

Social Clubs and Social Capital: the effect of Electronic Gaming Machines in disadvantaged regions on the Creation or Destruction of Community Resilience

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Abstract

The role of particular third sector organisations, Social Clubs, in supporting gambling through the use of EGMs in venues presents as a difficult social issue. Social Clubs gain revenue from gambling activities; but also contribute to social well-being through the provision of services to communities. The revenues derived from gambling in specific geographic locales has been seen by government as a way to increase economic development particularly in deprived areas. However there are also concerns about accessibility of low-income citizens to Electronic Gaming Machines (EGMs) and the high level of gambling overall in these deprived areas. We argue that social capital can be viewed as a guard against deleterious effects of unconstrained use of EGM gambling in communities. However, it is contended that social capital may also be destroyed by gambling activity if commercial business actors are able to use EGMs without community obligations to service provision.

This paper examines access to gambling through EGMs and its relationship to social capital and the consequent effect on community resilience, via an Australian case study. The results highlight the potential two-way relationship between gambling and volunteering, such that volunteering (and social capital more generally) may help protect against problems of gambling, but also that volunteering as an activity may be damaged by increased gambling activity. This suggests that, regardless of the direction of causation, it is necessary to build up social capital via volunteering and other social capital activities in areas where EGMs are concentrated. The study concludes that Social Clubs using EGMs to derive funds are uniquely positioned within the community to develop programs that foster social capital creation and build community resilience in deprived areas.

Social Clubs and Social Capital: The effect of Electronic Gaming Machines in disadvantaged regions on the Creation or Destruction of Community Resilience: The Experience of Victoria, Australia

Introduction

According to Brown et al. (2003) gambling is now a large taxation revenue earner for many western governments at both federal and state levels worldwide (for example UK, USA, Australia). However, there are also concerns about gambling, in particular, Electronic Gaming Machine (EGM) gambling and the accrual of benefits across all levels of society (Oddo, 1997; Marshall, 1998). The effect of problem gambling on individuals, in particular, has been the subject of research in relation to detrimental impacts that the resultant patterns of expenditure may have on low-income individuals, thereby deepening the economic problems that must be addressed by other public support programs (Szakmary and Szakmary, 1995; Madhusudhan, 1996). The effect of gambling activities on communities more broadly, however, is less well understood. The community harm and community benefit derived from gambling activities, specifically Electronic Gaming Machines (EGMs), is therefore the broad area of interest for this paper.

More specifically, the role of particular third sector organisations, Social Clubs, in supporting gambling through the use of EGMs in venues is a vexed issue. These Social Clubs which host gambling activities and thus gain revenue from them, also contribute to social well-being through the provision of services to communities, which can be seen as at least partly funded by the gambling activity. Further, the revenues derived from gambling in specific geographic locales has been seen by government as a way to increase economic development particularly in deprived areas. There are, however, clear concerns about accessibility to Electronic Gaming Machines (EGMs) and the level of gambling overall in deprived areas. Results presented in Pickernell et al (2009) for Victoria Australia highlighted the potential two-way relationship between gambling and volunteering, such that volunteering (and social capital more generally) may help protect against gambling, but also that volunteering as an activity may be damaged by increased gambling activity. This suggests that, regardless of the direction of causation, it is necessary to build up social capital (via volunteering and other social capital activities) in areas where EGMs are concentrated.

The area studied is that of Victoria in Australia, specifically building on quantitative analysis of access-to-gaming issues outlined in Pickernell et al (2009). According to Pickernell et al (2004), the debates concerning gambling are in some ways more advanced in Australia, and this can also be seen in terms of those issues concerning the spread of EGMs, as illustrated by the work of Layton and Worthington (1999), Brown et al (2003), Livingstone (2005), and Worthington et al (2007). EGM's were first introduced in Victoria in 1992/93 and since then EGM expenditure has significantly increased from just over \$250 million in 1992/93 to over \$2.5 billion in 2006/07 (Victorian Commission for Gambling Regulation 2009a,b). Livingstone (2005) outlines this history of EGMs in Victoria, from the inception of a super casino (in Melbourne) in 1991, and the expansion of EGM gambling venues in the 1990s, to social clubs and hotels/pubs (split on a 50:50 basis). This expansion meant that by 2003 there were 27,260 EGMs in 540 venues (split equally between clubs and hotel venues), excluding the 2,500 in the Melbourne Casino (which operates according to a different taxation regime). The revenue from the machines is split 33.3% (1/3) if it is a club venue or, 25% to a pub/hotel and 8.3% to a Community Support Fund (CSF), 33.3% (1/3) to the machine operators (Tattersall's and Tabcorp), and 33.3% (1/3) to the state (providing around 10% of Victoria's own tax revenues) (Livingstone, 2005). As well as the CSF which aims to provide community benefits from gaming revenue generated by hotels, there are other community benefits from gaming revenue generated through clubs. The state requires that clubs indicate, via a Community Benefit Statement (CBS) form, that 8.33% of their third of gaming revenue is directly put towards the community, the form asking for indication of community benefit under seven categories of employment expenses, gifts of funds, sponsorship, gifts of goods, voluntary services, volunteer expenses, subsidised activities and fixed assets. Victoria's longstanding experience of EGM activity therefore provides a very useful case study through which to explore a range of gaming issues surrounding these operations, which are of relevance to a wide range of contexts.

This research examines in more detail the view that social capital can be a guard against the deleterious effects of unconstrained use of EGM gambling in communities, but simultaneously may also be destroyed by gambling activity if commercial business actors are able to use EGMs without community obligations to service provision. The study also examines whether the resources from EGM activity which could be used to increase the stock of

social capital are currently concentrated in this way. Specifically, whether and in what ways Social Clubs as community actors may engender social capital creation opportunities through programs and activities supporting volunteering and action resulting in the redirection of capital derived from gambling to build community resilience, the capacity of citizens (individuals, groups and communities) to successfully cope with and respond to significant adversity (Kulig, 2000).

Gambling and its Broader Social and Economic Consequences

Gambling generally has long been the subject of intense debate as a consequence of its location in the moral/ethical dimension. Much of the research conducted in Australia, however, has concentrated on the psychological and behavioural factors leading to individual problem gambling (Crisp et al., 2004; Delfabbro & Winefield, 1999; Dickerson et al., 1992; Dickerson & Baron, 2000; Kyngdon & Dickerson, 1999). This personal deficit approach, however, neglects broader potential socio-economic outcomes, both positive and negative.

The poor, for example, tend to spend a greater portion of their income on gambling than do middle income earners (Abbot & Cramer, 1993). There can also be seen to be an inequitable distribution of risks and benefits from gambling, where government and those who do not gamble are the greatest beneficiaries and those often poorer socio-economic groups who do not benefit pay the highest costs both individually and as communities (Poulin, 2006). Benefits from gambling are thus seen as more likely to accrue at the macro rather than local level because of centralised tax revenues, whilst localities may suffer from displacement of activities with higher multipliers than the institutions with EGMs that replace them (Marshall, 1998). An over-concentration on gambling activities can also result in over-reliance on one industry to promote the social and economic capacity in a community (Mehta et al., 2007). In terms of the relationship between casinos and crime, the impact of crime is initially low, but grows over time; with gambling seen as increasing all crimes except murder (Grinlos & Mustard, 2006).

Gambling activities have also been acknowledged, however, as a way to increase economic development and social gain in deprived areas (Jinker-Lloyd, 1996). Where gambling is introduced to economically struggling areas, for example, it has generated economic benefits, although leakages of benefits out of the local economy severely limited these advantages (Rephann et al., 1997). There is a substitution effect between gambling and other forms of entertainment, for example, suggesting that displacement effects are most likely in these types of activities which might also be related to tourism (Siegle & Anders, 1999). Conversely, it was also found in municipalities in the United States of America (USA) that EGM gambling has a significant beneficial economic effect in most host cities, particularly those with Riverboat or land-based non-Native American gaming enterprises, with profits used for capital improvement projects to help serve the tourist demand generated by gaming (Alexander & Paterline, 2005). This research also highlights, however, the need to attract non-local money into the area. Where the majority of gambling is carried out by local residents rather than tourists, the outflow of funds from the community is likely to be a particularly problematic issue (Aasved & Laudergeran, 1993). Alexander and Paterline (2005) also highlighted that EGMs need to invite non-local money to experience advantages and that outflow of money occurs when the gamblers are locals.

Griswold and Nichols (2006) found in Metropolitan areas of the United States, for example, that a casino's presence significantly reduces social capital (measured by trust, civic, volunteerism, group participation, giving, and meeting friend/family obligations) when located within 15 miles of a community. This implies that EGM gambling (in this case casino) location may be crucial in determining impact in this regard. Pitcher (1999) also highlights however, that policies to ameliorate gambling may also be of crucial importance in building social capital, through sponsorship of local events that may attract tourists (but also benefit the local community), hosting of charitable fundraisers and promotional events in the communities in which they sit. In addition, gambling can be seen offer social support to older people, because of its social nature in bringing people together, and the subsidised amenities that could be accessed (such as inexpensive meals), in comparison with the isolation often found amongst this age group who no longer work (Bilt et al., 2004; McNeilly & Burke, 2000). Gambling can generate socio-economic benefits, such as increased employment and assistance to schools, senior citizens and recreation centres (Mehta, Levenson, & Levinstein, 2007). Therefore, gambling in communities has economic and social benefits as well as costs. Gambling can be advantageous for communities in terms of capital generation (provided there are no financial leakages outside of communities) and that gambling revenue is not solely collected from local residents. As well as economic benefits, it can increase

employment, provide assistance to community members in terms of financial resources, and is seen as a social mechanism in support for the elderly.

These elements alert to both the *positive* and *less desirable* issues arising from gambling in communities. The research results highlight the heightened effects for disadvantaged communities. The literature also highlights the particular ways in which gambling revenue is used for economic benefit and the possible threats that are incurred through financial structuring of EGM gambling revenue. Ultimately, from this brief examination of the broad literature, the determining factors of community impacts depend upon where gambling expenditure is coming from, who is spending on gambling, to what extent EGM gambling expenditure is occurring, and finally the way gaming revenue is realised through tax and spending structures.

Socio-Economic Studies

Examining the existing socio-economic literature for Victoria more specifically, a SACES (2005) study found that, comparing Victoria with Western Australia (where there are no pub or club EGM venues), gambling produces 3.2 jobs per \$1m compared with 8.3 jobs per \$1m of income from beverage sales, and 20.2 jobs per \$1m from food and meals, possibly as a consequence 10 persons per 1000 working in cafes and restaurants in W.A (and 15.9 per establishment) compared with 8 (and 12.7) in Victoria — the employment figures per licensed establishment being 16.3 in Victoria and 13.6 in W.A. suggesting a shift in employment rather than any addition.

Penge (2000) also calculated (for EGM spending in the Bendigo area) that the Type 2 (direct and induced effects) multiplier for output was 1.28, the income multiplier was 1.77, the employment multiplier 1.64, and the value added multiplier 1.63. All these results were, however, very low in comparison with most other sectors in the economy (Penge (2000) estimating an output multiplier of 2 for non gaming activities), not least because of the initial leakage of more than two thirds (2/3) of the revenue from the region (in government taxes and machine operator revenues). Further, examining the opportunity costs issue via hypothetical extraction (i.e. "closing down" sectors in the economy, such as gambling and others) to compare the impacts on the economy when substituting EGM activity for spending decisions on other sectors, Penge compared the impacts on the economy to determine that overall EGM activity in individual regions is likely to be substantially negative for the economy rather than merely redistributive (see Penge, 2000 for further details of the technique as it is applied to EGMs). The work of Brown et al and Pickernell et al (2009) suggests a more optimistic, view than Penge's assessment (2000) regarding the opportunity cost (or substitution effect), that EGM gambling inputs into the economy as a whole are largely but not wholly cancelled out by the multiplied negative effects on other areas of consumption. Clearly, however, the results strongly depend upon the opportunity cost issue of the initial spending decision, as well as where those inputs of financial resources into EGM activity came from, Penge (2000) estimating that 10% of gaming revenue came from tourism and another 6.8% came from spending that would otherwise have been spent on imports into the region. Doughney and Kelleher (1999) estimated that, based on other surveys, 20% of EGM expenditures are also likely to be funded (and therefore substituting) by savings, as well as by substituting for other forms of expenditure.

If we also utilise the available literature on the split of gaming revenue between government, hotels and clubs and machine operators (highlighted earlier in Livingstone, 2005) this allows calculation of a very simple illustrative regional EGM impact scenario which incorporates both input-output and opportunity cost-related factors for each dollar of EGM revenue. It must be acknowledged that these calculations are based on a number of (explicitly highlighted) assumptions, and thus that different assumptions from those used in the illustration will generate different results, though it is believed that the results are in their broadest terms, indicative of the likely broad picture. In this regional EGM scenario, EGM gambling inputs into the economy as a whole are largely but not wholly cancelled out by the multiplied negative effects on other areas of consumption. In terms of regional resources, however, retained resources will be reduced because of the approximately 2/3 of each \$1 EGM revenue which is redistributed out of the economy in the form of taxes and EGM owner revenues. In addition, the reductions in non-EGM output effects created via opportunity cost (substitution) on other areas of the economy far outweigh the relatively small additional multipliers from the EGM activity itself on other areas of the economy.

Examining EGM-Access issues for Victoria, Pickernell et al (2009) found, unsurprisingly, that EGMs per 1000 adults were positively linked with numbers of visitors from outside Australia (as a proportion of the local population), but also the unemployment rate, and negatively with income., consistent with previous research in

the literature that gambling and socio-economic locations are regressively connected, and that tourism was positively related.

Table 1. Net EGM spend per adult

Constant	EGMs per 1000 adults	EGMs per venue	Volunteers	Adjusted R-Squared	Durbin-Watson Statistic	F-Statistic
298.917 (**)	0.724(**)	0.150 (**)	-0.402 (**)	0.936	1.904	296.43

Source : Pickernell et al (2009)

EGM spend per adult was also found to be positively linked, again unsurprisingly, with both venue size and numbers of EGMs per adult in the LGA (concentration measures). Interestingly, however, volunteering was also a strong and significant negatively related variable, suggesting that volunteering behaviour mitigates EGM (spending) behaviours, though, of course, there may be the simultaneous and opposite causal link that higher EGM spend per adult reduces volunteering.

Table 2. Community benefit per person

Constant	EGMs per 1000 adults	EGM expenditure per adult	Adjusted R-Squared	Durbin-Watson Statistic	F-Statistic
-6.006 (**)	0.596 (**)	0.374 (**)	0.858	2.271	185.586

Source: Pickernell et al (2009)

As can be seen in Table 2, a strong statistically significant link exists between overall community benefit resources generated from EGMs (as reported in official community benefit statements), and the means by which the resources are generated in terms of EGM expenditure and EGM concentration measured per adult. There is not, however, (directly at least) a statistically significant link with potentially relevant locational variables such as unemployment, income or volunteering. This indicates, therefore, that there is no direct relationship between the resources generated and kept within a locality by gaming, and either measures of social inequality or social capital building.

Table 3. Volunteering (social capital)

Constant	Expenditure per EGM	Median age	Unemployment rate	Median housing loan repayment	Median individual income	Adjusted R-Squared	Durbin-Watson Statistic	F-Statistic
0.202 (**)	-0.429 (**)	0.285 (**)	-0.180 (**)	-0.513 (**)	0.327 (**)	0.849	1.831	69.401

Source: Pickernell et al (2009)

Volunteering is, however, significantly and negatively related to EGM gaming in terms of spend per EGM, though again there being an issue here over causation (that is, whether higher spend causes lower volunteering, or vice versa). In addition, however, it can also be seen that volunteering is negatively related to unemployment and housing loan repayments, but is positively affected by median income levels and also by age. Overall, this suggests that volunteering is disproportionately an activity undertaken by older citizens, the employed and higher income earners.

The major finding to come out of the quantitative research related to EGM access in Pickernell et al (2009), therefore, is that volunteering (and more broadly social capital building) may have potential to bolster community resilience against negative effects of gambling. Simultaneously, however, it is also a factor which may be particularly vulnerable to higher levels of EGM activity, as an activity which is less likely to be undertaken in the areas with lower socio-economic status where EGM activity is disproportionately concentrated.

The data also suggests that the community benefit funds generated and used within the communities themselves are linked directly and positively to EGM expenditures, but not to activities such as volunteering, which tend to be lower in these areas. It is therefore also necessary to examine further how the role of social capital building (and volunteering) might be bolstered as an alternative to gaming activity in areas where EGM activity is concentrated.

Social Capital as a protective factor

Social capital and community connectivity is of specific importance in the debate about community benefit and harm of EGM activity. In essence, social capital refers to the network ties of goodwill, mutual support, shared language, shared norms, social trust, and a sense of mutual obligation from which people can derive value (Coleman, 1988; Lin, 2001; Putnam, 1993; Woolcock, 1998). Central to the social capital concept is the notion that social relations among people can accrue benefits or resources that can be utilised (Coleman, 1988; Putnam, 1993, 1995). Regardless of the level of operation or the perspective adopted, at its most basic level social capital refers to the ability to leverage advantage from the relationships between people (Coleman, 1988; Putnam, 1995), or as Lin (2000:28) describes it, the 'assets in networks'. Social capital does not exist in social networks *per se* therefore, but rather in the resources that these networks may give access to. The key point here is that social capital is more than the existence of relations. These relations must be utilised, leveraged or capitalised on to produce some form of advantage or benefit (Keast, Brown, & Guneskara, 2009)

For communities, social capital reflects the ability of community members to participate, cooperate, organise and interact (Putnam, 2000). The building of strong, collaborative relationships thus enables the accomplishment of tasks and activities that might not otherwise be achieved through conventional ways of working (Putnam, 1993), playing a bridging role in community capacity building work and helping to link both within and between communities. In this way 'linking' social capital acts as a conduit to additional outside resources and provides a mechanism which moves the focus of intervention activity beyond 'getting by' to 'getting on' and improving life chances (Narayan, 1999; Woolcock, 2001). Keast and Brown (2002) highlight that these processes, if developed over the longer term, produce an ongoing and sustained social infrastructure, which they describe as network capital — that is, the residual knowledge, skills and facilities retained by a network after an intervention has passed (capacity building). Moreover, social capital once established and embedded can be 'borrowed' by neighbouring communities to secure wider regional benefits (Keast et al., 2009).

From an evaluative position, social capital focuses attention on two areas:

1. The relational elements of trust, norms, shared values and reciprocity (Putnam, 1993).
2. The strength and structure of the relationship networks that evolve.

Community volunteering and membership of clubs are recognised ways to create social capital (Putnam, 1995). However, the nexus of social capital creation activities with activities found to deplete or destroy social capital as

in the case of gambling is not well researched. This research therefore examines EGM gambling in selected communities and the effects on these communities through the lens of community harm and community benefit. It then investigates whether and how communities can better leverage the funds generated from gambling activities to create social capital and build community resilience.

Methodology

In order to examine in detail the social-capital impacts of gaming it was determined that a case study approach be taken, drawing on demographic data of three regions in Victoria, together with qualitative data on the views and perceptions about EGM gambling from those people located within the selected communities. The aim was to investigate the degree of resilience of different communities to the impacts of EGMs. Interview and focus group questions were therefore derived primarily from gambling and community development literature, and following a pilot study. The pilot study, however, highlighted several changes that needed to be made to the original set of questions and the overall case study design, primarily in terms of question design and case region selection. Adjustments to interview and focus group questions included a stronger emphasis on harm and benefit and the inclusion of more localised issues such as proposed legislative change. Based on these amendments a revised set of questions were developed for interviews and another for the focus groups. The case study design was also revised to ensure selection of low socio-economic regions, with a high concentration of gaming venues (in particular community clubs) and relatively high spend on EGM gambling.

Interviews and focus groups were undertaken to gain respondent's perceptions of their experiences, understandings and insights of EGMs in their community. A total of 25 semi-structured interviews and two focus groups were undertaken, with a total of 39 participants involved. Within the three regions, club owners/managers, community service representatives and other community representatives were sourced for interviews and focus groups. Table 33 shows the type of participant and setting where data was collected.

Table 4. Data collection sources

		Clubs	Community Service Representatives	Community Representatives
Region 1	10 interviews	x		
15 participants	1 focus group		x	x
Region 2	9 interviews	x	x	x
10 participants				
Region 3	6 interviews	x		
14 participants	1 focus group		x	

The respondent set was comprised of a diverse range of citizens representing an array of different community interests. Venue managers were interviewed in particular to assess the nature of clubs in Victoria and their community contributions, hence the community benefits of EGMs. Qualitative techniques were applied to assess community and stakeholder perceptions of EGM gambling. Interviews and focus groups with community groups and individuals have provided information about the effects EGMs have on the wider community and how they impact on social capital. Where possible, focus groups with community members were undertaken to utilise group dynamics issues exchange about the impact of EGM gambling. The research team sought to conduct focus groups in each region, however there was a preference by some participants to take part in an interview. Accordingly, separate interviews were conducted to meet this requirement. Although data was analysed on a case-by-case basis, it will be reported on an aggregate level with data presented in an integrated format as

similar themes were apparent in each region. Rather than using a cross-case comparison, the aim of this paper is to gain a deeper understanding of the community impacts of EGM gambling in communities and the ways in which communities and community bodies are able to build and leverage from social capital. .

Specifically, the City of Ballarat, City of Greater Dandenong and City of Latrobe are the regions investigated in this study. These regions were selected on the basis of social diversity, high concentration of a variety of EGM venues and accessibility to a general sample population of key informant interview and focus group participants. Interviews and focus groups were designed to uncover perceived effects of EGMs on the wider community and to discern potential impact on social capital. Additionally, the impact of the demand of EGMs in the selected regions was evaluated, and analyses if and how these communities mediate the impacts of EGM gambling. The regions are of low socio-economic standing where high rates of unemployment, low incomes and low skilled work characterise a relatively significant percentage of the population. The effects of gambling revenue to increase economic activity in deprived areas and the opportunity cost of gambling in such areas are central themes in all cases and are good indicators of EGM gambling impacts. The three regions have provided the research with valuable insights into these themes and the selection of these regions allowed for rich and informative data. The three regions, due to their overall low socio-economic background, potentially lack resilience to the harmful effects of EGM gambling activities in the community. Dandenong has the second highest average loss per adult in Victoria, and Latrobe has the highest ranking amongst regional LGAs. According to Doughney (2004), Dandenong, which is one of Melbourne's lowest socio-economic areas, has EGM gambling expenditure that is five times higher than EGM expenditure in Melbourne's highest socio-economic areas. Latrobe and Ballarat count as two of Victoria's lowest socio-economic regional areas. Regional caps limit certain areas on the number of EGMs that can be available for gaming. In addition, the case study regions were all also subject to a "cap" on the number of EGMs allowed. The Victorian Minister for Gaming determines the regions to be capped and sets limits on the number of EGMs that are allowed. Such regional caps are designed to protect vulnerable communities from problem gambling. Criteria for the selection are Local Government Authorities (LGA) that are highly disadvantaged — having a significant number of machines and above average gaming expenditures. Currently 20 Victorian regions are capped, including the City of Ballarat, City of Greater Dandenong and City of Latrobe.

Although all three regions are of low-socio-economic standing and have a high concentration of venues delivering EGMs, they also show variations in terms of demographics and EGM gambling activity which distinguish them in terms of how electronic gambling has impacted the region. Figure 1 shows the three regions selected in the study —City of Ballarat, Greater City of Dandenong and City of Latrobe — and their location within Victoria. Ballarat and Latrobe are on the periphery of the Metropolitan area, while Dandenong lies within it, being an outer suburb of Melbourne. However, Dandenong is designated as its own local area.

Figure 1. Victoria: households with a weekly income of less than \$500 as a percentage of all households

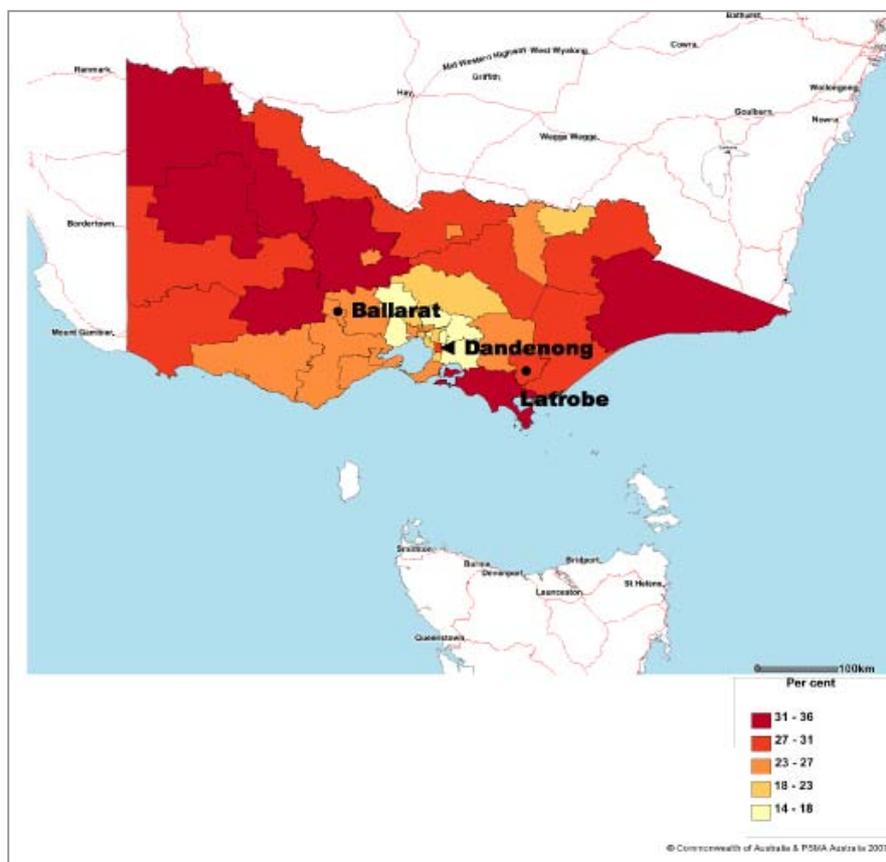


Figure 1 also indicates that the most disadvantaged communities are in regional and rural Victoria, where 31-36% of all households have a combined gross income of \$500 or less. These communities were not included in this study as there was a lower concentration of EGMs and venues. The more affluent LGAs in Victoria are clustered around the CBD, with the Greater City of Dandenong being an exception.

Table 5. Labour Force, Occupation and Income

	Greater City of Dandenong	% of total persons in Dandenong	City of Ballarat	% of total persons in Ballarat	City of Latrobe	% of total persons in Latrobe	% of total persons in Victoria	% of Total persons in Australia
Canberra								
Labour force (15yrs+)								
Total labour force (incl. employed and unemployed)	52,964		40,100		30,908		2,404,608	9,607,987
Employed full-time	31,949	60.30%	22,746	56.70%	17,199	55.60%	60.10%	60.70%
Employed part-time	12,424	23.50%	12,418	31.00%	9,142	29.60%	28.40%	27.90%

	Greater City of Dandenong	% of total persons in Dandenong	City of Ballarat	% of total persons in Ballarat	City of Latrobe	% of total persons in Latrobe	% of total persons in Victoria	% of Total persons in Australia
Employed away from work	1,482	2.80%	1,516	3.80%	1,208	3.90%	3.40%	3.50%
Employed hours not stated	2,105	4%	856	2.10%	764	2.50%	2.70%	2.60%
Unemployed	5,004	9.40%	2,564	6.40%	2,595	8.40%	5.40%	5.20%
Not in the labour force	40,879	-	24,425		20,758		1,330,368	5,271,116
Occupation								
Labourers	8,723	18.20%	4,255	11.30%	3,552	12.50%	9.90%	10.50%
Technicians and trades workers	7,678	16.00%	5,802	15.50%	5,464	19.30%	14.00%	14.40%
Machinery operators and drivers	7,092	14.80%	2,345	6.20%	2,346	8.30%	6.60%	6.60%
Clerical and administrative workers	6,538	13.60%	5,285	14.10%	3,950	14.00%	14.80%	15.00%
Professionals	5,284	11.00%	7,291	19.40%	4,023	14.20%	20.80%	19.80%
Sales workers	4,500	9.40%	4,274	11.40%	3,176	11.20%	10.10%	9.80%
Community and personal service workers	3,363	7.00%	3,630	9.70%	2,570	9.10%	8.40%	8.80%
Managers	3,263	6.80%	4,085	10.90%	2,732	9.60%	13.50%	13.20%
Income \$/weekly								
Median individual	342		404		376		456	466
Median household	770		839		784		1,022	1,027
Median family	918		1,071		1,047		1,170	1,171

Source: [Australian Bureau of Statistics 2006 Census QuickStats \(LGA\)](#)

Of the total labour force, the unemployment rate for each region is well above both Victorian and Australian averages. Dandenong in particular records a very high unemployment rate and the bulk of workers remain in low-skilled employment with low median weekly incomes. Community and personal service workers in Dandenong represent a low percentage of the population for such a disadvantaged region. Ballarat on the other hand, despite having a lower unemployment rate than the other two regions and a higher skilled and professional workforce, has a relatively high percentage of community workers compared to state and Australian figures. Latrobe also has a high percentage of unemployment, which is above Australian and Victorian percentages. Median incomes in Latrobe and Dandenong are significantly lower in comparison to state and national medians. Similarly, Ballarat has lower median income levels, though not much below state and national incomes. Latrobe

and Dandenong have similar occupation and income measures, with Latrobe holding a slightly higher position. Ballarat, although a disadvantaged community, appears to be of higher socio-economic standing than the other regions.

Finally, each region has a relatively high spend on EGM gambling and there is a high concentration of venues (measured by population per venue) which channel this expenditure. Table 6 depicts figures for spend on EGM gambling in each region, as well as the figures for Victoria as a whole.

Table 6. EGM expenditure 01/07/06-30/06/07 (all figures as at 30 June 2007)

	City of Ballarat	City of greater Dandenong	City of Latrobe	Victoria
2007 population projection	89,962	126,372	70,505	5,129,445
2007 population projection 18+	68,210	99,802	53,197	3,979,244
Venue no.	15	16	12	522
Clubs/hotels	10/5	10/6	9/3	
EGM no.	663	1,078	602	27,279
Total net expenditure	\$52,308,605.70	\$110,041,820.95	\$45,869,563.00	\$2,543,175,356.33
Population per venue	5,997	7,898	5,423	9,827
Population per venue 18+	4,547	6,238	4,092	7,623
Net expenditure per person	\$581	\$871	\$651	\$495
Net EGM expenditure per person	\$767	\$1,103	\$862	\$639
EGM per 1000	7.37	8.53	8.54	5.32
EGM per 1000 18+	9.72	10.8	11.32	6.86
EGM expenditure per EGM*	\$78,897	\$102,080	\$76,195	\$93,228

*EGM expenditure per EGM was not published on the VCGR website and has been calculated.

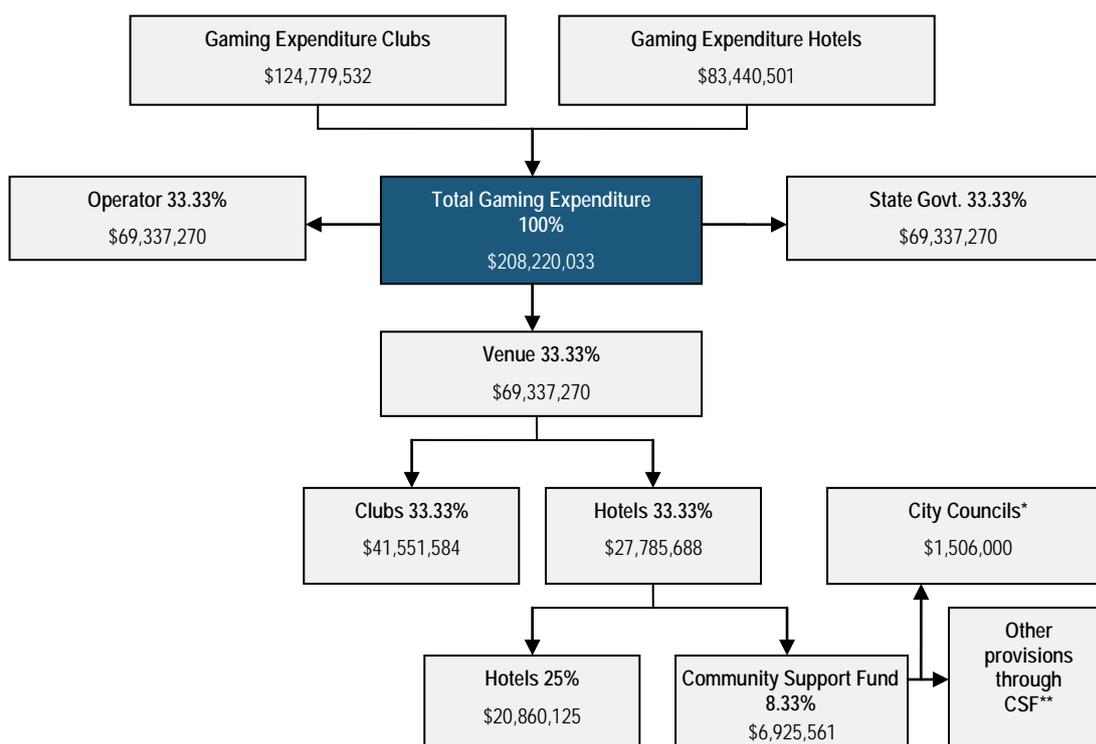
Source: Victoria Commission for gambling regulation 2007a

<http://www.vcgr.vic.gov.au/CA256F800017E8D4/Statistics/B15AC5519E2BA6C3CA25702D00171E7F?Open>

Results

As indicated in table 5, Gaming in the three regions occurs in a mixture of clubs, hotels/pubs and RSLs. Many of these venues use EGMs as a primary composition of their business mix. EGMs are managed by the operators Tabcorp and Tattersall's, who allow venues to run their machines. Ultimately revenue flows between several constituents which are the operator, the venue, government and the community (in CSF). [Figure 2 shows](#) the flow of gaming revenue between constituents and the total dollars that flow into the Community Service Funds (CSF) for each of the three study regions showing wide variations.

Figure 2. Gaming expenditure for Ballarat, Dandenong and Latrobe



*Ballarat City Council received 460,000 for the Lake Blitz Community Building (Department for Victorian Communities, 2006/07). Dandenong City Council received \$46,000 for The Castle Technical and Operational Fit Out (Department for Victorian Communities, 2006/07). Latrobe City Council received \$1,000,000 for the Churchill and District Hub (CDH) (Department for Victorian Communities, 2006/07).

**The remainder of funds through the CSF are applied in the following activities in Victoria: problem gambling (the first call on the fund); treatment of drug issues; financial counselling and support for families in crisis; youth programs; community advancement; sport and recreation; arts; tourism; advancement of the community as determined by the minister; costs associated with administering the CSF (Department for Victorian Communities, 2006/07). Furthermore, the report indicates that \$45 million per financial year is provided for the government's drug strategy and also one day's revenue is provided to the Victorian Veterans' Fund on 1 September each year.

Source: (VCGR, 2007a)

[http://www.vcgr.vic.gov.au/CA256F800017E8D4/WebObj/95555E76248A18C7CA2570D50007A37B/\\$File/cbs2003-4_summary.pdf](http://www.vcgr.vic.gov.au/CA256F800017E8D4/WebObj/95555E76248A18C7CA2570D50007A37B/$File/cbs2003-4_summary.pdf)
<http://www.vcgr.vic.gov.au/CA256F800017E8D4/Statistics/B15AC5519E2BA6C3CA25702D00171E7F?Open>.

EGM operating hotels in Ballarat have paid a combined \$1.4 million into the CSF during the financial year of 2006-07. In Dandenong the figure is higher at \$4 million a year. However, these municipalities have not seen a proportionate amount of this revenue flowing directly back into the community. The Ballarat City Council received a total of \$460,000 in the same year for community purpose and the Dandenong Council received \$46,000 in total during the year 2006-07¹. The City of Latrobe has seen the biggest share out of the CSF (\$1 million) even though local hotels contributed a total amount of only \$1.47 million.

Consequently, the amount of monies leaving the community to the CSF is not reflected in the distribution of monies returning to the community through the CSF. While they form part of the service delivery regime for addressing gambling-related problems, access to problem gambling treatment services such as telephone counselling and on-line services have not been factored in as part of this study. The CSF is to fund community gambling services and be directed to other community projects. However, relative to what flows into the CSF

¹ Information on CSF allocations was drawn from the Department for Victorian Communities, 2006/07. Contributions to community projects vary significantly from year to year and it is acknowledged that for the year 2007/08 the amount of funds directed to these regions are different, but for the purpose of consistency with gaming expenditure figures, 2006/07 CSF figures have been highlighted).

from these 3 regions, it appears that less is being returned to their local governments for community purpose. This poses a significant issue for planning for expenditure on community development activities and services, and underscores the leakage of gambling revenue out of the community. As well as the CSF which aims to provide community benefits from gaming revenue generated by hotels, there are other community benefits from gaming revenue generated through clubs. The state requires that clubs indicate, via the Community Benefit Statement (CBS) form, that 8.33% of their third of gaming revenue is directly put towards the community. The form asks for an indication of community benefit under seven categories which are employment expenses, gifts of funds, sponsorship, gifts of goods, voluntary services, volunteer expenses, subsidised activities and fixed assets.

The City of Ballarat, for example, hosts ten licensed clubs that facilitate EGM gambling, operating 479 EGMs from a total of 663 in the LGA. They accumulate a total of \$35 million gaming revenue and claim to contribute 19.96% of that back to the community, which equals \$7 million. The distribution of EGMs in venues is not equal, however, some clubs operating between 10-30 EGMs while others generate revenue from around 100 EGMs, with the two largest venues operating a combination of 195 EGMs and providing almost one third of Ballarat's community contributions. Employment expenses are the greatest area of expenditure for all clubs, with 66.47% of the total community benefit being claimed for employment, followed by 13.89% for fixed assets and 6.72% for direct and indirect costs. Only 0.48% of claimed community benefits relate to sponsorships, 4.94%, to gifts of funds, 0.01% to gifts of goods, 4.05% to voluntary services, 0.04% to volunteer expenses and 3.41% to subsidised activities.

Similar to Ballarat, Dandenong hosts ten licensed sporting, social, RSL and racing clubs. A total of 651 EGMs are located in clubs, however, and they generated gaming revenue of \$61 million in 2006/07. In the same year clubs claimed to have returned 25.79% or \$15.8 to the community via contributions for community purpose. In Dandenong, in contrast to Ballarat, all venues have a high concentration of EGMs, averaging 65 EGMs per venue, with half the venues operating more than 70 EGMs. Annual community contributions vary between \$600,000 and \$4 million. Employment expenses again account for the largest share of claimed benefits, but this time they account for only 47.84% of the total, followed by a much higher proportion assigned to fixed assets (28.4%), direct and indirect costs (7.34%) also being higher. Voluntary services amount to 6.58% of total community benefit, whilst gifts of funds amount to 5.16%, sponsorships to 1.62%, subsidised activities to 2.92% and volunteer expenses to 0.07%.

Finally, the nine clubs located in the City of Latrobe, with a total of 396 EGMs, generated gaming revenue of \$28 million in 2006/07. The Latrobe region hosts a range of clubs including sporting, social, racing and RSL's. Whilst the two larger venues have just over 60 EGMs, the average number of machines per venue varies from 23 to 54. Local clubs claimed almost \$6 million in community benefit, which is 21.26% of the total net gaming revenue (NGR). Similar to the other regions, employment expenses account for the largest share of community contributions, adding up to a total of \$4 million, which is 67.93% of the total community benefit provided by the clubs. Fixed assets (12.13%), direct and indirect costs (7.95%) and employment expenses are the major contributions and add up to 88% of all community benefit. Voluntary services (7.11%), subsidised activities (2.5%), gifts of funds (0.75%), sponsorships (0.63%), gifts of goods (0.34%) and volunteer expenses to account for the remaining 12% of community benefit provided by the clubs.

Overall, these figures, whilst differing to some degree, indicate consistently, that the community benefit being claimed, for the most part, is accruing to the venues themselves in the form of employment costs and fixed assets, rather than being distributed more widely into the community. This indicates, therefore, that it is within these venues that social capital building related to gambling often currently occurs, if it is to do so at all, given the present system. This also highlights that organisational structures able to better and more widely distribute EGM-generated resources are of potential importance.

Although it has been difficult to '*pin point*' (Focus group, 1) the effects of EGM gambling, this study has identified several issues around the perceived detrimental impacts of EGM gambling in the community. The lack of resources coming back from EGM gambling was, for example, highlighted as potentially social opportunities in the community:

“Perhaps many of the people who are regular gamblers, might be people in the older age group that don't get into sporting activities, but might enjoy theatre or a whole range of other activities, and we are constantly seeing councillors [local government] being asked, and perhaps hesitating to putting money into doing projects, like doing up theatres, but if all that (EGM) money was coming back in, it could really create a whole range of activity or projects that would add more vibrancy in the centre of town, because it is a fairly sedate place of a weekend” (Focus Group, 1).

A less prominent issue identified within a focus group session centred on the potential for some people to become socially isolated through extended engagement with gaming machines *“rather than interacting with people”* (Focus Group, 2). While not specifically related, this finding may help to explain the lower level of volunteering which was found in the quantitative data to accompany increased access and lower income and inactivity. The need to provide additional, specialised preventative services such as gambling support and education programs were also identified by some respondents as an additional impost on an already stretched service sector. An amplified preventative approach through increased community education and support workers was presented as a way to build community resilience to gambling. However, as the following statement indicates, existing resources or funding arrangements are limited and may not always stretch to include community strengthening initiatives:

“There is not enough money for a community resilience program. We have insufficient funds and resources” (Focus Group, 2).

In this context the service providers indicate that they are trying to “move beyond band-aid responses to gambling to address the real and underlying issues” (Focus Group, 2). In another example, community educators said that they hold workshops with groups of residents, around prevention and social connection. While this is seen as a positive outcome, they believe that it needs to be made more widely available to limit community harm as a result of EGM gambling.

Clubs also facilitate important community programs with the aid of EGM gambling revenue, outlined in the table below.

Table 7: Club community services

Club services	Description
Subsidised meals	<ul style="list-style-type: none"> • Most community clubs heavily subsidise their menus for low/no income patrons, offering three course meals at prices that most of the time cannot be found elsewhere. • Meals often as cheap as \$5. • Many patrons are pensioners or are living on welfare, so meals need to be within their price range. • Often clubs will have a tiered price structure, for seniors, members and non-members. • Community clubs usually make a loss in the bistro.
Low cost/no cost function rooms	<ul style="list-style-type: none"> • Most clubs have a no cost function room for members. • Non-members can hire function rooms for low prices, or become a member to take advantage of a no cost function room. • Function rooms are free for any community groups and schools who want to hold fundraisers e.g. charity groups have free access to function rooms regularly. • Members hold trivia nights in function rooms at no cost.
Fundraisers and community support	<ul style="list-style-type: none"> • Yearly clubs host various fundraisers for charity groups. • Some clubs continuously give gifts and donations to charity groups, schools and other groups. • Active in supporting many different community groups including sporting schools, charity and even Neighbourhood Watch.
Volunteering	<ul style="list-style-type: none"> • As well as a manager, clubs operate under the decisions of a voluntary committee, made up of members. • Members as volunteers also play an important role in the organisation, operation and maintenance of clubs. • Clubs see volunteering as an important way of gaining community participation. • Volunteering is fundamental to generating a sense of community in clubs. • Clubs reimburse volunteers for any expenses. • Clubs formally celebrate the efforts of volunteers.

Through interviews, club managers were highly vocal about the benefits they provide to the community, mostly made possible through EGM gambling. In addition to the resources highlighted in table 7 above, they also argued that they assisted social connectivity. Social connectivity is an important element for healthy and happy communities. Social connectivity in essence refers to the level of connection that people have to their community or involvement in community life. One of the most important positive impacts of EGM gambling identified from the qualitative data was the role that clubs played in providing the sense of belonging or connection for some members. One club manager described clubs as *“a life away from home”* (Interview, 21). Club managers observe that often there are particular groups of patrons that will come in during the same times each week. Clubs facilitate many activities for members to be involved in including sporting activities, mothers' groups, and EGM gambling is also a form of social interaction in these venues. In this way, as respondents indicated, many clubs act as a community hub — linking and connecting citizens to a range of people and activities. This is a particularly vital process for those people who are socially isolated, including the elderly.

It was also stated that older people represent the majority of members in small community clubs and attend venues as a social activity. Often there are not many opportunities for the elderly to engage with one another and clubs manage to achieve this successfully. Bus services to transport elderly members to club venues and other outings were noted as popular and valuable services provided by the clubs. One respondent expanded on the benefit of this service:

“My mother-in-law is very elderly now but she goes on bus trips with the Italians. She is a member of every Italian club and any time there is a trip on, she's on the bus, you know. The fact that they can afford buses, the fact she does it for next to nothing, she goes for a couple of dollars a trip” (Interview, 18).

Services that encourage social interaction amongst the elderly were seen by respondents as valuable club contributions to their communities. Some club respondents indicated that they prioritised this type of interaction

in the community believing that this is core to their role in the community. One club manager highlights the importance of the social aspect for the elderly:

"The club gives the people in the community something to live for. Every day of the week, our members have got planned what they are going to do and that strongly revolves around the club and so they would come here to play bingo on Mondays at 9.30am and they would come back here to see their friends at 7 o'clock on a Monday night, Tuesday they would come and sit in the poker room machine and we have what is called Ladies Day, where we have entertainers there and we give them cups of tea and bits of cake, so Tuesday they know they've got to be here, and they start rolling in at 10.30am to sit there and wait, because they've got nothing else to do, this gives them a sense of life" (Interview, 14).

Respondents acknowledged that without the resources from EGM gambling, these community connecting services would not be possible. Clubs have come to rely heavily on EGM gambling revenue to support all other aspects of business. There are several services and activities that clubs provide and encourage through the support of EGM gambling revenue that re-enforce the role of community clubs as community hubs, that is, a social outlet for patrons and in general a place where people can participate in the community. In addition, some respondents argued that, prior to the introduction of EGMs, clubs did not have as active a community role as they now do. One respondent elaborates on the lack of club culture pre-EGMs:

"Well we really didn't have a club culture before then. Clubs were reliant on government assistance and volunteers completely. They had a liquor licence purely to supplement their entertainment really, not any concept of raising funds from it" (Interview, 18).

EGMs have therefore, given some clubs the ability to be self-sufficient and more professional. Community club representatives mentioned that often, clubs were completely reliant on one or a few energetic volunteers and because of this lost a sense of continuity. With the introduction of EGMs, clubs have come to operate in an entirely different way and they rely on EGM revenue as their primary source of capital. Without EGM gambling revenue there would not be the ability, to the extent that there currently is, to look after not only their clientele but also the community and maintain the current level of community support and involvement.

It was suggested by respondents that these basic contributions to community life and engagement are sometimes overlooked or undervalued. Moreover, it was stressed that it was difficult for clubs to capture and claim these 'benefits' in their community benefit statements (CBS) to government. That is, the provision of a socialising space was an additional benefit which accounts for most of a club's practice that is not captured through the CBS. It was suggested by respondents that while the community realises these services and social support are offered by clubs, their significance to community benefit is not realised. It was argued that clubs were the generators of a considerable portion of the social connectivity in communities and this is made possible through EGM gambling revenue. In order to communicate their full role in the community, it was therefore suggested that a new structure of CBS is required to capture the qualities of this role.

"Just being a club is a community asset, just providing that facility and making it work, the volunteer board don't get any director's fees but give an opportunity for people in society to stay important, vital, so they have a job without having to be in the workforce, so just running the bowls on a Sunday afternoon, being on the Board, being on the House Committee, all those things are really important for a club and community to stay connected and be healthy, those types of opportunities for people who don't operate in the economic side of it is very important" (Interview, 18).

The activities that clubs enable and the level of participation from residents, is deemed a vital part of the community by respondents. Findings indicated that club managers struggled to quantify their contributions to the community under the CBS. As contributions are required to be indicated in dollar figures on the CBS, less tangible activities, such as community participation, sense of belonging and well being of members are often overlooked but are the most important contributions of clubs to the community. Some clubs therefore describe themselves as community hubs and their main activities gain high community involvement. Many smaller clubs and community members also believe that other venue types (hotels and non-membership clubs in particular) have "little real community benefit" (Interviews 8, 15, 18, and 22).

"My personal opinion is that there are too many hotels. There are also the other clubs which are managed by hotels. They had special legislation put through that they were under the clubs banner and not hotels. That was special legislation for those venues, even though they are privately run, they are treated like clubs. What do they put back into the community? They have always been a hotel. Just pushing the clubs wheelbarrow I suppose, it is tough when you are here, and your sole purpose is for the body that you are there for. For us it is basketball, at the trotting club it is trots, for football clubs, it is football and it is hard to say righto we are up against these big guys, when we are putting money back into the community" (Interview, 15).

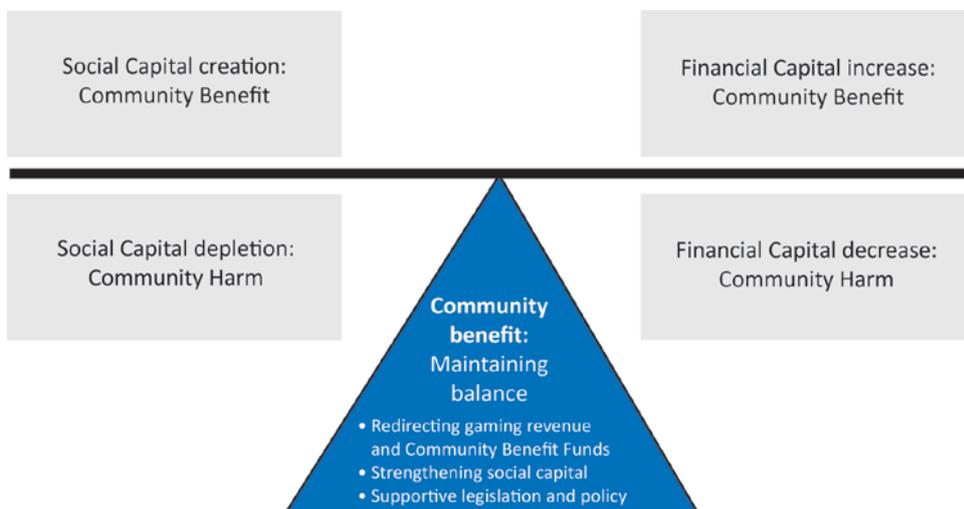
However, *"they [non-membership clubs] are seen to be doing the right thing as they operate very profitably" (Interview, 15).* Smaller community clubs are most concerned with providing for the community from the revenue they make and this has made it difficult for them to compete with hotels and non-membership clubs who do not return as much to the community. One non-membership club confirmed this concern when asked about their CBS:

"I will put my hand up to it: that we don't do enough" (Interview, 16).

Membership clubs are operated through a committee of members thus there is a stronger incentive to secure community-orientated results. Under this community-centric approach all decisions are subject to careful review. Hotels and non-membership clubs, on the other hand, were identified as making decisions focused primarily on business benefits. Non-membership clubs in particular were criticised by membership clubs as they operate under similar a style to hotels, but because they fall under the club category these bodies are not required to contribute to the CSF. These styles of venues are purely profit-driven and smaller clubs find it difficult to compete.

Figure 4 summarises the analysis in terms of the array of forces working for and against EGM gambling as a social benefit. On one side are the social capital benefits — with the top quadrant representing the form of community benefit and the bottom quadrant the types of harm that can be derived from EGM gambling. On the opposite side, financial capital benefits are depicted — with the top quadrant highlighting the positive flow of funds to a community, while the bottom quadrant sets out the possible losses. The challenge for gaming administrators and policy developers is to ensure that the positive outcomes of EGM gambling override the negative. A set of insulating or protective mechanisms which facilitate community capacity and resilience building provide a fulcrum to ensure the equilibrium, between social and financial capital and the harms and benefits of EGM gambling, remain.

Figure 43. Forces working for and against EGM gambling as a social benefit



Conclusions

Overall, the findings have afforded an acknowledgment that EGM gambling provides both benefit and burden to communities, particularly in the area of social capital building and resilience. Findings have indicated what appears to be an acceptance that EGM gambling activity is now an embedded part of community life. However it is argued that it is possible to develop stronger mechanisms to keep the balance more firmly toward producing community benefit. Clubs were found to create a greater positive impact in the community, through gearing EGM gambling revenue more deliberately for community purpose. It was found that clubs deliver many services to the community in the form of funding to other community groups, the services they have available to members and the wider community. The role of clubs as generators of social support and connectivity was presented as an overlooked and undervalued force to help mitigate against the harmful effects of EGM gambling. The ensuing social capital was seen as a way to strengthen the community and build resilience to enable it to respond effectively to problems, including excessive EGM gambling and its consequences.

In addition to the financial capital directed into a community by EGM gambling, however, it has also been found that clubs can fulfil a 'community hubs' function that exposes gamblers to a wider array of activities such as participation in social events and offers an opportunity to make connections with like-minded people. Additionally, revenue generated from gambling is directed beyond EGM-related activities to provide support and programs to the wider community by way of sponsorship, donations and other support services. Further, volunteering activity encouraged within the clubs can 'spill-over' to the broader community helping to strengthen capacity and connectivity. These connections serve as conduits for the flow of information, encourage participation, build local cohesion and help communities to advance by working together.

With respect to such social capital and community building, however, clubs lay on a continuum between community-centric and venue-centric practices. In summary, community-centric clubs are those that play a strong role in the community, are a not-for-profit enterprise, and can therefore be seen as providing an example of a social enterprise. Conversely, venue-centric clubs are those that operate on a for-profit basis, similar to hotels, and have a less positive social capital raising contribution in the community. Most of the clubs interviewed in the case study represent small community clubs and can be categorised as community-centric clubs. Further research is, however, needed to understand the operation and management and community contribution of these clubs, especially the role of volunteering.

This study concludes that Social Clubs using EGMs to derive funds are uniquely positioned within the community to develop programs that foster social capital creation and build community resilience in deprived areas. The detrimental effects of EGMs need to be mitigated and beneficial impacts maximised, however, by programmes and policies that reorient the focus of revenues and resources generated by EGMs towards social resilience building and social enterprise development outcomes. This aspect also highlights the need for a balanced 'satisficing' approach for the mutual benefit of the multiple stakeholders of government, industry and community actors, particularly given the expected longevity of EGMs as sources of both gambling activities and government revenue. Community resilience, facilitated by social capital and community building therefore presents as a critical and stabilising element for a sustained and balanced gambling industry.

References

- Aasved, M. J. and J. C. Laundergan. 1993. Gambling and its Impacts in a Northeastern Minnesota Community: An Exploratory Study. *Journal of Gambling Studies* 9 (4):301-319.
- Abbott, D. A. and S. L. Cramer. 1993. Gambling Attitudes and Participation: A Midwestern Survey. *Journal of Gambling Studies* 9 (3):247-263.
- Alexander, R. C. and B. A. Paterline. 2005. Boom or Bust? Casino Gaming and Host Municipalities. *International Social Science Review* 80 (1/2):20-28.
- Australian Bureau of Statistics 2006. 2006 Census data, http://www.abs.gov.au/websitedbs/D3310114.nsf/home/census+data?opendocument?utm_id=LN (accessed 10 April 2008)

- Australian Institute for Primary Care (AIPC) 2006. *The Changing EGM Industry and Technology*: GRP/Victorian Government Department of Justice, Melbourne.
- Bilt, J. V., H. H. Dodge, R. Pandav, H. J. Shaffer and M. Ganguli. 2004. Gambling Participation and Social Support Among Older Adults: A Longitudinal Community Study. *Journal of Gambling Studies* 20 (4):373-389.
- Brown, K., M. Crawford, A. Worthington and D. Pickernell. 2003. *Costs and Benefits of Gambling in Socio-economically Disadvantaged Areas: Model Development Implementation and Evaluation*: A project funded by The Gambling Policy Directorate in response to the Responsible Gambling Research Grant Program.
- Coleman, J. 1988. Social capital in the creation of human capital. *American Journal of Sociology* 94:95-120.
- Crisp, B. R., S. A. Thomas, A. C. Jackson, S. Smith, J. Borrell, W.-y. Ho, T. A. Holt and N. Thomason. 2004. Not the Same: A Comparison of Female and Male Clients Seeking Treatment from Problem Gambling Counselling Services. *Journal of Gambling Studies* 20 (3):283-299.
- Delfabbro, P. H. and A. H. Winefield. 1999. Poker-machine gambling: An analysis of within session characteristics. *British Journal of Psychology* 90:425-39.
- Dickerson, M. and E. Baron. 2000. Contemporary issues and future directions for research into pathological gambling. *Addiction* 95 (8):1145-59.
- Dickerson, M., J. Hinchy, S. L. England, J. Fabre and R. Cunningham. 1992. On the Determinants of Persistent Gambling Machine Behaviour of High Frequency Poker Machine Players. *British Journal of Psychology* 83 (2):237-248.
- Doughney, J. 2004. *New Data on Poker Machines: The low income areas slugged again*: Victorian Local Government Association, Carlton.
- Doughney, J. and T. Kelleher. 1999. *The Impact of Poker Machine Gambling on Low Income Municipalities: A Critical Survey of Key Issues*: Presentation to the Reforming Gambling Forum of Victorian Local Government Association, Melbourne.
- Grinols, E. L. and D. B. Mustard. 2006. Casinos, Crime and Community Costs. *The Review of Economics and Statistics* 88 (1):28-45.
- Griswold, M. T. and M. W. Nichols. 2006. Social Capital and Casino Gambling in U.S. Communities. *Social Indicators Research* 77 (3):369-394.
- Jinker-Lloyd, A. 1996. Gambling on Economic Development. *American City & County* 111 (8):57-64.
- Keast, R. and K. Brown. 2002. The Government Service Delivery Project: A Case Study of the Push and Pull of Central Government Coordination. *Public Management Review* 4 (4):439-59.
- Keast, R., K. Brown and C. Guneskara. 2009. Network Capital: Borrowing on Your Neighbour's Social Capital for Sustained Outcomes (pp127-150). In *Social Capital and Social Justice: Critical Australian Perspectives* ed. G. Woolcock and L. Manderson, 74-96. Darwin: CDU press.
- Kyngdon, A. and M. Dickerson. 1999. An experimental study of the effect of prior alcohol consumption on a simulated gambling activity. *Addiction* 94 (5):697-707.
- Kulig, J.C. 2000. Community Resiliency: The Potential for Community Health Nursing Theory Development. *Public Health Nursing* 17(5): 374-385.
- Layton, A. and A. Worthington. 1999. The Impact of Socio-economic Factors on Gambling Expenditure. *International Journal of Social Economics* 26 (1/2/3):430-440.
- Lin, N. 2000. Building a Network Theory of Social Capital. In *Social Capital: theory and research*, ed. N. Lin, K.S. Cook and R. S. Burt, 3-30. New Jersey: Aldine Transaction.
- Lin, N. 2001. *Social capital: A theory of social structure and action*. New York: Cambridge University Press.
- Livingstone, C. 2005. Desire and the Consumption of Danger: Electronic Gaming Machines and the Commodification of Interiority. *Addiction Research & Theory* 13 (6):523-534.

- Madhusudhan, R. G. 1996. Betting on casino revenues: lessons from state experiences. *National Tax Journal* 49 (3):401-12.
- Marshall, D. 1998. Missing the Jackpot? The Proliferation of Gambling in Australia and its Effect on Local Communities. *Australian Geographical Studies* 36 (3):237-247.
- McNeilly, D. P. and W. J. Burke. 2000. Late Life Gambling: The Attitudes and Behaviours of Older Adults. *Journal of Gambling Studies* 16 (4):393-415.
- Mehta, S. N., E. Levenson and J. L. Levinstein. 2007. Is This As Good As It Gets? *Fortune* 155 (5):134-146.
- Narayan, D. 1999. Bonds and Bridges: Social capital and poverty: World Bank.
- Oddo, A. R. 1997. The Economics and Ethics of Casino Gambling. *Review of Business* 18 (3):4-8.
- Penge, I. 2000. Measuring the economic impact of electronic gaming machines in regional areas - Bendigo, a case study. <http://www.gamblingwatch.org.nz/files/Bendigo%20Economic%20Study.pdf> (accessed 22 April 2005).
- Pickernell, D., Brown, K., Worthington, A., and Crawford, M., (2004) Gambling as a Base for Hypothecated Taxation: The UK's National Lottery and Electronic Gaming Machines in Queensland Australia, *Public Money and Management* , 24 (3),167-174.
- Pickernell, D., Brown, K., Keast, R., and Yousefpour, N. (2009) The Public Management Issues of Access to Electronic Gaming Machines (EGMs): A Case Study of Policy in Victoria, its Effects and Requirements for Evaluation, 2009 13th Annual International Research Society for Public Management Conference, Copenhagen Denmark April 6th-8th.
- Pitcher, A. 1999. Responsible Promotion of Gaming and Dealing with Problem Gamblers. *Journal of Gambling Studies* 15 (2):149-159.
- Poulin, C. 2006. Gambling. *Canadian Medical Association Journal* 175 (10):1208-1209.
- Putnam, R. 1993. The prosperous community: social capital and public life. *American Prospect* 4 (13):112-123.
- Putnam, R. 1995. Bowling alone: America's declining Social Capital. *Journal of Democracy* 6 (1):65-78.
- Rephann, T. J., M. Dalton, A. Stair and A. Isserman. 1997. Casino Gambling as an Economic Development Strategy. *Tourism Economics* 3 (2):161-183.
- Rose, A. 1998. *The Regional Economic Impacts of Casino Gambling: assessment of the literature and establishment of a research agenda*: Report for National Gambling Impact Study Commission, Washington D.C.
- Siegel, D. and G. Anders. 1999. Public Policy and the Displacement Effects of Casinos: A Case Study of Riverboat Gambling in Missouri. *Journal of Gambling Studies* 15 (2):105-121.
- South Australian Centre for Economic Studies, 2005. *Community Impacts of Electronic Gaming Machine Gambling*: Report Prepared for The Victorian Gambling Research Panel, Office of Gaming and Research, Melbourne.
- Stone, W. 2001. *Measuring Social Capital: Towards a Theoretically Informed Measurement Framework for Researching Social Capital*: Australian Institute for Family Studies, Melbourne.
- Szakmary, A. and C. M. Szakmary. 1995. State Lotteries as a source of revenue: a re-examination. *Southern Economic Journal* 61:1167-1181.
- Victorian Commission of Gambling Regulation, 2007a. *Gaming Expenditure all Local Government Areas 2006-2007*.
<http://www.vcgr.vic.gov.au/CA256F800017E8D4/Statistics/B15AC5519E2BA6C3CA25702D00171E7F?Open> (accessed 25 November 2008).
- Victorian Commission for Gambling Regulation (2009a) EGM Expenditure Statistics:
[http://www.vcgr.vic.gov.au/CA256F800017E8D4/WebObj/70480BB681B110A9CA25701C004D77D5/\\$File/EGM_expenditure_99-00_stats_v3.pdf](http://www.vcgr.vic.gov.au/CA256F800017E8D4/WebObj/70480BB681B110A9CA25701C004D77D5/$File/EGM_expenditure_99-00_stats_v3.pdf) (Accessed 06/01/2010)

- Victorian Commission for Gambling Regulation (2009b) EGM Expenditure Statistics:
[http://www.vcgr.vic.gov.au/CA256F800017E8D4/WebObj/F84DC11C6AA2AB83CA25749B00255612/\\$File/LGA_NPE_2007.pdf](http://www.vcgr.vic.gov.au/CA256F800017E8D4/WebObj/F84DC11C6AA2AB83CA25749B00255612/$File/LGA_NPE_2007.pdf) (Accessed 06/01/2010)
- Woolcock, M. 1998. Social capital and economic development: Toward a theoretical synthesis and policy framework. *Theory and Society* 27 (2):151-208.
- Woolcock, M. 2000. The place of social capital in understanding social and economic outcomes. *Isuma: Canadian Journal of Policy Research* 2: 11-17.
- Worthington, A., Brown, K., Crawford, M., and Pickernell, D. (2007) Gambling Participation in Australia: Findings from the National Household Expenditure Survey, (2007) *Review of Economics of the Household*, 5 (2) 209-221.