KPMG ECONTECH

Economic Analysis on Productivity Commission Draft Report on Gambling

18 December 2009

Final Report

ADVISORY

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1 Executive Summary

1.1 Overview

The Productivity Commission (PC) has recently released its 2009 Draft Report into Gambling (the 2009 PC Draft Report) which contains a number of findings and recommendations that seek to address problem gambling. The 2009 PC Draft Report is an update of the 1999 PC Information Report into Gambling (1999 PC Report). The Australasian Gaming Council (AGC) has engaged KPMG Econtech to review the report and to focus on findings and recommendations that are of particular concern to the AGC.

1.1.1 General Comments on the Productivity Commission Draft Report

A high-level review of the 2009 PC Draft Report has revealed the following results.

- The 2009 PC Draft Report aims to contribute to the policy debate on regulation of the gambling industry. The 2009 PC Draft Report draws together a wide range of policy alternatives and useful information which summarises and helps clarify key issues.
- Some of the recommendations advanced in the 2009 PC Draft Report tackle the symptoms or effects of problem gambling rather than target its causes.
- Quantitative analysis and modelling of the impacts of the recommendations is necessary. The quantitative analysis and modelling should address:
    - The increase in costs that the gaming industry would incur to implement the recommendations and ensure ongoing compliance with new requirements;
    - the fall in revenues that the gaming industry would bear as a result of reduced customer patronage of gaming venues;
    - the direct financial impacts for governments that would be associated with a reduction in gaming industry revenues and the implications for government budgets;
    - the indirect economic impacts associated with a reduction in gaming industry revenues in terms of reduced employment, investment and economic activity; and
    - the indirect social impacts that would be associated with a reduction in gaming industry revenues in terms of reduced investment in local community, sporting and recreational initiatives that gaming industry revenues help to underpin.
- In keeping with the *Productivity Commission Act 1998*, KPMG Econtech would expect the report to contain cost-benefit analysis, supported by economy-wide modelling. Moreover, given the emphasis on Electronic Gaming Machines (EGMs), the modelling tools to be used need to feature sufficiently detailed product definition to capture the impact of policy changes to EGMs and other specific products within the gambling industry.

1.1.2 Scope of Analysis

The AGC engaged KPMG Econtech to examine the following findings and recommendations:

1 Draft Finding 3.1: "Even under conservative assumptions, a sustained 10 per cent reduction in the costs associated with problem gambling is estimated to generate benefits to society of around $450 million a year in 2008-09 prices, and longer-term benefits amounting to several billion dollars" (2009 PC Draft Report, page 3.23);

2 Draft Finding 4.5: "It is 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). Moderate risk gamblers account for a further significant share" (2009 PC Draft Report, page 4.37);

3 Draft recommendation concerning pre-commitment strategies: "There should be a progressive move over the next six years to a universal pre-commitment system for gaming machines, using technologies that allow all consumers in all venues to set binding limits on their future play" (2009 PC Draft Report, page 7.42);

4 Draft Recommendation 11.1: "In all jurisdictions, the maximum bet limit on gaming machines, other than those in high roller or VIP rooms at casinos, should be set at one dollar" (2009 PC Draft Report, page 11.18); and

5 Draft Recommendation 11.2: "In all jurisdictions, the maximum amount of cash that can be inserted into a gaming machine should be $20, with no further cash able to be inserted until the maximum credit on the machine falls below $20. This restriction should not apply to gaming machines in high roller or VIP rooms at casinos" (2009 PC Draft Report, page 11.25).

1.2 Analysis of Specific Findings and Recommendations

1.2.1 PC Draft Finding 3.1

KPMG Econtech has identified a number of issues with the assumptions and inputs used by the PC to calculate the social cost of gambling as detailed below:

- The only revision carried out on the 'social cost per problem gambler' estimate developed in the PC 1999 Report was to apply an inflationary adjustment factor. In doing so, no allowance has been made for the likely reduction in the actual social cost per problem gambler over the last 10 years arising from a wide a range of social, policy and regulatory developments,[1] which the PC acknowledges have had a significant impact in moderating gambling behaviour; and

- Dollery and Storer (2007) reviewed the methodology used to calculate the social cost per problem gambler in the 1999 PC Report and have identified a number of issues. The 1999 PC Report estimates are now dated and a revision of the methodology used to generate this estimate is advisable.

[1] Government policy interventions such as state smoking bans for gaming areas have helped to bring about a decline in participation rates for gambling.

1.2.2 PC Draft Finding 4.5

- KPMG Econtech has reviewed the methodology used in the PC 2009 Report to develop the 40 per cent estimate. KPMG Econtech notes that the triangulation of the results of different methods and datasets is not without dangers. This is particularly pressing in this instance, since the estimate informs one of the key findings of the PC report. The concerns identified relate to:
- Limitations of the Canadian Problem Gambling Index (CPGI) methodology, including the alterations made in Australian jurisdictions which could affect the integrity of the data;
- reliability of the prevalence survey data;
- transparency in calculations and methodology; and
- use of a simple averaging approach.

1.2.3 PC Draft Recommendation on Pre-commitment Strategies

KPMG Econtech has identified the following issues with the proposed pre-commitment system:

- Although trials are currently underway in a few Australian locations, as yet there is no definitive evidence that precommitment systems reduce problem gambling;
- the technological challenges associated with the development of such a system;
- the upfront and ongoing costs that would be incurred by industry and governments to develop, implement and maintain an appropriate system;
- the reduction in industry revenue that the proposed pre-commitment system would generate; and
- how this approach would affect the rights of consumers to freely enjoy the entertainment service gambling provides.

Greater consideration should be given to the comparison of voluntary versus mandatory pre-commitment systems. A voluntary system has significant advantages over a mandatory one:

- The consumer choice issues associated with the mandatory system would be ameliorated;
- initial implementation and ongoing management costs are likely to be lower; and
- as recognized in the 2009 PC Draft Report, a voluntary pre-commitment system may be an effective mechanism for targeting problem gamblers without imposing an excessive burden on recreational gamblers.

1.2.4 PC Draft Recommendation 11.1

KPMG Econtech has identified the following issues with this recommendation:

- The maximum $1 bet does not tackle the causes of problem gambling;
- the recommendation constitutes a ‘one-size-fits-all’ approach, affecting recreational and problem gamblers in the same manner; and
- implementation of this recommendation poses a risk to the gaming industry.

This recommendation is based on studies by Blaszczynski (2001) and Sharpe (2005), which conclude that the only effective policy to reduce the amount of money spent by problem gamblers using EGMs is to limit the maximum bet. While both studies are cited in the 2009 PC Draft Report, particular emphasis is place on research from Blaszczynski (2001). This study shows that only 2.3 per cent of non-problem gamblers and 7.5 per cent of problem gamblers typically bet more than $1 per game. This implies that 92.5 per cent of problem gamblers would be largely unaffected by the policy, given that they typically bet below the $1 limit.

The link between the betting limit and problem gamblers' expenditure levels has not been soundly demonstrated in the PC 2009 Draft Report. Recent research suggests that betting limits translate into increases in session duration: Problem gamblers substitute the reduction in the amount they can bet per hour with an increase in session duration[2]. In light of this finding, the opportunity cost of any additional time that problem gamblers might spend on EGMs would need to be taken into account.

1.2.5 PC Draft Recommendation 11.2

The basis for this recommendation is that by having to stop playing for a short while, problem gamblers can take stock of their situation and think about whether to continue playing or stop. If implemented, this recommendation would reduce the playing time (i.e. number of bets that can be made) within a given timeframe.

KPMG Econtech has identified the following issues with this recommendation:

- The recommendation constitutes a 'one-size-fits-all' approach;
- the link between the number of bets that players can make in a given timeframe and the total amount spent by problem gamblers has not been clearly established;
- this recommendation could inconvenience players (recreational or otherwise) possibly without significant change in the behaviour of problem gamblers; and
- implementation of this recommendation poses a risk to the gaming industry.

The relationship between the number of bets that players can make in a given timeframe and the amount of money spent by problem gamblers is unclear. The Schottler Consulting (2009) report finds that players are likely to compensate for reductions in playing intensity by playing for longer. The Schottler Consulting (2009) report suggests that a recommendation of this nature could lead to a significant reduction in the level of play by recreational gamblers.

There is a risk that, if implemented, Pre-commitment and Recommendations 11.1 and 11.2 might appear to reduce problem gambling by triggering falls in industry revenue. However, this fall in revenue would come about through exit of recreational gamblers, even though problem gamblers may not necessarily be spending significantly less overall.

[2] See report by Schottler Consulting for the Victorian Department of Justice: *Impact of Changes to Electronic Gaming Machine Characteristics on Play Behaviour of Recreational Gamblers*, August 2009

2 Introduction

2.1 Scope

The PC has recently released its 2009 Draft Report into Gambling which has the aim of identifying how government policy can maintain the enjoyment that many people experience from gambling while, at the same time, addressing the potential costs it could pose for some groups. The 2009 Draft Report contains a number of findings and recommendations that attempt to tackle problem gambling.

The 2009 PC Draft Report presents little quantification of the possible cost impacts of its recommendations. The available evidence suggests that there is potential for some recommendations to have perverse outcomes. As a result, the Australasian Gaming Council (AGC) has engaged KPMG Econtech to undertake an analysis of a number of particular findings and recommendations proposed by the PC.

The AGC has sought explicit advice from KPMG Econtech on the following:

- Draft Finding 3.1: Even under conservative assumptions, a sustained 10 per cent reduction in the costs associated with problem gambling is estimated to generate benefits to society of around $450 million a year in 2008-09 prices, and longer-term benefits amounting to several billion dollars. This implies that even harm minimisation measures with modest efficacy may produce worthwhile net benefits so long as they do not also involve excessive costs;

- Draft Finding 4.5: It is 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). Moderate risk gamblers account for a further significant share;

- Draft findings and recommendations concerning pre-commitment strategies. This is namely that there should be a progressive move over the next six years to a universal pre-commitment system for gaming machines, using technologies that allow all consumers in all venues to set binding limits on their future play;

- Draft Recommendation 11.1: In all jurisdictions, the maximum bet limit on gaming machines, other than those in high roller or VIP rooms at casinos, should be set at one dollar; and

- Draft Recommendation 11.2: In all jurisdictions, the maximum amount of cash that can be inserted into a gaming machine should be $20, with no further cash able to be inserted until the maximum credit on the machine falls below $20. This restriction should not only apply to gaming machines in high roller or VIP rooms at casinos.

KPMG Econtech understands that the AGC is currently preparing its submission on the 2009 PC Draft Report and is expected to use material contained in this report in finalising their submission.

2.2 Approach

In preparing this report, KPMG Econtech undertook a comprehensive review of the selected findings and recommendations and the relevant chapters of the 2009 PC Draft Report. This enabled KPMG Econtech to conduct a review of the adequacy of the evidence used by the PC to support their findings and recommendations and to come to a preliminary view of the range of impacts associated with the findings and recommendations.

As part of this engagement, KPMG Econtech reviewed additional literature and undertook further research into the potential wider impacts of the selected findings and recommendations. KPMG Econtech also considered, at a high level, the social impacts associated with a reduction of industry revenues that could arise from implementation of the selected findings and recommendations.

3 The 2009 Productivity Commission Draft Report

3.1 Summary of the Key Policy Consideration

The objective of the 2009 PC Draft Report is to identify how government policy can maintain the enjoyment that many people experience from gambling while, at the same time, seek to address the harms it could potentially pose to some groups.

The 2009 PC Draft Report is an update of the 1999 PC Report which did not permit the PC to make formal recommendations. In the 2009 Report, the PC has been able to examine issues covered in the 1999 PC Report and the effectiveness of harm minimisation measures implemented since. The PC has also been given a mandate to make policy recommendations with a focus on harm minimisation. The PC has used this mandate to advance a number findings and recommendations that include those outlined in Section 1.1.2 of this report.

3.2 Key Points in the 2009 Productivity Commission Draft Report

The following is a summary of the key points of the 2009 PC Draft Report. This summary is included for the benefit of readers who may not be entirely familiar with all the key findings and recommendations in the 2009 PC Draft Report.

Summary of the 2009 PC Draft Report key points

- Government policy concerning gambling needs to balance the benefits enjoyed by recreational gamblers against the need to protect problem gamblers from the harm they could potentially incur. The policy interest of the PC is on Electronic Gaming Machines (EGMs).

- Around five per cent of adults play on EGMs weekly or more regularly. The PC finds that 15 per cent of this group are 'problem gamblers' and their share of total spending is estimated to range around 40 per cent. The PC also finds that a further 15 per cent of EGM players face moderate risks. On this basis, the PC estimates that there are currently around 125,000 problem gamblers in Australia, with a further 290,000 gamblers estimated as moderate risk.

- Significant social costs associated with problem gambling mean that even policy measures with modest efficacy may be worthwhile. The PC argues that rough, back of the envelope, calculations suggest that a 10 per cent sustained reduction in harm could provide a gain to society of around $450 million per year.

- Governments across Australia have enacted a wide range of regulatory and administrative measures in an attempt to reduce harm to consumers over the last decade. The PC finds that these have had mixed results and that some have been particularly burdensome on the gambling industry. Accordingly, the PC advocates for a effective policy approach involving harm minimisation policies that target problem gamblers but have minimal impact on recreational gamblers.

- Most recreational gamblers play at low intensity while problem gamblers are more likely to play at higher intensity. The PC argues that bet limits of $1 per button push and cash insert limits of $20, which are lower than current limits, would reduce harm on problem gamblers while having a negligible impact on the gaming experience of recreational players.

- Shutdown periods for gaming rooms in hotels and clubs are too brief and occur at the wrong time. In response, the PC argues that these should be extended and commence earlier.

- The PC advocates a gradual move toward a universal pre-commitment system for EGMs using technologies that allow consumers in all venues to set binding limits on their future play. The PC argues that with effective pre-commitment, governments could modify and/or remove many other regulations on EGMs.

- Effective harm minimisation policy for gaming machines will inevitably erode gaming revenues. The PC suggests that this will be partially offset in the long run as technological changes attract a wider base of consumers.

- Other measures, such as better information in venues or relocating ATMs away from gambling floors, would have modest effects on reducing harms, but are also low cost. In addition, the PC recognises that while help services for problem gamblers have worked well overall, they relate to people who have already developed major problems and are thus not a substitute for preventive measures.

- Governments have improved policy-making and regulation with respect to gambling, but significant governance flaws remain in most jurisdictions including insufficient transparency, regulatory independence and coordination.

4 Detailed Review of Selected Findings and Recommendations

4.1 PC Draft Finding 3.1

4.1.1 PC Rationale and Evidence Base for the Draft Finding

Draft Finding 3.1 states that even under conservative assumptions, a sustained 10 per cent reduction in the costs associated with problem gambling is estimated to generate benefits to society of around $450 million a year in 2008-09 prices, and longer-term benefits amounting to several billion dollars. The PC argues that this implies that even harm minimisation measures with modest efficacy may produce worthwhile net benefits so long as they do not also involve excessive costs.

4.1.2 KPMG Econtech view on the Draft Finding

KPMG Econtech has identified a number of issues with the assumptions and calculation inputs used for this estimate. The issues identified question the validity and usefulness of the estimate.

The original methodology used by the PC in its 1999 report into gambling, which is the basis for the calculations in the 2009 Draft Report, has come under criticism by Dollery and Storer (2007). Their critique is outlined below.

The only update to calculation inputs developed in the 1999 PC Report has been to adjust for inflation. In particular, the 'social cost per problem gambler' estimate that was developed in the 1999 PC report was escalated without questioning or updating the assumptions behind its construction. The main concern with this approach is that no allowance has been made for the likely reduction in the actual social cost per problem gambler that has materialised over the last 10 years. This is despite a range of social, policy and regulatory changes that have affected gambling over this period; changes which the PC has explicitly acknowledged as having helped to moderate gambling behaviour.

Box 2.1 of the 2009 PC Draft Report, which presents a snapshot of the gambling industry, provides a list of changes that have occurred over the last 10 years, many of which are believed to have had a large impact in moderating gambling behaviour, including the behaviour of problem gamblers. The PC references data that suggests that EGM usage is less common than in 1999 and that policy interventions such as state smoking bans for gaming areas have helped to bring about a decline in participation rates for gambling.

KPMG Econtech is of the view that the assumptions and inputs used by the PC in calculating the social cost of gambling require further investigation and validation. Further, even though the PC explicitly acknowledges that its calculation is 'back of the envelope,' KPMG Econtech questions the appropriateness of using a rough analysis as the basis for a key finding. There is a risk that policy makers and other stakeholders who use the report for policy direction may accept the calculation at face value without fully appreciating its inherent limitations and use this as the basis for policy development.

In addition to the concerns identified by KPMG Econtech, Dollery and Storer (2007) conducted a detailed critique of the original methodology used by the PC to calculate the social cost per problem gambler in 1999. Thus far, the PC has not responded to the issues raised by professors Dollery and Storer in their critique. A summary of the critique is provided below.

Independent Review of PC Methodology by Dollery and Storer (2007)

This paper reviews the methodology used to calculate the social cost of gambling in the 1999 PC report. Dollery and Storer argue that the methodology developed by the PC in 1999 contains theoretical flaws. Dollery and Storer present three main arguments:

- The Pigouvian economic approach adopted by the PC is not suited to EGM markets[3];
- it is not possible to calculate consumer surplus with a sufficient degree of precision; and
- it is not feasible to provide accurate estimates of the price elasticities of demand for the three categories of gamblers identified by the PC.

In conclusion, the Dollery and Storer paper is concerned with:

1) The uncritical acceptance of the methodology developed by the Productivity Commission (1999) by public policy makers across Australia; and

2) the caveat that the empirical application of consumer surplus must be accompanied by a great deal of caution.

4.2 PC Draft Finding 4.5

4.2.1 PC Rationale and Evidence Base for the Draft Finding

It is 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). Moderate risk gamblers account for a further significant share.

4.2.2 KPMG Econtech view on the Draft Finding

KPMG Econtech has reviewed the rationale and the methodology used by the PC to estimate that 40 per cent of EGM expenditure is attributable to problem gamblers. The estimate of 40 per cent is a rounding down of the average of 42 per cent across six surveys carried out in five states. The PC acknowledges that this is a broad estimate. Since the estimate informs a key finding of the PC report, KPMG Econtech suggests that the rigour and transparency in the PC's calculations and methodology in arriving at this figure be improved.

[3] The Pigouvian approach is based on rational behaviour by market participants, knowledge of both the price and quality of the goods and services traded, and, for policy purposes, reasonably accurate information on the shape and slope of the relevant marginal social benefit, marginal private benefit, marginal social cost and marginal private cost functions.

As the basis for its estimate, the PC report uses numbers from Australian prevalence studies that use the Canadian Problem Gambling Index (CPGI) methodology[4]. KPMG Econtech acknowledges that CPGI is currently the preferred measure of gambling prevalence of Gambling Research Australia and a widely used tool. However, there are also a number of recognised limitations with this approach[5]. KPMG Econtech is concerned that alterations made by several Australian jurisdictions to the methodology could compromise the integrity of the jurisdictional estimates, let alone the estimate that results from averaging them (see triangulation discussion below)[6].

There is also concern regarding the reliability and comparability of the various prevalence studies. For example the 'mean annual expenditure' of problem gamblers on EGMs from the various studies range from $15,000 to $47,000 - a very significant variation. Further, the PC itself admits that a lot of the data it uses is simply not that reliable[7].

As an example of the lack of transparency, KPMG Econtech found that the prevalence reports did not contain identical results to those quoted in Appendix B[8]. Whilst KPMG Econtech does not suggest that the figures in Appendix B are incorrect, it is concerned that the PC appears to have based its estimates on an unexplained methodology or calculation, or has used information that is not publicly available.

Further, the 'triangulation' of the various results is problematic as the PC's method of averaging the results of the various prevalence studies appears to be a simplistic way to come up with a key finding of such a far reaching report. The limitations of this triangulation include:

- The potential to mute the effects of underlying differences in location;
- the potential to not allow for differences in the data collection process (in this case the prevalence studies);
- the potential to not allow differences in magnitudes from the studies; and
- the potential to attribute disproportionate weights to individual datasets.

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[4] These studies are not individually referenced in Appendix B in the 2009 PC Report. After a process of searching and matching the figures in Appendix B to the assumed sources, these were reviewed to check the figures and sample sizes.

[5] Social and Economic Impact Study into Gambling in Tasmania

[6] As a full review of the CPGI methodology has not been conducted, KPMG Econtech cannot comment on the rationale for, or the validity of, these jurisdictional changes, however it is a concern that the same methodology and testing is not conducted Australia-wide, especially given the averaging approach the PC has used to support its key findings.

[7] PC Report, Appendix B, p. B.12

[8] For example, the 'NSW prevalence study 2006' referenced in Appendix B was assumed to be the 'Prevalence of Gambling and Problem Gambling in NSW' (2006) report prepared by AC Nielsen for the NSW Office of Liquor, Gaming and Racing. However, this report does not provide an estimate of the mean annual EGM spending per problem gambler as provided in Appendix B of the PC Report. The PC has therefore based its estimates on calculations not explained or provided in the Appendix or has used information that is not publicly available.

Therefore, KPMG Econtech believes that the PC's estimate that problem gamblers account for around 40 per cent of EGM spending should be treated with caution.

4.3 PC Draft Recommendation on Pre-commitment Strategies

4.3.1 PC Rationale and Evidence Base for the Draft Recommendation

KPMG Econtech has prepared a high-level summary of the key features of the national pre-commitment system put forward by the PC. This summary has been included for the benefit of readers in the AGC who may not be entirely familiar with all of the elements of the pre-commitment strategy advocated by the PC.

The pre-commitment advocated by the PC displays the following characteristics.

Involves full pre-commitment – the PC advocates the view that a single overarching condition of any pre-commitment strategy is that consumers not be given the ability to renege on their pre-committed decisions except on terms that they have already predetermined. The PC argues that this would include a capacity for complete abstinence (self-exclusion).

Involves real consequences for those that breach their commitments – the PC advocates that a key condition of a pre-commitment system is that exceeding a pre-imposed limit involve consequences that the gambler had pre-specified, or at best, limited options to deviate from these. The PC argues that an effective pre-commitment system would need, by definition, to give consumers the option to set limits that are binding.

Involves player identification – the PC argues that effective pre-commitment must preclude default. This implies that there would need to be some way of identifying all gaming machine players and their associated playing preferences. Otherwise, a player who had committed to a certain spending limit could exceed this limit by using a machine that ignored these pre-commitments. The PC suggests that this would involve the need for some form of commitment technology that would:

- Identify the particular gambler playing the machine;
- reflect their pre-determined preferences in their interaction with the EGM; and
- allow the secure storage of information.

The PC notes that this technology could involve a range of options including: cards (smart or not); universal serial bus interfaces (USB); mobile phones with Bluetooth or similar; and/or EGMs that have the capacity to recognise players through biometric methods (i.e. a fingerprint reader) or a secure password and to access and store information on a server.

The PC recognises that concerns have been raised in regard to player identification including:

- The risk that gamblers may subvert pre-commitment by giving or selling their passwords, cards or other identifying device to others;

- the need for player identity may deter occasional gamblers, though the PC argues that this could be managed by enabling venues to issue one-off small denomination cash cards (i.e. $10) to use on EGMs, with only minimal identification requirements; and

- a range of risks to the privacy of gamblers.

Involves the portability of pre-commitment – the PC argues that full pre-commitment also requires that a person's pre-commitment options would need to be portable between venues, so that decisions made in one place are binding in another.

Proposes that voluntary pre-commitment offers some advantages but is not as binding as mandatory pre-commitment – the PC argues that partial pre-commitment could come in several forms that include the voluntary uptake of cards or other similar identifying devices, with EGMs fully operational for players that are not enrolled. The PC recognises that partial pre-commitment offers several advantages including:

- Imposing fewer costs on those EGM players with no interest in pre-commitment;

- being seen as less paternalistic;

- assisting people in setting goals and in gaining awareness of their play; and

- being used as a mechanism to record transactions and provide players with a player transaction record.

However, the PC argues that a voluntary scheme would have limited effectiveness as a harm minimisation measure but still would still require significant infrastructure costs for many venues, particularly those without loyalty schemes in operation. As such, mandatory pre-commitment is the preferred approach advocated by the PC.

Is 'opt-in' rather than 'opt-out' in design – given inertia, relative risks, over-confidence and poor awareness of the personal risks, the PC strongly advocates the view that governments should implement an opt-out pre-commitment system. As opting out involves genuine risks to gamblers, the PC argues that there should be periodic checking of their preference to do so. In addition, it argues that it may be appropriate to withdraw inducements, such as the capacity to lose loyalty points, to encourage consumers not to opt out.

Provides flexibility in user-specified spending and playing limits – the PC argues that consumers should be given to tailor a pre-commitment in accordance with their particular preferences though it acknowledges that too complex a set of options would likely be problematic for consumers.

Enables consumers to exercise ultimate personal choice – the PC considers that a pre-commitment system should maintain choice for consumers with limits on the capacity for third parties to set pre-commitment conditions for consumers.

The PC recognises that the detail of any proposed pre-commitment scheme could make a significant difference to its effectiveness. The PC suggests testing systems that have an appropriate set of minimum functions to establish that they work as intended, and trials are already underway. The PC also suggests that the results of pre-commitment trials in Australia

and the experiences from commercial and overseas systems, such as those in Nova Scotia, in Canada, and Norway do provide solid insights.

4.3.2 KPMG Econtech view on the Draft Recommendation

In considering the pre-commitment strategy advocated by the PC, KPMG Econtech has found that it is essentially at a conceptual stage which, by the PC's own acknowledgement, requires significant development and refinement. The development and refinement process will be informed by the results of current government and commercial trials. The high-level review conducted by KPMG Econtech has identified a range of issues as discussed below.

Preliminary Stage of Analysis and Preliminary Nature of Evidence

The foundational question of whether pre-commitment is an optimal policy needs to be considered. That pre-commitment is the appropriate way forward cannot be taken as a given. Detailed studies need to be conducted to compare this policy against other alternatives. Furthermore, pre-commitment strategies canvass a wide range of options and the guiding principles for pre-commitment need to be established first. Although trials are currently underway in some Australian locations (South Australia, Queensland and Victoria), there is, as yet, no definitive evidence that precommitment systems reduce problem gambling. The current understanding of how pre-commitment works and its impact is at a nascent stage and further research needs to be conducted.

Risk to Consumer Privacy and Potential Discrimination Consequences

By establishing an identification system (biometric or otherwise) for gambling, there is a risk that gamblers could feel alienated or discriminated against. Moreover, the establishment of a national identification database could lead to potentially serious security breaches for the protection of consumer privacy.

Costs to Government

The range of potential costs that could be borne by governments under a national pre-commitment system could be quite extensive. On the basis of what the PC has proposed, governments would need to develop and deploy nationally consistent identity recognition technology that is linked-in to a national database. This would be a significant cost exercise. In addition, governments across Australia would be tasked with managing and enforcing compliance with the pre-commitment system from both venues and gamers. This would include, for example, the costs of enforcing the correct and proper use of identity cards on gaming machines. The costs of enforcing compliance also need to be considered. All of these costs need to be carefully estimated.

Risk to Consumer Choice

Setting reasonable betting limits would be problematic given the diversity of consumers and the magnitude of losses they are likely to incur. For example, a $5,000 annual betting limit might be reasonable for a low income individual but might be limiting for a high income person. In

this case, there is a question as to how governments could successfully implement betting limits for different groups of people without discriminating on the basis of socio-economic factors.

An important question to consider is how a pre-commitment system would respond if a high proportion of consumers and, in particular, problem gamblers were to set limits that are effectively too high to moderate gambling behaviour. Governments could respond by attempting to mandate maximum limits but this would encroach on consumer choice, which the PC has identified as a key feature of any pre-commitment system.

As such, KPMG Econtech envisages that a pre-commitment system could struggle to effectively maintain a balance of moderating and reducing problem gaming behaviour while at the same time maintaining consumer choice and maintaining consistency with national anti-discrimination legislation.

Technological Challenge

In developing a pre-commitment system of the scope and scale envisaged by the PC, there are a number of technological issues that so far not been considered.[9]

Effectiveness – the need for a timely, accurate and nationally consistent system for consumers.

Efficiency – the need to optimise resources including the infrastructure and systems already in place.

Confidentiality and privacy – the need to protect sensitive consumer information on gambling preferences and behaviour from unauthorised use.

Availability and reliability – the need to ensure accuracy and completeness of consumer information.

Compliance – the need to build-in the capacity to ensure compliance by consumers and venues with legislation and regulations.

Technology – the need for significant hardware, operating systems, database management systems, networking, multimedia for both gambling venues and governments.

People and facilities – the need for appropriately qualified and trained human resources at the gambling venue level to house and support information systems.

[9] Developed from the IT Governance Institute, *IT Framework Principles*, July 2002

Administrative and Compliance Costs to Industry[10]

Assuming the full range of technological challenges could be resolved, rollout of the pre-commitment system would be characterised by very high initial and ongoing administrative and compliance costs. At a minimum, the initial compliance costs would involve the retrofit of every EGM in Australia with nationally consistent identity recognition technology. New EGMs would also have to incorporate the technology. Although the PC advocates a transition programme to phase-in the technology, this would not reduce the magnitude of implementation costs incurred but merely enable the industry to distribute them over a longer time period.

Ongoing compliance and administrative costs for the gaming industry would be likely to involve staff training and development, consumer education and the management and maintenance of systems. In advancing its argument, the PC has argued that these costs could be recovered through a decrease in the return to player (RTP). Discussion of how this would work in practice and what steps would be put in place to ensure that gaming venues are compensated for the increase in their costs is required, particularly given that a pre-commitment system would be accompanied by declines in gambling industry revenues.

Reduced Industry and Tax Revenue through reduced Participation Rates by Recreational Gamblers

By introducing a series of steps required prior to being able to use EGMs, this policy effectively presents hurdles to consumers. Relative to problem gamblers, recreational gamblers would be more likely to substitute gambling for other recreational activities (Becker and Murphy, 1988). Pre-commitment would then generate:

1) Reductions in industry revenue, since recreational gamblers will prefer to direct more of their leisure time into alternative recreational pursuits; and

2) a recomposition of the client base of the gaming industry. To see this mechanism, note that as recreational gamblers substitute gambling for other leisure activities to a larger extent than problem gamblers, this will have the effect of increasing the participation of problem gamblers in industry revenue. This is akin to an adverse selection problem (Akerlof, 1970).

General Economic Considerations

A final important question to consider is the extent to which a national pre-commitment system would involve excessive government incursion into a consumer market and the equity issues that this would raise. The PC is essentially advocating a system that would require consumers to set limits on how much of a service (in this case, entertainment services derived from gambling) they can consume. This is not observed in any other sector of the economy.

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[10] According to the Victorian Competition and Efficiency Commission (VCEC), administrative costs include the costs of addressing information obligations on businesses, data requirements and administrative activities. These include annual reporting and record keeping. Compliance costs include the costs of substantive compliance requirements. These include activities and tasks to comply with legislative and regulatory requirements and in the case of EGM operators could involve the installation of new technology.

A relevant analogy would be for governments, in a bid to moderate fast food consumption, to establish a national pre-commitment system for fast food that would require consumers to set limits on how much fast food they can consume in any given year. Obviously, this would appear to be a rather excessive approach for moderating fast food consumption and yet this is advocated for moderating gambling, which for most people, is a service that provides genuine entertainment.

Summary

KPMG Econtech has found that there are a number of issues with a national pre-commitment system that appear inadequately addressed in the 2009 PC Draft Report. These include the nascent state of understanding about how pre-commitment works and its impacts, the raft of technological challenges associated with developing an appropriate system and the cost that would then be incurred by industry and governments in implementing and maintaining this. KPMG Econtech has also identified concerns about the impact this approach could have on consumer privacy, discrimination and the rights of consumers to freely enjoy the entertainment service that gambling provides.

KPMG Econtech believes that giving greater consideration to the relative merits of a voluntary as opposed to mandatory pre-commitment system might help to address some of the concerns raised above. Under a voluntary system, the consumer choice issues associated with the mandatory system would be ameliorated while the initial implementation and ongoing management costs are also likely to be lower. Also, a voluntary pre-commitment system may be an effective mechanism for targeting problem gamblers. However, current research and evidence is by no means definitive, so further detailed studies are advisable.

4.4 PC Draft Recommendation 11.1

4.4.1 PC Rationale and Evidence Base for the Draft Recommendation

Draft Recommendation 11.1 states that in all jurisdictions, the maximum bet limit on gaming machines, other than those in high roller or VIP rooms at casinos, should be set at $1.

The PC argues that the current bet limits set by jurisdictions are too high to effectively constrain the spending of problem gamblers, given the speed and intensity of play that modern EGMs permit. To this end, the PC states that a bet limit of $5 or $10 is too high in view of the potential average cost of an hour of play which the PC has quantified at up to $1,200. The PC argues that the maximum bet needs to be low enough to constrain the spend rate of problem gamblers, but not so low that it negatively impacts the gaming experience enjoyed by recreational gamblers.

The 2009 PC Draft Report advances the following arguments:

1 People with gambling problems bet more than recreational gamblers and may ratchet up bets when they ‘chase’ wins or losses;

2 recreational gamblers consistently bet well below those limits, suggesting that a reduction in the bet limit would have little effect on most players;

3 many players are not fully aware of the possible maximum spend per hour;

4 a small reduction would have minimal benefit in view of the cost per hour that would still be possible. A maximum bet of $1 would still involve a potential average loss rate in the order of $120 per hour; and

5 most recreational gamblers would not notice a significantly lower bet limit, as they typically bet at low levels anyway.

In supporting its arguments, the PC relies strongly on research evidence from Blaszczynski (2001) that found relatively few participants bet above $1 per spin, so only a small percentage of players would be affected by this limit. Those who did were relatively more likely to be problem gamblers, as it found that 2.3 per cent of non-problem gamblers and 7.5 per cent of problem gamblers typically bet more than $1 per game.

As taken from the 2009 PC Draft Report, the research from Blaszczynski (2001) found that on the modified EGMs:

1 Players gambled for shorter periods, made fewer bets and lost less money;

2 the change did not appear to lead to sessions being prolonged, although some players may have switched to other EGMs with higher bet limits or to other forms of gambling;

3 few players noticed the lower bet limit although it may have affected satisfaction and enjoyment for some; and

4 ratings of satisfaction were higher for machines where high maximum bets were accompanied by high bill acceptors or the reverse where the machine had both low maximum bets and bill acceptors.

The PC also cites research from Svetieva (2006). For one study of EGM players in NSW, this research found that the duration of sessions, rather than intensity of play, was the key difference between problem gamblers and recreational gamblers. This would appear to be at odds with the research cited in Blaszczynski (2001) and the PC's contention that the intensity of play of problem gamblers is significantly higher than that of recreational gamblers.

In advancing this recommendation, the PC acknowledges that it could have a potentially significant impact on the revenues earned by the gaming industry and with negative flow-on impacts on the quality of services available at many entertainment facilities. Critically, however, the research evidence presented by the PC on this matter is unclear and inconsistent. On the one hand, evidence cited from the Centre for International Economics (CIE) estimated that a $1 maximum bet in NSW would result in a reduction of EGM of 17 per cent at clubs and 39 per cent at hotels. On the other hand, evidence cited from Blaszczynski (2001) suggests that the revenue losses associated with this recommendation would be small.

4.4.2 KPMG Econtech view on the Draft Recommendation

Desktop research conducted by KPMG Econtech reveals that the Schottler Consulting Report, referenced earlier, essentially supports the findings of Svetieva (2006). The Schottler Consulting Report investigated the impact on the gambling habits of different types of gamblers, including

problem gamblers, of a range of changes to EGMs. One of the changes measured involved placing limits on the number of lines that games could play in any one turn, thus limiting the maximum bet.

The Schottler Consulting Report found that the results of this change indicated that there would be no reduction in the total amount of money spent by problem gamblers. In fact, the findings indicated that problem gamblers would spend more or, at very least, the same amount of money on the machine in the event of such a change. The report found that problem gamblers would simply spend more time at the machine.

On the basis of this new evidence, which was unavailable at the time the PC prepared its Draft Report, KPMG Econtech believes that, at best, the evidence supporting a maximum $1 is unclear and that, at worst, the evidence suggests that its impact could be small or even perverse. Moreover, the Schottler Consulting Report, which is the most recent and relevant form of research on this, clearly indicates that the there is the potential for problem gamblers to spend more time gambling as a result of a reduction of the maximum bet limit to $1. KPMG Econtech believes that the PC should consider the available new evidence in preparing its final report.

The recommended maximum bet limit of $1 appears to be a subjective figure. As cited in the 2009 PC Draft Report, the Independent Pricing and Regulatory Tribunal (IPART) in NSW, when previously addressing this subject, did not recommend a specific limit. Rather, it considered that further research on the optimal level was required. Equally, research from McMillen and Pitt (2005), as cited in the 2009 PC Draft Report, also recommended that further work be undertaken to determine optimal bet size and effects.

Consequently, KPMG Econtech believes that the available evidence, particularly in view of the new evidence that has come to light in the Schottler Consulting Report, is not sufficiently definitive to support the case for a much lower bet limit. Moreover, beyond the Blaszczynski (2001) report, whose position as authoritative evidence base is questionable due to its age and small sample size, there is no evidence for the apparently arbitrary limit of $1 that the PC has advocated.

An additional problem with the $1 figure that was used in the Blaszczynski (2001) report is that the purchasing power of $1 now is much lower than circa 2001. Accordingly, the value needs to be updated to reflect inflation during the 2001-2009 period.

The PC accepts that changes to maximum bet limits would involve costs to the industry that could be as high as several thousand dollars per machine. Given that there are close to 200,000 EGMs nationally, the changes would amount to aggregate costs of several hundred million dollars for to the gaming industry. As such, KPMG Econtech believes that the PC needs to establish a much more solid evidence basis for its position before advancing this recommendation which, if implemented, would impose significant costs on the industry.

The Blaszcynski (2001) study, as cited in the 2009 PC Draft Report, found that 7.5 per cent of problem gamblers bet above the $1 limit while only 2.3 per cent of non-problem gamblers bet above this limit. This implies that 92.5 per cent of problem gamblers would still bet below the $1 limit. It is therefore clear that this recommendation would not effectively target the population of problem gamblers. Thus, while it is plausible but by no means certain that the recommendation will affect problem gamblers to a greater extent than non-problem gamblers, this does not mean that it will effectively address the majority of problem gamblers. It is,

essentially, a "one-size-fits-all" approach, with the consequent shortcoming of inability to target specific groups effectively.

More generally, KPMG Econtech has found that this recommendation does not appear to tackle the underlying cause of problem gambling behaviour but attempts to manage the symptoms by attempting to reduce the spend rate of problem gamblers.

Accordingly, KPMG Econtech suggests that, in preparing its final report, the PC would be prudent to give greater consideration to concerns raised from IPART, as cited in the 2009 PC Draft Report, as to the likely impacts of any reduction on recreational gamblers' expenditure, the economic impacts arising from policies affecting the gambling industry, and any potentially unintended consequences such as the prolongation of gambling sessions.

4.5 PC Draft Recommendation 11.2

4.5.1 PC Rationale and Evidence Base for the Draft Recommendation

Draft Recommendation 11.2 states that in all in all jurisdictions, the maximum amount of cash that can be inserted into a gaming machine should be $20, with no further cash able to be inserted until the maximum credit on the machine falls below $20.

The 2009 PC Draft Report argues that current limits on the maximum amount of cash that players can insert into EGMs are too high. It argues that a lower cash input limit of $20 would not affect the gaming experience of most recreational players but instead help to engineer gaps in the intensity of play by stopping players from inserting multiple high denomination notes into EGMs. It argues that this would provide players with short breaks in their play and give them a greater opportunity to take stock and consider how much money they are spending. The 2009 PC Draft Report suggests that the breaks might encourage problem gamblers to cease playing where they otherwise would have continued to gamble.

In the absence of a more limited cash input level, the PC also argues that there is a more solid basis for removing note acceptors, prohibiting the use of note breakers and/or setting low bet limits.

4.5.2 KPMG Econtech view on the Draft Recommendation

KPMG Econtech has found that there is limited evidence to support the PC's argument that cash input limits, by engineering short breaks in play, would help to positively alter the playing behaviour of problem gamblers. The available evidence suggests that problem gamblers are likely to compensate for the reduction in the number of bets that can be made within a given timeframe playing time caused by having to reinsert money into EGMs with an increase in session duration.

Blaszczynski (2001) examined player behaviour in response to reduced note denominations in BNAs, and found little or no impact on the behaviour of problem gamblers. A study in Nova

Scotia (Canada), conducted by Focal Research[11], found that players were unlikely to change their expenditure if BNAs were removed, and that gambling sessions exhibited longer duration. On the other hand, the study by Focal Research highlighted a consumer preference for BNAs as a means to improve budgeting.

The available evidence suggests that cash input limits are actually more likely to alter the playing behaviour for a sizeable proportion of recreational gamblers. The Schottler Consulting Report investigated the impact that cash input limits (i.e. $10, $20, and coin only limits) would have on non-problem and low-risk gamblers[12]. It found that for the majority of recreational gamblers the spending level, session length, frequency of play and enjoyment would be unchanged with the introduction of these limits. However, it found that between 8 and 18 per cent of recreational gamblers would reduce their spending level, session length, frequency of play, and enjoyment if $10 and $20 limits were introduced. This range was considerably higher, between 17 and 30 per cent, if coin only maximums were introduced.

The evidence cited in the 2009 PC Draft Report and in the study by Focal Research indicates that cash input limits are likely to have a small to negligible impact on problem gamblers. Meanwhile, the Schottler Consulting Report indicates that cash input limits have the potential to reduce the level of play for a sizeable number of recreational gamblers. On this basis, it appears that the PC has not considered the potential unintended impacts of this recommendation. In having a small or negligible impact on problem gamblers and a much larger impact on recreational gamblers, implementation of this recommendation could lead to a decline in gambling industry revenues with little or no significant reduction in problem gambling. In this case, if the recommendation were implemented and it brought about a reduction in industry revenue, it could be wrongly interpreted by policy makers as a success in tackling problem gambling when its true impact is a reduction in takings from recreational gamblers.

Finally, KPMG Econtech has found that even if the recommendation were to moderate the behaviour of problem gamblers and cause them to reduce the amount of money they gamble, it is poorly targeted. If research from Blaszcynski (2001) is accepted at face value, despite the concerns about its validity, some 92.5 per cent of problem gamblers would be unaffected given that they typically bet below the $1 limit. Accordingly, the recommendation fails to target problem gamblers. Given the significant costs that implementation of this recommendation could have on the industry, further investigation is recommended.

Accordingly, the available evidence, which includes the latest research from the Schottler Consulting Report, does not appear to be sufficiently definitive to support the case for a lower cash input limit. KPMG Econtech has found that, if implemented, there is a risk that this recommendation could have a significant impact on industry revenues with small to negligible effects on the playing behaviour of problem gamblers.

[11] Focal Research Consultants (2002) for Atlantic Lottery Corporation. *Video Lottery: Responsible Gaming Feature Research.*

[12] The report does not include results for problem gamblers.

4.5.3 The Risks to the Community Associated with Recommendations 11.1 and 11.2

Adoption of Recommendations 11.1 and 11.2 could have adverse impacts on the gaming industry which could, in turn, flow through to the broader community. This needs to be weighed against the benefits of these recommendations to problem gamblers.

Many clubs and hotels, which provide vital community and social services, rely on gambling revenues for a large share of their income. As such, adoption of these recommendations requires careful consideration given the significant impact they could have for the sector. For example, a recent KPMG Econtech report prepared for ClubsNSW found that clubs in NSW make the following contributions to the NSW economy and community:[13]

- The industry employs approximately 43,000 NSW residents, generates $1.3 billion per annum in direct wages which flow into the NSW economy and undertakes capital investment of approximately $858 million per annum;

- in 2007, the NSW registered club industry made an $811 million direct social contribution to NSW, rendering the registered club industry's net social contribution positive; and

- in addition, registered clubs and hotels in NSW consistently contribute far greater amounts to the community than is mandated under the Community Development and Support Expenditure (CDSE) scheme. For example, in 2008, clubs in NSW contributed $62.6 million in CDSE payments, some $26.6 million greater than required.

[13] KPMG Econtech Final Report, *Financial and Economic Position of the NSW Registered Club Industry*, December 2008

5 Responsibilities

5.1.1 Inherent Limitations

This report has been prepared in accordance with the procedures outlined in Section 2.2 of this report. These procedures constitute neither an audit nor a comprehensive review of arrangements.

KPMG has indicated within this report the sources of the information provided. We have not sought to independently verify those sources unless otherwise noted within the report.

KPMG is under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form.

The findings in this report have been formed on the above basis.

5.1.2 Third Party Reliance

This report is solely for the purpose set out in Section 2.1 of this report and for the Australasian Gambling Council's information, and is not to be used for any other purpose or distributed to any other party without KPMG's prior written consent, other than as agreed in the engagement letter.

This report has been prepared at the request of the Australasian Gambling Council in accordance with the terms of KPMG's revised engagement letter dated the 19th of November 2009. Other than our responsibility to the Australasian Gambling Council, neither KPMG nor any member or employee of KPMG undertakes responsibility arising in any way from reliance placed by a third party on this report. Any reliance placed is that party's sole responsibility.

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