
***An Assessment Of The Benefits
And Costs Of The Manitoba
Lotteries Corporation***

September 1995

Submitted by:

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Highlights

□ Gaming industry currently and outlook.

- ▶ The gaming industry is considered to be young and experiencing rapid growth.
- ▶ Acceptance of casino gaming and rates of participation in gaming activities are high in Manitoba and other parts of North America.
- ▶ The number one reason for gaming in Manitoba is "for fun or entertainment".
- ▶ The outlook for casino gaming over the next 10 years in North America is for dramatic growth.
- ▶ Increased competition for the gambling dollar will occur. Spending of Manitobans and tourists at MLC facilities is at risk.
- ▶ MLC will need to be innovative in this competitive environment to preserve existing economic benefits.

□ Economic impact of gambling in Manitoba.

Total impact (\$000,000's).

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
Capital Costs	7.5	16.1	2.7	2.1	60
MLC Operations	110.5	230.4	113.2	87.2	3,416
MLC Beneficiaries	265.9	547.8	181.3	150.7	4,576
Prize Winnings	136.9	108.1	85.2	47.1	1,506
WCLC Operations	<u>23.1</u>	<u>45.8</u>	<u>20.1</u>	<u>14.1</u>	<u>363</u>
Total Impact	544.0	948.2	403.1	301.1	9,922

- ▶ In total, over \$544 million is spent in Manitoba as a result of MLC and related gaming activities.
- ▶ This spending results in \$403 million in GDP for the province.
- ▶ These expenditures result in \$301 million in labour income and almost 10,000 jobs.

Highlights (cont'd)

- ▶ A 1993 study comparing the economic impact of lotteries and gaming to other entertainment commodities showed that because a high degree of labour and local goods and services are procured by MLC and its beneficiaries—lotteries and gaming are among the highest economic impact entertainment industries in Manitoba.

Rank	Entertainment Option	Impact Generated From \$1 million spending	
		GDP (\$000's)	Employment (PYs)
1.	Restaurants	997	29.6
2.	Net spending lotteries & gaming	783	22.0
3.	Theatre, sports, recreation services	798	20.4
4.	Gross spending lotteries & gaming	682	15.8
5.	Movies	423	12.2
6.	Newspapers & magazines	468	9.7
7.	Recreational vehicles	339	8.2
8.	Recreational equipment	260	7.3
9.	Package travel tours	174	5.0
10.	Home entertainment equipment	126	3.4
11.	Gasoline (travel by car)	305	2.5

□ Tourism and cross-border gambling.

- ▶ 375,000 visits were made by out-of-province tourists to the Crystal Casino, McPhillips Street Station and Club Regent in 1994/95.
- ▶ These visits were made by approximately 100,000 tourists (assuming 3 or 4 visits per tourist.)
- ▶ Tourist expenditures generated 1,300 person years of employment and \$36 million of GDP.
- ▶ It is likely that MLC creates approximately 40,000 tourist visitors from out-of-province that would not occur in the absence of existing gaming venues.
- ▶ MLC recaptures spending of Manitobans that would otherwise go to casinos outside the province.

Highlights (cont'd)

❑ Deficit reduction and provincial credit rating.

- ▶ The balanced budget reported by the Manitoba government in the fiscal year 1994/95 was due in large measure to the transfer of funds from MLC.
- ▶ According to Dominion Bond Rating Service (DBRS), "The ability to raise revenue through gaming is one of the positive factors considered in our rating of Manitoba's debt. Gaming is considered by DBRS to be a more desirable form of raising revenues than personal and corporate income taxes, as well as sales taxes."

❑ MLC impact on Assiniboia Downs.

- ▶ North America has witnessed a decline in the horse racing industry. This is attributed to changing consumer tastes and preferences.
- ▶ 140 VLTs at the Assiniboia Downs contributed to 17% of revenues in 1994.
- ▶ Without the VLTs, the Assiniboia Downs could be losing over \$1 million annually, based on VLTs contribution to profits.

❑ Effect of MLC gaming on charitable gaming.

- ▶ Revenues of charitable gaming have steadily increased from 1991 to 1994. This is consistent with trends throughout Canada.
- ▶ Increased competition has occurred for the gaming dollar from an increased number of charities, as well as MLC. Charitable gaming margins have been reduced.
- ▶ Net income of charitable gaming has slipped \$1.5 million, or -6% in the last two years. In our view the overall gaming profits available to beneficiary groups through the activities of MLC overshadow the slight decline in net income of charitable groups.

❑ Impact of gaming on small business

- ▶ Empirical research demonstrates that in the short term (less than one year), gaming may be a substitute for consumer spending that would alternatively occur on other entertainment goods/services offered by Manitoba small businesses. This "substitution effect" is negated over time through an expanding disposable income pie.

Highlights (cont'd)

- ▶ Many economic variables effect the performance of small business. Overall, retail sales and disposable income have grown in Manitoba since 1991. Penetration of new household products, such as computers and CD players, have had substitution effects—like gaming—in the Manitoba economy.
- ▶ Since gaming is just one variable in the economy, it is difficult to conclude a positive or negative effect on small business in Manitoba.
- ▶ Positive long-term growth is evident for all entertainment goods and services.

❑ Crime and gambling.

- ▶ No empirical evidence exists to demonstrate that legalized gaming results in increased criminal activity. Some evidence exists that gaming reduces crime overall by contributing to economic development; increasing employment, incomes and educational attainment.
- ▶ Some evidence exists that prohibition of gaming encourages illegal gaming—to meet consumer demand. This illegal activity results in increased crime rates.
- ▶ Some evidence exists to suggest that pathological gamblers are more likely than the general population to be involved in crimes of fraud and embezzlement.

❑ Problem gambling.

- ▶ Manitoba has a prevalence rate of 1.3% for current “probable pathological gamblers”. This rate was measured for the first time in 1993 using the South Oaks Gambling Screen.
- ▶ The prevalence of problem gamblers in Manitoba is similar to other Canadian jurisdictions that have used the South Oaks Gambling Screen.
- ▶ Rates of prevalence are not necessarily correlated with the potential demand for treatment services. This is reinforced by the fact that the Addictions Foundation Of Manitoba treated approximately 300 problem gamblers in 1993, compared to the potentially 5,000 adults that were defined as probable pathological gamblers in Manitoba using the South Oaks Gambling Screen.

Highlights (cont'd)

- ▶ No definitive research suggests that the availability gambling influences the rate of prevalence of problem gambling.

□ Conclusion

- ▶ A significant loss of economic benefits would occur in Manitoba without MLC.
- ▶ Potentially higher taxes would occur in the province to pay for the deficit and debt without MLC.
- ▶ Increased leakage of Manitoba dollars to cross border casinos would occur without MLC.
- ▶ No incremental tourist visits to the province would occur that are now generated by gaming. This would result in lost economic benefits.
- ▶ Net incomes of charitable gaming groups in the province would likely increase without MLC.
- ▶ Small business would face less short-term competition for the entertainment dollar without MLC. However, little long-term differences would occur to small business without MLC.
- ▶ Crime would increase without MLC as illegal operators would attempt to meet consumer demand for gaming.
- ▶ Empirical research suggests the presence or absence of casino gaming is not associated with rates of problem gambling.

Study Objectives And Approach

Study objectives

- ❑ **A study was launched in May of 1995 to accurately and objectively summarize the economic benefits and potential social costs associated with gaming in Manitoba.**
- ❑ **Specific objectives:**
 1. **To respond to the Crown Corporations Council recommendation that an independent and objective study be conducted of the economic impact of gaming in Manitoba.**
 2. **To provide The Manitoba Lottery Policy Review Committee with current and objective information.**
 3. **To assess and summarize quantitative and qualitative information concerning economic benefits and costs of gaming in Manitoba.**
 4. **To critically review the recent report: *An Analysis of the Net Social Benefits from Legalized Gaming in the Province of Manitoba, April 7, 1995; Philippe Cyrenne*. (Our analysis is included in Appendix A.)**

KPMG's approach

□ We employed three consulting principles in this study:

1. A balanced and credible approach.

- ▶ We investigated and analyzed both benefits and costs. We relied on objective and rigorous evidence that meets professional standards of validity and reliability. Where no such evidence exists, we highlight this fact.

2. Use of secondary sources.

- ▶ We identified and reviewed literature on the economic benefits and costs of legalized gambling. We selected works that we deem to be authoritative based on the methods employed.

3. Original research for quantitative economic analysis.

- ▶ We analyzed the expenditures of MLC and beneficiary groups to quantify economic impacts. We researched the economic performance of the province of Manitoba.

We recognize the need for a well balanced assessment that decision makers can rely upon with a sufficient level of confidence to make policy decisions.

Defining Economic Benefits And Costs

In order to understand the net effect of gaming in an economy, both benefits and costs of this activity must be considered.

The terms economic benefit and costs are used throughout this report in a manner consistent with everyday discourse. This report is not intended to be a technical economic benefit/cost study of gambling in Manitoba. Accordingly, economic benefits refers to positive economic impacts and economic costs refers to negative economic impacts.

Defining economic benefits and costs

❑ Two fundamental components must be considered:

- ▶ Economic benefits.
- ▶ Economic/social costs.

❑ Economic benefits include:

- ✓ Job Creation.
- ✓ Revenue Creation—labour income, income of suppliers to the gaming industry, income for beneficiary groups, tax revenue to government, spin-off effects with local businesses and consumers.
- ✓ Increased tourism—through gaming venues, more visitors are attracted to Manitoba, or stay longer, thus creating economic benefits.
- ✓ Reduction in cross border gambling—through reduced numbers of Manitobans travelling to other jurisdictions to gamble, more money is held in the Manitoba economy, thus creating benefits.

It is important to note that these indicators are widely accepted measures.

Defining economic benefits and costs (cont'd)

□ Economic and social costs may include:

- X** Problem gamblers—persons for whom gambling becomes an addiction, resulting in behaviors that cause negative consequences for themselves, their families and friends, and their employers.
- X** Crime—incidence of violent and non-violent crime that is attributable to gambling activity.
- X** Charitable gaming—effect of increased competition from government-sponsored gaming on the net income from gaming activities of charitable groups.
- X** Small business impacts—potential decline in revenue of Manitoba small businesses offering entertainment goods and services, due to consumer spending (or substitution) on gaming versus other goods and services (a meal in a restaurant for example).

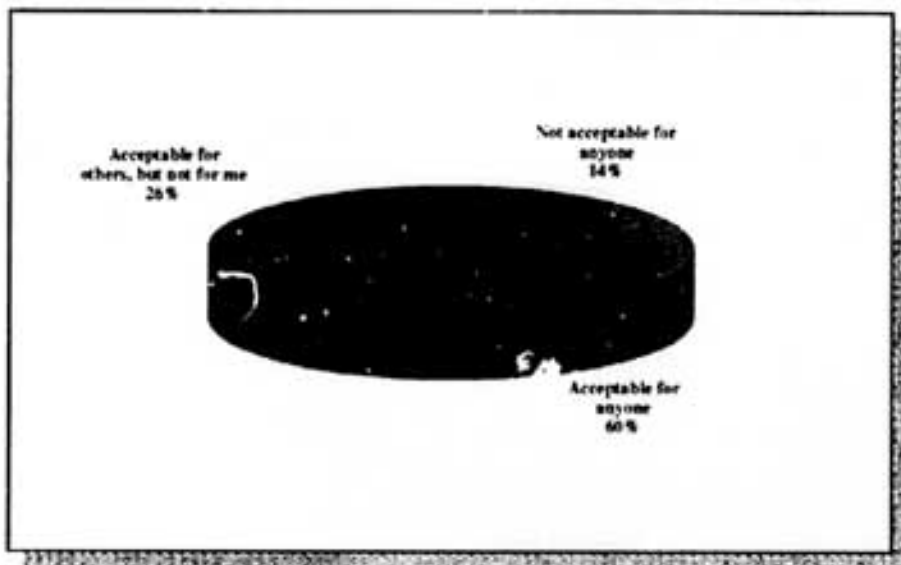
It is important to note that considerable debate exists between anti-gaming groups, the gaming industry, researchers and academics regarding whether or not negative costs result in an economy as a consequence of the above items. In this report we attempt to show whether or not empirical evidence exists that demonstrates any of the above items acting as true costs. We also look at the potential magnitude (where possible).

Gaming Industry Currently And Outlook

The gaming industry is young and experiencing rapid growth. The North American outlook is for continued expansion over the next ten years.

Acceptance and participation rates have grown

- ❑ **Acceptance of casino entertainment in Canada.**



Source: Harrah's Survey of Casino Entertainment, 1995

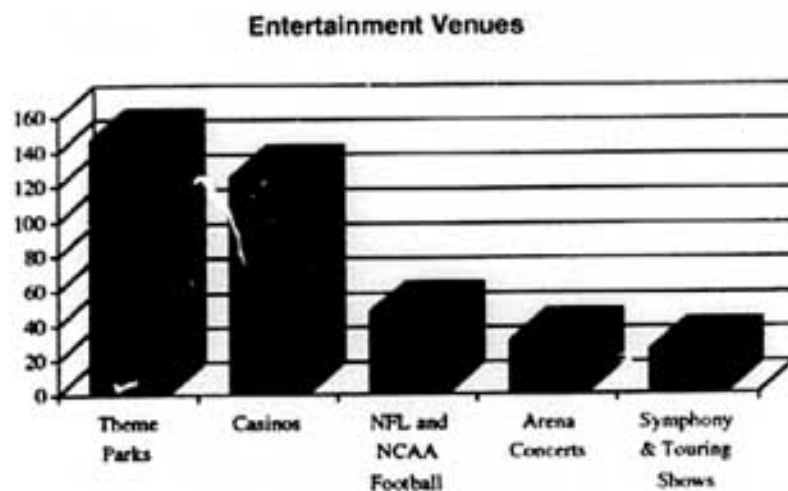
- ❑ **87% of Manitobans have participated in at least one gambling activity in the past year, according to a survey carried out for MLC in 1993.**
- ❑ **Favorite gambling activities of Manitobans are lottery or scratch tickets (28%), bingo (9%), casino slots (8%), VLTs (7%) and others.**

Manitobans are attracted to gaming as a form of entertainment. The number one reason for gambling in Manitoba expressed in a 1993 survey was "for fun or entertainment" by 71% of respondents.

U.S. gambling participation trends

According to Harrahs' Survey of Casino Entertainment:

- ▶ Attendance at U.S.-based casinos is growing rapidly.
- ▶ Total number of casino visits increased by 36% in 1994, with a total of 125 million visits to casinos in the U.S.
- ▶ The number of annual visits has grown by 172% since 1990.
- ▶ Median income of casino players is \$41,000 (U.S.) compared to \$30,400 for the U.S. population.
- ▶ Casino entertainment ranks second to theme park visits as a form of entertainment, as seen in the following graph:



Gaming industry outlook

- ❑ **Major new casinos are in various stages of consideration, planning, or construction in Canada:**
 - ✓ Aboriginal advocates for a casino in Vancouver.
 - ✓ Major private sector proponent for a casino in Calgary. Aboriginal proponent also exists for a casino in Calgary.
 - ✓ Regina casino under construction.
 - ✓ Ontario Casino Corporation plans for casinos in Toronto-Collingwood area, Niagara Falls, Ottawa and Sault Ste. Marie.
 - ✓ Proposed casinos in Hull, Quebec. Aboriginal groups are also advocating casinos in Quebec.
 - ✓ Halifax recently opened a temporary casino, with a permanent one slated to be built. Additional casino planned for Sydney, Nova Scotia.
- ❑ **Harrah's forecasts that industry revenues of U.S. operators may increase from \$16.5 billion in 1994 to \$33 billion over the next decade based on:**
 - ✓ Expansion of riverboats currently offered in 5 states to more than 10 states.
 - ✓ Expansion of Indian Casinos offered in 17 states to more than 25 states.
 - ✓ Expansion of land-based casinos.

The gaming industry will continue to grow based on consumer demand and changes in legislation. According to the Kiplinger Washington Letter; "Gambling will be the fastest growing industry of the nineties."

Manitoba Implications of Market Outlook From An Economic Benefit/Cost Perspective

- ❑ Increased competition will be created amongst gaming operators as the product lifecycle moves from growth to maturity. Operators, such as MLC, will need to be innovative to preserve existing economic benefits.
- ❑ The tourist dollar will face increasing competition from other jurisdictions as the consumer is presented with more choice—resulting in more Manitobans leaving the province to gamble, as well as fewer visitors coming to Manitoba primarily to gamble.

Increased competition will mean MLC will have to carefully adjust its strategy to mitigate Manitobans from travelling elsewhere, as well as preserve the attractiveness of Manitoba to out-of-province visitors.

Economic Impact of Gaming In Manitoba

In this section, we examine the economic impact of MLC and its beneficiaries. We also identify the tourism impacts and effect of VLTs at the Assiniboia Downs.

Introduction

□ The MLC has a significant impact on the economy of Manitoba.

- ▶ The impact includes direct, indirect and induced effects, each of which is included in the results of this study.
 - Direct—the value added arising from payments to labour, income earned by business and taxes from the first round of spending.
 - Indirect—the effects of subsequent rounds of spending—e.g. supplier purchases.
 - Induced—arise from the re-spending of labour income and income of unincorporated businesses and on consumer goods and services.
- ▶ The ratio of total impact to the direct impact is referred to as the multiplier effect.

□ The results of an economic impact assessment are reported along the following dimensions.

- ▶ Gross Output—gross expenditures on local goods and services, payments to labour and business profits.
- ▶ Gross Domestic Product—a net measure of economic impact that measures only the value added in each round of spending.
- ▶ Labour Income—all payments to labour in the form of wages and salaries, net income to unincorporated and supplementary labour income.
- ▶ Employment—person years of employment.

Introduction (cont'd)

- ☐ **Since the focus of the economic impact study is on Manitoba alone, all operations or expenses that do not originate in the province have been excluded.**
- ☐ **Data segmented into five lines of expenditures.**
 - ▶ Capital Costs—include maintenance, upkeep and replacement of current equipment.
 - ▶ MLC Operations—include current expenditures made by MLC, its licensees and commissions paid to retailers.
 - ▶ MLC Beneficiaries—expenditures by the ultimate recipients of gaming proceeds.
 - ▶ Prize Winnings—prize winnings of Lotteries and from Licensees were included.
 - ▶ WCLC Operations—operations of the WCLC that are attributable to Manitoba.
- ☐ **Data for each segment has been allocated to each of the seven product lines.**
 - ▶ Lottery.
 - ▶ Bingo/Breakopen.
 - ▶ McPhillips Street Station.
 - ▶ Club Regent.
 - ▶ Crystal Casino.
 - ▶ Licensing/Licensees.
 - ▶ Video Lottery Terminals (VLT's).

Methodology

❑ Capital Costs, MLC Operations and WCLC Operations.

- ▶ Based upon 1994-95 operating results, MLC expenses were segmented into various Statistics Canada commodities.
- ▶ Each commodity has a specific multiplier for the four various dimensions in question—gross output, GDP, labour income and employment.
- ▶ The various multipliers, as supplied by Manitoba Bureau of Statistics, were applied to the spending figures to arrive at estimates for each of the dimensions.

❑ MLC Beneficiaries and Prize Winnings.

- ▶ Source data derived from 1994-95 operating results.
- ▶ MLC Beneficiary and Prize Winnings were calculated differently.
- ▶ Estimates for each dimension were based upon multipliers derived from the previous MLC Economic Impact Study.

Economic data

□ Capital Costs (\$000's).

Capital Project	Total Corporate Additions	Amount outside Manitoba	Amount in Manitoba
Equipment Additions	13,340	9,101	4,238
Building Additions	3,267	0	3,267
Land	<u>2</u>	<u>0</u>	<u>2</u>
Total	16,608	9,101	7,507

Source: MLC financial statements

- ▶ As previously noted, all purchases made outside Manitoba have been subtracted from total expenses.
- ▶ Due to the recent moratorium placed on MLC operations, no plans for future expansion were available for analysis.

□ MLC Operations (\$000's).

	Total MLC Operations	Amount outside Manitoba	Amount in Manitoba
MLC Expenses*	45,765	730	45,035
Retail Margins	50,448	0	50,448
Licensee Expenses**	<u>15,000</u>	<u>0</u>	<u>15,000</u>
Total	111,213	730	110,483

* MLC expenses are net of depreciation and amortization

** Licensee expenses are net of licensee fees paid to MLC to avoid double counting

Source: MLC 1994-95 financial statements

Economic data (cont'd)

□ MLC funds provided to beneficiaries (\$000's).

Program	Total Benefit
Community Support Programs	6,068
Culture, Heritage & Citizenship	34,320
Fitness and Sport	13,461
Health	20,878
Education and Training	2,444
Natural Resources	450
Rural Development	17,500
Agriculture	524
Urban Affairs	5,000
Other Appropriations	<u>51,200</u>
Total Lottery Funded Programs	151,755
Deficit Reduction	90,000
Grants to Organizations	3,847
Addictions Foundation Grant	550
Net Revenue Earned by Licensees*	<u>19,749</u>
Total to all Beneficiaries**	265,901

* Includes the subtraction of \$151,000 loss by MLC on Licensee operations

** Net of approximately \$4 million payment made to Saskatchewan and Alberta

Source: MLC financial statements and documentation

- ▶ Deficit reduction is assumed to be funds used by the Government of Manitoba for the purpose of general operating expenses.
- ▶ Total beneficiary dollars exceed net income for the MLC due to the addition of depreciation, amortization and other 'non-cash' expenses.

Economic data (cont'd)

□ Prize Winnings (\$000's).

Product Line	Prize Amounts
Lottery	55,843
Licensee	81,092
Savings	<u>4,235</u>
Total	141,170

Source: MLC documentation

- ▶ Based upon a previous study, it is assumed that 3% of total winnings is saved and not re-spent.
- ▶ Prize winnings of the Casino, VLT's and the two entertainment centres are not included since no set pay-out ratio exists.

□ WCLC Operations—\$23.1 million.

- ▶ WCLC operations are net of retail margins which have already been accounted for under MLC operations.
- ▶ WCLC operations also include the related ticket printing operations of Pollard Banknote Ltd. in Manitoba.
- ▶ WCLC figures are based upon 1991-1992, uninflated, expenditures.

Economic impact on Manitoba

☐ **Capital Costs (\$000,000's).**

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
Lottery	0.1	0.1	0	0	0
Bingo/Breakopen	0	0	0	0	0
McPhillips Street Station	4.1	8.8	1.8	1.4	41
Club Regent	2.2	4.7	0.7	0.5	16
Crystal Casino	0.3	0.7	0	0	1
Licensee	0.4	0.9	0.1	0	1
VLT's	<u>0.4</u>	<u>0.8</u>	<u>0.1</u>	<u>0</u>	<u>1</u>
Total	7.5	16.1	2.7	2.1	60

- ☐ **Given the imposed moratorium, the impact of MLC's capital expenditures for the year is relatively minimal.**
- ☐ **Total spending of \$7.5 million generates over \$2 million in both GDP and labour income and creates 60 jobs .**

Economic impact on Manitoba (cont'd)

❑ MLC Operations (\$000,000's).

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
Lottery	10.7	22.7	11.4	9.1	353
Bingo/Breakopen	4.3	9.1	2.1	1.5	48
McPhillips Street Station	9.0	17.9	10.5	7.9	338
Club Regent	7.6	15.4	8.8	6.8	287
Crystal Casino	8.7	18.2	10.5	8.8	344
Licensee	17.2	36.8	14.6	11.3	234
VLT's	<u>53.2</u>	<u>110.4</u>	<u>55.3</u>	<u>41.8</u>	<u>1,812</u>
Total	110.5	230.4	113.2	87.2	3,416

- ❑ **MLC directly contributes more than \$110 million in spending to the Manitoba economy.**
- ❑ **This spending results in the creation of over 3,400 jobs and adds \$87 million in labour income.**
- ❑ **As well, MLC operations generate \$113 million in GDP for the province.**

Economic impact on Manitoba (cont'd)

❑ MLC Beneficiaries (\$000,000's).

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
Lottery	42.2	86.9	28.8	23.9	726
Bingo/Breakopen	3.6	7.5	2.5	2.1	62
McPhillips Street Station	33.4	68.8	22.8	18.9	575
Club Regent	28.0	57.6	19.1	15.9	481
Crystal Casino	10.6	21.8	7.2	6.0	182
Licensee	20.8	42.9	14.2	11.8	358
VLT's	<u>127.4</u>	<u>262.4</u>	<u>86.8</u>	<u>72.2</u>	<u>2,192</u>
Total	265.9	547.8	181.3	150.7	4,576

- ❑ **The economic impact of the MLC beneficiary operations is very significant to Manitoba.**
- ❑ **Over \$180 million of GDP and \$150 million in labour income is generated from the \$266 million in beneficiary spending.**
- ❑ **Moreover, greater than 4,500 jobs were created in Manitoba as a result of MLC's beneficiary operations.**

Economic impact on Manitoba (cont'd)

☐ **Prize Winnings (\$000,000's).**

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
Lottery	55.8	44.0	34.8	19.2	614
Licensee	<u>81.1</u>	<u>64.0</u>	<u>50.4</u>	<u>27.9</u>	<u>892</u>
Total	136.9	108.1	85.2	47.1	1,506

- ☐ **After subtracting savings, \$137 million is spent in Manitoba as a result of prize winnings.**
- ☐ **These expenditures generate an additional \$85 million in GDP and \$47 million in labour income and create 1,500 jobs.**

☐ **WCLC Operations.**

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
WCLC Operations	20.1	45.8	20.1	14.1	363

- ☐ **WCLC operations in Manitoba contribute over \$20 million to GDP, \$14 million in labour income, and 360 jobs to the Manitoba economy**

Economic impact on Manitoba (cont'd)

□ **Total impact (\$000,000's).**

	Spending	Gross Output	Gross Domestic Product	Labour Income	Employment in Person Years
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MLC Operations	110.5	230.4	113.2	87.2	3,416
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Total Impact	544.0	948.2	403.1	301.1	9,922

- **In total, over \$544 million is spent in Manitoba as a result of MLC and related gaming activities.**
- **This spending results in \$403 million in GDP for the province.**
- **Finally, these expenditures result in \$301 million in labour income and almost 10,000 jobs.**

Comparing economic impacts of other entertainment options

- ❑ In 1993, KPMG did a detailed comparison of lotteries and gaming to other entertainment options commonly sought by consumers.
- ❑ It showed that because a high degree of labour and local goods and services are procured by MLC and its beneficiaries—lotteries and gaming are among the highest economic impact entertainment industries in Manitoba.
- ❑ The key question was—of a sample of ten commodities purchased by consumers, which ones create the most economic impact (i.e. jobs created, labour income, value added).
- ❑ Lotteries and gaming ranked 2nd or 3rd in terms of economic impact, depending upon whether or not a gross (includes winnings of prize winners) or net (excludes winnings of prize winners) perspective is considered.

Rank	Entertainment Option	Impact Generated From \$1 million spending	
		GDP (\$000's)	Employment (PYs)
1.	Restaurants	997	29.6
2.	Net spending lotteries & gaming	783	22.0
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9.	Package travel tours	174	5.0
10.	Home entertainment equipment	126	3.4
11.	Gasoline (travel by car)	305	2.5

Tourism and cross-border gambling

Economic impact of tourist expenditures:

- ▶ In this section we analyze the economic impact of tourist expenditures generated by the Crystal Casino, McPhillips Street Station and Club Regent.
- ▶ Tourist expenditures are defined as expenditures made by tourists to Winnipeg from outside of Manitoba who visited the three facilities, regardless of the purpose of their trips.
- ▶ The number of visits (gate counts) to the three facilities in 1994/95 are as follows:

• Crystal Casino	404,000
• McPhillips Street Station	1,826,000
• Club Regent	<u>1,522,000</u>
• Total visitation	3,752,000
- ▶ Based on on-site surveys conducted by MLC, about 10% of the visitations were made by tourists from outside of Manitoba. Thus 375,000 visits were made by tourists.
- ▶ Assuming each tourist visited the three facilities a total of 3 to 4 times during his/her trip to Winnipeg, 100,000 tourists visited the three facilities.
- ▶ KPMG calculates that these 100,000 tourists spent about \$28 million on accommodation, restaurants, and other retail goods and services during their trips to Winnipeg.
- ▶ The tourist expenditures generated 1,300 person-years of employment and \$36 million of GDP.
- ▶ The above impacts are generated by all tourists who visited the three facilities. Based on surveys conducted by MLC on-site at the Crystal Casino, a significant portion of these tourists—about 30-40%—came to Winnipeg exclusively to visit the Crystal Casino.

Gaming in Manitoba is an attraction that creates incremental tourism visits. Assuming 40% of the 100,000 tourists came to Manitoba for purposes of gaming (based on Crystal Casino Survey), it is likely that MLC creates 40,000 tourist visits from out-of-province visitors that would otherwise not occur.

Cross-border gambling

- ☐ Cross-border gambling in this study refers to incidences of Manitobans traveling outside of the Province for gaming entertainment.
- ☐ Current MLC estimates show the outflow of revenue to U.S. gaming establishments to be approximately \$100 million.
- ☐ According to a 1993 Coopers & Lybrand study of the Windsor Casino, \$50 million of spending by Ontarions that would ordinarily gamble outside the province is recaptured by the Casino in Windsor. No definitive estimate exists for Manitoba of the amount of revenues recaptured by local gaming establishments.
- ☐ The Crystal Casino, McPhillips Street Station and Club Regent provide Manitobans with an alternative to travelling out of the province for gaming entertainment.
- ☐ There is some evidence that the three facilities have reduced cross-border gambling. Based on surveys conducted by MLC, 48% of players said that they are visiting U.S. casinos less since the opening of McPhillips Street Station and Club Regent.

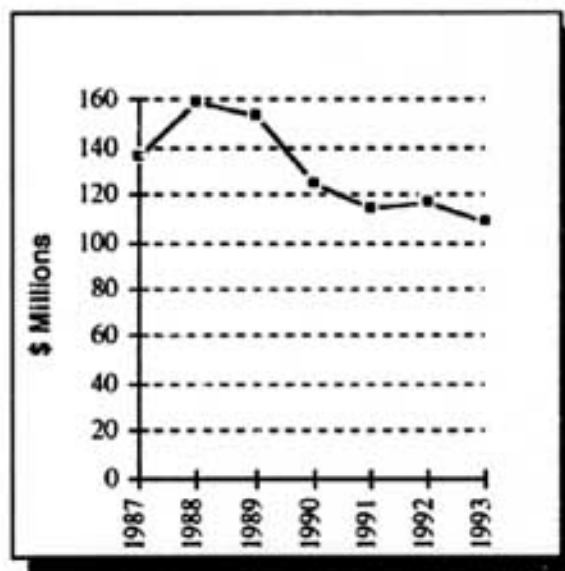
Deficit reduction and provincial credit rating

- ☐ Gaming revenues represent a significant source of revenue to the Manitoba Government. For 1994/95, MLC generated \$226 million in net income of which \$222 million was allocated to the province directly—representing about 4% of total Manitoba Government revenues.
- ☐ In 1994/95, the provincial deficit was \$196 million, according to the province's audited financial statements. For Fiscal Year 1995/96, the government tabled a \$48 million surplus budget.
- ☐ Currently, long term debt issued by the Province of Manitoba is rated as "A" by the Dominion Bond Rating Service (DBRS), with a trend of "Stable".
- ☐ According to DBRS, "the ability to raise revenue through gaming, without increasing the burden on the economy, is one of the positive factors considered in our rating of Manitoba's debt. Gaming is considered by DBRS to be a more desirable form of raising revenues than personal and corporate income taxes, as well as sales taxes."

MLC has significant economic impact on Assiniboia Downs

- ▶ A North American trend exists for diminished revenues and profitability of horse racing tracks.
- ▶ This is attributed largely to changing consumer tastes and competition for the entertainment dollar from a variety of sources.
- ▶ Increased proliferation of lotteries and gaming has been cited as one of the sources of competition for horse racing tracks.
- ▶ One example of the down-turn of the horse racing industry is Nebraska. This state is without casino gaming and VLTs. The following reflects the historical revenues of this horse racing track and illustrates the change in consumer tastes and preferences.

Revenue at the Nebraska Horse Racing Track

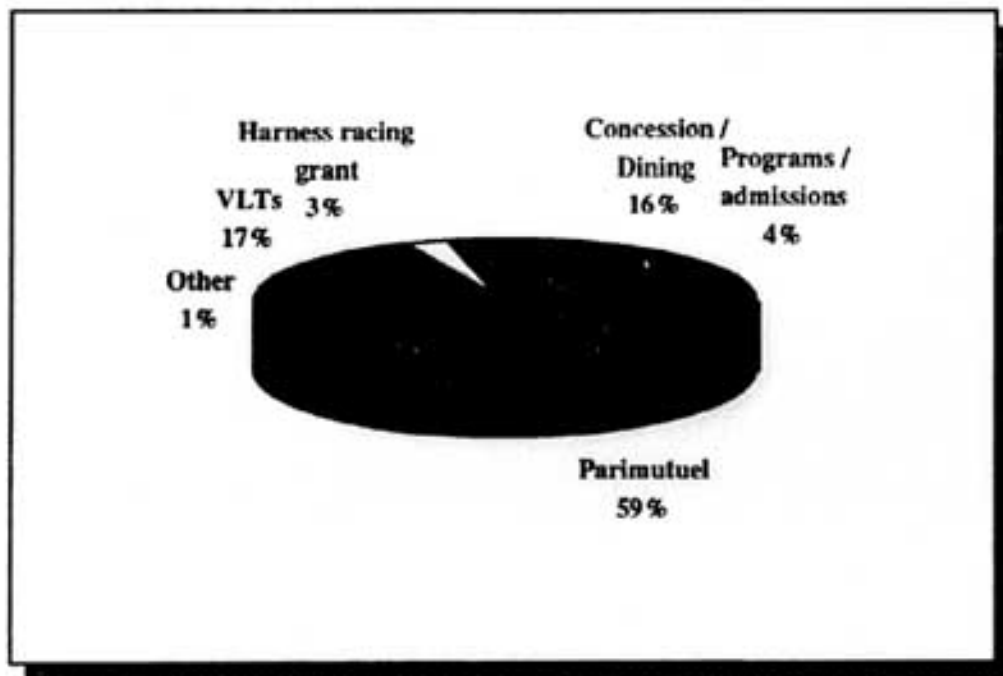


Source: Nebraska State Racing Commission

We see that revenues of a specific horse racing track have declined—in line with the North American trend. It is interesting to note this decline took place despite the fact that no competition for the entertainment dollar from casinos or VLTs exists in Nebraska.

MLC has significant economic impact on Assiniboia Downs (cont'd)

- Revenues for the Manitoba Jockey Club Inc. (Assiniboia Downs) for the year ended 1994 was \$10 million. This was derived from the following sources:



MLC has significant economic impact on Assiniboia Downs (cont'd)

- An analysis of the 1994 financial statements of the Manitoba Jockey Club Inc. demonstrates that 140 VLTs significantly contribute to the viability of the racetrack. The following table shows Assiniboia Downs would be in a net loss position without VLTs.

1994	Dollars
Revenue	10,092,680
Expenses	<u>6,093,115</u>
Gross profit	3,999,565
Less departmental expense	2,016,061
Less general and administrative expense	<u>1,812,615</u>
Net profit	170,889
Less VLT profit	1,686,747
*Net loss	(1,515,858)

**Please note that this does not reflect the potential for decrease in departmental and general and administration expenses associated with VLTs. We did not attempt to assess the impact of these costs.*

Effect Of Gaming On Specific Sectors In The Manitoba Economy

In this section, we examine the apparent effect of gaming on different segments of the Manitoba economy. We examine charitable gaming in Manitoba and other parts of Canada. We also examine the potential impact of gaming on the small business sector in Manitoba.

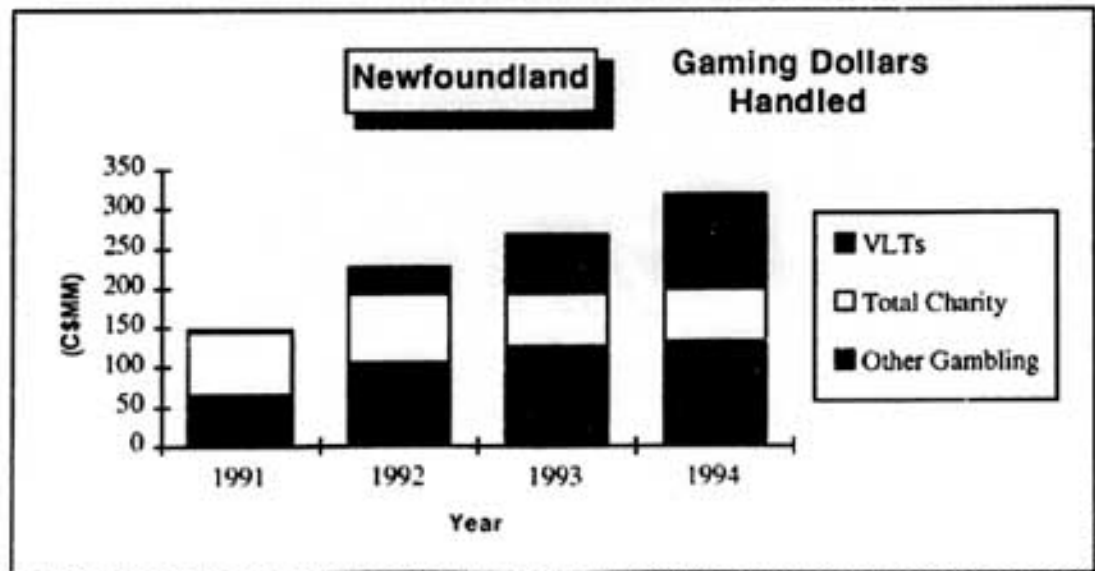
Effect of gaming on specific sectors of the Manitoba economy

□ Charitable gaming.

- ▶ Charitable gaming, measured in gambling dollars handled, has increased 12% in Manitoba from 1991 to 1994, despite the expansion of VLTs.
- ▶ Although total gaming dollars handled by other types of gaming has increased faster than that of charitable gaming, charitable gaming dollars have not declined. (Total gaming dollars handled increased 62% from 1991 to 1994.)
- ▶ We have looked at the effect of VLTs on charitable gaming in other provinces. Four provinces are selected based on their similarity in size to Manitoba, namely Saskatchewan, Alberta, New Brunswick and Newfoundland.
- ▶ The following charts show total gaming dollars from 1991 to 1994 in each of the five provinces broken down by type of product:
 - VLTs.
 - Charitable gaming (including bingo, raffles, etc.).
 - Other gaming products (including casinos, horse racing and lotteries).



Effect of gaming on specific sectors of the Manitoba economy (cont'd)



Effect of gaming on specific sectors of the Manitoba economy (cont'd)



- ▶ As shown in the charts, charitable gaming does not appear to have been cannibalized by VLTs or other forms of gaming, except in Newfoundland.

A report on the "Social Impacts of Gaming and the Impact of Gaming Expansion on Charitable Beneficiaries for the Minister's Advisory Committee on the Social Impact of Gaming in Saskatchewan" concluded that breakopen ticket sales declined due to the introduction of VLTs. No evidence was found to suggest that revenues from bingo and raffle tickets are affected by VLTs.

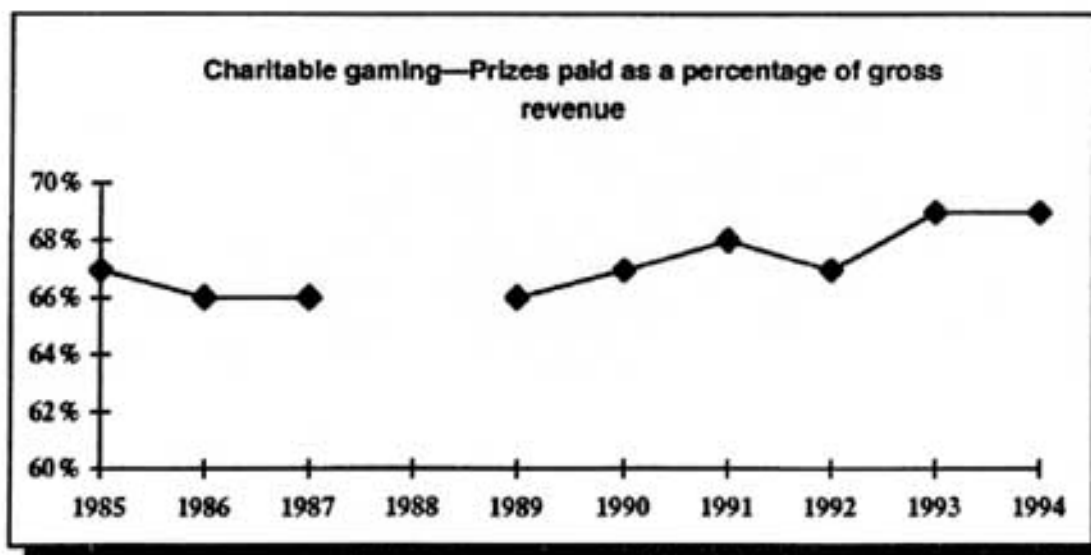
Net profits of charitable gaming in Manitoba

- The following table indicates that while revenues of charitable gaming have grown steadily since 1986, profits have slipped slightly since 1992.

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Gross Revenue	85.1	82.7	92.4	95.7	99.0	107.8	121.0	130.9	133.7	136.2
Prizes Paid	57.2	55.1	61.2	N/A	65.8	71.7	81.8	88.3	92.6	93.9
Total Expenses	12.8	11.0	10.9	N/A	13.4	14.4	16.5	18.2	18.3	20.2
Net Profit	15.1	16.6	20.3	20.1	19.8	21.7	22.7	24.4	22.8	22.1

- The following graph shows that prizes paid as a percentage of gross revenue have climbed steadily since 1992. Two potential factors account for this.

1. **Increased competition** for the gaming dollar has occurred from other charities and MLC. The number of registered charities in Manitoba has grown by more than 100 (from 3,900 to over 4,000 charities) in the last two years. MLC has also implemented its current suite of gaming products, largely post 1992. Expenditures on prizes as a percent of gross revenue has grown from 66% in 1986 to 69% in 1994. This likely reflects more intense competition with a need to offer larger prizes to attract consumers. As any market matures competition increases and margins tend to shrink.



* 1988 data was not available
Source: MLC

Net profits of charitable gaming in Manitoba (cont'd)

2. **Cost control by charitable organizations** may offer room for improvement. Operating expenses (exclusive of prizes) grew from 11.8% of gross revenue in 1987 to 14.8% in 1994.

Overall, we see that charitable gaming net profits have shrunk by \$1.5 million from 1992 to 1994 or -6%. Over the same period, MLC profits have increased by approximately \$109 million, adding to the resources offered beneficiary groups. In our view, the overall gaming profits available to beneficiaries overshadow the slight decline in net income for charitable groups.

Impacts of gaming on small business in Manitoba

- ☐ Does gaming draw consumer spending away from retail purchases, other forms of entertainment or other forms of gaming? ("the substitution effect")

- ☐ Some people argue that gaming hurts other businesses and has little positive effect by way of job creation, or income growth. Fundamental assumptions for this argument are:
 - 1. Consumer budgets are fixed over time.
 - 2. A dollar spent on gaming is not available to be spent elsewhere.

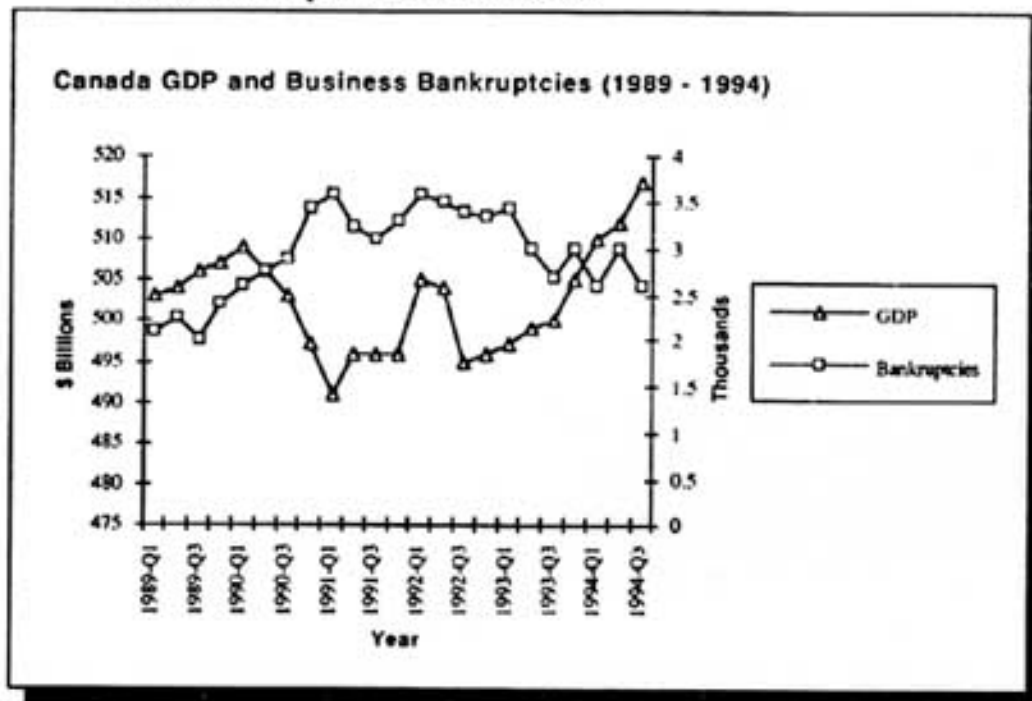
- ☐ The WEFA Group of economic forecasters in Pennsylvania conducted extensive analysis around this question¹.

- ☐ WEFA found:
 - 1. Consumer income grows over time.
 - 2. Gaming contributes significantly to income growth.
 - 3. Casino gamblers tend to be more affluent than the general population with more discretionary income (income available after purchasing necessities).
 - 4. Substitution will occur over a short time period, such as one year or less, as consumers spend money on gambling versus other discretionary items.
 - 5. Overall income growth negates the substitution effect over longer periods of time.

1. The WEFA Group, "The Effects of Casino Gaming on Consumer Spending, 1994".

Impacts of gaming on small business in Manitoba (cont'd)

- It is important to note that businesses of all sizes are susceptible to changes or fluctuations in the economy.
 - ▶ For example, in time of economic slowdown, the number of bankruptcies increase in response to the recession.



Source: *Conference Board of Canada
Entrepreneurial and Small Business Office, Industry Canada*

- ▶ Other examples of events that may effect the performance of businesses are:
 - Changing consumer preferences.
 - Changing consumer purchase patterns.
 - Increasing disposable income.
- ▶ Small businesses, in particular, are affected by these occurrences.
 - The small enterprise market is characteristically more volatile and more subject to change than the overall business market.

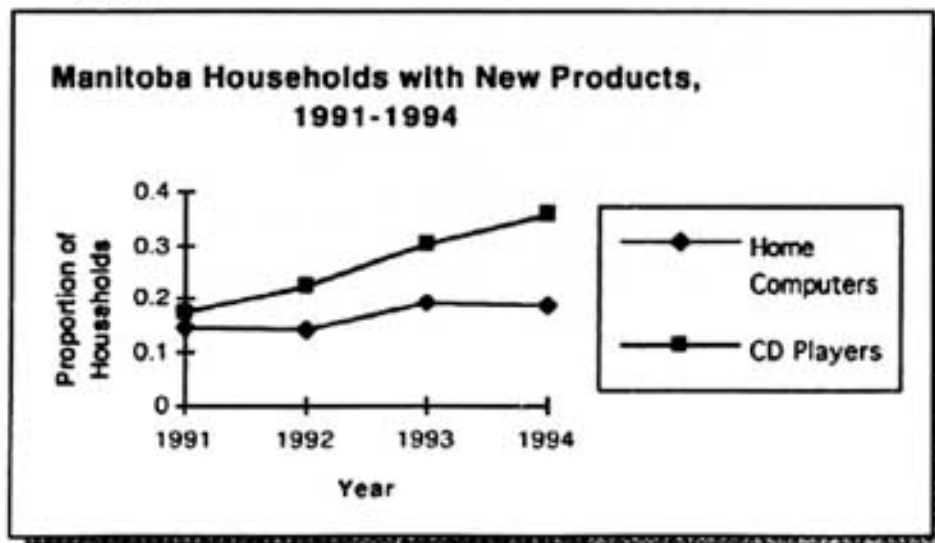
Impacts of gaming on small business in Manitoba (cont'd)

- **A number of other notable changes have taken place in the Manitoba economy since legalized gaming was first introduced in 1989.**

- ▶ After experiencing a short decline through the 1990 recession. Retail sales have increased significantly.



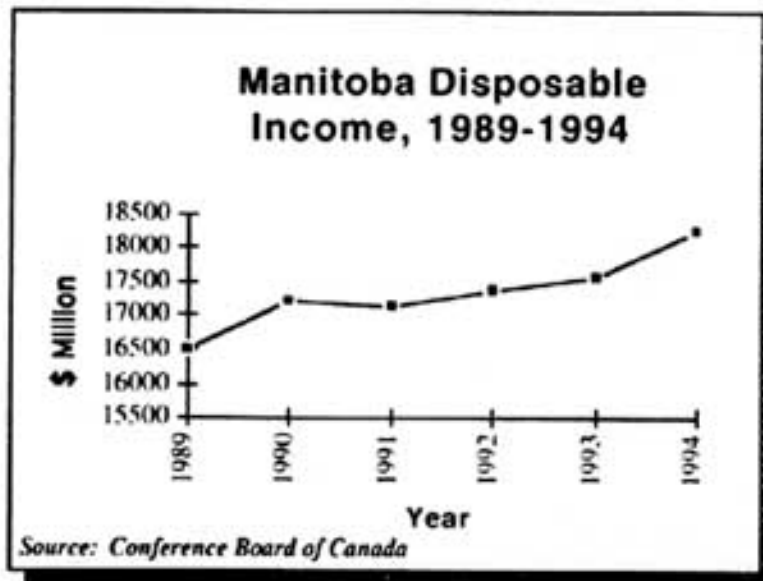
- ▶ Consumer preferences have changed with the advent of new technology, as evidenced by increased household penetration of consumer electronics below.



Source: Statistics Canada

Impacts of gaming on small business in Manitoba (cont'd)

- ▶ Disposable income has continued to grow.



- ❑ The above mentioned occurrences , in combination with a host of others, have all had an impact on small businesses in Manitoba.
 - ▶ Some events have had positive effect.
 - ▶ Some events have had negative effect.
- ❑ To isolate one individual variable in the economy and directly attribute its individual impact becomes scientifically very difficult.
- ❑ Since gaming is just one piece of the causal puzzle that determines the Manitoba economy, it is difficult to infer either a negative or a positive effect on small businesses in Manitoba.

Impacts of gaming on small business in Manitoba (cont'd)

□ KPMG economic impact studies in Manitoba suggest.

1. Gaming acts as an economic engine and generates new tourist visits.
2. Local employment is created which spurs consumer spending.
3. MLC and its beneficiaries procure most of their goods and services locally which creates a high degree of economic impact, compared to other entertainment products and services.
4. Manitoba disposable income shares the same historical growth pattern as Canada, as well as the United States. Therefore, any short-term "substitution effect" will be overcome by an expanding overall disposable income pie.

WEFA demonstrated that changing consumer preferences create short-term substitution effects. For example, growth in the purchase of videocassette recorders and cable television created an initial decline in movie admissions and spectator sports. Over the longer term, positive growth has been evident for all of these goods and services. The consumer benefits from more choice.

The Social Costs Of Problem Gambling

In this section, we identify the relationship between crime and gaming. We define problem gambling. We examine how it is measured, and rates of prevalence in Manitoba. We compare these rates to other jurisdictions. The profile of the problem gambler is outlined. We look at whether or not the availability of gaming causes problem gambling. We also examine the facts surrounding the costs of problem gambling.

Crime and gaming

... Some people associate crime with gaming activity—due in large measure to some of the historical developments surrounding organized crime's involvement in major gambling destinations, such as Las Vegas.

- ▶ Some casino jurisdictions report increases in traffic violations due to increased volumes of tourist traffic (e.g. Windsor).
- ▶ Several casino jurisdictions report decreases in crime due to enhanced employment opportunities brought by casinos (e.g. Windsor, Ontario; Dubuque, Iowa; East St. Louis, Illinois; Alton, Illinois; Gulfport, Mississippi; Joilet, Illinois).
- ▶ A 1994 WEFA report on the link between casinos and street crime indicated that an inverse relationship exists between the economic development effect of casinos and crime rates. Economic growth leads to social benefits, such as higher education. Higher crime rates are found in areas of high unemployment according to academic research (Theodore Chiricos, Florida State University) Economic growth created by gaming leads to:
 1. Job creation and lower rates of crime.
 2. Rising incomes and higher educational attainment.
- ▶ Report of the Senate Committee On Post Audit and Oversight in 1994 found:
 1. Few statistical patterns or discernible crime trends could be directly related to the introduction of casino gaming.
 2. Anecdotal evidence exists demonstrating a decrease in crime rates with the introduction of casino gaming.

No empirical evidence exists to demonstrate that the gaming results in increased criminal activity according to leading social impact experts (Volberg and Lesieur). Evidence demonstrates gaming reduces crime overall by contributing to economic development; increasing employment, incomes and educational attainment.

Crime and gaming (cont'd)

- ▶ Some evidence indicates that non-violent criminal activities are often associated with pathological gamblers. Embezzlement and fraud are notable. A 1984 study by Rena Nora, M.D. found that using a sample of 190 Gamblers Anonymous members, 24% of females and 38% of males were involved in embezzlement.

Some evidence exists that indicates pathological gamblers will contribute to the rate of non-violent crime.

What is problem gambling?

- ☐ Various terms are used to describe problem gambling, such as pathological and compulsive.
- ☐ Problem gambling is often employed as a catch-all label.
- ☐ American Psychiatric Association identified “compulsive gambling” (1987) as:

“Chronic and progressive failure to resist impulses to gamble and gambling behaviour that compromises, disrupts or damages personal, family or vocational pursuits.”

- ☐ Pathological gambling is defined by frequency and progression (Lesieur, 1987).
 - ▶ Quick repetitive action results in an aroused state of excitement (frequency). The gambler becomes psychologically dependent.
 - ▶ In order to achieve the same level of excitement, increased amounts (progression) must be wagered.
- ☐ Root cause of problem gambling is a personality defect, not necessarily the availability of gambling.
- ☐ More than half of problem gamblers have problems with alcohol and/or drug abuse (Lesieur, 1988).

Conditions for developing problem gambling

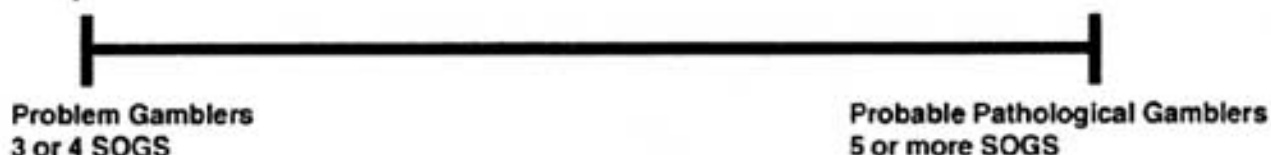
...According to Dr. Robert Custer, a founder of the National Council on Problem Gambling (U.S.), three conditions for developing problem gambling include:

1. Psychological predisposition.
 - Inappropriate parental discipline.
 - Early age exposure to gambling.
 - High family value on material or financial symbols.
 - Lack of family emphasis on financial responsibility.
2. Opportunities to wager large amounts of money.
3. Occasional big wins.

So opportunities to wager large amounts of money is only one of three conditions. In Manitoba opportunities to legally wager large amounts (defined as thousands) of money are restricted to the Crystal Casino and the Assiniboia Downs.

How is problem gambling measured?

- ☐ A survey instrument called the South Oaks Gambling Screen (SOGS) was developed in 1980 by the American Psychiatric Association.
- ☐ This survey has been used throughout Canada, the U.S. and abroad by Dr. Rachel Volberg of Gemini Research. Dr. Volberg assisted in the completion of a 1993 study to measure prevalence of problem gambling in Manitoba. She is currently engaged to determine whether or not the prevalence of problem gambling has changed in Manitoba in 1995.
- ☐ SOGS consists of 20 question items.
 - ▶ A score of 3 or 4 reliably identifies a respondent as a "problem gambler".
 - ▶ A score of 5 or more reliably identifies a respondent as a "probable pathological gambler".
- ☐ A continuum indicating the intensity of the gambling problem.



- ☐ Sample SOGS questions:
 - ▶ Do you ever spend more time or money gambling than you intended?
 - ▶ Have people ever criticized your gambling?
 - ▶ Have you ever felt guilty about the way you gamble or about what happens when you gamble?
 - ▶ Have you ever sold personal or family property to gamble or pay gambling debts?

What are the rates of prevalence of problem gambling in Manitoba?

- ☐ Based on a 1993 study conducted for MLC by Criterion Research Corp. and Gemini Research, among Manitobans 18 years of age or older:

	Current Probable Pathological Gamblers	Current Problem Gamblers	Total
Manitoba Prevalence Rate	1.3%	2.9%	4.2%

- ☐ Characteristics of problem gamblers in Manitoba include:
- ▶ Male, under the age of 30 years.
 - ▶ Weekly participation in multiple forms of gambling.
 - ▶ Unmarried.
 - ▶ Household income > \$25,000 annually.
 - ▶ High school graduate.

How does Manitoba compare to others?

- ☐ Rates of prevalence of current problem and probable pathological gamblers have been measured in numerous jurisdictions using SOGS.

	Current Probable Pathological Gamblers (%)	Current Problem Gamblers (%)	Total (%)
Alberta ¹	1.4	4.0	5.4
Manitoba	1.3	2.9	4.2
BC ¹	N/A	N/A	3.5
Saskatchewan ²	0.8	1.9	2.7
Washington State ¹	0.9	1.9	2.8
Texas ³	0.8	1.7	2.5
Montana ³	0.7	1.5	2.2
North Dakota ⁴	0.7	1.3	2.0
South Dakota ³	0.5	0.7	1.2

Sources:

1. *Social Gaming and Problem Gambling in British Columbia*, Gemini Research and Angus Reid Group, 1994.
2. *Gambling and Problem Gambling in Saskatchewan*, Rachel Volberg, Gemini Research 1994.
3. *Gambling in Texas, 1992 Texas Survey of Adult Gambling Behaviour*, Texas Commission on Alcohol and Drug Abuse.
4. Volberg R., and Silver E., 1993.

Manitoba has a similar rate of problem gambling as other Canadian provinces.

What is the significance of these prevalence rates?

- ☐ Prevalence must be used with caution. Time is an important dimension to interpreting SOGS scores. Recent changes to the SOGS divide problem gamblers into current and lifetime categories. The current category is indicative of the potential demand for treatment services to address problem gambling.
- ☐ The Addictions Foundation of Manitoba treated 293 persons in 1993.
- ☐ Like other pathologies, such as alcoholism, problem gamblers often recover on their own. A decrease in the likelihood of becoming a problem gambler occurs with age. Some problem gamblers recover from their pathology on their own—older and wiser.
- ☐ 36% of Albertans who ever had a gambling problem appear to have recovered on their own according to a 1994 study.

Rates of problem gambling are not necessarily correlated with the potential demand for treatment services. Problem gambling behaviours may have been equally prevalent before the advent of gaming offered by MLC in Manitoba.

What games are played by problem gamblers?

- ☐ **Problem gamblers are likely to participate in multiple forms of gaming on a weekly basis.**
- ☐ **Problem gamblers are most likely to be males under 30 years of age. This group prefers:**
 - VLTs.
 - Horse racing.
 - Casino games (including card games, slots).
 - Games of skill (e.g. betting on a golf game or billiards).
 - Instant lottery games (scratch tickets, breakopen tickets).
 - Sports betting.
- ☐ **A minority of problem gamblers are women, who are most likely to play**
 - Bingo.
 - VLTs.
 - Slot machines.
 - Instant lottery games.
- ☐ **Problem gamblers typically show dramatically higher expenditures than the general population at:**
 - Resort casinos.
 - Local casinos.
 - Horse track.
 - Charitable bingo.

Does the availability of legal gaming influence rates of prevalence of problem gambling?

- ▶ No empirical evidence indicates that the availability of legal gaming causes problem gaming.
- ▶ In fact, considerable evidence exists that suggests problem gamblers will find an illegal outlet to gamble, or travel to another jurisdiction, if gambling is not available locally.
- ▶ State of Texas measured rates of problem gambling before the introduction of the State Lottery in 1992. Findings were:
 - Texas offered horse racing, dog racing and charitable bingo. No legalized casino games were available at the time of the survey. Considerable illegal gaming appears to occur in Texas such as, card parlours, games of skill, sports betting and out-of-state betting.
 - Texas has one of the highest rates of lifetime problem gambling in all the U.S. at 4.8%, using SOGs.
 - U.S. jurisdictions with legalized gaming often have a considerably lower rates of prevalence than Texas. For example, South Dakota has a lifetime problem gambling prevalence rate of 2.8%.
- ▶ Rachel Volberg suggests that greater availability of gaming may contribute to higher rates of problem gambling. Some studies show rates of problem gambling in the eastern United States are higher than the western United States. This may be due to the maturity of wagering opportunities.
- ▶ Reuven Brenner and Gabrielle Brenner have concluded in their book "Gambling and Speculation" that:
 - Availability of gambling is not correlated with problem gambling.
 - Analogy used of diet soft drinks being responsible for anorexia nervosa.
 - Problem gamblers have fundamental personality weaknesses that give them a greater likelihood to experience all sorts of addictions.

No definitive research suggests that the availability of gaming influences the rate of prevalence of problem gambling. Logic would suggest that given one of the conditions to develop problem gambling is opportunity—availability may have some positive influence on rates of prevalence.

What are the costs of problem gamblers to Manitoba?

- ☐ The MLC provides \$916,000 in funding to the Addictions Foundation of Manitoba on an annual basis for the treatment of problem gamblers.
- ☐ Considerable debate exists in the research community about the economic costs that occur as a result of problem gambling, (e.g. debt, legal costs, and job loss).
- ☐ According to Rachel Volberg, the study of the social cost of gambling is a relatively young field with little empirical evidence on costs or causality attributable to gaming.
- ☐ In fact, an article in the Daily News, Halifax Nova Scotia on October 18, 1994 entitled "Casino Foes Misusing Numbers" quotes Volberg as saying:

"That figure (the social cost of gambling) has acquired a reality that I do not believe it merits...It is not based on actual data on the costs of pathological gambling in any reliable sense...She's disappointed to find the results have become statistics that are widely misused by people who oppose casinos."

No authoritative research exists on the costs of problem gamblers.

Conclusion

In this section, we summarize the evidence concerning the inventory of costs and benefits examined. We look at what might happen in the absence of legalized gaming operated by MLC with respect to these benefits and costs.

What if legalized gaming did not exist in Manitoba?

Economic impacts

- ☐ **Loss economic benefits without legalized gambling.**
 - ▶ Approximately 10,000 jobs in Manitoba.
 - ▶ \$301 million in labour income.
 - ▶ \$403 million in GDP.
- ☐ **Potentially higher taxes to pay for the deficit and debt. Increased taxes are seen as an increased burden on the economy by bond rating agencies.**

Tourism

- ☐ **Increased leakage of Manitoba consumer dollars to cross border casinos.**
- ☐ **No incremental tourist visits to the province created by gambling.**
- ☐ **Reduced tourist spending, resulting in a lower number of tourism jobs and contribution to GDP.**

Charitable gaming

- ☐ **It is probable that net incomes of charitable gaming would increase, as this form of gaming would fulfill some of the excess consumer demand in a situation of low supply of gaming product. Less competition would likely lead to enhanced gaming margins for charitable groups.**

What if legalized gambling did not exist in Manitoba? (cont'd)

Small business impacts

- ☐ Less short-term competition for the entertainment dollar.
- ☐ Short-term substitution of consumer dollar towards gaming may go to other (likely lower economic impact) product/service choices. Little long-term difference in the overall small business impact.

Crime

- ☐ Empirical evidence suggests that crime would increase in the absence of legalized gaming. Consumer demand for gaming would be addressed by illegal operators, such as the estimated 65,000 illegal VLTs ("gray machines") operated in Quebec, Ontario and British Columbia.
- ☐ According to Reuven and Gabrielle Brenner in "Gambling and Speculation": "Prohibition of gambling does not reduce crime ... illegal organizations take over the gambling sector and enforce illegal contracts leading to an increase in the crime rate."

What if legalized gambling did not exist in Manitoba? (cont'd)

Prevalence of problem gambling

- ❑ According to Lesieur (1993) "The presence or absence of casino gaming in a state was not associated with rates of pathological gambling."
- ❑ According to the Report on the Senate Committee on Post Audit and Oversight (1994) "Problem gamblers gamble, regardless of the legal status of the venue ... no data shows that gaming venues cause problem gambling."
- ❑ Findings from other studies suggest the demographic and socioeconomic characteristics in a given region may have more association with rates of problem gambling than the presence of legal gaming venues. For example:
 - Researchers in the Texas study in 1992 postulate that the comparatively high rate of prevalence of problem gambling in this state (no casino gaming or lotteries available at the time of measurement) may be influenced by the cultural and ethnic diversity of the state.
 - Demographically, problem gamblers tended to be non-white (black or hispanic) males, 18-24 years of age with lower educational levels.

Appendices

***Appendix A—A Critical Review Of “An Analysis Of
The Net Social Benefits From Legalized Gambling
In The Province Of Manitoba”***



Project Report

A CRITICAL REVIEW OF "AN ANALYSIS OF THE NET SOCIAL BENEFITS FROM LEGALIZED GAMBLING IN THE PROVINCE OF MANITOBA"

Prepared for

Manitoba Lotteries Corporation
Winnipeg, Manitoba

Submitted by

Mike Ross

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Executive Summary

A. Background

KPMG Management Consulting was retained by the Manitoba Lotteries Corporation to undertake an objective assessment of a report by Dr. Philippe Cyrenne, entitled *An Analysis of the Net Social Benefits from Legalized Gambling in the Province of Manitoba*.

We were asked to undertake an objective assessment of the report, examining the methodology employed and the conclusions reached.

B. Key Findings

1. The quantitative results of Cyrenne's analysis

- ▶ Cyrenne's analysis shows that there is a substantial positive benefit (\$153 million annually) to the people of Manitoba from the legalization of gambling.

2. Conceptual and methodological issues

- ▶ The framework used in the Cyrenne Report is appropriate for analyzing the legalization of gambling as an economic development policy, although less so as a tax policy.
- ▶ The basic categories of benefit and cost used are appropriate, although certain relevant categories have not been included in the analysis, particularly the tourism-related economic development dimensions of the legalization of gambling.
- ▶ The conceptual framework for the analysis is not sufficiently precise, which has led to conceptual errors, for example, in the treatment of the number of problem gamblers associated with legalization.
- ▶ Certain elements of cost have not been treated appropriately from a conceptual point of view. Both the value of foregone profits, and the cost of problem gambling, are significantly overstated.

3. Issues of quantification

- ▶ Cyrenne's negative impact of the introduction of VLTs on self-employed business earnings could as easily be attributable to the introduction of the GST.
- ▶ The estimate of consumer surplus is a crude "guesstimate", and might easily be substantially larger.

4. Conclusions and policy implications

- ▶ Cyrenne's conclusions appear to omit the most important conclusion, which is that legalized gambling creates net benefits for Manitobans.
- ▶ A number of the conclusions and policy implications do not appear to follow directly from the analysis in the Report.

5. A reworking of Cyrenne's analysis

- ▶ We have reworked Cyrenne's analysis, to reflect the issues described here. We emphasize that this is not a separate benefit/cost analysis by KPMG Management Consulting, and does not reflect our opinion as to the net benefits of the legalization of gambling in Manitoba. The reworking, which affects a number of elements of both benefits and costs, suggests that the net benefits of legalized gambling are considerably higher than Cyrenne's analysis shows.

C. Overall conclusion

On balance, the weaknesses and/or errors are sufficiently important that the results presented in the Cyrenne report are seriously flawed.

Introduction

In this chapter, we outline:

- ▶ The background to this study.
- ▶ Our terms of reference for conducting the work.

A. Background

Like many provincial and state governments in North America, the Government of Manitoba has progressively expanded the range of legalized gaming activities in the province, and has increased the revenue that it has derived from these activities.

The public policy issues associated with the expansion of legalized gaming frequently generate significant debate, and Manitoba is no exception. During the campaign leading up to the recent election, the Winnipeg Free Press ran a series of articles entitled *Manitoba Election Issues: The Hidden Cost of Gambling*. A number of these articles reported on a study commissioned by the Winnipeg Free Press, entitled *An Analysis of the Net Social Benefits from Legalized Gambling in the Province of Manitoba*. The study was undertaken by Dr. Philippe Cyrenne, an assistant professor in the Department of Economics at the University of Winnipeg. We refer to the study as "the Cyrenne Report."

On March 7, 1995, the Government of Manitoba established the Manitoba Lottery Policy Review Committee. The Manitoba Lotteries Corporation ("MLC"), which is responsible for much of the legalized gaming activity in Manitoba, understands that the Cyrenne Report may be used as a data source by the Policy Review Committee. MLC has retained KPMG Management Consulting to undertake a critical review of the Cyrenne Report.

This report documents the results of that review.

B. Our Terms of Reference

KPMG Management Consulting was asked to undertake an objective assessment of the Cyrenne Report, examining the methodology employed and the conclusions reached. We were asked to pay particular attention to the following:

- ▶ Sources of data employed.
- ▶ Integrity of data employed.
- ▶ Conclusions reached about relationships between economic events and gaming in the Province of Manitoba.

The ultimate deliverable which we were asked to provide was a critical and detailed review of the Cyrenne Report—and its methodologies and findings.

In our critique, we have been guided by considerations of materiality. In other words, we have focused our comments on the more conceptually and quantitatively important dimensions of the Cyrenne analysis.

Our workplan had five steps:

1. To review the Cyrenne Report and analyze its methodologies
2. To test the integrity of the data sources employed.
3. To examine critical assumptions made.
4. If appropriate, to model the results of alternatives to these assumptions.
5. To summarize our findings in this report.

In our work we have relied upon the Cyrenne report. We have not had direct discussions with Dr. Philippe Cyrenne.

Benefit/cost analysis is a rigorous analytical tool, with its own technical jargon. In preparing this report, we have tried to be true to the rigour of the discipline, but have sought to write in a style accessible to the general reader.

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What Is Benefit/Cost Analysis?

The Cyrenne Report employs the methodology of economic benefit/cost analysis to determine the net benefits to Manitoba of legalized gaming. In this chapter, we define benefit/cost analysis, and its key features.

A. Definition

Economic benefit/cost analysis is a tool for determining whether a proposed project, policy, or course of action is of net benefit to society, i.e., whether it increases the real value of the total amount of goods and services available to the people in that society. In other words, to apply benefit/cost analysis to the issue of legalized gaming in Manitoba is essentially to ask the question, "Does this policy increase the economic well-being of the people of Manitoba?"

The analytical framework is similar to that used by a private sector business in determining whether a particular investment project will more than cover its costs, and thus increase the real worth of the business. However, unlike a private sector perspective, benefit/cost analysis attempts to:

- ▶ Reflect the fact that some of the resources required to implement a project may have a different value or cost to society than to the proponent of the particular course of action.
- ▶ Include additional costs and benefits, which may be felt by other members of society besides the proponents of the particular course of action.

Thus, benefit/cost analysis is used to estimate net **social** benefits, unlike the private sector focus on **private** benefits.

Although there are a number of technical disputes in the economics profession about specific methodological issues, the general technique is widely accepted as a useful tool. The original intention of benefit/cost analysis was to analyze future courses of action; however, the approach can also be used to assess the net benefit to society of having undertaken certain actions in the past.

B. Benefit/cost analysis and economic impact analysis

Benefit/cost analysis is often contrasted, and sometimes confused, with economic impact analysis. These are different analytical approaches intended to illuminate different issues.

Benefit/cost analysis focuses on quantifying both the benefits and costs of a proposed course of action, and determining whether, after making appropriate adjustments for timing, the benefits exceed the costs. Benefit/cost analysis is essentially a technique for deciding which courses of action will make people as a whole better off, i.e., will "earn a profit to society as a whole." The underlying assumption is that, if society undertakes activities which generate net benefits, the people of the area under study will be made better off.

Economic impact analysis is intended to demonstrate the economic ramifications and linkages of a specific project, industry sector, or government policy. Typically, economic impact studies delineate the employment and economic value-added associated with the subject of study. For example, previous work undertaken by KPMG Management Consulting has sought to quantify the economic impacts of the activities of the Manitoba Lotteries Corporation.¹ Economic impact analysis is not in itself intended to determine a whether a course of action is appropriate. Instead, it essentially tries to illustrate how many people earn their living as a consequence of the activities or projects under study.

C. The analytical framework of benefit/cost analysis

A benefit/cost analysis should assess the impact of pursuing a particular course of action, rather than of pursuing an alternative. The costs and benefits to be valued are really the positive and negative differences between these two courses of action. In order to conduct the analysis, both courses of action should be clearly delineated, so that the differences over time between the two scenarios can be clearly identified, and the analyst can satisfy his/herself that all relevant differences have been identified and are attributable to the subject under study.

Applying benefit/cost analysis to past decisions always requires the analyst to develop a "counter-factual" or "do nothing" case. For example, suppose the objective of the Cyrenne Report were to assess the net benefit to Manitoba of the government decision, already taken some years ago, to legalize gaming in Manitoba. The alternative case, which in fact did not occur, is that no such legalization of gaming took place. Thus, in order to identify the costs and benefits in 1995 of the decision to legalize gambling in Manitoba, it is necessary to compare the key features of the existing situation, with a consistent and thought-through view of the hypothetical economic and social dimensions of the Manitoba economy in 1995, had that decision not been made.

¹ KPMG Management Consulting, *Manitoba Lotteries Foundation Economic Impact Study*, February 15, 1993.

III

What Are The Quantitative Results Of Cyrenne's Analysis?

The results of Cyrenne's analysis, which are presented in Table 1 (page 26 of his report), are that the net social benefits from legalized gambling in Manitoba are approximately \$153 million per year. In other words, Cyrenne's analysis shows that, the people of Manitoba have had their real income increased by \$153 million per year, as a consequence of the decision to legalize gambling in Manitoba. Cyrenne develops this estimate by considering the benefits to Manitoba of legalized gaming, and in particular the lottery revenues to the government. He then reduces these benefits by subtracting a number of identified and quantified costs, which are either required to generate these benefits, or the negative consequences of pursuing legalized gambling in Manitoba.

Press reports of the results of the study, which were presented in the series of the articles entitled, *The Hidden Cost of Gambling*, tended to focus on the nature and magnitude of the costs, rather than the fact that, even considering these costs, net benefits were generated by the decision to legalize gambling.

In fact, Cyrenne's analysis shows that there is a substantial positive benefit to the people of Manitoba from the legalization of gaming. We have not conducted benefit/cost analyses of the various public policy options available to the government of Manitoba. However, in our experience, it is relatively rare for governments to be able to undertake courses of action which generate net benefits in the order of \$150 million dollars a year, i.e., after netting out both the financial and social costs required to generate these benefits.

In Cyrenne's analysis, the bulk of the benefits are in the form of the provincial government revenues resulting from legalized gambling. The implications of his analysis are therefore two-fold:

- ▶ The policy decision to legalize gambling has generated significant annual benefits to the people of Manitoba.
- ▶ It has done so in a way that has led Manitoba residents to willingly pay the bulk of these benefits into the revenue stream of the provincial government, at a time when all levels of government in Canada and the United States are finding taxpayers increasingly reluctant to fund fiscal deficits.

The above comments take the study results at face value. In fact, as a result of our review, we have a number of concerns with respect to both the conceptual/methodological underpinnings of the Cyrenne study, and some of the data used. These are discussed in some detail in subsequent chapters.

IV

Conceptual And Methodological Issues

In this chapter, we discuss our findings with respect to the important conceptual and methodological issues raised by the Cyrenne report. Topics dealt with include:

- ▶ The appropriateness of the benefit/cost tool and the framework used.
- ▶ The definition of the question under study.
- ▶ The definition of certain benefits and costs in the study.
- ▶ An important omitted economic development consideration.

A The benefit/cost tool and the broad framework used are appropriate

Generally speaking, governments have two broad sets of objectives for introducing legalized gambling in their jurisdictions. These are:

- ▶ Fiscal objectives, i.e., as a way to raise additional government revenues, and
- ▶ Economic development objectives, i.e., to create additional economic activity or, in the language used earlier, to increase the real wealth of Manitobans.

In addition, legalized gambling raises some particular issues or policy concerns about the morality of gambling, and the phenomenon of problem gamblers.

While the Report includes some comments on the legalization of gambling as a tax policy measure, the focus of the Cyrenne Report is on legalization of gambling as an economic development tool.

In our view, the benefit/cost analysis framework is an appropriate tool for assessing the legalization of gambling in Manitoba from the perspective of economic development. In addition, the benefit/cost analysis framework permits the consideration of possible negative social costs associated with legalizing gambling, such as possible increases in the extent and social cost of problem gambling. Lastly, the benefit/cost framework is appropriate for looking at net benefits over time. While the Cyrenne Report looks at a single "typical year", this approach is a proxy for a long-term analysis and is appropriate.

The benefit/cost tool is not particularly appropriate for considering legalized gambling as a way of achieving fiscal objectives. Economists have developed a range of other tools and concepts for assessing the effectiveness and appropriateness of various fiscal measures; the tools and concepts are within the discipline of public finance.

The Cyrenne Report identifies and seeks to put values on a number of the important dimensions of benefit and cost. We have some concerns with respect to both the conceptual treatment of some of these categories and the way in which benefits and costs are quantified. In addition, we believe that certain types of benefits have not been incorporated within the framework of the study. For example, an important economic development objective of legalizing gambling is to attract and retain tourist dollars. This perspective is not really dealt with in the Cyrenne report. With these provisos, however, the types of benefit and costs assessed in this study are, in our view, appropriate.

B. The question under study is too imprecise

In our view, the Report is not sufficiently precise in its definition of the subject of the study.

As noted in Chapter III of this report, the benefit/cost analysis methodology leads to the assessment of the impact of pursuing a particular course of action, rather than of pursuing an alternative course of action. The Cyrenne report does not sufficiently identify these alternative courses of action which underlie its analysis. This leads to two specific concerns:

- ▶ The Report is entitled, "An Analysis of the Net Social Benefits from Legalized Gambling." The Report is vague about the specific historical policy decision which is being evaluated. For example, on page 2, the Report seems to focus on the impact of the introduction of legalized gambling, an event which took place twenty-five years ago. On pages 7 and 16, it focuses on the expansion of legalized gambling. On page 15, it focuses on VLTs. Each of these are different questions, leading to different views of how the world would have evolved without the decisions, and with different impacts. Because it is not clear which question the Cyrenne report tries to answer, it is difficult to determine both whether it has answered the question appropriately, and also what the answer really means.
- ▶ Because the "do nothing" case has not been well delineated, the causal linkages between introducing legalized gambling and various other affects are not clearly established. By not clearly laying out the "do nothing" case, Cyrenne leaves the impression that the alternative to legalized gambling is no gambling. It is probably more realistic to believe that the alternative is a combination of illegal gambling, and the loss of tourist dollars to jurisdictions which do permit legalized gambling. For example, on page 25, Cyrenne effectively assumes that all problem gambling behaviour is caused by the

particular policy activity under study. This is implausible; there were clearly problem gamblers and social costs associated with problem gambling long before the legalization of gambling in Manitoba, and certainly before the introduction of VLTs. Consequently, calling all problem gambling in Manitoba a social cost of introducing legalized gambling leads almost certainly to an overstatement of the magnitude of the associated social costs.

An associated difficulty is that the Cyrenne Report does not provide any real model for the effects over time of introducing legalized gambling. For example:

- ▶ What are the dynamic effects of introducing legalized gambling?
- ▶ Does an increase in the supply of gambling increase the demand for gambling?
- ▶ Are there lags between the introduction of new forms of gambling and changes in problem gambling behaviour?
- ▶ When does the situation stabilize—is there a “typical year”?

This lack of a dynamic view of the issue under study leads to some peculiar results. For example, by looking only at a single year, the analysis effectively implies that half of all pathological gamblers go through an annual cycle of losing their job for six months every year (see page 23).

C. Definition of benefits and costs

There are deficiencies in the definition of certain benefits and costs. Some of these relate to the failure to clearly delineate the base case, described above.

1. Changes in profits to businesses

Benefit/cost analysis recognizes that a certain course of action creates a net benefit only if it uses resources more productively than alternative courses of action. For example, it does not include all the profits of an activity as benefits, but only those profits above a level of “normal” profits which can be earned by the same resources in other ventures. These additional profits are sometimes referred to as “producer surplus.”

In his analysis, Cyrenne includes elements of both benefit and cost which do not recognize this distinction appropriately. In particular:

- ▶ He includes as a benefit, the VLT commissions as revenues to operators, in the amount of \$33 million annually. He should include only that part

of those revenues which represent above normal profits, after the appropriate allocation of costs to the VLT activity. This estimate should be somewhat smaller, and perhaps zero.

- He includes as a cost the loss in profits to other businesses due to the introduction of VLT's. However, in a benefit/cost analysis, he should only include any loss in "producer surplus," or above-normal profits which were being earned by these other businesses. Conceptually, therefore, the wrong measure has been used. (We have some concerns with the quantification of these losses, as well, which is described below.)

2. Transfer payments in the costs of problem gambling

Benefit/cost analysis distinguishes between true resource costs, and transfers between individuals. For example, an unemployed individual who could otherwise be working reduces the total value of wealth in the society as a whole, and his lack of productive work represents a cost to society. If society chooses to pay unemployment insurance to this individual, this is a transfer of wealth from those who pay unemployment insurance premiums to those who collect the insurance. The payment of unemployment insurance, broadly speaking, does not affect the level of wealth in Canada, but reflects only a decision as to how such wealth should be distributed. (This discussion ignores that relatively minor administration costs associated with the collection and disbursement of the funds.)

In his costing of problem gambling, Cyrenne includes estimates for both:

- True costs to society, including both the lost value of work by unemployed problem gamblers, and the cost society incurs to treat these gamblers, and
- The unemployment insurance payments that are received by these individuals.

The unemployment insurance payments represent a transfer, and should not be included in the cost estimate, which is therefore overstated by about \$20 million per year.

D. An important omitted economic development consideration

Clearly, one of the factors leading many provincial and state jurisdictions to expand legalized gambling is that a number of other jurisdictions are prepared to offer gambling services, both to their own residents and to tourists. A number of the decisions to expand

legalized gambling in North America in recent years have been driven by the associated economic development issues, which are:

- ▶ If we do not provide legalized gambling, we will find it more difficult to attract tourists, and
- ▶ If we do not provide legalized gambling, a number of our residents will travel to other jurisdictions for gaming purposes, will purchase lottery tickets from other jurisdictions, and will otherwise reduce their spending in their home market, etc.

On a smaller scale, clearly one of the considerations of jurisdictions legalizing VLTs is to address similar economic development issues at the local level, e.g., will VLTs enhance the viability of local food and beverage and entertainment facilities?

Since this is an important economic development consideration, one would expect that it would enter into the benefit/cost analysis of legalized gambling. While Cyrenne discusses the issue at various points in the report, e.g., page 7, this consideration does not enter into the quantitative analysis.

E. Summary of conceptual/definitional issues

In summary, then:

- ▶ The framework used in the Cyrenne Report is appropriate for analyzing the legalization of gambling as an economic development policy, although less so as a tax policy.
- ▶ The basic categories of benefit and cost used are appropriate, although certain relevant categories have not been included in the analysis. The important tourism-related economic development dimensions of the legalization of gambling are not treated in the analysis.
- ▶ The conceptual framework is not sufficiently precise, which has led to conceptual errors, for example, in the treatment of the number of problem gamblers associated with the legalization decision.
- ▶ Certain elements of cost have not been treated appropriately from a conceptual point of view. Both the value of foregone profits, and the costing of problem gambling, are significantly overstated.

V

Issues With Respect To Quantification

A. Introduction

In this chapter, we discuss some of the important issues with respect to the quantification of benefits and costs in the Cyrenne Report. In the previous chapter, the focus was on conceptual/definitional issues; in this chapter, we focus on the way certain categories of costs and benefits are actually quantified—the methodology whereby quantitative estimates are developed, and the quality of the data on which they are based.

The major issues in this regard in our view, which are discussed in this chapter are:

- ▶ Quantifying costs by looking at time series
- ▶ Estimating the consumer surplus

B. Quantifying costs by looking at time series

A number of the cost categories considered in the Cyrenne Report are quantified by identifying trends or changes in trends in economic data series, and attributing these changes to the legalization of gambling in Manitoba.

The Cyrenne Report uses this approach with respect to:

- ▶ The impact on charitable gaming profits, which is based on trends in the amount of charitable deductions by rural Manitoba.
- ▶ The loss in profits to other businesses, which is based on trends in self-employment business income as reported by taxpayers to Revenue Canada.

This approach requires the analyst to have a sufficient understanding of the various factors that affect economic data series over time, so that they can isolate the impact of a single one (e.g., legalization of VLTs) as the basis for quantifying costs.

For example, Figure 12 in the Cyrenne Report outlines the results of his forecasting methodology for self-employed net income. Although he does not reproduce his results,

they are based on a model that appears to forecast self-employed net income based on GDP in Manitoba. As can be seen, the forecast data broadly track actual results over time, but the forecasting tool is not completely accurate.

He then includes in his model the introduction of VLTs in 1991 and 1992, and uses this as an estimate of the short-fall in self-employed net income arising from the introduction of VLTs.

This is a simplistic, and probably over-simplistic, methodology. For example, 1991 also saw the introduction of GST. Cyrenne's method is unable to distinguish between the impacts on self-employed net income of the introduction of VLTs, and of the introduction of GST, which both took place in the same timeframe. In fact, his results are probably capturing both effects, and probably a variety of other causal factors..

There is no straightforward solution to this problem. Generally, the modelling of economic time series requires considerable sophistication and expense, and we do not offer a superior estimate. However, the reader must recognize the wide range of uncertainty associated with estimates of impacts based on changes in the behaviour of economic data series over time, without a clear understanding of the full range of factors that might have caused the series to change.

C. Estimating the consumer surplus

A feature of most benefit/cost analysis is a concept known as "consumer surplus." As is explained on pages 13 and 14 of the Cyrenne Report, consumer surplus benefits arise because many individuals are willing to pay a higher price for their gaming purchases than they are required to pay.

Cyrenne's estimate for consumer surplus is \$50 million, which he has adjusted downward for surplus earned by visitors to \$45 million. This is a relatively large number in the context of the various costs and benefits quantified on page 26 of his report (the same magnitude as the loss in profits to other businesses, which is the second largest social cost in his analysis.)

It is clear from his description on page 14 that this estimate of \$45 million is a very broad "guesstimate".

The information required to develop a more precise estimate is probably not easily available. However, there is clearly a wide range of uncertainty related to this estimate; the uncertainty dwarfs some of the other categories of costs and benefits.

Although we do not have any stronger empirical basis for estimating this element of consumer surplus than does Cyrenne, our "guesstimating" technique would probably lead to a substantially higher estimate than his, perhaps \$150 million¹.

D. Summary

In summary, the quantification of variables leads to a wide range of uncertainty around a number of the estimates of both costs and benefits. For example:

- ▶ Cyrenne's estimate of the impact of the introduction of VLTs on self-employed business earnings could as easily be attributable to the introduction of the GST.
- ▶ The estimate of consumer surplus is essentially arbitrary, and might easily be substantially larger.

¹ The basis of our "guesstimate" is as follows: the MLC seeks to maximize profits from gaming operations. Because costs are relatively low, and some proportion of these are fixed, maximizing profits is probably reasonably equivalent to maximizing revenue. Revenue is maximized by pricing the products so that demand is neither elastic nor inelastic, i.e., a small change in the price of the product would result in an offsetting change in the quantity purchased, so as to leave revenues essentially unchanged. With a simple straight-line demand curve, this would lead to a consumer surplus of about half of total revenues.

VI

Comments On Cyrenne's Conclusion And Policy Implications

In our view, the conclusions and policy implications of Cyrenne's Report (Section 6) suffer from two weaknesses:

- ▶ He does not emphasize some of the major conclusions from the quantitative analysis.
- ▶ Some of his conclusions and policy implications do not appear to flow directly from the results of the study.

A. Some important omitted conclusions

In our view, the most important conclusion of a benefit/cost analysis of legalized gambling has to do with the overall results, i.e., is legalized gambling a benefit or a cost? Cyrenne's results indicate that, in the terms of his analysis, legalized gambling produces a substantial benefit. This is an omitted conclusion.

B. Conclusions which do not seem to follow from the analysis

Some of the conclusions in the Cyrenne Report do not seem to follow from the analysis. For example:

- ▶ The work does not attempt to estimate the differential costs and benefits of various forms of gambling. Thus, the basis for conclusion #7, which is that particular focus should be placed on a reconsideration of the VLT network, does not appear to be substantiated by the study.
- ▶ Conclusion #6, which is that problems with availability of information bias the results of analyses of legalized gambling, appear to be contradicted by Cyrenne's own study. He has attempted to make estimates of the important benefits and costs that he has identified. The results are positive. This is not in itself a built-in bias in favour of the apparent benefits of legalized gambling, but rather the result of his analysis.

- ▶ A number of the issues discussed by Cyrenne are really tax policy issues, and are not in themselves effectively dealt with through benefit/cost analysis. This includes:
 - Discussions of whether social benefits from lottery revenues exceed benefits which will remain if these revenues are not gathered (conclusion #3).
 - Comparisons of differential tax-based development strategies (conclusion #4).
 - Alternative ways of raising tax revenues (conclusion #8).

These are all worthwhile questions, but they are essentially issues of tax policy, dealt with best by the tools of public finance, rather than by benefit/cost analysis.

C. Summary

We have two major concerns with the conclusions and policy implications section of Cyrenne's Paper:

- ▶ It omits the most important conclusion, which is that legalized gambling creates net benefits for Manitobans.
- ▶ A number of the conclusions and policy implications do not appear to follow directly from the analysis in the Report.

VII

A Reworking Of Cyrenne's Analysis

In this chapter, we rework Cyrenne's analysis based on some of the issues discussed in this report. We emphasize that this is not our own opinion as to the benefits and costs of legalized gambling in Manitoba, but simply a restatement of the Cyrenne analysis, adjusted to reflect some of the concerns noted earlier.

Exhibit VII-1 summarizes the net social benefits from legalized gambling in Manitoba, in two forms:

- ▶ It repeats Cyrenne's analysis, from page 26 of his report. (Cyrenne's estimates.)
- ▶ It shows the adjusted estimates by KPMG Management Consulting. (Reworking by KPMG.)

A. Categories of Benefits

1. Lottery revenues of government

The appropriate estimate of lottery revenues depends on a clearer definition of the question than is provided in the Cyrenne Report, and a consistent treatment of data sources from the MLC. Notwithstanding these comments, the estimate of \$210 million seems of the right magnitude.

2. Revenues to operators

Unless there are "monopoly profits" or "producer surplus" associated with revenues to operators, this should not be regarded as a benefit. We reduce this estimate to \$10 million, which offsets the cost item entitled "Cost of Gaming Facilities."

3. Consumer benefits from gambling remaining after gambling expenditures

It is our sense that this number should be larger, and we have doubled it to \$90 million.

Exhibit VII-1**Net social benefits from legalized gambling**

	Annual Amount (\$ millions)	
	<u>Cyrenne's Estimates</u>	<u>Reworking by KPMG</u>
<u>Benefits</u>		
Lottery revenues of government	\$210	\$210
Revenues to operators	33	10
Consumer benefits from gambling remaining after gambling expenditures	<u>45</u>	<u>90</u>
Subtotal Benefits	\$288	\$310
<u>Costs</u>		
Costs of gaming facilities	6	10
Loss in profits to charities	13	13
Loss in profits to other businesses	46	5
Social costs	<u>70</u>	<u>35</u>
Subtotal Costs	\$135	<u>63</u>
NET BENEFITS	<u>\$153</u>	<u>\$247</u>

B. Costs**1. Costs of gaming facilities**

We have not analyzed this category in depth, but suspect that the estimates are low. For example, \$1 million for the amortization of machine costs is too low. Accordingly, we have adjusted this estimate from \$6 million to \$10 million.

2. Loss in profits to charities

We agree conceptually that if charitable gaming also generates producer surpluses that are lost or diverted by the imposition of other legal gaming, they represent costs. As we have noted, the basis for quantification of these costs is crude. However, they are not large in the context of the analysis, and we make no adjustment.

3. Loss in profits to other businesses

We have several concerns with this measure:

- ▶ To the extent that they do not represent producer surpluses, the costs should not be included in the benefit/cost analysis.
- ▶ The basis of quantification of the costs is simplistic and leads to questionable results.
- ▶ The measure used—net income of self-employed businesses—is not a measure of pure profit. It includes a substantial wage component, i.e., the employment income which is earned by self-employed individuals, on account of the work they do. Unless such individuals can find no other productive activity to undertake, there should be no cost associated with this component of their income.

These various considerations suggest that the appropriate amount in this analysis may well be nil. This would be supported by work conducted by the WEFA Group.¹ We use an estimate of \$5 million to be conservative.

4. Social costs

We have several concerns with this estimate:

- ▶ The methodology attributes all costs of problem gamblers to the legalization of gaming. This is clearly an over-estimate.
- ▶ The analysis seems to assume that one-half of problem gamblers will be unemployed for six months every year, despite the fact that they are assumed to be receiving treatment at the same time. This seems excessive.
- ▶ The estimates of social costs are over-stated by approximately \$20 million, because they include the unemployment insurance transfer, which should not be included in the analysis.

Our adjusted estimate is \$35 million. To obtain this estimate, we have reduced Cyrenne's estimate of \$70 million for the \$20 million overstatement of unemployment insurance payments, and taken 70% of the remainder to reflect the other considerations above.

¹ The WEFA Group, *The Effects of Casino Gaming on Consumer Spending*, 1994.

C. Revised results

As Exhibit VII-1 illustrated, these reworked estimates yield estimated benefits of \$310 million annually, and costs of \$63 million. This yields an estimate of net benefits in the order of \$250 million annually, or about \$100 million higher than Cyrenne's estimate.

We emphasize that we have not conducted a full-fledged benefit-cost analysis, nor have we provided KPMG Management Consulting's opinion as to the true net benefit of legalized gambling in Manitoba. Instead, this result represents merely a reworking of Cyrenne's estimate, in a manner which addresses a number of the concerns which we have identified in this report.

VIII

Conclusions

The basic framework used in the Cyrenne Report is appropriate. However:

- ▶ We have a number of serious conceptual and methodological concerns with the way in which this framework was implemented.
- ▶ There are substantial weaknesses in the quantification of specific elements of benefit and cost.
- ▶ The conclusions and policy implication are not closely tied to the analysis in the report.
- ▶ A reworking of Cyrenne's analysis to reflect these issues suggests that their quantitative implications are substantial.

On balance, the weaknesses and/or errors are sufficiently important that the results presented in the Cyrenne report are seriously flawed.

Appendix B

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