Vineyard valuations, like common real estate or property valuations, are often carried out for a number of purposes including financing, sale or purchase, taxation or financial reporting, etc.

Valuing vineyards can be quite challenging as it may cover the valuation of land, buildings, various kinds of highly specialized machinery and equipment as well as the inventory of wine of different vintages, etc. A vineyard valuation often involves the valuation of the wine business with a going concern and the valuation of intangible assets such as the estate’s brand and trademark. Very often, in valuation of those assets different business valuation methodologies and techniques could be utilized.

**Factor Affecting Vineyard Prices**

There is a positive correlation between wine price, grape price and vineyard value. Beginning with the changes in wine prices, a rise in wine prices will drive grape prices and hence vineyard values.

**Grape Variety**

Different grape varieties produce wines of different characteristics, for example, a typical red wine of Pinot Noir gives a taste of cherry and raspberry while a typical red wine of Cabernet Sauvignon gives a taste of blackcurrant and cedar. Consumers’ preferences on different grapes and wines result in different supply and demand equilibriums of them and their prices around the world.

**Location**

When addressing the value of vineyards, location is always a primary determinant of value just like any other real estate or properties. Certain grape varieties are best to grow and only grow in certain regions therefore, it is reasonable that winemakers will produce grapes that can fetch higher prices. From a business point of view, the proximity to vendors, labor, and wineries and the accessibility definitely can reduce operating costs and add values to the wine business and the vineyard.

**Terroir**

“Terroir” means more than a location or a simple plot of land. It originated from a French term to denote the particular characteristics of wine, coffee and tea for the geography, geology and climate of the land they come from. Terroir plays a critical role in the realm of winemaking as it covers the most fundamental factors that determine the character and quality of grapes and wines. Furthermore, it is believed that terroir is unreplicable, i.e. wines from different terroirs are intrinsically different and there are no perfect substitutes of a particular wine.

Despite the importance of terroir in winemaking, there is no exact and clear definition of the term in the industry, however, there are several widely accepted aspects.
Figure: The Characteristics of Different Aspects of Terrior

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate</td>
<td>It relates to the temperate ranges, precipitation, microclimate and mesolimate such as temperature, sunshine, wind and rainfall, etc.</td>
</tr>
<tr>
<td>Soil</td>
<td>It relates to both the composition the vineyard soils and their intrinsic nature such as fertility, drainage, heat and water retention ability, mineral content, erosion, etc.</td>
</tr>
<tr>
<td>Topography</td>
<td>It relates to the natural landscape features such as mountains, valleys and water.</td>
</tr>
</tbody>
</table>

**Appellation**

The concept of appellation and terroir is inseparable. An appellation is a legally defined and protected geographical indication used to identify where the grapes for a wine are grown. For an appellation name to be legally appear on a wine bottle label, there are restrictions on the varieties of grapes to be grown, vinification techniques, the style of wine to be produced, maximum grape yields, alcohol level, sugar content and other quality factors, etc. The regulations that govern appellations vary across countries in which the wine is produced.

Example: Champagne is one of the most famous sparkling wines in the world. The term “Champagne” is also an appellation in northern France. To label a sparkling wine as Champagne, one of the criteria is it must be produced within the Champagne AC region (AC stands for “Appellation d’origine controlee” in French, which means controlled designation of origin in English). Sparkling wines produced in other regions of France may be labeled Crémant if production and certain criteria are met, but it can never be labeled as Champagne.

Since the use of appellation is restricted by law, different appellation’s names on wine labels both explicitly and implicitly by themselves give different perceived levels of wine quality and uniqueness of character. One simple and general rule used by consumers to judge the prices of grapes, wines and even vineyards is to look at the appellation they are from and such rule is supported by the results of many blind taste tests. It is undeniable that appellation has substantial impact on vineyard prices.

**Improvements**

When valuing a vineyard, growing grapes is considered to be one of the improvements to the land and have values. Improvements related to grapes that may affect the value of the vineyard include specific cultivars, rootstocks, spacing, plant density and population. Other improvements may include the trellis systems, irrigation systems and frost protection systems.
Valuation of Vineyards and Related Assets

There are three general approaches to value a vineyard: the cost approach, the market approach and the income approach. The choice of valuation approach often depends on the development stages of a vineyard and the availability of market data of transactions of grapes, wines and vineyards respectively.

In the early stages of a vineyard, which is when the risk of investing is considered to be the highest, the cost approach is usually adopted to evaluate the vineyard based on the cost of the investment. Then, when grapes and wines begin to be in production and vineyard is generating income, market approach or income approach would be the best choice.

Cost Approach

In general valuation practices, the cost approach provides an indication of value based on the principle that an informed buyer would pay no more than the cost of producing a substitute asset with equal utility as the subject assets.

A commonly used method under the cost approach is the replication cost method. Basically, it measures the amount of investment, i.e. the costs, that would be required to develop an asset similar to the subject asset. In this context, it is the vineyard under valuation.

In valuing vineyards, the replication cost method begins with the cost of the land as a capital cost. It may be either the possible return on its use or the opportunity cost of the land. Other costs may include:

i. Costs for obtaining relevant permits, licenses and entitlements from the authority
ii. Costs of plant and machinery
iii. Costs and depreciation of improvements

The cost approach is usually adopted in the early development stages and also as a last resort when neither the methods under the market approach nor the income approach can be used.

Market Approach

In general valuation practices, the market approach provides an indication of value by comparing the subject asset to similar business, business ownership interests or securities that have been sold in the market, with appropriate adjustments for the differences between the subject asset and comparable assets.

In real estate valuations, actual sales of a nearby and similar property usually provide the best indication to the value of the subject property.

The sales comparison method under the market approach computes a price multiple using recent sales and purchase transactions of comparable vineyards and then applies the result to a base of the subject vineyard. It is the most frequently used valuation method when there are enough data available to calculate an accurate value. Some commonly used price multiples include price per acre, price per ton of grapes and price per foot or cordon.
Adjustments on these price multiples may have to be made to account for the similarity and differences of the characteristics of the subject vineyard and its comparables.

**Income Approach**

In general valuation practices, the income approach provides an indication of value based on the principle that an informed buyer would pay no more than the present value of anticipated future economic benefits generated by the subject asset.

It is an approach to analyze and project the income of a vineyard. Discounted cash-flow (DCF) analysis is a method under the income approach. In applying the DCF method, the expected cash-flows of a vineyard in future months or years are projected. The results are then discounted using a proper discount rate, such as the cost of capital, to determine the present value of the expected cash-flows.

There are generally two ways to project future cash flows. One way is to assume the vineyard has been leased instead of being operated by the owner. Another way is to assume the vineyard is self-operated and then determine the net cash flows that can be obtained from operation. In this way, a number of key variables have to be studied thoroughly before precise cash-flows can be projected, these include:

i. General economic trends
ii. Consumer preferences
iii. Industry cycles
iv. Future wine prices and sales performance
v. Cost of materials
vi. Operating costs such as labor, administrative and transportation costs
vii. Cost of capital and market required rate of return
viii. Required working capital
ix. Fixed assets investment and depreciation, etc.

**About Us**

All in all, vineyard valuation is challenging and requires multidisciplinary and momentous effort. We, BMI Appraisals Limited, are a pioneer in the industry in providing valuations on vineyards and related assets and we have been consistently approached by a number of listed and private companies regarding our services.

Our professional team comprises of wine producers, vineyard experts, Chartered Surveyors, professional accountants, Certified Public Valuers and Charterholders of Chartered Financial Analyst, etc who are experienced and qualified. Should you have any enquiries, please feel free to contact Dr. Tony Cheng at (852) 2593 9633 or tcheng@bmintelligence.com.

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