



Study of the Ontario
Economic Impact Content
of Ontario Wines vs.
Foreign Wines and Ontario
VQA Wines vs. Ontario
Cellared-in-Canada (CIC)
Wines

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Ontario
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Executive Summary

In 2008, KPMG LLP ("KPMG") was retained by the Wine Council of Ontario ('WCO') to:

- Assess the economic impact of the Ontario Wine Industry on the Ontario Economy in 2007 (actually the fiscal year ending March 31, 2007.) (This assessment was to be an update of our 1997 KPMG Economic Impact Study, "Economic Impact of the Ontario Wine Industry on the Economy of the Province of Ontario in 1997", which is referred to in this study as "the 1997 study".)
- Examine the Ontario economic impact content of Ontario wines versus foreign wines, and with the category of Ontario wines, VQA wines versus 'Cellared in Canada' ("CIC") wines. VQA wines are those wines made using 100% grapes grown in Ontario. CIC wines are defined as those wines made using a **minimum** of 30% grapes grown in Ontario combined with grapes or juice from other jurisdictions; CIC wines may contain from 30% to 100% Ontario grapes;
- Compare and contrast the economic impact of the Ontario Wine Industry in 1997 and in 2007.

A. Description of the Ontario Wine Industry

In this study, the Ontario wine industry is defined to include the following sectors:

- Ontario grape growers supplying the Ontario wine industry;
- Ontario wineries and their Ontario-based Head Office operations (jointly referred to as "Ontario wineries"); and
- Ontario winery retail stores.

In applying this definition, we include only those parts of the industry that are devoted to handling wine products. Therefore, we do not include the entire operation of a grape grower who also grows grapes for non-wine producers; rather, we include only the share of the grower's business that is attributable to wine products. Note as well that the Liquor Control Board of Ontario ("LCBO") is treated as a customer of the Ontario wine industry, not as a component of the industry.

We have based our analyses on the findings of the 1997 study, and we have scaled up the results for each of the three sectors based on updated data provided by the WCO (see page 8 for overview of scale-up approach).

Accordingly:

- We did not collect new primary data from individual wineries on their revenues and expenditures; and
- We did not conduct any new input-output modeling.

B. Economic Impact of the Ontario Wine Industry in 2007

Exhibit 1 provides an estimate of total employment supported by the Ontario Wine Industry in 2007. The industry supported over 6,900 jobs in 2007.

Exhibit 1 **Ontario Direct and Indirect Employment Supported by the Ontario Wine Industry, 2007 (Jobs)**

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail Stores</i>	<i>Total</i>
<i>Direct</i>	<i>1,476</i>	<i>1,369</i>	<i>2,442</i>	<i>5,287</i>
<i>Indirect</i>	<i>134</i>	<i>1,233</i>	<i>279</i>	<i>1,646</i>
<i>Total</i>	<i>1,611</i>	<i>2,602</i>	<i>2,721</i>	<i>6,934</i>

*Notes: Direct grape grower jobs are the sum of 958 Full-Time Equivalent employment positions and 518 owner-operators.
Figures may not add up due to rounding.
Indirect employment excludes suppliers within the wine industry.*

Exhibit 2 summarizes the value-added generated in Ontario by the Ontario wine industry in 2007. The value-added of the Ontario wine industry is estimated to be almost \$529 million in 2007.

Exhibit 2 **Ontario Direct and Indirect Value-Added Generated by the Ontario Wine Industry, 2007 (\$ Millions)**

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail Stores</i>	<i>Total</i>
<i>Labour Income</i>	<i>20</i>	<i>232</i>	<i>67</i>	<i>318</i>
<i>Business Income</i>	<i>35</i>	<i>105</i>	<i>38</i>	<i>178</i>
<i>Government Income</i>	<i>2</i>	<i>25</i>	<i>6</i>	<i>32</i>
<i>Total</i>	<i>56</i>	<i>361</i>	<i>111</i>	<i>529</i>

*Notes: Government income excludes personal or corporate income tax; and wine-specific revenues.
Figures may not add up due to rounding*

C. Ontario Economic Impact Content of Ontario Wines vs. Foreign Wines

Based on the updated economic impacts developed in this study, we analyzed the Ontario economic impact content of Ontario wines versus foreign wines.

D. Results

These economic impact “content” results are based on the 2007 Ontario wine and foreign wine sales as well as information provided by the WCO regarding agency commissions for foreign wine and the Free-on-Board “F.O.B.” prices of imported wines.

We detail our results in **Exhibits 3** and **4**, below.

Exhibit 3 **Value-Added Impacts per Litre of Ontario Wine Sold, 2007** **(Dollars)**

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Labour Income</i>	\$ 0.32	\$ 3.71	\$ 1.07	\$ 5.11
<i>Business Income</i>	\$ 0.56	\$ 1.68	\$ 0.61	\$ 2.85
<i>Government Income</i>	\$ 0.02	\$ 0.40	\$ 0.10	\$ 0.52
<i>Total Value-Added</i>	\$ 0.90	\$ 5.79	\$ 1.78	\$ 8.48

*Notes: Government income excludes wine-specific revenues.
LCBO value-added impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit 4 **Value-Added Impacts per Litre of Foreign Wine Sold , 2007** **(Dollars)**

	<i>Total</i>
<i>Labour Income</i>	\$ 0.67
<i>Total Value-Added</i>	\$ 0.67

*Notes: Value-Added excludes wine-specific revenues.
Value-Added from foreign wine sales is derived based on the assumption that agents receive a 10% commission on the F.O.B. price of foreign wine. The F.O.B. price of foreign wine is estimated to be \$6.68.
LCBO value-added impacts are not included in the analysis.*

E. Ontario Economic Impact of VQA vs. CIC Wines

Based on the updated economic impacts developed in this study, we analyzed the Ontario economic impact content of Ontario VQA wines versus Ontario CIC wines.

Information differentiating the expenditures required to produce VQA versus CIC wines was only available in certain instances and as such, some particular assumptions were made. Our major assumptions include:

- VQA wines must use 100% Ontario grapes

- CIC wines must include a minimum of 30% of Ontario grapes. We have used this assumption in our calculations. (Note: This is a conservative assumption based on available data. Actual Ontario grape content is expected to vary, on a weighted average basis, from approximately 30-50% depending on a number of factors such as crop yields, production cycles etc.)
- Labour and non-labour (excluding grapes) factors for VQA and CIC were apportioned based on estimates from discussion with WCO and industry representatives.
- Winery retail store costs are equal for a litre of VQA and CIC wine at the same price.
- Government income for winery retail stores is based on a weighted average using the government income from an average bottle sold for VQA and CIC.

Based on the above assumptions and the relative share of VQA wines in the province, approximately 45-50% by volume (55-60% by value) of the grape purchases in the province are made for use in VQA wines, while CIC wines use approximately 50-55% by volume (40-45% by value) of the Ontario grapes harvested. As discussed above, this estimate of Ontario grapes used is based on the legal 30% minimum requirement in CIC wines. In certain years, where yields and other production cycles vary, an increased share of the harvest of Ontario wine grapes may be directed towards certain CIC products. **Exhibits 5 and 6** below detail our estimated results.

Exhibit 5
Value-Added Impacts per Litre of VQA Wine Sold in Ontario, 2007 (Dollars)

VQA	<i>Grapes</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Labour Income</i>	\$ 0.91	\$ 4.56	\$ 1.07	\$ 6.54
<i>Business Income</i>	\$ 1.61	\$ 2.06	\$ 0.61	\$ 4.28
<i>Government Income</i>	\$ 0.07	\$ 0.50	\$ 0.12	\$ 0.69
<i>Total Value-Added</i>	\$ 2.58	\$ 7.11	\$ 1.81	\$ 11.50

*Notes: Government income excludes wine-specific revenues.
LCBO value-added impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit 6
Value-Added Impacts per Litre of CIC Ontario Wine Sold in Ontario, 2007 (Dollars)

<i>CIC</i>	<i>Grapes</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Labour Income</i>	\$ 0.17	\$ 3.50	\$ 1.07	\$ 4.75
<i>Business Income</i>	\$ 0.30	\$ 1.58	\$ 0.61	\$ 2.50
<i>Government Income</i>	\$ 0.01	\$ 0.37	\$ 0.09	\$ 0.48
<i>Total Value-Added</i>	\$ 0.48	\$ 5.46	\$ 1.78	\$ 7.72

*Notes: Government income excludes wine-specific revenues.
LCBO value-added impacts are not included in the analysis.
Figures may not add up due to rounding.*

F. Comparison of 1997 vs. 2007

Based on the outcomes of this 2007 study, we summarized the results for value-added impacts and employment in 2007 and compared them to 1997 results (Both real and nominal dollars).

Exhibit 7
Value-Added Impacts of the Ontario Wine Industry – 10 year Comparison (\$ Millions)

	<i>1997 (nominal dollars)</i>	<i>2007 (in 1997 Dollars)</i>	<i>2007 (nominal dollars)</i>	<i>Nominal 10-yr Growth</i>
<i>Labour Income</i>	121	257	318	163%
<i>Business Income</i>	68	144	178	163%
<i>Government Income</i>	14	26	32	139%
<i>Total</i>	202	427	529	161%
<i>Total Employment</i>	4777	n/a	6934	45%

As is shown in the table above, the Ontario Wine Industry has seen significant growth in both real and nominal terms over the period from 1997 to 2007. Nominal growth in Total Value-Added impacts has been 161% over the period and total employment has grown by 45%. This reflects significant growth in a number of factors such as, the increase in the number of wineries, the value and amount of Ontario grape purchases (\$21.9M to \$64.4M), winery volume sales (39.4M litres to 62.4M litres), average FOB prices, and the amount of taxes paid to governments.



I. Introduction

In 2008, KPMG LLP ("KPMG") was retained by the Wine Council of Ontario ('WCO') to:

- Assess the economic impact of the Ontario Wine Industry on the Ontario Economy in 2007 (actually the fiscal year ending March 31, 2007). In this report, the 2007 results refer to the fiscal year ending March 31, 2007.
- Examine the Ontario economic impact content of Ontario wines versus foreign wines and, within the category of Ontario wines, VQA wines versus CIC wines;
- Compare and contrast the economic impact of the Ontario Wine Industry in 1997 and in 2007.

The assessment of the economic impact of the Ontario Wine Industry is an update of our 1997 KPMG Economic Impact Study, "Economic Impact of the Ontario Wine Industry on the Economic of the Province of Ontario in 1997," which was published in 1998, and is referred to in this present study as "the 1997 study." KPMG has previously completed updates of these economic impact results for the WCO for the years 2000 and 2001 and 2005.

In this introductory chapter we provide:

- A description of the study components;
- A description of the Ontario wine industry;
- An overview of the data-gathering and analysis; and
- A definition of economic impact.

A. Study Components

There are three components to the study. We discuss each of them, in turn, below.

1. Impact of the Ontario Wine Industry on the Ontario Economy in 2007

In this current study, we scaled up our 1997 study results to 2007 to reflect changes in the intervening years of the production and sale of wine, the purchase of grapes, and labour productivity.

Accordingly, we:

- did not collect new primary data from individual wineries on their revenues and expenditures; and
- did not conduct any new input-output modeling.

In Chapter II of this report, we outline the impact of the Ontario wine industry on the Ontario economy in 2007 in terms of employment and value-added.

2. Ontario Economic Impact Content of Ontario Wines Versus Foreign Wines

Based on the updated economic impacts developed in the first component of this study, we analyzed the Ontario economic impact content of Ontario wines versus foreign wines. Results are delineated in terms of:

- Employment impacts per litre of Ontario wine and foreign wine sold.
- Value-added impacts per litre of Ontario wine and foreign wine sold.

In addition, we analyzed the Ontario economic impact content of Ontario VQA wines versus Ontario CIC wines.

In Chapters III and IV of this report, we outline the Ontario economic impact content of Ontario wines versus foreign wines and, within the Ontario category of wines, VQA versus CIC wines in 2007.

3. Compare and contrast the economic impact of the Ontario Wine Industry in 1997 and in 2007.

Based on the outcomes of this 2007 study, we summarized the results for value-added impacts and employment in 2007 and compared them to 1997 results. In order to facilitate comparison, we have also provided the 2007 results in 1997 dollars. This was accomplished using the value of the Consumer Price Index change from 1997 and 2007 (Source: StatsCan). Chapter V of this report compares and contrasts the results from 1997 to 2007.

B. Description of the Ontario Wine Industry

In this study, the Ontario wine industry is defined to include the following sectors:

- Ontario grape growers supplying the Ontario wine industry;
- Ontario wineries and their Ontario-based Head Office operations (jointly referred to as "Ontario wineries"); and
- Ontario winery retail stores.

In applying this definition, we include only those parts of the industry that are devoted to handling wine products. Therefore, we do not include the entire operation of a grape grower who also grows grapes for non-wine producers; rather, we include only the share of the grower's business that is attributable to wine products. Note as well that the Liquor Control Board of Ontario ("LCBO") is treated as a customer of the Ontario wine industry, not as a component of the industry.

This economic impact report analyzes the expenditure flows of the Ontario wine industry and determines their ultimate disposition as employment and income to various economic groups. Within each sector of the Ontario wine industry, impacts are generated by all functions undertaken by the companies in that sector and by suppliers to the sector. For example, wineries generate

impacts through all elements of their operations, including production, head office support, sales, and distribution.

C. Data-Gathering and Analysis

The results provided in this report are based on the collection of detailed data from the WCO at the industry level. For this study we have not collected new primary data at the individual wineries level; rather, we have scaled up the results of our 1997 study (which did collect such primary data on revenues and expenditures) to reflect changes in the intervening years of the production and sale of wine, the purchase of grapes, and labour productivity.

1. Scaling Up Impacts

We have scaled up results for each of the three sectors of the Ontario wine industry — Ontario grape growers supplying the Ontario wine industry, Ontario wineries, and Ontario winery retail stores — using the relevant 1997 and 2007 volume and/or sales data pertinent to each sector.

Employment figures were adjusted to 2007 levels using reduction factors calculated via the comparison of labour productivity factors (an “industrial aggregate” labour productivity factor in 1997 and 2007 obtained from StatsCan. The 2007:1997 reduction factor used was 1.15.

1996 Ontario grape growers data were scaled up using the ratio of the value of grapes purchased by the Ontario wine industry in 1996 and crop year 2006 (FY 2007). Data from 1997 Ontario wineries were scaled up using the ratio of wine sales [on a volume (litre) basis] for 1997 and 2007. 1997 Ontario winery retail stores data were scaled up using the ratio of the number of winery retail store licences owned by winery parents in 1997 and 2007 and the ratio of sales volume generated by these retail stores in 1997 and 2007.

We have also scaled up the 1997 results to account for inflation. Grape production values already include inflation as we are using the value of grapes sold (in 2007 dollars) to scale up our 1997 results. Winery production values have been scaled up by the ratio of margin per litre above grape costs in 1997 and 2007. This margin is the free on board price of a litre of wine less the price of grapes per litre of wine. This allows us to isolate changes in the margin above grape costs that wineries receive. Winery retail stores have been scaled up by the value of Consumer Price Index change from 1997 and 2007.

In scaling up impacts to produce 2007 estimates, we have assumed the same industry structure and mix of distribution channels as in 1997, except for the increase in the number of winery retail stores and the inclusion of Ontario Vintages sales.

2. Definitions

As was the case with our 1997 study, this study includes the production of wine, wine coolers, and wine kits in the winery economic impact results. The sales of these commodities, along with wine accessories, are included in the winery retail store economic impact results.

In this study, wine sales from Vintages stores and Direct Delivery were included in the scaling up of our economic impact analysis. This sales data was not included in our 1997 study as a result of little or no data.

D. Definition of Economic Impact

Economic impacts are characterized by the employment and value-added impacts accruing to the residents of a geographic region under study. Employment impacts are measured in terms of jobs for employment that is ongoing (i.e., employment impacts associated with annual expenditures).

Value-added is one of the most commonly used indicators of economic activity and it measures economic value created through the production of goods and services. For example, an industry's value-added is the difference between the value of its sales and the cost of its purchases from suppliers. The total value-added produced in a country is known as Gross Domestic Product ("GDP"). Value-added is measured in dollars. Value-added impacts are composed of the following categories:

- Labour income, which includes salaries and wages, plus workers' benefits (supplementary labour income), calculated before taxes.
- Business income, which includes net before-tax income of unincorporated business, plus corporate business income before deductions for depreciation, interest, and corporate income tax.
- Government income, which consists of net indirect taxes, as well as revenues from goods and services purchased from the government. Indirect taxes include taxes such as sales taxes and property taxes, but exclude personal income taxes and corporate income taxes, which are included in the above categories. In this study, government income does not include revenues generated from the sale of wine.

1. Direct and Indirect Impacts

In the results presented in this report, we estimate direct impacts (the wages and salaries paid, the business income earned, and the taxes paid by the Ontario wine industry itself), and indirect impacts (the wages and salaries paid, the business income earned, and the taxes paid by Ontario suppliers to Ontario the wine industry).

For example, the direct employment impact consists of the Ontario wine industry's employees and the indirect employment impact consists of the Ontario workers employed by the Ontario wine industry's suppliers. Similarly, direct labour income accrues to the Ontario employees of the Ontario wine industry, while indirect labour income accrues to the Ontario employees of the suppliers.

This report presents an industry perspective of three sectors of the Ontario wine industry — grape growers, wineries, and winery retail stores. We have analyzed the economic impact of each of these sectors independent of one another. That is, all indirect impacts exclude suppliers within the Ontario wine

industry. For example, indirect impacts of the wineries do not include the impacts of grape growers; instead, these results are presented separately.

2. Induced Impacts

In accordance with prevailing practice in economic impact studies, we have not estimated induced impacts in our study. Induced impacts are those impacts associated with a re-spending of direct and indirect labour income generated (e.g., impacts associated with the goods and services purchased by Ontario wine industry employees and Ontario-based suppliers' employees using their wages and salaries earned).



II Ontario Wine Industry Activity and Impacts in 2007

Ontario wine industry activity in 2007 can be delineated along four lines of activity:

- Wine sales in Ontario;
- Grape growing activities in Ontario;
- Winery activities in Ontario; and
- Winery retail store activities in Ontario.

A. Wine Sales in Ontario

According to sales data provided, 62.4 million litres of Ontario wine were sold in Ontario in fiscal 2007. Total wine sales in Ontario in FY 2007 were 138.9 million litres. Accordingly, Ontario-produced wines held a 44.9% market share (by litres) of wine sold in Ontario. **Exhibit II-1** details the breakdown of wine sales in Ontario in FY 2007.

Exhibit II-1

Wine Sales in Ontario, Fiscal 2007 (Millions of Litres)

	<i>Volume (Millions of Litres)</i>
<i>Ontario Wine Sold - LCBO</i>	<i>35.3</i>
<i>Ontario Wine Sold at Winery Retail Stores</i>	<i>19.4</i>
<i>Ontario Wine Sold through Direct Delivery from Wineries to Licensees</i>	<i>3.2</i>
<i>Ontario - Other</i>	<i>4.5</i>
<i>Ontario Wine Total</i>	<i>62.4</i>
<i>Foreign Wine Sold at LCBO</i>	<i>76.5</i>
<i>TOTAL</i>	<i>138.9</i>

Sources: "Wine Council of Ontario and Ontario Wine Industry 50/50 Market Share report, Litres Sold for the 12 months ended March 31, 2007", LCBO, 2007

Notes: "Foreign" wine includes wine imported from other countries and wine from other Canadian provinces.

Sales from Vintages stores are included as LCBO sales.

Figures may not add up due to rounding.

B. Grape Growing Activities in Ontario

Grapes are the single largest commodity expenditure for the Ontario wine industry. We have assumed that the 2006 grape crop had the same input structure as did the 1996 grape crop supplying the 1997 Ontario wine industry.

C. Winery Activities in Ontario

In 2007, there were over 100 grape wineries in Ontario and the industry sold more than 6.9 million cases of wine. The nominal free on board price per litre of wine (net of grape costs) in 2007 was \$6.97, up from \$3.81 in 1997.

D. Winery Retail Store Activities in Ontario

In 2007, there were 395 winery retail stores in Ontario, up from the 330 winery retail stores that existed in Ontario in 1997. Ontario winery retail stores sold 19.4 million litres of wine in 2007, up from 14.8 million litres in 1997.

E. Economic Impacts in Ontario in 2007

Exhibit II-2 summarizes direct and indirect employment supported in Ontario by the Ontario wine industry in 2007. Direct and indirect employment amounted to more than 6,900 jobs in 2007.

Exhibit II-2

Ontario Direct and Indirect Employment Supported by the Ontario Wine Industry, 2007 (Jobs)

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail Stores</i>	<i>Total</i>
<i>Direct</i>	<i>1,476</i>	<i>1,369</i>	<i>2,442</i>	<i>5,287</i>
<i>Indirect</i>	<i>134</i>	<i>1,233</i>	<i>279</i>	<i>1,646</i>
<i>Total</i>	<i>1,611</i>	<i>2,602</i>	<i>2,721</i>	<i>6,934</i>

Notes: *Direct grape grower jobs are the sum of 958 Full-Time Equivalent employment positions and 518 owner-operators.
Figures may not add up due to rounding.
Indirect employment excludes suppliers within the wine industry.*

Exhibit II-3 summarizes the value-added generated in Ontario by the Ontario wine industry in 2007. The value-added of the Ontario wine industry is estimated to be approximately \$529 million in 2007.

Exhibit II-3
Ontario Direct and Indirect Value-Added Generated by the
Ontario Wine Industry, 2007 (\$ Millions)

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail Stores</i>	<i>Total</i>
<i>Labour Income</i>	20	232	67	318
<i>Business Income</i>	35	105	38	178
<i>Government Income</i>	2	25	6	32
<i>Total</i>	56	361	111	529

*Notes: Government income excludes personal or corporate income tax; and wine-specific revenues.
 Figures may not add up due to rounding*



III Ontario Economic Impact Content of Ontario Wines Versus Foreign Wines

Based on the updated economic impacts developed in this study (as shown in chapter II), we analyzed the Ontario economic impact content of Ontario wines versus foreign wines. The economic impact “content” of a litre of Ontario wine versus a litre of foreign wine is described via two measures:

- Employment per litre of Ontario wine or foreign wine sold.
- Value-Added per litre of Ontario wine or foreign wine sold.

A. Results

These economic impact “content” results are based on the 2007 Ontario wine and foreign wine sales shown earlier in **Exhibit II-1**, as well as information provided by the WCO and a WCO member regarding agency commissions for foreign wine and the F.O.B. prices of imported wines. (The latter assumptions are shown in the explanatory “notes” sections of **Exhibits III-3** and **III-4**.) We detail our results in **Exhibits III-1** to **III-4**, below.

Exhibit III-1

Employment Impacts per Litre of Ontario Wine Sold , 2007 (Jobs)

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Direct</i>	0.000024	0.000022	0.000039	0.000085
<i>Indirect</i>	0.000002	0.000020	0.000004	0.000026
<i>Total</i>	0.000026	0.000042	0.000044	0.000111

*Notes: Direct grape grower jobs reflect full-time equivalent employment positions and number of owner-operators.
Indirect employment excludes suppliers within the wine industry.
LCBO employment impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit III-2
Value-Added Impacts per Litre of Ontario Wine Sold, 2007
(Dollars)

	<i>Grape Growers</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Labour Income</i>	\$ 0.32	\$ 3.71	\$ 1.07	\$ 5.11
<i>Business Income</i>	\$ 0.56	\$ 1.68	\$ 0.61	\$ 2.85
<i>Government Income</i>	\$ 0.02	\$ 0.40	\$ 0.10	\$ 0.52
<i>Total Value-Added</i>	\$ 0.90	\$ 5.79	\$ 1.78	\$ 8.48

*Notes: Government income excludes wine-specific revenues.
LCBO value-added impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit III-3
Employment Impacts per Litre of Foreign Wine Sold, 2007
(Jobs)

	<i>Agents</i>	<i>Total</i>
<i>Direct</i>	0.000016	0.000016

*Notes: Agents are assumed to be sole proprietors.
Employment from foreign wine sales is derived based on the assumption that agents receive a 10% commission on the F.O.B. price of foreign wine. The F.O.B. price of foreign wine is estimated to be \$6.68.
LCBO employment impacts are not included in the analysis.*

Exhibit III-4
Value-Added Impacts per Litre of Foreign Wine Sold, 2007(Dollars)

	<i>Total</i>
<i>Labour Income</i>	\$ 0.67
<i>Total Value-Added</i>	\$ 0.67

*Notes: Value-Added excludes wine-specific revenues.
Value-Added from foreign wine sales is derived based on the assumption that agents receive a 10% commission on the F.O.B. price of foreign wine. The F.O.B. price of foreign wine is estimated to be \$6.68.
LCBO value-added impacts are not included in the analysis.*



IV. Ontario Economic Impact of VQA vs. CIC wines

Based on the updated economic impacts developed in this study (as shown in Chapter II), we analyzed the Ontario economic impact content of Ontario VQA wines versus Ontario CIC wines. The economic impact “content” of a litre of Ontario VQA wine versus a litre of Ontario CIC wine is described via two measures:

- Employment per litre of Ontario VQA or CIC wine sold in Ontario.
- Value-Added per litre of Ontario VQA or CIC wine sold in Ontario.

A. VQA vs. CIC Sales in Ontario

Using the available data for 2007, it was been estimated that 12.5 million litres of Ontario VQA wine and 49.9 million litres of Ontario CIC wine were sold in the province. VQA wines represent approximately 20% of total Ontario wines sales and CIC wines represent approximately 80% %. This information was provided by the Wine Council of Ontario. VQA wines are those wines made using 100% grapes grown in Ontario. CIC wines are defined as those wines made using a **minimum** of 30% grapes grown in Ontario combined with grapes or juice from other jurisdictions; CIC wines may contain from 30% to 100% Ontario grapes

Information differentiating the expenditures required to produce VQA versus CIC wines was only available in certain instances and as such, some particular assumptions were made. Based on discussions with the Wine Council of Ontario and other industry representatives, our major assumptions include:

- VQA wines must use 100% Ontario grapes
- CIC wines must include a minimum of 30% of Ontario grapes. We have used this assumption in our calculations. (Note: This is a conservative assumption based on available data. Actual Ontario grape content is expected to vary, on a weighted average basis, from approximately 30-50% depending on a number of factors such as crop yields, production cycles etc.)
- Labour and non-labour (excluding grapes) factors for VQA and CIC were apportioned based on estimates from discussion with WCO and industry representatives.
- Winery retail store costs are equal for a litre of VQA and CIC wine at the same price.
- Government income for winery retail stores is based on a weighted average using the government income from an average bottle sold for VQA and CIC.

Based on the above assumptions and the relative share of VQA wines in the province, approximately 45-50% by volume (55-60% by value) of the grape purchases in the province are made for use in VQA wines, while CIC wines use approximately 50-55% by volume (40-45% by value) of the Ontario grapes harvested. As discussed above, this estimate of Ontario grapes used is based on the legal 30% minimum requirement in CIC wines. In certain years, where yields and other production cycles vary, an increased share of the harvest of Ontario wine grapes may be directed towards certain CIC products.

B. Results

These economic impact content estimations are based on the sales of Ontario VQA and CIC wines in 2007 as well as the grape content assumptions listed above. Additional assumptions are listed as notes under the exhibits below.

As a result of the greater use of Ontario grapes for VQA wines and differing economic impact based on our assumptions, VQA wines have a higher Ontario economic impact content than do CIC wines on a per litre basis. **Exhibits IV-1 to IV-4** below detail our estimated results.

Exhibit IV-1 Employment Impacts per Litre of VQA Wine sold in Ontario 2007 (Jobs)

VQA -	<i>Employment Per Litre Sold</i>			
	<i>Grapes</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Direct</i>	0.000068	0.000027	0.000039	0.000134
<i>Indirect</i>	0.000006	0.000024	0.000004	0.000035
<i>Total</i>	0.0000738	0.0000511	0.0000436	0.0001686

*Notes: Direct grape grower jobs reflect full-time equivalent employment positions and number of owner-operators.
Indirect employment excludes suppliers within the wine industry.
LCBO employment impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit IV-2
Value-Added Impacts per Litre of VQA Wine Sold in Ontario,
2007 (Dollars)

	<i>Value Added per Litre of VQA Wine Sold in Ontario</i>			
VQA	<i>Grapes</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Labour Income</i>	\$ 0.91	\$ 4.56	\$ 1.07	\$ 6.54
<i>Business Income</i>	\$ 1.61	\$ 2.06	\$ 0.61	\$ 4.28
<i>Government Income</i>	\$ 0.07	\$ 0.50	\$ 0.12	\$ 0.69
<i>Total Value-Added</i>	\$ 2.58	\$ 7.11	\$ 1.81	\$ 11.50

*Notes: Government income excludes wine-specific revenues.
LCBO value-added impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit IV-3
Employment Impacts per Litre of CIC Ontario Wine Sold in
Ontario, 2007 (Jobs)

CIC	<i>Employment Per Litre Sold</i>			
	<i>Grapes</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Direct</i>	0.000013	0.000021	0.000039	0.000073
<i>Indirect</i>	0.000001	0.000019	0.000004	0.000024
<i>Total</i>	0.0000138	0.0000393	0.0000436	0.0000968

*Notes: Direct grape grower jobs reflect full-time equivalent employment positions and number of owner-operators.
Indirect employment excludes suppliers within the wine industry.
LCBO employment impacts are not included in the analysis.
Figures may not add up due to rounding.*

Exhibit IV-4
Value-Added Impacts per Litre of CIC Ontario Wine Sold in
Ontario, 2007 (Dollars)

	<i>Value Added per Litre of CIC Wine Sold in Ontario</i>			
<i>CIC</i>	<i>Grapes</i>	<i>Wineries</i>	<i>Winery Retail</i>	<i>Total</i>
<i>Labour Income</i>	\$ 0.17	\$ 3.50	\$ 1.07	\$ 4.75
<i>Business Income</i>	\$ 0.30	\$ 1.58	\$ 0.61	\$ 2.50
<i>Government Income</i>	\$ 0.01	\$ 0.37	\$ 0.09	\$ 0.48
<i>Total Value-Added</i>	\$ 0.48	\$ 5.46	\$ 1.78	\$ 7.72

*Notes: Government income excludes wine-specific revenues.
LCBO value-added impacts are not included in the analysis.
Figures may not add up due to rounding.*



V Comparison of 1997 vs. 2007 Economic Impact

Based on the outcomes of this 2007 study, we summarized the results for value-added impacts and employment in 2007 and provide a comparison to 1997 results (in both real and nominal terms)

Exhibit V-1 **Value-Added Impacts of the Ontario Wine Industry – 10 year Comparison (\$ Millions)**

	<i>1997 (nominal dollars)</i>	<i>2007 (in 1997 Dollars)</i>	<i>2007 (nominal dollars)</i>	<i>Nominal 10- yr Growth</i>
<i>Labour Income</i>	<i>121</i>	<i>257</i>	<i>318</i>	<i>163%</i>
<i>Business Income</i>	<i>68</i>	<i>144</i>	<i>178</i>	<i>163%</i>
<i>Government Income</i>	<i>14</i>	<i>26</i>	<i>32</i>	<i>139%</i>
<i>Total</i>	<i>202</i>	<i>427</i>	<i>529</i>	<i>161%</i>
<i>Total Employment</i>	<i>4777</i>	<i>n/a</i>	<i>6934</i>	<i>45%</i>

As is shown in the table above, the Ontario Wine Industry has seen significant growth in both real and nominal terms over the period from 1997 to 2007. Nominal growth in Total Value-Added impacts has been 161% over the period and total employment has grown by 45%.

This reflects significant growth in a number of factors such as:

- The number of wineries and as such, the amount of capital investment
- The value and amount of Ontario grape purchases (\$21.9M to \$64.4M)
- Winery volume sales (39.4M litres to 62.4M litres)
- Winery retail stores sales (\$111.4M to \$189.0M)
- Average FOB prices per litre
- The amount of taxes paid to governments
- The number of winery retail stores