



**Submission to the Victorian Competition and
Efficiency Commission Inquiry into the Social and
Economic Costs of Problem Gambling**

14 September 2012

Australasian Gaming Council

About the Australasian Gaming Council (AGC)

The Australasian Gaming Council (AGC) is a national industry association established in June 2000.

The AGC supports a sustainable gambling industry, while promoting gambling information, education and responsible gambling.

Within a public policy framework the AGC:

- promotes responsible gambling and high quality gambling research;
- develops and distributes gambling education resources;
- participates in and leads public policy forums and events about gambling;
- maintains an extensive gambling research e-Library and industry statistical database; and
- provides first class services for members including issues papers, newsletters, research comment and the AGC website.

The AGC has broad coverage of the industry in Australia. AGC members are the Australian Hotels Association, the Gaming Technologies Association, the Australasian Casino Association, the Australian Leisure and Hospitality Group and Tabcorp Holdings Limited.

To read more about the AGC or to access the AGC's public e-Library of gambling research articles please visit us at www.austgamingcouncil.org.au

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Submission Overview

1. Multiple and far-reaching changes to the gambling environment in Victoria have occurred over the past decade. During this time a multi-faceted suite of initiatives that seek to prevent problem gambling, minimise the harms that may arise and provide means by which those experiencing problems may be alerted to and directed towards helpful treatment options have been implemented.
2. The changes that have occurred reflect a clear and ongoing commitment by all stakeholders to reduce and ameliorate the harms that may arise through problem gambling and promote a sustainable and responsible gambling environment in Victoria.
3. The CPGI is subject to limitations and its actual measurement capacity may differ from the Australian harm-based definition of problem gambling. However, in the absence of any metric devised to comprehensively and reliably assess harms being applied across the full spectrum of those gambling in Victoria the VCEC must have regard to a valid measure point in assessing cost. The AGC submits that costs are currently most reliably based on the harms experienced by those defined as problem gamblers using the CPGI instrument.
4. The Productivity Commission's 1999 methodology for assessing both the benefits and costs of gambling has been the subject of extensive criticisms by a number of commentators – not least for the inclusion and monetisation of 'internal' costs.
5. Notwithstanding a number of significant concerns regarding elements of the Commission's 1999 methodology, the AGC is of the view that the VCEC's current inquiry may be presented with a number of substantial challenges in sourcing sufficient accurate and quality data to allow provision of a suitably robust set of estimates with regard to the current terms of reference.
6. Where data may be available it must be recognised that:
 - a. Significant issues of causality exist owing to the high degree of co-morbidity experienced by problem gamblers - to which application of a standard discount rate may not be appropriate.
 - b. There are overlaps in some cost headings (which may be resistant to segregation). Some variables should also be recognised as relatively fixed costs.
 - c. Most of the studies pertaining to Victoria provide point in time material and only the most recent data may give rise to valid estimates. The gambling environment has changed significantly in the past decade alone and prevalence has declined over time. It follows that cost estimates will also be impacted by societal changes and adaptations occurring over time.
 - d. A number of studies in Victoria relate to particular populations and/or regions. Many of the statistics in these reports cannot be taken as representative of the wider Victorian population.
7. The Productivity Commission was among the first to seek a methodology for assessing the social and economic impacts of gambling. The current inquiry affords an opportunity to ask how complexities impacting on the Productivity Commission's 1999 results could be better addressed by other methodologies and a more robust data framework. This is a subject that requires discussion not just in Victoria, but for the sake of comparability, across Australia.

Executive Summary

1. Overview to the Victorian Gambling Environment

- While the Terms of Reference for the current VCEC Inquiry into the Social and Economic Costs of Problem Gambling in Victoria do not include an enumeration of the benefits provided by Victoria's gambling industries these are manifest.
- Apart from the enjoyment experienced in recreational gambling activity by the vast majority of those Victorians who choose to gamble, the gambling industries provide substantial economic benefits to the Victorian community.
- The industry also plays a significant role in the social fabric of the Victorian community and funds garnered from gambling revenue have furthered numerous community objectives.
- The 1990's were a time of expansion and a rapid growth for gambling in Victoria, however in the decades since the industry has shown significant consolidation and maturation.
- Since the 1990's the industry has embraced multiple and far-reaching changes to the gambling environment in Victoria. During this time a multi-faceted suite of initiatives that seek to prevent problem gambling, minimise the harms that may arise and provide means by which those experiencing problems may be alerted to and directed towards helpful treatment options have been implemented.
- The industry holds a firm view that responsible gambling occurs in regulated environment as a product of collective actions and shared commitments involving industry, government, the community and gamblers themselves.
- The costs associated with the implementation of any detailed regulatory compliance framework can undoubtedly be significant – for both governments and industry. The industry has drawn attention throughout various inquiries over recent years to the need for evidence-based policies that are thoroughly underpinned by sound research.
- In recognition of its role in fostering a socially responsible gambling environment, Victoria's gambling industries have also voluntarily implemented a number of initiatives, which operate in addition to and support of the various legislative and regulatory requirements applicable.
- Industry has self-funded many of these measures, contributing substantial sums annually for the development, implementation and maintenance of responsible gaming awareness programs, prevention initiatives and safety net services for customers. These undertakings represent a large investment – requiring the provision of a great many human and capital resources.

2. Problem Gambling in Victoria

- There is a clear understanding on the part of the industry that while the majority of Victorians gamble responsibly and within their means a relatively small, but no less significant, proportion of the population is negatively impacted.

- Like most prevalence statistics obtained in jurisdictions throughout Australia there appears to be a distinct downward trajectory to survey results regarding the number of those estimated to be problem gamblers in Victoria.
- Multiple factors affect prevalence rates and estimates, however the declining prevalence of gambling problems may be explained to some degree by the sustained efforts at harm minimisation that have occurred in Victoria.
- There is also growing international support for a premise that while problem gambling prevalence may rise initially with increased gambling availability (exposure), this relationship at some point breaks down as individuals and communities adapt and develop a greater resilience and understanding (social adaptation).
- While the CPGI is agreed to be the best method for capturing population prevalence, it is also subject to limitations. Its actual measurement capacity may differ from the Australian harm-based definition of problem gambling.
- The AGC is of the view however that, in the absence of any metric devised and validated to comprehensively assess harms being applied in Victoria, the costs applied to problem gambling harms must of necessity have regard to a valid measure point and are most reliably assessed as harms experienced by those defined as 'problem gamblers' (or CPGI 8+).
- Given the downwards trajectory of prevalence findings it should also be considered that in the four years since the last major prevalence study was undertaken in Victoria prevalence rates may have further diminished.

3. The Social and Economic Costs of Problem Gambling

- Providing a framework to assess the costs arising from problem gambling harms is a complex task subject to a variety of issues - including a distinct lack of agreement about what costs should be included or accorded a monetary value, a need for relevant, quality data upon which to base estimates, issues of causality where data is available and significant overlaps in the costs included.
- Australia lacks an appropriate standardised definition of social cost just as it lacks any agreed methodology for measuring these costs.

Debate Regarding the Inclusion of 'Internal' Costs

- Various writers have evinced a number of significant reservations regarding the Productivity Commission's rationales for the inclusion of 'internal costs'. A clear definition and methodology for determining social cost is now required.
- Knowledge of the impacts of problem gambling upon intangible realms is important. They remain a salient reminder of the need to maintain and sustain efforts to reduce the incidence and prevalence of problem gambling.
- Monetary estimates of 'cost' for intangible items however are likely to be somewhat unreliable and a number of commentators argue that they should not be understood as the best way of promoting understanding of the complexity of problem gambling impacts. Nor may they necessarily succeed in representing an objective true dollar cost to gamblers, their families or the community.

Data

- The AGC submits that to establish the cost of problem gambling with any academic rigor the VCEC's inquiry may well need to be informed by the establishment of quantitative and qualitative data collection instruments specifically designed to provide further up to date statistics that realise a robust and reliable assessment.
- In estimating costs the AGC submits that data from recent studies reflecting as nearly as possible the *current* Victorian gambling environment will need to be used to inform estimates by the VCEC. The gambling environment in Victoria has undergone significant change in the past decade. It is logical then that estimates will be impacted by societal changes and adaptations occurring over time.
- Costs may also be somewhat specific to a jurisdiction – with its particular socio-economic trends and variables. Data used to quantify costs emanating from national studies or from other Australian jurisdictions may have lesser relevance in a purely Victorian context. This factor also impacts comparisons between Victorian regions and time periods.
- The AGC suggests that to conduct a meaningful study of the costs of gambling across Victoria, one that fully answers the current terms of reference an extensive data framework - that goes beyond the use of existing studies and accounts for a number of the issues faced when triangulating the results of smaller studies and/or studies of unrepresentative populations - will be required.

Causality

- Causality may be of particular relevance to costs occurring in the health domain owing to the high prevalence of co-morbid disorders with problem gambling.
- Ultimately the most effective way of identifying causal pathways relating to apparent adverse outcomes for problem gamblers is a longitudinal study of gamblers. Victorian longitudinal study results provide a further current information source but do not, at the current time, provide indicators of causation.

Discounting for Causality

- While the Productivity Commission may have been satisfied that a uniform 15-20% discount rate for causality was appropriate with regard to 1999 estimates it is debateable whether it would remain similarly appropriate for Victorian estimates in 2012.
- Studies such as a US NORC report (upon which the Commission benchmarked their causality discount in 1999) evidence a sounder methodology - however currently available Victorian data sets would likely defy any attempts at replication of such a methodology.

Segregating the Impacts of Gambling

- Many problem gamblers tend to experience multiple problems, so that costing problematic domains separately may provide over-inflated estimates.
- While it's possible that unit data from Victorian prevalence and longitudinal studies may allow for segregation of the overlapping costs of multiple problems this will be a complex exercise. For many other Victorian research studies the AGC suggests that segregating results to apportion costs within specific domains may not be possible.

Fixed versus Variable Costs

- The AGC notes that unless there is evidence of a proportionally greater demand placed by problem gambling (and this proportion may be accounted for to the exclusion of other factors) accounting for costs where services are fixed will likely result in an over-estimation of the costs attributed to problem gambling.

4. Personal and Family Costs – A Brief Discussion

- The Productivity Commission's ability to ascertain some of personal and family impacts on cost was largely dependent on data from surveys specifically undertaken to inform their 1999 report. In Victoria in 2012 without the benefit of any large scale survey devised specifically to answer the terms of reference there may be insufficient up to date, reliable data to inform many of the cost headings explored by the VCEC Issues Paper.
- Further, in discussion of this domain, issues of causality abound and for some problem gamblers co-morbidities may impact in a far greater manner than the Productivity Commission's 1999 discount rate would allow.
- It is well recognised that problem gambling has a number of impacts on families and loved ones. However, despite a number of informative studies there is not a great deal of state-wide quantitative data available to inform costs in this domain and further difficulties exist in differentiating the severity of impacts experienced.

5. Productivity and Employment Costs – A Brief Discussion

- Evidence concerning job change or loss as a result of gambling activity is not well researched in Victoria and up-to-date data sources of population-wide statistical evidence specifically addressing this topic are scarce. With regard to the effect of gambling on overall workplace stability and productivity evidence suggests it does not always follow that this domain will be adversely impacted.

6. Treatment Costs – A Brief Discussion

- The AGC is of the view that while many health service providers across the spectrum of Victorian health services may deal with and assist problem gamblers, in seeking to quantify the costs of treating problem gambling the funds apportioned to Victoria's specifically designated problem gambling services are those most readily identifiable and appropriate to consider – however further methodological issues apply to this domain also.

7. Crime and Legal Costs – A Brief Discussion

- The relationship between gambling and crime is complex and gambling just one of many factors. Overall, while finding a significant positive association between crime and gambling, a recent study also found that the relationship between crime and gaming expenditure has lessened somewhat in Victoria from 1996 to 2006 and, much as other studies indicate, drug offences were the most significant influence on crime.¹

¹ Wheeler, S., Round, D. and Wilson, J (2010) *The Relationship between Crime and Gaming Expenditure in Victoria*, Office of Gaming and Racing, Department of Justice

- How problem gambling may be held to impact on the number and severity of crime(s) and by virtue of severity, subsequent sentencing duration and related costs for punishment/imprisonment may be a salient question for cost estimates – however it is one to which current Victorian research does not provide any clear answers.

8. Financial Costs – A Brief Discussion

- Just how much expenditure on gambling can be attributed to problem gamblers has been the subject of considerable debate - and continues to be a contentious issue. The Victorian Government's 2009 submission to the Productivity Commission and the AGC's response to the Commission's 2010 report reference the fact that many of the individual findings triangulated to achieve results were weakened by inadequacies in the data available – which was not originally sourced to inform cost estimates.
- The AGC remains concerned that the Productivity Commission 2010 methodology did not evidence an understanding that gamblers may, within a carefully considered and appropriate budget, still evidence a high spend that remains consistent with personal means and wholly recreational play.
- The AGC would suggest that on current data sets a sufficiently robust estimate across all gambling forms available in Victoria of the proportion of 'excess' gambling expenditure derived from problem gamblers is not an immediate possibility.
- While bankruptcy statistics are a possible source of data for costing gambling related harm, attributions of causality in bankruptcy are faced with the difficulty that available statistics aggregate at least one (possibly two) further self-report reason(s) for bankruptcy with gambling.

9. Conclusions

- Notwithstanding concerns regarding elements of the Commission's 1999 methodology, the AGC is of the view that the VCEC's current inquiry may be presented with a number of significant challenges in sourcing sufficient accurate and quality data to allow provision of a suitably robust set of estimates with regard to the current terms of reference:
- While the research undertaken and commissioned by Victoria is often of very high quality, the Victorian Government would be well advised to consider further investment in state-wide research and data collection. A data framework that could provide clearer answers to both the questions asked by the current terms of reference as well as addressing other variables present in international methodologies for assessing and reporting on the social and financial costs of problem gambling is necessary.
- Through the current inquiry process an opportunity also arises to assess just what could be required for the future. Given the constant call in Australia for greater comparability between jurisdictions the AGC submits that there is scope now for a higher level discussion about precisely how the social and economic impacts of gambling may best be defined and appropriately measured. An agreed framework that captures timely and relevant information and continues to track changes while addressing confounding issues such as causality is necessary - not just in Victoria, but across all Australian jurisdictions.

1. Introduction

The Australasian Gaming Council (AGC) is pleased to provide a submission to the Victorian Competition and Efficiency Commission's (VCEC's) current inquiry into the social and economic costs of problem gambling.

AGC members include some of the largest providers of licensed gambling services in Victoria.

The Crown Melbourne casino and entertainment centre is a member of the AGC through membership of the Australasian Casinos Association, 254 Victorian hotels with gaming facilities are represented through the Australian Hotel's Association (Vic) - of which some 84 are owned and operated by the Australian Leisure and Hospitality Group (ALH) – while Victoria's TAB and Keno facilities are provided through the operations of Tabcorp Holdings Limited.

Gambling is widely recognised as a legitimate and enjoyable recreational pursuit that attracts the participation of Victorians across multiple forms - from racing and wagering to lotteries, Keno, bingo, sports-betting, casino table games and electronic gaming machines (EGMs).

While this inquiry does not seek an enumeration of the benefits provided by Victoria's gambling industries these remain manifest. Apart from the enjoyment garnered by thousands of Victorians from their recreational gambling activity, revenues from gambling in Victoria have contributed substantially to the benefit of the state.

1.1 The Contribution of Victoria's Gambling Industries

In the late 1980's to early 1990's Victoria was in the grip of recession. From the mid to late 1990's the expansion of gambling contributed to a substantial increase in employment and economic activity in Victoria.²

In the years since the expansion of legalised gambling opportunities in Victoria, the gambling industry has provided employment and training opportunities for thousands of Victorian job seekers.

The direct benefits conveyed by the industry are not the only contribution to the state economy made by the gambling industries.

Sums outlaid on differing gambling forms vary, however total yearly Victorian expenditure on gambling amounted to over \$5 billion in 2008-09 and aggregate taxes levied on gambling as a proportion of this expenditure have contributed over \$12.8 billion to the state in the period 2000-01 to 2008-09 alone.

Taxation schedules for the various forms of gambling in Victoria differ, as do licensing fees and levies – which may change over time.

For example, EGM providers at hotels in 2008-09 paid 24.24% of player losses as state tax, 8.33% of player losses to the Community Support Fund and an additional \$4,333.33 per EGM as funds due to the Health Benefit Levy. Post August 2012, as EGM ownership at clubs and hotels by the

² National Institute of Economic and Industry Research [NEIR] (2000) *The Economic Impact of Gambling*, Victorian Casino and Gaming Authority.

Tattersall's and Tabcorp duopoly has ceased, these arrangements have changed to reflect a new structure.³

Overall, Victoria derives approximately 13.1% of total state taxation revenue from gambling – a significant proportion, and one of the highest, proportionally, in Australia.

Of course there are also further taxes payable by the industry – including payroll taxes, land taxes, land rates, fringe benefits tax and goods and services tax (GST).

Gambling also occurs in social settings where there is an expenditure flow-on to food, beverages and various other leisure and entertainment offerings.

Numerous businesses rely on income derived from their status as suppliers or service providers to the hospitality sector in Victoria and capital expenditure on hospitality business development may both increase property values and provide further employment opportunities.

Victoria's gambling industries undoubtedly play a complex and significant economic role – they are also a part of the social fabric of the Victorian community.

Funds drawn from gambling revenues have refurbished and revitalised numerous hotel and club properties – venues which often serve as a hub of local community life and provide discounted services and amenities.

Revenues have also been allocated for charitable donations, funding of infrastructure, sporting group sponsorships, youth, arts and recreation projects as well as many further community objectives.

The completion of Crown's permanent casino at Southbank heralded a renaissance for the previously neglected Southbank area of the CBD. It is now a tourism drawcard and highly regarded international destination.

Equally, a portion of wagering revenues assist in maintaining a healthy Victorian racing industry of which the annual Spring Racing Carnival is both a highlight and an event of world renown.

1.2 Maturation of the Industry and Environment

While the 1990's were a time of expansion and a rapid growth for gambling in Victoria, in the decades since the industry and the gambling environment have shown significant maturation.

Gambling remains a popular leisure pursuit with statistics showing that as many as 73% of Victorian adults participate in at least one form of gambling in any twelve month period.⁴

Recorded participation levels do appear to have declined somewhat over the past decade – a factor consistent with other indicators of maturation in the gambling environment.

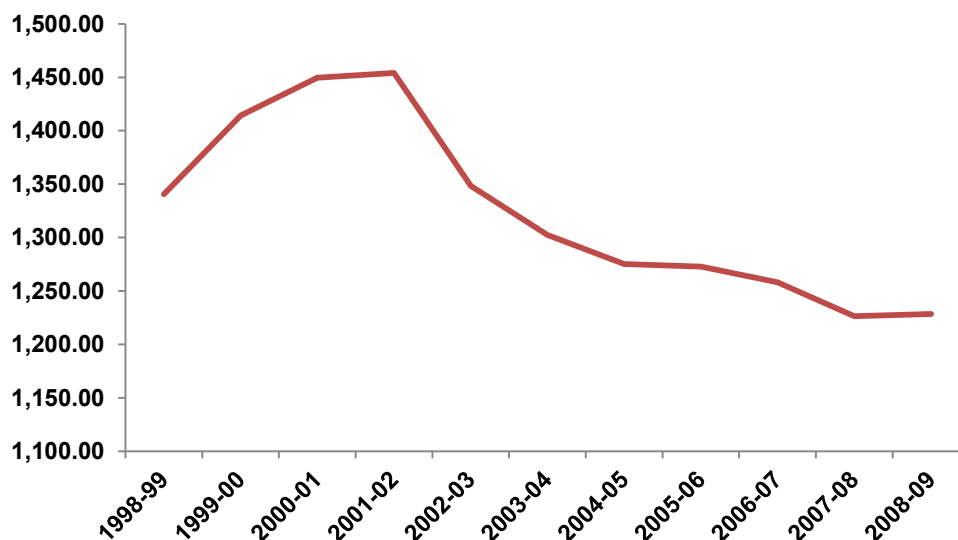
Expenditure growth rates have slowed considerably and indicators such as real per capita expenditure on gambling and the proportion of Household Disposable Income (HDI) spent on gambling activities can both be seen to have declined over past years.

³ For a detailed breakdown of taxation arrangements on various gambling forms in Victoria see the Australasian Gaming Council (2012) *A Database on Australia's Gambling Industries 2011-12*. Available online at www.austgamingcouncil.org.au

⁴ Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling From A Public Health Perspective*, Department of Justice (Victoria).

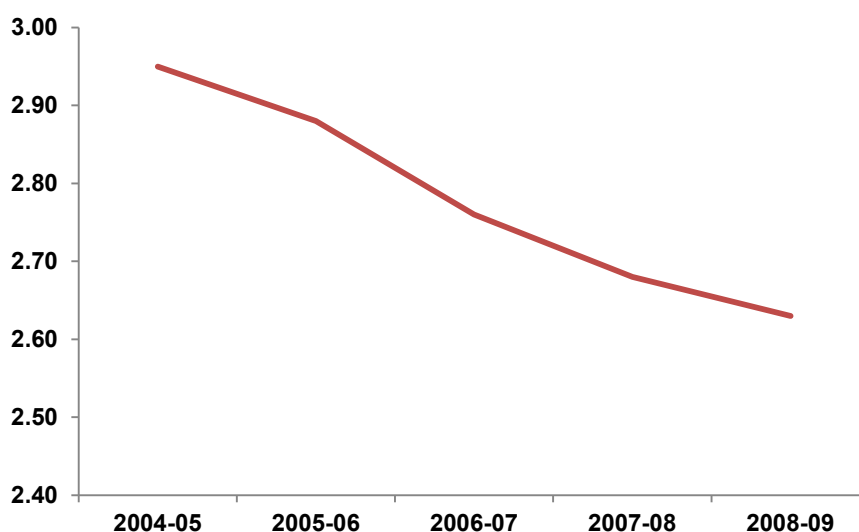
This effect is not restricted to Victoria alone. Recent analyses of gambling expenditure across the nation conducted by Roy Morgan Research have indicated that “many Australians remain cautious since the GFC, spending less in general, including less on gambling”.⁵

Figure 1.3 Victorian real per capita expenditure on gambling (1998-99 to 2008-09)



Source: Office of Economic and Statistical Research

Figure 1.4 Proportion of HDI spent on gambling in Victoria (2004-05 to 2008-09)



Source: Office of Economic and Statistical Research

With regard to the most recent participation rates, the 2008 Victorian Epidemiological Survey found a relatively small percentile of those surveyed used internet channels to access various gambling forms - the largest numbers were of those using electronic mediums to bet on sporting outcomes or events.⁶

⁵ Roy Morgan Research “Spending on gambling plummets to 10.3 billion” Press Release 8 May 2012

⁶ Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling From A Public Health Perspective*, Department of Justice (Victoria) p45.

More recent research conducted on a national scale suggests that online gambling may have a larger role to play as increasing numbers of Australians embrace digital and mobile technologies with access to readily available high-speed, low-cost Internet facilities.

The Productivity Commission estimated in 2010 that “between one and four per cent of Australians gamble online, although much higher figures have been cited.”⁷

Williams, Rehm and Stevens posit that the impacts of certain forms of gambling are not well identified and “the highest priority for study among these is the impact of Internet gambling”.⁸

These authors also note other forms of gambling as ripe for further investigation - including social gambling (poker), lotteries, horse racing and bingo.

For the purposes of this submission the AGC has not focused upon impacts pertaining to any particular gambling form but rather upon the impacts of problem gambling across the whole of Victoria’s legally available gambling forms.

1.3 The Public Health Approach to Gambling

Victoria, much as other Australian states, takes a public health approach to gambling – part of which is an acknowledgement that the severity of problems experienced by gamblers are influenced not only by individual characteristics and circumstances but may be impacted through a variety of contributing and co-existing factors.

The impacts of problem gambling – while variable in the pathways from which they arise, their severity and duration – remain the primary reason for continued efforts at every level of industry, government and community to maintain and improve upon the responsible gambling environment and responsible gambling practices that have come to the fore in Victoria over the past decade.

The industry holds a firm view that responsible gambling – where recreational gambling is enjoyed as part of an informed consumer choice and problems occurring through excessive gambling are diminished - cannot occur through the actions of any one sector alone.

Responsible gambling occurs in regulated environment as a product of the collective actions and shared commitment of industry, government, the community and individual gamblers themselves.

1.4 The Focus on Harm Minimisation and Responsible Gambling

Since the 1990’s the industry has embraced multiple and far-reaching changes to the gambling environment in Victoria. During this time a multi-faceted suite of initiatives that seek to prevent problem gambling, minimise the harms that may arise from problematic gambling and provide means by which those experiencing problems may be alerted to and directed towards helpful treatment options have been put into place.

⁷ Gainsbury, S., Hing, N., Blaszczynski, A., and Wood, R. (2011) *An Investigation of Internet Gambling in Australia*. Lismore, NSW Australia, Southern Cross University, Centre for Gambling Education and Research citing Nielsen Online (2010, February) *The Australian Internet and Technology Report 2008-09*. Edition 12

⁸ Williams, R. J., Rehm, J. and Stevens, R. (2011) *The Social and Economic Impacts of Gambling*, Final Report prepared for the Canadian Consortium for Gambling Research p 9

Victorian initiatives include:

Primary interventions to reduce the incidence of gambling-related harm and promote informed choice such as:

- The provision of meaningful information on price, odds, rates of return;
- Warnings regarding the signs of problem gambling and messaging attached to gambling products/terminals;
- Widespread provision of information on gambling support services and gambling help counselling availability through a variety of media;
- The provision of expenditure statements (where available) to gamblers; and
- Community awareness campaigns, information materials and education programs.

Secondary intervention strategies such as:

- Programs enabling self-exclusion from gaming and wagering activities;
- Voluntary pre-commitment programs to assist consumers in limiting their time and expenditure (available at Crown Casino and planned for other EGM venues throughout the state);
- State-wide and regional EGM caps;
- Requirements for social impact assessment prior to any increase in EGM numbers at gaming venues;
- Various restrictions upon venue opening hours – including mandatory shut-down periods;
- Restrictions and penalties precluding the access of minors to gambling and gambling products;
- Bans on gambling with credit;
- Restrictions upon, or removal of, ATMs from gaming venue premises;
- Limits to Bank Note Acceptors (BNAs) on EGMs;
- Cheque pay-out requirements for large wins on EGMs;
- Restrictions or bans on advertising and promotional activity;
- Venue lighting and other environmental requirements (such as the provision of clocks on EGMs and prohibitions upon smoking); and
- Restrictions upon the provision of alcohol.

Government and industry together have also furthered extensive consumer assistance commitments such as the formulation of comprehensive Victorian Responsible Gambling Codes of Conduct and staff training programs focusing on the delivery of responsible gambling.

Advanced training programs in problem gambler assistance and support have also been provided – some through the Victorian Venue Support Worker program.

Tertiary interventions (generally provided by government and/or other funded community agencies) have included:

- Gambling assistance hotlines and websites;
- Self-help strategies and peer support groups; as well as
- Free counselling services providing psychological interventions, treatments and financial counselling/assistance.

Victorian strategies have been fostered in a collaborative environment where all stakeholders have contributed constructively to promote a culture of responsible gambling in Victorian venues.

Some measures are also relatively new, with research yet to show the impact of policy change - such as legislation requiring the removal of ATMs from Victorian hotel and club gaming venues from 1 July 2012.

Industry has drawn attention throughout various inquiries in recent years to the need for efficacious, evidence-based policies that are thoroughly underpinned by sound research in order to provide the greatest benefit in proportion to cost.

The compliance costs associated with Victoria's detailed regulatory framework for gambling are significant and costs in this area are under researched.

Industry initiatives that go beyond those legislated and seek to promote responsible gambling environments that further ameliorate the costs arising from problem gambling have also been put into place in Victoria.

In recognition of its role in fostering a socially responsible gambling environment Victoria's gambling industries have implemented a number of initiatives which operate in addition to and support of the various legislative and regulatory requirements applicable.

Industry has self-funded many of these measures, contributing substantial sums annually for the development, implementation and maintenance of responsible gaming awareness programs, prevention initiatives and safety net services for customers and in some cases have earned international recognition for the efforts made towards best practice.

For example:

- The Australian Leisure and Hospitality Group (ALH) has engaged high-profile former AFL footballer, David Schwarz, as a Responsible Gambling Ambassador. Schwarz uses his sporting and media profile, well-documented personal experience of problem gambling and responsible gambling training to facilitate employee and customer awareness around responsible gambling, as well as promoting responsible gambling messages throughout the group's licensed venues.
- Crown Melbourne provides an on-site Responsible Gambling Support Centre offering self-exclusion, information and referral for problem gamblers and their families. Acknowledged as a world's first, the Centre opened in 2002 after consultation with a Responsible Gambling Advisory Committee comprised of academics, government and community representatives. This facility offers 24/7 assistance, on-site information, support and crisis diffusion for casino customers, their families and members of the wider public, from a core group of specially trained Responsible Gambling Liaison Officers. It also provides crisis counselling support from two accredited psychologists.
- The then Victorian Gaming Machine Industry (VGMI) has partnered with Gambler's Help and the Victorian Office of Gaming and Racing in the pilot of a supported model of self-exclusion from hotels and clubs administered by the Australian Hotels Association (Vic). The program - trialed from May-November 2007 - emphasises education and rehabilitation. It also works to reduce any perceived conflicts of interest and increase transparency in implementation and monitoring. Program results and evaluations showed improved links to treatment and a higher uptake of

counselling opportunities via this initiative.⁹ This program continues to the current day.

- Since 2001 Tabcorp has been included in the Dow Jones Sustainability Index and FTSE4Good Index and continue to be recognised as a world leader in the responsible service of gambling and for its high standard of governance.

Compliance with legislative harm minimisation provisions and all further undertakings are fulsome evidence of a genuine commitment to furthering a culture of responsibility in Victoria that aims to reduce the impacts and harms arising from problem gambling.

These undertakings also represent a substantial investment by the Victorian industry – requiring the ongoing provision of both human and capital resources.

It remains very difficult to segregate the costs of compliance across the full spectrum of the many and extensive responsible gambling initiatives and collaborative efforts undertaken in Victoria.

Should the VCEC require further information, individual AGC members may be better placed to discuss costs with regard to any particular initiatives that have been put into place.

⁹ Victorian Self-Exclusion Pilot Partnership, Presentation to the National Association for Gambling Studies Conference, Wednesday 3 December, 2008

2. Problem Gambling in Victoria

2.1 Victorian Prevalence Statistics

The positive contributions to consumer enjoyment, employment and the economy provided by Victoria's gambling industries are juxtaposed with a clear understanding on the part of the industry that while the majority of Victorians gamble responsibly and within their means a relatively small, but no less significant, proportion of the population are negatively impacted.

Problem gambling is a complex psycho-social phenomenon that is recognised by Australian governments, community service providers and industry stakeholders as a public health concern.

There is likewise a commitment from all stakeholders to furthering a public health approach that seeks to prevent, minimise and treat harm.

Since the Productivity Commission's National Gambling Study was published in 1999 two major prevalence studies have been undertaken in Victoria that have yielded data pertaining to periods in both 2003 (the Longitudinal Community Attitudes Survey)¹⁰ and 2008 (the Epidemiological Survey).¹¹

The Victorian Department of Justice is also conducting an ongoing longitudinal study, the Victorian Gambling Study. While overall findings from this research are to be presented in 2013¹² a report of findings from Wave 2 of the Victorian Gambling Study (September 2009 to January 2010) is already available.

However it should be noted that this latter study population is not, nor was it intended to be a representative sample of the Victorian adult population.

On the whole, like most prevalence statistics obtained in jurisdictions throughout Australia (and while caution should be taken in any direct comparison between years and studies using differing screening tools) there appears to be a distinct downward trajectory to the number of those estimated to be problem gamblers in Victoria.

Table 2.1 Prevalence Study Results, Victoria (1999-2008)

Year	Sample	Estimated Problem Gambling (SOGS 5+)	Estimated Problem Gambling (CPGI 8+)	Estimated Moderate Risk (CPGI 3-7)
1999	2,200	2.14%		
2003	8,479	1.12%	0.97%	0.91%
2008	15,000		0.70%	2.36%

Source: Productivity Commission (1999), Centre for Gambling Research (2004), Schottler Consulting (2009)

The Productivity Commission remarked similarly in 2010 that, nationwide, notwithstanding various limitations in comparing studies over time, the evidence suggests that prevalence rates have fallen.¹³

¹⁰Centre for Gambling Research, Australian National University (2004) *2003 Victorian Longitudinal Community Attitudes Survey*, Gambling Research Panel.

¹¹Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling From A Public Health Perspective*, Department of Justice (Victoria).

¹²<http://www.gamblingstudy.com.au/>

¹³Productivity Commission (2010) *Gambling*, Report No 50, Canberra p 5.37

2.2 Industry Maturation and Community Adaptation

While multiple factors affect prevalence rates, the declining prevalence of gambling problems over time may be explained to some degree by the sustained efforts at harm minimisation that have occurred in Victoria.

There is also growing international support for a premise that while problem gambling prevalence may rise initially with increased gambling availability (exposure), this relationship at some point breaks down as individuals and communities adapt and develop a greater resilience and understanding (social adaptation).

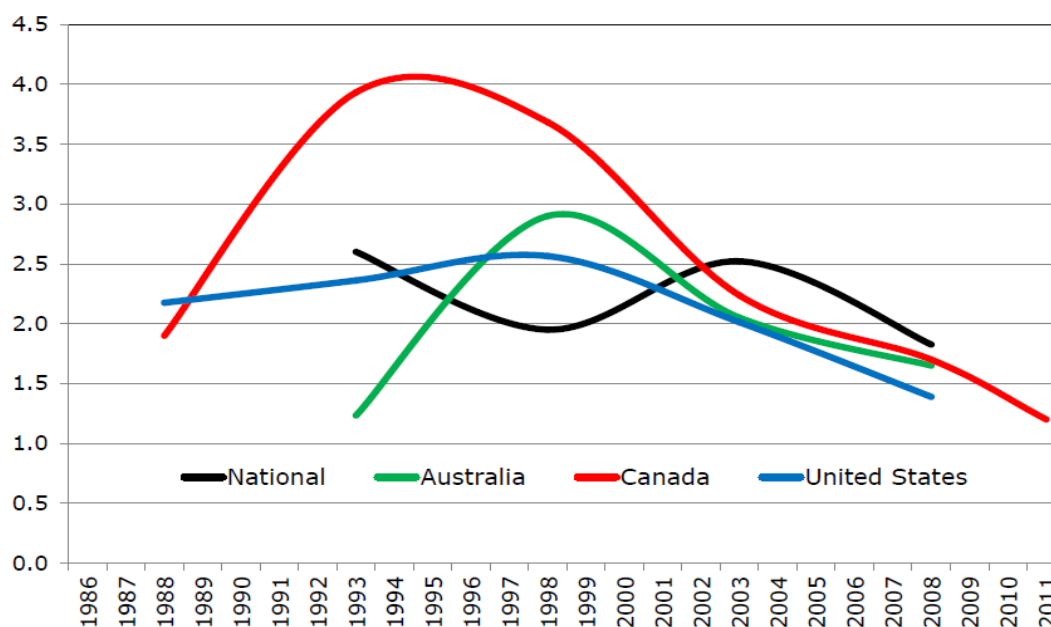
Abbott, amongst others, has hypothesised that “over time, years rather than decades, adaptation typically occurs and problem levels reduce – even in the face of increasing exposure”.¹⁴ This could be due to protective changes, a decrease in novelty, and/or gamblers recognising that the chances of winning have a negative expected value over time.

Abbott suggests that “increased public awareness of problem gambling and its early warning signs, the development of informal social controls and the expansion of treatment and self-help may also play a role”.¹⁵

There is a need for further study to advance knowledge in this area. However recent international studies of prevalence provide support for the view that subsequent to exposure, a degree of adaptation will occur.

A meta-analysis of 202 standardised prevalence surveys (including 68 national studies and 27 from Australian states and territories) has found a general downward trend in prevalence rates in Australian states and territories, the US and Canada in the past decade.¹⁶

Figure 2.1 Standardised problem gambling prevalence rates over time (5 year smoothed)



Source: Excerpted from Volberg (2012)

¹⁴ Abbott, M (2007) Do EGMs and problem gambling go together like a horse and carriage? *Gambling Research: Journal of the National Association for Gambling Studies (Australia)*, vol. 18, no. 1, pp. 7-38.

¹⁵ Ibid

¹⁶ Volberg, R. (2012) *The Availability of Gambling and Problem Gambling Rates*, Presentation to the Alberta Gaming Research Institute Conference 2012 http://dspace.ucalgary.ca/bitstream/1880/48950/13/Volberg_AGRI_Conference_2012.pdf

A lead author of this project, Volberg, has reported that likely mechanisms of declining prevalence may include:

- Increased population awareness of potential harms;
- Decreased population participation;
- Removal of problem gamblers from the pool due to severe adverse consequences;
- Increased industry and/or government efforts to provide gambling more safely, enact prevention programs, provide treatment; and
- Increasing population age.¹⁷

2.3 Defining and Measuring the Extent of Problem Gambling

Problem gambling is defined in Victoria in terms of its social and public health impacts. It is:

“Characterised by difficulties in limiting money and/or time spent on gambling which leads to adverse consequences for the gambler, others or for the community.”¹⁸

Research has been devoted over the past decade to sourcing and assessing the preferred diagnostic tool for assessing problem gambling prevalence and differences in opinion have been abundant.

When evaluating the South Oaks Gambling Screen (SOGS) in 1999, the Productivity Commission noted the limitations of this screen and employed various alternative thresholds and approaches in an attempt to seek an appropriate guide – including the construction a specific HARM index.¹⁹

The Canadian Problem Gambling Index (CPGI) of which a nine item question set (the Problem Gambling Severity Index or PGSI) is scored to determine prevalence, was developed subsequent to the Commission’s 1999 analysis and designed more specifically to measure the extent of problem gambling in general population surveys.²⁰

The CPGI has now become the preferred population prevalence instrument in Australian jurisdictions.²¹

While the CPGI is agreed to be the best method for capturing population prevalence rates currently available, it is also subject to limitations and its actual measurement capacity may differ from the Australian harm-based definition of problem gambling.

For instance, Svetieva and Walker contend that, “little research has attempted to validate the CPGI against the actual problems caused by excessive gambling,” and that the PGSI “includes items that may be responsive to cultural differences in gambling attitudes rather than problem gambling”.²²

¹⁷ Volberg, R. (2012) *The Availability of Gambling and Problem Gambling Rates*, Presentation to the Alberta Gaming Research Institute Conference 2012 http://dspace.ucalgary.ca/bitstream/1880/48950/13/Volberg_AGR_I_Conference_2012.pdf

¹⁸ Neal, P., Delfabbro, P. & O’Neill, M. (2005) *Problem Gambling and Harm: Towards a National Definition*, The South Australian Centre for Economic Studies with the Department of Psychology, University of Adelaide for Gambling Research Australia.

¹⁹ Productivity Commission (1999) *Australia’s Gambling Industries*, Report No 10, Ausinfo, Canberra

²⁰ Ferris, J. & Wynne, H. (2001) *The Canadian Problem Gambling Index: Draft – User Manual*

²¹ Victoria has also sought to validate the Victorian Gambling Screen (VGS). The VGS has not found popular use. It has also been adjudged to require a revision in its cut-off scores before use in major prevalence studies. See, for example, the commentary regarding this screen in Neal, P. et al. (2004) op. cit. p. 81.

²² Svetieva, E. & Walker, M. (2008) Inconsistency between concept and measurement: The Canadian Problem Gambling Index, *Journal of Gambling Issues*, Vol. 22

For this reason the AGC were critical of the Productivity Commission's 2010 use of prevalence survey unit data aggregating single item PGSI responses as a means of benchmarking the occurrence of harm across the breadth of CPGI gambler groups.

While some PGSI questions may serve to illustrate the occurrence of harm others may be more questionable.

Still other criticisms of the CPGI in its current format include that while it may address harm at the individual level, it does not adequately assess harm at family, community and other environmental levels.²³

Issues with the CPGI have been further compounded in Victoria by use of an amended screen, after the model used in Queensland. In discussing the amended screening tool the Productivity Commission noted in 2010 that it is most likely to have "overstated the population of gamblers of most interest to policymakers (the combined moderate risk and problem gambling group) albeit probably not to a policy significant degree".²⁴

It is acknowledged that assessing where harms fall remains difficult due to the nature of the cut off points in any psychological screen. In the strictest sense CPGI estimates are understood as occurring on a cumulative scale (i.e., a gambler who scores a 7 on the PGSI may not be defined as a 'problem gambler' but will be experiencing a greater number of problems than those scoring a 3 - albeit both are categorised as at 'moderate risk').

While it is the practice of some to combine the problem gambling and moderate risk groups Australian academic and expert in the problem gambling field for some decades, Professor Clive Allcock, has pointed out that while conclusions regarding problem gamblers are hampered by small sample sizes "it is not correct to take those scored in surveys as being at 'moderate risk' and then add them to the problem gamblers to reach a conclusion".²⁵

The AGC is of the view that, in the absence of any metric devised and validated to comprehensively assess harms being applied in Victoria, the costs applied to problem gambling harms must of necessity have regard to a valid measure point. They are most reliably assessed as the harms experienced by those defined as 'problem gamblers' (or CPGI 8+).

As the Productivity Commission reported, "people scoring CPGI 8+ are much more likely to suffer severe difficulties than other risk groups...Around 90% of those scoring as problem gamblers under the CPGI had experienced clear harm or faced high self-reported problems, much greater than for the other risk categories".²⁶

This finding appears to be borne out in Victoria. The 2008 Epidemiological Survey found that a far greater number of those scoring as CPGI 8+ self-reported 'ever experiencing difficulties due to gambling' (51.25%) than those scoring as at moderate risk (8.66%). Similarly, in the previous 12

²³ Glynn, J (2012) Canadian Consortium for Gambling Research "Enhancing the CPGI – A National Collaboration" Presentation made to the Discovery 2012 Conference <http://www.responsiblegambling.org/docs/discovery-2012/enhancing-the-cpgi-a-national-collaboration.pdf?sfvrsn=10>

²⁴ Productivity Commission (2010) *Gambling*, Report No 50, Canberra p 5.12

²⁵ Professor Clive Allcock, *Submission to the Joint Select Committee on Gambling Reform, Inquiry into the Prevention and Treatment of Problem Gambling*, March 2012

²⁶ Productivity Commission (2010) *Gambling*, Report No 50 p 5.17. The Commission illustrated this point by tabulating the prevalence of severe problems in regular gamblers (Table 5.1). Those scoring CPGI 8+ were clearly found to experience the most issues (91.3%).

month period, 49.68% of problem gamblers considered that they had experienced difficulties due to gambling as opposed to 2.64% of those scoring as at moderate risk.²⁷

Given the downwards trajectory of prevalence findings and the fact that the Victorian harm minimisation environment has not remained static since 2008, it should also be considered that in the four years since the last major prevalence study was undertaken in Victoria problem gambling prevalence rates may have further diminished.

²⁷ Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling from a Public Health Perspective*, Department of Justice (Victoria) p224.

3. The Social and Economic Costs of Problem Gambling

Notwithstanding any possible decline in Victorian prevalence rates and adaptations occurring in the community, harms continue to be experienced by problem gamblers.

Providing a framework to assess the costs arising from problem gambling harms is a complex task subject to a variety of issues - including a distinct lack of agreement about what costs should be included or accorded a monetary value, a need for relevant, quality data upon which to base estimates, issues of causality where data is available and significant overlaps in the costs included.

Broadly, items contained in the Productivity Commission's 1999 framework for assessment of the costs arising from problem gambling bear some similarity to domains identified in other studies that have been conducted in Australian and international jurisdictions since.

The Commission's 1999 work must be understood however as an early attempt at analysis of this nature and some significant criticisms of the methodology employed have been made since.²⁸

Despite the fact that the Productivity Commission's methodology has been extremely influential, it remains the case that "there is no consistently agreed upon conceptual framework for undertaking economic impact research in Australia. Instead researchers have tended to employ different economic approaches and sources for data for their analyses".²⁹

The use of differing methodologies, data sources and differing assumptions by various authors in Australian studies has impacted on the results obtained and creates difficulties in comparison both within and between jurisdictions.

Australia lacks an appropriate standardised definition of social cost just as it lacks any agreed methodology for measuring these costs. This has impacted heavily on the value of research undertaken in this area and remains an issue demanding resolution.

3.1 Challenges to the Estimation and Attribution of Cost

Eadington raises a number of important methodological challenges facing researchers in the conduct of socio-economic impact analyses of gambling. Including, amongst other issues, that:

- There is a need to distinguish between private costs (i.e., those borne by the consumer) and social costs (i.e., those borne by society);
- Costs may be difficult to measure with any degree of accuracy; and
- There is difficulty in attributing outcomes to gambling as a sole cause.³⁰

3.1.1 Debate Regarding the Inclusion of 'Internal' Costs

As noted by the VCEC, in their 1999 estimates the Productivity Commission included a number of costs economists would more usually consider 'internal costs' to be borne by the gambler themselves and not policy relevant.

²⁸ See for example Dollery, B. and Storer, J (2008) "Assessing the impact of electronic gaming machines: A conceptual critique of the Productivity Commission's methodology" *Gambling Research, Journal of the National Association for Gambling Studies*, Australia Volume 20 (1) pp1-12

²⁹ Delfabbro, P (2008) *A Review of Australian Gambling Research*, Gambling Research Australia, p161

³⁰ Eadington, W. R. (2003) "Measuring Costs from Permitted Gaming: Concepts and Categories in Evaluating Gambling's Consequences" *Journal of Gambling Studies*, Vol 19, No 2, Summer 2003

The inclusion of these costs had a substantial impact on 1999 estimates. The Commission estimated then that the personal and family costs of problem gambling in Australia represented the bulk of costs.

Likewise a recent report into the socio-economic impacts of gambling in Tasmania found 85-90% of costs to fall within this category.

Whether internal costs should be considered was a matter of some argument in 1999 (and a number of assumptions about gambler understanding of the costs involved in their activities informed the Productivity Commission's reasons for inclusion of costs under this head).

Ultimately the Commission rationalised the inclusion of private costs on the basis of public policy – as a means of illuminating why there should be consideration of government intervention to improve outcomes.

Whether the Commission's approach and rationales remain wholly relevant in Victoria over a decade on – when policy makers and stakeholders remain very aware of the need to maintain and improve outcomes and still many further measures have been put in place to ameliorate impacts – is debatable.

Some commentators have taken a strict approach. Walker, in particular, has argued that the definition of social cost applied in gambling research is simply not consistent with economic theory – in that a social cost should result in a decrease in the aggregate level of wealth to a society.

This author suggests rather that a number of the items included as costs in the gambling literature are more appropriately viewed as transfers.³¹

By their nature internal costs are both extraordinarily difficult to assign a quantum and allocate an objective monetary estimate.

As Delfabbro puts it, “how does one place a dollar value on what, in many cases, may be largely intangible, or which cannot be neatly broken down into its constituent parts?”³²

The Productivity Commission itself noted the difficulty experienced in trying to find information on suitable dollar values that could be placed on personal and family costs and suggested further research in this area³³ The AGC would query from what schedule(s) or how the VCEC proposes to cost these items for Victoria in 2012.

Still other gambling researchers vigorously dispute the application of monetary values to the impacts gambling may have on personal and familial well-being at all – choosing to measure these variables by other methods.

For instance, Williams, Rehm and Stevens argue that while “it is a mistake not to capture social impacts that do not have significant monetary consequences it is also a mistake to try to capture them within a cost-benefit economic framework applying an arbitrary monetary value to them”.³⁴

These authors add that “this approach is an overextension of an economic worldview that fails to recognise that the true nature of the impact is largely non-monetary/economic in nature”.³⁵

³¹ Walker, D (2003) “Methodological Issues in the Social Cost of Gambling Studies”, *Journal of Gambling Studies*, Vol 19, No. 2, Summer 2003 pp149-181

³² Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, Report prepared for the Independent Gambling Authority of South Australia

³³ Productivity Commission (1999) *Gambling*, Report No 10, Ausinfo, Canberra Vol 1, p9.2

³⁴ Williams, R. J., Rehm, J. and Stevens, R. (2011) *The Social and Economic Impacts of Gambling*, Final Report prepared for the Canadian Consortium for Gambling Research p 15

For such impacts Williams et al advocate quantification and reporting by means of percentage changes in the variable.

Walker's conclusion on the issue is somewhat similar, arguing that there needs first to be agreement on what constitutes 'social cost' and that for those items "legitimately considered to be social costs, i.e., if they decrease the aggregate wealth in society, then we should attempt to measure their value". However:

"For all of the other negative effects of pathological gambling that do not decrease aggregate wealth, or that do so in a way that cannot be adequately measured (e.g., psychic costs), then we should only identify these effects and suggest ways to decrease their severity. But we should not attempt to arrive at dollar figures for these effects since the estimates are likely to be unreliable".³⁶

Various researchers have evinced a number of significant reservations regarding the Productivity Commission's rationales for the inclusion of 'internal costs' and a clear definition and methodology for determining social cost is now required.

Knowledge of the impacts of problem gambling upon intangible realms is important – they are a salient reminder of the need to maintain and sustain efforts to reduce the incidence and prevalence of problem gambling.

Monetary estimates of 'cost' for intangible items have engendered a great deal of debate. They are likely to be somewhat unreliable and should perhaps not be understood as the best way of promoting understanding of the complexity of problem gambling impacts. Nor may they necessarily succeed in representing an objective true dollar cost to gamblers, their families or the community.

3.1.2 Data

The literature discussing the challenges and limitations to socio-economic impact analyses invariably identifies as one of the most important the "general absence of adequately robust data for the various impact domains, variables and indicators".³⁷

Most major impact studies – rather than relying upon evidence already available - have undertaken surveys and sourced data specifically to inform their findings, providing a pool of timely evidence relevant to the questions they seek to answer.

Rather than relying on currently available data-sets the AGC submits that a Victorian impact study of any academic rigor may well need to be informed by the establishment of quantitative and qualitative data collection instruments specifically designed to provide further up to date statistics that realise a robust and reliable assessment of the costs of problem gambling.

"Effective economic analysis requires the availability of consistent, comprehensive and accurate economic data at an aggregate, regional or local level".³⁸

³⁵ Williams, R. J., Rehm, J. and Stevens, R. (2011) *The Social and Economic Impacts of Gambling*, Final Report prepared for the Canadian Consortium for Gambling Research p 15

³⁶ Wynne, H and Schaffer, H (2003) "The Socio-economic Impact of Gambling: The Whistler Symposium" *Journal of Gambling Studies*, Vol 19, No. 2, Summer 2003 pp 111-121

³⁷ Canadian Consortium for Gambling Research (2008) *The Socio-Economic Impact of Gambling (SEIG) Framework*, Prepared by ANIELSKI Management Inc. for the Inter-Provincial Consortium for the Development of Methodology to Assess the Social and Economic Impact of Gambling p7

³⁸ Delfabbro, P (2008) *A Review of Australian Gambling Research*, Gambling Research Australia, p160

A lack of adequate and up to date data impacted the most recent 2010 Productivity Commission exploration of gambling costs.

Much of the original data for the Productivity Commission's 1999 cost of problem gambling estimates was generated through the Commission's own purpose-built surveys administered in 1997-98 (including a prevalence survey, and a national survey of the clients of counselling agencies).

While the Commission updated 1999 report final cost estimates of gambling in 2010 there was simply no similar thorough update to the base data (sourced over a decade previously) from which many of these initial cost estimates were derived

In short, "the Productivity Commission made no allowance for a likely reduction in the actual social cost per problem gambler over the last ten years arising from a wide range of social policy and regulatory developments which the Commission acknowledged had a significant impact in moderating gambling behaviour".³⁹

A report from the National Institute of Economic and Industry Research (NIER) from March 2000 has criticised a number of the components to the Productivity Commission's initial 1999 cost calculations and makes a strong argument that they were a product of their time.

The NIER were of the opinion that a number of commercial, social and institutional factors of the day played a part in increasing personal and family stress, depression, attempted and realised suicides, personal destructive behaviour and crime – likewise impacting on the Commission's quantitative estimates.⁴⁰

In estimating costs the AGC submits that data from recent studies reflecting as nearly as possible the *current* Victorian gambling environment will need to be used to inform estimates by the VCEC.

The gambling environment in Victoria has undergone significant change in the past decade. It can be surmised that estimates will be impacted by societal changes and adaptations occurring over time.

Some changes may assist in ameliorating costs. For instance, educative and preventative measures, improved knowledge of gambling help services and greater access to gambling help programs and treatments may have helped lessen the burden and length of gambling problems experienced. Conversely, some costs may have taken time to manifest.

The AGC holds significant doubts that sufficient reliable data exists to answer a number of the questions posed by the VCEC issues paper and that where data is available some of it may not be applicable to the current environment.

The majority of Victorian studies remain snapshots of a particular period. Many use differing methodologies and some survey questions, while reflecting similar information request types to those used by the Productivity Commission in 1999, vary in their specificity and provide information too dated to be of current use.

As the Productivity Commission has also noted, the effects of gambling may also be very localised. The 1999 report produced estimates and conclusions that applied at a *national* level and the

³⁹ KPMG Econtech (2009) *Economic Analysis of the Productivity Commission Draft Report on Gambling*, Report prepared for the Australasian Gaming Council p 11

⁴⁰ National Institute of Economic and Industry Research (2000) *The Economic Impact of Gambling*, report prepared for the Victorian Casino and Gaming Authority p 23

Commission warned against taking the national figures and assuming that they apply in the same way at a more local level.⁴¹

Costs may also be somewhat specific to a jurisdiction – with its particular socio-economic trends and variables. Data used to quantify costs emanating from national studies or from other Australian jurisdictions may have lesser relevance in a purely Victorian context.

This factor also impacts comparisons between Victorian regions and time periods. Essentially:

Unless collection methods and data fields are consistent between regions and within separate cost-benefit studies, comparisons of the effects of gambling among different communities will not be robust. Different collection and accounting methods tend to exacerbate reported differences in the effects of gambling among communities.⁴²

This is not to say that useful and valuable Victoria-wide data sources do not exist – a number of larger studies have been conducted in Victoria, including the 2008 Epidemiological Study and subsequent longitudinal study.

Reports such as the 2003 Longitudinal Community Attitudes Survey and a 2005 report authored by the South Australian Centre for Economic Studies⁴³ also explore some of the variables for which the VCEC seeks to apportion cost – although evidence in older reports may be of lesser relevance to the current environment.

Equally there exist a number of smaller studies for data triangulation – however such studies often come with the proviso that further research, a larger sample size or a replication of results is required.

Issues are also apparent in extrapolating from particular population subsets to broader population groups. A further criticism of the Productivity Commission's 1999 work exists in that data drawn from surveys of problem gamblers in counselling was used to inform broader assumptions about the problem gambler group - however problem gamblers in counselling may not be representative of the problem gambler cohort as a whole.

The AGC suggests that to conduct a meaningful study of the costs of gambling across Victoria, one that fully answers the current terms of reference an extensive, data framework - that goes beyond the use of existing studies and accounts for a number of the issues faced when triangulating the results of smaller studies and/or studies of smaller unrepresentative populations - will be required.

3.1.3 Determining Causality

The issue of causality – or the attribution of outcomes to gambling as a sole or major cause - provides another key challenge to any economic assessment of costs. The authors of a Canadian framework for the socio-economic analysis of gambling note that 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, is difficult.⁴⁴

⁴¹ South Australian Centre for Economic Studies (2009) *Social Impacts of Gambling: A Comparative Study*, South Australian Independent Gambling Authority, p 4.

⁴² Azmier, J., Kelley, R. and Todosichuck (2001) *Triumph, Tragedy or Trade-Off? Considering the Impact of Gambling*

⁴³ South Australian Centre for Economic Studies (2005) *Community Impacts of Electronic Gaming Machine Gambling (Part A)*, report prepared for the Gambling Research Panel.

⁴⁴ Canadian Consortium for Gambling Research (2008) *The Socio-Economic Impact of Gambling (SEIG) Framework*, Prepared by ANIELSKI Management Inc. for the Inter-Provincial Consortium for the Development of Methodology to Assess the Social and Economic Impact of Gambling p7.

Causality may be of particular relevance to costs occurring in the health domain owing to the high prevalence of co-morbid disorders with problem gambling.

Evidence suggests that people with problem gambling are at a much greater risk of having a range of serious mental health and risky behavioural problems than the general community⁴⁵ and, as Delfabbro points out in a review of the Australian research, it is highly unlikely that the issue of causality is likely to be resolved unequivocally based on the research findings.

“This is largely because research has tended to be cross-sectional or retrospective in nature. It is not always possible to obtain direct confirmation that problems preceded gambling, as opposed to being caused by it. Conclusions must instead be based upon the balance of evidence that is currently available”.⁴⁶

In dealing with this issue a number of Australian studies, including the Victorian 2003 Longitudinal Community Attitudes Survey, have asked participants to *infer causality* between gambling and a consequence.

However, as noted in the most recent Socio-Economic Impact Study in Tasmania, the separation of the instance of an event and the rating of gambling problems is a much more scientifically rigorous way of ascertaining relationships between variables and also avoids the possibility of respondent biases.⁴⁷

The Productivity Commission’s 1999 report provides an overview of the difficulties in accounting for causality and ultimately felt that “the most effective way of identifying causal pathways relating to apparent adverse outcomes for problem gamblers would be a longitudinal study of gamblers”.⁴⁸ This recommendation has been echoed in Victoria by researchers such as Thomas and Jackson (among others).⁴⁹

Given that Victoria has been conducting a longitudinal study over past years it is expected that the data sourced in this study may contribute to greater understanding.

It should be noted though that the study findings to date point out that further waves are needed for trend analysis and indications of causation rather than association.⁵⁰

Victorian longitudinal study results provide a further current information source but do not, at the current time, provide indicators of causation.

Longitudinal study results do suggest however that co-morbid health issues may have varying impacts on problem gambling outcomes and that this remains a very complex area.

For instance, increasing psychological distress has been associated in the Victorian Gambling Study with movement both *up* and *down* PGSI risk segments. Hence, the presence of psychological

⁴⁵ Thomas, S., Jackson, A., Lorains, F. & Dowling, N. (2009) *Problem Gambling and its Co-morbidities: A Systematic Review*, A paper prepared for the Australasian Gaming Council by the Problem Gambling Research and Treatment Centre.

⁴⁶ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, report prepared for the Independent Gambling Authority of South Australia p 92

⁴⁷ The Allen Consulting Group, Problem Gambling Research and Treatment Centre, and The Social Research Centre (2011) *Social and Economic Impact Study of Gambling in Tasmania – Summary Report*, prepared for the Tasmanian Government Department of Treasury and Finance p 40

⁴⁸ Productivity Commission (1999) *Australia’s Gambling Industries*, Report No 10, Ausinfo, Canberra, Volume 1 p7.9

⁴⁹ Thomas, S. and Jackson, A. (2008) *Risk and Protective Factors, Depression and Comorbidities in Problem Gambling*, Report to *beyondblue* pix

⁵⁰ Billi, R., Marden, P. and Stone, C (2011) *The Victorian Gambling Study: A Longitudinal Study of Gambling and Public Health- Wave Two Findings*, Victorian Department of Justice p 4

distress, rather than occurring as a result of or necessarily worsening gambling problems, “may be a very dynamic factor in people’s lives that may have differing impact on gambling states”.⁵¹

3.1.4 Discounting for Causality

As noted by the VCEC, a discount rate for causality was applied by the Productivity Commission in 1999 to allow for the understanding that a number of problem gamblers would have experienced various adverse life impacts irrespective of their gambling behaviour.

Methodology used by Gerstein et al in a 1999 US study⁵² undertaken by the National Opinion and Research Centre (NORC) was used by the Commission as a barometer to judge whether the 15-20% discount for causality recommended by a panel of Australian experts (and subsequently applied to 1999 Commission costs) was estimated correctly.⁵³

While there may have been a sufficient similarity of results between its own findings and the complex methodology used in the NORC study to satisfy the Productivity Commission that a set causality ‘discount rate’ was appropriate with regard to national estimates in 1999, it is difficult to assess whether using a uniform 15-20% discount rate would be similarly appropriate for Victorian estimates in 2012.

The NORC study methodology was quite detailed and compared the rate of costly consequences for problem gamblers relative to ‘predicted’ or expected rates for individuals with similar characteristics, but who were low-risk gamblers.⁵⁴

The NORC study specifically “adjusted for basic and systematic differences between different types of gamblers that might be related to the outcomes of interest, rather than simply taking the difference in outcomes for pathological and problem gamblers and comparing them to those with no history of problems”.⁵⁵

The estimates arising were then the “excess of costs experienced by problem and pathological gamblers.”⁵⁶

The NORC study would appear to have applied a sounder methodology than simply imposing a set ‘rule of thumb’ discount rate over all costs where causality could be in issue.

However whether replication of such a methodology is achievable (given current data-sets available in Victoria and in the understanding that the NORC report had the benefit of numerous distinct data collections collated specifically to inform that report) is another matter.

3.1.5 Segregating the Impacts of Gambling

A further complexity to the Productivity Commission’s 1999 exploration of cost is that many problem gamblers tend to experience multiple problems over various domains. Costing problematic domains separately may provide over-inflated estimates.

⁵¹ Ibid p 18

⁵² National Opinion Research Centre, Gemini Research, Lewin Group, Christiansen/Cummings Associates (1999) *Gambling Impact and Behaviour Study*, Report to the National Gambling Impact Study Commission

⁵³ Productivity Commission, *Australia’s Gambling Industries*, Report No 10, Ausinfo, Canberra Vol 3 p J.7

⁵⁴ National Opinion Research Centre, Gemini Research, Lewin Group, Christiansen/Cummings Associates (1999) *Gambling Impact and Behaviour Study*, Report to the National Gambling Impact Study Commission pp 57 - 58

⁵⁵ Ibid

⁵⁶ Productivity Commission, *Australia’s Gambling Industries*, Report No 10, Ausinfo, Canberra Vol 3 p J6

For example, severe depression could logically be expected to impact upon productivity, which may impact on finances, increase the likelihood of divorce, and compound the likelihood of suicidal ideation.

The Commission did seek to adjust for potential 'double counting'. The numbers estimated for divorce and separation were excluded from those numbers estimated for break-up of a relationship, the numbers estimated for thoughts of suicide excluded from those for depression and the numbers of attempted suicides excluded from those reporting thoughts of suicide.⁵⁷

Again however the Commission had the benefit of data available from purpose built surveys and an ability to drill down into individual unit data and gambler responses to inform the estimates made.

While it's possible that availability of unit data from Victorian prevalence and longitudinal studies may allow for segregation of the overlapping costs of multiple problems this will be a complex exercise.

For many other Victorian research studies the AGC suggests that segregating results to apportion costs within specific domains may not be possible.

3.1.6 Fixed versus Variable Costs

It is important to consider that the cost of providing services to problem gamblers or of dealing with impacts largely, or caused in part by problem gambling will not necessarily accord with the prevalence rates for problem gambling.

Delfabbro notes that, particularly in relation to the costs of divorce, counselling services, prisons and other government services, additional demand is most often covered by fixed, as opposed to variable costs.⁵⁸

Unless there is evidence of a proportionally greater demand placed by problem gambling (and this proportion may be accounted for to the exclusion of other factors) accounting for costs where services are fixed will likely result in an overestimation of the costs attributable to problem gambling.

The AGC would note that only a very brief discussion of a non-exhaustive search of the data available is included in the next discussion section of this submission.

Discussion has been confined, in the main, to larger jurisdiction-wide studies of Victorian gamblers and how the factors listed above impact on any attribution of cost that may be made from the available research.

⁵⁷Productivity Commission, *Australia's Gambling Industries*, Report No 10, Ausinfo, Canberra Vol 3 p J.27

⁵⁸Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, Report prepared for the Independent Gambling Authority of South Australia p 227

4. Personal and Family Costs – A Brief Discussion

In 1999 the Productivity Commission considered that the personal and family impacts of problem gambling included a range of issues from those affecting the mental health and physical well-being of the problem gambler him/herself to family relationship problems,⁵⁹ relationship breakdowns and divorce.

The Productivity Commission's ability to ascertain some of the personal and family impacts on cost was largely dependent on data from surveys specifically undertaken to inform their 1999 report triangulated with other research available at the time.

The Commission's specific cost headings included:

- the emotional distress of immediate family members (accounting for severe problem gamblers);
- the emotional distress of parents (of severe problem gamblers);
- relationship break-ups,
- the financial and emotional costs of divorce;
- violence;
- depression;
- suicidal ideation; and
- impacts of attempted suicide on family members.

Even a brief discussion of some of these impacts serves to illustrate just how difficult attributions of cost may be in this area. Data and causality, as elsewhere, remain core issues.

4.1 Problem Gambling and Physical Health

Discussion by the Commission in 1999 notes that information on problem gambler physical health was not available from their surveys, and was thus not estimated among the impacts listed above.

The physical health of problem gamblers has been surveyed more effectively in Victoria over recent years with its epidemiological approach to prevalence. The AGC would note however that it is extremely difficult to determine, as with mental health, where precisely causality may lie in physical health issues.

Problem gambling for example is highly correlated with smoking (53.88% of problem gamblers were reported as past year smokers in the 2008 Epidemiological Survey). Smoking, apart from being a known factor in a number of physical health complaints has also been linked to some mental health issues – notably anxiety, depression and mental health disorders.⁶⁰

4.2 Problem Gambling and Mental Health

There is “consistent evidence that problem gambling is significantly associated with a high prevalence of depressive symptomatology”.⁶¹

Both 2003 and 2008 Victorian prevalence surveys have included data on the percentile of those problem gamblers reporting depression - with some data available on the prevalence of anxiety

⁵⁹ The Problem Gambling Research and Treatment Centre in Victoria has undertaken studies in the field of other impacts besides emotional harm – specifically family violence as it impacts on problem gamblers and their families.

⁶⁰ See for example a report of findings from a joint study by the Norwegian Institute of Public Health (NIPH), University of Bergen and King's College in London <http://www.medicalnewstoday.com/releases/98344.php>

⁶¹ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, Report prepared for the Independent Gambling Authority of South Australia p 93

and stress within the problem gambler group also (albeit the majority of this latter data comes from 2003 findings).

The second wave results of the current longitudinal study in Victoria report, similarly to the 2008, survey that just over half of problem gamblers surveyed reported depression.

A 2008 study undertaken by the Problem Gambling Research and Treatment Centre (PGRTC) for *beyondblue* that specifically investigated depression and other comorbidities as they relate to problem gambling makes very plain some inherent causality issues in mental health domains.⁶²

Despite the high levels of depression found to be experienced in this study (higher than those estimates revealed by Victorian prevalence surveys). The authors state that:

“it was not possible from this survey to establish a causal nexus between problem gambling and these co-morbidities. We do not know whether one set of conditions precedes the other or not nor whether they are causally linked. Longitudinal research is required to address this question”.⁶³

Hence while depression, stress and anxiety impact heavily for problem gamblers the costs attributable to problem gambling itself may be harder to ascertain.

As with depression and anxiety, issues of causality and co-morbidity loom large when discussing other mental health impacts that have been associated with gambling - such as suicidal ideation.

Simply put, it can be extremely difficult to disentangle gambling from a number of other issues which may be occurring in the life of any individual in acute psychological distress.

For instance the 2008 Victorian Epidemiological Study reported that 27.06% of PGSI 8+ gamblers considered taking their own life in the past year – a deeply concerning number.⁶⁴

The same study also reported however that 47.63% of problem gamblers reported experiencing significant levels of trauma, hardship and problems in their life or upbringing and a lesser likelihood of feeling socially connected or able to access help from friends or family if needed.

Other Victorian studies dealing with suicidal ideation (while having an unavoidably small sample size) shed further light on the complexity of causality and co-morbidity.

For example, a study undertaken in Victoria by the Alfred Hospital in Melbourne at their Crisis Assessment and Treatment Team (CATT) triage program in 2009 found a very high rate of problem gambling (a rate of 17.2% consistent with a 2006 pilot study) in attending clients.

290 participants completed a screening tool for problem gambling from which 50 were identified with gambling problems. Only a further 21 participants consented to an in-depth interview looking at the extent of their gambling and co-morbid illness.

Of those further 21 participants, depression and anxiety co-occurred for 76%, 57% reported significant alcohol use (with nearly half indicating use at the level of alcoholism) while the report notes that a 23.8% were identified as having substance abuse/dependence issues.⁶⁵

⁶² Thomas, S. and Jackson, A. (2008) *Risk and Protective Factors, Depression and Comorbidities in Problem Gambling*, Report to *beyondblue*

⁶³ Ibid p 40

⁶⁴ Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling From A Public Health Perspective*, Department of Justice (Victoria) p218

For some problem gamblers severe co-morbidities may impact in a far greater manner than the Productivity Commission's 1999 discount rate for causality would allow.

On the whole, statistics pertaining to the actual suicides believed attributable to gambling problems are not the province of recent studies and those available are confounded by issues of causality.

In 1998 Blaszczynski and Farrell undertook one of the few systematic studies of coronial records in Victoria from 1990-97, from which they concluded that, overall, 1% of the total number of Victorian suicides during that period could be attributed to gambling. However these authors "pointed out that caution needs to be applied in the interpretation of these figures because it is unclear to what extent other co-morbid factors might have contributed to these suicides".⁶⁶

In 2000, the Victorian Coroner's Court similarly investigated the link between suicide and gambling. In 25 (4.3%) of the 579 files reviewed financial difficulties from gambling were mentioned. Again it was concluded that it would be inappropriate to assume that gambling problems alone caused the suicides to occur.⁶⁷

A 2005 report prepared by the SA Centre for Economic Studies sought to investigate this issue and tabled findings of some depth.

From their assessment of the ABS and coronial data available at the time SACES were able to make a number of comparisons and general findings but noted that the data itself was inconclusive and that extreme care should be exercised in drawing conclusions from the statistics reviewed.⁶⁸

Essentially, while the co-existence of co-morbid health problems and mental health disorders with problem gambling is clear, the order in which problems develop and the degree to which co-morbidities impact on outcomes remains unclear.

Attributions of cost that accurately account for causality are thus likely to be far more complex than the Productivity Commission's 1999 methodology may suggest.

4.3 Problem Gambling and Family Relationships

There is a long held recognition in Victoria that a part of the emotional burden of problem gambling may fall on family members and loved ones whose lives are bound up with that of the gambler.

In 1999 the Productivity Commission attempted to gauge impacts by distinguishing between moderate and severe problem gamblers, excluding double counts by assigning costs to distinct categories and adjusting for variables such as the average number of family members and the estimated degree of adverse effect on others.

In Victoria today while a number of studies explore various impacts in this area there does not appear to be a great deal of state-wide quantitative data suited to informing cost estimates.

⁶⁵ De Castella, A., Bolding, P., Lee, S., Cosic, S. and Kulkarni, J. (2011) *Problem Gambling in people presenting to a Public Mental Health Service*, Department of Justice, Melbourne pp16-22

⁶⁶ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, report prepared for the Independent Gambling Authority of South Australia p 95

⁶⁷ Graham, A. (2000) *Victorian Suicides during the Year 2000 Initial Brief Report Focusing on Gambling Related Issues*, Victorian State Coroner's Office cited in South Australian Centre for Economic Studies (2005) *Community Impacts of Electronic Gaming Machine Gambling (Part A)*, Report prepared for the Victorian Gambling Research Panel p129-141

⁶⁸ South Australian Centre for Economic Studies (2005) *Community Impacts of Electronic Gaming Machine Gambling (Part A)*, Report prepared for the Victorian Gambling Research Panel pp 129-141

For example, the 2008 Victorian Epidemiological Survey asked a series of questions providing statistics on life events in the past year – but includes only limited information on divorce and items such as an increase in arguments with those to whom respondents are close.⁶⁹

The 2003 Victorian Longitudinal Community Attitudes Survey provides more fulsome information on impacts of this nature in its discussion of the correlates of problem gambling, chiefly as the questions asked sought specificity for causality.⁷⁰

Still other Victorian studies serve to illustrate the further complexities that may arise in costing this area - such as the difficulties that exist in differentiating the severity of impacts experienced,

For example, a majority of respondents indicated in a 2006 study of the clients of problem gambling services undertaken by New Focus Research that their problem gambling had a serious impact on their family and/or loved ones – that “tended to be characterised by lies, deceit and arguments over money.”⁷¹

While problem gamblers attending counselling services may not necessarily be representative of the broader population of problem gamblers findings from this study included that problem gamblers are likely to hide the extent of their problems from loved ones.

The quantitative phase of the New Focus research found that “while 82% of respondents’ families and loved ones were aware of the gambling problem, only 54% were fully aware of the extent of the problem”.⁷²

How variations to behaviour such as this serve to increase, decrease or provide a negligible impact to the burden of stress and anxiety experienced by family members may depend entirely on the particulars of each familial setting, individual circumstances and the number and nature of loved ones involved.

It is clear on any brief foray into the literature that the number of impacts on family members and loved ones that may be associated with problem gambling go further than those discussed here.

What remains lacking however is any sufficiently rigorous method to calculate how such impacts may be differentiated for severity and allocated costs.

⁶⁹ Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling From A Public Health Perspective*, Department of Justice (Victoria) p 186

⁷⁰ Centre for Gambling Research, Australian National University (2004) *2003 Victorian Longitudinal Community Attitudes Survey*, Gambling Research Panel p110

⁷¹ New Focus Research Pty Ltd (2006) *Stage Three – Study of Clients of Problem Gambling Services*, Report to the Gambling Research Panel p 86

⁷² *Ibid* p 88

5. Productivity and Employment Costs – A Brief Discussion

The productivity and employment costs considered by the Productivity Commission in 1999 were based upon the costs of job change – which may vary according to a number of individual circumstances - including, as the Commission then considered, whether the change was voluntary or involuntary.

Broadly, the Productivity Commission included the costs of productivity loss owing to time taken from work to gamble (and the impact of depression upon work performance), income loss whilst unemployed, the financial cost of a job search to the individual and the cost to employers of finding and training replacement staff.

Again the Commission's estimates were informed by 1998 survey evidence that provided data upon which subsequent estimates were based – such as the amount of those who had changed their job as a result of their gambling (although as no respondents to the Commission's 1998 surveys reported having lost a job as a result of gambling in the previous 12 month period no estimates were made in the 1999 report for this variable).⁷³

Evidence concerning job change or loss as a result of gambling activity is not well researched in Victoria and up-to-date data sources specifically addressing this topic are scarce.

For instance, the 2008 Victorian Epidemiological Survey reports on life events by PGSI gambler segment and the data available speaks of a higher occurrence of reported troubles with 'work boss or superiors' and a higher rate of 'major change in work or living conditions' occurring for problem gamblers.⁷⁴

However, from the published material it is impossible to ascertain the causative factors that may be involved in each case and how respondents may be segregated to allow for cost.

Older information in the 2003 Victorian Longitudinal Community Attitudes survey sought to elicit casual information from respondents and provides information on the differential effects of gender, noting a higher proportion of male problem gamblers experienced problems at work but that females were found more likely to lose a job due to their gambling.⁷⁵ Whether findings would remain the same in the current day, and what the effects of respondent bias on these results may be, remain difficult matters to gauge.

Further, while job changes and losses may have a high cost to gamblers themselves, the costs to employers in advertising, recruiting and training new staff must be understood as having a degree of variability – according to the role being replaced.

Delfabbro notes for instance that these costs "will only be substantial if the job requires specialised expertise or knowledge of complex recruitment procedures".⁷⁶

Similarly, with regard to the effect of gambling on overall workplace productivity results may vary broadly according to the individual experience of each gambler.

While stress, depression and psychological trauma can no doubt impact on productivity, Delfabbro cautions that:

⁷³ Productivity Commission (1999) *Australia's Gambling Industries*, Report No 10, Ausinfo, Canberra p J14

⁷⁴ Schottler Consulting Pty Ltd (2009) *A Study of Gambling in Victoria: Problem Gambling From A Public Health Perspective*, Department of Justice (Victoria) p185

⁷⁵ Centre for Gambling Research (2004) *2003 Victorian Longitudinal Community Attitudes Survey*, pp 110-111

⁷⁶ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, report prepared for the Independent Gambling Authority of South Australia p 228

“It does not always follow that spending time gambling during work necessarily leads to a decline in work output. The same employees might compensate for this lost time by working more quickly or more intensively, perhaps after hours. Alternatively there may be others in the workplace who compensate for a colleague who does not appear to be happy or productive at work. This view is supported by the observation that gambling in the workplace often remains hidden, and is often only detected when criminal activities are involved. It does not appear that employers were aware of any appreciable decline in productivity”.⁷⁷

This view appears to be borne out by evidence from a 2006 Victorian study of the Clients of Problem Gambling Services.

This report observes that “very few of the respondents mentioned that their problem gambling has had any major impact on their employment” and, that “in many cases employment remained the last bastion of ‘normality’ in many respondents’ lives”.⁷⁸

While using a small sample of those in counselling – and those accessing counselling services must not be understood as necessarily representative of the problem gambling cohort as a whole - this study reported only two respondents “having lost their jobs as a result of their problem gambling” and “less than a quarter of respondents were unemployed or retired for part or the entire duration of their gambling addiction”.⁷⁹

⁷⁷ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, report prepared for the Independent Gambling Authority of South Australia p 228

⁷⁸ New Focus Research Pty Ltd (2006) *Stage Three – Study of Clients of Problem Gambling Services*, Report to the Gambling Research Panel p 87

⁷⁹ Ibid

6. Treatment Costs – A Brief Discussion

The AGC is of the view that while many health service providers across the spectrum of health services in Victoria may deal with and assist problem gamblers, in seeking to quantify the costs of treating problem gambling the funds apportioned to Victoria's specifically designated problem gambling services are among those most readily identified - however in measuring costs in this area further methodological issues apply.

The Victorian Gambler's Help network specifically includes:

- The Gambler's Help 1800 24/7 help and assistance line;
- Regional Gambler's Help services;
- Victorian Aboriginal Health Service;
- Victorian Aboriginal Community Service Association Limited; and
- Multicultural Gambler's Help Program (at the Centre for Culture, Ethnicity & Health).

The Victorian Government reported in 2009 that since 1999 over \$87 million has been spent on problem gambling "including more than \$54 million on specialist services to help problem gamblers and their families".⁸⁰

These services provide counselling and interventions, problem gambling financial counselling, links with mental health, alcohol and other drug services (to coordinate care for individuals and families experiencing problems), community education services and a Recovery Assistance Program (RAP) that provides material and financial assistance for those in crisis.

It remains well established that not all people with a gambling problem or experiencing the adverse effects of someone else's gambling will take advantage of Gambler's Help services. Problem gamblers who typically present to treatment services may only represent a small percentile of those experiencing issues.

More often it has been reported that problem gamblers may present to other services, including GP's, seeking treatment for co-morbid issues.

While this knowledge is integral in ensuring that problem gambling is recognised across the spectrum of Victoria's health services and that appropriate referral procedures are in place, it is unlikely that service usage may be segregated with any degree of specificity applicable to an apportionment of cost.

Increase to the numbers of those seeking treatment may also be considered unlikely to increase cost (at least short term treatment cost) in general.

As Delfabbro notes, "unless the government makes a concerted effort to increase the budget allocation to services to meet increased demand, extra demand will otherwise be met by existing resources being used more intensively".⁸¹

Further, when examining the cost of interventions for problems "it is important to recognise that the same service will usually assist with multiple problems, so that the costs of intervention will not have to be counted separately for each individual, or each separate issue addressed".⁸²

⁸⁰ Victorian Government (2009) *Submission to the Productivity Commission Inquiry into Gambling in Australia* p 67

⁸¹ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, report prepared for the Independent Gambling Authority of South Australia p 228

Other authors have noted that even when particular government paid costs of gambling are agreed to be social costs measuring them may be tricky. Policy, for example, impacts on cost and Walker argues that social cost studies that simply use government expenditures as the measure of social cost are problematic – they may be tied for example more directly to the level of politics than to the level of problem gambling.

Walker suggests that researchers could use the average costs of treatment for those attending services to estimate costs more effectively – and that the resulting cost estimate may vary from the level of expenditures allocated to problem gambling.⁸³

⁸² Ibid

⁸³ Walker, D. (2007) *Challenges that Confront Researchers on Estimates of the Social Costs of Gambling*, AGA 10th Anniversary White Paper Series

7. Crime and Legal Costs – A Brief Discussion

7.1 Gambling and Crime

Williams, Rehm and Stevens point out that the introduction of legal gambling should, theoretically, affect crime rates in a number of ways.

Impacts may include a decrease in the amount of illegal gambling activity but, conversely, there may be at least an initial rise in problem gambling numbers – a corollary of which may be an increase in the percentage of those committing income-generating crimes to fund gambling activity.

However these authors go on to add that, empirically, the evidence regarding crime and gambling is mixed and has certainly reached no firm consensus. While some international studies have reported increases in crime associated with gambling, others have not.

Likewise crime and gambling in the Victorian context where for instance, a recent report on the socio-economic impacts of access to electronic gaming machines found little to suggest that cash-related crime was impacted upon by EGM activity.⁸⁴

This report found rather that crime “seems to be more impacted upon by drug-use (a potentially strong motive for crime), local income levels, tourism and ABN numbers (potential victim groups for cash-based crime opportunity) as well as associated with unemployment”.⁸⁵

A recent major study of gambling and crime in Victoria released in 2010⁸⁶ notes that the relationship between gambling and crime is a complex one and gambling just one of many factors.

While this report concluded that a ‘significant positive relationship’ existed in Victoria between gambling and crime, for the strongest association (that between expenditure and income-generating crimes in 2006) it was found that a one standard deviation increase in per capita EGM expenditure increased offence rates by 0.006 per capita. Every additional \$1 per adult spent on EGMs was held to increase income-generating offences by 0.00002 per capita.

Overall, it was also found that that the relationship between crime and gaming expenditure has lessened somewhat in Victoria from 1996 to 2006 and, much as other studies indicate, drug offences were “the most important influence on crime (and in particular, income-generating crime).”⁸⁷

7.2 Problem Gambling and Crime

In 1999 the Productivity Commission reported that problem gamblers, having exhausted legal funds for gambling may subsequently resort to illegal activities to fund their gambling.

A finding from the 2008 Epidemiological Survey does illustrate that problem gamblers in Victoria are significantly more likely to report that their gambling has ‘led them to do something technically against the law’.

While 15.17% of problem gamblers reported a breach in the law (and any self-report of illegal activity should also be considered as having a high likelihood of under-report) the AGC notes that

⁸⁴ Brown, K., Pickernell, D., Keast, R. and McGovern, M (2011) *Socio-economic Impacts of Access to Electronic Gaming Machines in Victoria*, Office of Gaming and Racing, Department of Justice, Victoria

⁸⁵ Ibid p 37

⁸⁶ Wheeler, S., Round, D. and Wilson, J (2010) *The Relationship between Crime and Gaming Expenditure in Victoria*, Office of Gaming and Racing, Department of Justice

⁸⁷ Ibid pp 10-11

there is little explanation afforded in the published report to indicate what ‘doing something technically against the law’ meant to respondents and whether the acts reported would comprise items that may be considered costs.

For instance, a breach of self-exclusion prompted by an urge to gamble could be understood by a problem gambler as ‘technically against the law’ – in fact a whole spectrum of offences from the most petty to grand larceny or embezzlement (all technically transfers) could plausibly be encompassed in this statistic.

7.3 Costing Problem Gambling and Crime

In 1999 the Productivity Commission used data from the National Gambling Survey to calculate the cost of detecting, prosecuting and punishing gambling related crime.

Again, there is little systematic and ongoing data available in Victoria on this subject. Further, the cost headings suggested presume that gambling related crimes are likely to attract due process – whereas it is likely that many, especially petty crimes or crimes occurring in the realm of familial relationships - will not.

A 2005 Victorian report on the community impacts of EGM gambling notes that “current data systems are inadequate to conclusively comment on the extent and the relationship of problem gambling and crime.”⁸⁸ This report remarks that crimes associated with excessive or problem gambling, unless they relate to the detection of fraud and/or embezzlement are often not detected or disclosed.

As a rule, courts do not maintain consistent records regarding the extent to which problem gambling played a role in the commission of an offence. Warfield, who has undertaken one of the few forensic studies of gambling and crime (chiefly financial crimes) in Australia, points out that:

- even where offences are detected they may not be reported;
- even where reported, offences may not end up in court; and
- that many crimes which involve theft between family members may be resolved outside of the court process.⁸⁹

To comprehensively assess those cases where gambling is recorded as a factor, access would be required to all court files in all courts – a time and cost prohibitive exercise even if suitably detailed records of all cases heard were to be available.

As pointed out in a study conducted into the relationship between crime and problem gambling by the Independent Gambling Authority (IGA) of South Australia⁹⁰ definitional issues also affect this variable.

There are a number of different definitions of ‘gambling related crime’ that have been applied in the few Australian studies that have sought to assess the relationship between gambling and crime.

These differences impact on comparability between studies and moreover, when examining the link between gambling and offending provide scope for a large degree of subjective interpretation in deciding whether an offence was committed “as a consequence of, in order to support, as a

⁸⁸ South Australian Centre for Economic Studies (2005) *Community Impacts of Electronic Gaming Machine Gambling (Part A)*, report prepared for the Victorian Gambling Research Panel p vi

⁸⁹ Warfield and Associates (2011) *Gambling Motivated Fraud in Australia* p 6

⁹⁰ Independent Gambling Authority of South Australia (2002) *Study into the Relationship between Crime and Problem Gambling, Report to the Minister*

significant result of, or significantly related to a desire or need to gamble” (which is just one definition, used by Crofts in a 2002 NSW study).⁹¹

Further, when assessing the costs of prosecuting crime the AGC would also note, as Delfabbro has done, that many of the costs in this area remain fixed. Police, court workers, judges and public defenders are likely to be salaried and funded to deal with offenders irrespective of any motive for the crime committed.

Unless the number of crimes that may be attributed to problem gambling is so significant as to create an excess of demand for services beyond those already funded, the costs of problem gambling are unlikely to contribute substantial costs to the legal system in prosecuting offenders.

With regard to the costs of punishing offenders, studies of gamblers in prison populations and analyses of Victorian clients attending counselling services have been conducted (notably in the late 90’s). All suggest a higher level of offences amongst prisoner and counselling populations.⁹²

Overall however there is, yet again, little systematic data regarding how gambling has impacted on sentencing and punishment.

How problem gambling may be held to impact on the number and severity of crime(s) and by virtue of severity, subsequent sentencing duration and related costs of punishment may be a salient question for cost – however it is one to which current Victorian research does not provide clear answers.

As Delfabbro reports, questions with regard to this variable are potentially best answered by replicating early studies or via the conduct of extensive studies in the community corrections system.⁹³

⁹¹ Crofts, P (2002) *Gambling and Criminal Behaviour: An Analysis of Local and District Court Files*, Casino Community Benefit Fund, Sydney

⁹² See for example Blaszczynski, A. (1994) Criminal Offences in Pathological Gamblers, *Psychiatry, Psychology and Law* 1 (2): 129-138; Jackson, A., Thomason, N., Ryan, V., and Smith, S (1997) *Analysis of Clients Presenting to Problem Gambling Counselling Services from July 1995 to June 30 1996*. Client and Service Analysis Report No 1. Melbourne: School of Social Work, Melbourne University; Centre for Criminology and Criminal Justice, Monash University (2000) *The Impact of Gaming and Crime Statistics*, Victorian Casino and Gaming Authority May 2000.

⁹³ Delfabbro, P. (2008) *Australasian Gambling Review*, 4th Edition 1992-2008, Report prepared for the Independent Gambling Authority of South Australia p 118

8. Financial Costs – A Brief Discussion

The Productivity Commission did not include the costs of excessive spending (excess money losses) in its estimates of social costs.

The Commission instead adjusted its estimates of consumer benefit, noting that problem gamblers cannot be said to derive a nil consumer surplus from gambling and regarded the ‘excess’ amount of spending as that which may be regarded as a cost.

8.1 The Expenditure of Problem Gamblers

The AGC would query precisely how the VCEC intend to calculate the ‘excess’ losses of problem gamblers for inclusion amongst its estimates of financial cost.

Just how much expenditure on gambling can be attributed to problem gamblers was discussed at some length by the Productivity Commission in both its 1999 and 2010 reports. This topic engendered a considerable amount of debate at the time and continues to be contentious.

As the Victorian Government itself submitted to the Productivity Commission in 2009, numerous concerns can be stated regarding the Commission’s 1999 methodology, including:

- Concerns regarding assumptions about the behaviour of problem gamblers according to product type;
- Concerns that the Productivity Commission’s views of underestimation by gamblers of their losses were not uniform – affecting the efficacy of the method used to estimate the problem gambler expenditure share of total expenditure;
- Errors in the sample (as with any sample) that reflect reliability and accuracy – including the use of gambler self-report data and gambler estimates of expenditure – which are notoriously subject to inaccuracies;
- The lack of distinction made between expenditure that falls into a benign recreational category (where a modest amount of money is spent on gambling) and a level of expenditure that is indicative of risky expenditure; and
- An absence of analysis of expenditure levels relative to income.⁹⁴

In 2010, when the Productivity Commission estimated that problem gamblers account for around 40 per cent of total gaming machine spending (the midpoint of a range of estimates as high as 60 per cent and conservatively at least 20 per cent,⁹⁵ the AGC queried the very large range of diverse methods and datasets triangulated to achieve even this very broad range.

The AGC response to the Productivity Commission’s 2010 findings included that many of the individual findings were weakened by inadequacies in the data available.

In particular, some estimates were drawn from data sets and studies that were not meant for use to inform wider expenditure estimates (and subject to a number of methodological shortcomings for this purpose).

⁹⁴ Victorian Government (March 2009) *Submission to the Productivity Commission Inquiry into Gambling in Australia*

⁹⁵ Productivity Commission (2010) *Gambling*, Report No 50, Canberra

While aggregate outcomes from numerous studies and sources may fortify results by their quantity (if perhaps not always by their quality) the expenditure estimates ultimately obtained remained, in the AGC's view, sufficiently wide to suggest that true figures were materially uncertain.

Importantly in 2009 the Productivity Commission found very little evidence of the ratio of expenditure to household income that may be attributed to problem gamblers.

At what point expenditure becomes problematic is a relative concept - proportionate to the gambler, their income, their outgoings and financial position. As Svetieva and Walker note:

There may be heavy time and monetary expenditure on gambling activities, but if there are no consequences of that behaviour, as may often be the case for gamblers with ample leisure time and large disposable incomes, then this cannot constitute problem gambling in the public health sense.⁹⁶

The AGC remains concerned that the Productivity Commission's methodology did not evidence an understanding that recreational gambling is not categorised merely by low spend.

The AGC contends that gamblers may, within a carefully considered and appropriate budget, still evidence a high spend that remains consistent with personal means and wholly recreational in nature.

Whether the 'excess' money losses experienced by problem gamblers should be included in any calculations of financial cost by the VCEC would depend largely on whether excess expenditure can in fact be estimated with any degree of precision on the information currently available across all gambling forms in Victoria.

Undertaking a jurisdiction-wide study to assess the proportion of excess gambling expenditure derived from problem gamblers across the multiple gambling forms available in Victoria would require valid estimates from a truly representative sample that corrects for response and sampling biases - uses the most accurate methods for data collection in order to avoid the inaccuracies that have been found to beset self-report estimates and provides corroborative evidence drawn from other sources.

The AGC would suggest that on current data-sets available in Victoria a sufficiently robust estimate of problem gambler expenditure is not an immediate possibility.

⁹⁶ Svetieva, E. & Walker, M. (2008) Inconsistency between concept and measurement: The Canadian Problem Gambling Index, *Journal of Gambling Issues*, Vol. 22 p160

8.2 Gambling Related Bankruptcies

As identified by the VCEC in 1999 the Productivity Commission used as data for financial costs the cost of gambling related bankruptcies – a product of the number of ‘gambling and speculation’ bankruptcies indicated by official data.

The official data in question is reported through the Insolvency and Trustee Service Australia (ITSA) which provides information on bankruptcies, debt agreements and personal insolvency agreements across a range of categories.

The reported numbers for bankruptcies attributable to ‘Gambling and Speculation’ in 2010/11 comprise approximately 1.97% of total Victorian business bankruptcies⁹⁷ and approximately 3.77% of the Victorian total of non-business bankruptcies.⁹⁸

However, again, the official data creates issues of causality by aggregating reasons for bankruptcy in data collection and reporting.

Attributions of causality in bankruptcy are confounded by the fact that ITSA statistics, while differentiating between business and non-business bankruptcies and bankruptcies by cause by jurisdiction, do not separate bankruptcies reported as attributable to ‘speculation’ from those attributed to ‘gambling’.

Further, a brief review of ITSA data collection documentation (Form Three – Statement of Affairs) finds that this body also appears to include ‘extravagance in living’ with ‘gambling’ and ‘speculation’ for non-business bankruptcies on the form provided to those undergoing the bankruptcy process – even if this extra variable as a cause of bankruptcy is not apparent in the reporting of results.⁹⁹

⁹⁷ [http://www.itsa.gov.au/dir228/itsaweb.nsf/bf5e4b32909dbd8b4a256bfb00191f36/16b78bfe934ddef9ca25792d0010e014/\\$FILE/Table%206%20Causes%20by%20State%20Business.pdf](http://www.itsa.gov.au/dir228/itsaweb.nsf/bf5e4b32909dbd8b4a256bfb00191f36/16b78bfe934ddef9ca25792d0010e014/$FILE/Table%206%20Causes%20by%20State%20Business.pdf)

⁹⁸ [http://www.itsa.gov.au/dir228/itsaweb.nsf/bf5e4b32909dbd8b4a256bfb00191f36/16b78bfe934ddef9ca25792d0010e014/\\$FILE/Table%205%20%20Causes%20by%20State%20Non%20Business.pdf](http://www.itsa.gov.au/dir228/itsaweb.nsf/bf5e4b32909dbd8b4a256bfb00191f36/16b78bfe934ddef9ca25792d0010e014/$FILE/Table%205%20%20Causes%20by%20State%20Non%20Business.pdf)

⁹⁹ [http://www.itsa.gov.au/dir228/itsaweb.nsf/docindex/About%20Us-%3EPublications-%3ENew%20Statutory%20Forms%20Document/\\$FILE/Form_03.pdf?OpenElement](http://www.itsa.gov.au/dir228/itsaweb.nsf/docindex/About%20Us-%3EPublications-%3ENew%20Statutory%20Forms%20Document/$FILE/Form_03.pdf?OpenElement)

9 Conclusions

It is well understood that in any estimation of the costs of gambling true precision is extraordinarily difficult (hence the provision of estimate ranges from low to higher bounds).

Discussion with respect to the limited range of sources outlined in this submission has been provided in the understanding that for many of the questions raised the VCEC will be well aware of the difficulties in accounting for cost. Likewise other submissions will no doubt explore further evidence that may be available

Broad estimates of cost however – while informing public consciousness to a degree – may give rise to as much debate as they inform and whether the Productivity Commission's 1999 methodology remains sufficiently meaningful to warrant application in Victoria in 2012 is a question that deserves a great deal of consideration.

The Productivity Commission's 1999 methodology has been the subject of extensive criticisms by a number of commentators – not least for the inclusion and monetisation of 'internal' costs.

Notwithstanding concerns regarding elements of the Commission's 1999 methodology, the AGC is of the view that the VCEC's current inquiry may be presented with a number of substantial challenges in sourcing sufficient accurate and quality data to allow provision of a suitably robust set of estimates with regard to the current terms of reference:

- 2008 figures relating to problem gambler prevalence may, if following the trajectory of previous studies, have declined further;
- The evidence available is largely fragmented and incomplete. For many of the questions asked, up-to-date data suitable to the calculation of state-wide figures is simply scarce or unavailable; and
- Further, in those areas where data is available a number of inherent difficulties exist in calculating and segregating the costs applicable to gambling as opposed to other factors and co-morbidities – significant issues of causality and overlap abound.

Without a data collection instrument tailored to the task at hand and designed to provide up-to-date evidence relevant to the terms of reference many of the questions posed by the VCEC cannot be answered with the degree of accuracy deserved

While the research undertaken and commissioned by Victoria is often high quality, the Victorian Government would be well advised to consider further investment in research and data collection. A data framework that could provide clearer answers to both the questions asked by the current terms of reference as well as addressing other variables present in international methodologies for assessing and reporting on the social and financial costs of problem gambling is necessary.

In seeking answers similar to those posed by the VCEC terms of reference, much work has been undertaken in other jurisdictions to develop and test substantial methodological frameworks for measuring the social and economic impacts of gambling.

A methodology outline by Massey University in New Zealand includes:

- a review of the available literature about methodologies and approaches used for measuring the social and economic impacts of gambling – including economists' cost benefit analysis;

- Data collection with stakeholders – including a data framework for information known and yet required; and importantly,
- The development and piloting of a quantitative data collection instrument to assess social and economic impacts.

While in Canada the Canadian Consortium for Gambling Research has created a framework for the Socio-Economic Impact of Gambling (SEIG) that includes six impact themes, each with numerous associated variables and indicators for consideration:

- Health and Wellbeing;
- Economic and Financial;
- Employment and Education;
- Recreation and Tourism;
- Legal and Justice; and
- Culture.¹⁰⁰

The time frames stipulated for the current VCEC inquiry may preclude realisation of a methodology that accounts for some of the complexities and data gaps apparent in attributions of cost.

Through the current inquiry process an opportunity arises however to assess just what could be required for the future.

On a broader scale the methodological issues of just how to appropriately define and measure the impacts of gambling are not specific to Victoria alone.

In their review of the manner in which Australian states and territories gauge gambling impacts The South Australian Centre for Economic Studies (SACES) found that definitions and methodologies vary, there is a lack of consensus as to the manner by which the social impacts of gambling may be assessed and while similarities exist and specific processes may be in place there remain significant degrees of variation and high levels of subjectivity throughout the nation.¹⁰¹

While SACES commented largely on local area impact assessment frameworks and procedures these findings are just as applicable to the few larger state-wide studies conducted.

Walker advises that, while gambling is multi-disciplinary and that it may be difficult for the various disciplines to agree on a single definition of social cost, that agreement is critical to the validity and future of such research as “only when we adopt a single definition of social costs and agree upon acceptable measurement methods can we begin to compare social cost studies across regions and through time.”¹⁰²

Given the constant call in Australia for greater comparability between jurisdictions the AGC submits that there is scope now for a higher level discussion about precisely how the social and economic impacts of gambling may best be defined and appropriately measured.

An agreed framework that captures timely and relevant information and continues to track changes while appropriately addressing confounding issues such as causality is necessary - not just in Victoria, but across all Australian jurisdictions.

¹⁰⁰ Canadian Consortium for Gambling Research (2008) *The Socio-Economic Impact of Gambling (SEIG) Framework*, Prepared by ANIELSKI Management Inc. for the Inter-Provincial Consortium for the Development of Methodology to Assess the Social and Economic Impact of Gambling

¹⁰¹ South Australian Centre for Economic Studies (2009) *Social Impacts of Gambling: A Comparative Study*, South Australian Independent Gambling Authority.

¹⁰² Walker, D (2003) “Methodological Issues in the Social Cost of Gambling Studies”, *Journal of Gambling Studies*, Vol 19, No. 2, Summer 2003 pp149-181

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