

The Wine Industry in British Columbia: A Closed

Wine But Showing Potential

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Executive Summary

This report is based on a Genome BC, Genome Canada, SFU, and UBC funded study from 2009-2011 of the competitiveness of the BC wine industry as compared to other wine industries around the world (other cases and comparative analysis will be released as a book or special edition sometime in 2011-12). Though the BC industry has had remarkable success, we focus on vulnerabilities (possible weaknesses) for growth and stability in the industry (as listed in the Table of Contents). We use cluster theory, which suggests that firms competing in the same industry also have reason to cooperate. When we compare BC with the other cases studied, namely, Italy, Spain, Australia, and Chile, we find that there is far less cooperation, institutional support and leadership, and a heavy dependence on the local market, particularly local tourism. There are weaknesses as well in access to knowledge and learning through limited opportunities for interactions, agricultural extension, and training. This may be natural given the early stage of BC's wine industry, however, it also suggests adjustment is important for long-term growth and evolution. One of the key differences is that BC does not compete for exports, which in the other cases pushes the firms towards a shared long-term vision (such as Australia's 2025 vision statement). The perception by many in industry is that BC produces at too low a volume and too high a price to compete for exports. However, the examples of all the other cases show that even small producers can export given adequate institutional support, and, above all, in producing a high quality consistent product that is well marketed. This reinforces in turn the need for closer attention to improving the quality of grapes in BC, which equally requires a long-term strategy along the same lines and long-term relationships with wineries that currently are haphazard.

Thus, we envision a BC wine industry that could take the next step forward into becoming a producer of global quality and renown, if certain steps are taken. On the other hand, resistance to this research and to change is also predominant in the industry; with the recent growth and advantages to incumbents, there is limited appeal for change at the moment.

The analysis is based on original data gathered by Andy Hira via 53 interviews and surveys with winemakers and suppliers in the Okanagan during summer 2010 as well as background analysis of historical, political, economic and social factors. These were supplemented by the creation of a database on wineries in the region, as well as input from experts on the industry. We hope the report will spark debate and interest in further serious research into how to improve the long-term competitiveness of BC wine. We invite comments.

Introduction

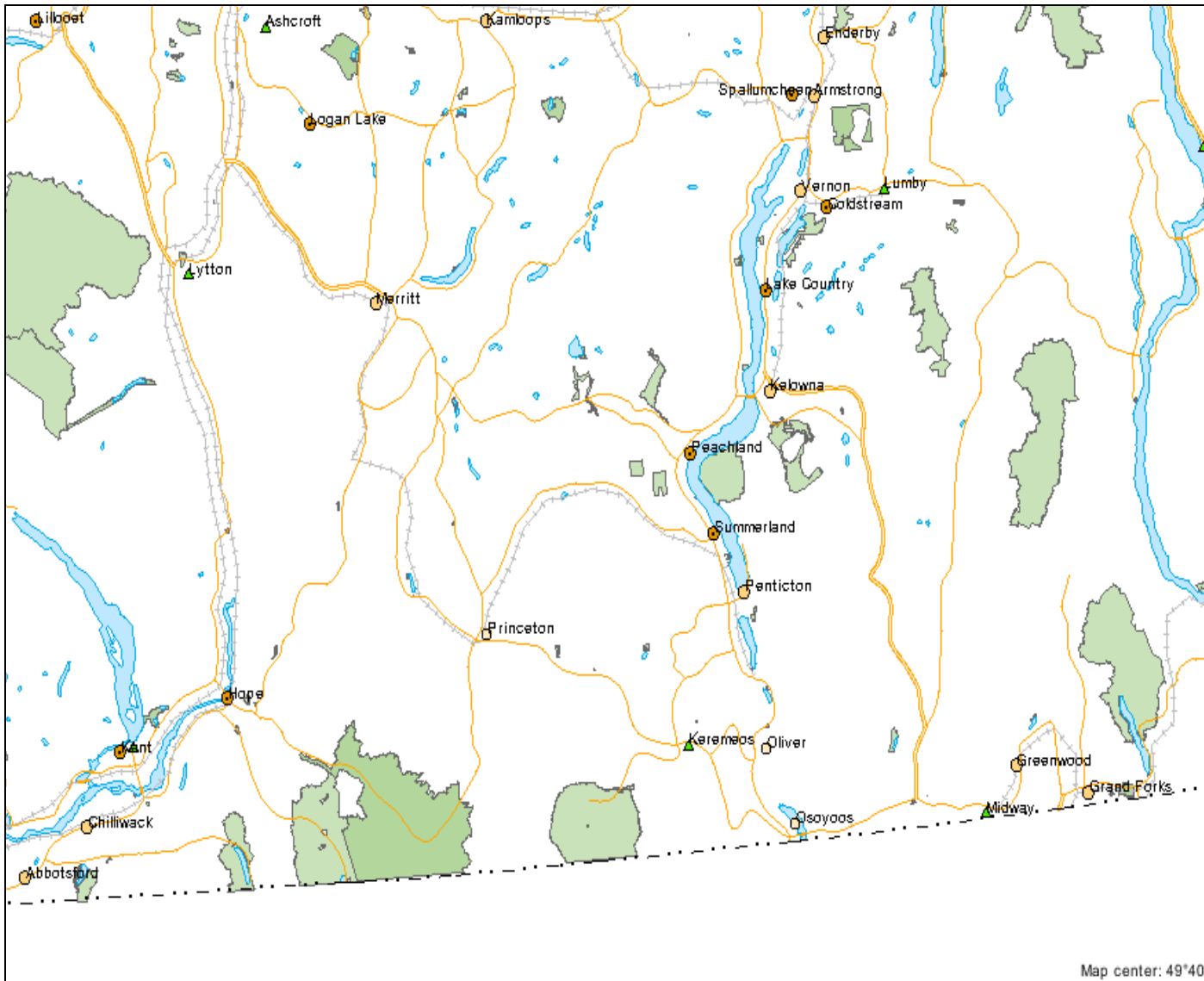
The analysis in this report is structured around a theoretical framework I have developed for the larger comparative project- that industry competitiveness depends on policies that guide: markets, institutions, networks, and supply chains. We apply the framework to the British Columbia (BC) Canada wine industry, with an emphasis on the area with the greatest concentration, the Okanagan Valley (OKV). Our approach focuses on the potential role of public and collective support institutions to promote industry competitiveness in clusters. By clusters, we mean geographically concentrated producers in the same industry. I take an evolutionary view of the role of such institutions, reflecting my recent work that a successful public-private partnership requires continual

adaptation to changes in markets (Hira, forthcoming). I therefore completely reject the false dichotomy that prevails that either markets (private companies) or states (governments) determine economic success. Productive public-private interactions are fundamental to successful industries. The analysis in this report strongly reinforces this point- to be successful BC needed and will need public-private partnerships that are responsive, flexible, and pro-active.

The Recent Creation of the OKV Wine Industry- Market Trends and Policy Responses

Lake Okanagan and the presence of a suitable range of mesoclimates make the Okanagan Valley (OKV) an attractive location for viticulture. The OKV stretches far, about 155 km from Lake Country in the North to Osoyoos in the South, on the border with the US, for about a 2 hour drive, and about 9-16 km in width. In addition, a grape growing region in the South from East to West, from Osoyoos to Princeton, principally the Similkameen Valley, spans some 100 additional km. Over 90% of BC's tree fruit acreage and 95% of its grapes are grown in the OKV. The Cowichan Valley on Vancouver Island and the Fraser Valley, just east of Vancouver, the other main areas for wine production have about 50 hectares of vines as opposed to over 9,000 in the OKV. The BC Wine Institute 2009 BC Crop Survey indicates that 96.35% of all BC wine is produced in the OKV.

Map of Okanagan Valley



Notes: map created by author using imaps BC (Provincial government web-based tool), see <http://webmaps.gov.bc.ca/>

Grape and wine industry in British Columbia (BC) and, more particularly, the Okanagan Valley (OKV) can be traced back to 1859 (BC Wine Institute), though there are some who suggest that such a claim stretch the truth. The OKV was dominated early on by apple production, from the time the first commercial orchard was opened in Penticton in 1890. Tree fruit orchards were considered much more viable than grapes given the harsh Okanagan winters (Nichol 1983, 128 & 136).

Early wine was reportedly made from loganberries grown at Saanich on Vancouver Island and in the Fraser Valley. Early varieties of grapes in BC, as in the rest of Canada were native (primarily *Labrusca*), rather than European ones, because of a perceived need for frost-hardiness. In the 1920s, J.W. Hughes, an immigrant from Iowa began growing commercial grapes, and started Pioneer Vineyard. His fruit operations were to evolve into the giant Sun-Rype Products (Nichol 1983, 129). The onset of the Depression led some apple growers to begin to make wine from it. The first of these was the Domestic Wines and By-Product Company run by Pasquale Capozzi and W.A.C. Bennett (later Premier of BC), which set up in 1932. By 1934, they realized that apple wines were not competitive with grape wines, and they began to import grapes from California. The name changed to Calona in 1936 (Adams 1992, 9-10).

Bill Collings notes a key event that changed the industry, “In the 1930’s the Rittich brothers, both with degrees in viticulture and oenology from Hungary, established a vineyard in the Black Mountain area near Kelowna. They published the results of their five-year viticultural experiment. I believe the title was *Growing European Grape Varieties in a Climate Where the Winters are Long and Cold*. To my knowledge, this was the first planting of many of the current *vinifera* varieties. Eugene Rittich became

the winemaker for Grower's Wines." In 1932, Growers Wine Co. began to produce wine from grapes in the OKV under the name of Beau Sejour, which started in 1928 (Rowe 1970, 22-23). The taste of the early wine was considered poor, so that much of the early wine was fortified into port or sherry for drinkability. After World War II, grapes were often imported from California for blending with the native Labrusca varieties. Growers hired Frank Schmidt to plant a white seedless grape called Himrod that was marketed as Canadian Liebfraumilch until litigation from Germany forced them to change the name to Rhine Castle. The adoption of European names was common by BC wineries then (Schreiner 2000, 8). From the 1950s, hybrid grape varieties were planted in BC, leading to a general mix of 80% hybrid, 20% Labrusca. In 1952, there were a total of 425 acres devoted to grapes, of which 383 were devoted to American hybrid varieties. By 1960, the total was just 572 acres (Senate Standing Committee 1978, 44-45).

By the late 1950s and early 1960s, Andrés Wines (Port Moody, 1961), Casabello Wines (Penticton, 1966) Mission Hill (Kelowna, 1966), and Uncle Ben's Industries (Westbank) were also established. In 1966, Growers wine was bought by Castle Wines, a subsidiary of Imperial Tobacco, who produced wines under the name Ste. Michelle (Adams 1992, 11). The general orientation of both the BC and Ontario vineyards was towards mass production of low cost, high alcohol content wines to serve local markets, called "jug" or "plonk" wine. The Prairies was one important market for both. In both places, a highly regulated oligopoly of a few large firms characterized industry structure (Hickton and Padmore 2005, 86-7 and Senate Standing Committee 1978, 16-17).

Early regulatory emphasis was on developing the grape industry. Given his roots in the industry, it is not surprising that W.A.C. Bennett, then premier of the province,

pushed for local sourcing of grapes, a seeming quid pro quo for the government's role in distributing wineries' products (Ross 1995, 33). As a result, the British Columbia Liquor Control and Licensing Board (BCLCB) sought to increase the local use of grapes in the wine industry, increasing the required quota from 25 to 50% in 1962, and up to 65% in 1965. The results were impressive, with grape acreage increasing by 400% in BC by 1967, and the average local grape content of wine increasing to 81%, finally settling at 80% in 1969 (known as the 80/20 rule). The end result was greater vertical integration between wineries and local suppliers, moving towards long-term contracts. At the same time, it increased pressure for improved quality of grapes, as wineries had to shift from their previous dependence on higher quality American grapes (Adams 1992 28; Kingsbury 2004, 3).

In 1968, the Inkameep vineyard began planting Riesling and Ehrenfelser grapes imported from Europe; interestingly, the foundation of the vineyard was the product of a partnership between the department of Indian Affairs and national grape juice and wine distributor Andrés Wines. Throughout this period, the preponderant grape being planted in the OKV (Okanagan Valley of BC) remained the Labrusca variety¹. There was strong skepticism that vinifera grapes could succeed, with one early writer stating “the Okanagan climate (due to the harshness of winters) is marginal for the production of grapes suitable for quality wine...as yet the limited plantings (of quality grapes) provide scant evidence that it will be possible to consistently produce high sugar, low acid, quality grapes from such vines...(Miles 1981, 98, notes are mine).” The orientation towards dessert type wines fit with the capabilities of the Labrusca and hybrid grapes,

¹ Originally a wild grape found in the eastern United States, it yields a black-blue grape popular in North American Wines. In the vernacular, it is referred to as a ‘skunk grape.’

orienting wineries and growers towards yield and hardiness from winter, rather than quality (Miles 1981, 4).

Just 4 wineries dominated the scene in 1978: Calona (4.2 m gallons of storage capacity), owned by Standard Brands Ltd.; Jordan & St. Michelle (3.2), owned by Carling O’Keefe Ltd.; Andrés (2.75); Casabello (1.5), owned by John Labatt Ltd.; with Uncle Ben’s Country Winery producing just 0.45 of the total 12.1 million gallons produced (Senate Standing Committee 1978, 64-7).

BC grape supply was grown exclusively in the OKV, with a 1978 report estimating 43% of the total provincial acreage of 3,000 acres was in and around Oliver, Osoyoos, Cawston and Keremeos. Only 2% of these grapes were European vinifera, with the rest being hybrid grapes (with the native *Labrusca*). Regulatory protection that had existed de facto since World War II in the sense that few imported table wines were listed in BC liquor stores began to dissipate in 1974 as the listing of imported wines grew (Schreiner 2000, 8). Furthermore, a crisis of overproduction of grapes by the late 1970s led to more active provincial and industry efforts to improve grape varieties in order to expand a viable wine industry in line with changing tastes (Senate Standing Committee 1978, xix). At the same time, consumer attitudes towards wine were beginning to change, with a new generation demanding more but higher quality wine with less emphasis on alcohol content (Senate Standing Committee 1978, xxviii). These wines were known as “mod” or “pop” wines in that they had low alcohol and carbonation (similar to what we call wine coolers now) (Miles 1981, 1). This led to a rise in import shares from 15% in 1970 to 31% by 1977 (Senate Standing Committee 1978, 31), pushing the government and industry to adjust.

Early responses including packaging improvements, such as changing labeling and moving to European style bottling and corks (Senate Standing Committee 1978, 33). Such efforts coincided with the growth of capacity to produce quality wine based in good part on a limited series of agricultural projects from the late 1960s and 1970s, including the planting of Johannisberg Riesling by Jordan and Ste Michelle, the successor to Growers. The industry in BC transitioned at this time towards the production of Baby Duck champagne, in response to changes in the local market towards less sweet and lower alcohol content wine, using hybrid grapes (Schreiner 2000, 8; Hickton 2005, 7).

The roots for long-term change lay in 1974 when the Canadian Federal government purchased 4000 vinifera vines² and conducted an agro-experiment at 18 different sites across BC (BC Wine Institute). In 1975, George Heiss Sr., the owner of Gray Monk, began working with Helmut Becker, a legendary director of wine research in Germany's Geisenheim Institute to test the ability to adapt vinifera, including testing close to 50 varieties (Riesling, Gewurztraminer, Pinot Blanc), and a Rotberger (that led to a true Rosé) to the OKV. According to some informants, this came on the heels of an earlier experiment with Inkameep. The experiment lasted over 8 years in 2 spots (in north and south Okanagan) and developed the varieties that "have become the industry's backbone" (Schreiner 2000, 9; Hickton 2005, 74).

A 1978 study of the industry notes in regard to the \$3 price ceiling BC wine could not surpass (Senate Standing Committee 1978, 37):

The difficulties experienced by BC wineries in obtaining higher prices for their improved quality wines reflects the market situation ten years ago. At that time, B.C. wines were definitely inferior to available European wines....Present

² Vines from the European varieties that are considered more palatable than the native labrusca variety.

government liquor advertising laws currently inhibit the ability of the wineries to convince the consumer that their higher priced products are a reflection of higher quality.

The lack of coordination between vineyards and growers led to overproduction of grapes and an inability to improve quality, such as reduced usage of European varieties and poor locations. This led to some consternation about the role of the B.C. Grape Marketing Board. The Marketing Board derived from the rapid increase in grape cultivation owing to the large increase in production from 1,100 tons in 1958 to 10,000 in 1972, as tree fruit planters switched over, partly in response to growing demand by wineries. The B.C. Grape Growers Association had interlinked members with the B.C. Tree Fruit Marketing Board, so that they knew from experience that such boards could regulate the industry. Therefore they set up a marketing board with the permission of the government in 1970. The Marketing Board created standard prices per ton by variety of grape each year. However, in an odd twist, growers registered with the Board prior to 1977 received Class A licenses for existing acreage, meaning wineries were obliged to buy their grapes first, even if they were of the Labrusca variety. The Marketing Board created fierce resistance among wineries who lost their ability to individually negotiate with growers, and thus, they claimed, to establish long-term relationships aimed at improving quality. Nor were attempts made to differentiate varieties for the meso-climates throughout the OKV. These problems reverberated with experiments in 1977 by local tree-fruit juicer Sun-Rype to develop grape juice production with federal government price support. The \$500,000 investment required a minimum of 900 tons of grapes to break even. However, only 370 of the needed 1,000 tons of grapes were

delivered by growers, indicating a lack of coordination between growers, Sun-Rype and wineries (Senate Standing Committee 1978, 50-6 & 97). These issues reflected an overall conclusion that grape and labour costs would price BC wines above imports without drastic change (Ross 1995, 32).

The Senate report notes that BC wineries had traditionally marketed their own products. Eighty five percent of wine was sold to the BC market, and 15% to other Canadian provinces, though there were dreams of exporting particularly to Asian markets such as Japan (73 & 93). In 1976, import agents formed a 42 member lobbying association to deal with the provincially-run Liquor Distribution Board. This led the wineries to utilize the B.C. Wine Council (est. 1974) to promote their product, begin to generate statistics about the industry, develop better relationships with the grapegrowers, and lobby the government. Calona withdrew from the Council in 1976 (Senate Standing Committee 1978, 37 & 69).

By 1980, the wine industry was in full crisis, with none of the wineries reporting a profit that year (Miles 1981, 2). From 1970-80, imported wines sales increased over 500%, and by 1988 imported wine sales accounted for 53% of all wine sales in BC. At the same time, sales increases were preponderantly in white wines, leading to a surplus of red grapes (Adams, 20). The B.C. wineries won the day, and key changes were made to market regulations that further spurred the industry, including (Senate Standing Committee 1978, 38-9):

- reducing the mark-up on BC wines under 14% alcohol from 66 to 46% while lowering it on imported wines from 117% to 100%
- banning new imports that retailed under \$2.75

- creating minimal volumes and standard sizes in order to be permitted to sell
- creating shelf space for local products; allowing more frequent ads; and permitting for the first time retail sales at the winery
- preventing sales at grocery stores (which might lead to a downgrading of product or less shelf space for local producers who were smaller)

The changes followed through from a 1978 Provincial law that allowed for the establishment of small-scale wineries. Liquor board mark-ups for them were set at 15% for sales in Liquor Board stores and 0 for direct sales to customers and licensees. The idea was to build estate wineries around the following guidelines, a precursor to the VQA system we discuss below, including (Miles 1981, 6-9):

- a minimum of 20 acres and of annual production of 7,500 gallons
- a maximum of 30,000 gallons
- all wine was from 100% BC grapes, and at least 50% from the winery's vineyards
- at least 2 wines will be stocked by government liquor stores
- price should be above \$3 per 750 ml. bottle

The BC Estate Winery Association (BCEWA) was founded in 1984 as the Okanagan Valley Estate Wineries Association, but changed its name when a non-Valley winery joined. The original membership was 5 wineries who cooperated to develop retail outlets (Kingsbury 2004, 39-40).

In addition, the new regulations designated the category "farm gate winery" to denote those producing between 1,000-10,000 gallons or 500-5,000 cases per year.³ Farm wineries were expected to grow 75% of their own grapes and use 100% BC grapes.

³ According to the LDB, this category no longer exists.

As with estate wineries, farm wineries were allowed to create on-site shops. As of 1998, there were 13 farm wineries in the OKV, and 18 throughout BC (Hackett 1998, 56).

Both of these aspects were closely tied to an idea of an agri-tourism basis for the industry. The already existing bounty of skiing, hiking, golf, and beaches provided the conditions to make the OKV a world class tourism spot. The original idea, then, was that the wineries would combine forces with the fruit stands, including pick your own, country markets, etc., to provide a bucolic experience for urban tourists (Hackett 1998, 57-8).

In short, the industry and the government consciously worked to lay out the pre-conditions for the transformation of a low-value, low quality production structure to one that could improve considerably and charge higher prices through a combination of upgrading and protection, with emphasis on estate wineries that could improve quality. In 1981, the highest priced wine was Casabello's Pinot Chardonnay, selling for \$5.60 (Miles 1981, 20). There were also preliminary indications that tourism could be a source of growth. One of the majors in 1980 reported 23,000 visitors and most sales were on premises (Miles 1981, 22).

The industry looked with envy at the example of upgrading in Washington State and Oregon that occurred at the same time, and had led to in-state sales of premium wine that could compete with California. This upgrading was based on switching to better grape varieties and extension from university partners. As the 1978 Senate report states: "However, the future of a healthy B.C. wine industry will not be determined by promotional activity alone. If a wine is below standard it sells only once. In the long run domestic wines must compete successfully with imports on the basis of quality and price

if they are to survive in the market place (Senate Standing Committee 1978, 41-2, 48 & 60).” Other than recommending a grape and wine division be formed at the BC Ministry of Agriculture, a plan, including how to get BC wines into appropriate distributional channels for BC, had yet to be worked out (Senate Standing Committee, 104 & 113).

The result of successful experimentation was the foundation, between 1977-1982, of now leading Canadian estate wineries Sumac Ridge, Cedar Creek (formerly Uniake), Mission Hill and Gray Monk, as well as Claremont Estate Winery, Vinitera (reorganized in 1984 as Okanagan Vineyards), and Divino. Moreover, 1979 saw the introduction of French vinifera varieties. Despite these significant advances the OKV wine cluster remained a relative backwater, with a mere 13 wineries of inconsequential size. In 1988, the estate wineries produced 627,536L, accounting for 2% of wine sales in BC. Nonetheless, these same wineries laid the foundation for future success and demonstrated the efficacy of public-private partnership in the incipient stages of wine industry development (Hickton 2005, 74; Adams 1992, 13-14).

Until the OKWFS (Okanagan Wine Festival Society), there was no lead agency in terms of wine industry tourism. The Wine Institute, the BC Farm Wineries Association, the Okanagan-Similkameen Tourist Association, the BC Tourism Ministry, and various Chambers of Commerce all played roles (Hackett 1998, 83-86). The OKWFS was founded in 1988 by a group of 6 wineries and tourism operators around the idea of organizing a series of food and wine culinary events. The main one was the Okanagan Fall Wine Festival, which including a competition of local wines (Kingsbury 2004, 40).

A lack of coordination and planning also reflected some conflicting values, as, for example, a Ministry of Agriculture, Food and Fisheries (MAFF) spokesperson,

interviewed in 1998, expressed concerns about the loss of farming land to wineries (Hackett 1998, 123).

Transformation through the NAFTA

Though the usefulness of public-private networking is notable at this stage it did not constitute evidence of a conscious effort to establish an industrial cluster until after the ratification of the Canada-U.S. Free Trade Agreement, the precursor for the North American Free Trade Agreement (NAFTA) in 1989. In fact, the precursor of the transformation to free trade occurred in 1987, when a GATT panel found for the European Community who suggested that provincial liquor boards were unfairly marking up wines (Kingsbury 2004, 3). The decision marked the start of a new era, one that would require more direct competition with imports. The view for the BC industry was quite pessimistic at the time, with one analyst stating that the ruling and agreement “have left the B.C. wine industry vulnerable and unable to compete.” As of 1992, there were 21 BC wineries, with 19 in the OKV (Adams 1992, 2 & 6).

The immediate results of the movement towards free trade were to shake up the relationships between wineries and grape growers. Many of the wineries cancelled their contracts with grape growers, invoking a *force majeure* clause in light of the loss of 50% of the preferential mark-up 14 months after NAFTA went into effect (Kingsbury 2004, 38). Commercial wineries were freed from the 80/20 rule and allowed unlimited access to US grapes, while the rules for estate wineries stayed the same. Market share for BC wines fell from 60% in 1988 to 48% in 1991 (Adams 1992, 75 & 78).

The signing of NAFTA resulted in increased market pressure to raise quality standards and there was a broad concern in the Canadian viticulture industry that wine

from the Napa Valley could come to dominate the domestic market. Foremost was the fact of the phase out of a price advantage for BC wines. Previously, BC wines had a 50% markup before sale vs. 110% for imported wines; NAFTA meant a phase out of this price advantage, gradually over 10 years (Hickton 2005, 10).

The crisis brought BC wineries, grape growers and the government together for extensive consultations on what to do. On Sept. 21, 1989, the BC Cabinet established the Premium Wine Industry Strategy to rigorously raise quality standards in an effort to save the industry (Adams 1992, 79-80). The strategy was consummated in the British Columbia Wine Act (Bill 58-1990) which laid out the regulatory groundwork for the transformation of the industry. This bill set up the guidelines for the BC Wine Institute (BCWI), appellation standards, and the Vintner's Quality Alliance (VQA), which the BC provincial government adopted to ensure that all wines labeled as BC wines were made from grapes grown in the province and have passed a critical or sensory standard to ensure quality. The creation of a standards system was augmented by a 28 million dollar grant from the Canadian Federal government, called the Grape and Wine Sector Adjustment Assistance Program (GWSAAP), to provide 8100 dollars per acre to growers who removed the old Labrusca varieties in favour of European vinifera varieties. In fact, \$27 million went to pay grape growers to uproot their vines and exit the business. As a result, the number of growers dropped from 225 to 90, and 2,308 acres of hybrid and Labrusca grapes were removed (BC Wine Institute and Kingsbury 2004, 38-9).

The VQA (Vintner's Quality Alliance) was the first conscious effort to establish a standards system and unite the OKV wine industry under one 'brand.' In the 1990s, the new developments attracted a large number of new small wineries who could take

advantage of the VQA label, and the realization that climate did not prevent the production of high quality wines (Hickton and Padmore 2005, 87). A number of the smaller grape growers transformed themselves into farm wineries, with estate wineries aiding in terms of providing supplies in smaller quantities than commercially available (Kingsbury 2004, 39). A rush of investment from Eastern Canadian and international companies from the late 1990s sent land prices soaring (Hickton 2005, 12). A 1994 economic study of the industry reported a remarkable transformation- with revenues and profits increasing significantly from 1988, and with estate wineries growing by 66% in revenues over the same period (Ross 1995, 61).

The GWSAAP program also gave \$1 million to help establish and finance the BC Wine Institute for 5 years, from 1990. The original head of the BCWI was also the founding Chairman of the BCEWA. The BCWI was launched in 1990 by 19 founding members and MAFF (Adams 1992, 80). The BCWI originally shared office space in Kelowna in the OKV with the BC Grape Marketing Board and the Association of BC Grapegrowers (ABC GG). It had 1 full time and 1 part-time employee. By the end of 1996, these grew to include an executive director and assistant in Vancouver and an administrative director and 5 staff in Kelowna (Kingsbury 2004, 39-41). The 1990 Act gave multiple roles to the BCWI, including setting standards, including testing, for labeling and advertising; the ability to raise levies upon membership; promotion and marketing; R&D and developing a database of information. At this time, all wineries considered it a legal obligation to join the BCWI (Kingsbury 2004, 54). The early impression of the BCWI's VQA and marketing efforts seems uniformly positive, as

information about quality spread throughout the BC market (Kingsbury 2004, 61-3). By 1998, there were some 31 wineries in the OKV (Hackett 1998, 55).

A 2004 Report by the BC Ministry of Agriculture, Food and Fisheries (16) notes the following breakdown of BC wineries:

Large Wineries

- Andrés Wines Ltd.
- Calona Vineyards
- Mission Hill Family Estate
- Sumac Ridge Estate Winery
- Vincor International

Medium Wineries

- Burrowing Owl Vineyards
- Cedar Creek Estate Winery
- Gray Monk Estate Winery
- Hawthorn Mountain Vineyards
- Quails' Gate Estate Winery
- Summerhill Estate Pyramid Winery
- Inniskillin Okanagan Vineyard Inc.
- Gehring Brothers Estate Winery
- Domaine de Chaberton Estate Winery
- Mt. Boucherie Estate Winery
- NK'MIP Cellars
- Tinhorn Creek Vineyards
- Victoria Estate Winery

Small Wineries

Over 80+ existed as of 2004

All except Victoria and Domaine de Chaberton of the above are in the Okanagan Valley. Andrés was renamed Andrew Peller Ltd. in 2006 and is run by the grandson of the founder. There are other wineries in the Gulf Islands, Vancouver Island, and in other areas of BC (such as the Kootenays), but the numbers are far too small to consider in terms of clusters. So, even from an early stage, the general structure of the OKV wine

industry is a very flat pyramid- with a few (<10) large wineries, a few more (<20) estate wineries, and the rest being very small operations.

Support Institutions

While there are the beginnings of a set of support institutions for the emerging cluster, they are still in the nascent stage, and under-resourced as compared with other wine clusters, such as New Zealand, Australia, and the U.S.

Regulatory Bodies

The main regulatory bodies for the wine industry in BC are the Liquor Control and Licensing Branch, that controls where and how alcohol is consumed, the Liquor Distribution Branch, that controls the supply; and the new BC Wine Authority. The regulatory system has a strong element of protection for local industry. The BC Wine Authority was set up in 2005 to take over the wine standards and tasting part of the VQA program from the BC Wine Institute (which still controls the marketing side). It has a 3 member board and a Chair that are independent and conduct taste tests as well as ensuring that regulatory standards in the production of BC VQA wine are met. Following is a description of the key support institutions.

Pacific Agri-Food Research Centre (PARC)

PARC is located in Summerland and conducts research on tree fruits and grapes. Wine research at PARC includes fruit/wine quality, pest and disease management, environmental physiology, which they state includes nutrient, water relations and response to climate, and biochemistry of fruit and wine. PARC has received support from the BC Wine Grape Council and the BC Wine Institute in the past for research.

Until 1994, there was a single research scientist responsible for grape growing projects, but he was more academically oriented. When the scientist moved to Brock University's centre supporting Ontario wineries, as a result of the position being cut, industry protested. In 2000, a new scientist who is a graduate of the renowned UC Davis wine school, came to occupy the position. There are in addition 10 researchers, 14 technicians and students and visiting workers. Local wineries now have more of an input into the research (Hickton and Padmore 2005, 96).

BC Wine Institute

The Institute was established in 1990 by an act of the BC legislature, reflecting a desire for the public and private sectors to collaborate towards developing a competitive wine industry. The aforementioned project of replacing existing grapes with vinifera varieties started the work. The current functions are marketing and research, with a focus on VQA wines. BCWI also appoints members of the VQA stores. Members pay a levy so that they have a direct input into activities and the research agenda. Other services are provided on a fee per service basis. Members gain access for their products to 19 VQA stores, marketing efforts, and learning opportunities. However, Hickton (2005, 34) notes that not all wineries are included, and there is no enforcement power for industry-wide initiatives. As we discuss below, the BCWI's role has transformed, in line with its reliance on VQA store revenues.

Association of BC Grape Growers

The ABCGG was founded in 1961 as an industry lobby and marketing group (Kingsbury 2004, 3).

Okanagan Wine Festival Society (OKWS)

This group grew in the 1980s to promote the wine industry. In 1994, a Spring wine festival was started, and in 2002 a summer festival. The OKWS has helped to promote quality improvements in the industry, by bringing in international judges to their festival competitions.

BC Wine Grape Council

The BC Wine Grape Council was formed as a research body to replace the BCWI Research and Development Committee, which no longer had funds to continue. The Council was set up through an industry-wide referendum.⁴ Funds come entirely from membership who pay in equal amounts, with a budget of < \$5000 in 2004. The Association traditionally met at PARC or one of its members (Kingsbury 2004, 114-5). The Council has a research and development committee and now hosts its own annual conference.

Ministry of Agriculture, Food and Fisheries (MAFF)

There is currently only 1 employee from MAFF involved in the industry, and he covers both grape and fruits. He spends most of his time on R&D and other industry boards.

University of British Columbia

The UBC has a wine research centre devoted to grape and wine research in Vancouver, including scientific studies of both grape growing and winemaking. There is also a second campus, UBC Okanagan, located in Kelowna, where research also takes place, and which offers technical training courses.

Okanagan College

⁴ Correspondence with Bill Collings, Jan. 2011.

Okanagan College, with its primary campus in Penticton, offers wine assistant and related courses for training.

Others

There are numerous groups in the OKV that seem to have informal lives (and occasional deaths) of their own. Among the noteworthy are: The Estate Winery Association, which seems now to be mostly an informal group of the larger estate wineries who meet occasionally to share information. The British Columbia Winegrowers Association appears to be a group of small and medium sized wineries to speak out on issues of common interest. For example, the Association has complained about the need for more accurate labeling (see issues below).

Sub-Regional Groups- see *Lack of Coordination* Section

Current Industry Issues

Introduction

As described above, market changes and policy responses precipitated the growth and evolution of the OKV winemaking industry. While comparative advantage allows for beneficial conditions for the making of wine, changes were necessary in the policy environment to create an industry. The first key set of policies were government protection of local grapegrowing and wine industries. The second set of policies, precipitated by market changes as well as the Canadian government entering into a free trade agreement with the US, was focused on upgrading. Policies in this case included a downgraded but still important element of protection, massive investment in creating estate wineries of high quality, and tourism promotion. One scientist interviewed also

suggested that climate change allowed for the introduction of new varieties, permitting upgrading, which sounds plausible, and was reinforced by several long-standing interviewees who noted changes in the possibility for the cultivation of vinifera grapes in several areas previously deemed too cold. The fruits of these efforts are remarkable success in both the proliferation and revenues of the industry, and the Valley has the makings of a quiet gold rush.

A large expansion of the industry took place as industrial giants (such as Vincor) and institutional investors have taken note of the growth and bought up properties. In addition, a large number of interviewees highlighted the widescale conversion of fruit farmers into grape growers and grape growers starting their own wineries (with some fruit growers bypassing the intermediate step). There are also a strikingly large number of winery owners who come to the business with no background in the industry, not necessarily to strike it rich but out of a passion for wine. Many interviewees described the dedication that has led them to entrust their life savings toward the idyllic dream of running a winery and vineyard. On the other hand, long-timers in the industry warned that should the rapid growth of the market decelerate, there could be shake-outs.

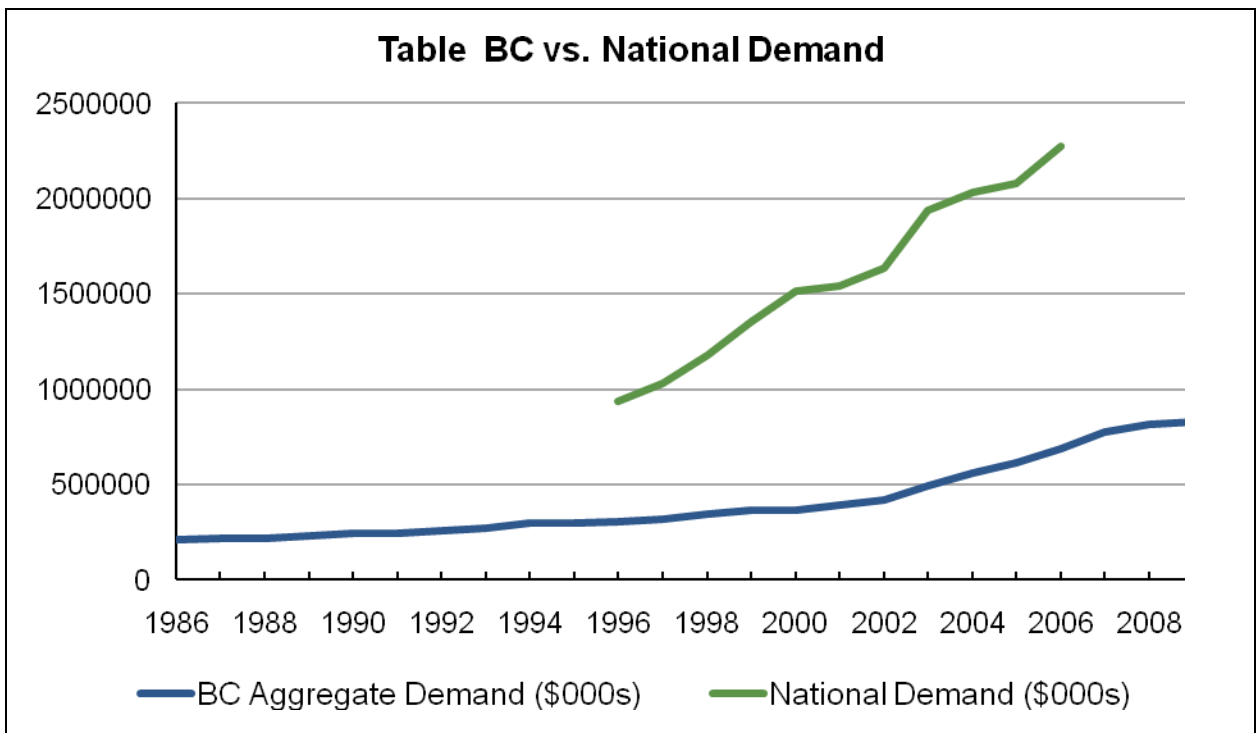
Already there are rumours of many (up to 30) wineries being put up for sale, including one long-time family business with several wineries declaring bankruptcy. And there is certainly a gradual recognition by entrants about the arduous and tempestuous nature of the business. Several interviewees remarked that it is really more like farming than winemaking, and subject to all the volatilities (weather, pests, disease, etc.) of that occupation. One interviewee, coming from the financial sector, remarked, “I’ve never worked so hard in my life. I had no idea it was going to be this labour-

intensive.” This has led several of the smaller wineries, as well as a growing proportion of absentee investors, to hire consultants to run their wineries. Competition and consumer preferences should be allowed to decide who in the industry survives, yet, there are still a large number of pressing issues that both the public sector and the industry will need to confront in the foreseeable future for the industry as a whole to succeed in BC.

Market Conditions and Vulnerabilities

The long-term growth of the Canadian wine industry, as a national market place, is clearly established by the Figure below.

Figure Growth in BC and National Demand



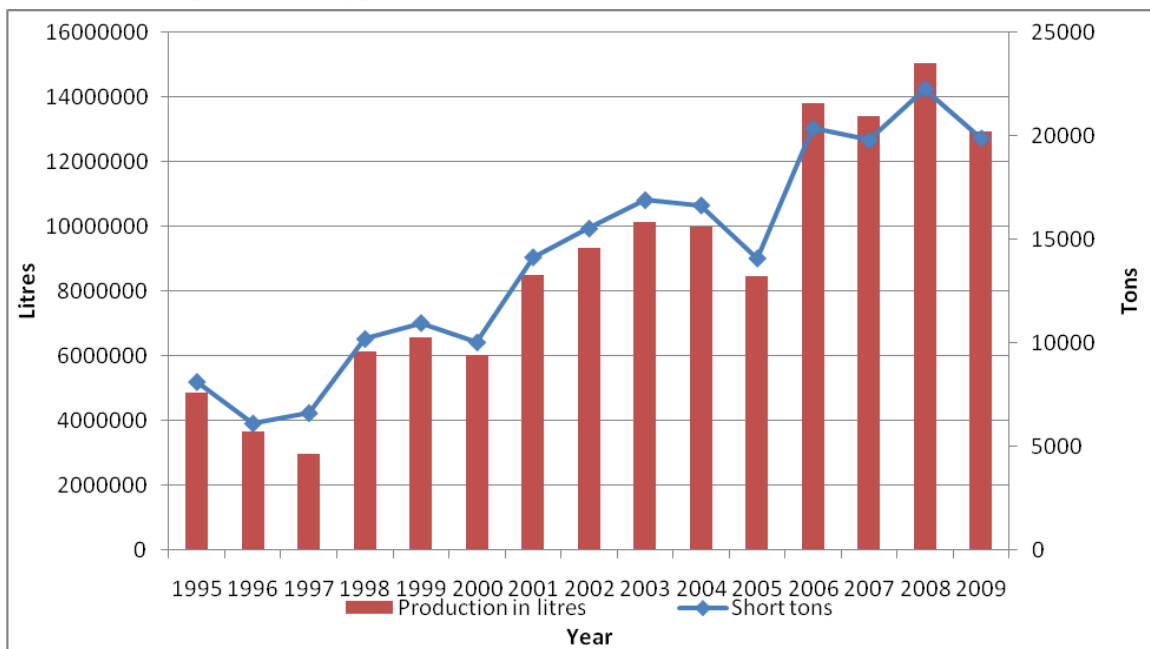
Annual Survey of Manufactures by Statistics Canada

Evidently, the average consumption of wine increases substantially over time, with an increase in the national average consumption between 1983-95 of 3.36 litres per adult, according to Hope-Ross (2006). The boost can be attributed to changing consumer

trends influenced by an increased quality of wines resulting from greater availability of US wines as a result of NAFTA. This trend must be kept in perspective because as Hope-Ross (2006, 9) notes: “Canada is still very much a beer-drinking nation. But more and more, wines are making inroads. In 1993, each Canadian adult bought, on average, 10.6 litres of wine. By 2005, sales had increased by 3.6 litres to 14.2 litres per adult. At the same time, beer sales fell from 91.3 litres per adult to 88.1 litres, a decline of 3.2 litres.”⁵

BC supply has followed the positive trajectory of demand as demonstrated in the following figure.

Figure BC Upward Supply Trends



B.C. Wine Institute: <http://www.winebc.com/quickfacts.php>, Accessed Jan 25, 2011; short ton = 2,000 lbs.

The BC Wine Institute puts the value of the 2009 grape crop at C\$40,205,170.

The growth in annual VQA wine sales between 1992 and 2010, from 6.8 million dollars

⁵ “2007 BC Wine Grape Acreage Report”, British Columbia Wine Institute. <http://www.winebc.com/library/reports/2007VintageReport.pdf>

to 182.1. million dollars, indicates the increased importance of the provincial and domestic market for BC wines⁶. The VQA system's ability to improve quality likely helped to push overall gains in sales. By 2007 BC VQA wines represented 19.9 % of total BC wine sales and Canadian wines as a whole represented 42.4% of total BC wine sales⁷. of the industry is corroborated by increases in acreage of vinifera grapes, tonnage yields and value of the yields. Notable is the increase over a short period of time and the extent of the growth as primarily occurring in the OKV, regardless of the size of the winery.

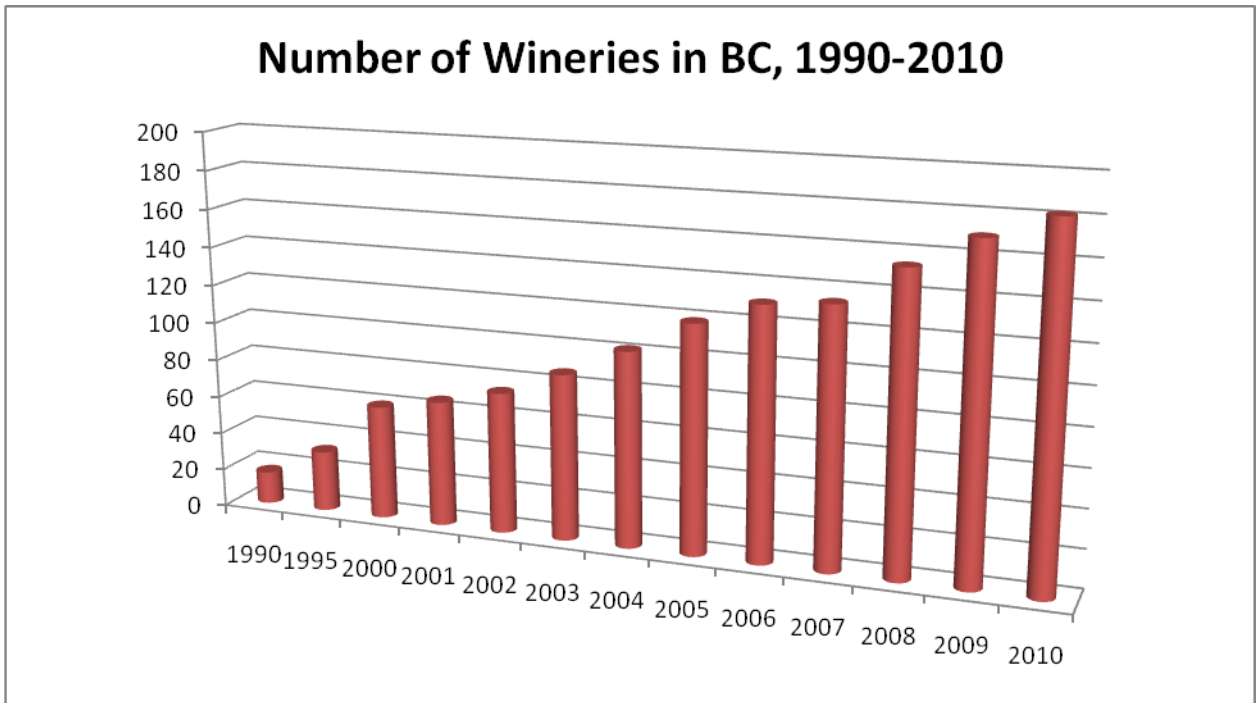
The BC Wine Institute sees VQA as evidence of its success. Executive Director Mile Prodan states, "with over 190 grape wineries now in BC, and several licenses pending, clearly consumer's have choice. A definitive factor in consumer selection is quality, a standard of which the BC Wine Institute (BCWI) works to promote through the "Wines of British Columbia (BC VQA)" - an "Appellation of Origin" system that guarantees authenticity of origin and stipulates minimum quality standards and is regulated by the British Columbia Wine Authority (BCWA). As the preferred premium wine brand in BC, over the past five years, annual BC VQA wine sales (in BC) have increased by \$40 million, and, with an average yearly growth in provincial BC VQA sales of 9% over the last 5 years, clearly consumers have embraced BC VQA."

Vulnerability #1: Market Saturation

Undoubtedly, phenomenal growth in demand has fueled the BC wine industry's remarkable expansion in the last 2 decades.

⁶ John Schreiner for 1992 figure and BWI 2010 Annual report for 2010, http://www.winebc.com/library/reports/2010_Annual_Report.pdf.

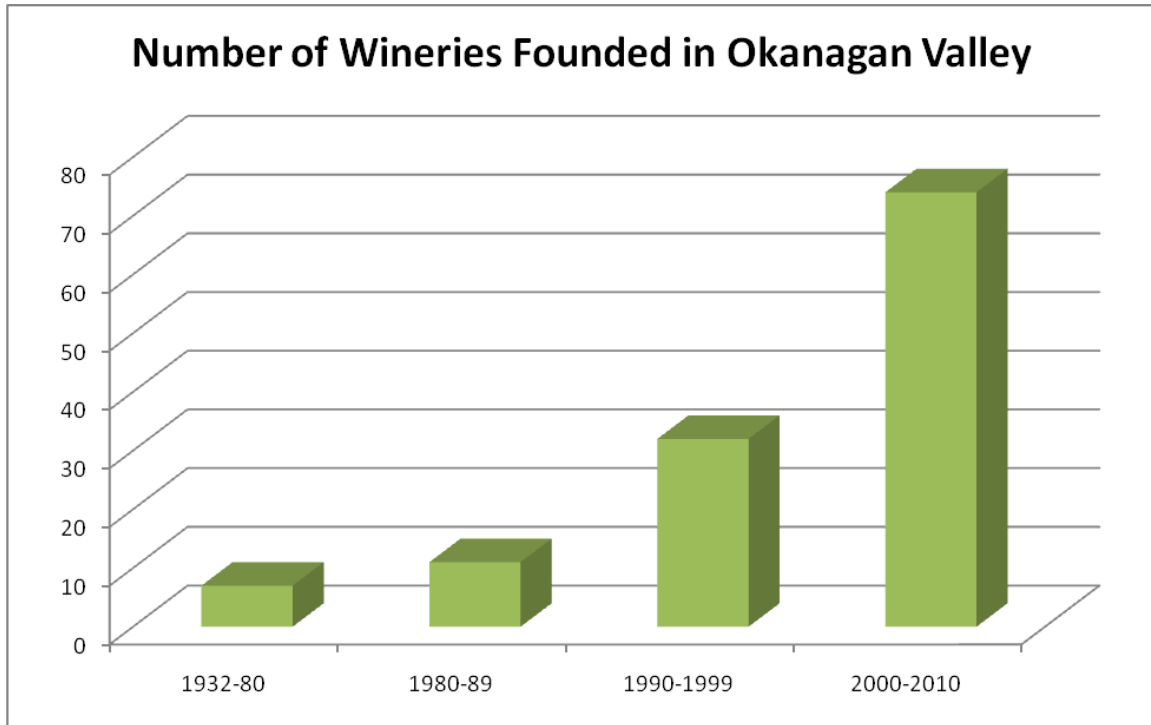
⁷ "2007 BC Wine Grape Acreage Report", British Columbia Wine Institute. <http://www.winebc.com/library/reports/2007VintageReport.pdf>



Source: BC Wine Institute, <http://www.winebc.com/quickfacts.php>, accessed Jan. 25, 2011

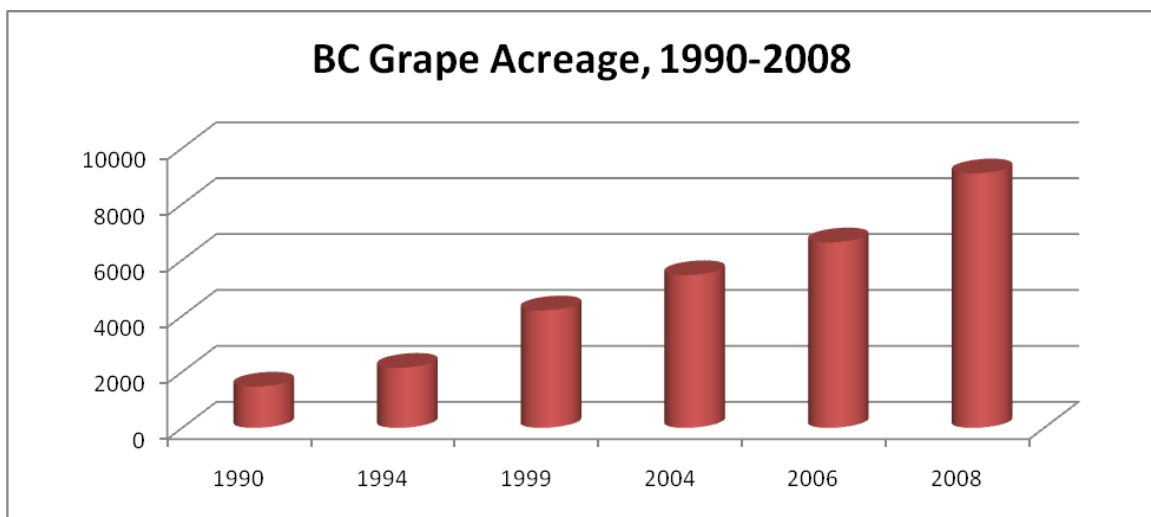
The figure below, based on our constructed database of information about Okanagan wineries, demonstrates the acceleration in the creation of new wineries, especially after the post-NAFTA adjustment program in the OKV itself.

Figure Increasing Number of Wineries Founded in the Okanagan



Notes: author calculations own database; total datapoints = 125; updated as of June 2010

These trends are matched by phenomenal increases in grape acreage in the province, as demonstrated by the figure below.

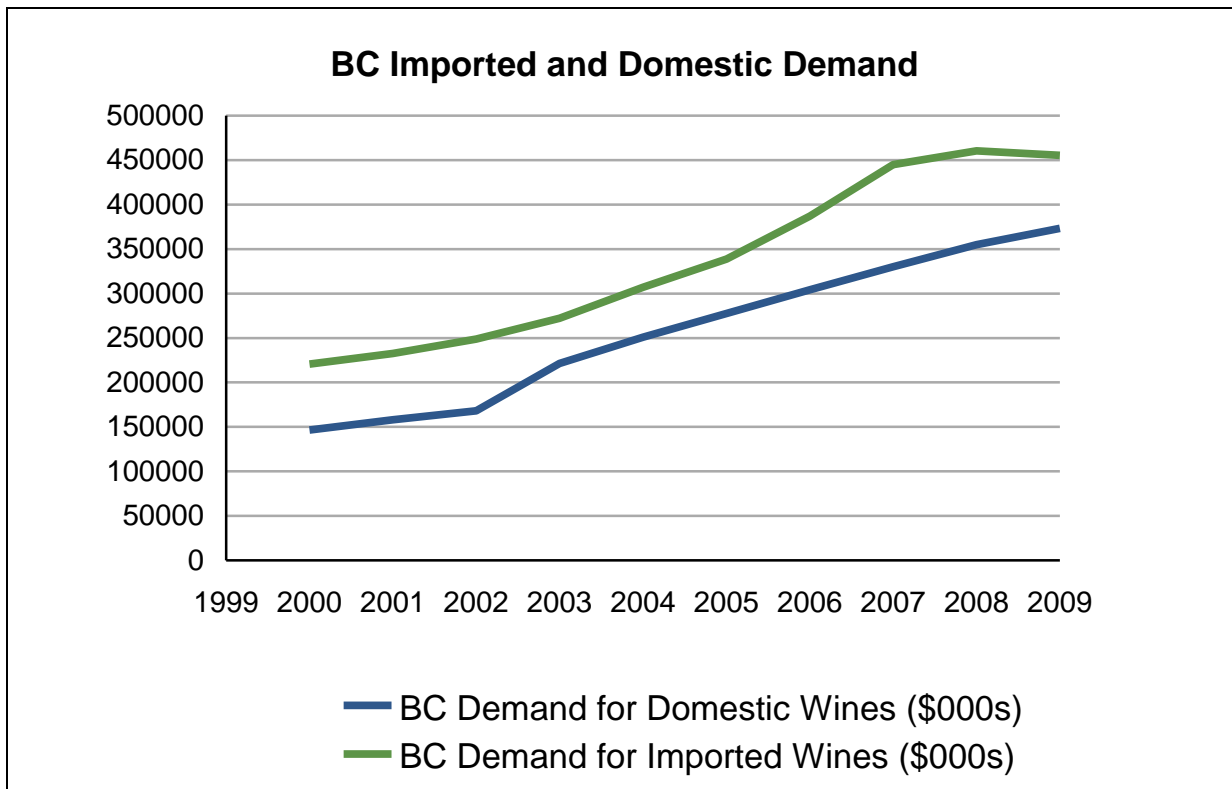


Source: BC Wine Institute, <http://www.winebc.com/quickfacts.php>, accessed Jan. 25, 2011

Longtime industry insider Bill Collings states, “There are about 10,000 acres planted to grapes in the province, most in the Okanagan Valley. At 12 million litres, this means that on average, each acre yields only about two tons per acre. Normal production per acre is estimated at between 3 and 4 tons per acres. At 3.5 tons per acre, the wine yield would be 21 million litres. Full grape production would be a disaster for the BC industry. The industry is currently having difficulty selling 12 million litres; 21 million litres will result in huge unsold inventories.”

It is important to note, furthermore, that increases in demand have been spread through both domestic and imported supply, with imported wines experiencing a higher rate of increase.

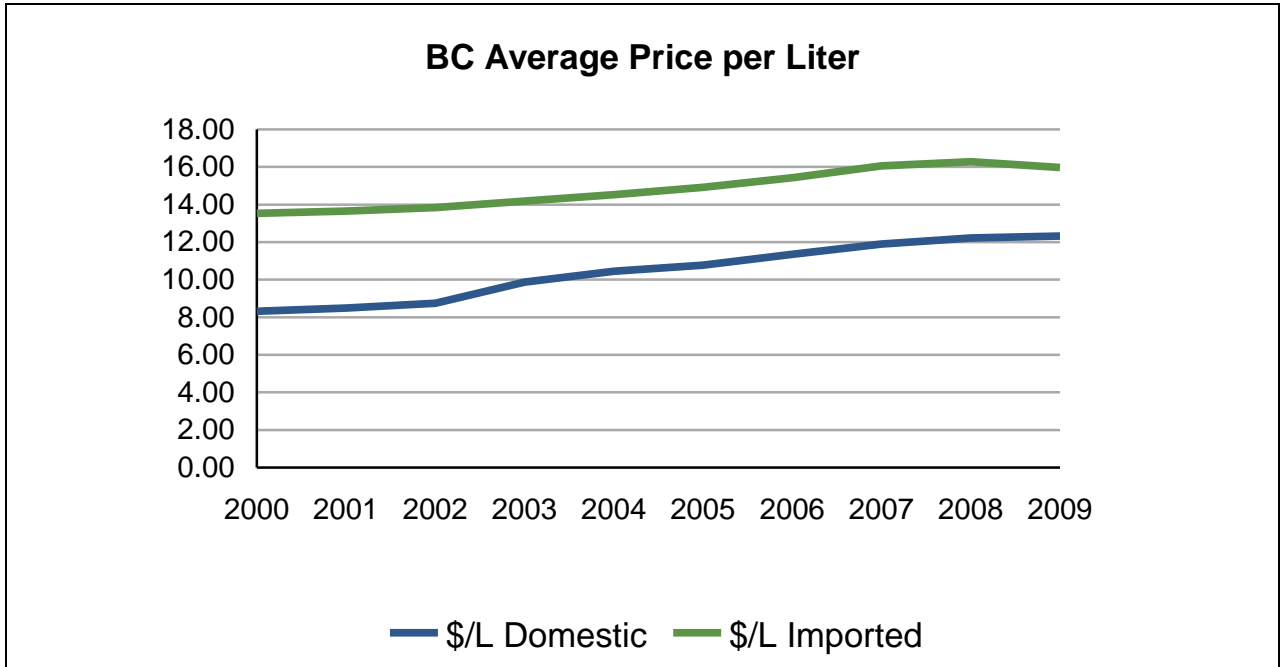
Figure Demand for Imports Outpaces Demand for BC Wines



B.C. Liquor Distribution Branch Annual Reports

If increases in prices and quality continue to evolve, imported brands are more likely to capture this additional educated demand, as reflected in the following figure.

Imported Wines Fetch a Premium vs. BC Wines



B.C. Liquor Distribution Branch Annual Reports

Interviewees reported positive recent results- 52% reported increases in revenues over 2009-10, while 21% said that they stayed the same, and just 12% claimed a decrease. While some interviewees were optimistic and confident about the future of the BC wine market, most were skeptical that it can continue apace. The question becomes, then, at what point the growth will decelerate or reach a plateau. Since the Lower Mainland (Greater Vancouver) remains the sole anchor of demand for the BC wine industry, any changes in that market, including a likely economic slowdown in the near future, must affect the positive trajectory of growth, and with it the fortunes of the myriad new wineries. Obviously, demand growth has natural limits by the overall size of the

Vancouver market; a number of interviewees opine that supply is already beginning to surpass demand. The result will be ramped up competition. While the attractive result for consumers will be lower prices and improved quality, the large number of entrants in the “boutique category,” catering towards small market niches of customers willing to pay higher prices suggests that some shakeout is likely to occur. A large number of interviewees agreed with this general premise, though they each thought that their own products could distinguish themselves enough to thrive.

Vulnerability #2 Increasing Costs of Land and Inputs

A lot of the vulnerability of the industry to demand slowdown or plateau is that business plans for the new wave of wineries are based on the present revenue stream. In fact, the cost of land has risen astronomically in the OKV, meaning that the capital burden of most of the wineries in the OKV, established over the last decade, has risen accordingly.

One industry source states, “The growers of the day sold their properties after taking the \$8,100/acre subsidy and bailed out. Good vineyard properties sold in the early 1990's for as low as \$2,000/acre. By 1993/94 the price had increased to just over \$4,000/acre for raw vineyard land. In 2002 the price in the south OKV had increased to about \$40,000/acre (planted). It peaked in 2008 at about \$120,000/acre (planted) but has settled back now to an estimated \$80,000 - \$90,000/acre (planted).” Another real estate agent in the Valley states that winery and vineyard prices rose constantly from 1992-2004, then dropped from 2005-7. An influx of Albertan money “willing to purchase at any price” was responsible for the rapid inflation. However, there are signs that bubble is bursting. Oliver and Narmata land prices are now half (\$90,000 and \$100,000/acre

respectively) of what they were at their peak in 2004. According to this source, those who bought property in the 1990s are generally “ok,” having had time to establish brands when the market was expanding. New entrants to the market (from 2006) are “in trouble,” however. Declining demand due to economic slowdown, and newly stringent drinking and driving laws have hurt industry and restaurant sales, with wine tourism down possibly by 20%. More accessible tourist transport could be an emerging solution. According to the source, there are 20 wineries and vineyards for sale, though many are not publicly listed; he expects the number could reach 50 in the coming years.

Most wineries in the Okanagan are quite small, making cost reduction challenging; 45% of our sample owned less than 20 acres. Yet, surprisingly few interviewees complain about a lack of access to finance. But this may reflect the thus far propitious conditions both in terms of market forces and growing conditions over the last decade. Indeed, the 7-8 year preparation time of the vineyard, and the likely even longer lead time to establishing a brand reputation, along with the quite low volumes of production of the majority of the wineries in the OKV, and the reliance on outside management teams and consultants, bring into question how many can thrive or even survive over the long-run. *The logical response to market saturation would be to improve quality and to seek out new markets. In the rest of the paper, we discuss why such an adjustment will be extremely challenging without changes to the industry and to government policy.* The end result of the skyrocketing of real estate prices in the OKV, as well as the demonstration effect of success is the growing spread of wineries to the far flung corners of the Valley. The table below gives our calculations on the geographic spread of the OKV wineries over time.

Table Increasing Geographic Spread of Wineries in the OKV

Year	Lake Country	Kelowna	Summerland	Naramata/Penticton	Ok Falls	Oliver	Osoyoos	Cawston	Total
1932-80	1	2	2		1	1			7
1980-89		3	2	1	2	2		1	11
1990-1999		6	2	10	2	11		1	32
2000-2010	3	11	8	23	4	12	4	9	74
									124

Notes: based on author database, 125 datapoints, as of June 2010; Kelowna incl. West Kelowna and West Bank; Summerland incl. Peachland; Penticton incl. Naramata; Ok Falls = Okanagan Falls, incl. Kaleden; Cawston incl. Keremeos

This table demonstrates that as the price of land around Kelowna has increased, the number of wineries has spread out as well. During the 1990s, the spread was concentrated in the Penticton and Oliver areas. In the last decade, these areas have continued to grow at a hot pace, but there is also growth at the geographic margins of the OKV: to the north in Lake Country; in the more isolated area of Summerland and Peachland (between Kelowna and Penticton); south to the US border in Osoyoos, and, most recently, west, to the Similkameen Valley (Cawston and Keremeos). A few new wineries are being established in new areas for winemaking, from the Edge of the Earth winery in Spallumcheen and a couple in Salmon Arm, both several hours north of the OKV, to a few coming on line recently in the Kootenay region (far southeastern BC). There are discussions of other regions coming into play in the future, such as Kamloops. Several winemakers and other experts with long-term experience in the industry pointed out that *the high cost of land is leading to a higher risk profile as more marginal lands are being brought into play*, with potential quality and environmental problems resulting. And all wineries will be subject to this factor- 24% of our sample said that they purchased 21-50% of grapes off estate, and another 42% said they bought 51-100%.

Vulnerability #3: Lack of Alternative Markets

While the market growth of BC wine is impressive, it may be built upon faulty premises. Of our sample 76% said they sold 90-100% of their wines in BC. Therefore, lack of diverse markets is clearly a huge vulnerability for BC wines that led a number of interviewees to express their concern about the future of the industry. Most farm/small family wineries cited tourism as their main source of revenue. Estate wineries generally said that the ability to sell directly to restaurants was their key market. All rely most heavily upon tourism, principally locals from Vancouver and, to a lesser extent, Alberta. Up to now, BC wineries have expanded upon the basis of the local market, however a number of interviewees express concern that, given the large increases in the supply of wine and number of wineries, the saturation point is coming close. It is interesting to note that there are a few new wineries in the OKV who sell only on-line, such as Pentage and Soaring Eagle. I suspect that this reflects the heavy reliance of many boutique and estate wineries on direct restaurant sales. There are a few other new ones who do not seem to be open to tourists, such as Intrigue Wines and Pacific Breeze. Some of these new entrants have mailing addresses in Vancouver, suggesting that they may not even own land in the Valley. A significant number of interviewees confirmed reliance on restaurant sales, and stated that they did not bother to sell in liquor stores because of the hassle and pricing system of the BC Liquor Distribution Branch. Indeed, several interviewees noted that restaurants had already cut back on purchases overall and that their attempts to move much beyond the principal price point of \$20 were halting or failing at best, as Vancouver buyers tighten their belts due to economic downturn. In addition British Columbia introduced tougher drinking and driving laws in September

2010. Many restaurants have reported a decline in wine/liquor sales since the new laws took effect.

Vulnerability # 4: Heavy reliance on Tourism

Tourism is the lifeblood of the OKV wine industry, and so presents the same vulnerability as reliance on BC restaurant sales for estate and boutique wineries. In our survey, there was virtual unanimity that tourism was “extremely important” to wineries. Many of the wineries, especially the smaller and small estate ones, do not have the same sense of urgency about exports outside of BC because tourism is by far their most important source of income, and has been a reliable source of revenues thus far. Their investments go primarily into facilities to attract more tourists and to get them to spend more, thus their policy priority would be to put more money and effort into that area. Thus, tourists are their primary source of information and feedback for new products. Reliance on just one revenue stream in a market where many suppliers are entering is, needless to say, another potential vulnerability.

A 2008 study by Tourism BC Canada surveyed 1,977 customers at 7 wineries in the OKV: Mission Hill, Cedar Creek, Elephant Island, Soaring Eagle, Tinhorn Creek, Burrowing Owl, and Nk’Mip. They found that 50% of travelers were from BC, another 26% from Alberta, 13% from elsewhere in Canada, and just 5% from the US. Most were between 35-64 years old, with 27% being 45-54. Almost three quarters (74%) had a college or technical diploma; 52% had household incomes of at least \$100,000, while another 25% had incomes between \$65,000-\$99,999. Over three quarters (79%) were repeat visitors. Thus, it is clear that the target market for BC wine is of a relatively high

stature. More marketing and educational efforts could raise prices for this market as BC wineries move to improve their quality.

Vulnerability #5: Dependence on Regulatory Protection

Protectionism revolves around the fact that the BC Liquor Distribution Branch (LDB) has a monopoly position over the supply of all alcohol in the province. After national counterparts, Ontario's LCBO and Québec's Société d'Alcools du Québec, it is the 3rd largest buying consortium for alcohol in the world.⁸ No other agent can import or sell alcohol in BC without the express permission of the LDB. The LDB sells the vast majority of alcohol in the province through its BC Liquor Stores, including not only individuals but the pubs and restaurants, clubs, etc who purchase from them. According to the LDB, there are 1360 retail liquor stores in BC, 200 of which are government-run, and 700 of which are retail stores operating under license from the Liquor Control and Licensing Branch. Effectively, then, the LDB is able to set the prices for all alcohol with a high markup price, which provides the provincial government with a huge revenue stream.

Just as important are the ways that the LDB controls supply. First, the LDB controls shelf space in its stores. It uses this power to show preference to BC wines.⁹ Secondly, all imports go through an arduous process whereby an import agent must fill out reams of paperwork asking the LDB to order the wine on their behalf from the winery. The wine must be shipped to a bonded warehouse and can only be processed through when LDB receives a valid order for the wine from a customer (private store, restaurant, or government store). This generally means considerable delay, possibly

⁸ Tony Wilson, Why BC's liquor board gets away with complacency, Mar. 12, 2010, www.lawyersweekly.ca, 13.

⁹ Robert Todd, Labelling wars heat up, Oct. 19, 2009, www.lawtimesnews.com.

months, before the product can be placed on shelves. VQA wine is also exempt from BC LDB mark ups. The end result of this system, as columnist Anthony Gismondi writes, is “Despite what you read about our burgeoning local industry and the rise in quality wine production, the best (BC) bottles are seldom seen in government stores because local producers have the freedom to sell direct and avoid the massive tax levied on wine sold in government stores and private wine shops.”¹⁰ He refers to direct sales to restaurants, on-line, and at retail winery shops, which are exempt from price markups and taxes.

Thirdly, Canadian customs regulations prevent day trippers from bringing back any wine without paying heavy duties at the border. This has led to complaints by US producers and government officials. Canadians must be out of the country at least 48 hours before they can bring just 2 bottles of wine back duty free. Fourth, the LDB sets the prices for all items, at a high markup including processing fees, which is estimated to be over 100% of the retail price in other areas. A successful GATT complaint by the European Union led to the abolition of the favourable markup treatment for BC wines by the LDB. However, even BC wine that is sold in government stores receives a portion of the markup back as a rebate through the VQA Support Program or Quality Enhancement Program.¹¹

The above demonstrate amply the precarious nature of the BC wine industry in its reliance on provincial regulatory protectionism. A slight change in one of these regulatory aspects based on external complaint or some other source, such as deciding to tax restaurant or direct sales, would have profound effects on the entire industry. Indeed, complaints by the European Union (EU) in 1988 about preferential treatment led to a

¹⁰ Anthony Gismondi, Best of BC Release, Nov. 11, 2006, *Vancouver Sun*, found at: <http://www.gismondionwine.com/articlelist.php?grp=5>

¹¹ See Mark Hicken, BC Wine and Trade Agreement Trouble, Feb. 16, 2010, www.winelaw.ca

separate agreement where Canada agreed to reduce import duties. However, the issue has not gone away. Complaints about wine have been brought up in various international fora, such as a 1991 complaint by the US about protectionism in beer, in which Australia complained, and a 1998 Trade Policy Review of the World Trade Organization, in which Spain, the EU, Chile, and Australia all raised questions about provincial treatment of wine, particularly how listing decisions were made. The EU and Canada reached an updated agreement in regard to wine and beer in 2008. In both the EU and the CUSFTA (Canada-US Free Trade Agreement), the *principle of national treatment is embraced*. This could be the basis for future challenges.

Industry participants seem to take the status quo for granted, however. The principal complaint/suggestion by the wineries interviewed in regard to public policy was, not surprisingly, that taxes should be lowered and the government should “stay out” of the industry. Several said that the sole role of government was to “gouge” industry as one put it. However, there are several other intriguing issues worth discussing.

The 1973 Agricultural Land Commission Act established the Provincial Agricultural Land Reserve (ALR) and the Agricultural Land Commission to manage the reserve, in response to concerns that farm land would disappear. The reserve set aside land exclusively for farm use, including all land then zoned as agricultural under municipal bylaws (Hackett 1998, 22). Interviewees complained about restrictions based on ALR on their ability to offer full restaurant services, perhaps reflecting the power of already existing on restaurants and hospitality services on municipal and provincial boards.

Interviewees also express a great deal of consternation at “laggards” holding quality improvements and reputation behind. In particular, some medium and smaller wineries would like adjustments towards more truthful labeling. The controversy revolves around the “cellared in Canada” label whereby several large wineries import bulk wine and then bottle it here. In fact, the BC Wine Institute states on its website that cellared in Canada wines are the best selling category of wines, ahead of VQA sales.¹² The label is considered by critics to be disingenuous, and the BC LDB has responded by separating out such wines from its BC wines shelf space into a separate space for bottled and/or blended in Canada. The wines are apparently good revenue producers, and they avoid the morass of import hassles described above, so they are likely to continue. One insider from a company that produces such wines states “cellared in Canada wines are a big part of our portfolio and provide high paying jobs to numerous BC residents. The province could not support the agricultural base required to supply such wines and it allows us to compete with low cost bottle imports.” One interpretation is that producers of such wines see them as competing in a different category than BC estate wines. Perhaps that distinction needs to be made clearer to clear up the controversy. On the other hand, Mark Hicken’s important blog on wine law in Canada, www.winelaw.ca, suggests that the issue will not die down, and may be challenged on the basis that federal law requires a listing of countries of origin. However, since blend mixes are changing according to price movements, businesses will resist this (May 12, 2010).

Almost universally, interviewees mentioned the difficulties of interprovincial shipping and sales (often called “exports” by industry participants) as a major obstacle to expansion of wine markets. However, an inside sources states that industry lobbying for

¹² <http://www.winebc.com/quickfacts.php>, accessed Jan 11, 2011.

liberalization of interprovincial shipping that *any changes in this regard, according to WTO and “national treatment” provisions, would have to be allowed for all foreign wines (or their agents), as well.* On the other hand, the industry is split among large, medium and smaller wineries, with the latter two citing quite limited ability to export (particularly internationally), thus they do not support any major policy or industry initiatives in this area.

The shipping issue is based on the 1928 Importation of Intoxicating Liquor Act, passed at the federal level, that prevents interprovincial sales unless it is to government agencies, i.e. the provincial distribution monopolies. The Act was passed in the context of the Prohibition era when provinces adopted varying levels of bans on alcohol. While that is no longer a valid reason, clearly the revenues enjoyed by the monopoly government distribution boards are, with BC’s LDB providing around \$800 million in annual revenue. BC wineries who had shipped to customers in Alberta, Ontario, and Manitoba, have received warning letters from the provincial governments there.¹³

Vulnerability #6 Difficulties in Learning How to Export

Exporting would seem the logical solution. However, there are major problems with recognition of BC wines in global markets. A review of 424 wines rated in *Wine Spectator* between 1989-2008 revealed the limited reach of Canadian wines into global markets. *Wine Spectator* is the premier source of international ratings for the industry. About 2/3 of the wines reviewed were from Ontario, and the other 1/3 from the Okanagan. A third of all Canadian wines rated are icewines, and 41% of Ontario wines are, vs. just 14% for BC, showing the greater range of varietals of the latter. This

¹³ Mark Hicken, Brief History of BC Wine and Liquor Laws, Mar. 18, 2008, www.winelaw.ca

suggests that *Canada is known principally for icewines*, and these are more likely to be rated. We see that the average score of Canadian wines reviewed is in the “good” range, 80-90. The average price of Ontario wines is considerably higher than BC wines, at \$37 vs. \$24, likely reflecting again the premium afforded to icewines.¹⁴

Exporting globally is even more problematic, as a number of interviewees suggest that few BC companies are able to produce adequate volumes for export markets and that they were not competitive at international price points with producers who “exploited cheap labour,” such as Chile. Only one winery expressed that they did any systematic research on prospective markets and trends. Hope-Ross notes “Canadian wine still faces aggressive competition from foreign products, ranging from South Africa to Australia and Central Europe. At first glance, the growth in Canadian wine sales is impressive. However, most of this increase has been in sales of imported wines. Sales of imported wines have increased much more than sales of domestic wines, both in terms of value and volume...” (Hope-Ross 2006, 10). In sum, with the exception of icewines, Canadian products are still quite limited in their ability to export. Canadian wines lack any clear reputation or branding at this point (Hickton 2005, 41). *Interviews with a couple of winemakers who were producing wines for export markets revealed a perceived lack of policy support for such efforts*, especially stark if one compares it to the high level of export promotional efforts of other winemaking clusters. One interviewee suggested that the Federal/Provincial government with industry association support could do much more in terms of promoting knowledge of BC wines around the globe, including Canada, through renting space in business fairs in order establish a reputation. He also suggested

¹⁴ Further quantitative analysis is available upon request.

that aid in financing exports, with market research, and finding trading partners could also be extremely helpful.

One logical solution would be to brand OKV wines around a clear varietal, such as Argentine Malbecs and Willamette Valley (Oregon) Pinot Noirs, to establish a high end global niche. However, interviewees universally reported that *there is almost no likelihood that a regional specialization around a varietal will take hold* given the variety of mesoclimates in the Okanagan and the changing sources of grape supplies. Almost universally, winemakers cited their interest in organic growing and sustainability, something that could be taken up for support by support institutions, but it is unclear as to whether an exporting market niche upon such a basis could be established. Several winemakers interviewed expressed that they had been approached by Asian buyers for China and Japan, but that the prices were so low and the channels so unclear as to make it not worthwhile.

In response to earlier versions of this report, Janet Dorozynski of the federal Dept. of Foreign Affairs and International Trade (DFAIT) contacted the author and pointed to the National Export Strategy Working Group for wine that she is a part of. The group also includes Agriculture and Agri-food Canada, the Canadian Vintner's Association (CVA), and the BC Wine Institute, and several large Canadian wineries and corporations.

In May 2009, DFAIT announced that it was spending US\$81,000 during the first year of a 3-5 year campaign to promote Canadian wine exports. The goal is to double exports from their 2007 volume of 3 million litres and US\$20.1 million values. The strategy is based on the Export Strategy Group's study of other countries. CVA President Dan Paszkowski stated, "We looked at Australia, New Zealand and other countries that

aren't that far ahead of us in terms of export growth but have national strategies that really helped their wineries move in tandem into exports."¹⁵ The strategy focuses getting Canadian wines into trade fairs and competitions, and targeting several identified key markets in large international cities. The strategy appears to be based on a consultant's report by Susan O'Dell and Associates (DFAIT 2009). The report (pp.13-16) reinforces the governance issues cited throughout this report:

- Export initiatives continue to be sporadic and one-offs, not contributing to sustained sale; allocated funding (by the Federal Govt.) is not fully spent;
- The 2 regions (Ontario and BC) are “ separate silos diluting export effectiveness; potential partners are confused about how to help industry; and the greatest risk is the strategy may not be “actively embraced and implemented by the regional and national associations

Vulnerability #7 Lack of Coordination

The BC wine industry is hardly a cluster in the sense of creating shared goods that benefit across firms. The lack of interaction in part reflects the nature of the market. One winemaker interviewed puts it, “Okanagan is unique from other regions because of its domestic focus. So there is direct competition and people are careful of information sharing.” Hickton (2005, 16) notes that despite the influx of outside investment, the OKV on the whole has a culture of social relationships revolving around kinship ties, reflecting the family ownership background behind the origins of many of the wineries. Much of the training is therefore tacit, now being passed on to a second generation

¹⁵ “Canadian Government Helps Domestic Wineries Step onto the World Stage” *Wine Business Monthly* May 15, 2009, found at: <http://www.winebusiness.com/wbm/?go=getArticle&dataId=66045>

(Hickton 2005, 16). A number of winemakers interviewed suggest Oregon and California as touchstones of best practices, rather than any local firm.

The size of the OKV, 2 hours to drive from the northern to the southern vineyards, prevents the development of a strong informal culture. The BC Wine Institute lists 5 different agricultural sub-regions based on days of sunshine and soil characteristics, leading to different optimalities for varieties: Kelowna, Penticton/Naramata, Okanagan Falls, Oliver/Golden Mile, and Black Sage/Osoyoos. There is some interaction through the aforementioned support institutions, but the *OKV can not really be considered a cluster*. Several winemakers said they interacted with wineries outside their area primarily because of former employment, but on the whole the level of interaction is quite limited.

To analyze the level of social organization, part of our survey asked for the level and strength of ties that wineries had with other wineries. We then created social network maps anonymizing the responses using the following coding: coding ID; Location (Kelowna, Oliver, Okanagan Falls, Summerland, and Lake Country); Size (Small <20 acres, M 21-50, L 51-100, XL >100); and Year started selling wine or founding (Early before 1998, Recent 1998-2005, and New 2006-present). We use these maps to illustrate our points from the interviews.

The level of social organization depends greatly on the size of the winery and its location in the OKV. In Kelowna, is a domination of large and estate wineries, with a handful of family wineries, none of which are geographically concentrated. The large early wineries in Kelowna and Lake Country seem to have ties across the OKV. Though the latter group has less ties, they are not geographically bound.

Figure Social Networks of Early Extra Large Kelowna Winery (12KXLE)

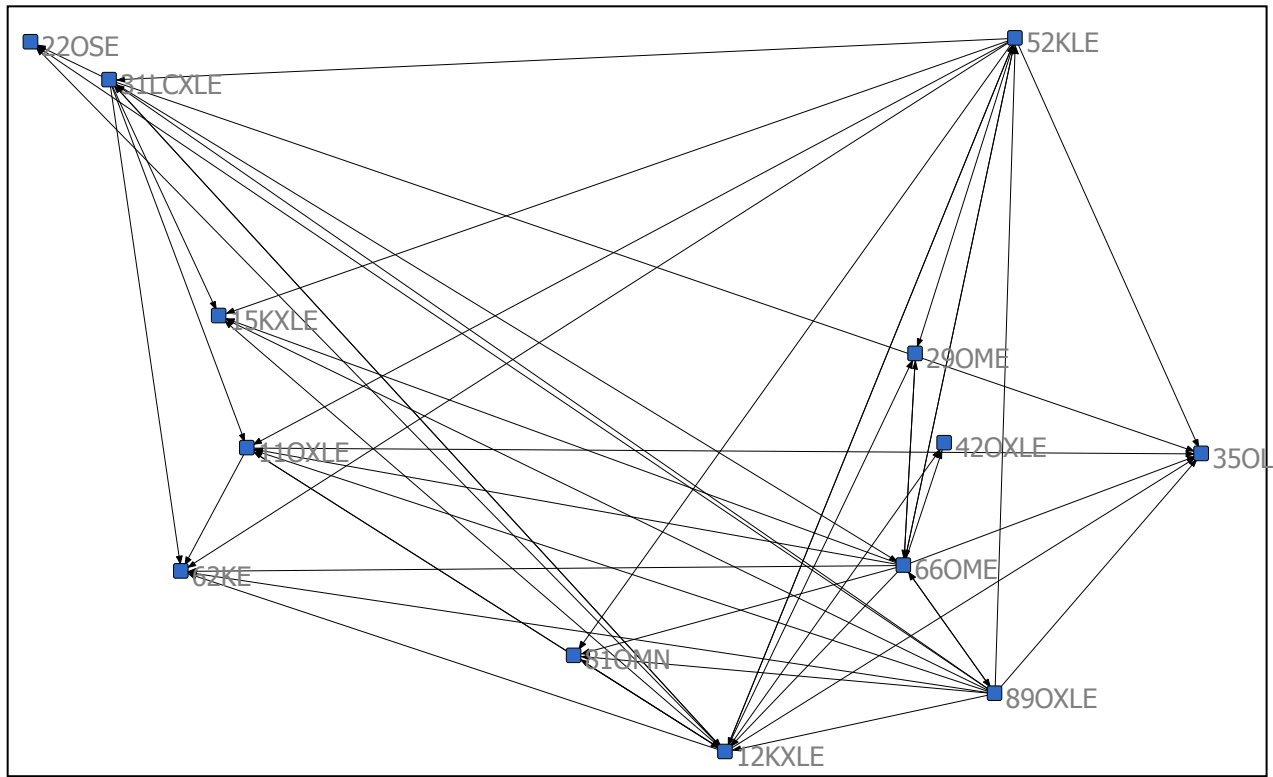
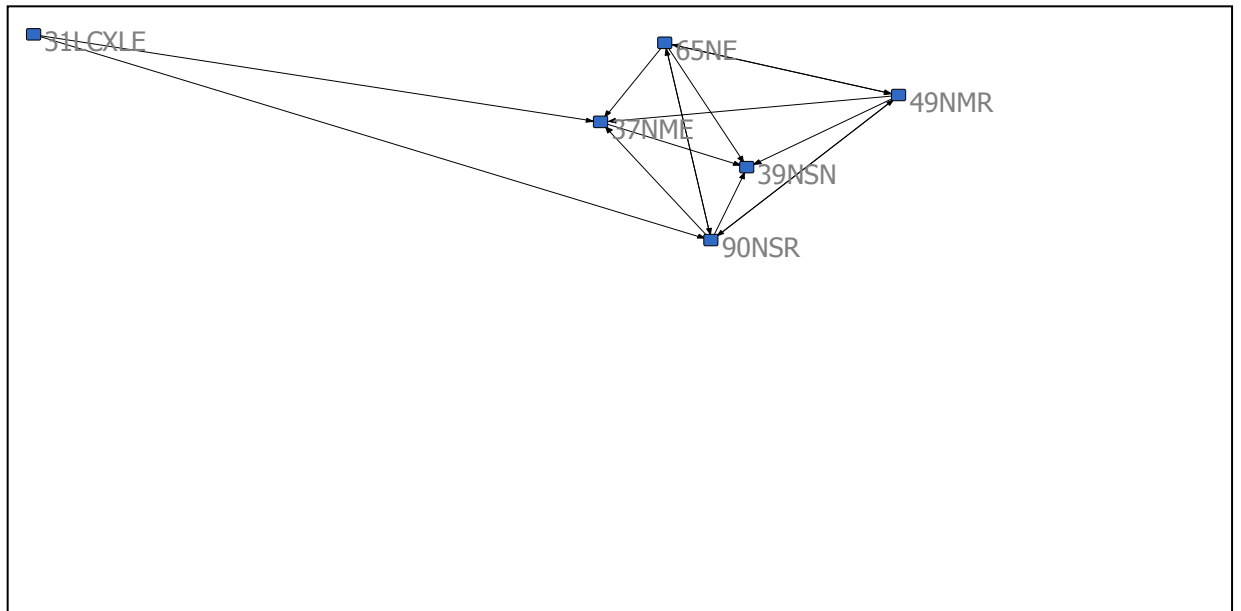
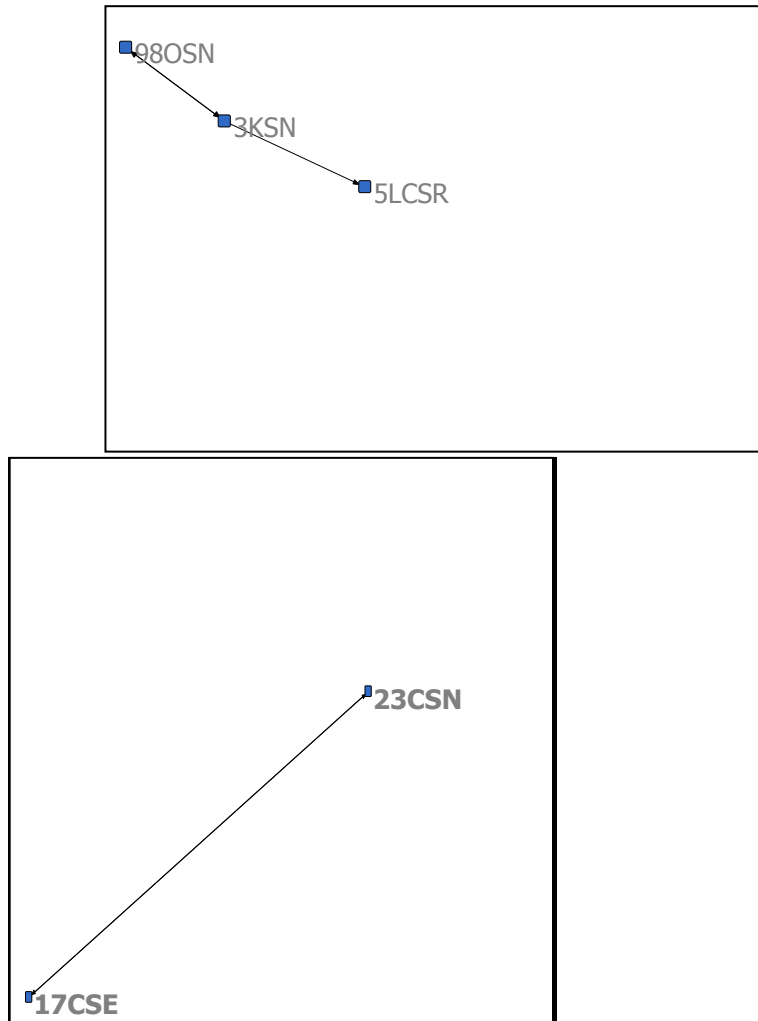


Figure Social Networks of Early Extra Large Lake Country Winery (31LCXLE)



In general, small and medium-sized wineries have far fewer ties. Small wineries in Cawston and Kelowna are relatively isolated. One small winemaker in Kelowna said he/she felt “surrounded” by larger wineries. One winemaker said, “I sometimes chat with some of the local winemakers at the local pub when I run across them,” indicating the haphazard nature of social interactions in the industry. Several indicated that only once in a blue moon did they even interact with neighbours, such as to borrow equipment. Many of these are “isolates” or nearly so, with few regular ties to other wineries in the area.

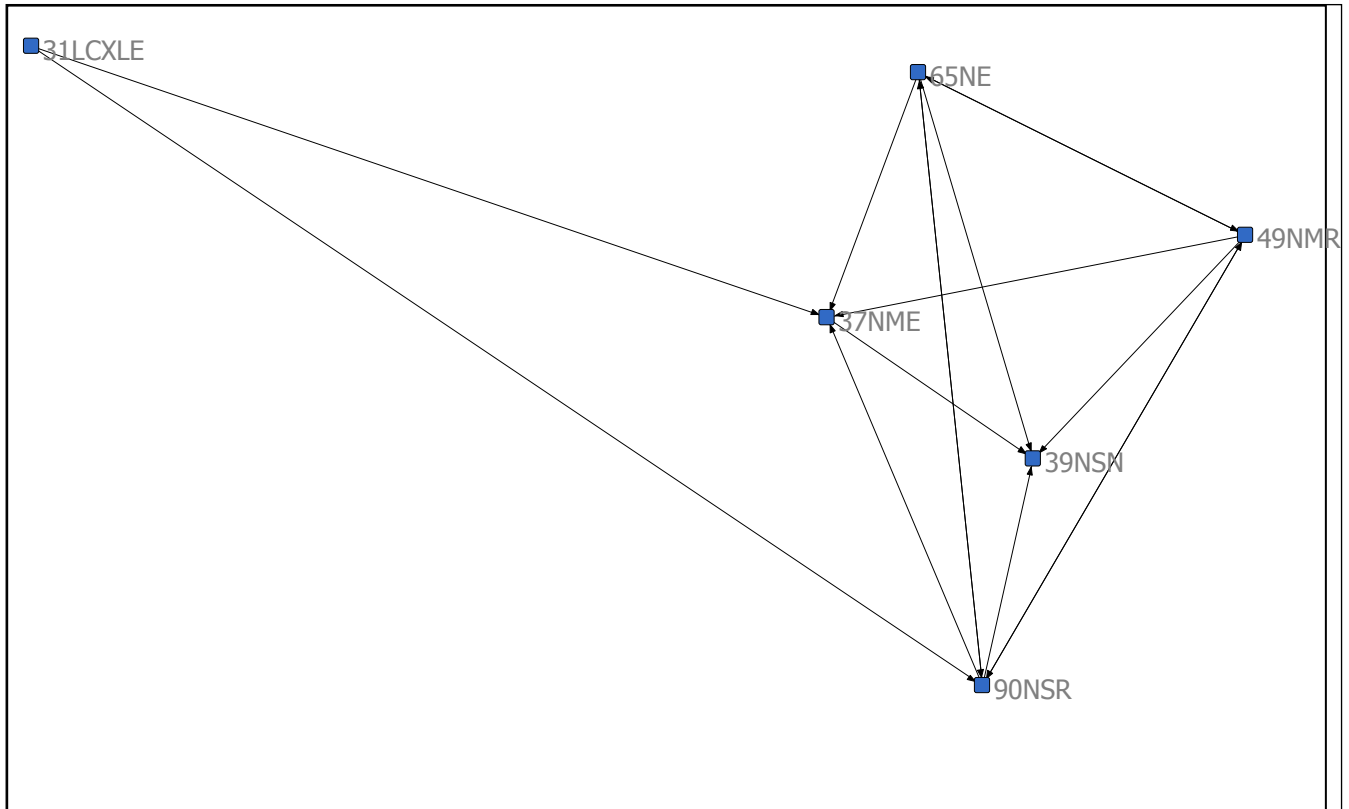
**Figure Social Networks of New Small Kelowna Winery
Small Winery in Cawston (17CSE)**



So, there really are few cross-valley ties. Instead, our field research indicates smaller subcultures of informal networks among similar wineries that are within about a 20 minute drive of each other. These are reflected in the current move towards sub-appellations, such as Golden Mile, Black Sage and Naramata Bench, where a handful of firms are moving towards both informal ties and cooperation in marketing. The Naramata Bench near Penticton, made up of some 25 long-standing estate wineries clustered together geographically, is the best organized group, and is cited by several of the small and smaller estate wineries as an example to follow. The only exception in this

area is Red Rooster, which was bought in recent years by Andrew Peller Estates (formerly Andrés). Naramata is working towards joint marketing and meets on a regular basis, informally. These efforts are reflected in a high level of local social capital.

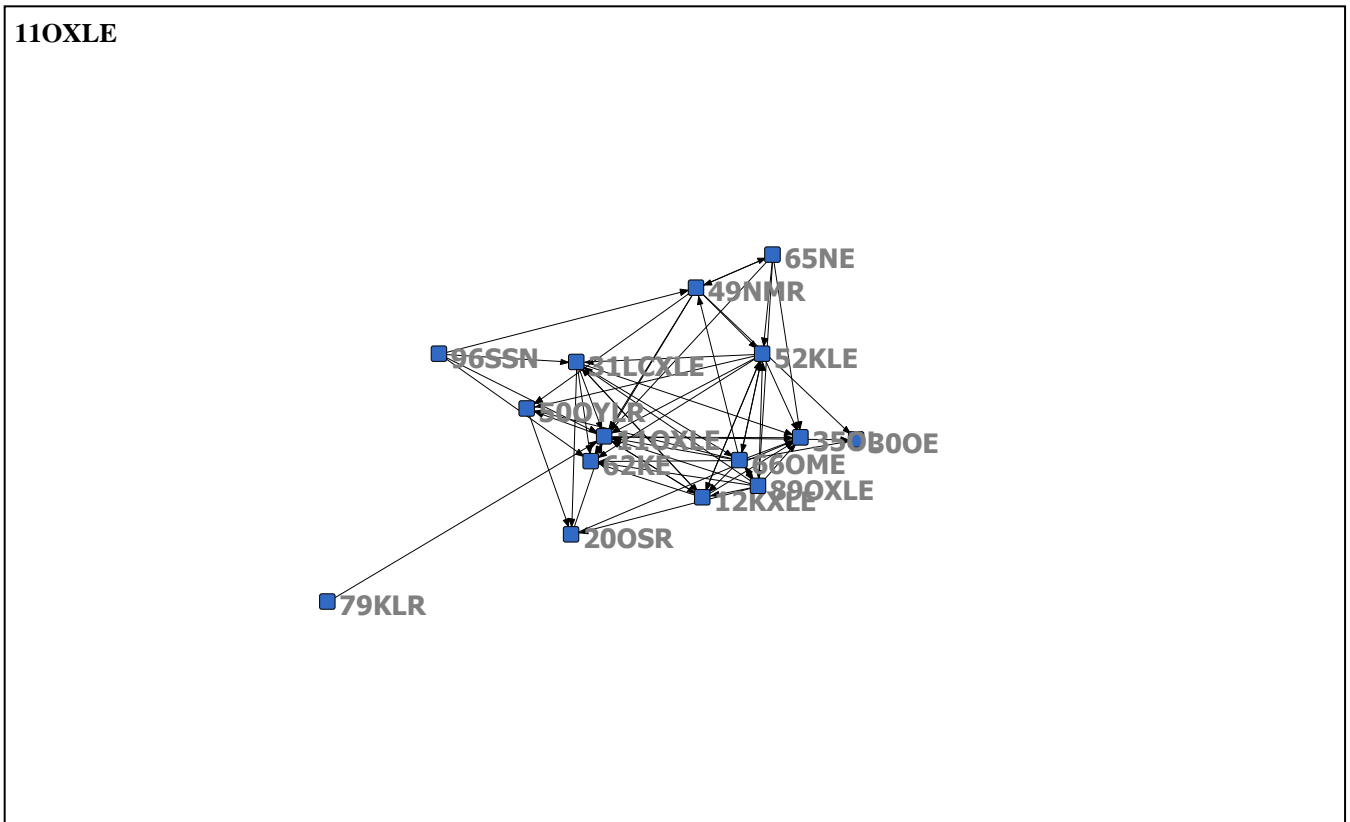
Figure Social Networks of Early Medium-Sized Naramata Winery (37NME)

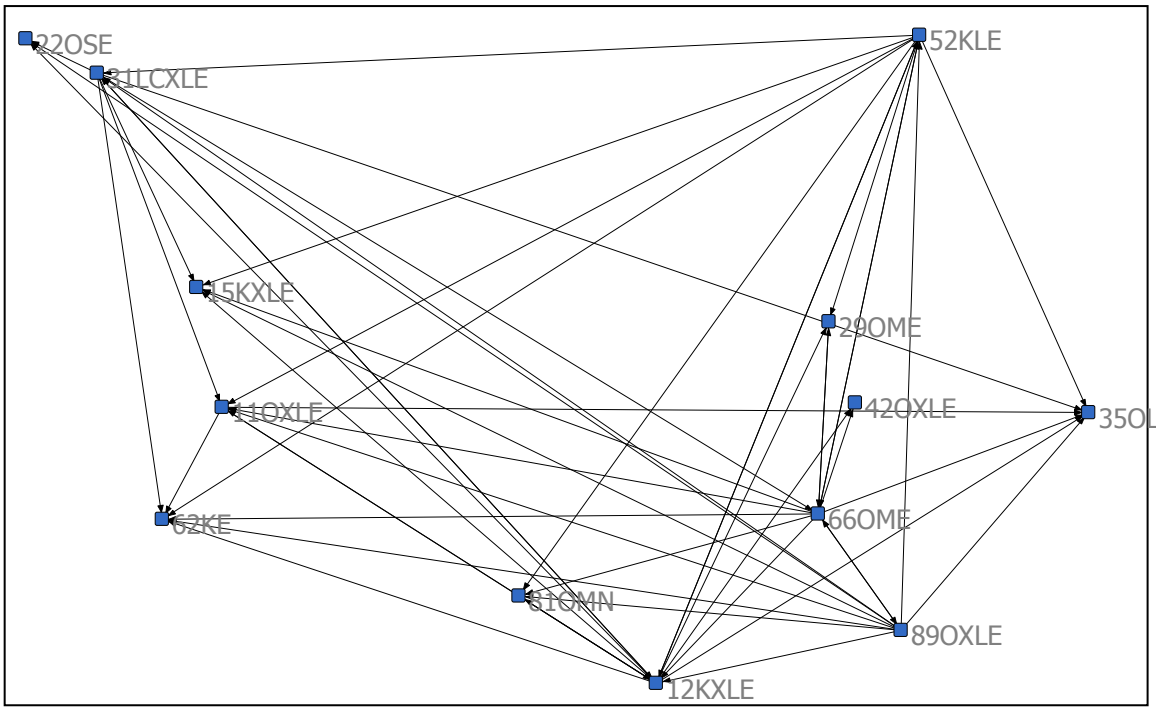


The conditions are not good for either extending the Naramata Bench organization or recreating it elsewhere. To the north of Penticton comes Summerland, with just a handful of estate and family wineries. South of Penticton is Okanagan Falls, with just a handful of wineries, followed by Oliver with a mix of family, estate and large wineries (including Vincor’s Jackson-Triggs), and Osoyoos which is even more spread out and contains estate, large, and native wineries (Nk’mip), and large grape growing

tracts for wineries in the north Okanagan. The wineries around Oliver and Osoyoos have created the South Okanagan Wineries Association. Within this area, there is movement towards sub-appellation in the Golden Mile and Black Sage (Oliver). These large wineries seem to have a stronger level of social capital, though it is generally concentrated with local large wineries as seen in the following maps.

Figures Social Networks of Large Early Oliver Wineries

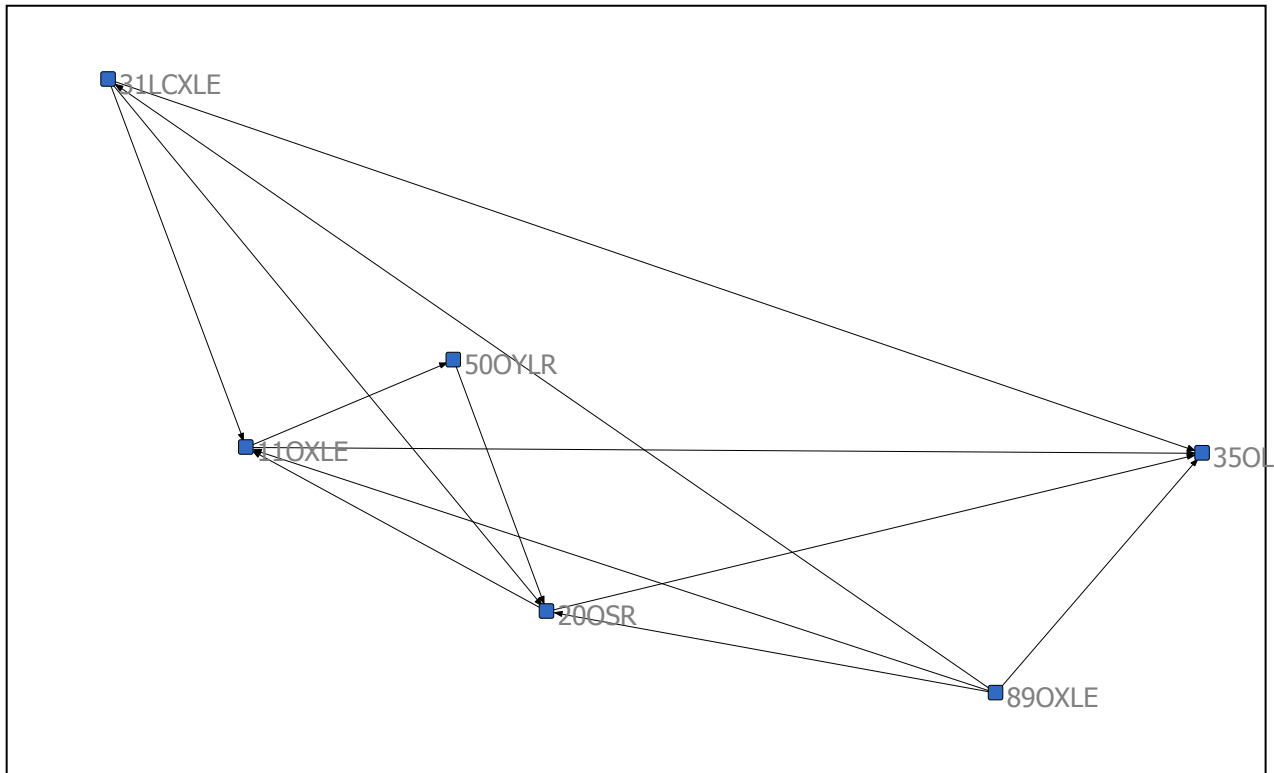




Above: 13OXLE

Being a smaller winery in Naramata or Oliver does seem to lead to greater ties with other local wineries, though even in these regions there are isolates.

Figure Social Networks of Recent Small Oliver Winery (200SR)



Why Sub-appellations are insufficient

What can be done to improve social capital in the OKV? Throughout field research, sub-appellations were a major source of hope, particularly for estate wineries, falling into certain areas. In fact, there are several networks beginning to develop in each micro-cluster despite these obstacles. The South Okanagan Winery Association meets monthly. The Bottleneck Drive group in Summerland began meeting in 2009 and developed common signage to guide tourists in their area. The Golden Mile area like Naramata is seeking new regulations to create its own sub-appellation. Several have also discussed joint marketing efforts.

Ontario decided in 2005 to create and regulate sub-appellations that can appear on VQA labels, and this is the catalyst for a number of these regional associations to begin to come together. Interviewees are anxious to push sub-appellations as a way of

distinguishing the locality of origin and the terroir it represents, however, they also related concerns by those on the margins about who would be included. They are pushing the BCWA to create regulations that allow sub-appellation, to avoid a parallel of the cellared in Canada controversy. This could help them to differentiate their product and reflects supply saturation of the BC market. But none of these associations have anywhere near the critical mass to develop the collective institutions and policy needed to address the vulnerabilities of the industry. Moreover, one can be skeptical that such efforts will pan out into significant market differences given successful sub-appellations elsewhere based on regions, such as Burgundy, Champagne, Willamette Valley, etc. which are associated with specialization in a certain varietal.

The Problem with OKV Institutions

The weakness and fragmentation of BC wine institutions underscores the lack of social capital in the OKV. We asked respondents to rate the importance of support institutions using a 5 point scale (1 = not important; 2= slightly; 3 = neutral; 4= somewhat; and 5= extremely) with the following average scores:

Table Low Rating of Institutional Support

Ministry of Agric, Food, & Fisheries	1.9
PARC	2.8
Okanagan University-UBC	1.9
UBC Wine Research Centre	1.8
BC Wine Grape Council	2.2
BC Grapegrowers Association	2.9
BC Wine Institute	3.5
BC Wine Authority	2.2
Association of BC winegrowers	2.2
Okanagan Wine Festival Society	3.4
Okanagan College	1.4

The table points to the Wine Festival Society and the Wine Institute as the only ones that are of neutral importance. The problem of fragmentation and lack of institutional support is even deeper. Kingsbury relates in a detailed analysis the slow unraveling of the BCWI as the key to understanding the fragmentation of the emerging cluster. He highlights foremost problems with the governance of the institution. The government appointed the 8 members of the 8 person Board of Directors, however, it took input from various sectors. The BCEWA gave 2 candidates and the MAFF representative had one slot. Financing came primarily from the provincial and federal governments (885); the rest was from a levy on membership by ton produced and wines bottled, with an additional \$.05 a litre levy being added in 1993 for VQA marketing. In 1993, the BCWI started a number of new committees to make recommendations to the Board, which by 1995 included: Domestic Marketing, Export, Finance, Policy, Technical, and Strategic Plan. The committees were filled by volunteers from the wineries (Kingsbury 2004, 41-7). There was concern within BCWI that the BC market could become saturated, and that international recognition of quality was needed in turn for full acceptance within Canada of the quality of BC wines. Therefore, in 1993 the BCWI began a long-term export program. It began with a strong effort in the UK to promote BC wines. In 1995, the BCWI partnered with the Ontario VQA to create a Canada VQA appellation. However, the program fell apart, as only a few firms had the capacity to export in volumes large enough for international markets (Kingsbury 2004, 63-5). The fallout from the decline of the BCWI likely led to the development of the BC Wine Authority taking over important parts of its turf.

These new BCWI programs occurred at the same time as government funding was diminishing, leading to an increase in levies to \$90/ton and in the costs of taste tests for VQA from \$25 to \$50. The changing in funding also led to cutbacks in promotional programs and growing concerns about financial management issues. While medium-sized firms paid the most in levies, the aggregate amount from small wineries was increasing as their numbers increased over time. The shift in constituency as well as the abovementioned issues led to a loss of faith in the BCWI by the smaller wineries, who began to withhold their levies. The smaller wineries felt disenfranchised from the Board and the committees. The situation worsened when the first elections for the Board took place in 1999, which included a proviso that any Board decisions could be re-voted on a second time based on votes weighted by dues paid (Kingsbury 2004, 70-85). The unraveling of the organization led to a reduction of the overall levy as well as a flexible levy system. Each winery's levy was reduced to \$5/ton, with additional fees for marketing promotion domestically and for exporting. The shortfall in resources led to the closure of the Vancouver offices (Kingsbury 2004, 105-8).

In response to an earlier version of this report, Miles Prodan, Executive Director of BCWI offers, “the BC Wine Institute’s (BCWI) volunteer membership represents 95% of BC VQA sales AND 88% of the TOTAL wine production in the province. Wholly supported through member sales, the BCWI represents the interests of BC VQA wine producers in the marketing, communication and advocacy of their products to all stakeholders. Whether in partnership with the BCLDB, its 21 BC VQA wine stores, the export market via the Canadian Vintners Association (CVA) or tourism and media stakeholders, the BCWI strives to provide leadership for the BC wine industry.”

The new BC Wine Authority (BCWA) seeks to address some of the problems with BCWI by offering a more neutral body to taste for VQA. The BCWI suffered from the perceived conflict of interest that it only represented some of the larger wineries and that it also had to market and promote the same wines.¹⁶ Under the new statutes, all wineries seeking VQA labeling must be members of the authority. It is difficult to say what role the new BCWA will play at this point, though initial indications are that it will be limited to tasting, and several interviewees suggested it was reluctant to sort out the basic labeling issues described above. Multiple interview requests by the author to the BCWA received no response.

Vulnerability # 8- Poor Coordination of Supply Chains

Power in the value chain has changed over time as the OKV industry has transformed. As noted, previous to NAFTA, a grape reference price existed, set by the BC Grape Marketing Board. Though the grape marketing board continues to exist, after the reference price was eliminated in 1995 it has had little influence on supply, since grape prices are freely negotiated between wineries and grape growers (Hickton 2005, 11). An interviewee suggests the board ended in 1997 based on a referendum. As of 1998, there were 235 grape growers in the OKV, of which 119 were supplying wineries. The average vineyard size was 12-14 acres (Hackett 1998, 61). In 2001, Quail's Gate started a trend by changing the nature of its contracts to grape growers, so that it paid set amounts for grapes of high quality, rather than by the ton (Schreiner 2003, 98). There are long-standing trends that reflect the desire of grape growers to enter into the winery business, such as Desert Hills. This seems to be a growing trend. Scherzinger Vineyards

¹⁶ Peter Mitham, BC Wine Authority Up and Running, *Wines and Vines*, Oct. 10, 2008, www.winesandvines.com

started as a grapegrower to Sumac Ridge and then split off in 1995 (Schreiner 2003, 105). However, interviews with the winemakers in the OKV reveal a haphazard patchwork of ever changing contracts, that lack the long-term stability or consistency to lead to quality improvement. The possibility that estate wineries could be expanded (with wineries simply growing more of their own grapes) was rejected as implausible by interviewees owing to the prohibitively high price of land. This leads to the inability to focus on certain varieties as a strategy, as almost all decent size wineries have to outsource their grape supply, which come from a variety of terroirs and mesoclimates around the Valley. Rising costs and a shortage of labour have led to increasing use of temporary migrant workers, many from Mexico, and accompanying concerns about labour practices in the industry. Workers are not unionized, but activist efforts have led to some notice about their conditions.

It is also fueling the expansion in the number of wineries as grape growers feel that they are not getting a fair share of the final profits, and so decide to move into winemaking themselves. All of this will change, if either the demand or supply of grapes changes, as is inevitable at some point, bringing up the question of whether the anarchic structure of winery-grower relations can adapt. Most importantly, the uncertainty around these arrangements means that it is difficult to improve quality among the grape growers, as investments by the wineries could lead to defection (sales to other wineries) and the feeling among grape growers that such investments are not worthwhile when demand for their product is so high. One interviewee suggested that a return to a marketing board or other form of collective agreement did not have adequate support given growers' favourable situation, but that it could change if the expected supply

surplus of grapes arises. He and several other interviewees noted the increasing pressure on land as marginal areas were being brought into play in response to demand, with accompanying difficulties in improving quality.

The OKV also lacks local equipment suppliers. Most equipment, corks, bottles, labels, chemicals, and other inputs are imported (Hickton and Padmore 2005, 97 & 107). In Oliver, Okanagan Barrel Works operates as the only cooper in the region, using wood imported from elsewhere. Interviewees note a bias against local products; for example many said that many local wineries insist that the wood used must be imported from France. Many interviewees cited local suppliers when they really meant local agents for imported equipment. Local suppliers face problems similar to the wine industry as a whole- with inadequate demand, they are unable to reach economies of scale, and so find it difficult to compete with the behemoths of the industry, especially with Canadian skilled wages being relatively high. Their comparative advantage is that they are able to tailor products and services to particular needs, and to provide local service. Suppliers interviewed suggested that their quality was improving in line with the demands of the wineries. Suppliers interviewed universally suggested entrance from a non-winemaking background and almost all noted that they were self-trained.

Vulnerability #9: Training Opportunities and Lack of Research Dissemination for Innovation

Training opportunities for BC wine personnel are quite limited. A surprising number of wine personnel, including winemakers, come from another background and have had limited formal training. There is assuredly a refreshing quality about this, with abounding blue sky enthusiasm coming through in interviews. One supplier interviewed (himself not formally trained) suggested that he had observed that ability to take risks and

to learn on the job were more important than formal training, and that he had seen a number of “Ph.D. types” fail for lack of such attributes. Nonetheless, he and other wine suppliers as well as the winemakers themselves universally noted that the industry’s push to increase sophistication was hitting major obstacles given the lack of educational and outreach support.

Given the lack of formal training opportunities, the provincial Ministry of Agriculture, Forestry and Fisheries (MAFF) in the late 1990s operated a business planning program, that examined both grape production and taught basics on viticulture investment and financial planning (Hackett 1998, 125). However, the one employee dedicated to grape growing retired and was never replaced. A number of interviewees pointed out that the lack of expertise and “grounding” in the industry generally is what left them skeptical that the government could play any helpful pro-active role.

In terms of support institutions, *there is little coordination* between PARC and UBC’s Wine Research Centre. In my opinion and that of many interviewees, and certainly in comparison with other wine research centres, PARC is spread far too thin, covering a wide variety of crops from tree fruits to wine grapes with just a handful of experts. However, PARC disagrees with this conclusion. There are reports of challenges regarding reaching intellectual property agreements as well. UBC sees its role as international in scope, and focused on the discovery of scientific processes and products that would be valuable to the worldwide market, as seems appropriate for the nature of its genomics-based research. The idea of having a middleman from the BC wine industry has occurred to them, however Director Hennie J.J. Van Vuuren states that while it would be good to have an ex-winemaker play this (bridging) role, “it is important to me to have

personal relationships with the winemakers themselves.” Thus the interactions of the research centre seem to be focused on a handful of leading large wineries in the OKV. *One can see this as a situation where these leading wineries would become first adopters and then other wineries would imitate their lead, however, the nature and speed of that dissemination given the lack of collective institutions or middlemen is bound to be slow and haphazard at best.*

Reinforcing this observation is that fact that there is no university-level training institute as in the US, Europe, or Australia, or even the BA equivalent offered by Brock University in Ontario. The UBC Okanagan campus offers 3 programs for training: viticulture, winery assistant, and wine sales, at the BA level, that have operated since 1997. Each program has a common course on grapes and grape growing, and then 3 specialized courses for the particular program, as well as a practicum course to allow for hands on learning. As several interviewees noted, this is hardly sufficient for those above the retail level. It is worth noting that 2 courses on Enology are being offered in UBC Okanagan in 2011 in biochemistry, with enrollments of 50 and 17. Previously, Wine Chemistry courses had been offered every 2 years by a Chemistry professor every 2 years, with unknown enrollment. Okanagan College has offered 3 certificate programs: viticulture, wine sales, and winery assistant, from 1999-present. Enrollments have varied between 12 (1999) and 44 (2008-9), with 30 total students in 2009-10.

Because of distance from UBC Okanagan, most wineries in the Penticton area and south rely upon Okanagan College (OC) for basic training. One winemaker thinks the OC’s offerings are sufficient, and certainly better than UBC-Okanagan, stating, “I think you will find that over the last 15 years or so these (OC wine courses) have been very

well attended. Compare this to the 2 or 3 graduates being turned out each year from UBC (if that).” Several winemakers expressed the desirability of moving the UBC Wine Research Centre to the Okanagan. Some of the smaller wineries suggested that formal training was either unnecessary or that it was inaccessible. One suggested more distance education offerings. One medium-sized winemaker suggested that the UBC Wine Research Centre could provide a great service by creating summaries and links to full papers with the latest research, but with very few exceptions, there was almost no stock put into local research by industry participants. The lack of recognition of the potential value of research was revealed early on in the project, with the lack of response, or even hostility, to responding to survey and interview requests, including by the support institutions. To complete the project required 6 months of active personal entreaties and networking through multiple channels.

As with the other issues, the needs of the industry are filled only through a patchwork of make do solutions. Almost all respondents said that suppliers (such as Cellar Tek) and independent consultants were the most important sources of innovation, and self-teaching seems to be the predominant modus vivendi. A few interviewees said that there was nothing new in winemaking, so no need for innovation knowledge. While some of the larger wineries have their marketing personnel who research market trends, most wineries make do or guess. One interviewee stated that he/she just follows the general lead. Most interviewees at the medium- and larger-sized wineries indicated that the lack of training opportunities was clearly an impediment in comparison with other wine growing regions.

The research by the UBC Wine Research Centre was praised highly by a few of the larger wineries in the OKV, but most of the interviewees did not seem to have any knowledge of it or what it did. The UBC Okanagan campus's activities seem to have an even lower profile. Several interviewees suggested that the Wine Research Centre relocate to Kelowna, but the real problem seems to be a lack of a middleman to translate what the cutting edge research in grape growing and winemaking is to the average winery. The following table summarizes the findings about the modalities of education and training.

Table Few Training Opportunities

18. HOW TRAINING IS PROVIDED	
In-house training	87.88%
External provision of training	42.42%
via UBC Okanagan	6.06%
Consultants	42.42%
via Okanagan College	12.12%
Other, please specify	6.06%

Clearly, there is a major institutional gap in terms of training opportunities in the Okanagan Valley. Of our sample, an average of *just 30% of employees at these wineries have any formal training*, and this is probably an overstatement as we included those who might have just completed a course. While the employees of wealthier wineries are sending their children abroad, this does not provide the rich environment needed for employees at lower levels or for the creation of an atmosphere of local learning and exchange. Particularly in the case of agriculture, training and research should be oriented towards and tailored for, the local environment.

These findings underscore what we found out about institutions. While 55% said that their production processes had improved “a lot” over the past 2 years, *almost no respondents identified any institutions as being above a score of 1 in terms of help with innovation.* The industry relies heavily on easy access sources for ideas for innovation as illustrated in average scores in the following table (1-5 scale).

Table Few Sources of Local Innovation or Dissemination

Internal Company Sources	4.5
Suppliers of equipment, materials, components or software	3.7
Clients or customers	2.9
Joint research with Other BC Wineries – Marketing	2.3
Wineries outside of BC	2.3
Consultants	3.4
Conferences, trade fairs, exhibitions	3.5
Trade magazines or journals	3.7
Internet	3.8

In terms of possible areas where innovation had occurred, we found the following results.

Table Innovation of Interest Despite Lack of Support

Retail sales	51.52%
Marketing	66.67%
Finance	30.30%
Plant Breeding	9.09%
Use of Genetics	3.03%
Soil Adaptation	54.55%
Fermentation	63.64%
Information Systems	45.45%
Education/Training	60.61%

Clearly, there is great interest in soil adaptation and fermentation processes, as well as further training. This demonstrates a clear gap between the support institutions

and the winemakers that should be filled by support institutions. The limited nature of innovation dissemination reflects that a number of interviewees mention the lack of any agricultural extension agency for the industry. In 1994, a major breakthrough for BC wineries took place, as Mission Hill won a top trophy at a London wine competition for its Chardonnay. The winery had hired John Simes, a top winemaker at a New Zealand winery, in 1992 (Schreiner 2003, 96), and thus started a trend of hiring Australians or New Zealanders, and to a lesser extent Canadians trained there, that appears to be accelerating today. There was also universal chagrin at the lack of agricultural extension support. While PARC was mentioned positively by some medium-sized wineries, most of the smaller and larger wineries stated that it was unimportant to them. One interviewee, reflecting the sentiments of many others, said that PARC was “helpful in terms of viticulture, and AgCanada (Agriculture Canada) in terms of pesticides and some related areas of agriculture, but really offered nothing in terms of winemaking advice, or practical knowledge.” Repeated follow-up enquiries to PARC, including requests for access to their own research by the author received no response. Finally a response on June 29, 2011, was received in which PARC stated in a letter to the author that agricultural extension was not part of its mandate, but that of the province, that it works very closely with industry, including professional relationships with individual growers and winemakers, and disseminates its research widely. This still bring up the issue, if PARC does not do extension, and the province does not, who fills this crucial role in BC? At present, the answer is no one, a crucial gap and detriment to the industry’s fortunes. PARC and BCWI’s responses reflect the defensiveness pervasive throughout the BC

industry and the ubiquitous inability of almost anyone to see the bigger picture industry issues reflected throughout this report.

Conclusions

The BC Wine industry centred in the Okanagan, has undergone an amazing transformation from “plonk” wine manufacturer to a viable industry, with some beginning to meet world class standards of quality. However, the industry is more of a proto-cluster, with key issues stemming from a lack of organization, coordination, and policy foresight. Policy changes are constrained by the use of liquor sales and accompanying protectionism as a cash cow through the provincial monopoly, which has created the conditions for the growth of the sector. The BC case is not a good fit for lessons about how to engender clusters generally, given these idiosyncrasies. However, it does support many of the key concepts behind cluster theory: that geography matters crucially in some industries and explains their locational concentration; that a pro-active policy can help to catalyze an industry; and that social networks and collective action are essential to clusters’ long-term success.

While lauding the present success, we are likely entering into a new phase for the maturing of the sector, one in which growing pains will start to become evident unless there are major adjustments. Adjustments can not occur in the absence of a long-run view of the industry as a whole, or the growth of the policy and collective networks of the industry. Interviewees from the public sector, and all areas of the private sector universally decried the lack of cooperation and organization of the sector. Without major efforts to create a cluster policy, the vulnerabilities noted above could lead to major problems in the industry. As one interviewee put it rather nicely, “We don’t need

consensus (a la the BCWI early experiment) to move forward. But we do need a push towards a culture of cooperation, and organizations to improve our collective efforts and policy.”¹⁷

The bottom line is that no one in BC has a strategic long-term vision for the industry. In general, the policy literature tells us that major policy change does not occur unless there is a crisis. This policy paper hopes to catalyse forces that might prove otherwise and suggests places to start before that unhappy circumstance arises.

¹⁷ Note is mine.

Acknowledgements

The research for this project was generously funded through a grant by GenomeBC, Genome Canada, and co-funded by Simon Fraser University. Field research was carried out by Andy Hira in Spring and Summer 2010, when 33 1 hour surveys and interviews were conducted with winemakers and winery owners, for a response rate of approximately 30%. A solid cross-section of small, medium, and large wineries are represented here. In addition, over 20 interviews with suppliers and consultants were carried out. To allow for freer discussion, an ethics agreement was signed promising anonymity for all participants. The assistance of the BC Wine Grape Council was crucial, particularly allowing the author to participate in the 2010 annual oenology and viticulture conference. Research assistance, partly funded by BC's Work Study Program, was carried out by Justin Domareski, Stewart Wilkinson, Alexis Bwenge, Gavin Cheung, and Neil Boehm over 2009-11; all made important contributions. Bwenge is responsible for some parts of the supply and demand trends analysis. Janet Dorzynski, Ingo Grady, Lynn and John Bremmer, Karen Ayers, Jim Wyse, Art Cobham, and Kirk Seggie made helpful comments. John Schreiner, foremost historian of the industry, and Bill Collings, former director of the BC Grape Marketing Board, BC Grape Growers Association, and BC Wine Institute, made extensive helpful comments and provided needed encouragement. Patty Hira helped with crucial research and editing in the final round. The Scientific Advisory Board of this project provided helpful feedback. David Aylward, Peter Phillips and Camille Ryan provided crucial advice, particularly on survey design and social networking analysis. I would like to thank all those noted above for their support, as well as the generosity that participants showed me in granting the

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APPENDIX Survey Document

BC Wine Survey

updated: May 31, 2010

By Hira and Aylward

NB: Read ethics disclaimer and get signature.

I. Basic Firm and Industry-Level Information

1. Firm Identification as of May 2010

- A. Name
- B. Address
- C. Acreage
- D. Region
- E. Year Founded
- F. Number of Employees
- G.. Tonnes crushed or Litres/cases sold
- H.. When did you start selling wine? Date:

2. Revenues

- a. Have your revenues increased /decreased in the past 12 months?
- b. By what percentage?
- c. Has the volume of wine sold increased/decreased? by what %
- d. What price points are you currently targeting?
- e. Have these increased/decreased over the past 12 months?

3. Is your company part of a larger enterprise group?

- Yes
- No

4. Is your company Canadian or Foreign Owned? Family Owned? (Y/N)

- Canadian
- Foreign
- Family Owned?

5. What percentage of the grapes that your company uses is purchased from growers off your estate? exact number or estimate %

6. If you purchase, what % of your grapes are BC, Canada, or International

- BC/Local
- RoCanada
- International

7. What percentage of your wine is sold within? (last 3 years)

BC?

Canada?

Exported?

What percentage of your wine is currently surplus to demand?

8. How would you rate your firm's reliance on the following for competitive advantage

(1-5) scale with 1 = not important, 2 slightly important, 3= neutral, 4= somewhat important and 5 being extremely important

Access to latest winemaking and viticultural information

Market placement at appropriate price-points (price competitiveness)

Marketing

Branding

New product development

Product differentiation

Employee training

Production process continual improvement

Distribution channels

Agents

Exporting

II. Networking

9. Give the relative importance and frequency of interactions with the following (1-5) scale with 1 = not important, 2 slightly important, 3= neutral, 4= somewhat important and 5

being extremely important (Annually, Monthly; Weekly;Daily; and

Formal/Informal or Both)

Did they help you with innovation?

Importance (1-5)	Frequency (A,Q,M,W,D)	Formal/ Informal/ Both	Innovation Help? (Y/N)
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Ministry of Agric, Food, & Fisheries

PARC

Okanagan University-UBC

UBC Wine Research Centre

BC Wine Grape Council

- BC Grapegrowers Association
- BC Wine Institute
- BC Wine Authority
- Association of BC Winegrowers
- Okanagan Wine Festivals Society
- Okanagan College
- Other (specify)

10. Give the relative importance and frequency of interactions with the following other wineries in the Okanagan Valley (or other region studied); **They can see list of wineries on survey PO (1-5) scale with 1 = not important, 2 slightly important, 3= neutral, 4= somewhat important and 5 being extremely important

	Importance (1-5)	Frequency (A,Q,M,W,D)	Formal/Informal/Both
8th Generation Vineyard			
Antelope Ridge			
Arrowleaf Cellars			
Beaumont			
Black Hills Estate Winery			
Black Widow			
Blasted Church Vineyards			
Blue Mountain Vineyard and Cellars			
Burrowing Owl Estate Winery			
Calona, Sandhill, Peller Vineyards			
Camelot			
CedarCreek Estate Winery			
Chandra Estate Winery			
Crowsnest Vineyards			
D'Angelo Estate Winery			
Deep Creek/Hainle Vineyards Estate			

Desert Hills Estate Winery
Dirty Laundry Vineyard
Dunham & Froese Estate Winery
Elephant Island Orchard
ExNihlo
Fairview
Forbidden Fruit Winery

Gehringer Bros
Golden Beaver
Granite Creek
Gray Monk Estate Winery
Greata Ranch Vineyards
Hawthorne Mountain Vineyards
Herder Winery & Vineyards
Hester Creek Estate Winery
Hijas Bonitas
Hillside Estate Winery
Hollywood & Wine
Howling Bluff
House of Rose Vineyards
Inniskillin Okanagan Vineyards
Jackson-Triggs
K Mountain
Kalala Organic
Kettle Valley Winery
La Frenz Winery
Lake Breeze Vineyards
Lang Vineyards
Larch Hills
Laughing Stock Vineyards
Le Vieux Pin (oliver)/La Stella (osoyoos)
Little Straw Vineyards

Mission Hill Family Estate Winery
Mistral Estate Winery
Mt. Boucherie Estate Winery
Nichol Vineyard & Estate Winery
Nk'Mip

Noble Ridge Vineyard & Winery
Oliver Twist
Orofino Vineyards
Pentage Winery
Poplar Grove Winery
Quails' Gate Estate Winery
Quinta Ferreira
Raven Ridge
Recline Ridge
Red Rooster Winery
Road 13 (Golden Mile) Cellars
Robin Ridge
Rollingdale Winery
Ruby Tuesday
Rustic Roots

See Ya Later @HNV
Seven Stones
Silk Scarf
Silver Sage Winery
Soaring Eagle
Sonoran Estate Winery
Spiller Estates
Stag's Hollow Winery
St. Hubertus
St. Lazlo
Stoneboat Vineyards
Stonehill Estate Winery
Stone Mountain
Sumac Ridge Estate Winery
Summerhill Pyramid Winery
Tangled Vines
Tantalus Vineyards
Therapy Vineyards
Thornhaven Estates
Tinhorn Creek Vineyards
Township 7 Vineyards & Winery
Twisted Tree
Van Westen Vineyards

Volcanic Hills
Wild Goose Vineyards
Zero Balance
Other (specify)

11. How would you rate the importance of geographical proximity to other firms & industry bodies?

Critical
Important
Marginally important
No impact
A disadvantage

III. Innovation

12. Innovative Activities

- a. How many new products (brands or lines) have you developed over the past 2 yrs?
- b. Have you seen significant product improvement over that period? Y/N
- c. To what extent have you improved production processes over this time not much, a little, or a lot

13. Are there any particular companies you see as leaders in innovation? List companies

14. In which areas has innovation occurred over the past three years in your company? (select all that apply)

Retail Sales
Marketing
Finance
Plant Breeding
Use of Genetics
Soil Adaptation
Fermentation
Information Systems
Education/Training
Other, please specify

15. How important were the following actors to innovation activities your company was involved in over the past three years? (select all that apply)

(1-5) scale with 1 = not important, 2 slightly important, 3= neutral, 4= somewhat important and 5 being extremely important

Level of Importance (1-5)

Internal Company Sources

Suppliers of equipment, materials, components or software

Clients or customers

Joint research with Other BC Wineries

Wineries outside of BC

Consultants

Conferences, trade fairs, exhibitions

Trade magazines or journals

Internet

Other (list)

16. How important were the following sources of funding for these innovations? 1-5 scale

(1-5) scale with 1 = not important, 2 slightly important, 3= neutral, 4= somewhat important and 5 being extremely important

Personal Finances

Commercial Bank/credit union

Venture Capitalists

Federal Government

Provincial Government

Local or Regional Government

17. If your company has not been involved in utilizing major innovation, why is this the case?

(check all that apply)

Not needed by the company

Too expensive
Lack of human resources
Lack of information on technology
Lack of information on potential markets
Difficulty in finding co-operative partners
Lack of adequate or clear regulatory framework
Unaware of what's available

18. How is training given in your company? Y/N for each

In-house training
External provision of training
via UBC Okanagan
Consultants
via Okanagan College
Other, please specify

19. Number of trained employees as % of total employees?

20. How important is wine tourism for your strategy? 1-5

(1-5) scale with 1 = not important, 2 slightly important, 3= neutral, 4= somewhat important and 5 being extremely important

C. Strategy (personal interviews)

- i.-How do you target markets for your wine? How do you identify the appropriate price points and types of product that will sell?
- ii.-What are the tradeoffs between being a small independent producer and part of a larger global enterprise?
- iii.. Do you believe exporting (if applicable) has made your firm more competitive? In which ways?
- iv- How do you see the role of government in terms of the industry? How do you see industry associations?
What else could governments or industry associations do to enhance the industry's competitiveness?
- v. To what extent are you able to rely upon local suppliers for equipment? Has this changed over time.
- vi. Do you take a scientific or artisan approach or both? Do you see wine more as a commodity or cultural asset? How important is terroir to the value of your product? How important is the local identification of the sale of your product?
- vii.- What role does the success of the wine cluster have in terms of the overall identity and culture of this province and of the country? Do your suppliers tend to be local or global?
Do your buyers tend to be local or global?

viii. Do you primarily take an artisan or scientific approach to winemaking?

Reasons?

What role do you think the concept of terroir plays in the value and perceived value of your product?

What value do your buyers place on local identity?

Do you view your wine as a commodity or more of a cultural asset?