

The Economic Impacts of Casino Gambling at the State and Local Levels

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1. Introduction

Thank you very much for inviting me here today to discuss the economics of commercial casino gambling in general and the economics of riverboat gambling in particular. It is my opinion that the pace of the spread of gambling in the U.S. has not been accompanied by comparable levels of studies dealing with the consequences of such an expansion. There is a lack of comprehensive evaluation of the economic impact of gambling activities in the U.S., while there are many reports on the impact of casino gambling at the local and state levels. However, the majority of these reports were commissioned by the gaming industry and most of them focus exclusively on the positive impact of casino gambling and completely ignore or minimize the negative impacts also associated with casino gambling. The commission's work is a superb opportunity to improve our understanding of such an important industry and its economic and social impact in the United States. Once again, I thank you for the opportunity of sharing some of my thoughts and some results of my research in this area.

My remarks today address the major aspects of an economic impact analysis of casino gambling at the state and local levels, which are usually neglected in the literature. I will, however, limit my remarks to the monetary impact of casino gambling on local and state economies. In other words, the question I will address is: What is the likelihood of a casino having a positive economic (monetary) impact on a local (county, state, or other specification) economy? The answer depends on many facts and their resulting impacts on the positive and negative sides of the equation. Today, I would like to discuss some

of these facts. The comments focus on how these impacts are likely to be different from one jurisdiction to another after accounting for differences in casino size.

The Positive Side

On the positive side, differences among casino expenditures are likely to be relatively small for expenditures such as wages and salaries, utilities, insurance, new construction, maintenance, etc. Larger differences across jurisdictions are more likely for expenditures, such as purchases of goods and services from local suppliers. Larger local economies are more likely than smaller economies to supply larger shares (from local suppliers) of goods and services to a local casino. State and local taxes also vary substantially across jurisdictions, and they can make a large difference on the economic impact of casino gambling across regions. Commercial casinos face different gambling tax rates in each jurisdiction, from as low as Nevada's (average) 8 percent to as high as Illinois' 20 percent.

The share of profits which stays locally is one of the most, if not the most, important item on the list of positive impacts of a casino on a local economy. Profit as a share of gross revenues varies substantially across jurisdictions. Casinos facing substantial competition experience lower rates of profits than casinos operating as monopolies or oligopolies. Casinos in Illinois, for example, experience little to no competition within their market boundaries and, as a result, most of them have experienced very high profit rates. The situation has changed somewhat for some of them since casinos have opened in Indiana.

Monopoly and oligopoly market structures resulting in above-normal profit rates (in economic terminology, positive economic profits or positive economic rents) affect the local economy in a very different way than in a competitive market with normal profit rates. For example, profit rates (before corporate taxes) above 30 percent of gross revenues (even higher for some casinos) represent, in general, a much higher share of total revenues than do expenditures on wages and salaries. If a large share of

profits is reinvested locally or distributed to local shareholders (most of the income stay in the local economy), the positive impact can be large; otherwise, the positive impact will be small. In summary, if profits represent a large share of total revenues and most of these profits leaves the local economy, the direct positive impact of the casino is likely to be small.

Corporations located in Nevada and New Jersey own most of the casinos in new gambling jurisdictions in the U.S. Additionally, many new gambling jurisdictions have adopted a “monopoly or oligopoly” market structure. The result of such a strategy is that, in most of the new gambling jurisdictions, the positive monetary impact of casinos is relatively small compared to gross casino revenues. More competitive jurisdictions, such as Las Vegas, Atlantic City, and Southern Mississippi, are more likely to experience higher ratios of positive impact to gross revenues.

The impact of expenditures of nonlocal visitors on noncasino businesses, another potentially important item on the positive impacts of a casino, is likely to be small if the casino targets basically the local market and day-trippers from adjacent areas. Most of the new jurisdictions have failed to attract a substantial number of tourists to their local areas. Additionally, very often casinos offer subsidized food and beverages (below cost of production), reducing or eliminating competition. Monopoly and oligopoly market structures are likely to result in a low ratio of nonlocal to total casino gamblers. In other words, if casinos can be profitable catering only to the local market, there is no incentive to increase spending (costs) in attracting nonlocal visitors. In the absence of sufficiently large local markets, casinos, in order to survive, must expand their markets beyond local boundaries. Other things equal, a local market is likely to be large enough for a casino operating alone than if there is a concentration of casinos in the area.

The Negative Side

On the negative side, the so-called cannibalization effect due to local gamblers and noncasino visitors, although controversial, is important in measuring the economic impact of casino gambling in a local economy. The casino industry, in general, has argued that there is no evidence of reduced expenditures on other businesses due to increased expenditures on casino gambling. To prove this point, the industry shows expenditure growth in both casinos and other entertainment (and other consumption items) services. However, expenditure growth has been substantially higher in the casino industry than growth in other consumption items and, most important, growth in personal income.

There is no doubt that some expenditure shift occurs when a casino starts operation in a specific area. The microeconomic argument that consumers know best how to allocate their dollars has some merit in the case of a casino. For occasional gamblers the shift of expenditures from any previous consumption item toward gambling is not different than if they had shifted their preferences from movie-going to a dinner in a restaurant. However, for a problem or compulsive gambler, the decision is not "rational" and the implications of their gambling activity are severe. But, independent of the consumer sovereignty argument, there is a shift in expenditures; and some established businesses are likely to lose with the presence of the casino. In a strict monetary sense, a shift of expenditures from one activity to another does not represent new income for the local economy. Since expenditures by local gamblers were accounted for in the positive side, they should also appear in the negative side. However, in the absence of a local casino, some local residents would travel to gamble in other jurisdictions and their expenditures would be lost for the local economy. Yet, these local gamblers are likely to visit a casino outside the local area less often than they would visit a local casino. Thus, adjustments can be made to estimate the share of their current expenditures (in the local casino) that would have leaked from the local

economy in the absence of gambling locally. The above discussion applies to all types of expenditures by local residents within the casino.

The size of the cannibalization effect due to noncasino visitors depends on the share of noncasino to total visitors. Expenditures within the casino by noncasino visitors are included in the positive side. The part of those expenditures that represents a decrease of demand for noncasino businesses (shift of expenditure pattern from noncasino toward casino activities) represent a loss of income for the local economy and should be included in the negative side as well. However, there will be no negative effects if a noncasino visitor keeps the same level of expenditures in noncasino businesses before and after the casino opens and additionally he or she gambles in the casino as well. There is, however, evidence that this is not the average behavior and that some expenditure shifts occurs when casinos open in a specific area.

The additional public-sector expenditures, if any, due to the presence of the casino should be included in the negative side as the counterpart of taxes revenues generated by the casino included in the positive side. Such expenditures include costs with casino regulations and supervision by gaming boards or other institutions, new roads, additional police force, and firefighters, among others.

Negative externalities are generally omitted in the majority economic impact studies of casinos in the literature. Most economic activity results in some type of negative externalities, costs borne by everybody regardless of whether they are involved with that activity. For example, a convenient store brings additional traffic congestion and noise to a particular area. Even those who do not patronize that store bear those negative costs.

There are two main negative externalities associated with a casino in a new jurisdiction, higher crime rates and problem gambling.

Higher crime rates and their associated costs represent a controversial item in the literature and in the public policy area in general. Some people argue that using crime rates (based on population numbers) to investigate the relationship between casino gambling and crime is misleading since crime rates do not take into account the large number of tourists visiting gambling jurisdictions and, in reality, overestimate crime rates. However, other studies show that independent of the "tourist-population" effect, there is evidence of a relationship between certain types of crime and gambling activity.

My own research with Thompson and Rickman (1996) using crime rates data for each of Wisconsin's 72 counties for 14 years, found a statistically significant relationship between casino gambling and crime rates for different types of crimes. Our results suggest that the presence of casino in a county or the presence of casino in two adjacent counties "explains a major crime rate increase of 6.7% beyond what would otherwise be experienced in the absence of casinos." Friedman, Hakim, and Weinblatt (1989) investigated crime spillover from Atlantic City to other localities in the region, concluding that "the statistical results suggest that casinos might have 'brought' significantly more crime than the population increase warranted."

The lower opportunity costs for criminal activities are most likely the main reason for the increase in crime rates associated with casino gambling. Large agglomerations of people, carrying cash, and a "less alert" mood make it easier for criminals to act and reduce their relative chances of getting caught.

The second and, maybe, the most important negative externality deals with the problems of additional problem and compulsive gamblers. There is plenty of evidence that incidence rates of problem and compulsive gambling increases as gambling becomes available in a convenient way. Independent of the reasons of why some people experience gambling problems, there are costs associated with problem gambling and they are paid by society as a whole and must be included in the negative side of an impact

analysis. Most of the studies available in the literature on the social costs associated with compulsive gambling are based on small samples. However, it is clear that the costs associated with gambling addiction can be very substantial depending on the number of additional problem-compulsive gamblers due to the casino and the estimated annual social cost per problem-compulsive gambler.

Conclusions

In conclusion, it is important to note that, with a few exceptions, many state and local economies in the U.S. have most likely experienced net monetary losses due to casino gambling in their jurisdictions. One of the major reasons for such negative impacts is the strategy of "monopolistic or oligopolistic" market structure chosen by the new jurisdictions. These market structures resulted in low ratios of nonlocal to total visitors and high ratios of casino profits to total revenues.

Policy makers and population in jurisdictions considering casino as a future economic activity must be careful in choosing what type of market structure they adopt. It is better to concentrate casinos in one specific area creating competition among them (forcing them to attract outside gamblers) than to create several "local monopolies." Politicians should also examine the negative side associated with casino gambling and not focus only on the positive side of job creation and increased tax revenues. Negative externalities are a reality even if precise estimates of their monetary costs are not yet available. Further research is needed to develop a more complete and balanced view of this industry at the national and subnational levels.

Thank you.

Figure 1: Direct and Indirect Positive, Negative, and Net Impacts

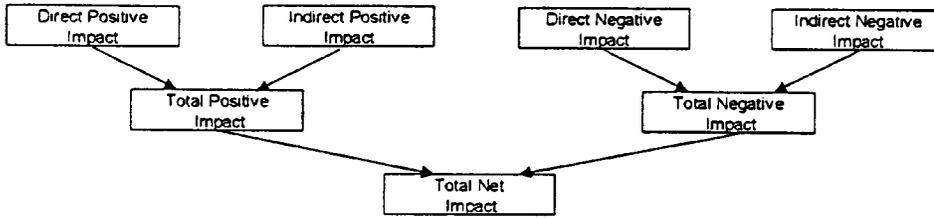
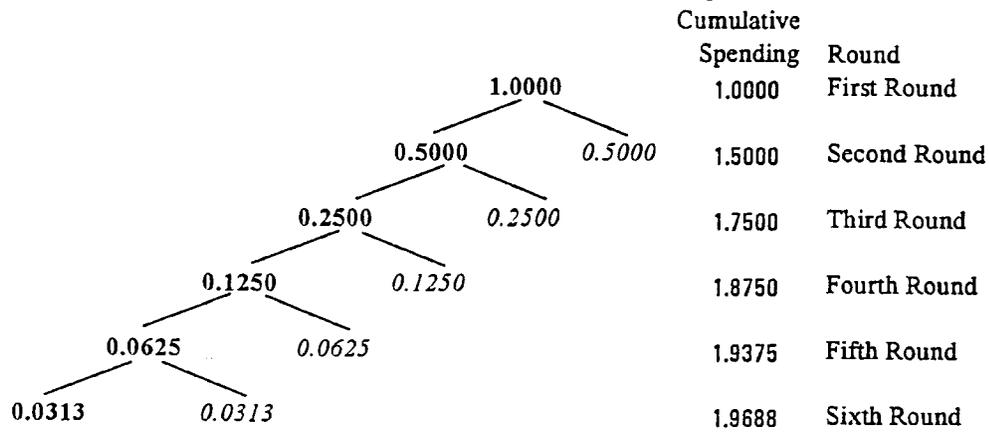


Figure 2: Economic Effects by Rounds of Consumption



Note: Numbers in bold represent local expenditures and numbers in italics represent leakages.

Figure 3: Direct Positive Economic Impacts

Source	Type of Expenditures
1. Casino	1.1. Wages and salaries of local employees 1.2. Purchases of goods and services from local suppliers 1.3. Local advertisement 1.4. Utilities 1.5. Insurance from local providers or brokers 1.6. New construction 1.7. Maintenance 1.8. Local taxes 1.9. Share of profits staying within the local economy 1.10. Other direct expenditures within the local economy
2. Nonlocal Visitors	2.1. Lodging outside casino 2.2. Food and beverages outside casino 2.3. Shopping outside casino 2.4. Entertainment outside casino 2.5. Local transportation 2.6. Tour bus if provided by local companies 2.7. Other direct expenditures in the local economy

Figure 4: Direct Negative Economic Impacts

Type of Impact	Source	Type of expenditures
Cannibalization	1. Local gambler	1.1. Share of casino wins due to local gamblers' losses 1.2. Expenditures on food and beverages within the casino 1.3. Shopping within the casino 1.4. Other expenditures within the casino
	2. Noncasino visitor	2.1. Share of casino wins due to noncasino visitors' losses 2.2. Expenditures on food and beverages within the casino 2.3. Shopping within the casino 2.4. Other expenditures within the casino
Additional Public Sector Expenditures	3. Government	3.1. Regulation and supervision of casino 3.2. Additional police force* 3.3. Additional fire protection 3.4. Infrastructure - new roads and maintenance, etc. 3.5. Other expenditures due to the presence of casino
Negative Externalities	4. Higher crime rates**	4.1. Additional public expenditures on police, prosecution, and court costs 4.2. Additional correction costs 4.3. Additional private costs of protection such as alarms guards, etc. 4.4. Additional costs of crimes against persons and property
	5. Gambling addiction	5.1. Additional costs due to increased incidence of problem and compulsive gambling

* Excludes costs associated with higher crime rates

** Excludes costs associated with problem and compulsive gambling

Table 1: Positive Economic Impact of Casino Gambling in Wisconsin - 1995 - (\$ millions)

Source	Type of Expenditures	Direct Expenditures	Multiplier	Indirect Impact	Total Impact
1. Casino	1.1. Wages and salaries of local employees	128.00	1.91	116.66	244.66
	1.2. Purchases of goods and services from local suppliers	26.40	1.82	21.52	47.92
	1.3. Local advertisement	19.70	2.01	19.84	39.54
	1.4. Utilities	4.40	1.46	2.04	6.44
	1.5. Insurance from local providers or brokers	7.30	2.40	10.26	17.56
	1.6. New construction	27.00	2.22	32.82	59.82
	1.7. Maintenance	26.40	2.17	30.85	57.25
	1.8. Local taxes	0.00		0.00	0.00
	1.9. Share of profits staying within the local economy	257.36	2.15	295.60	552.96
	1.10. Other direct expenditures within the local economy	94.00	1.95	89.35	183.35
	Total Casino Expenditures	590.56		618.94	1209.50
2. Nonlocal Visitors	2.1. Lodging outside casino	36.70	1.93	34.21	70.91
	2.2. Food and beverages outside casino	12.34	2.31	16.16	28.50
	2.3. Shopping outside casino	15.96	2.04	16.56	32.52
	2.4. Entertainment outside casino	3.08	1.93	2.87	5.95
	2.5. Local transportation	7.99	2.02	8.13	16.12
	2.6. Tour bus if provided by local companies	23.32	2.02	23.73	47.05
	2.7. Other direct expenditures in the local economy	0.00		0.00	0.00
		Total Nonlocal Visitors	99.39		101.66
	Total Positive Impact	689.95		720.60	1410.55

Table 2: Estimated Negative Economic Impact of Casino Gambling in Wisconsin - 1995 - (\$ millions)

Type of Impact	Source	Type of expenditures	Direct Expenditures	Multiplier	Indirect Impact	Total Impact
Cannibalization	1. Local gambler	1.1. Gambling losses	387.38	1.91	353.05	740.42
		1.2. Food and beverages	38.74	2.31	50.71	89.45
		1.3. Shopping	4.97	1.91	4.53	9.51
		1.4. Other expenditures	83.31	1.91	75.93	159.24
	2. Noncasino visitor	2.1. Gambling losses	29.35	2.01	29.64	58.99
		2.2. Food and beverages	2.75	2.31	3.6	6.36
		2.3. Shopping	2.08	2.04	2.16	4.24
		2.4. Other expenditures	7.81	2.00	7.83	15.64
	Total Cannibalization		556.39		527.45	1083.85
Additional Expenditures	3. Government	Not Estimated				
Negative Externalities	4. Higher crime rates	Additional costs	20.00			20.00
	5. Gambling addiction	Social Costs	117.74			117.74
		Total externalities		137.74		137.74
Total Negative Impact			694.13		527.45	1221.59

Table 3: Estimated Total Economic Impact of Casino Gambling in Wisconsin - 1995 - (\$ millions)

Source	Direct Expenditures	Indirect Impact	Total Impact
Positive Impacts	689.95	720.60	1410.55
Negative Impacts	694.13	527.45	1221.58
Net Impacts	-4.18	193.15	188.97

Table 4: Positive Economic Impact of Casino Gambling in Illinois - 1995 - (\$ millions)

Source	Type of Expenditures	Direct Expenditures	Multiplier	Indirect Impact	Total Impact
1. Casino	1.1. Wages and salaries of local employees	264.99	2.44	381.29	646.28
	1.2. Purchases of goods and services from local suppliers*	191.46	2.11	213.19	404.65
	1.8. Local taxes	296.61	2.28	378.53	675.14
	1.9. Share of profits staying within the local economy	22.82	2.44	32.84	55.66
	1.10. Other direct expenditures within the local economy				
	Total Casino expenditures	775.88		1005.85	1781.73
2. Nonlocal Visitors	Total Nonlocal Visitors**	48.95	2.42	69.43	118.38
	Total Positive Impact	824.83		1075.28	1900.11

*Includes local advertisement, utilities, insurance from local providers, and maintenance.

** Includes all expenditures in noncasino businesses while in the area

Table 5: Estimated Negative Economic Impact of Casino Gambling in Illinois - 1995 - (\$ millions)

Type of Impact	Source	Type of expenditures	Direct Expenditures	Multiplier	Indirect Impact	Total Impact
Cannibalization	1. Local gambler	1.1. All expenditures	738.64	2.42	1,047.68	1,786.32
	2. Noncasino visitor	2.1. All expenditures	57.01	2.11	63.49	120.5
		Total Cannibalization	795.65		1111.17	1906.82
Additional Expenditures	3. Government	Not Estimated				
Negative Externalities	4. Higher crime rates	Not Estimated				
	5. Gambling addiction	Social Costs	280.07			280.07
		Total negative externalities	280.07			280.07
Total Negative Impact			1075.72		1111.17	2186.89

Table 6: Estimated Total Economic Impact of Casino Gambling in Illinois - 1995 - (\$ millions)

Source	Direct Expenditures	Indirect Impact	Total Impact
Positive Impacts	824.83	1075.28	1900.11
Negative Impacts	-1075.72	-1111.17	-2186.89
Net Impacts	-250.89	-35.89	-286.78