technology & business

What's in Your Wine? Costing Tips for Better Accounting

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Controlling the cost of making wine in our industry has been challenging with the vagaries of worldwide disruption. Inflation, geopolitical issues and the desire for environmental, social and governance (ESG) products are affecting the wine business. These are encouraging wineries to re-think how our wine is produced, packaged and delivered to customers.

The wine industry is one of the most capital-intensive endeavors in the United States. The cost of wine and managing the resultant supply chain are viewed as the most complicated aspects of making wine from a business operations perspective. The typical methodology appears straightforward, like following a recipe: start with your direct costs, mix in your indirect costs and sprinkle on a little tax to taste. But of course, it's never that easy. Accountants and auditors will examine your cost per bottle calculations to value the inventory at a particular period and true-up the inventory by releasing the difference to your cost of goods sold, calculated as follows: beginning inventory plus purchases minus ending inventory equals cost of goods sold.

First, let's discuss what goes into the cost of producing a bottle of wine. Under the uniform capitalization (UNICAP) rules for tax purposes, you must capitalize the cost of creating the inventory or asset. The two primary components of manufacturing consumer packaged goods (CPG) are direct and indirect costs. The direct costs include raw materials and salaries directly associated with making the wine. Indirect costs include overhead, such as utilities, leases or administrative support. This is usually an allocated portion of the overall costs that are then capitalized. Under UNICAP, costs will continue to be capitalized until the production period terminates at the "release date" or the date the wine is made available for sale or offered through distribution channels. Please note that providing wine for a wine writer to taste or tasting for other promotional purposes does not terminate the production period.

Costing Components

The exhaustive list of costing components may include the following: Produced wine; landed costs, such as transportation, duties and federal and state excise taxes, along with associated Craft Beverage Modernization Act (CBMA) credits; glass; raw materials storage; capsules; corks; labels; filtration; bottling; quality assurance and testing; wine blending and amendments; equipment depreciation; barrel cost allocations; personnel salaries, benefits and insurance; and transfer costs to transport grapes, wine or other raw materials—often called dry goods.

Vineyard Development

Let's start our costing discussion chronologically by first discussing the planting of the vine. The general rule under IRC § 263A is that all preproductive costs incurred, during the pre-productive period of vines, must be capitalized into the cost of the vines. Depreciation on those capitalized costs would begin when the vines have their first commercially-harvestable crop. A commercially-harvestable crop means that the yield is substantial enough that sales revenues will exceed the harvest cost. It takes approximately three years from planting to reach the point of a commercially-harvestable crop.

There is a fantastic reference guide issued in March 2011 by the IRS called *The Wine Industry Audit Technique Guide*. Be forewarned that there is a disclosure statement attached that this is not an official pronouncement of the law or the position of the IRS and cannot be used, cited or relied upon as such. However, this remains a handy tool that is still the standard on capitalizing vineyard farming and the timing for capitalizing the costs into your inventory.

Exhibit 1-1 Timing and Treatment of Vineyard Development Costs

The following is an example of costs, noting C for Capitalize and E for Expense.

Costs	First Year	Second Year	Third Year
Pre-Plant Tillage: Man and Tractor	С		
Fumigation	С		
Layout and Mark	С		
Distribute and Set Stakes	С		
Stakes - 7-foot Treated	С		
Rootstocks	С		
Planting Vines - Labor	С		
Planting Supervision	С		
Bud and Cover, Including Rubber Ties	С	Е	E
Budwood - Certified		С	E
Uncover and Prune Rootstocks		С	E
Cut Rubbers and Tops, Place Collars		С	E
End Posts - Treated	С	С	С
End Posts Set - Labor	С	С	С
String Trellis Wire - Labor	С	С	С
Trellis Wire	С	С	С
Train and Prune - Labor		Е	E
Mildew Control		E	E
Irrigation Labor - After Planting	E	E	E
Water & Pumping Power - After Planting	E	E	E
Repairs on Irrigation Equipment	Е	Е	Е
Cultivation	С	Е	Е
Frost Protection - Labor		E	Е
T-Budding - Conversion	С	С	C



Harvest and Production

Next comes the harvest of the wine and its production. This is my favorite reason for being in the wine industry. When I take my break from calculating all these costs, I will often walk next door by following my nose. This is a good time for me to understand the process of winemaking firsthand and connect with the winemaking team. Perhaps I can flip on the switch for the optical sorter and be mesmerized, watching the machine pop out bad grapes. Remember the Nut Room in Charlie and the Chocolate Factory? This was where Willy Wonka has squirrels sort the good nuts that go into candy and the bad nuts that go down the garbage chute. The optical grape sorter works much the same way—without the squirrels!

Under the Uniform Capitalization (UNICAP) rules of IRC § 263A, wineries must account for their costs as a manufacturer and capitalize these costs into inventory. This accounting of harvest costs is capitalized into inventory, regardless of whether harvesting is completed by internal employees, contract labor or a vineyard management company. The costs included in the production of wine include crush and fermentation, aging and storage, and general and administrative (G&A). The direct costs, such as crush and fermentation, and aging and storage, are all capitalized into inventory. A percentage of G&A attributable to the production of the wine is also capitalized. These may include managing, payables, rent and utilities based on the actual use of the production facilities. The remainder of the G&A is expensed. As a point to note, marketing costs are always expensed. If a winemaker is marketing the wine, then only the portion of time spent producing the wine should be capitalized. For tax purposes, the allocation of overhead into the cost of inventory is known as full absorption costing per ASC 330-10-30-1 through ASC 330-10-30-8.

Depreciation

Something about depreciation interests me. It may be because, as an accountant in the wine industry, I often peer out the window, daydreaming and watching tractors methodically rumble down the vine rows. Yes, I still like tractors: I had Tonka Trucks as a kid, and I still want to drive one. Perhaps another reason it interests me is because of the earlier statement that winemaking is one of the most capital-intensive industries in the U.S. Hard to believe this as many of us drive through miles of vineyards, throughout wine country, with elaborate houses and buildings. Due to OSHA regulations, wineries will, in general, not allow guests to tour their production facilities. However, if you peek behind the tasting room curtain, instead of viewing a great ballroom or an expansive library, you will find the winemakers and cellar workers in overalls and rubber boots, working with the destemmer, basket presses, bladder presses, filtration systems, rows of stainless steel tanks wrapped with glycol chillers, terracotta amphorae, concrete qvevri and the wastewater treatment system, which is environmentally-sustainable.

As a helpful tool, here is a list of depreciable assets and the timeline for depreciation.

Book: The depreciation method booked to the General Ledger

Life: Life of Asset for IRS Purposes **ADS:** Alternative depreciation system

Farm Buildings	(40 Book, 20 year life, 25 for ADS)	
Residential Buildings	(40 Book 27.5 year life, 40 for ADS)	
Land Improvements - Fences, Landscaping, Sidewalks, Roads and Sewers	(20 Book, 15 year life, 20 for ADS)	
Vineyard Equipment - Tractors, Sprayers, Mowers, Gondolas, Mechanical Harvesters, etc.	(10 Book, 7 year life, 10 for ADS)	
Trellis System*	(20 Book, 7 year life, 10 for ADS)	
Irrigation System* - Drip Irrigation, Drainage, non-earthen Reservoirs, Wells, etc.	(20 Book, 15 year life, 20 for ADS)	
Vines - Fumigation, layout, vines and planting costs	(20 Book, 10 year life, 20 for ADS)	

* Useful lives of trellis and irrigation systems were argued in <u>Trentadue v. Commissioner</u>, 128 TC 91 (2007), in which the Tax Court determined that the drip irrigation system was not depreciable. Prior to this decision coming out in 2007, it was an industry practice to use a seven-year life on irrigation systems.

BARRELS

Wine barrels fascinate me. The smell of the oak becoming one with the wine stimulates my olfactory senses when I walk into a barrel room. The aromatics bring a scent of the outdoors into the facility, much as it has done for thousands of years.

Here is an interesting bit about barrels. A law was drafted in California — § 133 (a)(2)(B) Business Inventory Exemption — that exempts barrels from sales tax. It stated: "New and used oak barrels used in the manufacturing process that physically incorporate the flavor- and aromaenhancing chemical compounds of the oak into wine or brandy to be sold, when used for this purpose. However, an oak barrel is no longer business inventory once it loses the ability to impart the chemical compounds that enhance the flavor and aroma of the wine or brandy." I think it is interesting that the barrel is part of the wine because both components are recognized as one. As it relates to costing, barrel costs are allocated to the wine based on the amount of time that a specific wine spent in each barrel and whether the barrel was new or used.

GLASS

The cost of glass is by far the most expensive raw material, second only to the wine itself. Obtaining glass and applying costing methods to it can be what is referred to as an "assembly item" all of its own. Glass can be bought domestically or internationally; it can arrive by ship, train or truck, or all three; and it can be bought in bulk, which needs to be packed. Once

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received, it may need repacking into printed boxes. If the glass is cased, it can come in a standard white box or a printed box with the wine label printed on it. A winery can buy directly from a manufacturer as some large wineries might do. Most wineries purchase their wine bottles from a broker that has access to multiple suppliers to source the right quantity with the correct mold. Yes, even geopolitics has an influence on glass pricing.

If you let me digress for a moment away from costing methodologies, I'd like to address several worldwide influences in procuring glass that will affect your cost per bottle.

COVID Pandemic: The ports in the Northwest, including Portland and Seattle, curtailed glass shipments and required other ports to receive it. The glass then had to be transported by rail or truck to the final destination.

Suez Canal: During the pandemic, shipping costs climbed more than 1,000



percent due to shipping slowdowns in the Suez Canal in March of 2021. This disrupted global distribution is yet another example of supply chain challenges across the world.

China Trade War: On February 25, 2020, the Department of Commerce (DOC) announced a countervailing tariff on most glass containers made in China of approximately 23 percent. No help to us there, eh?

European Energy Crisis: Moscow has reduced or ceased entirely its European natural-gas exports. Glass producers in Europe that own and operate glass kilns must have a constant supply of natural gas. A kiln is unlike your home fireplace, where you turn it off daily. A kiln runs 24/7, 365 days a week. To turn a kiln off and back on again is extremely expensive. Therefore, glass manufacturers will pass these higher prices for natural gas on to their buyers until this opportunity cost changes.

Based on feedback from a glass broker colleague, many customers who buy glass from Latin America are also experiencing mixed service reliability issues. Another colleague of mine once said: If your supplies don't arrive on time, it doesn't matter how much you paid for them.

DOMESTIC GLASS

Domestic Glass is produced in California by both Owens-Illinois in Tracy and Gallo Glass in Modesto. There are other non-California domestic glass manufacturers that supply the wine industry, including Anchor Hocking Co. and Ardagh Group. The glass from these manufacturers is often best sourced by a broker. These may include Saxco International, Berlin and Encore Glass. Ideally, they can manage the supply chain issues and pivot as glass supply sources and prices change. From an Environmental, Social and Governance (ESG) perspective, the reduction of transportation distances is the best way that a winery can reduce its carbon footprint.

LABELS

Labels can be difficult to cost because each label or brand is going to have its own SKU. Unlike bottles where the same SKU for a mold can be used for many different brands, a label is unique. A label can also be an "assembly item" with additional costs, such as molds, set-up fees, digital preparation charges, printed production proofs, foil, stamps, embossing and dies. Bottles can also have etched labels or frosted glass, which add to supply chain logistic complexities and costs. In addition, spare labels are purchased to allow for damage during bottling, which are then added into the overall cost of unused labels as these typically cannot be reused on another production. Due to these complications in the costing of labels, it may be easier to have labels added as a standard cost or calculate the total cost and add it to the assembly item build as an actual cost and the last item to add to your cost per bottle.

CORKS AND CAPSULES

Finally, corks, capsules and screw caps can be easy to cost, but it can become more complicated if your intention is to produce an ESG product. Corks are single items of varying materials. They can be printed or not printed. A printed cork may also have issues related to storage of unused cork for a specific brand until the following year. At least cork doesn't take up much room in the warehouse! For a high-end wine, the brand may utilize a wax seal rather than a capsule, which also adds to the cost. Many wineries will ask the question: Is cork or a screw cap better for the environment? There is an abundance of sustainable eco-friendly cork grown in the rural areas of south Portugal. However, screw caps are cheaper than cork and do not allow the potential for a wine to become "corked." An environmental downside to screw caps is they cannot be recycled unless the plastic interior is removed with tweezers from the metal screw cap.











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TAXES

A nice reference chart for federal excise taxes can be found at the TTB website at: https://www.ttb.gov/tax-audit/quick-reference-guide-to-wineexcise-tax. Still wine under 16 percent alcohol by volume is taxed at \$1.07 per gallon either produced or made available for sale when moving the wine from bonded to tax-paid status. Adding the excise tax to the cost per bottle of wine gets complicated. Most wineries will list excise taxes as a separate line item in the cost of goods sold above the gross profit line. However, the matching principle requires that revenues and any related expenses be recognized together in the same reporting period; thus the excise tax should be capitalized and released with your cost of goods sold. Where you account for the excise tax depends on who is relying on the financials. The Craft Beverage Modernization Act (CBMA) allows for a reduced excise tax rate for small wine producers. The credits are \$1 per wine gallon on the first 30,000 gallons, \$0.90 on the next 100,000 gallons and \$0.53 on the next 620,000 gallons. The current tax rate of \$1.07 per gallon applies to wines that contain 16 percent or less alcohol by volume. Therefore, to properly apply the revenue matching principle, the excise tax applicable to wines produced in the beginning of the year will have a lower tax rate than wines produced later in the year. As a side note, importing international wine can also allow for the use of unused credits from foreign producers not subject to TTB taxes. Keep in mind that the wine will need to be fully produced in the foreign country and cannot be altered on U.S. soil to receive the CBMA credit from foreign producers.

BOTTLING AND PACKAGING

The costs to bottle and package can vary by facility and depend on whether the bottling is outsourced or in-house. Some third-party outsourced bottling facilities may have a standard cost but will add a plethora of additional charges to the invoice. Due to the variety of charges that may be applied, a standard cost may be most beneficial to apply to the cost of bottling the wine, with a quarterly review and true-up of the standard cost.

WAREHOUSE STORAGE AND TRANSPORTATION

The storage and transportation of bulk wine and case wine can be capitalized. It may be best to use a standardized cost added to the wine with quarterly true-up. The storage and transportation of the grape or bulk wine are capitalized into the produced wine assembly item; whereas the storage and transportation of cased goods is added into the final assembly item for the case produced. Typically, the capitalization of costs associated with your wine ceases as soon as the case is sealed. However, capitalization per GAAP allows for continued capitalization of the transportation and warehousing of the cased goods until that product is available for sale or offered through the winery's distribution channels as mentioned above.

Well, there you have it on what is in your wine. Next time you have a glass of wine and enjoy the subtleties of its aroma, bouquet or feel, you should also consider how your wine was produced. There are many ways to reduce the carbon footprint of your winemaking and to find lower costs in doing so. How you produce your wine does make a difference to everyone involved. Perhaps the next glass of wine might just put a smile on your customer's face, knowing you have made the best choice possible for our environment. wbm