

Assessing the Use of Geographical Indications for the New England Wine Region in NSW

Hui-Shung (Christie) Chang, Gene Campbell and Peter Sniekers*

Paper presented to 51st AARES Annual Conference 2007, Queenstown, New Zealand,
13-16 February 2007

Abstract

Geographical Indications (GIs) have increasingly been used as a marketing tool to create an image of quality and uniqueness, and so capture premium prices. Hedonic pricing studies have shown that indication of geographical origin of production (e.g. country, region, wineries, and location), can affect prices. However, Geographical Indications only work when they are backed up by quality products. The objectives of this study are to assess the potential of a proposed Geographical Indication for the emerging “New England” wine region in promoting local wines and to make recommendations on how that potential, if it exists, can be realised. The assessment is based on an overview of existing systems of Geographical Indications and conditions, both economic and regulatory, which are required for successful geographical indication applications.

Key words: geographical indication, TRIPS Agreement, wine marketing, hedonic pricing.

*Christie Chang and Gene Campbell are Senior Lecturer and honours student, respectively, in the School of Economics, University of New England and Peter Sniekers is Agribusiness Development Manager, New England – North West, with the NSW Department of State and Regional Development.

This document has been prepared with assistance from the Department of State and Regional Development (DSRD) from information and data gathered in the course of its activities. No person should act on the basis of its content without taking appropriate advice. Neither the Department, nor its staff, nor the NSW Government accepts responsibility for the information contained in the document or the claims of any person(s) acting on it.

Assessing the Use of Geographical Indications for the New England Wine Region in NSW

Introduction

Global wine production was estimated to fall by 6% in 2005 while consumption was expected to rise by 1% from 2004 levels (ABARE 2006). This relative stability has masked the changes in the international wine market and the long-running contrast between the developments in the ‘new world’ and ‘old world’ wine nations. ‘Old world’ producers, such as Spain, France, Italy and Germany, have seen their domestic wine consumption falling over the past several years in the midst of increased production from the ‘new world’ producers, such as Australia, USA, Chile, Argentina and New Zealand (ABARE 2006). As competition intensifies, the old world producers have increased their effort to protect their market shares through more aggressive promotion and regulation (e.g., through the Trade-Related Aspects on Intellectual Property Rights (TRIPS) Agreement (Rangnekar 2003) of their geographical indications (GIs). There are several different GI systems in the world that provide the opportunity for producers to differentiate their products. Some systems are based solely on location while others take geographical features into account along with methods of production, explicit varieties and strict control on quality and volume of production. Champagne wine from France, Ceylon tea from Sri Lanka and Wisconsin cheese from the USA are all examples of food products being given a geographical indication. The increasing use of GIs by other agricultural products and foodstuffs also reflects the increasing demand for quality agricultural products amidst proliferation of mass-produced standard products (Rangnekar 2003).

Hedonic pricing studies (i.e. based on the measurement “pleasure” motivation) have shown that ‘indication of source’ had a statistically significant impact on prices (e.g., Schamel 2000; Schamel and Anderson 2001; Skuras and Vakrou 2002; Schamel 2003).

¹While old world wine producers have been successfully undertaking this marketing approach for over centuries, e.g. Champagne in France and Tuscany in Italy (Unwin 2003), new world producers, e.g. Napa Valley, California in USA, Barossa Valley and Hunter Valley in Australia, are increasingly exploiting this strategy. The New England region of New South Wales is developing a wine industry and is establishing a GI to differentiate itself based on higher altitudes, soil types and historical naming tradition of a region. The region is still in its infancy of development but is gaining a reputation for producing premium cooler climate wines. The objectives of the study are to review established GI regions in Australia and overseas, and to assess the effectiveness of the soon-to-be established “New England” GI as a potential marketing tool.

The paper is organised as follows. First, it provides a brief overview of the global wine market and the marketing strategies adopted by major producers, especially the use of GIs. Second, it describes the New England wine region and assesses the future prospects and the proposed GI, based on economic arguments and Porter’s Diamond Model (Porter 1998). Key issues are identified and recommendations are then made, followed by concluding remarks.

Economics of Geographical Indications

“GI” is a descriptive term indicating the geographical origin of a product and a specific quality or reputation which is due to this particular geographical origin.² There are several ways to define a GI. The broad clarifications include: (1) ‘indication of source’, which requires only that a product come from the named location without necessarily linking to product quality, (2) ‘designation of appellation of origin’, which requires features and characteristics of a product be attributable exclusively or essentially to its geographical environment, or (3) ‘geographical indication’, which requires a specific quality, reputation or other characteristic of a product be attributable to that geographical area of origin and its production and/or processing and/or preparation takes place in the

¹ Variables that are often included in these hedonic studies are: winemaker, brand name, grape varieties, country region, volume, vintage, medals/awards, and (ratings for) sensory wine quality.

² A trademark is a distinctive sign indicating the company origin of a good or service.

defined geographical area (Donaldson 2004).³ Clearly, ‘protected geographical indication’ is more expansive than ‘protected designation of appellations of origin’, but is less inclusive than ‘indications of source’.

The establishment and implementation of a GI system provides producers with legal protection of the name of the region where the product is produced. Therefore, the benefit of a well-defined and well-protected GI is that it allows the producers in the region to act as monopoly and hence, command a premium price due to their exclusive use of the GI (Agarwal & Barone 2005:2). Producers in the defined and protected region are able to extract economic rent because the image of exoticness and/or scarcity which GI has created for their products which would otherwise be given a commodity status (Unwin 2003). However, this “monopoly rent” can only occur for regions which produce exceptional quality product and have the ability and authority to control quality and output within the region, as well as preventing any imitation by producers from outside the region. For this to happen there must be a governance structure to ensure that the protection of an appellation is enforced and to bring any offenders to task (Kerr 2006:9). The purpose of the multilateral TRIPS Agreement and other bilateral agreements is to recognise and protect registered GIs cross borders by parties to the agreements.

World Examples of GIs

Many wine producing nations around the world have similar systems of GIs though they may differ by name and in some cases by specific regulations (Rangnekar 2003; Wikipedia 2006a). For example, Regulation EEC 2081/92 (Protection of Geographical Indications and Designations of Origin for Agricultural Products and Foodstuffs) has two categories of indications of geographical origins: Protected Designations of Origin (PDOs) and Protected Geographical Indications (PGIs). PDOs are “names of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff where particular quality or characteristics are essentially due to a particular geographical environment with its inherent natural and human factors and the production, processing and preparation takes place in the defined geographical area”. PGIs, on the

³ GIs are defined in the TRIPS Agreement, Article 22.1, as “--- indications which identify a good as originating from a Member, or a region, or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributed to its geographical origin” (Rangnekar 2003).

other hand, are defined as “names of a region, a specific place or, in exceptional cases, a country, used to describe an agricultural product or a foodstuff where a specific quality, reputation or other characteristic is attributable to that geographical area of origin and where production and/or processing and/or preparation takes place in the defined geographical area”. Therefore, to be eligible to use a PDO or PGI, an agricultural product or foodstuff must comply with a specification (Rangnekar 2003:25). The purpose of the EEC regulations is to ensure that only products genuinely originating from a region are allowed in commerce as such, and therefore protecting regional foods. Support for quality regional foods is, in turn, directly linked to rural development (Sturas and Vakrou 2002). These regulations have been applied to wines, cheeses, hams, sausages, olive, beers, regional breads, fruit and vegetables. PDOs are similar to the French Appellation d’Origine Contrôlée (AOC), the Denominación de Origen in Spain and the Denominazione di Origine in Italy ((Wikipedia 2006d). In addition, there are the American Viticultural Areas (AVAs) in the USA and Australian GIs. The French, American and Australian systems are described in more detail in the following section.

- The French System

The beginnings of the appellation of control (AOC) system can be traced back to the early twentieth century during the outbreak of the disease phylloxera to prevent fraudulent activities by vigneron who were adding water to wine or/and using hybrid vines to increase supply (Unwin 2003:313). Between 1908 and 1912 government decrees were passed to regulate the areas from which Bordeaux, Banyuls, Armagnac, Cognac and Champagne wines could be produced (Unwin 2003:314). In 1919, law was passed to protect AOC. In 1935, the ‘Institut National des Appellations d’Origine’ (INAO) was created as a branch of the French Department of Agriculture to manage the AOC (Wikipedia 2006b). The application to be registered as an AOC is made by the producers of the appellation group together in what is known as an appellation defense syndicate (INAO 2006). The syndicate must present technical, economic, legal and historical documentation to prove the link between the wine and its location, the use of the location in the past, originality and reputation (INAO 2006).

There are many well-known wine regions in France, for example, Burgundy, Bordeaux, the Loire Valley and the Rhone Valley, but the most successful AOC in France is arguably the Champagne region, famous for its white sparkling wine with the same name. The region is located in northern France, 145kms north of Paris and the official area comprises of 30,000 hectares winegrape growing country (Sharp & Smith 1990:18). In the region only certain varieties can be grown; these are Chardonnay (a white grape), Pinot Noir and Pinot Meunier (both red varieties), which are all grapes crushed for their white juice. The Chardonnay grape makes up 27% of all grapes in the region, Pinot Noir, 37.5% and Pinot Meunier, 35% (Wilson 1998:71).

The AOC of Champagne has three distinct characteristics which have made it the benchmark against which the other sparkling wines are judged. First, its chalky subsoil that drains excess water and retains the heat in the colder months allows the ripening period to be extended, thus producing higher quality grapes (Sharp & Smith 1991:14). Second, its 200 years of experience and tradition of rigorous champagne production, ‘the ‘methode champenoise’,⁴ along with state of the art technology, allow it to stay at the forefront of sparkling wine production (Sharp & Smith 1991:14). Third, its set of rules, which must be followed in the production of the wine, sends a strong quality signal to the market.

The bilateral agreement between EU and Australia on champagne stipulates that ‘champagne’ can no longer be used as a generic term outside the French region (Kok 1999). Instead, ‘sparkling wine’ will be used to describe the wines with champagne method or style that are not produced in Champagne. However, there still are producers who use the champagne name to label their wine even though they are not from that region. The AOC of Champagne has had to fight many court cases to protect its intellectual property rights.

- The U.S. System

In the global wine market, the focus on geographical origin by old world producers is in stark contrast with the use of grape varieties (e.g. Chardonnay, Merlot, Shiraz, etc) by

⁴ It includes restriction on volume of grapes, a ban on irrigation in the region and the storage of the wine for at least a year (Sharp & Smith 1991:14)

new world producers to gain consumer recognition. However, some new world producers have developed some form of a GI system to take advantage of what a GI can offer. The U.S. system is called the American Viticultural Areas (AVAs).

The AVA system was established in 1978 with the first AVA being granted in 1980 to Augusta, Missouri (Kolpan et al. 2002:128). The AVA system requires that at least 85% of grapes come from the specified AVA in order to carry the AVA. When applying for an AVA the applicant must show that the name proposed is locally or nationally known and the boundaries are suitable (Gay & Hutchinson 1987:99). An AVA application must also include climate, soil characteristics, rainfall and elevation in order to demonstrate that viticultural characteristics are differentiated (Gay & Hutchinson 1987:99). In addition, producers within an AVA must abide by the laws and regulations of the AVA that cover production methods, the composition and the designation of wines produced in the AVA. Regulatory power to control AVA rests with the state (LaMar 2005).

The most well known AVA is the Napa Valley in California. The producers of the Napa Valley have successfully used the new world practice of marketing wine by grape variety. However, Sawyer and Hammett (1998) found that American wine consumers have become tired with the popular varieties and the practice of varietal labelling has also become uninteresting and ineffective. Schamel (2003) also found that there was a clear trend towards regional differentiation through the use of geographical indications. As such, geographical indications are being adopted by new world wine producers, as well as many other agricultural products and foodstuffs.

- The Australian System

The Australian Wine and Brandy Corporation (AWBC), which is the regulatory body of the Australian wine industry, defines the Australian GI system as:

‘official description of an Australian wine zone, region or sub-region. It takes the form of a textual description (ie a list of grid references, map coordinates, roads and natural landmarks which can be traced to outline the regional boundary) along with a map’ (AWBC 2003). There are several tiers under the Australian GI system. One of these is the ‘super zone’ known as South-Eastern Australia, which is the area south east of a line from North Queensland to Ceduna in South Australia. It covers the southern parts of

Queensland, and South Australia and the whole of Tasmania, New South Wales (NSW), and Victoria. There is also one super zone of Adelaide which includes Mount Lofty Ranges, Fleurieu and Barossa (AWBC 2003). The next tier includes the six states and the two territories of Australia. From here each state/territory is divided into zones, which are further divided into regions and subregions (Kolpan et al. 2002:248-249).

States have been declared as GIs as well as 28 zones with contiguous boundaries within each state. About 61 regions have been identified; most have been entered in the Register of Protected names, while others are still in the interim or proposal stage. A Geographical Indication does not have legal status under the Australian Wine and Brandy Corporation Act until it has been defined and entered onto the Register of Protected Names. Areas determined at March 2003 are shown in Appendix 1.

The AWBC takes into numerous factors when making decisions on GI applications, such factors include history, (general, grape growing and wine production), geology, climate, drainage, water availability, elevation, harvest time, and finally traditional use of the area and name (AWBC 2003). The Australian GI requires that at least 85% of the fruit come from the specified region (AWBC 2003).

The influence of Australian GIs on domestic consumer preferences is noted in the study by Schamel and Anderson (2001) who found regional reputations becoming more significant in influencing price over time (from 1992 to 2000). Strong support for Australian GIs is provided by the tourism industry, which has used them extensively for promotion. For an Australian wine region to successfully promote its GI through tourism and marketing there must be substantial investment over a lengthy periods of time in order to gain reputation and consumer recognition of the region (AWBC 2000:16). Many regional development agencies have taken this approach to promote regional wines along with special features of the region.

From the review of various GI systems for wine in the world, it is clear that the rules of the Australian and American systems are not as stringent as the French system, especially on quality aspects (Gay 1987 and 2003). In addition, while marketing by new world producers, such as USA and Australia, tends to place more emphasis on grape variety and winery/brand reputation, the French and other European system focus predominantly on

GIs of the regions. Each system has its own advantages and disadvantages (Agarwal and Barone 2005). The main advantage of the GI systems adopted by new world producers is the freedom and entrepreneurship afforded to the winemakers in meeting changing consumer demand and market conditions, while the latter benefits more from the additional investment on promotion made possible by collective marketing arrangements.

The New England GI

The history of viticulture in the New England region of NSW is somewhat unique, with the industry starting in the 1850s, being abandoned by the early part of the 20th century, and then re-emerging in the 1970s. The first real commercial operation started in 1852 when a vineyard was established at Bukkulla with peak production of between 54,500 and 68,100 litres (Walker 1966:69). Main grape varieties grown at that time were Madeira, Hermitage, Pinot Riesling and White Shiraz (Wiedemann 1981:139). No new vines were planted after the 1880s and in 1939 the last of the vines were allowed to die out due to lack of local demand and long distance to key markets (Wiedemann 1981:141). The industry re-emerged in the 1970s, following the national trends in vine plantings.

The New England wine industry can be described as embryonic, with only small-to medium-scale operations run by semi-professional producers (Vanzella 2003:13). However, it has already gained reputations for producing premium cool climate wines with distinctive style (Wine-Diva 2006: online). To promote and further develop the industry, it was recommended that a GI be established for the region (Vanzella 2003:13).

Since 2003 the Armidale office of the NSW Department of State and Regional Development has been working with two local grape grower associations (The New England Winegrowers Association (NEWGA) and the Southern New England Vignerons (SNEVA)) to apply to the AWBC for a GI for the New England region. At the time of writing, the GI application had just been submitted (29 November 2006) and is yet to be approved. The critical mass which is required as a prerequisite by AWBC to register a GI for the region (at least five vineyards of at least five hectares each and with total annual grape production over 500 tonnes) has been reached. One issue that may arise is the use of the name 'New England' for the proposed region, which may be confused with an

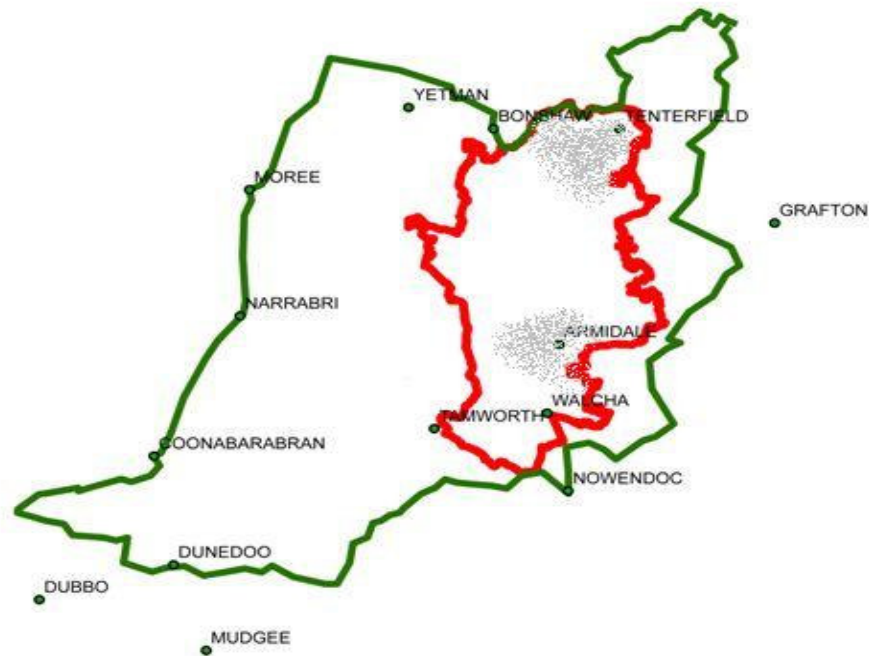
American Viticulture Area known as Southeastern New England. The GI committee of the AWBC may object to the use of 'New England' to avoid potential confusion that may occur in the American and European markets. If this does happen the region may fall back on a clarifying "New England-Australia" title. However, New England is preferred since it is well known in Australia and presents an image of quality and tradition.

"New England" is situated in the Northern Slopes Zone (see Appendix 1) and was registered as a protected GI name in 1996 by the AWBC. However, the name "Northern Slopes" was created merely for administrative purposes and there is no marketing advantage associated with it. Vanzella (2003) found from reference groups and consultations with industry stakeholders that the Northern Slopes zone GI was too broad and too diverse to mean anything to Australian or international wine consumers (Vanzella 2003:142). This was the basis for applying for a regional GI named "New England", within the Northern Slopes zone, which is more narrowly defined according to grape growing attributes. Still, the proposed New England region has a mixture of climates and geographies.

The proposed New England region GI is in the middle of the Northern Slopes zone GI (see fig 1), which covers area from Gilgandra in the south west to Tenterfield in the north east. The town of Armidale, which is located in the south of the New England, has an altitude of 950 metres with an annual rainfall of 793 millimetres. The town of Tenterfield at the north end of the New England has an altitude of 880 metres with an annual rainfall of 855 millimetres (Falling Rain Genomics Inc. 2004). The soils around the Armidale and Tenterfield areas are both made up of yellow Podzolic and yellow Solodic soils (Vanzella 2003:57). Although these two areas are similar in geographical and topographic factors, other areas of the New England show marked differences. For example, Delungra in the west of the New England region is at an elevation of 589 metres, and the soil structure consists of black earth / Euchrozem soils (Vanzella 2003:57, Falling Rain Genomics Inc. 2004). The most southern point of the New England is Kootingal at 596 metres and there are several vineyards around this area which, like Delungra, produce warmer climate wines (Falling Rain Genomics Inc. 2004). Figure 1 shows the current Northern Slopes zone GI, the greater outline (green) which encompasses the outline of the proposed New England region GI (Red). The shaded area of Figure 1 shows the cooler climate areas

around Tenterfield and Armidale and should extend uninterrupted between Armidale and Tenterfield, taking in Glen Innes, Glencoe, and Gyra which are actually higher than Armidale and Tenterfield.

Figure 1. Northern Slopes zone GI and Proposed New England GI



Source: University of New England 2006.

The blends of both cooler and warmer climate grapes / wines in a GI region may be contentious. Both the Armidale and Tenterfield areas are producing cooler climate wines while Kootingal and Delungra produce warmer climate wines. This problem is potentially significant especially if some in the region wish to market their New England wines as cool climate. This issue was raised in communication with the AWBC GI Committee. However, the GI Committee did not see the area covering different wine styles/types as an issue as long as it could be argued that the "New England" region has some basis in other features, e.g. land use, soil types, naming tradition, etc. This means the point of differentiation will have to be carefully considered and examined.

In New England, vines are planted by small hobby farmers and non-traditional enthusiasts, based on landownership and national trends rather than terroir, with Shiraz, Cabernet Sauvignon, Merlot and Chardonnay being the dominant varieties in the area (Vanzella 2003:28). As of September 2005, there were 52 vineyards in the entire New England – North West region (41 in “New England”), with a total planting of 409 hectares (ha) (291 ha in “New England”); the size of these vineyards ranged from 0.27 to 44.03 hectares (NSW Department of State & Regional Development 2006). Total grape production was estimated at 2,529 tonnes per year (1,852 tonnes in “New England”), which was made into 1,580,734 litres of wine (1,157,750 litres in “New England”) and put into 2,107,645 bottles (1,543,666 bottles in “New England”). During a farm survey in 2003, it was found that 32% of 33 growers surveyed produced their own wine on site and the remaining had their wines made elsewhere but bottled under their own labels. The equivalent retail value of all wines produced in the New England - North West region was estimated at approximately \$29.5 million (\$21.6 million for “New England”) (NSW Department of State & Regional Development 2006).

There are currently five wineries (Reedy Creek Winery (Tenterfield), Wright - Robertson (Glenceoe), Merilba Estate Winery (Kingstown), Gilgai Estate (Gilgai) and Warrina Wines (Kootingal)) and 20 cellar doors in the New England area, with two more planning to open during 2007(NSW Department of State & Regional Development 2006). Another channel of distribution attempted by some producers in the region has been through the New England – North West Wine Club (2006). In addition, efforts have been made to promote local wines through a regional wine tourism network that offer “package” experience for their customers, including vineyard and winery tours, restaurant and wine meals, and wine holidays (Vanzella 2003). In 2003, a regional survey found that 80% of producers in the New England believed that tourism would be a significant factor in their future. However, to develop wine tourism, there must be a minimum of at least three cellar doors/wineries in close proximity to each other and centred around a major town with concentration of facilities (accommodation, restaurants, wine tours and other attractions) in each centre (Vanzella 2003:37).

Besides cellar doors, wine clubs and wine tourism, sales of New England wines through more traditional distribution channels is very limited A survey of local liquor stores,

hotels and restaurants shows that majority of them do not sell any local products. This could be attributed to the lack of recognition of local wine by consumers and retailers and the relatively high price of local wines. Wine produced in the region ranges in price from \$12 to over \$25 a bottle.

Assessment of the New England wine region and proposed GI

In this section, we report how Porter's Diamond Model (1998) was used to assess whether the New England wine region can be developed into a profitable industry (with or without a GI).

According to the Diamond Model, there are four determinants of national advantage. They are:

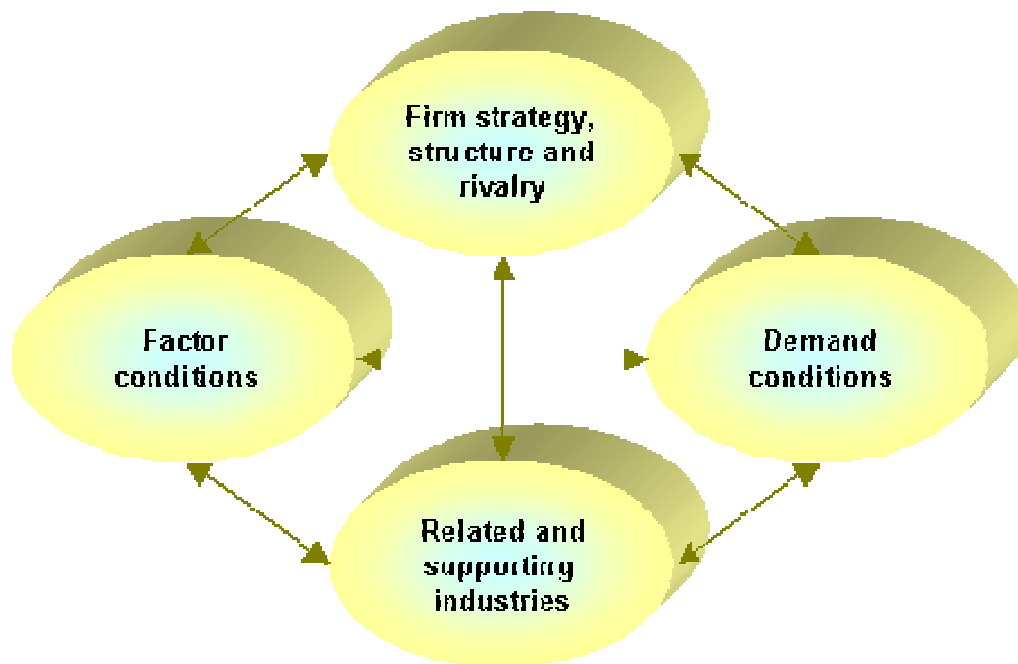
- ***Factor conditions.*** The factors of production, such as skilled labour, infrastructure, knowledge resources and physical resources, which are necessary to compete in a given industry.
- ***Demand conditions.*** The nature of domestic demand for the industry's product or service. Sophisticated consumers can pressure firms to innovate faster and to produce superior products than otherwise.
- ***Related and supporting industries.*** The presence or absence in the nation of supporting and related industries, which are internationally competitive in their own right, can aid the industry in development and upgrade.
- ***Firm strategy, structure and rivalry.*** The presence of fierce rivalry in the home base and the conditions in the nation governing how firms are created, organised and managed are important for success.

Among the four determinants, the presence of demanding consumers and fierce firm rivalry are most important since they put pressures on firms to invest and innovate, which, in turn, helps create and sustain competitive advantage (Porter 1998, p.71). Porter's Diamond Model is illustrated in Figure 2.

When the Diamond model was applied to the New England, results were not encouraging. It is fair to say that the New England wine region is far from meeting those

conditions that are necessary for becoming an internationally competitive industry. Failure to meet those conditions can largely be explained by the early stage of development of the region in wine production. In particular, the lack of human resources was a problem and this is pointed out by a regional survey where 16% of growers indicated that sourcing skilled labour from within the region was a major concern. More than 30% of those surveyed also nominated labour as a constraint on future expansions (Vanzella 2003:35). In addition, product quality may be another weakness with vineyard selection based predominantly by land ownership rather than quality and suitability of geographical features (Vanzella 2003:29). Finally, given that the Australian wine industry is internationally competitive and many wineries are well-established in other regions, the New England wine region is likely to face stiff competition even in the local/domestic market.

Figure 2. The Diamond Model



Source: Adapted from Porter (1998).

In terms of assessing the effectiveness of GI to promote the local wine industry, it was found that the industry is yet to identify points of differentiation that are appropriate for

well-defined target markets. The pre-requisites for a successful GI rest on having a premium product that is recognised by consumers. However it is also recognised that this activity is more likely to be encouraged once the “New England GI” has been ratified.

However, it is not all doom and gloom for the New England wine region and the proposed GI region. The continued support of government departments for both funding and promotion and development, the cooperation between grower organisations and the sectors of the industry, and the faith shown by investors from both within the region and outside all represent factors that will give the region the chance to grow and mature. While the New England does not have any specific wine industry research-based institutions, it is supported by the University of New England (UNE). In recognition of the potential of the region as a future premium wine producing area UNE is currently looking to expand its rural and environmental sciences into the viticultural industries (Vanzella 2003:155). In addition, promotion of wine tourism, highlighting the New England’s food alongside its wines, has huge potential in attracting tourists to the region (Vanzella 2003:44).

For the region to become a preferred tourist destination and a premium wine producer, it needs to have a long-term strategy that will encourage a competitive environment suggested in the Diamond Model to develop and mature, as well as identify the target market and point of differentiation for the region and its wines. The latter will require more market research to complement the supply side research which has been the focus so far.

Conclusion

Geographic Indications, when backed up by premium products, can be effective marketing tools for gaining a competitive advantage. Geographic indications can be used to their full potential when they are properly protected from imitation and reproduction by producers outside the defined region. GIs have been successful in the old world wine producing nations, for example Champagne France, having unique features or characteristics associated with the produce or the regions.

The New England region is currently in the process of applying to the Australian Wine and Brand Corporation for a regional geographical indication for its wine. Currently the

region is in the broader GI of the Northern Slopes zone, and the local producers of the New England believe that a GI for the region will provide them with their own identity and further marketing opportunities. Compared with more established GIs, the New England wine region appears to have a weak basis for meeting the pre-requisites for achieving success. In particular, the New England wine region is yet to identify its target markets and establish point of differentiation.

When Porter's Diamond Model was applied to the New England wine region, several weaknesses, such as poor local demand conditions and lack of necessary supporting and related industries, were identified. However, those problems are probably associated with the infancy of the New England wine region and may become less of a concern over time as the industry develops further.

The industry has great potential as the local wines are generally of higher than average quality; but the industry has many weaknesses to overcome. If it is to expand and compete both nationally and in the future internationally, it is essential that the region continues to be supported by local and state governments in research and development and that there is cooperation between local growers and other supply chain participants. The immediate challenge to the industry is to find a point of differentiation in terms of physical features (soil, altitude and climate etc) and wine styles (both cool and warm climate wines exist) in a rather diverse natural environment. As GI systems can be used merely as an indication of source or as protected designations of origin or geographical indications with strict control on quality and volume of production, governance issues associated with the proposed New England GI (e.g., membership, competition versus collaboration, and quality control) also need to be considered sooner than later. It is these factors which will hamper the development of an image of quality and distinctiveness for the region and its proposed GI. To move forward, further research is needed to provide current and timely information on consumer preferences and to identify local and wider target markets and points of differentiation for the "New England" wines.

References

- Agarwal, S. and Barone, M. J. 2005, 'Emerging issues for Geographical Indication Branding Strategies', Midwest Agribusiness Trade Research and Information Centre, Iowa State University. Retrieved 8 August 2006 from AgEcon database on <http://agecon.lib.umn.edu>.
- Australian Bureau of Agricultural and Resource Economics (ABARE) 2006, *Australian Commodities*, ABARE, Canberra.
- Australian Wine and Brandy Corporation 2000, 'The marketing decade – setting the Australian wine marketing agenda 2000-2010', AWBC. Retrieved 14 July 2006 from <http://www.awbc.com.au/Content.aspx?p=154>.
- Australian Wine and Brandy Corporation 2003, 'Wine Regions', AWBC. Retrieved 17 August 2006 from: <http://www.awbc.com.au/Content.aspx?p=16>.
- Donaldson, A. 2004, 'Geographical indications (GIs)', The Law Society of South Australia.
- NSW Department of State and Regional Development 2006, 'Vineyard NE-NW database', NSW Department of State & Regional Development.
- Falling Rain Genomics Inc. 2004, 'Directory of cities, towns in State of New South Wales, Australia'. Retrieved 1 November 2006 from: <http://www.fallingrain.com/world/AS/2/>.
- Gay, D. 2003 'Comparative economic regulation of viticultural appellations: U.S. practices and Italian wine law', *International journal of wine marketing*, vol. 15, no. 3, pp.5-14.
- Gay, D. E. R. Hutchinson R. B. 1987, 'A comparative analysis of French and U.S wine appellations', *Atlantic Economic Journal*. Retrieved 24 August 2006.
- Institut National des Appellations d'Origine 2006, 'Presentation: English version', INAO. Retrieved 13 July from: <http://www.inao.gouv.fr/public/home.php>
- Kerr, W. A. 2006, 'Enjoying a good port with a clear conscience: geographic indicators, rent seeking and development', *The Estey Centre Journal of International Law and Trade Policy*. Retrieved 28 August 2006 from AgEcon database on <http://agecon.lib.umn.edu>.
- Kok, S. S. L. 1999, *The economics of geographical indications: a case study of the bilateral EU-Australia wine agreement*, Honors thesis, University of Adelaide.
- Kolpan, S. Smith, B. H. & Weiss, M. A. 2002, *Exploring Wine*, 2nd Ed Wiley & Sons Inc, New York.
- LaMar, J. 2005, 'Understanding wine labels, appellation labels'. Retrieved 23 August 2006 from:

- New England North West Wine Club 2006, 'New England North West Wine Club'. Retrieved 9 November from: <http://www.newwineclub.com/>.
- New England Wine Show 2006, 'Regional viticultural & winemaking background'. Retrieved 22 July 2006 from: <http://www.newenglandwineshow.com.au/WineShowProfile.html>.
- Porter, M. E. 1998, *The competitive Advantage of Nations*, Macmillan Press LTD, London.
- Rangnekar, D. 2003, *The socio-economics of geographical indications- A review of empirical evidence from Europe*, Centre for the Study of Globalisation and Regionalisation, Warwick University Coventry.
- Sawyer, A. Hammett, J. 1998, 'American appellation earn distinction as a marketing tool, growers and vintners weigh merits of tying appellation to varietal'. Retrieved 17 July 2006 from <http://www.winebusiness.com/html/SiteFrameSet.cfm?fn=../Archives/Monthly/1998/june/bmf9801.htm>.
- Schamel, G 2000, 'Individual and collective reputation indicators of wine quality', Centre for International Economics Studies. Retrieved 07 July 2006 from <http://www.adelaide.edu.au/cies/0009.pdf>.
- Schamel, G. & Anderson, K. 2001, 'Wine quality and varietal, regional and winery reputations: Hedonic prices for Australia and New Zealand', Centre for International Economics Studies. Retrieved 19 July 2006 from <http://www.adelaide.edu.au/cies/0103.pdf>.
- Schamel, G. 2003, 'International wine trade: analysing the value of reputation and quality signals', Humboldt University. Retrieved 30 May 2006 from AgEcon Search database on <http://agecon.lib.umn.edu>.
- Sharp, A. Smith, J. 1990, 'Champagne: a sustainable competitive advantage', *European Journal of Marketing*, vol. 24 no. 4 pp. 18-26.
- Sharp, A. Smith, J. 1991, 'Champagne's sparkling success', *International Marketing Review*, vol. 8 no.4, pp.13-19.
- Skuras, D. & Vakrou, A. 2002, 'Consumers' willingness to pay for origin labelled wine – a Greek case study', *British Food Journal*, vol. 104, no. 11, pp. 898-912.
- Spawton, S. 1991, 'Marketing, planning for wine', *European Journal of Marketing*, vol. 25, no. 3, pp. 1-48.
- Stricker, S. Mueller, R. A.E. & Sumner, D.A. 2006, 'Marketing wine on the web', International Association of Agricultural Economists. Retrieved 6 July 2006 from AgEcon database on <http://agecon.lib.umn.edu>.
- University of New England 2006, *New England Northern Slopes*, Development Office, University of New England.

Unwin, T. 2003, *Wine and the Vine, An Historical Geography of Viticulture and the Wine Trade*, Taylor & Francis Group, New York.

Vanzella, T. 2003, *New England – North West Viticulture: A Handbook for Investors and Regional Strategy*, New England North West Development Board, Armidale.

Walker, R. B. 1966, *Old New England: A history of the Northern Tablelands of New South Wales 1818-1900*, Sydney University Press, Sydney.

Wiedemann, E. 1981, *World of its own, Inverell's early years 1827-1920*, Devill Publicity, Inverell.

Wikipedia 2006a, 'Appellation', Wikipedia, the Free Encyclopaedia. Retrieved 17 August 2006 from:

<http://en.wikipedia.org/wiki/Appellation>.

Wikipedia 2006b, 'Appellation d'origine contrôlée (AOC)', Wikipedia, the Free Encyclopaedia. Retrieved 29 August 2006 from:

http://en.wikipedia.org/wiki/Appellation_d'Origine_Contr%C3%B4l%C3%A9e.

Wikipedia 2006c, 'Promotion (Marketing)', Wikipedia, the Free Encyclopaedia. Retrieved 16 August 2006 from:

http://en.wikipedia.org/wiki/Promotion_%28marketing%29.

Wikipedia 2006d, 'Denominazione di origine controllata', Wikipedia, the Free Encyclopaedia. Retrieved 16 August 2006 from:

http://en.wikipedia.org/wiki/Denominazione_di_Origine_Controllata.

Wine Diva 2006, 'New England-North West, New South Wales'. Retrieved 22 July 2006 from:

<http://www.winediva.com.au/regions/new-england.asp>.

Appendix 1a. Australian GI system – New South Wales

New South Wales		
State/Zones	Regions	Subregion
Big Rivers	Lachlan Valley*	
	Murray Darling ²	
	Perricoota	
	Riverina	
	Swan Hill ²	
Western Plains		
Central Ranges	Cowra	
	Mudgee	
	Orange	
Southern New South Wales	Hilltops	
	Canberra District	
	Gundagai	
	Tumbarumba	
South Coast	Shoalhaven Coast	
	Southern Highlands	
	Sydney*	
Northern Slopes	Proposed: “New England”	
Northern Rivers	Hastings River	
Hunter Valley	Hunter	Allandale*
		Belford*
		Broke Fordwich
		Dalwood*
		Pokolbin*
		Rothbury*

Appendix 1b. Australian GI system – South Australia

South Australia		
State/Zones	Regions	Subregion
Adelaide (Super Zone, includes Mt Lofty Ranges, Fleurieu and Barossa)		
Mount Lofty Ranges	Adelaide Hills	Lenswood
		Gumeracha*
		Piccadilly Valley
	Adelaide Plains	
	Clare Valley	Auburn*
		Clare*
		Hill River*
		Polish Hill River*
		Sevenhill*
		Watervale*
Barossa	Barossa Valley	
	Eden Valley	High Eden
		Springton*
Fleurieu	Currency Creek	
	Kangaroo Island	
	Langhorne Creek	
	McLaren Vale	Clarendon*
	Southern Fleurieu	
Limestone Coast	Bordertown*	
	Coonawarra	
	Mt Benson	
	Padthaway	
	Penola*	
	Wrattonbully*	
	Robe*	
Lower Murray	Riverland	
The Peninsulas		
Far North	Southern Flinders Ranges*	

Appendix 1c. Australian GI system – Victoria

Victoria		
State/Zones	Regions	Subregion
North West Victoria	Murray Darling ²	
	Swan Hill ²	
North East Victoria	Alpine Valleys	Kiewa River Valley*
		Ovens Valley*
	Beechworth	
	Glenrowan*	
	King Valley*	Myrree*
		Whitlands*
	Rutherglen	Wahgunyah*
Central Victoria	Bendigo	
	Central Victorian Mountain Country*	
	Goulburn Valley	Nagambie Lakes
	Heathcote	
	Strathbogie Ranges	
Western Victoria	Grampians	Great Western*
	Henty	
	Pyrenees	
Gippsland		
Port Phillip	Geelong	
	Macedon Ranges	
	Mornington Peninsula	
	Sunbury	
	Yarra Valley	

Appendix 1d. Australian GI system – Western Australia

Western Australia			
State/Zones	Regions	Subregion	
Greater Perth	Perth Hills		
	Swan District	Swan Valley	
	Peel		
Central Western Australia			
South West Australia	Blackwood Valley		
	Geographe		
	Great Southern	Albany	
		Denmark	
		Frankland River	
		Mount Barker	
		Porongurup	
	Manjimup*		
	Margaret River		
	Pemberton*		
Warren Valley*			
West Australian South East Coastal	Esperance*		
Eastern Plains, Inland and North of Western Australia			
*name included on listing pending determination by the G.I.C. and inclusion in the Register of Protected Names.			
¹ The zone South Eastern Australia incorporates the whole of NSW, Vic. and Tas. and only part of Qld and SA.			
² Murray Darling and Swan Hill are contained within the zones of Big Rivers (NSW) and North West Victoria (Vic.).			