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THE SOCIAL AND ECONOMIC IMPACTS OF GAMBLING

EXECUTIVE SUMMARY

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SUMMARY

There has been considerable debate about the best methodological and theoretical approach to analyzing the social and economic impacts of gambling, with one of the central issues being how to aggregate the social impacts with the financial impacts to arrive at an overall summative measure. However, there is no reliable way of doing this. Judging the overall positive or negative nature of gambling will always be a subjective determination about the relative importance of the observed social impacts compared to the observed economic impacts. This does not mean that high quality socioeconomic analyses of gambling cannot be conducted. Rather, there are many basic principles for conducting socioeconomic impact studies that can ensure that the obtained results are comprehensive, provide a meaningful accounting of the social impacts of gambling, and are scientifically rigorous. These principles are outlined in the first section of this paper.

In light of these methodological principles, the second section of this paper provides an exhaustive review of what is known about the social and economic impacts of gambling. A total of 492 studies were identified, 293 of which were empirical investigations. Study quality was uneven, with only 51 of these empirical studies being rated as good or excellent. Although 70% of the socioeconomic literature has been published since 2000, the study period of the empirical investigations has primarily been in the 1990s (55% of studies). The large majority of the empirical studies have been conducted in the United States (62%). The only other countries with significant numbers of investigations have been Canada (16%), Australia (8%), and New Zealand (4%). The impact of casinos has been the focus of most of these investigations (57%), followed by study of multiple forms of gambling (26%), EGMs (10%), lotteries (6%), Internet gambling (1.4%), and horse racing (0.7%). Certain types of impacts have been investigated more thoroughly than others, with the most commonly examined impact areas being: government revenue (27% of studies), employment (27%), problem gambling and related indices (24%, primarily prevalence rates and bankruptcy), non-gambling business revenue (23%), crime (16%), public services (15%), and attitudes (12%). Fewer than 10% of studies examined impacts in the areas of infrastructure costs, regulatory costs, quality of life, infrastructure value, socioeconomic inequality, property values, personal income, leisure activity, and business starts and failures.

Analysis of these empirical studies shows that the most reliable impact of gambling across all forms of gambling is an increase in **government revenue**. However, there are occasional situations where the introduction of a new form of gambling contributing to government revenue primarily cuts into the revenue of another form that also contributes to government revenue. There are also occasional situations where government revenue decreases: a) the newly introduced form contributes less to government revenue (e.g., Indian casinos) than the forms that are negatively impacted (e.g., state lotteries); or b) if a newly introduced form that does not contribute to government revenue (e.g., Indian casinos) negatively impacts personal income and business revenue that is subject to government taxation. Finally, in cases where gambling revenue is derived in a local area (e.g., community hosting a casino), but the revenue

goes to the state or federal government, there can be losses to local municipal governments if they do not receive equivalent value back in the form of state or federal services.

Not surprisingly, the evidence also shows that the **enhancement of public services** (e.g., health, education, social security) is also a fairly reliable impact of gambling introduction. However, it is also sometimes the case that government gambling revenue is used to avoid raising taxes, reduce government debt, or just to maintain rather than enhance existing services. It is also the case that new forms of government and/or privately delivered gambling (e.g., casinos) can sometimes negatively impact public services by their direct competition with and negative impact on traditional charitable gambling revenue.

Government typically provides the regulatory oversight over gambling operations. Thus, all studies that have examined this issue have found **regulatory costs** to increase with the introduction of gambling. These administrative/regulatory costs are increased in jurisdictions where the government is also directly involved in the commercial provision of gambling. However, these studies also point out that the revenue governments receive from gambling usually significantly outweighs these costs.

The construction of new gambling venues (e.g., casinos) reliably adds to the physical assets and wealth of the community and thereby reliably increases **infrastructure value**, albeit to a small degree. This is especially true if the new venue is associated with upgrades (e.g., roads, electrical, sewage) to accommodate the new facility and the new building and infrastructure upgrades are financed by out-of-jurisdiction investors. Increased infrastructure value can also occur in the situation where this new gambling revenue stimulates the construction of complementary businesses (e.g., hotels, restaurants) to take advantage of the increased patronage of the area. These positive impacts on infrastructure value primarily occur for types of gambling that involve the construction of new venues (casinos, horse race tracks, bingo halls) as opposed to examples such as Internet gambling or adding EGMs to bars. The magnitude of the increase in infrastructure value is often a function of how well developed the existing infrastructure is, with larger gains occurring in impoverished areas (e.g., Aboriginal reserves).

The introduction of a new gambling venue usually increases **infrastructure costs**. This occurs when physical infrastructure upgrades for new gambling venues are financed by government rather than by a private developer. Service upgrades that are needed (e.g., police, fire services, public transportation) are costs that are usually borne by government, as is the maintenance of physical infrastructure (e.g., roads, utilities, sewage). Most studies that identified infrastructure costs have found them to be relatively minor and to be offset to some extent by increased infrastructure value.

The introduction of gambling often has beneficial **impacts on other businesses** in the local area in terms of increased revenue, business starts, and overall **employment** *when a significant portion of its patron base is from outside the area*. This is particularly true when the number of visitors is large relative to the local population, when the area was previously economically impoverished, and when visitation requires overnight stays. Hospitality services tend to be the

industry sector that experiences the most economic benefits. However, when the patron base is *from the local area* it is more likely there will be negative impacts on other local businesses. In either case, regardless of patron origin, any benefits to gambling venues, other businesses, or any specific geographic area usually occurs at the expense of other business sectors and/or geographic areas. The caveat to this general substitution effect is that there may be some potential for gambling to increase overall economic activity in its first few years of introduction without negative impacts on other industry.

The introduction of gambling usually does not impact **personal income** except in the situation where gambling brings in new revenue from outside the community and there is a significant degree of impoverishment prior to gambling introduction. This effect is most evident with the introduction of destination casinos hosted by Native American communities in the United States.

Casino introduction can increase **property values** or have no impact. Factors that appear to mediate whether there is a positive or neutral effect concern the property value of the area before the introduction of a casino (with impoverished areas more likely to experience property value gains), and zoning regulations which may restrict casinos to areas less sensitive to price changes (e.g., industrial areas).

One of the main negative impacts of gambling introduction is an increase in **problem gambling and its related indices** (e.g., bankruptcy, divorce, suicide, treatment numbers). The bulk of the impacts tend to be social/nonmonetary in nature because only the minority of problem gamblers seek or receive treatment, and only a minority typically have police/child welfare/employment involvement. Most of the increase in problem gambling occurs after the initial introduction of gambling, with progressively less impacts on problem gambling occurring with extended exposure. It is also important to recognize two things: a) the *legal* availability of a gambling is only partly responsible for the prevalence of problem gambling (i.e., problem gambling existed to some extent in all jurisdictions prior to legal provision), and; b) problem gambling is only partly responsible for these serious consequences (i.e., the mental health and substance abuse comorbidities of problem gamblers are additional contributing factors). A controlled before-after comparison of changes in rates of problem gambling and related indices coincident with the introduction of a new form of gambling will reliably identify the unique impact that this new form of gambling has on increasing these rates. However, this 'attributable fraction' will vary between jurisdictions depending on the type of gambling introduced, the magnitude of the change, and many other factors. This attributable fraction also does not identify the extent to which associated comorbidities have made people vulnerable to problem gambling and therefore susceptible to the impacts of this greater legal availability of gambling.

The impact that gambling has on **crime** is particularly complex and the results are mixed. Theoretically, the introduction of legal gambling should influence crime rates in one of several ways. One way is by decreasing the rate of illegal gambling, which tends to be a fairly reliable effect. A second is by increasing the number of problem gamblers, a minority of which engage

in crimes (primarily property crime) to support their gambling. A third is because certain forms of gambling (e.g., casinos) offer increased opportunities for illegal activity to occur (e.g., passing counterfeit money, money laundering, cheating-at-play). A fourth is by creation of venues that serve alcohol and thereby potentially contribute to alcohol-related offences, and/or venues that disproportionately attract a clientele with criminal tendencies. A fifth and final way is by increasing the overall number of visitors to the area (this population is often not taken into account when determining a jurisdiction's crime rate per capita). Thus, although there are good theoretical reasons to usually expect a positive relationship between gambling introduction and crime, it may not always manifest itself. There are many other factors that can potentially mediate this relationship, such as extensive prior exposure to gambling, a relatively small increase in the availability of gambling relative to population size, a temporal lag whereby crime increases take several years to occur, or the existence of jurisdictional policies that protect against the negative impacts of gambling. Because the magnitude of the increase in crime is not that large in most of these reviewed studies, the presence of any of these other moderating factors has potential to negate the increased crime effect.

Research confirms that lower income people consistently contribute proportionally more of their income to gambling than do middle and high income groups (**'socioeconomic inequality'**). However, average annual expenditure on gambling still tends to increase as a function of income class. Thus, total gambling revenue is still primarily contributed by middle and higher income groups. The only exception to this finding of regressivity concerns Internet gambling, where the limited existing research indicates it to be less likely to be regressive, as computer savvy Internet gamblers tend to be better educated and have higher incomes.

One of the important and unambiguous positive impacts of gambling is that it offers entertainment value and an additional **leisure option** for the population. However, gambling represents an *important* recreational activity to a fairly small segment of the population. The purchase of lottery tickets is the only type of gambling in which the majority of the population participate. Furthermore, when surveyed, only a small percentage of people typically report that gambling is a "very important" leisure activity for them or that it has replaced other leisure activities.

Community leaders in government and business tend to have positive **attitudes** about the impact of gambling, emphasizing its ability to generate additional revenue and economic benefits. In contrast, the attitude of the general population toward gambling is much more negative. In most cases, direct and/or extended exposure to gambling has tended to increase negative public attitudes. This is not always the case, as there are some jurisdictions that have experienced significant economic benefits and consider the positives to outweigh the negatives. Although most people consider gambling's impacts to be more negative than positive, it is important to recognize that most people do not consider gambling to be immoral, and most people agree that gambling revenue tends to go to appropriate causes. There are also significant demographic differences, with younger people, males, and heavier gamblers tending to have more positive attitudes toward gambling.

Arguably the most important impact of gambling concerns its overall impact on the **quality of people's lives**. Unfortunately, impacts in this area are also the most difficult to measure. The most common report of positive impacts concerns the significant improvement in general living conditions and/or public health in North American Aboriginal communities that have hosted a successful new casino development. While positive impacts on general living conditions are to be expected for profitable casinos in impoverished areas, studies that have looked at the impact of casinos in non-Aboriginal communities have tended to find very little impact on overall quality of life. From a theoretical perspective, population-wide changes in quality of life seems unlikely when regular gambling involvement tends to be restricted to a small percentage of the population and gambling revenue constitutes a very small percentage of most jurisdictional gross domestic product (GDP). Thus a more pertinent question concerns the *individual* impact of gambling involvement. In this regard, it is well established that heavy involvement in gambling is associated with poorer mental health, as heavy involvement is characteristic of problem gamblers. The negative impacts that problem gamblers experience, in turn, negatively impacts their families. When excluding heavy and/or problem gamblers from the analysis, there is relatively little difference in subjective well-being between gamblers and non-gamblers or between occasional gamblers and more frequent gamblers.

In general, the most consistent economic impacts across all forms of gambling tends to be increased government revenue, increased public services, increased regulatory costs (a relatively minor expense), and either positive or negative impacts on non-gambling businesses. The most consistent social impacts across all forms of gambling tends to be increased problem gambling (with most of this increase occurring after initial introduction), increased crime (to a small extent), increased socioeconomic inequality (to a small extent), and more negative attitudes toward gambling.

There are different impacts as a function of type of gambling. Formats that generate the most revenue (casinos, EGMs) and that are the most likely to be directly delivered by governments (lotteries) have the most reliable positive impacts on government revenue and the accompanying public services that may derive from this. Forms of gambling that are more likely to be delivered by government (lotteries) will also have more regulatory/administrative costs. Forms of gambling that are venue based (casinos, horse race tracks) are the only ones with the potential to add to the infrastructure value of the jurisdiction and also the only forms likely to impose infrastructure costs. Destination casinos have the greatest potential to bring in revenue from outside the local area, and thus, the greatest potential to create broad economic benefits to other local businesses in terms of revenue, business starts, and employment. Horse racing tends to support a wider range of businesses than other forms of gambling. EGMs and lotteries have a greater potential to divert money away from other local businesses and thereby negatively impact them. Casinos have the greatest potential to increase property values. Continuous forms of gambling (casino table games, EGMs) and forms of gambling with 24 hr accessibility (Internet gambling) have greater potential to increase problem gambling. Casinos have the greatest potential to increase crime, and lotteries have the greatest potential to decrease crime. EGMs are the least labour intensive form of gambling and are most likely to decrease overall employment, whereas horse racing and casinos have the greatest potential for

increasing employment. Internet gambling is the only form of gambling that may not be economically regressive. Lotteries are the only form of gambling that reliably adds to the leisure options of most people. EGMs and Internet gambling have greater potential for negatively impacting attitudes toward gambling. Destination casinos have the greatest potential for improving the quality of life for impoverished communities, whereas non-destination casinos and EGMs have the greatest potential for decreasing quality of life.

The impacts of gambling can vary considerably between jurisdictions, as the impacts are strongly mediated by a) the magnitude of the change in gambling availability that has occurred for the population; b) the type of gambling that is being introduced; c) the length of time that gambling has been legally available in the jurisdiction prior to the introduction of additional or new forms; d) whether patrons and revenues are locally derived or come from outside the jurisdiction; e) the type and extent of gambling opportunities in neighbouring jurisdictions; e) the strength of jurisdictional policies and educational programs to mitigate the negative effects of gambling; f) baseline levels of community impoverishment; g) whether the impacts are only being examined at a micro community-specific level, or whether larger macro regional impacts are taken into account; h) the length of the time in which impacts are being evaluated; and i) how gambling revenue is ultimately distributed.

Depending on these variables, the overall impact of gambling in a particular jurisdiction in a specific time period can range from small to large, and from strongly positive to strongly negative. *That being said, in most jurisdictions, in most time periods, the impacts of gambling tend to be mixed, with a range of mild positive economic impacts offset by a range of mild to moderate negative social impacts.*

There are 4 main areas that warrant further research:

1. The impacts of certain forms of gambling are not well identified. The highest priority for study is the impact of Internet gambling. Furthermore, excellent research opportunities currently exist for before-after and cross-jurisdictional comparisons. Other forms of gambling that also merit further study are social gambling (poker), lotteries, horse racing, and bingo.
2. Certain types of impacts have not been studied to any significant extent and would benefit from more research. Specifically, the impacts of gambling on property values, regulatory costs, social capital, and values.
3. More research is required on the social and economic impacts of gambling in European countries and non-Western jurisdictions.
4. More research is required on the impact of gambling on indigenous peoples outside of the United States (e.g., Canadian First Nations, Australian Aborigines, New Zealand Maori).