



Gambling away perspective?

A review of the evidence justifying electronic gaming regulations

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Executive summary

- There is no dispute that some people bet beyond their reasonable means when gambling. But this doesn't necessarily justify government intervention, in and of itself.
- The extent to which governments regulate to protect citizens from themselves and remove risk from the lives of individuals is growing. These developments are not constructive and are creating a 'nanny state' absolving individuals of responsibility.
- Any policy measure must be based on sound evidence of both a problem and the efficacy of the policy.
- The Productivity Commission in 2010 released a report into the gambling industries, including the prevalence of problem gambling and levels of expenditure on electronic gaming machines (EGMs) by problem gamblers.
- Based on state surveys from 2001 to 2009, the Commission estimated that between 80,000 and 159,000 Australian adults are afflicted by problem gambling.
- On the basis of the numbers of problem gamblers playing EGMs more than weekly, the Commission also estimated that 41 per cent of EGM spending was attributable to problem gamblers.
- However the Commission's estimates appear to have overestimated the problem gambling profile in Australia.
- The published estimates did not appear to adjust for differences in the adult population between states or the varying number of EGMs available in each jurisdiction.
- Outdated data was used by the Commission to estimate the prevalence of problem gambling; using the latest data shows a lower figure, about 75,300 problem gamblers in Australia. This is about 35 per cent lower than the Commission's average estimate of problem gambler numbers.
- Based on the Commission's analysis that between 75 per cent and 80 per cent of problem gamblers use EGMs, this reduces the numbers of EGM problem gamblers to between 57,000 and 60,000 people.
- Based on total expenditure on EGMs in Australia the implied share of spending by problem gamblers would in fact appear to be between ten and 20 per cent, and not the 41 per cent estimated by the Commission.
- A potentially more reliable measure - the numbers of people actively seeking help from state government problem gambling counselling and referral services – shows about 17,500 accessing such services, with about 31,000 people calling gambling helpline telephone services.
- The inflated problem gambling estimates provided by the Commission have been seized upon by anti-gambling interests, with significant implications for the freedom of Australians to use their own disposable incomes, in this case to partake in games of chance, as they so desire.

1.0 Introduction

The current policy environment towards gambling has been dominated by proposals to circumscribe the freedom of Australians to expend their own monies on gambling activities, in a clear retreat from the tendency towards deregulation of the gambling industries since the 1980s.

In what can best be described as a ‘tail wagging dog’ approach to public policy, the Tasmanian independent MHR Andrew Wilkie has predicated his parliamentary support for the minority federal Labor government upon the implementation of a suite of policies to restrict the use of poker machines by 2014.

A key feature of Wilkie’s policy demands is a system of mandatory pre-commitment that requires poker machine players to set their maximum acceptable loss prior to playing, with further plays of the machine over the set loss limit prevented.

The ensuing policy debate has been highly emotive, running the risk of diverting attention away from a hard-nosed consideration of the costs and benefits of the proposals canvassed. In a letter of appreciation to the GetUp! lobby group, Wilkie stated ‘[p]roblem gamblers can easily lose more than \$1,000 an hour on poker machines. It tears families apart, houses are lost and kids go hungry. That’s why the machines are referred to as the ‘crack cocaine’ of the gambling industry.’¹

The efficacy of proposals to place limitations upon the ability of individuals to gamble depends critically upon the extent to which gambling actually poses financial and social problems for those participating in such activity.

For its part the Productivity Commission was commissioned by the government in 2008 to undertake a broad-ranging inquiry into the gambling industries, including ‘the participation profile of gambling, including problem gamblers and those at risk of problem gambling.’²

The Commission’s final report, released two years later, stated that the numbers of Australians categorised as ‘problem gamblers’ averaged about 116,000, with people categorised as at ‘moderate risk’ averaged about 279,000. This implies that almost two thirds of people who play electronic gaming machines weekly or more are either problem gamblers or at moderate risk of becoming so. The Commission stated that the prevalence of problem gambling was higher for those playing ‘table games, wagering and, especially, gaming machines.’³

The purpose of this paper is to contribute to the Australian literature on the prevalence of problem gambling.

The next section will provide a critical analysis of the Productivity Commission’s assessment of the rates and numbers of problem gamblers and their expenditure levels.⁴

¹ Andrew Wilkie MHR, 2011, ‘Latest campaign: Pokies - a message from Andrew Wilkie’, <http://blog.getup.org.au/2011/03/29/latest-campaign-pokies-a-message-from-andrew-wilkie/>.

² Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra, p. iv.

³ *Ibid*, p. 2.

⁴ The Productivity Commission also reported on the social costs attributable to gambling, replicating the methodology adopted in their 1999 gambling inquiry report which has been the subject of intense criticism. For example, the Commission included an array of harms largely felt by the gambling individual, such as depression and suicide, as a social cost, while the presence of pre-existing comorbidities had not been appropriately accounted for. Whilst these are important issues in the context of the contemporary policy

On the basis of an assessment that the Commission has overestimated the prevalence of problem gambling and associated expenditures and costs in the Australian context, this paper will then suggest an alternative estimation framework for, and derive alternative estimates of, the numbers of problem gamblers.

While acknowledging the risks attached to gambling, and that addiction may cause significant problems for individuals and their families, the lower numbers of problem gamblers estimated here suggest that the need for draconian policy proposals to limit access to gambling activities, thereby taking risk assessment calculations out of the hands of individual participants, should be discounted as a solution to ameliorate the incidence of problem gambling.

debate on gambling in Australia, the issue of appropriately calculating social cost is not canvassed further in this paper.

2.0 Justifying nanny state gambling measures

Governments of all political persuasions have sought to regulate and limit gambling. It is a favoured past time of strong arm governments, as well as in democracies, because of its perceived impact on economic and moral wellbeing.

However, proposals for gambling regulation also fit within a broader policy shift that exists in the developed world, and particularly Australia, where government is increasing its influence and control over the lives and condition of individuals. Encapsulated in the colloquial phrase, the ‘nanny state,’ governments are incrementally encroaching through taxation, regulations and prohibitions into the lives of individuals to remove risk and the downstream consequences of that risk.

The most recent effort to legitimise nanny statism has come from Thaler and Sunstein’s theory of libertarian paternalism, or *nudge*, theory where the government seeks to use its toolbox of powers to change consumer behaviour.⁵ At the heart of the theory is that the government can change consumer behaviour without restricting it. Similarly, there is the assumption that the government is wiser than the body politic or individuals.

These proposals are often driven and given a rubber stamp by taxpayer-funded activists justified under the banner of a broad (yet questionable) interpretation of ‘public health’. But the concept of a nanny state is not as New South Wales Greens Senator, Lee Rhiannon, agrees ‘trotted out when people are a bit hard up for an argument’.⁶ It is a phrase that successfully encapsulates the broader societal trend of increased government interference into the lives of individuals.

The nanny state trend involves individual policy steps that are incremental and compound on previous measures that erode freedoms and risk from people’s lives. However, because each measure is incremental and seemingly justified the overall extent and growth of a nanny state goes largely unnoticed. There are now hundreds of examples in Australia and elsewhere to demonstrate efforts by government to remove risk from people’s lives, including:

- The commonwealth government introduced an alcopops tax on pre-mixed alcoholic drinks.
- The Danish government recently introduced a ‘fat tax’, and there has been support for similar measures in Australia.
- Bans have been placed on the use of trans-fats in many places around the world.
- The Obesity Coalition Taskforce proposed a ban on the use of cartoon characters on cereal packets.
- Australia’s world-first effort to strip tobacco products of trademarks and introduce plain packaging.

While some may argue that each of these policies, in isolation, delivers a desirable outcome it cannot be disputed that they erode a level of freedom for individuals, and the expectation that they will manage risk. Furthermore, they cannot be treated in isolation. When additional excise was placed on tobacco products it would have appeared an absurd proposition that plain packaging, licensing and an eventual ban would be proposed. The same absurdity now exists around equivalent measures surrounding alcohol and energy-dense, nutrient-poor food. However recently anti-alcohol

⁵ Richard Thaler and Cass Sunstein, 2008, *Nudge: Improving Decisions about Health, Wealth and Happiness*, Penguin Group, New York, United States of America.

⁶ Senator Lee Rhiannon, on ABC1, 2011, ‘The Nanny State?’, Q&A, Australian Broadcasting Corporation, <http://www.abc.net.au/tv/qanda/txt/s3227620.htm>.

advocates proposed introducing text- and graphic-based warning labels that replicate first generation anti-tobacco on-packet warning labels.

And much of the same spirit of legislating for a perceived ‘public’ benefit has now shifted across to gambling. Imposing public morality on gambling is not a new occurrence. Like alcohol, there have been numerous, failed, efforts to ban gambling by both authoritarian and democratic governments around the world.

The current proposal to introduce mandatory pre-commitment for gamblers using poker machines by Mr Wilkie continues in the nanny state spirit where government should legislate to protect people from themselves.

The 2009 published report, *Free to gamble: The roles of the gambling industry and policy in a modern Australian society*, articulated and outlined the IPA’s opposition to government intervention into the gaming industry noting that it is an industry that individuals voluntarily participate in for enjoyment.⁷ In any government attempt to regulate an industry the importance of voluntary participation should not be ignored. As the IPA’s Richard Allsop rightly pointed out in 2008:

‘While there is no doubt that problems have been caused by gambling and by poker machines, these negatives do not justify stopping the 97.9 per cent, of more likely 99 per cent, of non-problem gamblers, from consuming a product they enjoy. A 2003 survey in Victoria found that only 4 per cent of people had found gambling had a negative impact on their lives, compared to 21 per cent who found it had a positive impact (and 75 per cent for whom it made no difference). Why should the needs of the 4 per cent outweigh the 21 per cent?’⁸

Life is full of risk. And learning to manage risk is a component of the education of productive individuals. Government attempts to blind individuals from risk and its consequences is not a desirable public policy objective.

No one disputes that there is gambling that occurs where some people bet beyond their reasonable means. But a problem doesn’t justify government intervention, in and of itself. And as the Productivity Commission has noted in its reviews into the impacts of problem gambling there is limited data to successfully articulate the extent of the problem.

The IPA has previously questioned the rate of problem gambling.⁹ The Commission’s 1999 report concluded that 130,000 Australians were estimated to ‘have severe problems with their gambling’ and ‘a further 160,000 adults are estimated to have moderate problems’.¹⁰ By the Commission’s 2010 report the number of people with ‘severe problems with their gambling’ were classified as ‘problem gamblers’ and ranged from ‘around 115,000 with people categories as at ‘moderate risk’ ranging around 280,000.’¹¹

⁷ Julie Novak and Richard Allsop, 2009, *Free to gamble: The roles of the gambling industry and policy in a modern Australian society*, Institute of Public Affairs, February, http://www.ipa.org.au/library/publication/1235604569_document_free_to_gamble.pdf.

⁸ Richard Allsop, 2008, ‘Pokies Unfairly stigmatised’, ABC Unleashed, October 7, <http://www.abc.net.au/unleashed/32340.html>.

⁹ Novak & Allsop. 2009.

¹⁰ Productivity Commission, 1999, *Australia’s Gambling Industries*, Report, November 26, No. 10, <http://www.pc.gov.au/projects/inquiry/gambling/docs/finalreport>.

¹¹ Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra, <http://www.pc.gov.au/projects/inquiry/gambling-2009/report>.

Indicative data shows the extent of the problem is potentially much less than the Productivity Commission may have previously raised. According to a 2006 Relationship Australia survey into the 'issues negatively impacting on partner relationship[s]' gambling rates as the 23rd highest issue behind 'housework', 'serious illness or disability', influence of in-laws', 'sexual difficulties', 'alcohol and other drug issues' and 'influence of ex-partners', to name a few.¹²

By the 2011 survey the data had dropped off the reported list entirely with the lowest rated reason listed for relationships breaking down being 'insecurity/jealousy' at two per cent.¹³ It should be noted in the 2011 survey that the top reasons listed for relationship breakdowns on the indicators is 'financial stress', though a similar classification of 'financial insecurity/difficulties' also appeared in the 2008 survey ranking ninth.

Faced with regulation proposals and introducing measures that will take Australia further down the nanny state path there has to be compelling evidence that the measure is warranted. In this light, the merit and foundations of introducing mandatory pre-commitment, or even many already existing restrictions on the gaming industry, deserve scrutiny and should be based on sound evidence that is clearly lacking. Similarly, evidence that the measure will clearly be effective is also required.

¹² Relationships Australia, 2006, *Relationships Indicators Survey 2006*, November, <http://www.relationships.org.au/what-we-do/research/australian-relationships-indicators/ra-rel-ind-2006-report>.

¹³ Relationships Australia, 2011, *Issues and Concerns for Australian relationships today: Relationships Indicators Survey 2011*, <http://www.relationships.org.au/what-we-do/research/australian-relationships-indicators/relationships-indicator-2011>.

3.0 Productivity Commission problem gambler and expenditure estimates: A critique¹⁴

Based on the proposition that ‘problem gambling is probably best characterised as a social *and* psychiatric issue where a cluster of significant harms are present,’¹⁵ the Productivity Commission sought in the 2010 gambling inquiry report to identify the number of problem gamblers in existence in Australia.

As noted by the Commission, the identification of the prevalence of problem gambling typically rests upon psychological ‘screens’ - or a short set of questions relating to gambling behaviours and beliefs - applied to a sample of the general population.

The Canadian Problem Gambling Index (CPGI) has been more commonly used in recent years as the survey instrument of choice, which asks respondents to rate the frequency of nine behaviours or attitudes over the last year of gambling with the options on any question being ‘never’ (allocated a numerical score of zero), ‘sometimes’ (one), ‘most of the time’ (two) or ‘almost always’ (three). The questions are:

- have you bet more than you could really afford to lose?
- still thinking about the last 12 months, have you needed to gamble with larger amounts of money to get the same feeling of excitement?
- when you gambled, did you go back another day to try to win back the money you lost?
- have you borrowed money or sold anything to get money to gamble?
- have you felt that you might have a problem with gambling?
- has gambling caused you any health problems, including stress or anxiety?
- have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
- has your gambling caused any financial problems for you or your household?
- have you felt guilty about the way you gamble or what happens when you gamble?

Scores for each question are summed with a spectrum of problem gambling incidence interpreted as follows: ‘non-problem gambling’ (numerical score of zero); ‘low level of problems with few or no identified negative consequences’ (between one and two inclusive); ‘moderate level of problems leading to some negative consequences’ (between three and seven inclusive); and ‘problem gambling with negative consequences and a possible loss of control’ (eight or more).

Based on state CPGI surveys from 2001 to 2009, and statistically adjusting for errors in prevalence rates, the Commission estimates that between 80,000 and 159,000 Australian adults are afflicted by problem gambling (Table 1).

¹⁴ Unless otherwise specified, this section draws from Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra.

¹⁵ *Ibid*, p. 5.4

Table 1 | Summary of prevalence rates estimated by Productivity Commission, June 2009

Risk category	Prevalence rate (per cent)			Adults affected (number)		
	Average	Lower	Upper	Average	Lower	Upper
Problem gambler	0.69	0.48	0.95	116,000	80,000	159,000
Moderate risk	1.67	1.36	2.08	279,000	228,000	348,000
Combined risk	2.36	1.93	2.82	395,000	323,000	472,000

Numbers of adults affected by problem gambling based on a projected Australian adult population of 16.75 million for June 2009. Excluding Western Australia due to insufficient data.

Source: Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra p. 5.20.

The Commission estimates that 95,000 problem gamblers¹⁶ played electronic gaming machines (EGMs) with an average annual expenditure of \$21,000 each, implying that the share of total spending on EGMs by problem gamblers was 41 per cent - with the range from the minimum to maximum being 22 to 60 per cent.¹⁷

3.1 Lack of statistical weighting for interjurisdictional differences

The aggregated measures presented by the Commission do not reflect the fact that the adult population varies across the states and territories, and that the availability of games (other than lotteries and instant 'scratchie' tickets) also differ on an interjurisdictional basis reflecting issues such as the existing population size and the nature of regulatory standards.

Table 2 provides a summary of the adult population and number of operating EGMs in each jurisdiction.

Table 2 | Count of adult population and total operational electronic gaming machines (EGMs), 2009

Jurisdiction	Adult population (number)	Operational EGMs (number)	EGMs per adult head of population (number)
NSW	5,506,316	97,065	0.018
Vic	4,229,120	29,272	0.007
Qld	3,355,362	45,311	0.014
SA	1,270,135	13,595	0.011
Tas	384,754	3,652	0.009
ACT	274,054	5,157	0.019
NT	163,249	2,018	0.012

The number of operational EGMs in all states and territories (except Northern Territory) are capped by legislation, which is not reported in this Table. Western Australia, with an adult population of 1.72 million and 1,750 operational EGMs, is excluded from this Table to reflect information contained in other Tables in this section.

Source: ABS, Population by Age and Sex, Australian States and Territories, June 2010, cat. no. 3201.0; Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra p. 2.26.

These differences between the jurisdictions are significant, and need to be appropriately accounted for in any rigorous analysis of problem gambling prevalence.

¹⁶ This number is based upon an assessment by the Commission of the numbers of problem gamblers who play EGMs weekly or more in 2008. Ibid, p. 5.25.

¹⁷ Ibid, p. 5.33 and p. B.13.

For example, Tasmania with an adult population of about 385,000 people and about 3,650 EGMs are effectively weighted in the Commission's analysis in the same manner as NSW, with about 5.5 million adults and about 97,000 EGMs.

Any analysis that emphasises a simple national average prevalence rate is likely to conceal or mask important interstate variations, potentially leading to an inflated picture of the true extent of problem gambling in Australia.

Policy differences are also likely to confound analysis of this issue. For example, amongst the smaller states the ACT appears to have a more liberalised approach to EGM availability with 29 per cent fewer adults, say, compared with Tasmania, but 41 per cent more machines. Among the larger states the differential between Victoria and other mainland states on Australia's eastern seaboard are significant, and reflect in part explicit policy decisions to maintain tight caps on EGM availability in hotels, clubs and Crown casino.

In summary, the absence of statistical weighting can clearly lead to inappropriate data analysis and compound inaccuracies if the data is used in other analyses.

3.2 Use of outdated survey data

The derivation of the Commission's estimates of problem gambling relies upon a mixture of contemporary CPGI survey results (for example, data collected in 2009 for NSW) with results from surveys conducted as far back as 2001 (for example, Queensland), together with survey data collected for almost every year in between for most states and territories.

Given the inherently dynamic nature of problem gambling, with relevant individuals likely to transition in and out of situations of relatively high use of gambling products over time, and with more recent studies reporting a lower prevalence of problem gambling, the use of older surveys leads to an inflated estimate of the prevalence rate of Australian problem gambling.

To take an example of the statistical problem this poses, consider the reductions to the Queensland problem gambling prevalence rate since 2001. In the 2001 survey it was estimated that 0.83 per cent of Queensland adult residents were problem gamblers; by 2008-09 this rate had fallen to 0.37 per cent.¹⁸ Indeed, CPGI survey results in each state and territory show that the incidence of problem gambling is declining.

It is notable that the Productivity Commission includes the 2001 Queensland problem gambling survey result in its collection of data to derive a national average prevalence rate of 0.69 per cent,¹⁹ even though this figure is outside the 95 per cent confidence interval of the most recent Queensland survey and, hence, almost certainly statistically invalid as a contemporary indicator of problem gambling prevalence in that state.

If one takes the most recent CPGI 8+ survey results and accounts for variations in state populations the national prevalence rate for problem gambling is 0.49 per cent of the adult population of about 15.47 million people - in other words, about 75,300 problem gamblers (or a figure some 35 per cent lower than the Commission's average estimate) (Table 3).

¹⁸ Queensland Office of Liquor, Gaming and Racing, 2010, *Queensland Household Gambling Survey 2008-09*, Department of Employment, Economic Development and Innovation, p. 2.

¹⁹ Productivity Commission, op. cit, p. 5.18.

Table 3 | Current problem gambling prevalence rates

Jurisdiction	Year	Prevalence rate (per cent)	Adult population (number)	Adults affected (number)
NSW	2009	0.40	5,601,746	22,407
Vic	2008	0.70	4,316,946	30,219
Qld	2009	0.37	3,428,226	12,684
SA	2005	0.43	1,288,256	5,540
Tas	2007	0.52	388,984	2,023
ACT	2010	0.50	279,273	1,396
NT	2005	0.64	166,626	1,066

Excluding Western Australia due to insufficient data. Adult population data as at June 2010.

Source: Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra p. 5.20; Clubs Australia submission to Joint Select Committee on Gambling Reform Inquiry into Pre-commitments Scheme; ABS, Population by Age and Sex, Australian States and Territories, June 2010, cat. no. 3201.0.

The Commission estimates that between 75 per cent and 80 per cent of problem gamblers play EGMs.²⁰ Applying these ratios to the estimation presented here of 75,300 problem gamblers suggests that the total numbers of problem gamblers playing EGMs is approximately between 56,500 and 60,200 people.

That said the problem with the data presented in Table 2 is that problem gambling prevalence surveys were collected for years ranging from 2005 to 2010. This suggests the need for a more coordinated approach among the states concerning the conduct of surveys on problem gambling, including the collection of data within the same time period.

3.3 Limitations of problem gambler expenditure estimates

The analysis provided by the Commission of expenditure by problem gamblers on EGMs appears to significantly overestimate the actual amount of expenditure, at least based on data presented elsewhere in the inquiry report.

According to data drawn from a variety of sources, including state governments, industry stakeholders and independent consultants, Australians spent about \$10.5 billion on EGMs in clubs and hotels and about \$1.4 billion on EGMs in casinos in 2008-09.²¹

If 95,000 problem gamblers spent an average of \$21,000 on EGMs then this equates to total EGM expenditures of \$1.995 billion. However this equates to approximately 16.8 per cent of the total expenditure on EGMs, and not 41 per cent as claimed by the Commission. In effect, the Commission appears to have grossed up the EGM spending share attributable to problem gamblers by a factor of about 2.4.

If, instead, between 56,500 and 60,200 problem gamblers spent \$21,000 each on EGMs then this equates to total EGM expenditures by this group of between \$1.186 billion and \$1.265 billion. This in effect further reduces the total EGM expenditure share by problem gamblers to between ten per cent and 10.6 per cent. That is 75 per cent less than estimated by the Productivity Commission.

In interpreting the results of expenditure surveys the Commission appears to have committed a similar error in approach as with problem gambling prevalence rates, with its estimated share of

²⁰ Ibid, p. 13.

²¹ Productivity Commission, op. cit, p. 2.18.

total EGM expenditure committed by problem gamblers drawn from unit records spanning from 2003 to 2008-09.

The approach used by the Commission is cause for concern. When compounded with the lack of appropriate weighting for EGM expenditure in different states it is clear that the findings presented by the Commission are not particularly robust.

4.0 The number of problem gamblers in Australia: An alternative framework

Gambling is one of the many leisure activities available to the Australian population. Like any other good or service, the demand for gambling products is derived from the subjective preferences of consuming individuals.

These preferences may, in turn, be shaped by a range of factors including direct economic considerations, such as price, quality, income level and availability of substitute goods and services, and other issues including a sense of excitement and fun when consuming gambling products, the desire to 'be in it to win it' and the anticipation of a win, or testing one's luck or skill against games of chance.

Many providers, such as clubs, hotels and casinos, bundle their gambling products and services with food, beverage and accommodation services, music and other entertainment. For many Australians, including in rural and regional areas, gambling is part and parcel of an enjoyable day or night out 'on the town.' Indeed, gambling is not unlike many other forms of entertainment, such as attending a cinema or theatre or watching cricket or a football match, in that individuals willingly expend a part of their disposable income to obtain a form of enjoyment.

It should be self-evident from everyday experience that the overwhelming majority of Australians partake in legal forms of gambling, such as EGMs, responsibly and derive a host of benefits from doing so. Further, many people exhibit appropriate levels of self-command when participating in gambling activity, often by pre-committing their own sums of money to a given bet, play or wager without the need for third-party interventions.

The key benefit for those engaging in gambling is the enjoyment, satisfaction or utility they acquire from it, compared with the gains obtained from their next preferred form of expenditure and activity.

Within the generic microeconomic framework of consumer utility theory, gambling products have been conceived as belonging to a class of 'addictive' goods. The Becker-Murphy 'rational addiction' model suggests that an individual might rationally choose to consume an addictive good if the present value of doing so is sufficiently high so as to outweigh the expected costs of addiction.²² As Douglas Walker explains:

*'the decision whether or not to gamble is a rational choice. ... The implication here is that even pathological gambling is a condition that results from rational behavior. ... risking addiction is not inconsistent with rationality. ... it [rational addiction theory] implies that the costs of pathological gambling are actually private in nature.'*²³

The central message of the rational addiction theory is that individuals can factor in the benefits and costs, including risks of addiction associated with engagement, when making decisions to consume addictive goods.

This reasoning can be suggested to be applicable to most Australians and underscores, from an economic perspective at least, why the Commission's estimate of between 230,000 to 350,000 people experiencing 'moderate risks' from gambling product use – as if precariously wedged

²² Gary Becker and Kevin Murphy, 1988, 'A Theory of Rational Addiction', *Journal of Political Economy* 96 (4): 675-700.

²³ Douglas M Walker, 2007, *The Economics of Casino Gambling*, Springer, New York, p. 118-119.

between 'healthy' and 'unhealthy' gambling as depicted in Figure 7.1 of the Commission's inquiry report²⁴ – is a gross misrepresentation of the nature of gambling consumption. The problems associated with the 'moderate risk' gambling characterisation have also been canvassed in recent studies of the methodological integrity of the CPGI screen.²⁵

Even so, it is widely acknowledged that there still exists small numbers of people within the adult population that commit amounts of disposable incomes towards the playing of EGMs and other forms of legal gaming that often unintentionally entail significant (but largely non-social) costs to themselves and possibly immediate family members or relatives.²⁶

As noted above discourse about the actual number of problem gamblers in Australia are characterised by intense, and increasingly highly politicised, disputes. Whereas questionnaire surveys are being largely used as the sole method of furnishing estimates of the numbers of people afflicted with problem gambling behaviours, errors in the construction and interpretation of these surveys, as discussed above, can compromise the veracity of research in this area.

Other issues must also be borne in mind. These include those concerning small sample sizes of respondents, and the potential corruption of surveys, to the extent that they measure an individual's sensitivity to society's reaction to gambling rather than issues to do with individual acts of gambling. To paraphrase the Commission, questionnaire surveys alone should not be construed as the 'gold standard' of problem gambling prevalence estimation.

A valuable source of information on the extent of problem gambling that seems to have been dismissed by the Commission, and certain commentators in the gambling policy debate, is the numbers of people who have availed themselves, either of their own volition or with the support or encouragement of relatives, to problem gambling counselling services.

This strand of information can be potentially important in helping to clarify the actual numbers of problem gamblers if it is understood that decisions by people to seek help for their gambling issues are as much a *revealed preference* as decisions to consume gambling products in the first place.

As noted in the Commission's inquiry report the state and territory governments offer counselling and treatment support services for problem gamblers, including referrals to some non-government community organisations. In 2007-08 it is estimated that 17,500 people attended these services.²⁷ This is equivalent to a little over a fifth of the Commission's lowest bound estimate of the numbers of problem gamblers in Australia (80,000).

Even so, as the Commission indicates, there are inconsistency issues concerning the collection of data with some states collecting data of 'all' clients, others on 'new' clients and some including clients attending financial counselling services.²⁸ The figure presented above does not include people

²⁴ Productivity Commission, op. cit, p. 7.8.

²⁵ Shawn R Currie, David M Casey and David C Hodgins, 2010, 'Improving the Psychometric Properties of the Problem Gambling Severity Index', <http://www.nsgamingfoundation.org/uploads/Research%20PGSI%20Full%20Report.pdf>.

²⁶ For a discussion of the appropriate distinction of the private and social costs associated with gambling activities, see Douglas M Walker and A H Barnett, 1999, 'The Social Costs of Gambling: An Economic Perspective', *Journal of Gambling Research* 15 (3): 181-212. Another issue to be considered is the presence of co-morbidities.

²⁷ Productivity Commission, op. cit, p. 7.3. The Commission also states that there are about 4,000 people seeking assistance for someone else's gambling problem.

²⁸ Ibid.

seeking assistance from privately provided gambling help services or from specific financial or relationship counsellors. In addition, non-problem gamblers may also avail themselves of these services.

The Commission also refers to the numbers of people calling gambling telephone help lines, which typically offer 24 hour services such as referrals, counselling and support for people experiencing problems with gambling. In 2007-08 it was estimated that 31,000 calls were made to such services (Table 4).

Table 4 | Numbers of calls to gambling help line services, 2007-08

	NSW	Vic ^a	Qld	WA	SA	Tas	ACT	NT ^c
Target callers	6,757			885	1,536	536		52 ^d
Non-target callers	4,789			536	641 ^b	404		64 ^e
Total calls	11,546	11,153	3,376	1,421	2,177	940	266	116

a. Includes 183 contacts associated with the RTC program. b. Includes prank calls, hang ups and wrong numbers. c. Includes only calls made outside normal business hours. d. Gambling related calls (counselling, information or referral). e. Calls answered.

Source: Productivity Commission, 2010, *Gambling*, Report No. 50, Canberra p. J.5.

To be sure, issues of statistical consistency and other limitations also apply to the existing data available on the numbers of problem gamblers seeking support to address their behaviours. These issues can be addressed, however, by further research and consistent methods of data collection.

Nonetheless, with the high levels of public awareness of the risks of problem gambling and the lowering of stigmatisation about people actually receiving help to resolve their afflictions, information on the numbers of people taking action to seek assistance could potentially offer a rigorous evidence base on those small numbers of Australians detrimentally affected by gambling.

5.0 Conclusion

In fairness, the Commission concedes on numerous occasions the existence of a number of limitations associated with the very concept of problem gambling, let alone methodologies of establishing problem gambling prevalence and expenditure estimation. As it stated in its report:

*'there are significant difficulties in getting a coherent picture of gambling in Australia due to differences in the content and implementation of ... surveys. Differences relate to their frequency; scope (such as which gambling activities and expenditures are included); consistency in the questions used and in their ordering; the gambling screens applied; and in the definition of terms (such as what constitutes a 'frequent' or 'regular' gambler).'*²⁹

While the Commission helpfully recommended that jurisdictions enact common prevalence surveys using a set of core questions, and that a nationally consistent and publicly available dataset on gambling help services be established,³⁰ it is perplexing that it nonetheless proceeded to provide estimates of prevalence and problem gambling expenditure as if the valid debates surrounding these issues have been sufficiently settled.

The strategy of the Commission to proceed now in providing estimates, rather than wait for contemporary, comparable data to become available, has already led to an undesirable situation in which federal politicians are hyping up the available over-estimates to actively countenance onerous pre-commitment conditions for electronic gaming machine plays.³¹

In fact it is notable that the Commission itself recommended mandatory pre-commitment be trialled due to a lack of evidence as to its efficacy or cost-benefit. This recommendation has been ignored by the technology's proponents who claim they are simply following the recommendations of the Productivity Commission.

However, as this paper shows, there are a host of problems with the estimation methodology employed by the Commission which, in effect, is highly likely to overstate the extent of problem gambling numbers and the estimates of the amount of expenditure undertaken by problem gamblers.

The Productivity Commission has long made much of the policy virtue of marshalling the best possible evidence and applying these in accurate fashion when prosecuting its arguments in the policy domain. The operating environment that it faces of contending with a growing array of policy issues within its inquiry remit is testament to the merits of this approach.

Advocates for the introduction of mandatory pre-commitment have clearly used the Commission's data to justify their proposals, even though the data presented is subject to a host of important limitations rendering it inadmissible as a solid evidence base for policymaking. And without sufficient and credible data it is not appropriate to enact proposals with significant implications for the freedom of Australians to use their own disposable incomes, in this case to partake in games of chance, as they so desire.

²⁹ Ibid, p. 18.4-18.5.

³⁰ Ibid, p. 50, 64.

³¹ For an example of references to Productivity Commission estimates by government and independent members of the federal parliament, see Jenny Macklin MP, Bill Shorten MP, Andrew Wilkie MP and Senator Nick Xenophon, 2010, 'Tackling Problem Gambling', Joint Media Release, 21 October. On Monday 26 September the Minister for Families, Housing, Community Services and Indigenous Affairs, Jenny Macklin, stated 'we know there are millions of Australians, particularly the families of poker machine addicts, who are suffering, whose lives have been ruined as a result of poker machines,' a proposition not even supported by the Commission's estimates.

6.0 About the Institute of Public Affairs

The Institute of Public Affairs, founded in 1943, is the world's oldest free market think tank. The IPA is a not-for-profit research institute based in Melbourne, Australia with staff and associates based around Australia. Think tanks act as public policy incubators and develop public policy solutions.

The objective of the IPA is to promote evidence-based public policy solutions rooted in a liberal tradition of free markets and a free society. The IPA achieves these objectives by undertaking and disseminating research; participating in national and international policy debate through the media; and engaging with opinion leaders, stakeholders and public policy makers.

All work completed by the IPA is published in the public domain for the consumption of governments, politicians, domestic and international policy makers and the public-at-large.

The IPA has a demonstrated track record of contributing to, and changing the terms of the public policy debate in Australia and internationally. In particular, in recent years the IPA has been at the centre of public discussion in Australia and in appropriate international fora on:

- Regulation
- Trade
- Intellectual property
- Water
- Energy
- Housing
- Industrial relations
- Taxation
- Investment

7.0 About the authors

Julie Novak is a Research Fellow with the Institute of Public Affairs and previously worked for the Productivity Commission. Julie has also previously worked for a number of other State and Federal public sector agencies, including the Commonwealth Treasury. She was also previously advisor to the Queensland Chamber of Commerce and Industry. Julie's regularly published on the opinion pages of Australian newspapers including *The Australian*, *Australian Financial Review*, *The Age* and *The Courier Mail* on issues ranging from State public finances to social services reform.

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