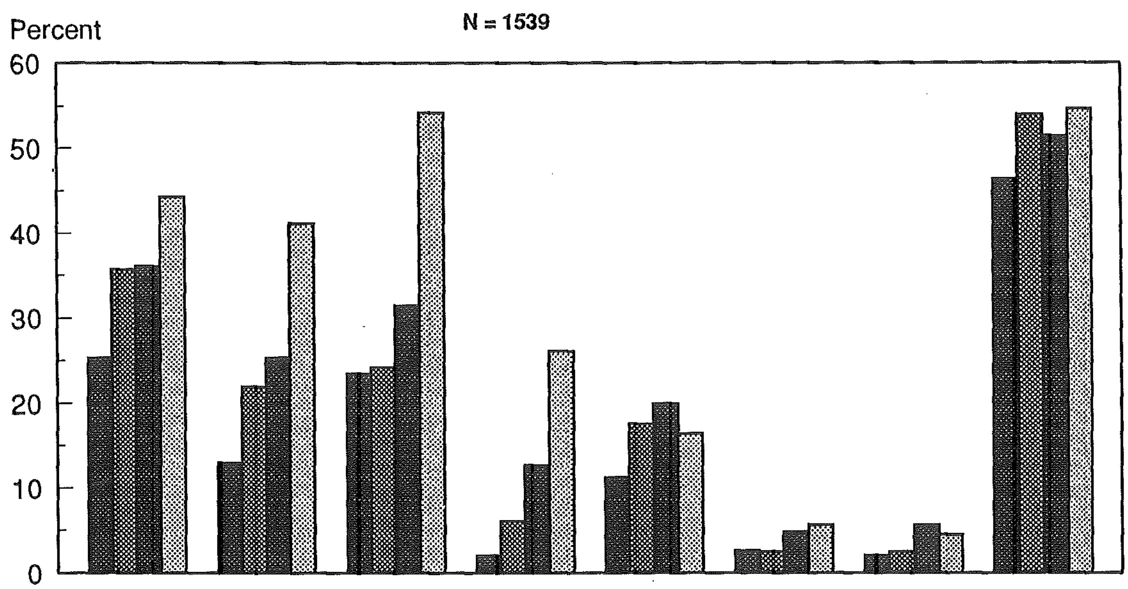
[a] Used at least once in 30 days prior to survey.
Massachusetts Department of Public Health,
Health & Addictions Research and Massachusetts Council on Compulsive Gambling.

Figure 3
Current Patterns of Gambling and Substance Use Among Middle School Students



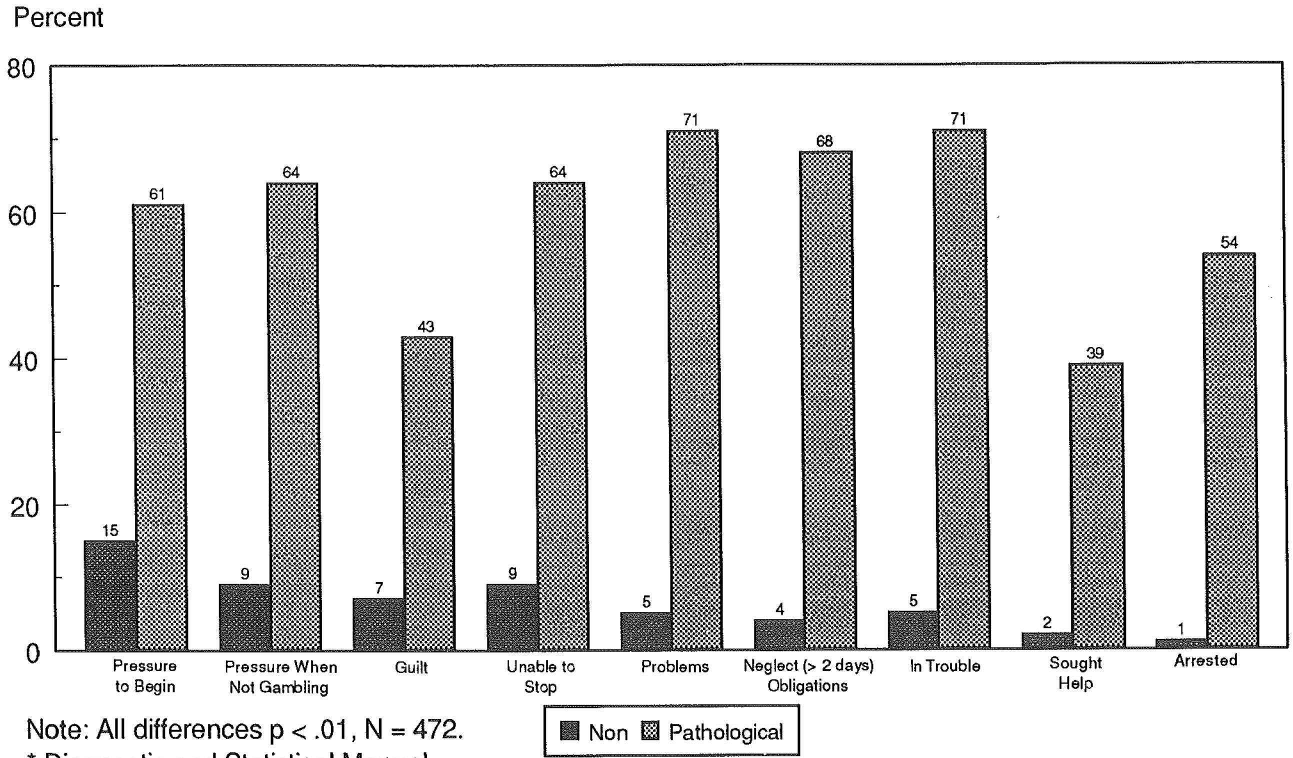
Use in Past 30 Days	Lottery	Tobacco	Alcohol	Marijuana	Inhalants	Stimulants	Narcotics	Gambling
5th Grade	8.2	4.6	8.9	0.3	3.0	0.0	0.0	20.4
6th Grade	11.2	9.3	6.8	1.9	7.7	1.4	0.5	24.1
7th Grade	16.4	12.3	12.8	7.0	9.1	2.3	2.5	24.3
8th Grade	14.4	21.9	25.1	11.2	8.6	2.6	1.5	28.9

Figure 4
Lifetime Gambling and Substance Use by Grade



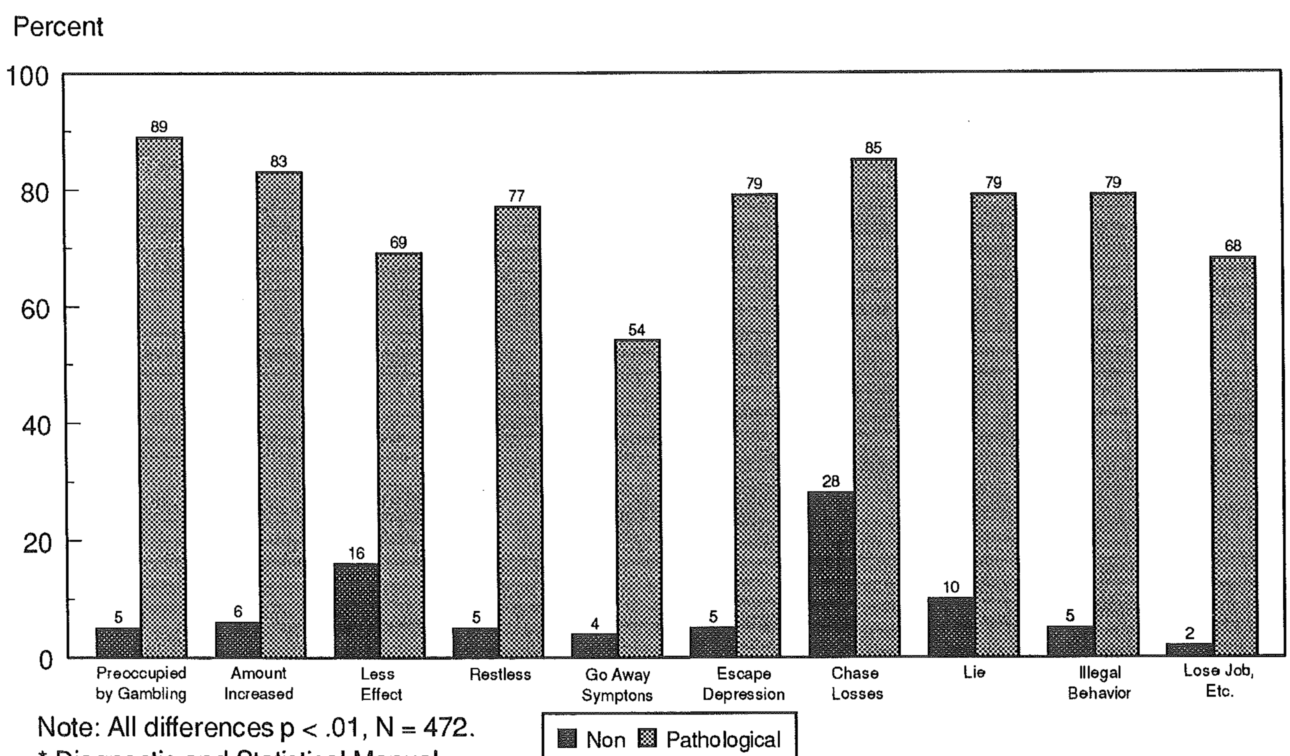
Lifetime Prevalence	Lottery	Tobacco	Alcohol	Marijuana	Inhalants	Stimulants	Narcotics	Gambling
5th Grade	25.3	12.9	23.4	2.0	11.2	2.6	2.0	46.4
6th Grade	35.6	21.9	24.1	6.1	17.6	2.5	2.5	54.0
7th Grade	36.0	25.3	31.4	12.6	19.9	4.8	5.6	51.4
8th Grade	44.3	41.1	54.2	26.1	16.4	5.6	4.5	54.7

Figure 5
DSM IV*- Diagnosed Pathological vs. Non-Pathological High School Gamblers



Note: All differences p < .01, N = 472.
* Diagnostic and Statistical Manual.

Figure 6
DSM IV*- Diagnosed Pathological vs. Non-Pathological High School Gamblers



Note: All differences p < .01, N = 472.
* Diagnostic and Statistical Manual.

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Summary and Concluding Comments

Timothy P. Ryan*

The spread of casino gaming is currently one of the most hotly debated topics in the field of public policy and U.S. economic development. Proponents of casino proliferation promise more jobs, more state and local tax revenue, more tourists, and revitalization of distressed economies. Opponents warn of higher crime rates, more severe social problems such as addictive gambling behavior, corruption of the political process, and only short-term and mostly illusory economic gains. The one thing that both sides seem to agree on is that the gaming industry in the United States is growing rapidly, as community after community and state after state turn toward casinos.

Today's conference has highlighted the major issues that communities in New England and throughout the United States should consider in evaluating casino gaming as an economic development or fiscal tool. The panelists have presented the current thinking and state-of-the-art information on the casino industry, both pro and con. Their remarks suggest that the ultimate laboratory for analyzing the true impact of casino gaming in the United States does not exist or has only recently been created. The proliferation of casinos has been so recent that we lack sufficient historical data to analyze accurately their impact on any particular economy. Prior to 1990, casino gambling was legal only in the state of Nevada and in Atlantic City, New Jersey. Only five years later, Louisiana also offers land-based casino gaming; many states have Indian gaming facilities, some of which rival the largest Las Vegas casinos; Mississippi's "dockside" casinos are similar to those in Las Vegas, differing only in that they must be located on a body of water; riverboat casinos operate in six states; two states have limited-stakes casinos; and many more states are considering the legalization of some form of casino gaming.

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Identification of the Issues

The panelists have identified the following issues that should be considered by any community contemplating the legalization of casino gaming:

Impact of gaming on business activity

- Effects of gaming on existing business
  - Extent of business diversion or substitution
  - Extent of new business creation
  - Effect of gaming on employees
- Effects on tourism
  - Will the casino attract new visitors? How many?
  - Will the casino change the pattern of visitation?
  - Will the casino divert visitor spending from other businesses?
- Effects of gaming on minority business
  - Will gaming create new minority business opportunities?
  - What will be the effect of minority preference in hiring?

Social problems created (or intensified) by gaming

- Does the introduction of gaming into a community increase problem or addictive gambling behavior?
- Does the introduction of gaming contribute to social breakdown?

Effects of gaming on crime rates

- Direct gambling crimes and their related costs
  - Skimming
  - Money laundering
  - Dealer crime
- Business crime related to gaming
  - Employee embezzlement
  - Shoplifting
  - Increased bad debt and check kiting
- Other gaming-related crimes
  - Prostitution
  - Bunko
  - Burglary and robbery
  - Diversion of police from other areas

Real estate and land-use impacts

Impact of gaming on land values

Impact of gaming on rents, especially business rents

Impact of gaming on land use

Impact of gaming on public facilities and services

Public services affected

- Traffic and transportation
- Public safety
- Sewerage
- Sanitation and solid waste
- Social service provision
- Health services, especially emergency medical services

New public revenues

- "Win" taxes (taxes on the casino gross)
- Lease payments
- Additional hotel/motel taxes
- License and permit revenues
- Additional sales taxes
- Additional income taxes

One or more of these issues is raised by the introduction of any new industry or firm into a community, and a growing number of public policymakers appreciate their relevance. As a result, many new manufacturing plants have been rejected by local communities because of the proposed facilities' perceived negative impacts. Nevertheless, the casino industry believes that it is subject to unusually harsh scrutiny. By contrast, gaming opponents believe that resistance to casino proliferation reflects the magnitude of gambling's negative effects and the fact that casino gambling, like other perceived sources of social problems such as drug use, has been illegal during most of the nation's lifetime.

Estimating the Impact of Gambling on a Community's Business Activity and Tourism

Today's panelists have identified two basic types of gaming enterprises: resident-based and destination-based. The clientele of a resident-based enterprise consists mostly of local residents and tourists who would visit the community in which the enterprise is located anyway, that is, even in the enterprise's absence. By contrast, a significant percentage of the clientele of a destination-based enterprise consists of nonresidents who otherwise would not visit the community. The distinction is crucial in the analysis of the impact of gaming on local business activity.

As an illustration of the distinction's importance, suppose the city of Miami were to legalize casino gaming. Each year, almost 20 million people visit Miami. The Miami casino could be quite profitable if its clientele consisted exclusively of Miami residents and nonresidents who would visit the city with or without the casino. Even if a large fraction of the casino's customers were visitors, it would not necessarily follow that the casino stimulated Miami's economy. The casino spending of visitors who would be in the city anyway is not, in most cases, new or incremental spending within the city. Such spending would occur with or without the casino. In order for the casino to boost the city's economy, it must generate spending that would not have occurred in the casino's absence.

How does one distinguish "new" visitors from existing visitors? Not by examining the addresses of casino patrons, as many have attempted. Rather, the distinction can be done in two different ways: 1) survey a sample of the visitor population after gaming is introduced and use the resulting responses to determine the marginal impact of gaming on the decision to visit; or 2) conduct a time series statistical analysis using the number of visitors as the dependent variable and including the introduction of gaming, as well as other exogenous factors, as independent variables.

Another major issue in estimating the economic impact of gaming is the definition and measurement of "spending diversion." Spending diversion is defined as the reduction in spending in other businesses caused by the casinos, called the "substitution effect" in some gambling studies. Although a very simple phenomenon, it is often misunderstood or misused. Every consumer has a budget constraint -- that is, he or she has, at any point in time, a limited amount of income available for consumption and savings. Consequently, when a consumer chooses to purchase a new product or service, he or she has less income to spend on other goods and services.

This assertion has been challenged on three different grounds: 1) Gambling will bring in new visitors and total spending at the existing establishments will go up. This is certainly possible and has occurred in many gambling jurisdictions. However, even if gambling does stimulate additional spending, spending diversion still occurs and should be taken into account in evaluating the net economic impact of the introduction of gaming. 2) Over time, incomes grow, permitting consumers to engage in gambling without reducing spending on other goods and services. Consequently, spending diversion occurs only in the short run. However, while incomes do grow, spending diversion still takes place. Incremental income allocated to gambling would be spent on other products in gambling's absence. 3) Evaluators of the net economic impact of non-gambling enterprises, such as theme parks or sports teams, usually do not concern themselves with spending diversion. Therefore, why should those studying the economic effects of the proliferation of gambling facilities take such diversion into account? True, many economic studies ignore spending diversion, but they should not.

Social Problems Created by Gaming

Most of the debate over casino gaming revolves around the measurement and identification of the "social costs" that it generates, for example, exacerbation of crime and addictive and problem gaming behavior. Of all the alleged costs of gaming, social costs have attracted the most attention of both proponents and opponents. While some have concluded that the social costs engendered by the proliferation of gaming are negligible, others have asserted that these costs are so high that they outweigh all possible benefits.

Casino proponents argue that the incidence of addictive and problem gambling is independent of the availability of casino gaming. They argue that the widespread existence of lotteries, race tracks, and various forms of illegal gambling activities, such as the "numbers racket" and bookmaking, give the average citizen enough exposure to gambling to create problem and addictive gambling behavior. The existence of casinos may channel these problem gamblers into the casino but will not increase the level of problem and addictive gambling behavior. Gambling opponents argue that this is nonsense -- increased opportunities create new problem and addicted gamblers. They contend that greater access to gambling, intensified competition for gambling dollars, and the resulting increased advertising create thousands of new gamblers, some of whom will exhibit problem or addictive behavior.

Similar arguments are presented with respect to the impact of gambling on crime rates. Gambling opponents present data revealing relatively high crime rates in cities and areas that have adopted gaming. Gaming proponents argue that the increased crime is purely a function of the increased numbers of tourists brought into the communities by the casinos. They often make comparisons to the increase in crime in Orlando, Florida, after Disney World opened. They also attempt to adjust crime rates, which are based on the number of crimes in various categories divided by the resident population of the city, by defining the crime rate as the number of crimes in the categories as a percentage of the overall population of the city, including both residents and visitors.

The appropriate way to estimate statistically the impact of casino gaming on a city's crime rate is regression analysis that takes into account a wide variety of factors influencing the incidence of crime. In addition to the availability of gaming facilities, such factors include the number of visitors to the city, the city's rate of poverty, its population density (to measure the level of crowded living conditions), its unemployment rate, and its level of spending on police. Studies using such a methodology indicate that crime does increase with the advent of casino gaming but it tends not to be violent crime. (Instead, it is white-collar crime, bunko, robbery, and the like.) This kind of crime can be mitigated with increased police and corrections spending, but that is expensive and must be undertaken by the public sector.

Real Estate and Land-Use Impacts

The effect of casino gaming on real estate values will depend, to a large extent, on the kind of gaming that is authorized. One of the long-term problems created by casino gaming in Atlantic City was the speculative increase in real estate values around the city. New Jersey law authorizes the creation of as many casinos as can meet the licensing and market tests, and a great deal of land speculation was attributable to this provision. This led to increased land values and increased rents, which drove out businesses unable to pass on the resulting higher operating costs. Since casinos were never built on most of these sites, a large number of properties were abandoned. This experience has created a demand for limited gaming laws, based on the premise that widespread land speculation will not occur if only a limited number of gaming sites are authorized.

Impact of Gaming on Public Facilities, Services, and Revenues

Gaming has proliferated in large part because of its promise as a source of new state and local governmental revenue. Given the tax limitation movements of the 1980s, the recession of the early 1980s, and the general increase in anti-tax feeling around the country following the November 1994 congressional elections, state and local governments have been searching for new, "acceptable" revenue-raising alternatives. One of the most popular is casino gaming. Taxes on casinos are considered to be voluntary levies that people do not mind paying as long as they have access to the games.

As governments pursue casino gaming for its revenue-raising potential, they must keep in mind that gaming also imposes potentially significant costs that governments must bear. Local governments must be careful to identify the costs, social and otherwise, that are created by casinos, and make sure that anticipated local revenues exceed these costs. If the majority of the revenues accrue to state government but the majority of the costs are imposed on local government, a casino can create a serious fiscal problem at the local level. The potential for such an imbalance is especially great in the case of Indian reservation casinos, which are generally exempt from state and local taxation and often can be established without formal local approval. Nevertheless, they can generate local costs for the governments of surrounding municipalities. Indian tribes must seek approval of the governor of the state in which they are located in order to open a casino. It is essential that governors reviewing proposals for tribal casinos take local governmental concerns into account.

Conclusion

Casino gaming is a rapidly growing industry, whose swift proliferation has provoked strong sentiments both for and against. This conference has brought together the nation's experts on the issue of the impact of gaming on the economy. They have made it clear that we have a long way to go in the analysis of the expected impacts on most communities. Given the very limited history of casino gaming in this country and its very rapid recent growth, we do not yet have good models to evaluate casinos' economic impacts. The experiences of casinos in Las Vegas and Atlantic City do not generally pertain to the latest generation of gaming enterprises. We must study these new enterprises carefully and gather the necessary data for proper analysis of the gaming industry in the United States.

Editor's note: At the conference Dr. Ryan described a requirement that the city of New Orleans has included in its conditional use or zoning permit for the new casino gambling there. It is the first time that a large, land-based casino has been located in the center of a large city whose economy is both worker- and visitor-based. The new casino must provide the funds to pay for a complete analysis of the impact of gambling there over the first five years of casino operation. The study is to be undertaken by a consortium of six universities, led by the University of New Orleans.

About the speakers . . . .

Cathy E. Minehan was named President of the Federal Reserve Bank of Boston in July 1994 and is currently a voting member of the Federal Open Market Committee, the monetary policymaking body of the U.S. central bank. Her career began in 1968 with the Federal Reserve Bank of New York, where she held positions in supervision and regulation, public information, accounting, and funds and securities. She also had a tour of duty as a senior aide to several governors at the Board of Governors in Washington, D.C. Minehan was appointed First Vice President of the Boston Fed in 1991. She holds a B.A. in political science from the University of Rochester and an M.B.A. with distinction from New York University.

Panel I: Impact of Casino Gambling on Income and Jobs

Panel Leader:

Robert Tannenwald is a Senior Economist in the Research Department of the Federal Reserve Bank of Boston. He served as Executive Director of the Massachusetts Special Commission on Tax Reform from 1984 to 1986, on leave from the Bank, and as Director of Research for the Massachusetts Special Commission on Business Tax Policy in 1992 and 1993. He was an undergraduate at Dartmouth College and earned his Ph.D. at Harvard University. Tannenwald is the author of numerous papers and journal articles in the fields of banking and taxation, and he is a member of the National Tax Association's Committee on State and Local Income and Business Taxation.

Panelists:

Earl L. Grinols is Professor of Economics at the University of Illinois in Champaign-Urbana. He did his undergraduate work at the University of Michigan and the University of Minnesota, and received his Ph.D. at the Massachusetts Institute of Technology. He has also taught at Cornell and the University of Chicago, and he has served as a research economist for the U.S. Treasury Department and senior economist at the Council of Economic Advisers. Grinols has published extensively in the fields of international economics, public finance, and macroeconomics. He has testified often before the U.S. Congress and state legislative groups about economic issues related to gambling. Among his forthcoming articles is "Incentive Malfunctions and Gambling Policy."

I. Nelson Rose is Professor of Law at Whittier Law School in Los Angeles. He is a graduate of the University of California, Los Angeles, and Harvard Law School. A leading authority on gambling law, he is the author of over 100 articles on the subject and the comprehensive book Gambling and the Law, also the title of his syndicated column on developments in gambling law. He is a member of the American Bar Association's Gaming Law Committee and the International Association of Gaming Attorneys. Last year he was the first Visiting Scholar at the University of Nevada, Reno, Institute for the Study of Gambling and Commercial Gaming. Rose has also served as a consultant to casinos, law firms, players, Indian tribes, and governments.

S. Timothy Wapato is the Executive Director of the National Indian Gaming Association (NIGA), an association of 94 Indian tribes engaged in gaming. An enrolled member of the Colville Confederated Tribes, Nespelem, Washington, Wapato has 35 years' experience in Native American affairs and advocacy. He served as Commissioner, Administration for Native Americans, in the U.S. Department of Health and Human Services from 1989 to 1993, and before that he was Commissioner, Pacific Salmon Commission. He served as Executive Director and as Enforcement Director of the Columbia River Inter-Tribal Fish Commission between 1979 and 1989, and earlier was with the Police Department in Los Angeles, where he was active in Native American affairs.

Arthur W. Wright has been Professor of Economics at the University of Connecticut since 1979; he was head of the department from 1979 to 1989. Before Connecticut, he taught economics at Purdue University, the University of Massachusetts at Amherst, and Oberlin College. Wright was an undergraduate at Haverford College and received his Ph.D. from M.I.T. His main research and teaching interests are in industrial organization, market analysis, economic regulation, and law and economics. He has also written widely on energy markets and policy and, recently, on product liability. Wright has led several economic impact studies, including one for the Foxwoods High Stakes Bingo & Casino, at Ledyard, Connecticut.

Panel II: Implications for Public Sector Revenues

Leader:

Gary S. Sasse is Executive Director of the Rhode Island Public Expenditure Council, where he is responsible for the development and administration of a program of research, education, and consultation to state and local governments. Sasse was an undergraduate at Florida State University and received his M.S. in public administration from the University of Missouri. He also holds honorary doctorates from Brown and Johnson & Wales Universities. Before joining the Rhode Island Council in 1977, he served as Assistant Chief Administrative Officer in Memphis, Tennessee, and, for the state of Tennessee, as a member of the governor's senior staff and Director of the Office of Urban and Federal Affairs.

Panelists:

Charles T. Clotfelter is Professor of Public Policy Studies and Economics at Duke University, where he is also Director of the Center for the Study of Philanthropy and Voluntarism. His major research interests are in public finance, tax policy, the economics of education, and the nonprofit sector. Clotfelter was an undergraduate at Duke, where he majored in history, and received his Ph.D. in economics from Harvard University. He has also taught at the University of Maryland, and he served in the Office of Tax Analysis of the U.S. Treasury Department for a year. He has published numerous articles and books and is the co-author (with Philip J. Cook) of the 1989 book Selling Hope: State Lotteries in America.

Steven D. Gold is Director of the Center for the Study of the States, a part of the Nelson A. Rockefeller Institute of Government, State University of New York. He is also a Professor of Public Administration at SUNY-Albany. Earlier, he was Director of Fiscal Studies for the National Conference of State Legislatures. He has also taught at Drake University. Gold is the author of many books, including most recently The Fiscal Crisis of the States. He has testified before legislative committees or spoken at conferences in 47 states. Gold was an undergraduate at Bucknell University and earned his M.A. and his Ph.D. in economics at the University of Michigan.

Ranjana G. Madhusudhan is a Research Economist at the New Jersey Department of the Treasury. She specializes in tax policy, tax administration, and revenue analysis. Among her current research projects is a study of the tax policy implications in New Jersey of interstate banking and branching. Madhusudhan is active in the National Tax Association and the Economists of New Jersey organization. She has also worked for the New Jersey State and Local Expenditure and Revenue Policy Commission, and she was a consultant to the World Bank, analyzing issues in fiscal decentralization, housing finance, and public sector investments. Earlier, she was an Economist at the National Institute of Public Finance and Policy in New Delhi, India. She received her Ph.D. in economics from the Maxwell School of Citizenship and Public Affairs at Syracuse University. Madhusudhan is a member of the National Tax Association's Committee on State and Local Income and Business Taxation.

Joseph D. Malone is serving his second term as Treasurer and Receiver General of the Commonwealth of Massachusetts. He is also head of the Massachusetts State Lottery. He has instituted many new programs, including the Economically Targeted Investment Program, which uses state pension funds to stimulate the economy, and the Middle Class American Dream program, which has made $250 million available for affordable mortgages. He has also created a venture capital fund to invest solely in Massachusetts companies and instituted the Treasurer's Award for Community Reinvestment, which honors Massachusetts banks with outstanding community reinvestment ratings. Malone holds an A.B. from Harvard College.

Richard A. McGowan, S.J., is Adjunct Professor of Economics at Boston College and Assistant Provost and Associate Professor at the University of Scranton, on leave during the past academic year to finish research projects. He received an undergraduate degree in mathematics from Widener University and an M.S. in econometrics from the University of Delaware. After completing master's degrees in theology and in divinity at the Weston School of Theology, he earned a doctorate in business administration from Boston University. His first book is State Lotteries and Legalized Gambling: Painless Revenue or Painful Mirage?, also the topic of several of his published articles. He is a member of the Massachusetts State Lotteries Commission and the D.C. Lottery Commission.

Panel III: Social Costs

Leader:

Helen F. Ladd is Professor of Public Policy Studies and Economics at Duke University, where she is Director of Graduate Studies in Public Policy. She has also taught at Dartmouth College, Wellesley College, and Harvard University. Ladd is a Wellesley graduate and holds a master's degree from the London School of Economics and a Ph.D. from Harvard. An expert on state and local public finance, she has written extensively on the property tax, education finance, state economic development, and the fiscal problems of U.S. cities, among other topics. Her most recent book (with John Yinger) is America's Ailing Cities: Fiscal Health and the Design of Urban Policy.

Panelists:

G. Michael Brown is President and Chief Executive Officer of Foxwoods Resort and Casino in Ledyard, Connecticut. He began to represent the Mashantucket Pequot Tribe in 1990 during its Compact negotiations with the State of Connecticut and went on to become founding Chairman of the Tribal Gaming Commission in February 1992. He assumed his current position in January 1993. Brown served as Director of the New Jersey Division of Gaming Enforcement from July 1980 to April 1982. Before that he served in the Division of Criminal Justice of the New Jersey Attorney General's Office. He is a graduate of Seton Hall Law School. Since leaving government service, Brown has represented both American and foreign casino interests, here and abroad.

Robert Goodman is Lemelson Professor of Environmental Design and Planning at Hampshire College in Amherst, Massachusetts. He has also taught at MIT and at the University of Massachusetts. He is an urban planner, economic development consultant, and writer. His new book, The Luck Business: The Devastating Consequences and Broken Promises of America's Gambling Explosion, will be published this year. He has testified on urban planning, legalized gambling, and economic development before city councils, state legislatures, and the U.S. Congress. Goodman recently completed a two-year study of the economic impacts of legalized gambling in the United States, funded by the Ford Foundation and the Aspen Institute, and issued a report, Legalized Gambling as a Strategy for Economic Development. Currently he is conducting a study of the economics of gambling in Massachusetts, funded by the U.S. Economic Development Administration.

L. Scott Harshbarger has just begun his second four-year term as Attorney General of the Commonwealth of Massachusetts. Before that he served for eight years as District Attorney of Middlesex County. He has been a Lecturer in Professional Responsibility at Boston University Law School since 1980. He has also been Counsel to the Massachusetts State Ethics Commission, Deputy Chief Counsel for the Massachusetts Defenders Committee, and Chief of the Public Protection Bureau of the Office of the Attorney General. Between periods of public service, he was a trial attorney in two Boston law firms. Harshbarger is a graduate of Harvard College and Harvard Law School, where he was president of the Harvard Voluntary Defenders. He is Vice President of the National Association of Attorneys General.

Jeffrey B. Pine began his second term as Rhode Island's Attorney General this year. He has spent virtually his entire career in public service, having also been front-line prosecutor in the Department of Attorney General for ten years, beginning soon after he obtained his law degree from the National Law Center at George Washington University. He did his undergraduate work at Haverford College. Pine has established a Statewide Task Force to Prevent Violence in Schools, a Domestic Violence Task Force, and a Task Force to Prevent the Sexual and Violent Abuse of Children. Among his other initiatives are a Statewide Whistleblower Hotline and a parole tracking system.

Howard J. Shaffer, Ph.D., is a clinical psychologist and Associate Professor at Harvard Medical School, where he also serves as Associate Director of the Division on Addictions. He has written extensively about addictive behaviors and is a co-editor of the recent book Compulsive Gambling: Theory, Research & Practice. He is now completing a new book on youth gambling and its consequences. His professional appointments have included consultation to the National Institutes of Health, the Massachusetts Council on Compulsive Gambling, and the Massachusetts Departments of Mental and Public Health. Shaffer is a member of the national advisory board of the National Council for Problem Gambling and for the past two years he has been a senior scientist at the National Technical Center for Substance Abuse Needs Assessment.

Summary and Concluding Comments

Timothy P. Ryan is Dean of the College of Business Administration and Director of the Division of Business and Economic Research at the University of New Orleans. He was an undergraduate at the University of New Orleans and received his Ph.D. in economics at the Ohio State University, writing his dissertation in the area of state and local public finance. He has published many articles in economic journals and is co-author of a book entitled Law, Economics and Public Policy. Ryan has served on many state and local finance and development organizations, and currently he is an economic consultant to the Louisiana Council for Fiscal Reform and a member of the Board of Directors of the Metropolitan Area Committee.