

5.1 Introduction

For the purposes of analysis the Office of Gaming Regulation (OGR) provided the researchers with detailed tables of the number of electronic gaming machines by venues for the five “cap” regions on a monthly basis from March 1999 to July 2004 (the most recent data available). Similar data was also provided for the five control regions and for all of Victoria.

Detailed tables listing the five cap regions, the five control regions and three potential spillover or ‘leakage points’ for the three LGA “plus” regions are presented in Appendix 3, Table A3.1 to A3.13. Those tables summarise the areas under study and include a list of venues by name, the number of venues and machine numbers over the period March 1999 to March 2004. June 2000 is the base month used by the Office of Gambling Regulation to calculate the number of machines to be withdrawn, to commence during February 2002 and then in that same month in 2003 and 2004. The end of the month is the final cut-off date for each monthly total. Selected months are shown in these tables, although the researchers econometric analysis is based on the more extensive monthly data set.

Table 5.1 provides a summary of regional level data for the baseline year of June 2000 and then February-March periods thereafter. The actual starting month for the econometric analysis was March 1999. Whilst this summary data is much easier to follow, its presentation in aggregate form masks some of the changes that have occurred.

5.2 Explanation of Data Requirements

Following the successful resolution of the issue to provide venue based revenue data on a confidential basis, the researchers submitted a request to the OGR to access this data. As all of the caps (state-wide, regional, local, hotel/club, and casino) are binding, the decline in machine numbers at any venue as a result of the regional caps will result, eventually, in an increase in the number of machines elsewhere in Victoria. To confirm the hypothesised impact of regional caps, namely to *reduce the costs of problem gambling to the Victorian community*, it was recognised that it would be just as important to prove:

1. That the regional caps have reduced electronic gaming machine gambling in the capped regions and that this has led to a reduction in problem gambling in these regions; as it would be to prove that,
2. The costs of more machines, more gambling and more problem gambling in the rest of the State are smaller than the benefits in the capped regions.

Table 5.1
Electronic Gaming Machine Numbers and Venues, For Cap Regions and Control Regions

Name	Mar-99	Jun-00*	Feb-01	Mar-01	Feb-02	Mar-02	Feb-03	Mar-03	Feb-04	Mar-04
Greater Dandenong Plus										
Total EGM Numbers	1,650	1,682	1,681	1,682	1,631	1,631	1,598	1,599	1,540	1,540
Number of Venues	20	21	21	21	21	21	21	21	21	21
Monash Minus										
Total EGM Numbers	865	918	918	918	917	918	918	918	918	918
Number of Venues	12	13	13	13	13	13	13	13	13	13
Maribyrnong Plus										
Total EGM Numbers	1,310	1,329	1,324	1,324	1,299	1,297	1,235	1,232	1,172	1,172
Number of Venues	26	24	24	24	23	23	23	23	23	23
Hobsons Bay Minus										
Total EGM Numbers	533	552	552	552	518	518	518	517	518	518
Number of Venues	10	10	10	10	9	9	9	9	9	9
Darebin Plus										
Total EGM Numbers	1,535	1,553	1,539	1,538	1,532	1,532	1,534	1,532	1,531	1,532
Number of Venues	27	25	24	24	24	24	24	24	24	24
Moreland Minus										
Total EGM Numbers	499	567	548	548	548	548	548	548	547	548
Number of Venues	10	11	11	11	11	11	11	11	11	11
City of La Trobe										
Total EGM Numbers	673	663	663	663	628	628	615	615	602	602
Number of Venues	17	16	16	16	15	15	15	15	15	15
City of Ballarat										
Total EGM Numbers	681	684	684	683	674	674	674	674	674	673
Number of Venues	16	16	16	16	16	16	16	16	16	16
Bass Coast Shire										
Total EGM Numbers	244	261	260	261	253	253	237	237	220	220
Number of Venues	8	8	8	8	8	8	8	8	8	8
City of Greater Geelong										
Total EGM Numbers	1,317	1,392	1,392	1,392	1,392	1,392	1,395	1,390	1,392	1,391
Number of Venues	27	27	27	27	27	27	27	27	27	27

* = Base Month

Source: Office of Gambling Regulation.

From the above, the researchers needed to identify every venue in Victoria in which the number of machines has increased or decreased since March 1999. Because of this requirement, along with other possible changes (e.g., changes in trading hours, re-location of machines for other than cap requirements, closure/opening of venues), the need to construct capped rather than LGA regions (e.g., three regions are LGA's + plus) and the actual number of cap and control regions, the following uniform data set was requested for March 1999 out to July 2004:

- list of all venues with revenue data at monthly intervals; and
- list of all venues, with the number of EGMs at monthly intervals from March 1999.

The two data sets, by month since March 1999, are hereafter referred to as the:

- venue by revenue data set; and
- venue by number of EGMs data set.

The provision of the two data sets enabled the researchers to construct the cap regions (the LGAs + “plus”), to examine leakage points, to compare with the Victorian aggregate, to compare with selected matched comparison or control regions and to incorporate (and fully understand) other changes that may impact on the trial of cap regions.

The researchers were concerned to track gambling in areas which were closely accessible to residents of the capped regions, the ‘leakage points’. The researchers constructed these leakage points from the two data sets. There was no need to choose ‘leakage points’ for the control regions, since there was no constraint in these regions from which to have leakage.

In addition, it would not have been possible to comment on intra-regional flows following the progressive withdrawal of EGMs nor would it have been possible to comment on inter-regional flows to nearby localities (i.e., potential spillover regions) without access to venue based data.

5.2.1 Data Request — venue by revenue data set

The venue by revenue data set for Victoria was required for the reasons already outlined, including to facilitate constructing regional aggregates. For example, the researchers needed to know the level of gambling expenditure and total number of gaming machines for every venue in each of the capped regions ‘Greater Dandenong Plus’, ‘Maribyrnong Plus’ and ‘Darebin Plus’ for every month since March 1999. The venue-level data was required to construct the region aggregates as these differed from LGA regions. The City of La Trobe and the Bass Coast Shire were existing LGA regions.

It was also important to know the level of gambling expenditure and total number of gaming machines for every venue in the control regions ‘Monash Minus’, ‘Hobsons Bay Minus’ and ‘Moreland Minus’ for every month since March 1999. The venue data enabled the construction of the region aggregates, the level of gambling expenditure and

the total number of gaming machines for the control regions 'City of Ballarat', the 'City of Greater Geelong' and the 'City of Warrnambool'¹ for every month since March 1999.

The venue by revenue data set is subject to confidentiality constraints and no revenue per venue is identified in this report.

5.2.2 Data Request — venue by number of EGM data set

The following venue by number of EGM data set was requested from the OGR:

- the total number of gaming machines in Victoria for every month from March 1999;
- the number of machines by venue in Victoria for every month from March 1999 up to July 2004; and
- venues by LGA level.

These data were a matter of public record, so they were not subject to any confidentiality constraints. The venue by number of EGM data set was required for the reasons already outlined, including to facilitate constructing regional and cap region aggregates and to construct the potential leakage points lying just outside the cap regions.

5.3 Trends and Cyclical Patterns

Table 5.2 compares the December and March quarters (1999 to 2004) and provides a partial insight into the cyclical pattern of EGM expenditure. The trend pattern can be summarised as follows:

- EGM revenues peak in December and into January and then consistently decline in February and March, ensuring that the March quarter represents the trough in each cycle;
- from April through to November expenditure gradually rise over the months; and
- the cycle of the peak (December-January) and the trough (February-March) is repeated.

Over the long-run the major influence on gambling expenditure appears to be related to two factors:

- firstly that consumer expenditure peaks in the holiday period December/January associated with Christmas shopping and holiday spending; and
- having completed holiday spending, most probably adding to credit card debt, then recreational spending is curtailed and February and March are the months when debts and credit card are paid off and gambling expenditure is restrained.

¹ This additional control region, while not used in this report was established should one of the other control regions not be suitable.

Table 5.2
Change from End December to End March Quarters
All Victoria, 1999-2004 (Per cent)

	Metropolitan (Per cent)	Non-Metropolitan (Per cent)	All Victoria (Per cent)
Yearly Change in Expenditure			
December 1999 – March 2000	-7.1	-3.5	-6.4
December 2000 – March 2001	-9.8	-6.2	-9.1
December 2001 – March 2002	-7.6	-2.8	-6.6
December 2002 – March 2003	-8.2	-3.0	-7.1
December 2003 – March 2004	-6.0	-2.0	-5.2
Average Change in Revenue (5 years)	-7.8	-3.5	-6.9

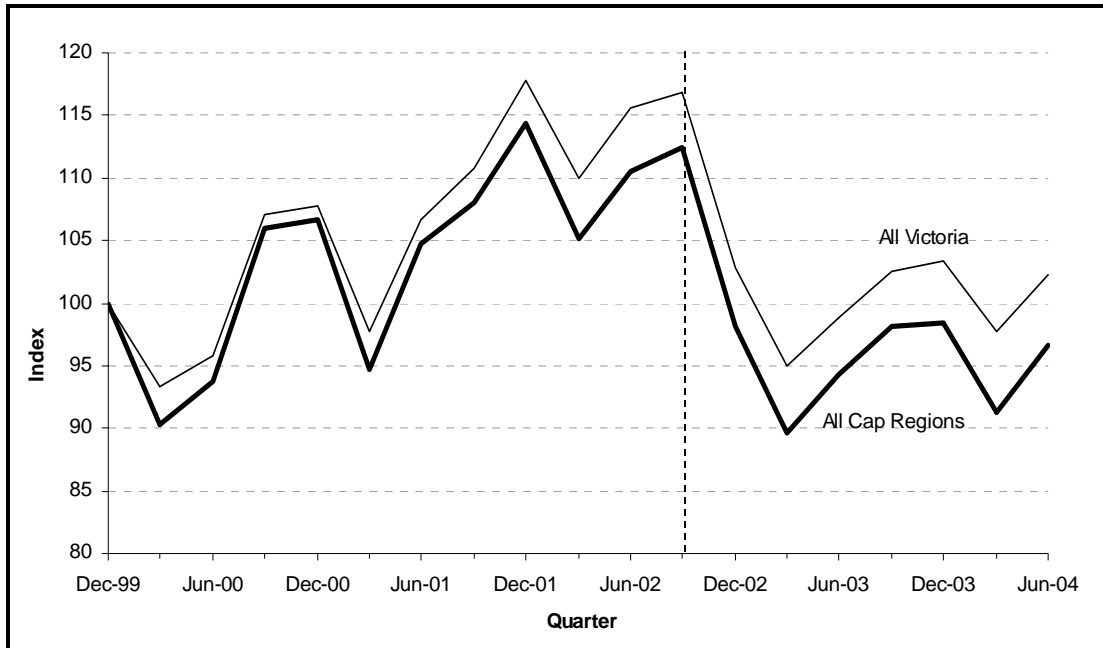
Source: SACES calculations based on OGR data (2004).

The same aggregate pattern for all Victoria is repeated in the cap metropolitan and non-metropolitan regions with the rise in expenditure in December-January, decline in the full March quarter and resumption of growth to a higher peak. In each of the Figures 5.1, 5.2 and 5.3 for metropolitan and non-metropolitan areas, the cap regions and all Victoria, this cyclical pattern can be observed, prior to, and after the smoking ban in gaming venues. Then, as in each of the Figures, the smoking ban provides a structural break but the trend in gaming expenditure resumes at a lower level.

Figure 5.1 compares the 5 cap regions with the trend for all Victoria before and after the ban on smoking in gaming areas. Net gaming revenue from the cap regions contributed quite strongly to total Victorian revenue. The share of total net gaming revenue for the cap regions was 19.7 per cent in 2001 and had declined to 19.3 per cent at the time of the smoking ban, and further declined to 19.2 per cent by 2003. The almost identical scenario can be observed for metropolitan Victoria and the three metropolitan capped areas shown in Figure 5.2 where the net gaming revenue for the 3 metropolitan cap regions declined from 16.9 per cent in September 2002 to 16.3 per cent by the first quarter of 2003. The declining shares contributed by the three cap metropolitan regions could indicate a change in expenditure as a result of smoking bans, the caps policy or that other regions had grown more strongly and increased their relative shares of NGR. We consider this in Section 6, Assessment of Gaming Statistics: Phase Two, that involves more formal econometric tests of the effects of regional caps on expenditure at venues in the capped regions.

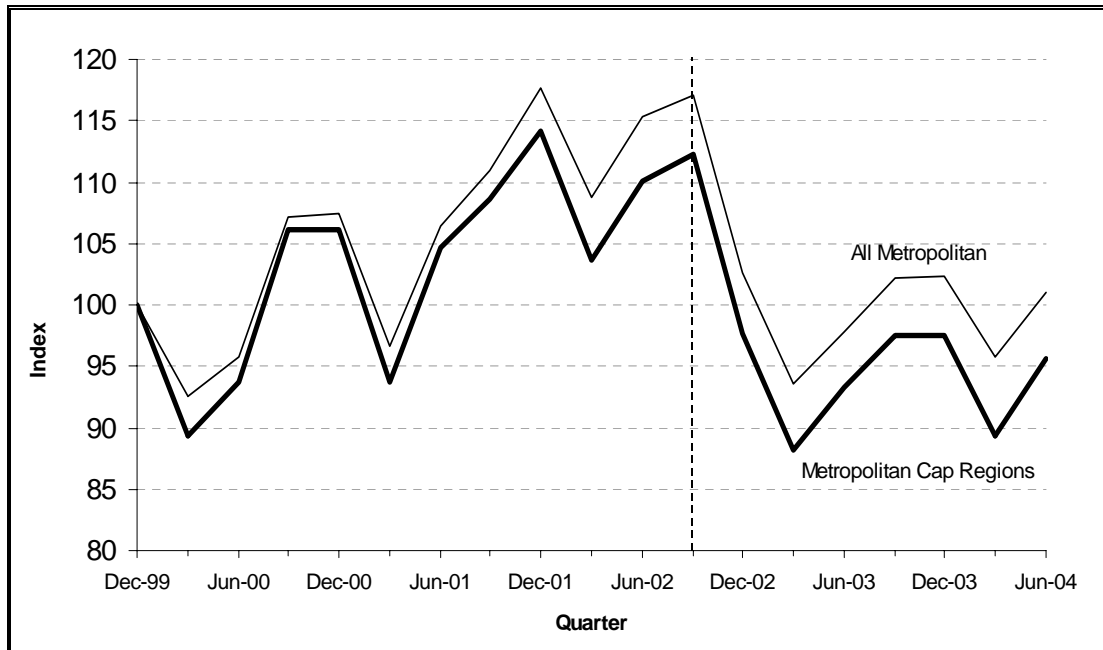
The pattern of gambling expenditure in non-metropolitan Victoria is influenced by a variety of seasonal factors, holiday destinations and the mobility of the population. These issues are considered in more detail in the discussion on the Bass Coast Shire.

Figure 5.1
Index of Average Quarterly Net Gaming Revenue
All Victoria and All Cap Regions: 1999-2004
 (Base: Oct-Dec 1999 = 100)



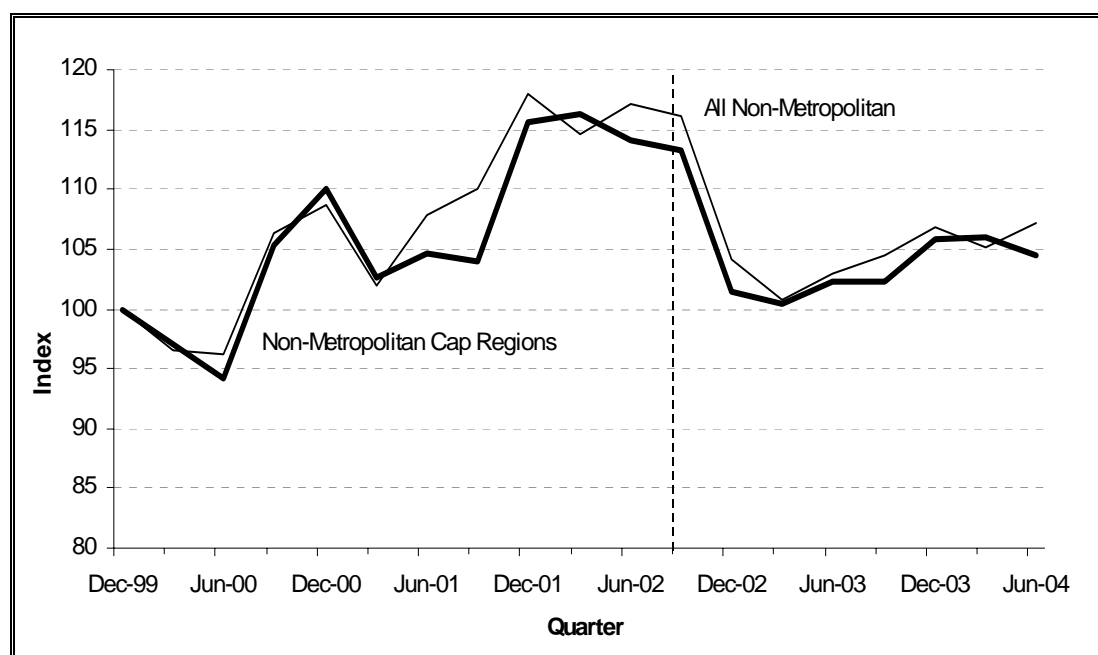
Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.2
Index of Average Quarterly Net Gaming Revenue
Cap Metropolitan to All Metropolitan: 1999-2004
 (Base: Oct-Dec 1999 = 100)



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.3
Index of Average Quarterly Net Gaming Revenue
Cap Non-Metropolitan to All Non-Metropolitan: 1999-2004
 (Base: Oct–Dec 1999 = 100)



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.

Source: Constructed from data obtained from OGR (2004).

5.3.1 Trends in Revenue Per Machine

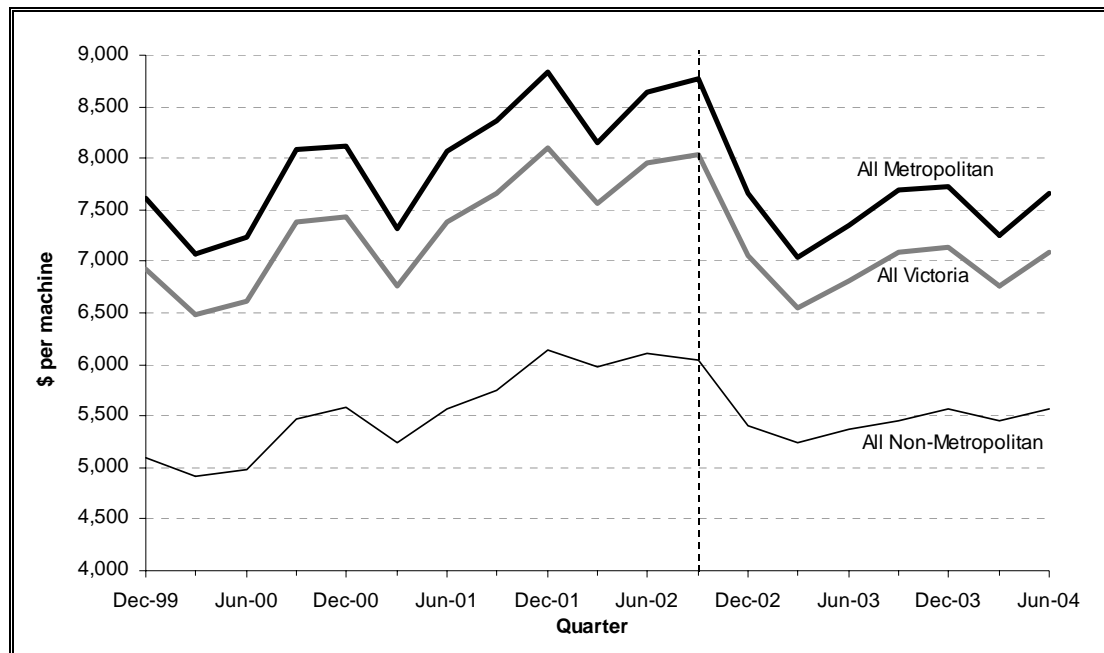
Another possible way to assess whether the cap policy may have contributed to a reduction in problem gambling is to examine whether there had been a statistically significant change in revenue per machine. In this section we examine trends in revenue per machine² which will be contrasted with the experience of each of the cap regions in Section 5.4.

Metropolitan regions have consistently provided a higher net gaming revenue per machine than for Victoria as a whole, while non-metropolitan regions have been consistently below the Victorian average as is illustrated in Figure 5.4.

Table 5.3 provides a summary of the average quarterly revenue per machine and number of machines commencing in the December quarter 1999 and concluding in the June quarter 2004. The data is for metropolitan LGAs, non-metropolitan LGAs and for all Victoria. The March quarter is shown as this period includes the first month after the removal of machines is 2002, 2003 and 2004. The long term aggregate trend is that revenue per machine declines over the December to March quarters as shown in Table 5.3 and rises in the June quarter, rising again in the September and December quarters, with the exception of the September to December 2002 quarter following the smoking ban.

² Note: the following analysis is based on aggregate revenue and aggregate number of machines in each of the regions and represents the average of all machines, average revenue over three months and the percentage change in revenue and machine numbers for regions and all Victoria.

Figure 5.4
Average Quarterly Net Gaming Revenue per Machine
All Metropolitan, All Non-Metropolitan to All Victoria: 1999-2004



Source: Calculated from data supplied to the researchers by OGR (2004).

The peak in revenue per machine occurred in December 2001 — \$8,832 per machine in metropolitan Victoria and \$6,140 in non-metropolitan regions. A careful study of the data for the four quarters of 2002 reveals that the two peaks referred to above would have been exceeded by December 2002, except for the introduction of the smoking ban that caused net gaming revenue to decline for the first time ever in the September to December quarter (see Table 5.3).

In metropolitan regions the number of machines increased by 104 in the period December 1999 to June 2004, an increase of 0.5 per cent while the revenue per machine increased by 0.6 per cent. In non-metropolitan regions machine numbers declined by – 1.8 per cent while revenue per machine increased by 9.1 per cent. These changes are shown in Table 5.4.

Table 5.5 summarises the change in net gaming revenue and machine numbers for the cap and control regions and all Victoria, all metropolitan and all non-metropolitan regions. The potential impact of the first round of machine removals would be felt in March 2002 and throughout the time period covered here. The time period also captures the impact of the smoking ban commencing in September 2002.

Table 5.3
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Metropolitan, Non-Metropolitan, All Victoria:

Quarter	Metropolitan		Non-Metropolitan		All Victoria	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999						
December	7,616	19,675	5,099	7,510	6,920	27,185
2000						
March	7,072	19,604	4,921	7,507	6,476	27,111
June	7,230	19,835	4,973	7,414	6,616	27,249
September	8,089	19,861	5,478	7,438	7,377	27,299
December	8,117	19,841	5,589	7,446	7,427	27,287
2001						
March	7,322	19,779	5,244	7,439	6,754	27,218
June	8,061	19,784	5,568	7,416	7,381	27,200
September	8,364	19,872	5,748	7,335	7,659	27,207
December	8,832	19,967	6,140	7,358	8,107	27,325
2002						
March	8,158	19,971	5,971	7,355	7,569	27,325
June	8,636	20,000	6,100	7,350	7,955	27,350
September	8,764	20,018	6,047	7,357	8,034	27,375
December	7,666	20,046	5,413	7,363	7,061	27,409
2003						
March	7,038	19,919	5,248	7,350	6,556	27,270
June	7,352	19,922	5,370	7,339	6,818	27,261
September	7,688	19,908	5,447	7,340	7,084	27,248
December	7,720	19,876	5,569	7,350	7,139	27,226
2004						
March	7,257	19,775	5,459	7,372	6,768	27,147
June	7,657	19,779	5,562	7,377	7,088	27,157

Note: Number of machines and revenues is the average of the preceding three months (i.e., October, November and December) recorded as the December quarter.

Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.4
Change in Revenue Per Machine and Machine Numbers
Metropolitan, Non-Metropolitan, All Victoria
December 1999 – June 2004

	Metropolitan (Per cent)	Non-Metropolitan (Per cent)	All Victoria (Per cent)
Percentage Change in Machine Numbers			
December 1999 – June 2004	0.5	-1.8	-0.1
Percentage Change in Revenue			
December 1999 – June 2004	0.6	9.1	2.4

Source: SACES calculations based on OGR data (2004).

Table 5.5
Change in Revenue and Machine Numbers
All Victoria, Metropolitan and Non-Metropolitan, Cap and Control Regions:
March 2002 to June 2004

		Change in Revenue (Per cent)	Change in Machine Numbers (Per cent)
Cap Regions	All Victoria	-6.4	-0.6
	All Metropolitan	-6.1	-1.0
	All Non-Metropolitan	-6.9	0.3
	Greater Dandenong Plus	-8.3	-5.8
	Maribyrnong Plus	-8.1	-10.6
	Darebin Plus	-6.9	0.0
	La Trobe	-3.7	-4.3
	Bass Coast Shire	-23.7	-14.1
Control Regions	Monash Minus	-8.8	0.0
	Hobsons Bay Minus	-8.5	0.0
	Moreland Minus	-6.2	0.0
	Ballarat	3.3	-0.1
	Greater Geelong	-6.9	0.0

Source: SACES calculations based on OGR data (2004).

The first comparison in the period under study is that for all Victoria there was a decline in revenue of -6.4 per cent and a small reduction in machine numbers of -0.6 suggesting that other factors apart from the decline in machine numbers contributed to the fall in revenue. In the 5 control regions there was virtually no reduction in machine numbers, while the change in revenue varied between a 3.3 per cent increase in Ballarat to a fall of -8.8 per cent in Monash Minus. Again, this suggests other factors are important. For the cap regions, the change in machine numbers varied: no change in Darebin Plus but revenue fell by -6.9 per cent, machine numbers fell by -10.6 per cent in Maribyrnong Plus and revenue declined by -8.1 per cent; and Bass Coast Shire the change in machine numbers was -14.1 per cent and the fall in revenue was -23.7 per cent.

Compared to all metropolitan areas change in revenue of -6.1 per cent, all metropolitan cap and control regions exceeded this figure (range: -6.2 to -8.8) but did so whether or not they lost machines. This reinforces our view that other factors were more important than the reduction in machine numbers.

5.3.2 Impact of Reduction in Opening Hours

An additional change that occurred during the phased removal of machines was that 25 venues in the cap regions were required to cease 24 hour trading. All 25 venues were in the cap regions of Greater Dandenong Plus, Maribyrnong Plus and Darebin Plus. While this change is unlikely to have had an impact on the extent of problem gambling we report the change in net gaming revenue and revenue per machine following the reduction in trading hours. These 25 venues in the three regions ceased 24 hour trading, reducing to 20 hours, and nineteen venues did so after February 2002. Table 5.6 shows the gross impact (i.e., incorporates smoking ban for

those hotels that reduced hours after the introduction of the ban) with no net change in machine numbers. The “actual” month (Col. 1) refers to the month in which the reduction in hours took place relative to the previous month and the “following” month (Col 2) refers to the month after the changes took place. The last column refers to exactly one year after the change.

Table 5.6
Reduction in Trading Hours: Average Change in Net Gaming Revenue

	Actual Month (Per cent)	Following Month (Per cent)	One Year On (Per cent)
Change in NGR	-1.5	-6.6	-11.1
Change in NGR per Machine	-1.3	-6.7	-9.7

Source: SACES calculations based on OGR data (2004).

In the actual month in which the reduction occurred, 16 of the 25 venues experienced a decline in revenue and nine experienced an increase in revenue. For all 25 hotels, the average change in net gaming revenue was a decline of -1.5 per cent. By the end of the following month, the average decline in revenue was -6.6 per cent (19 hotels declined, 6 increased revenue) and one year on, the average reduction in net gaming revenue was -11.1 per cent (18 hotels declined, 7 increased revenue). On a per machine basis, revenue had declined by an average of almost 10 per cent (from \$10,497 to \$9,476 per machine) one year on from the reduction in trading hours. It is clear that the removal of 24 hour gaming did reduce gaming expenditure at the affected venues. It is not possible to determine whether the reduction in hours impacted more on the committed gambler or the recreational gambler.

5.4 Assessment of the Cap and Control Regions

In this section we discuss the comparison of gaming trends in each of the five cap and control regions. The similarity to be observed in the data and figures confirms the researchers original selection of appropriate matched control groups, with the exception of Bass Coast Shire and Greater Geelong, where the former displays somewhat of a “counter cyclical” pattern. The reasons for this are considered in the section headed Bass Coast Shire.

In what follows, the data and analysis for each of the cap and the matched control groups is presented using average quarterly data for net gaming revenue, revenue per machine and number of machines.

In each of the regions there are presented two figures and one table. The “Index of Net Gaming Revenue” plots the trend in total revenue from December 1999 quarter to June 2004 quarter. The base value is set to an index value of 100 (October – December 1999) and each successive quarter measures the change over time.³ The second figure, showing Net Gaming Revenue Per Machine illustrates the change over time on a dollar per machine basis.

³ Index or percentage relative: current value divided by base value x 100.

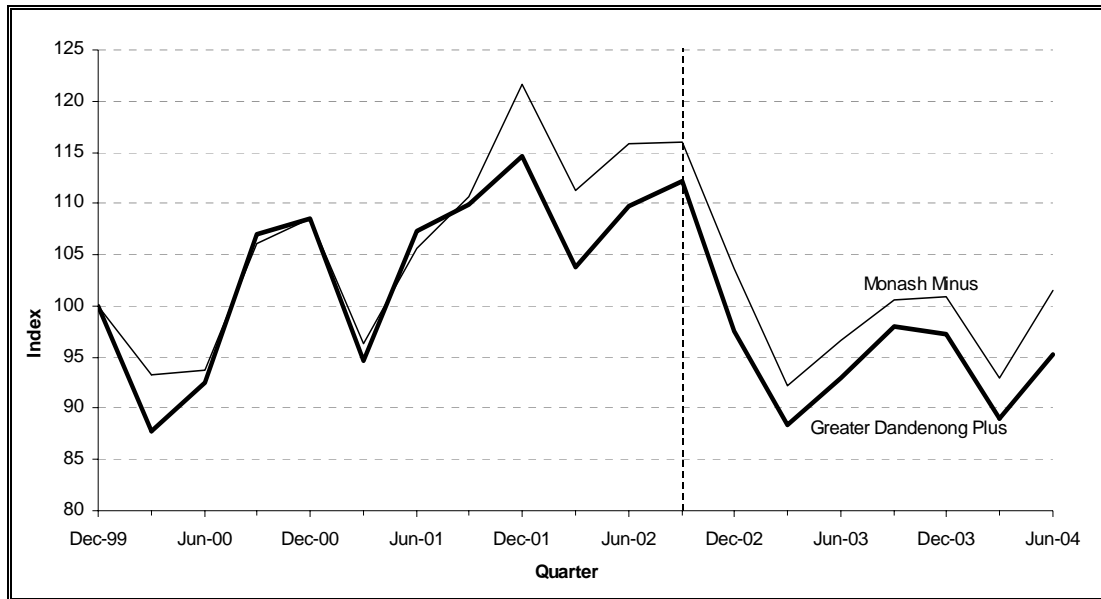
5.4.1 Cap Region: Greater Dandenong Plus

The cap region is Greater Dandenong Plus matched to the control region of Monash Minus. Greater Dandenong Plus lost 147 machines to achieve the target number of 1,540 while the Monash Minus remained at 918 machines for the entire period. Net gaming revenue in Greater Dandenong Plus and its comparison region of Monash Minus track each other closely with the only notable difference being the surge in revenue in Monash Minus in December 2001 (see Figure 5.5).

The baseline comparison is to recall that total net gaming revenue for all metropolitan Victoria declined by -6.1 per cent in the period March 2002 to June 2004. Comparatively, Greater Dandenong Plus and Monash Minus experienced a decline of -8.3 per cent and -8.8 per cent respectively over the same period. The decline in machine numbers was -5.8 per cent and zero respectively. As Figure 5.6 illustrates, revenue per machine increased in Greater Dandenong Plus so that it exceeded that for Monash Minus from September 2002 and thereafter. This implies that the number of machines lost (-5.8 per cent) was higher than the net gaming revenue lost per machine (-2.6 per cent: March 2002 to June 2004), which indicates that the remaining machines were used more intensively.

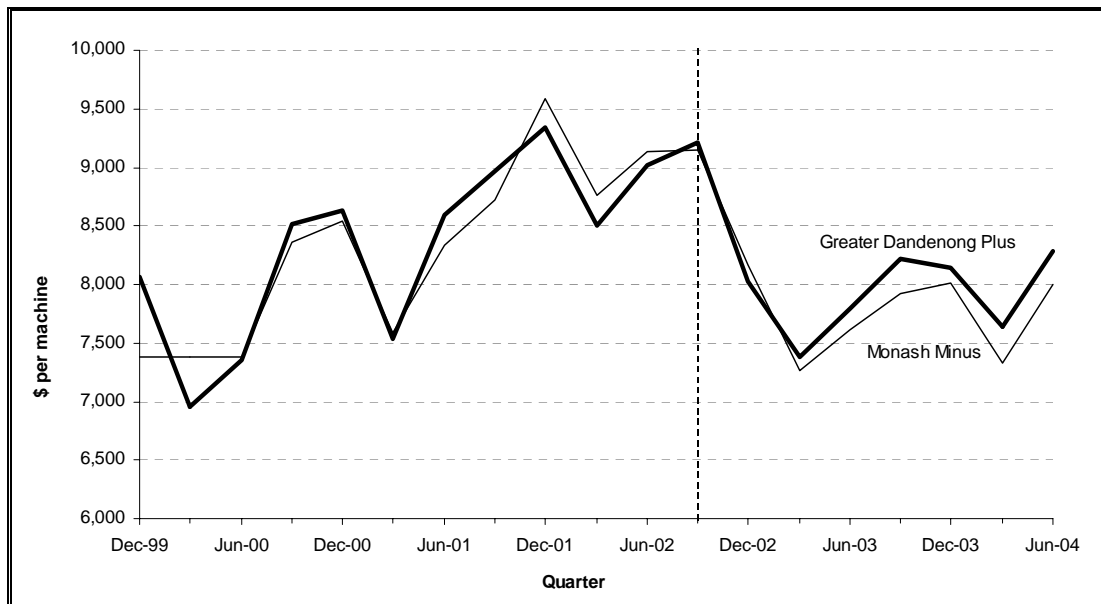
The fact that revenue declined in both regions in the period under study, and did so whether or not there was a change in machine numbers — in Monash Minus machine numbers remained constant but NGR fell more significantly than in Greater Dandenong Plus — confirms to us that other factors were more important than the reduction in machine numbers. It is obvious that the remaining machines were used more intensively in the cap region.

Figure 5.5
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Greater Dandenong Plus and Monash Minus



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.6
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Greater Dandenong Plus and Monash Minus



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.7
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Greater Dandenong Plus and Monash Minus

Quarter	Greater Dandenong Plus		Monash Minus	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	8,062	1,661	7,384	921
2000				
March	6,952	1,692	7,384	920
June	7,357	1,684	7,384	918
September	8,521	1,682	8,367	918
December	8,634	1,683	8,548	918
2001				
March	7,538	1,682	7,590	918
June	8,593	1,672	8,330	918
September	8,969	1,642	8,717	918
December	9,347	1,642	9,587	918
2002				
March	8,508	1,635	8,766	918
June	9,015	1,631	9,130	918
September	9,208	1,632	9,148	918
December	8,021	1,629	8,167	918
2003				
March	7,375	1,605	7,267	918
June	7,789	1,599	7,618	918
September	8,222	1,597	7,927	918
December	8,142	1,598	8,012	918
2004				
March	7,640	1,559	7,329	918
June	8,286	1,540	7,996	918

Source: Calculated from data supplied to the researchers by OGR (2004).

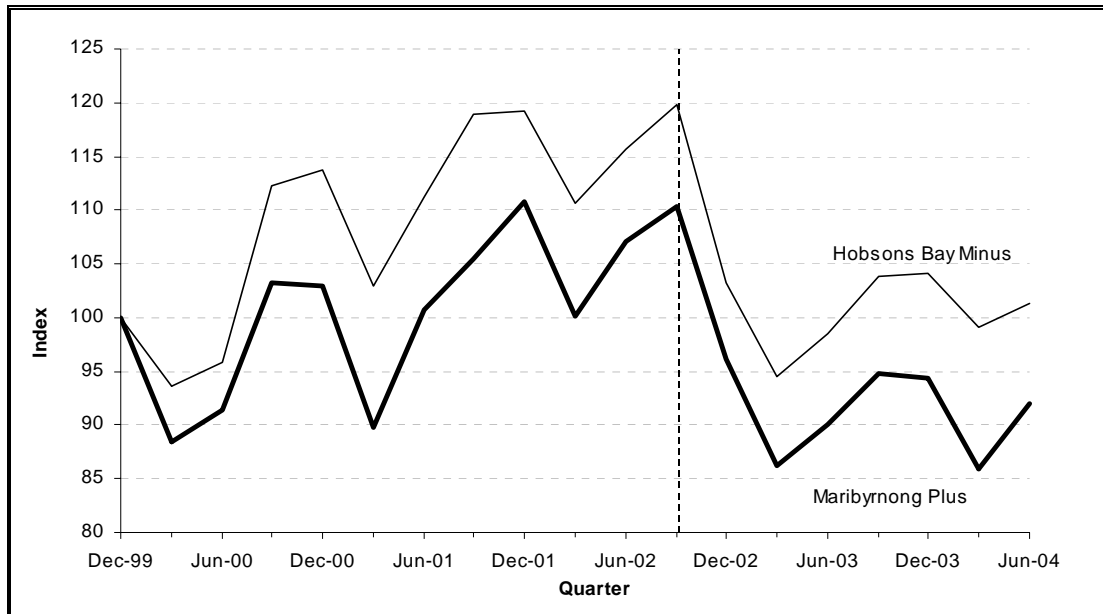
5.4.2 Cap Region: Maribyrnong Plus

The cap region is Maribyrnong Plus matched to the control region of Hobsons Bay Minus. The index of net gaming revenue summarised in Figure 5.7 for both areas under study illustrates the same trend with the distinguishing features that the troughs in the December to March quarters are “deeper” for Maribyrnong Plus than the control regions and the impact of the smoking ban was felt more strongly in Hobsons Bay Minus.

The baseline comparison is to recall that total net gaming revenue for all metropolitan Victoria declined by -6.1 per cent in the period March 2002 to June 2004. Comparatively, Maribyrnong Plus and Hobsons Bay Minus experienced a decline of -8.1 per cent and -8.5 per cent respectively over the same period. The decline in machine numbers was -10.0 per cent and zero respectively. As Figure 5.8 illustrates, revenue per machine increased in Maribyrnong Plus so that it consistently exceeded that for Hobsons Bay Minus from September 2002 and thereafter. This implies that the number of machines lost (-10.0 per cent) was higher than the net gaming revenue lost per machine. In fact, in Maribyrnong Plus revenue per machine actually increased by 2.1 per cent from March 2002 to June 2004, confirming that the remaining machines were used more intensively.

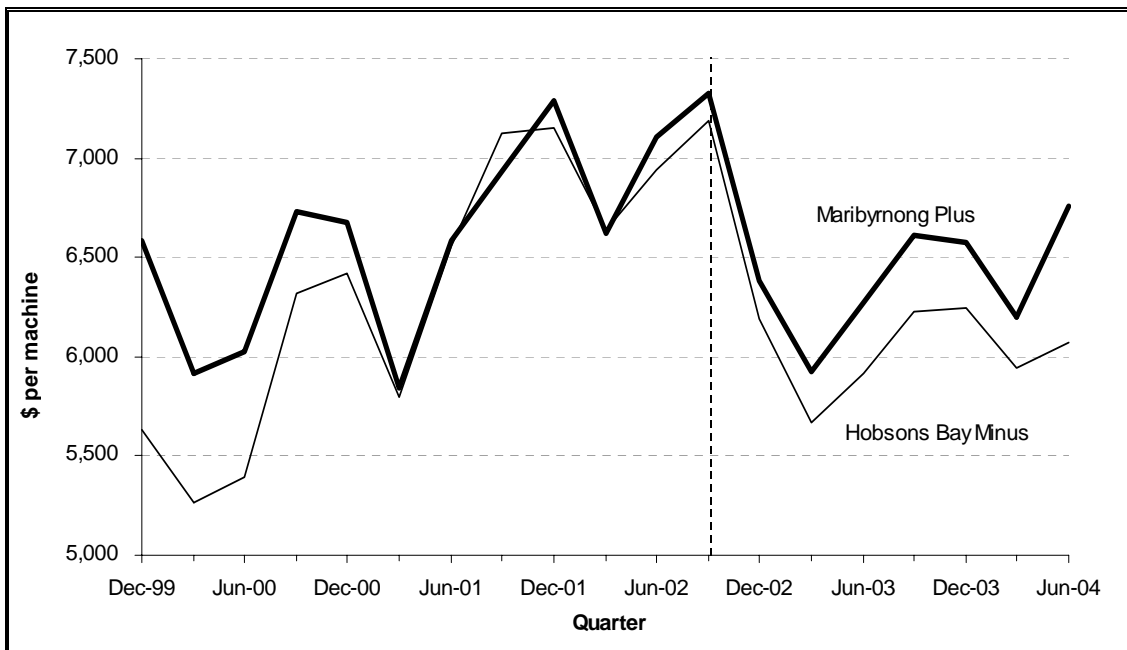
Once again, in the control region machine numbers remained constant while in the cap region they declined, yet NGR fell by more in the control region of Hobsons Bay Minus. It would again appear that other factors were more important than the reduction in machine numbers.

Figure 5.7
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Maribyrnong Plus and Hobsons Bay Minus



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.8
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Maribyrnong Plus and Hobsons Bay Minus



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.8
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Maribyrnong Plus and Hobsons Bay Minus

Quarter	Maribyrnong Plus		Hobsons Bay Minus	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	6,581	1,308	5,628	552
2000				
March	5,916	1,287	5,265	552
June	6,025	1,302	5,393	552
September	6,732	1,329	6,316	552
December	6,676	1,327	6,415	551
2001				
March	5,838	1,323	5,794	552
June	6,581	1,317	6,556	527
September	6,929	1,309	7,126	518
December	7,288	1,309	7,150	518
2002				
March	6,619	1,302	6,638	518
June	7,105	1,297	6,938	518
September	7,330	1,296	7,188	518
December	6,380	1,297	6,189	518
2003				
March	5,921	1,253	5,668	518
June	6,276	1,234	5,919	517
September	6,609	1,234	6,232	518
December	6,575	1,235	6,248	518
2004				
March	6,201	1,193	5,945	518
June	6,755	1,172	6,073	518

Source: Calculated from data supplied to the researchers by OGR (2004).

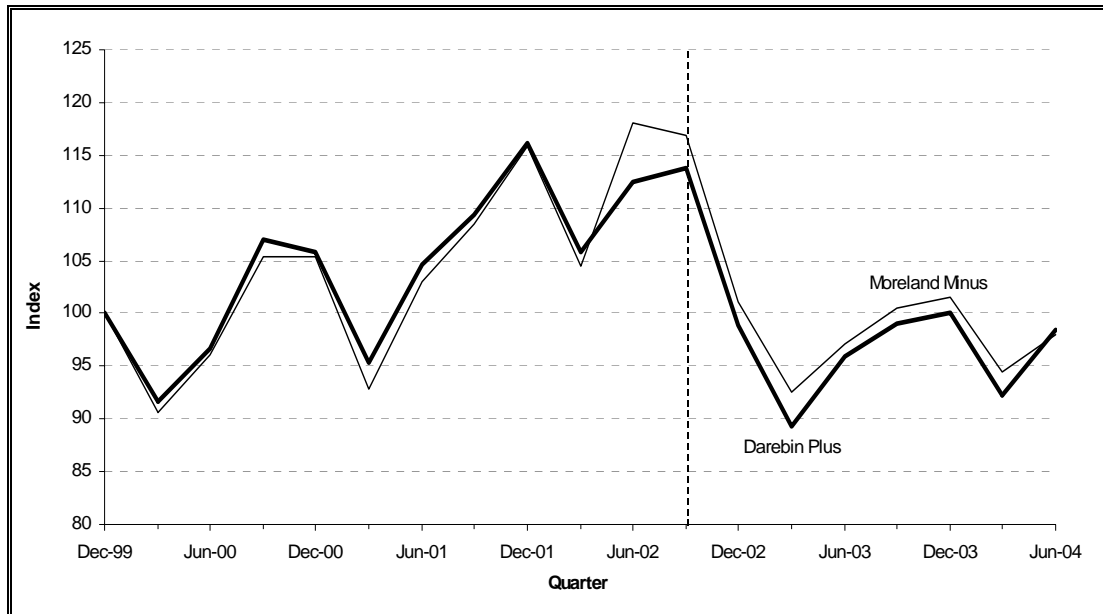
5.4.3 Cap Region: Darebin Plus

The cap region is Darebin Plus matched to the control region of Moreland Minus. Figure 5.9, the index of net gaming revenue in the cap region of Darebin Plus and its control region of Moreland Minus illustrates similar trends in expenditure over time.

The baseline comparison is to recall that total net gaming revenue for all metropolitan Victoria declined by -6.1 per cent in the period March 2002 to June 2004. Comparatively, Darebin Plus and Moreland Minus experienced a decline of -6.9 per cent and -6.2 per cent respectively over the same period. There was no change in machine numbers in this period. As Figure 5.10 illustrates revenue per machine declined in both Darebin Plus and Moreland Minus from March 2002 to June 2004. In both the cap and control regions where machine numbers were unchanged the most significant impact was the smoking ban as shown in Figure 5.10. In Darebin Plus revenue per machine declined by -13.5 per cent and in Moreland Minus by -16.9 per cent following the smoking ban and out to June 2004.

In summary, in the cap region of Darebin Plus, with no change in machine numbers, revenue declined most sharply following the introduction of the smoking ban as was also the situation in the control region of Moreland Minus.

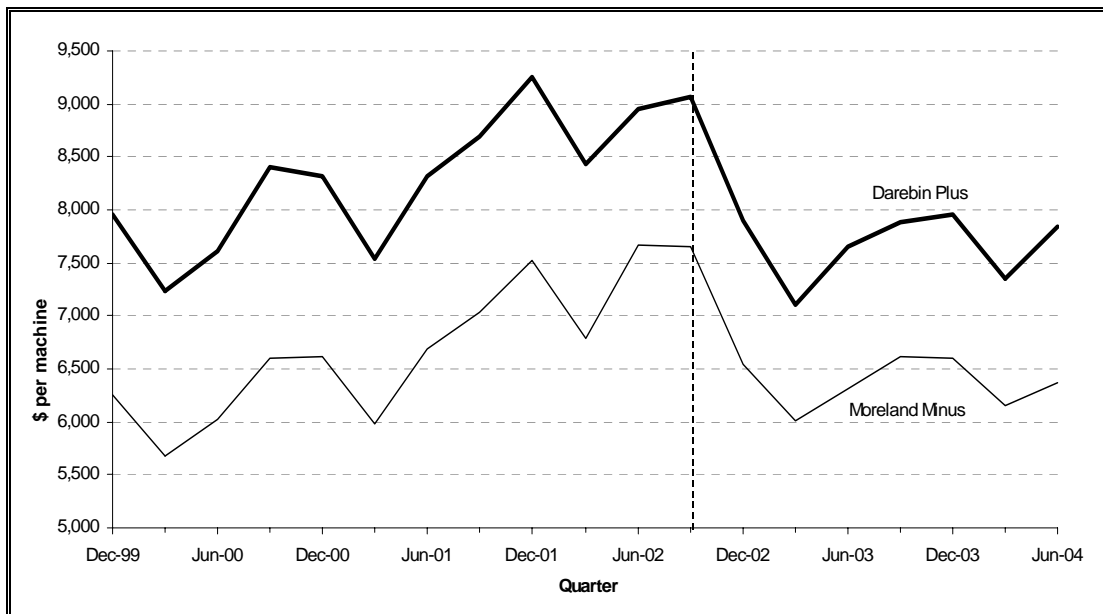
Figure 5.9
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Darebin Plus and Moreland Minus



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.

Source: Constructed from data obtained from OGR (2004).

Figure 5.10
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Darebin Plus and Moreland Minus



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.9
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Darebin Plus and Moreland Minus

Quarter	Darebin Plus		Moreland Minus	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	7,962	1,533	6,253	569
2000				
March	7,231	1,548	5,675	568
June	7,613	1,549	6,022	568
September	8,406	1,554	6,606	568
December	8,318	1,553	6,621	566
2001				
March	7,544	1,543	5,974	553
June	8,324	1,535	6,686	548
September	8,697	1,534	7,037	548
December	9,259	1,530	7,526	548
2002				
March	8,430	1,532	6,789	548
June	8,957	1,532	7,671	548
September	9,069	1,532	7,660	545
December	7,893	1,529	6,548	548
2003				
March	7,106	1,533	6,012	548
June	7,649	1,531	6,311	548
September	7,891	1,532	6,617	544
December	7,963	1,534	6,597	548
2004				
March	7,350	1,531	6,148	547
June	7,846	1,532	6,367	548

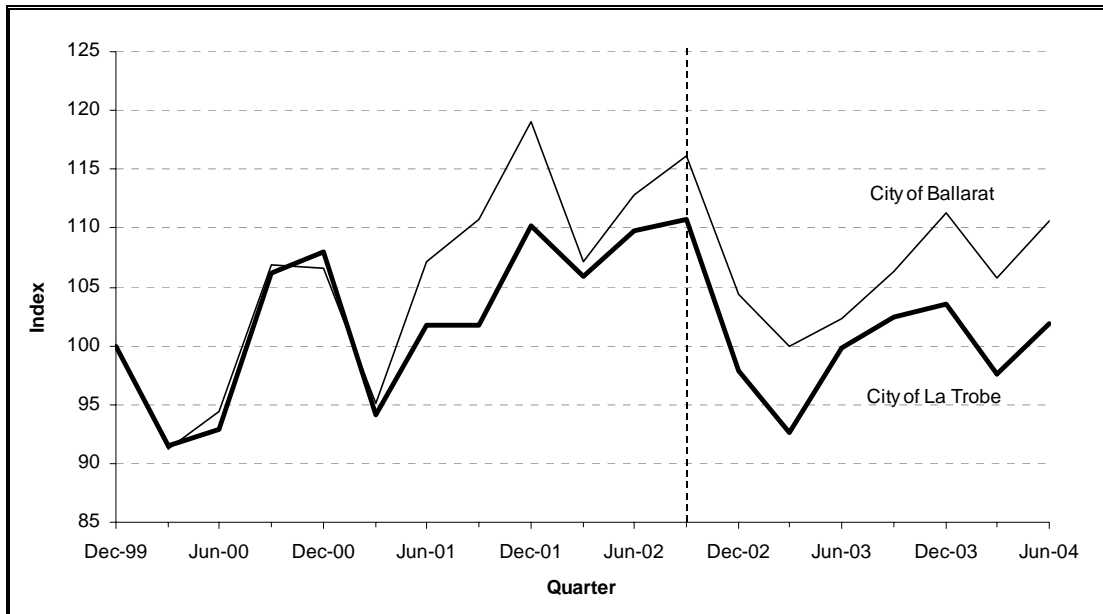
Source: Calculated from data supplied to the researchers by OGR (2004).

5.4.4 Cap Region: City of La Trobe

The cap region is the City of La Trobe, matched to Ballarat, which are both non-metropolitan regions in Victoria. One of the distinguishing features of both the City of La Trobe and Ballarat is that the decline in net gaming revenue following the smoking ban was relatively small — -4.1 and -4.6 respectively, although none the less significant (see Figure 5.11).

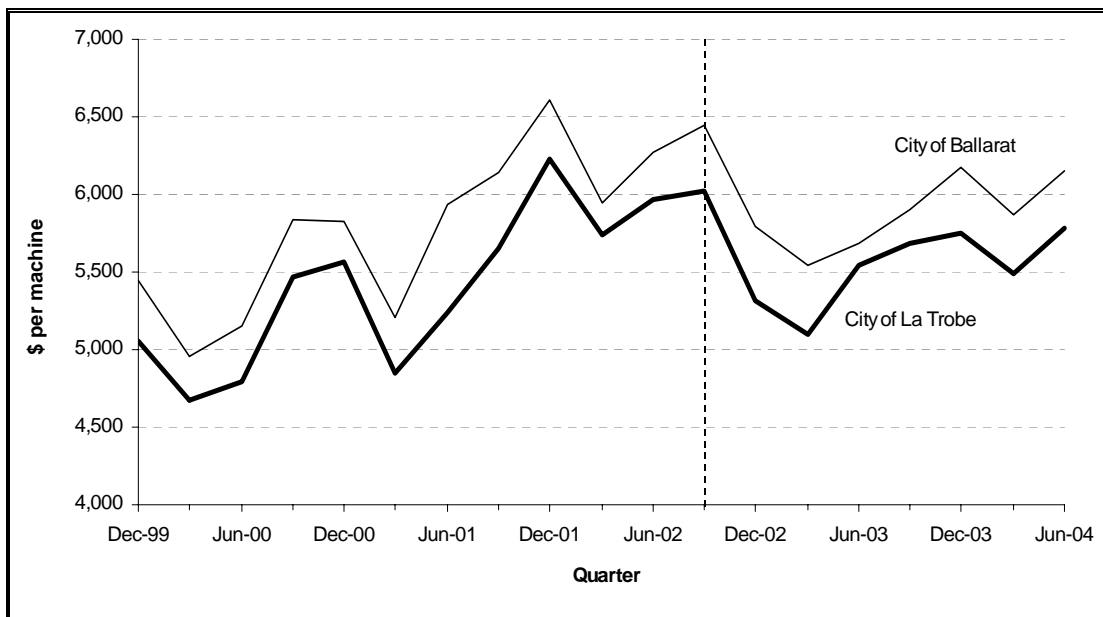
The baseline comparison is to recall that total net gaming revenue for all non-metropolitan Victoria declined by -6.9 per cent in the period March 2002 to June 2004. Comparatively, the City of La Trobe experienced a decline of -3.7 per cent while total net gaming revenue in Ballarat actually increased by 3.3 per cent. The decline in machine numbers was -4.3 per cent and 0.1 respectively. As Figure 5.12 illustrates revenue per machine in both regions is rapidly approaching the pre-smoking ban levels. The number of machines withdrawn (-4.3 per cent) was higher than the net gaming revenue lost per machine (0.6 per cent: March 2002 to June 2004), which indicates that the remaining machines were used more intensively.

Figure 5.11
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
City of La Trobe and City of Ballarat



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.12
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
City of La Trobe and City of Ballarat



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.10
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
City of La Trobe and City of Ballarat

Quarter	City of La Trobe		City of Ballarat	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	5,056	675	5,442	687
2000				
March	4,674	668	4,952	689
June	4,795	661	5,156	685
September	5,462	663	5,842	684
December	5,562	663	5,827	684
2001				
March	4,844	663	5,207	684
June	5,236	663	5,930	676
September	5,650	614	6,143	674
December	6,226	604	6,608	674
2002				
March	5,741	629	5,945	674
June	5,694	628	6,273	673
September	6,021	628	6,446	674
December	5,321	628	5,793	674
2003				
March	5,099	619	5,548	674
June	5,539	615	5,680	674
September	5,689	614	5,901	674
December	5,750	615	6,179	674
2004				
March	5,490	606	5,871	674
June	5,778	602	6,149	673

Source: Calculated from data supplied to the researchers by OGR (2004).

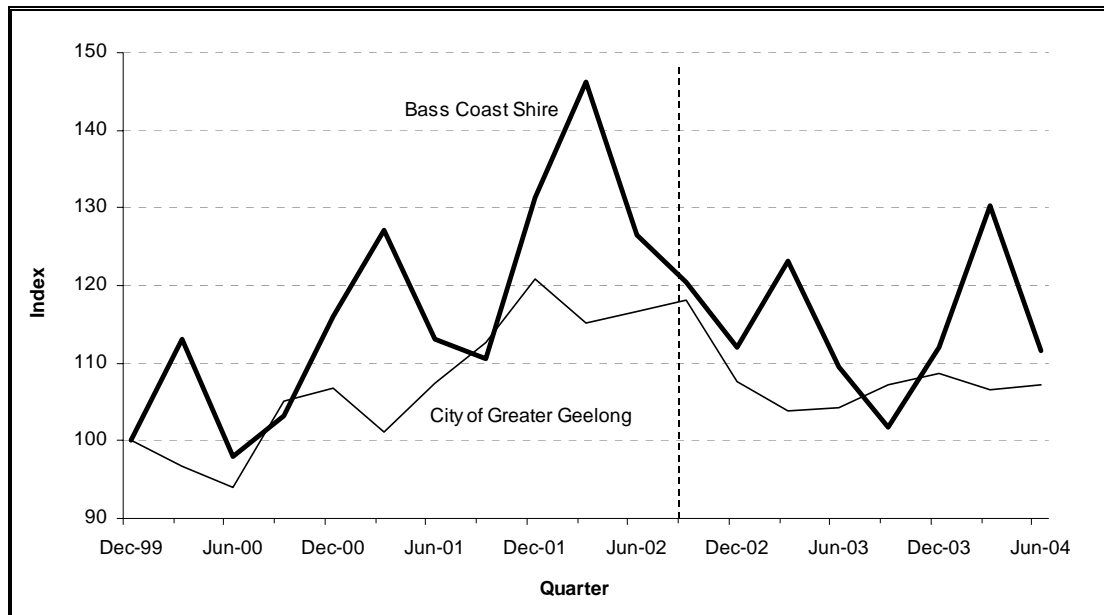
5.4.5 Cap Region: Bass Coast Shire

The cap region of Bass Coast Shire matched to Greater Geelong which are both non-metropolitan regions of Victoria. As indicated earlier, there was a potential concern in matching Bass Coast Shire with the City of Greater Geelong as they are regions of very different population size and Bass Coast has a more seasonal employment pattern which suggested that expenditure patterns may be more variable. The two regions actually provide an interesting contrast in expenditure patterns because they differ as holiday destinations. The Bass Coast Shire provides an insight into the impact of tourism on participation in electronic gaming machine gambling. The Bass Coast region including the very popular summer, beachside holiday location of Phillip Island and Venus Bay areas receives a considerable number of holidaymakers in the December-February period. The resident population of Bass Coast was 24,075 in the 2001 Census. However the Shire is characterised by 50 per cent of its housing being non-permanently occupied. When all holiday accommodation in the Shire is occupied, the area's population triples to some 60,000 persons. What can be observed in Figure 5.13 is that the peaks for net gaming revenue occur in each of the first quarters (January-March) in contrast to the less popular tourist destination of Greater Geelong. The exodus of holidaymakers then leads to decline in net gaming revenue in the second quarter (April-June) of each year, creating a rather unique pattern of peaks and troughs, indicating a high seasonal influence on a more volatile pattern of gaming revenue.

Venues in Bass Coast Shire removed in total 8, 16 and 17 machines in February 2002, February 2003 and February 2004 respectively. The size of venues were generally smaller than those in the control group. Net gaming revenue fell in each subsequent period following the machine removal, however the end of holiday season in Bass Coast and therefore exodus of gamblers from this tourist area could readily explain the fall in revenue.

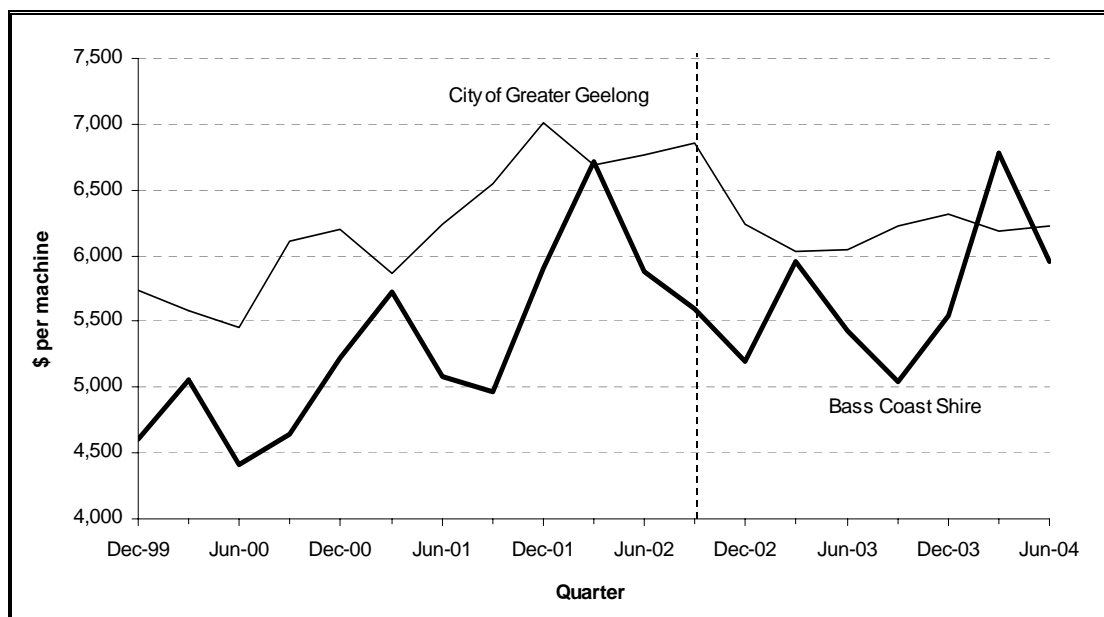
The baseline comparison is to recall that total net gaming revenue for all non-metropolitan Victoria declined by -6.9 per cent in the period March 2002 to June 2004. Comparatively, Bass Coast Shire and Greater Geelong experienced a decline of -23.7 per cent and -6.9 per cent respectively over the same period. The decline in machine numbers was -14.1 per cent and zero respectively. As Figure 5.14 illustrates revenue per machine increases quite strongly in the Bass Coast Shire over each successive March quarter, highlighting the impact of seasonal tourism. With a reduction of 41 machines, in the whole time that Greater Geelong remained stable at 1,392 machines, gaming revenue per machine exceeded that for Greater Geelong by March 2004 (see Table 5.11 and Figure 5.14) so that the remaining machines were used more intensively.

Figure 5.13
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Bass Coast Shire and City of Greater Geelong



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.14
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Bass Coast Shire and City of Greater Geelong



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.11
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Bass Coast Shire and City of Greater Geelong

Quarter	Bass Coast Shire		City of Greater Geelong	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	4,608	255	5,731	1,410
2000				
March	5,052	263	5,585	1,400
June	4,409	261	5,451	1,395
September	4,649	261	6,116	1,390
December	5,221	261	6,200	1,392
2001				
March	5,727	260	5,871	1,392
June	5,083	261	6,241	1,392
September	4,971	261	6,545	1,392
December	5,904	261	7,015	1,392
2002				
March	6,713	256	6,684	1,392
June	5,873	253	6,769	1,392
September	5,591	253	6,854	1,392
December	5,201	253	6,240	1,393
2003				
March	5,961	242	6,027	1,392
June	5,425	237	6,051	1,394
September	5,042	237	6,225	1,392
December	5,550	237	6,314	1,392
2004				
March	6,779	226	6,185	1,391
June	5,956	220	6,224	1,391

Source: Calculated from data supplied to the researchers by OGR (2004).

5.5 Assessment of the Cap and the Leakage Points

The researchers noted in setting out the methodology for this study that implementation of the caps policy may induce diversionary expenditure, intra-regionally and inter-regionally and that, *a priori* the direction and extent of revenue flows cannot be predicted. For this reason, the study identified likely spillover regions for the three metropolitan cap areas. The researchers identified the three “leakage points” or localities/venues as shown in Appendix 3, Tables A3.11 to A3.13 which were constructed from those venues in close proximity to the three cap regions of Greater Dandenong Plus, Maribyrnong Plus and Darebin Plus. The main purpose for the “leakage point” construction was to recognise any possible shift in gambling activities away from venues that fall into the cap regions to the venues that were in close proximity but not under the cap legislation, as gamblers might be more willing to attend venues that are not too crowded. It was not only gamblers who might move. Venues lying approximate, but just outside cap regions, were accessible to the operators to increase the number of machines in these venues (subject to constraints) in a manner which may have been attractive to gamblers (i.e., reduce waiting or queuing times).

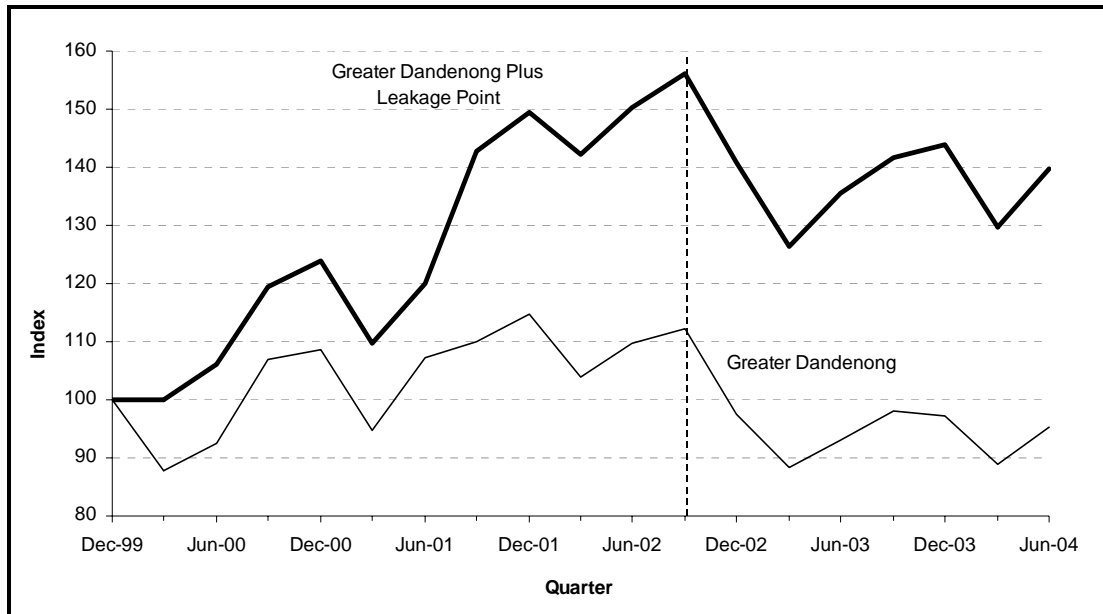
Comparison between the three caps regions, Greater Dandenong Plus, Maribyrnong Plus and Darebin Plus, and their respective leakage points constructed by the Centre reveals that the average quarterly net gaming revenue in leakage points follows the trend observed in caps regions with troughs and peaks being reached approximately at the same time. However, the divergence/convergence of average quarterly net gaming expenditure between caps regions and their leakage points differs from cap to cap area.

5.5.1 Greater Dandenong Plus and Leakage Point

There are 8 gaming venues in close proximity to the border of Greater Dandenong Plus that were identified by the researchers as potential leakage points (Table A3.11). It is interesting to note that the number of machines declined by 40 in Greater Dandenong Plus commencing in March 2001 only to then increase by 39 in venues in the leakage point in the September (27 machines) and December 2001 (12 machines) quarters. A comparison of venues in the cap region and venues in the leakage point reveals a divergence in net gaming revenue commencing in the third quarter of 2001 at the time machines were located in venues in the leakage point.

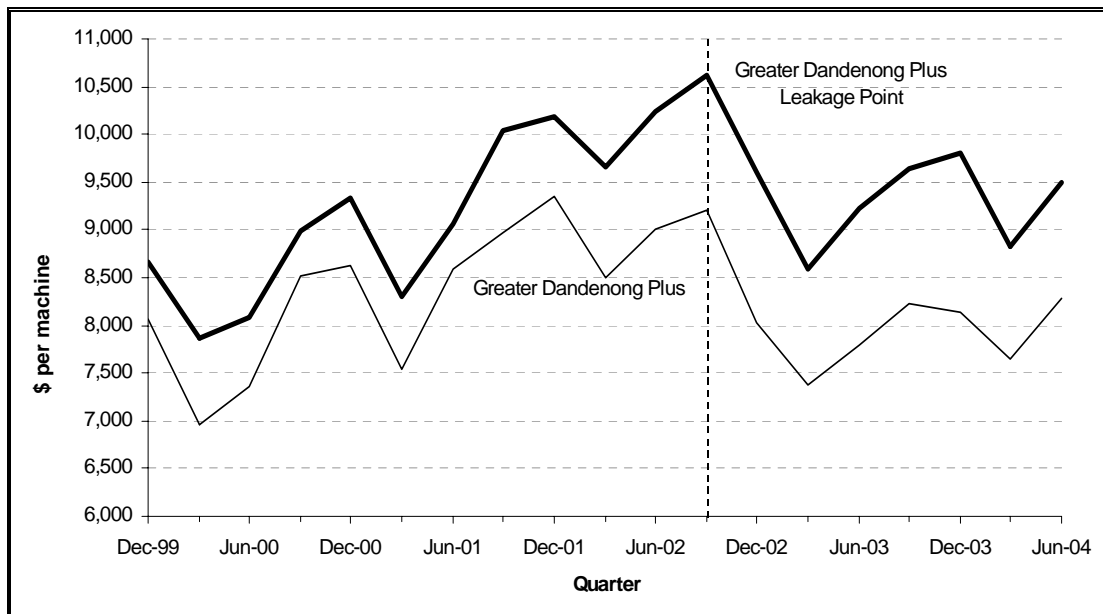
However, there is no evidence to suggest that the caps affected gaming expenditure in either the cap or the control region. In fact as machine numbers decline by -2.4 per cent in 2001, revenue per machine in Greater Dandenong Plus increased by 24 per cent; in comparison, revenues increased by 23 per cent in the control region with an increase in machine numbers in the order of 10.7 per cent. In both regions it appears that machines were used more intensively, and at a later date, only the ban on smoking had a moderating impact on expenditure. We test to verify this conclusion in Section 6.

Figure 5.15
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Greater Dandenong Plus and Leakage Point



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.16
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Greater Dandenong Plus and Leakage Point



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.12
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Greater Dandenong Plus and Leakage Point

Quarter	Greater Dandenong Plus		Greater Dandenong: Leakage Point	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	8,062	1,661	8,657	318
2000				
March	6,952	1,692	7,857	351
June	7,357	1,684	8,087	361
September	8,521	1,682	8,996	366
December	8,634	1,683	8,341	365
2001				
March	7,538	1,682	8,294	365
June	8,593	1,672	9,069	365
September	8,969	1,642	10,045	392
December	9,347	1,642	10,188	404
2002				
March	8,508	1,635	9,661	405
June	9,015	1,631	10,234	405
September	9,208	1,632	10,616	405
December	8,021	1,629	9,598	405
2003				
March	7,375	1,605	8,589	406
June	7,789	1,599	9,219	405
September	8,222	1,597	9,644	405
December	8,142	1,598	9,796	405
2004				
March	7,640	1,559	8,830	405
June	8,286	1,540	9,504	405

Source: Calculated from data supplied to the researchers by OGR (2004).

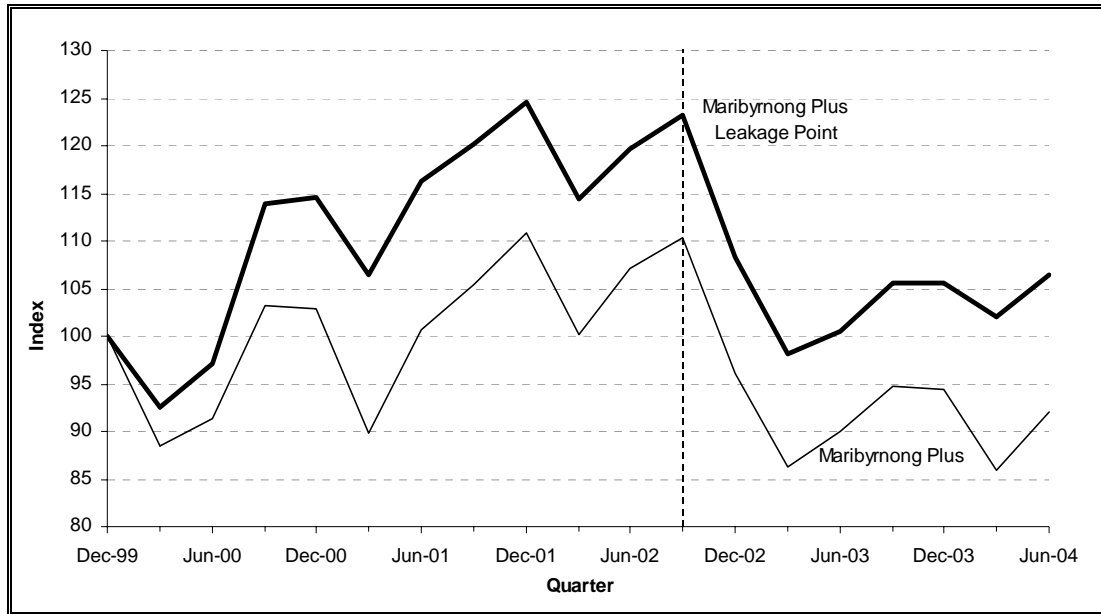
5.5.2 Maribyrnong Plus and Leakage Point

For the leakage points in close proximity to Maribyrnong Plus there was no change in either the number of venues or the number of machines prior to or after the withdrawal process. Machine numbers remained at 515 located in 8 venues.

From the baseline month of June 2000 to June 2004 total revenue increased in Maribyrnong Plus by 0.6 per cent and revenue per machine by 12.1 per cent. The number of machines declined from 1,684 to 1,540 in this period, a decline of -8.6 per cent. In contrast, while the number of machines remained constant in the eight venues comprising the leakage point, total revenue increased by 9.7 per cent and revenue per machine also by 9.7 per cent. In both areas it therefore appears that machines were used more intensively with only the smoking bans having any moderating impact on net gaming revenue. Again, we find no evidence in the data presented here (or at the individual venue level) that regional caps reduced the level of gaming expenditure in the

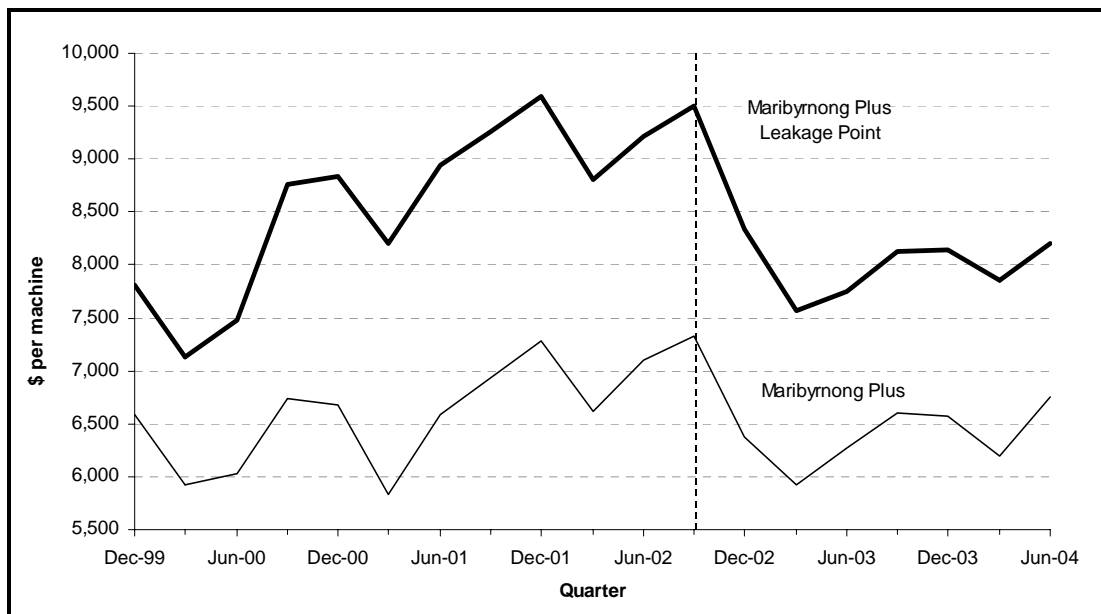
cap regions and no evidence that the caps affected gaming expenditure in the leakage regions. We test to verify this conclusion in Section 6.

Figure 5.17
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Maribyrnong Plus and Leakage Point



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.18
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Maribyrnong Plus and Leakage Point



Source: Calculated from data supplied to the researchers by OGR (2004).

Table 5.13
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Maribyrnong Plus and Leakage Point

Quarter	Maribyrnong Plus		Maribyrnong Plus: Leakage Point	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	6,581	1,308	7,817	507
2000				
March	5,916	1,287	7,133	515
June	6,025	1,306	7,479	515
September	6,732	1,320	8,766	515
December	6,676	1,327	8,835	515
2001				
March	5,838	1,323	8,203	515
June	6,581	1,317	8,947	515
September	6,929	1,309	9,260	515
December	7,288	1,309	9,590	515
2002				
March	6,619	1,302	8,813	515
June	7,105	1,297	9,215	515
September	7,330	1,296	9,495	515
December	6,380	1,297	8,340	515
2003				
March	5,921	1,253	7,563	515
June	6,276	1,234	7,745	515
September	6,609	1,234	8,126	515
December	6,575	1,235	8,137	514
2004				
March	6,201	1,193	7,855	515
June	6,755	1,172	8,200	515

Source: Calculated from data supplied to the researchers by OGR (2004).

5.5.3 Darebin Plus and Leakage Point

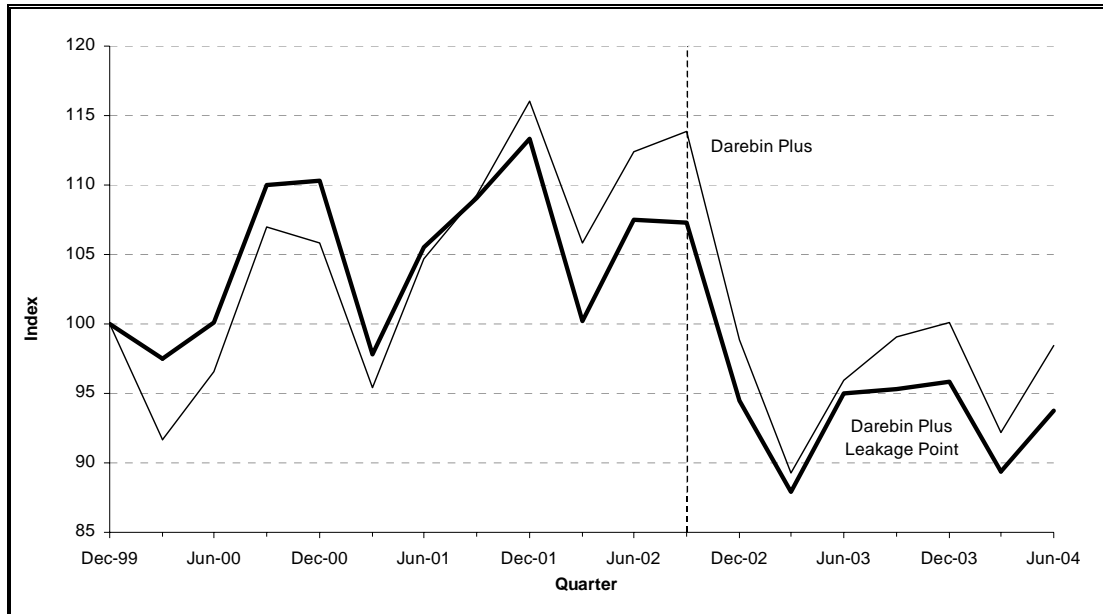
There was no change in the number of machines in Darebin Plus and its corresponding leakage point between February 2002 and February 2004.

In the leakage point there were 5 venues with 286 machines. The 21 machines that were removed from Darebin Plus were removed between December 2000 and December 2001, so both Darebin Plus and the leakage point maintained a stable regime of machine numbers and venues.

There were virtually similar impacts of the smoking ban and changes in revenue over time. In regard to the smoking ban, revenue declined in Darebin Plus by –13.5 per cent and the leakage point by –12.6 per cent respectively (September 2002 to June 2004). With an unchanged number of machines total revenue declined in the caps withdrawal phase in Darebin Plus by –6.9 per cent and the leakage point by –6.5 per cent; revenue per

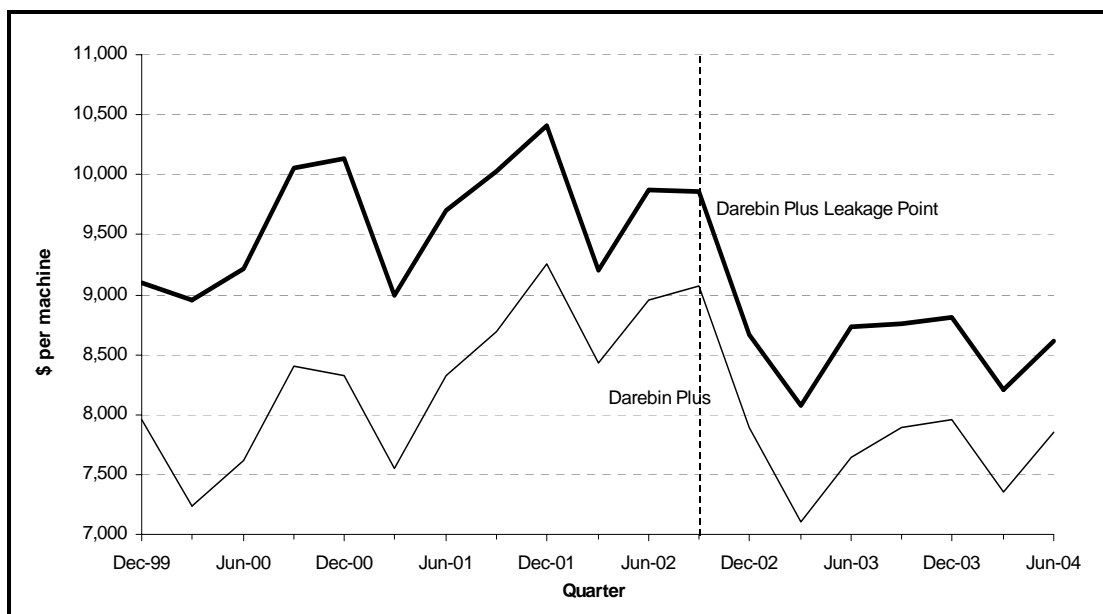
machine declined at virtually exactly the same rate (i.e., -6.9 and -6.5 per cent). These trends are shown in Figures 5.19 and 5.20 where the two regions record identical changes.

Figure 5.19
Index of Net Gaming Revenue: 1999-2004
Quarterly Average (Base: Oct-Dec 1999 = 100)
Darebin Plus and Leakage Point



Note: Graph starts from fourth quarter of 1999 and ends at second quarter of 2004.
Source: Constructed from data obtained from OGR (2004).

Figure 5.20
Net Gaming Revenue Per Machine
Quarterly Average, December 1999 – June 2004 (\$ per machine)
Darebin Plus and Leakage Point



Source: Constructed from data obtained from OGR (2004).

Table 5.14
Revenue per Machine and Number of Machines
Quarterly Average, December 1999 – June 2004
Darebin Plus and Leakage Point

Quarter	Darebin Plus		Darebin Plus: Leakage Point	
	Revenue per Machine (\$)	Number of Machines	Revenue per Machine (\$)	Number of Machines
1999				
December	7,962	1,533	9,093	289
2000				
March	7,231	1,548	8,959	286
June	7,613	1,549	9,214	285
September	8,406	1,554	10,060	287
December	8,318	1,553	10,138	286
2001				
March	7,544	1,543	8,995	286
June	8,324	1,535	9,696	286
September	8,697	1,534	10,024	286
December	9,259	1,530	10,414	286
2002				
March	8,430	1,532	9,208	286
June	8,957	1,532	9,875	286
September	9,069	1,532	9,855	286
December	7,893	1,529	8,661	287
2003				
March	7,106	1,533	8,078	286
June	7,649	1,531	8,727	286
September	7,891	1,532	8,759	286
December	7,963	1,534	8,807	286
2004				
March	7,350	1,531	8,208	286
June	7,846	1,532	8,612	286

Source: Calculated from data supplied to the researchers by OGR (2004).

5.6 Assessment of the Impact on Problem Gamblers

Because machine utilisation rates were nowhere near 100 per cent then *a priori*, it is reasonable to assume that there would be minimal displacement effect or “crowding out” of gamblers, following the removal of 406 machines over the three years. A likely effect of the cap (and what we observed) is, that the utilisation rate of the remaining machines went up, or did not decline as much as machine numbers declined (reflected in higher NGR per machine) as there were fewer machines for recreational and problem gamblers to use. Unfortunately, more precise information on utilisation rates is not available and is not able to be accurately estimated because data was not available on time of day/time of play.

Information on utilisation rates would help to inform whether committed or problem gamblers changed behaviours as a result of the loss of machine. For example, perhaps this latter group shifted the time of play to earlier in the morning or later in the evening to avoid peak times where recreational gamblers were present. The comments of venue owners (see Section 5.8) indicate that they did observe some changes in gambling habits to accommodate the reduction in machines — but it was certainly not that problem gamblers ceased to play. Machines were used more continuously as supported by the increase in net gaming revenue per machine.

Another way to assess the potential impact of the regional cap on problem gamblers is to review the data on those in counselling to observe whether an increase in those participating in counselling was realised. This is at best a proxy measure; in actual fact, the data for those in counselling from the twenty most vulnerable LGAs shows a decline over 2002 and 2003 following the first two periods in which machines were removed. For the five capped regions, those in counselling actually declined from 418 to 230 persons. The total in counselling for all twenty regions and all Victoria also declined as shown in Table 5.15. Participation by problem gamblers in services to assist them is obviously subject to a number of variables. It is noticeable that when advertising campaigns are conducted through radio, television and newspapers that contact with gambler’s help services rises quite dramatically and waiting lists extend. The initial contact does not always translate into attendance at formal counselling sessions.

Certainly, we could find no evidence that the regional cap had any positive influence on problem gambler counselling rates or those seeking assistance through Helpline, a gateway into treatment or counselling. Calls to Victorian Helpline over the period 2001-02 to 2003-04 due specifically to gambling problems represented 67 per cent, 69 per cent and 65 per cent respectively. The total number of calls also declined from 16,450 (2001-02) to 12,347 (2003-04) in tandem with those in counselling.

Table 5.15
Problem Gamblers in Counselling in Twenty Most Vulnerable LGAs & Total

Region	2000	2001	2002	2003
Maribyrnong	44	70	59	40
Greater Dandenong	120	135	133	75
La Trobe	80	99	64	41
Bass Coast	13	23	21	11
Darebin	142	194	141	63
East Gippsland	41	37	58	63
Warrnambool	53	79	78	34
Hobsons Bay	78	149	86	59
Ballarat	98	124	123	82
Melbourne	44	66	61	46
Hume	114	168	138	45
Whittlesea	98	172	154	59
Brimbank	107	186	185	129
Greater Geelong	162	214	157	122
Wyndham	59	138	124	71
Moonee Valley	89	180	137	77
Mildura	63	83	61	35
Moreland	147	195	153	66
Greater Shepparton	59	76	80	84
Monash	105	85	133	119
Total	1,716	2,473	2,146	1,321
Victorian Total	3,891	5,309	4,832	3,508

Source: Victorian DHS (2004).

However, this data needs to be treated with a great deal of caution as individuals may choose other support options in preference to gambling counselling services. As already noted, the timing of statewide and local advertising can influence help seeking behaviour and there is a difference between those actually attending services and those who seek information on problem gambling. This last point is summarised by the Victorian Helpline Services provider:

“In our experience of providing Helpline services in other health areas and jurisdictions, this “newness” (i.e., relatively recent phenomenon of problem gambling) makes treatment seeking particularly susceptible to community awareness and the level of normalisation around problem identification and help seeking. This is especially the case in an area such as gambling, which is characterised by high levels of isolation, guilt and secrecy. This is also highlighted in the proportion of Helpline callers who call in relation to a well entrenched gambling problem as opposed to earlier identification of potential problems.”⁴

⁴ Email correspondence. Turning Point Victoria, 27 September 2004.

We stress again that statewide data and data on the cap regions for the take-up of counselling and/or information through Helpline services does not provide any support to the proposition that the regional cap encouraged problem gamblers to seek out counselling, referral or information. It is unlikely that there was an uptake in self-help, private clinical referrals or other treatment methods as a result of the cap. However, we cannot conclude from this that the regional cap had no impact on problem gamblers — it is just not evident in the data reviewed here.

5.7 Industry Assessment of the Impact of the Caps

The researchers wrote to Tabcorp and Tattersall's (June 2004) to invite the two operators to provide their assessment of the impact of the regional caps program. A copy of that letter is included at Appendix 5. A formal interview was held with Tabcorp staff in September 2004 and an outline of the interview schedule is shown at Appendix 5. Tattersall's declined to be interviewed and to respond to the letter of request citing the reason, that the organisation was in the process of preparing to list on the Australian Stock Exchange.

An observation by the industry is that the introduction of the smoking bans was most significant for several reasons. It represented a "shock to the market", forcing a review of the drivers of growth and management of the industry, issues that were perhaps neglected given the strong growth experienced by the industry prior to the introduction of the smoking ban. It encouraged a review of business strategies and customer market trends. One response has been to alter the profile of machines to lower credit value (i.e., 1¢, 2¢ machines). Unfortunately, as machines are approved within a range of 1¢ to \$1 and the credit value can be altered relatively easily⁵, it is not possible to compare the profile of credit values at different points in time.

In written correspondence to the Centre, TABCORP advised the following with respect to the caps policy, industry impact and potential to influence problem gambling:

"TABCORP has not analysed whether the removal of EGMs affected the time of day/time of play. Anecdotally, we do not believe there has been a change.

We are unable to comment in relation to regional caps having a positive or negative affect on problem gambling. Anecdotally, we believe it is unlikely that there has been an impact.

TABCORP's assessment of credit values on machines is ongoing and occurs in response to changes in customer preferences.

The only significant impact we have observed is a change in customers' ability to play in times of peak demand (i.e., when, in venues where machines have been removed because of the caps, there may not be sufficient machines to satisfy demand in peak times)."

One of the important consequences of the caps is that it slowed the re-allocation of machines that were instructed to be removed from four of the five capped regions. This situation arises because of the process instigated by the VCGR whereby community social impact statements are required and local councils are able to be involved when

⁵ Notification of these changes are provided by the operators to the OGR.

considering gaming licence applications. For the operator, the cost of the application, lodgement and legal work and the time taken to process the application imposes delays when shifting machines. Operators are required to give greater consideration to the location of machines in this more complex multi-layered process. To the extent that the regional caps policy forces the removal of machines and/or more municipalities are subject to caps on EGM numbers then further constraints will exist on the placement of EGMs.

The availability of different types of machines and/or games is important, to provide for consumer preferences and industry sustainability. The reality is that operators do seek to provide a broad range of games to attract and retain EGM players. They offer a range of credit values designed to meet player preferences. So while it may seem that regions or municipalities are “over-endowed” with machines numbers, the critical variables are:

- the utilisation rate of machines;
- the playing style of the gambler which influences player losses (i.e., number of lines, credit value, intensity of play);
- hours of opening and access to gaming;
- the pattern of play, including time of day/time of play; and
- the range of credit values and player return rate options.

While net gaming revenues are high in some localities (in total and per capita) they are relatively low when measured against the potential revenue capacity of the machines.

Victorian Treasury concurred with the researchers that the actual number of machines in an area is only one consideration. This is because the current number of machines (in all regions of the state) do not operate at anywhere near their capacity and utilisation rates are relatively low. The researchers estimate that the utilisation rate currently averages less than 20 per cent to 25 per cent across the network. One of the major reasons for the number of machines given their relatively low utilisation rate, is to provide the customer with a range of specific games, credit values and machine options.

5.8 Impact of the Caps: Assessment by Venues

During the course of this study selected venues were visited and surveys were mailed out to assess the perspective of venue owners of the impact of the caps and the smoking ban. Venues in the five cap regions (N=94; 33 per cent response rate), the five control regions (N=77; 42 per cent response rate) and selected venues making up the potential “leakage regions” (N=31; 26 per cent response rate) were sent a mail out questionnaire in September 2004. The interviews and responses of venue owners and gaming area managers to the mail out survey are considered in this section. The survey achieved an overall response rate of 36 per cent and was representative of clubs and hotels, Tabcorp and Tattersall’s venues.

Commenting upon the impact of the smoking ban first, 87 per cent of venues did not believe the ban had “assisted in reducing problem gambling”, although 97 per cent of all venues reported a decline in gambling participation. The decline in total revenue supports the decline in gambling participation. Observations of staff were quite varied:

“It has had a greater impact on the recreational gamblers”.

“Customers leave the EGM to smoke and quite often don’t return. Players do not stay as long”.

“It had a greater impact on recreational gamblers. Problem gamblers tend to wait to get the free spins, then they go and have a cigarette whilst the EGM is operating autonomously”.

“Problem gamblers will gamble anyway. It has not reduced problem gambling. The keen gamblers seem to be unaffected by the smoking bans and continue to gamble in a similar fashion”.

If there was a consensus from hotels and clubs, it was that the problem gambler was largely unaffected (although smokers were affected); however being forced to take breaks, to cash out machines or to change gambling and smoking habits provided an interruption to play and some did not return. Notwithstanding, the significant decline in revenue suggests that many committed gamblers did reduce the amount they gambled, and probably the length of time spent gambling following the introduction of the smoking ban.

The other impact was that 50 per cent of venues reported a decline in employment (or reduction in hours) but significant employment losses are unlikely to be associated with a decline in gambling income as the jobs-to-income ratio is relatively low. Overall, nineteen venues surveyed in the caps regions reported they lost EGMs and this resulted in a combined loss of 26 full-time, part-time or casual positions (most positions were casual positions). The Researchers have previously estimated that for venues (hotels, taverns, bars and clubs) with gaming facilities, the jobs-to-income ratio is as follows:

- for gambling income (3.2 jobs per \$1 million of income);
- for sales of liquor and other beverages (8.3 jobs per \$1 million of income); and
- for meal and food sales (20.2 jobs per \$1 million of income).⁶

This analysis reinforces the idea that reallocating the consumer dollar away from gambling to other goods and services in hospitality venues tends to boost employment levels in the sector, because employment in other areas rises by more than gambling employment falls.

Employment losses could also be associated with a reduction in trading hours, where venues reported a reduction in gaming room operating hours as a result of the restrictions in 24 hour trading.

⁶ SA Centre for Economic Studies (2004), “Consideration of budgetary, employment and welfare effects arising in connection with smoking bans in hospitality venues”. Report prepared for the Cancer Council of South Australia.

The views of gaming managers and venue owners were sought on whether, as a result of the caps policy, they noticed ‘any change in the pattern of player behaviour’, whether for the most regular players a change in behaviour was observed and whether the operators changed or substituted the credit value of machines and/or the type of machine as a result of the caps policy. The results are summarised in Table 5.16.

Table 5.16
Change in the patterns of player behaviour by venue category

	Cap Venues (Per cent)	Control and Leakage Venues (Per cent)
No discernible change	42.0	51.3
Unable to get on machine in peak times	35.5	18.0
Once idle machines used more continuously	25.8	10.3
Play more intensively on machine	25.8	10.3
Change in pattern of time of play/time of day	19.4	18.0
Players queued to access machines	19.4	7.7

Source: SACES Survey of Venues, 2004.

Observations of a change in player behaviour were strongest in those venues that had lost machines; however, it was the recreational or casual gambler who was seen to be most affected particularly in the Bass Coast Shire during the holiday season. Obviously the popularity of a venue will account for “busier times and peak periods”; however, only two venues indicated that several regular gamblers left a venue. Overall, regular players changed their gambling habits such as “they come earlier and stay longer” or they changed the time of day to avoid peak times. The majority response was that the caps policy had no effect at all because the proportion of time in which any gaming room is full is relatively small. Even those venues that lost machines indicated either the machines lost were not popular or “we had sufficient machines to cover most of the requirements”.

While both Tattersall’s and Tabcorp replace machines and change credit values as a normal part of business operations, the hotels and clubs overwhelmingly responded that more 1 cent and 2 cent EGMs had been installed. Often the change had been at the request of the venue. Newer machines also enable more lines to play and are said to be more popular with gaming customers. However, we find no evidence that an increase in the proportion of 1 cent and 2 cent machines was as a result of the caps policy. The change appears to be a response to consumer preferences, improvements in machine technology, normal business practice to provide variety in the denomination mix to achieve balance within a venue and replacement of older machines that previously allowed \$100 note acceptors. And further, while 63 per cent of venues indicated the operators had changed the credit value of machines, this was the same for venues in the caps, control and “leakage’ regions. There is no evidence that the type of machine was subject to systematic change. The installation of newer machines with more lines to play and newer machines linked to jackpots represent normal upgrades and deployment of machines. Again, both operators endeavour to maintain a “fresh feel to the product”, upgrading machines and games — so older machines were removed, newer machines installed, there was an on-going phase out of the \$100 bill note acceptors and this was ‘fairly regular business practice’. In fact, we note that 41 per cent of venues in the control

and “leakage” regions had experienced changes to machines, while only 30 per cent of venues in the cap region responded that operators had changed machines. We followed these issues up in our interview with Tabcorp and we were able to confirm that changes in credit value, machine type, the replacement rate of machines were not altered in response to the caps policy.

5.9 Concluding Remarks

An examination of trends and patterns in gaming expenditure, data on revenue per machine, initial comparison of the cap, control and leakage point areas and the impact of policy induced changes such as the ban on smoking and on 24 hour gaming leads to the tentative conclusion that other factors, apart from the reduction in machine numbers, were more important in contributing to a decline in revenue and any potential influence on problem gamblers.

Over the period March 2002 to June 2004, we note that for all Victoria, there was a decline in revenue of -6.4 per cent with an almost negligible reduction in machine numbers (-0.6 per cent) which suggests other factors were at play. In our control regions, with no reduction in machine numbers 4 of the 5 regions experienced a decline in revenue of between -6.2 and -8.8 per cent. Ballarat which actually lost several machines experienced a growth in revenue of 3.3 per cent. All metropolitan cap and control regions (6 regions) experienced a fall in revenue of between -6.2 and -8.8 per cent (compared to the all metropolitan average of -6.1 per cent) but did so whether or not they lost machines.

These observations reinforce our view that other factors were more important than the reduction in machine numbers.

We find at this stage of our analysis that the ban on smoking in gaming areas and phased removal of 24 hour gaming did reduce gaming expenditure. Whether this result was achieved from a reduction in gaming expenditure by problem gamblers is less certain.