

The Socio-Economic Impact of Gambling (SEIG) Framework

An Assessment Framework for Canada: In Search of the Gold Standard

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**Inter-Provincial Consortium for the Development of Methodology to
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- Addictions Foundation of Manitoba
- Alberta Gaming Research Institute
- British Columbia Ministry of Public Safety and Solicitor General
- Canadian Centre on Substance Abuse
- Manitoba Gaming Control Commission
- Ministère de la Santé et des Services sociaux du Québec
- New Brunswick Department of Health
- Nova Scotia Gaming Foundation
- Ontario Problem Gambling Research Centre
- Saskatchewan Liquor and Gaming Authority

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Disclaimer: The ideas expressed in this analysis may not necessarily represent the views of all the funding partners.

Executive Summary

Searching for the Best Method

This report deals with the question of what is the best method to measure the social and economic impact of legalized gambling in an early 21st Century society. The specific impact referred to is one that touches the individual gambler, the family or household, and the community, region or province.

The authors have developed a framework to address the complex and wide-ranging impact question of what is the positive and negative impact of legalized gambling and, in particular, what are the preventable negative consequences. The construct presented in this report is called **The Socio-Economic Impact of Gambling (SEIG) Framework**. It is designed to help guide researchers and policy makers to measure, assess and report on the social and economic impact – both positive (benefits) and negative (costs) – of gambling in Canada.

Over the last decade, there has been a growing need for a consensus-based and acceptable standard for measurement methodology that will objectively gauge the true impact of legal gambling as a business enterprise and leisure activity. Since the mid-1990s, the gaming industry has flourished in this country, growing extensively throughout the Canadian provinces and territories, consuming significant investment funds and annually harvesting substantial profit. It is a multi-billion dollar industry that generates much consumer interest, and its business footprint is felt by many. Because of the nature of this business enterprise, finding a true snapshot of its actual, authentic and unbiased worth to the general common weal is of critical importance.

The SEIG Framework represents the highest standard yet attained for a measurement methodology of assessment. It is expected that, with wide application and further refinement, the framework will assume the recognized and accepted position as the preferred methodology when assessing the gaming industry's impact on the individual and society.

The SEIG Framework reflects the interdisciplinary and complex nature of gambling and takes a broad and integrated systems approach to measuring impact. It uses the best and most relevant analytical tools, ranging from quantitative and qualitative research methods to conventional economic analysis tools. In addition, it applies new social welfare economic analysis tools in order to facilitate the development of an objective profile of legalized gambling's impact.

The SEIG Framework is designed as an “open architecture” construct. This means that the utility of the framework is expected to evolve through ongoing application of the analytic tools, the development of specific impact indicators, and the analysis and interpretation of the impact results.

While the SEIG Framework does contain some methods for estimating impact of gambling, it is not a “one-size-fits-all” universal framework and it allows for considerable flexibility. Several areas will require new research and development, while others will need ongoing refinement and improvement. It is anticipated that an efficient and effective mix of tools will emerge through this iterative process.

Snapshot of an Emerging Measurement Standard

The SEIG Framework consists of six impact themes, each of which has its own associated variables and accompanying indicators that address the question of positive and negative impact. The entire SEIG Framework can be concisely summed up in the chart immediately below.

SEIG Framework Chart¹

Impact Theme One:

Health and Well-Being	
Health and Well-being variable	Indicator
Benefit	
Entertainment pleasure	Level of enjoyment in time spent gambling
	Citizen positive or negative attitudes toward gambling
Cost	
Problem gambling prevalence	Problem gambling prevalence and incidence rates in a region or community Number of gamblers who seek help through community-based and residential treatment services
Problem gambling and co-morbidity	Prevalence of problem gambling and co-morbid disorders: <ul style="list-style-type: none"> • Mental health • Depression and mood disorders • Physical (e.g. gastric problems, high blood pressure, etc.)
	Prevalence of problem gambling and substance abuse
Mortality	Deaths from natural causes attributed to problem gambling
Suicide	Suicides attributed to problem gambling
Social relationships	Family breakdown: separation and divorce due to gambling impacts
	Impact on children, spouses and other family members of problem gamblers
	Social isolation
	Psychological impacts on family and friends of gamblers
	Domestic violence

Impact Theme Two:

Economic and Financial	
Economic and Financial Variable	Indicator
Benefit	
Contribution to economic growth	Contribution gambling sector makes to provincial Gross Domestic Product
	Changes in investment, housing starts, value of residential and commercial building permits, hotel and commercial starts

¹ This chart is an excerpted version. The full chart appears as Table 1 in Section 2.1.1.

The Socio-Economic Impact of Gambling Framework

Economic and Financial	
Economic and Financial Variable	Indicator
Personal gambling expenditures	Net gambling expenditures as a percentage of household income Changes in disposable household income, as potential proxy driver of gambling activity
Personal entertainment satisfaction benefit	Consumer surplus
	Distance surplus
Gaming industry benefit	Producer surplus Revenues by industries on which gambling may have a large impact on such as: leisure, hotel, restaurant, and traditional gambling
	Net growth in revenues/sales and employment in other sectors that benefit from gaming industry development
Government revenues	Government revenues from gambling, including incremental tax revenues (GST, PST, corporate income taxes) related to gaming activity as a percentage of total revenues
Capital gains	Capital gains to consumers, including increases in private and commercial property values related to gambling venues and development
Cost	
Bankruptcy	Personal bankruptcy rates attributable to problem gambling
Financial problems (gambling debts)	Self-reported financial problems, including gambling debts, borrowing or financing of gambling activity and debts Changes in personal savings rates and liquidation of assets (e.g. RSPs, RESPs, home equity)
Value of losses in quality of life time	The value of volunteer time spent by households to work charity gambling venues to raise money for community programs and infrastructure; time that would not otherwise have to be invested if other government general revenues were available for fully funding these community needs
Public sector cost	Government expenditures allocated for problem gambling treatment, education and prevention
	Government regulatory costs (government expenditures) related to gambling industry
	Public infrastructure costs related to gaming industry development
	Government subsidies to the gaming industry

Impact Theme Three:

Employment and Education	
Employment and Education Variable	Indicator
Benefit	
Job creation	Direct employment (job creation) in gaming industry
	Indirect employment related to gaming industry
	Annual and hourly wages for gaming industry employees
	Job intensity: Gambling-related jobs created per \$1 million of gambling income (or Gross Domestic Product), <i>compared with other sectors in the economy</i>
Unemployment and underemployment	Changes in unemployment and underemployment rates resulting directly from gaming industry development
Cost	
Work performance	Productivity losses, absenteeism due, and increased likelihood of unemployment to problem gambling activity by employees
Employment cost	Retraining and other employment cost impacts sustained by in other industries

The Socio-Economic Impact of Gambling Framework

Impact Theme Four:

Recreation and Tourism	
Recreation and Tourism Variable	Indicator
Benefit	
Gambling tourism	Gambling tourist rate Percentage of patrons/visitors from outside the region/community/province making day or overnight trips to a local gaming venue Tourists citing gambling as primary reason to visit region; as a contributing factor Overnight trips made by local residents to other regions with gaming venues. Average tourist/visitor expenditures on gambling venues
Cost	
Negative impact on other recreational industries	Income and employment losses sustained by traditional forms of entertainment and recreation in the community

Impact Theme Five:

Legal and Justice	
Legal and Justice Variable	Indicator
Benefit	
Reduced illegal gambling	Reduction in illegal gambling activities using court proceeding statistics as a proxy
Crime rates related to gambling	Decreased crime rates related to gambling (e.g. embezzlement, fraud) as a result of legalization of gambling activities Benefits (or costs) of crimes related to problem gambling in a legalized gambling context
Decreased crime, judiciary and policing cost	Reduced policing and court costs associated with illegal gambling
Cost	
Crime rates related to gambling	Violent crimes (homicides, attempted murders, assaults, robberies, harassment/stalking) attributed to gambling Non-Violent crimes--break and enter, vehicle theft, fraud, theft over/under \$5,000
Criminal cost	Negative crime impacts including losses to other businesses from gaming-related crime (e.g. fraud and theft, money laundering and loan sharking)
Judiciary and policing cost	Policing and court cost related to gambling-related crime, total and as a percentage of total policing and court cost
Security cost	Increased security (private and public) costs related to gambling activities

Impact Theme Six:

Culture	
Culture Variable	Indicator
Benefit	
Community benefits from gaming activity	Local charities and non-profit sector who derive income from gaming revenue transfers from government
Public sector benefits from gaming activity	Gambling revenue contributions to government social program spending, grant programs, and organizations (e.g. schools) that come from gaming revenues
Sense of safety from gaming venues	Increased sense of personal safety because of gaming venues

Culture	
Culture Variable	Indicator
Cost	
Non-gambling charitable sector impact	Changes in the amount and value of non-gambling charitable donations and grants
Loss of social cohesion (i.e. sense of community; social capital) in a community due to legalized gambling development	Loss (or gain) in community social capital (i.e. sense of cohesion, trust, belonging)

Challenges and Limitations

As with any initiative, many limitations, challenges and issues surfaced during the creative process. This section identifies conceptual, theoretical, and methodological measurement challenges and data limitations with respect to socio-economic analysis.

The stumbling blocks in developing and using the SEIG Framework are summarized as follows:

- **First and most important key challenge:** The general absence of adequately robust data for the various impact domains, variables and indicators. New research and a commitment to rigorous analysis of existing societal health, social and economic indicators and data sets will be required with a special focus on gambling impact.
- **Second key challenge:** The issue of causality, namely, the difficulty in determining the degree to which gambling is a key contributing factor to a change in a given measure of well-being, especially in relation to health indicators.
- **Third key challenge:** The challenge of estimating the full monetized cost and benefit of gambling on society. While conventional cost-benefit analysis tools may be beneficial, there is still considerable disagreement among economists as to the right taxonomy of cost and benefit for gambling and how to measure this impact.

To address the third challenge directly, the SEIG Framework proposes the use of the Genuine Progress Indicator (GPI) full-cost-benefit accounting model as a practical tool to account for and weigh the broadest possible scope of impact (positive and negative) of gambling expressed in economic or monetary terms.

A review of the literature on the socio-economic analysis of gambling, as a form of economic development, shows the inconsistencies and problems in theoretical and methodological issues as well as inconsistency in the use of terminology in defining

well-being impact, cost, and benefit. In order to develop a meaningful framework for well-being impact analysis, clear definitions and methodological concepts need to be spelled out. The SEIG Framework achieves significant progress in this respect.

There is also a lack of consensus and a misuse of economic theory on how conventional cost-benefit analysis should be used in assessing welfare effects of public policy. The key issue of political and theoretical debate is what to count in a cost-benefit analysis, which is often influenced by what the researcher wants to study.

A Consensus-Building Tool

Ideally, the SEIG Framework will function as a consensus-building tool to permit stakeholders to reach a point of agreement concerning whether or not a particular impact of gambling warrants further investigation. Typically, agreement emerges from a research community as a form of consensus, or a common sense of what is supported by the balance of evidence. The SEIG Framework will enable this emergence of research consensus and let individuals, communities, governments and decision makers reach a similar consensus and make informed decisions.

The authors of this report hope for the following outcomes as a direct result of the SEIG Framework:

- An interdisciplinary research consensus concerning an appropriate set of tools for understanding the issue of legalized gaming in a concise, clear, intuitive, and theoretically appealing way; and
- Individuals, communities, governments and other decision makers will have a basis upon which to reach consensus regarding knowledge bases, recognizing that such consensus may vary from region to region or even community to community.

In relation to its underlying values, the SEIG Framework is intended to be both flexible and transparent. It is not intended to divert intellectual energy into “us vs. them” disputes, but to facilitate consensus, as mentioned above, by providing a practical, intuitive,, and theoretically appealing tool that frames and resolves such disputes (i.e. maximizing agreement).

A true standard has been launched with this report, and users of the SEIG Framework will, over time, help to evolve the construct into a robust approach to measurement.

New Emerging Research in Canada

A number of research initiatives are currently underway in several Canadian provinces to examine the social and economic impact of gambling; some of these initiatives are already experimenting with the SEIG Framework outlined in this report. A complete list of these research initiatives is provided in Appendix 10. Some key initiatives include:

- a socio-economic study of gambling in Nova Scotia
- the measurement of the socio economic impact of a new gambling venue (gaming room) in Trois-Rivières, Quebec
- a longitudinal study of the socio-economic impact of the new slots-at-racetrack facility in Belleville, Ontario
- the use of the SEIG framework assess the social and economic impact attributable to the construction and operation of First Nations casinos in Manitoba
- a study of the social and economic impact of gambling to commence in 2008 in Alberta
- the study of the social and economic effects of casinos and slot machines in the Lower Mainland communities of British Columbia that began in 2004

Conclusion

The SEIG Framework represents a first step in building consensus on methodologies for conducting reliable and comparable impact studies to inform responsive and responsible decisions. It is focused on addressing the first two of four basic questions that could help policy makers arrive at well-informed decisions on gambling issues; that is:

- What is the positive and negative impact of legalized gambling?
- What are the preventable forms of negative impact?
- Where should investments be made to avoid preventable negative impact?
- How well are these investments achieving their objectives over time?

The sponsors of this initiative will undertake the necessary steps to support the research and testing required to refine the SEIG Framework and to answer the foregoing questions. It is their hope that researchers and policy makers will do likewise, as will others in jurisdictions outside Canada. In this context, the funding partners are actively considering the staging of a second SEIG Symposium in 2010 to review progress made to date, refine the Framework, and reach broad agreement on next steps.