ACCOUNTING ISSUES CONCERNING THE APPLICATION OF INTERNATIONAL STANDARDS IN WINE PRODUCTION INDUSTRY

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Agriculture is an important part of the global economy. Given the gap in the literature, the problems of legislation (in particular the lack of them), the controversies related to IAS 41 standard, we considered necessary to analyze problems and the way in which it it highlighted in the economy the production process of wines with different periods of aging. In Romania, agriculture is a sector with great potential, traditionally occupying an important role in the national economic structure. Thus, by adopting the accounting regulations imposed by Order no. 1802-29 December 2014 the national legislation was aligned with the European level, this framework being closer to regulations imposed by IAS 41. However, if we take into account large areas of forest cultures, vineyards or cultures purchased using foreign investment funds and the many foreign investments in livestock farms, it is expected that in the near future it will also be necessary to consider the application of this standard in Romania. In conclusion, this study is intended as a promoter of change that must occur in accordance with the current situation, supporting the idea of harmonizing the rules in effect worldwide.

Keywords: wine industry, biological assets, IAS 41

Jel code: M 21,M 41,M 40

Introduction

Agriculture is an important sector of the global economy. However, for a long time, accounting in agriculture was not a priority for researchers and normalizers, with agriculture accounting still having many gaps. By publishing IAS 41 there was attempted the improvement of this situation and increase in the comparability of financial statements of entities in the agricultural sector.

Although controversial, IAS 41 "Agriculture"⁷¹ is the first step of a consistent transition to fair value assessment in agriculture. This standard was approved only in December 2000, being the only international standard dedicated exclusively to agriculture.

Accounting regulations in Romania are in line with European directives and in many respects converge with the IFRS referential. Even if it is presented in a relatively narrow form IAS 41 "Agriculture" has a significant impact on those entities within its scope.

Romania-Current Context in the Wine Industry

Romania is a major European wine producing country, having a great historical past and rich cultural traditions, most of them directly related to this drink, rightly considered a divine liquor.

Today the country is going through a period of profound change, building a future in line with the European Union and aspires to become a valued member of the international community as a wine producer of the prized wines of high quality.

The beginnings of viticulture in this region date back at least 4,000 years. Legend has it that Dionysus, god of wine, was born in Thrace, the land that is today Romania.

The structure of Romanian vineyards is very diverse, giving the wine industry the opportunity to produce a large range of wines. According to experts, Romania can provide up to 402 different types

 $^{^{71}}$ TOMA Constantin, Recognition and measurement of biological assets and agricultural products, Annals of Alexandru Ioan Cuza University of Iasi, Economics, 2004/2005



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of wine, of which 11 types for current consumption or table wine (VM), 42 types of superior wines (VS) and 349 types of wine with designation of origin (DOC).⁷²

In terms of area planted with vines, as well as the production of grapes and wine, Romania is among the main wine producing 12 countries in the world, holding vantage even compared with other European countries.

Large vine cultivator countries are Spain 1,174,000 ha, 882,000 ha France, Italy 835 000 ha, 602 000 ha Turkey, USA 400 000 ha, 246 000 ha Portugal etc. Romania, with a growing area of approx. 184 000 ha is ranked 9 in the world and 5th in Europe.

In terms of wine production, the largest wine producing countries are France 57.5 million. Hl, Italy 51.6 million. Hl, Spain 41.1 million. Hl, Argentina 12.5 million. Hl etc. Although in recent years, the amount of wine produced in the territory of Romania decreased considerably, from approx. 5200hl in 2007 to approx. 3500hl in 2012, our country continue to stay in the top of wine producers in Europe and worldwide.⁷³

According to a recent vineyard zoning work, in Romania there are a total of 37 vineyards, which includes 123 wine centers, to which there are added 40 independent wine centers located outside the vineyards.

Although the number of companies producing wine is in a continuous growth, a very small number of companies have chosen IPO, which is listed on Rasdaq. Among these Prodvinalco SA Galati, Roni Vin SA Panciu, Vinalcool SA Bacau and Zarea SA Bucharest.

In Moldavia, vineyards occupy an area of over 90,000 hectares, which means a third of the vineyard area of the country. Vineyards are lined on the entire length of the province, from Botosani, north, up in Vrancea, in the south and throughout its width, in the Subcarpathians eastern hilly area until the waters of Prut.

In Iasi County, one of the largest vineyards is Cotnari. Here we encounter Iaşi vineyard, with its vineyards centers Copou, Bucium, Uricani and Coama, and the independent viticulture centers Plugari and Probota. From the south of the county and across, Vaslui county throughout its length, there is the Huşi vineyard, where are the vineyards centers Bohotin, Avereşti, Huşi, Vutcani and Murgeni. Also in Vaslui there is the Colinele Tutovei vineyard, composed of centers Iana, Tutova and Bălăbăneşti (last located in Galaţi). In Bacau County there is the Zeletin vineyard, with its vineyards centers Zeletin, Dealul Morii, Paricea, Tanasoaia and Gohor. Finally, in the south-west of Moldova, in the Carpathian Bend, there are the great vineyards of Vrancea, respectively Odobeşti, Coteşti, Panciu, which in turn comprise a number of high reputation wine centers.

Galati County, in southeastern Moldova, became a great wine area in which there are four wineries: Dealul Bujorului (Bujoru viticultural centers, Smulti, Oancea and Berești) Ivești (Ivești viticulture centers, Galati and Corod) Covurlui (viticulture centers Baleni, Scânteiești, Pechea and Smârdan) and last but not least Nicorești (centers Nicorești and Buciumeni). Situated in the north of the county Galati between Siret and Barlad, Nicorești vineyard is at a latitude of 250 meters and the plantation is characterized predominantly by high quality red wines. The most important wine of the area is Black Babeasca, so that Nicorești and Babeasca have become synonymous. Another Nicorești black is Black Feteasca that lends itself very well to the fertile soil in the area. Also this is the home of Merlot, with a large share in the plantation, and Cabernet Sauvignon plantation but with less weight. Among the most representative white varieties are Feteasca Alba, Feteasca Regala and Riesling.

Literature

Many academics and institutes abroad have devoted time to the study of accountancy for the production of wine. Amat and Anzizu (1996), Amat and Blake (1995), Hill and Juche (2000), Juche (1996), Juche (2001), Lee and Jacobs (1993) and Rodriguez Ocejo (2002), Booth and Walker (2003), AECA (1999) and Instituto de Contabilidade de Madrid (2002), are good examples.

In Romania, we can say that there is a void in terms of studies in this area. Among the writers who dedicated themselves to studying the peculiarities of the sector specialized on growth of vines and wine are: Mihai Nitu (2003) Feleagă (2012)⁷⁶ and Macici (1996) etc.

⁷⁶ FELEAGĂ Liliana, FELEAGĂ Niculae, RĂILEANU Vasile, Theoretical considerations regarding the implementation of IAS 41 in Romania, Theoretical and Applied Economics Volumul XIX (2012), No. 2(567), pp. 11-19



⁷² www.wineromania.com - APEV Romania – "Romania, the country of wine", 2003

⁷³ www.madr.ro

⁷⁴ www.romvintec.ro/podgoria

⁷⁵ Mihai Macici - Wines of Romania, Editura Vremea, 1996

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The problem of particularities the production of wine

The wine industry has its own characteristics that classify it as a special industry. One part deals with the existence of an industry of cellar wine on short term (usually associated with low quality wine) and another industry of the wine in the long term - aged wine industry. Usually a top quality wine remains iin the cellar up to 10 years. A special case is the Port wine that can remain in the cellar up to 40 years. These long term stocks create a lot of difficulties when a company adopts the traditional accounting that is suitable for companies that have large stock rotation.

The literature identified several issues regarding wine producing companies: problems related to time (long-term assets in stocks, inflation), fiscal problems (depreciation of wine barrels, the residual value of the plantation), evaluation of grapes etc. 77

Some authors question the historical cost method in the wine industry, when faced with wines that have a long maturation period. In their study, Rodriguez and Ocejo (2002) stated that when we deal with wines that are in the cellar for a long time, historical cost must be corrected. They suggest the use of monetary factors, the cost of replacement or other solutions, such as using LIFO or currency revaluation.

Juchau (1996) ⁷⁸ studied the practice of reporting the assets in Australian wine companies and found that the companies were divided wine stocks in current and non-current assets. In order to capitalize stocks of wine, wine companies treat superior wine separately from bottled wine.

AECA (Asociation of Contabilidade Espanola de Empresa y Administration) thinks, however, that wines with a long maturation period should be recorded in fixed tangible assets. However, the Spanish committee delegate for issuing standards, when it issued the accounting plan applicable to the wine industry, did not follow the AECA and separated Stocks account in current and non-current.

It should be noted, however, that IAS 1 (as pt. 59), does not allow stocks to be charged to the non-current assets if they belong to a normal operating cycle. This usually produces a reporting problem in all industries which have different stocks - Short-term and long term, belonging to the same operating cycle. Thus, all stocks must be reported in the same account balance.

Another problem occurs in the case of premium wines refers to the amortization of barrels.⁷⁹ In the production of high quality wine, the costs of wooden barrels used have a relatively high share in the total cost of the wine. Typically, in countries such as Spain and Portugal, these wooden barrels are amortized over seven years for tax purposes, but their economic lifetime is less than - 2 or 3 years is the period when these barrels add their flavor to the wine. Because existing tax rules companies amortize their own barrels in the same period of seven years. The problem of the amortization period which is not realistic does not arise in the situation of the table wine (whose quality is lower).

Currently, grapes assessment can be made according to its historical cost or fair value. This happens in countries such as Spain or Australia and the companies that adopt IASB standardization. Where a company adopts fair value in the grape assessment, it must share income in grape production (agriculture) and wine production (industry). For this reason many companies have divided their work in agriculture and industry, in order to recognize earlier revenue in grape production.

Accounting regulations in Europe and Romania

In Romania, financial accounting is oriented in two different directions. A number of groups and companies apply International Financial Reporting Standards (IFRS), including IAS 41. Most companies still apply local accounting provisions. By the end of 2014 Order of Public Finance Minister no. 3055/2009 was the legislative framework according to which the accounting was made, both in agriculture and other fields.

Starting from January 2015, the order no. 3055/2009 was replaced by Order no. 1802 from 29 December 2014. This new legislative framework proposes a more rigorous regulation regarding biological assets introducing a number of new accounts that help professional accountants. However, the accounting regulations in Romania are converging, for a number of issues, with the IFRS referential⁸⁰.

As regards vine crops, there is no certain national standard to regulate this activity. An example of a country that has implemented a sectoral plan to regulate the activity of the wine is Spain.

⁷⁹ John BLAKE, Oriol AMAT, Soledad MOYA - The drive for quality - the impact on accounting in the wine industry ⁸⁰ IAS 41 Agricultura



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 $^{^{77}}$ Rui Couto VIANA, Lúcia Lima RODRIGUES - A special accounting treatment for special industries. Evidence from Port Wine Industry accounting practices, University of Porto, February 2004

⁷⁸ FISCHER Mary, Treba Marsh, Biological Assets: Financial Recognition and Reporting Using US and International Accounting Guidance, Journal of Accounting and Finance vol. 13(2) 2013

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This sectoral plan was issued as a result of operational specifications of the wine industry and given the importance of this industry in the Spanish economy.

If the companies in this industry would make the transition from an accounting point of view to the IFRS referential some changes would occur at the level of perception and counting. Thus, a series of international standards will have to be joined that help the company to accurately reflect the overall activity.

There are companies engaged in integrated production and performing activities both in agriculture as well as agricultural product processing activities. Looking through the existing European legislation on accounting policy, the enterprise must consider the scope of IAS 41 "Agriculture", IAS 2 "Inventories" IAS 16 "Tangible assets" and IAS 36 "Impairment of Assets". The accounting policies applied are consistent with IAS 41, for the accounting for biological assets and agricultural production to the point of harvest, and complying with other standards, such as IAS 2, for stocks entering the processing operations.

The accounting in countries with a tradition of wine industry

Next we selected for study a number of countries, motivated in choice of different arguments.

Initially, Portugal because this country is among the top manufacturers in terms of premium wines, mainly Port wine industry. Secondly, Spain, because it has a plan dedicated to the wine industry sector accounting and it has a accounting standardisation fund comparable to the Portuguese one. Last but not least, we considered it important to present them in comparison with the relevant applicable model in Romania.

For Portugal⁸¹, there is no special accounting treatment of Port wine industry excluding the "the traditional cost formula". This formula is a cost charging rule issued by the authorities, which is accepted as a rule of accounting in the wine industry in Portugal. All wine production companies are legally authorized, for tax purposes, to adopt this cost formula specifying the case in which they wish to do so. Since this cost formula is very old, being used before designing accounting standards, it was accepted by auditors and industry regulations.

Every year the company calculates the average purchase cost, thus it has a single entry accounting per year. When this traditional cost formula was implemented, as a rule of taxation in 1980, all pre-1980 entries were merged into a single entry, calculated by the average cost. After calculating the accounting entries, the cost of sales is calculated in the same manner as LIFO, with one exception the last entry in the accounts is not taken into consideration.

Port wine industry is facing a new challenge, however, because the process of harmonization of 2005 - giving up the traditional formula for calculating the cost, since it is not permitted under IAS 2 - Inventories. This industry will be forced to use an adaptation of which is the general standard IAS 2, which was created for companies listed on the financial markets.

In thehe Portuguese General Accounting Plan, companies can adopt as a cost formula: specific costs, weighted average cost, FIFO, LIFO and standard cost. Under the scope of IAS 2 - Inventories, LIFO is not allowed as an alternative formula of cost, there are used FIFO and weighted average cost where the specific cost is not determinable.

Regarding Spain, a country that is in the top 5 in both wine production and the acreage, in 2001, the committee in charge of designing Spanish accounting standards issued an accounting plan applicable to the wine industry sector. This sectoral plan was conceived as a result of operational specifications of the wine industry and given the importance of this industry in the Spanish economy. According to Rodriguez and Ocejo (2002), this plan was a demand of the industry for a long time.

The plan is divided into five parts: Principles of Accounting, Accounts, Accounting Definitions and Relationships, Financial Statements and Measurement criteria. Regarding accounting principles there is no difference to the General Accounting Plan. "Balance" is a guide for companies regarding the name and number; they are not required. The third part (Accounting Definitions and Relationships) is not mandatory except when dealing with measurement criteria of interpretation. Companies are required to adopt the financial statements, including models of the balance sheet, profit and notes to the financial statements. The last part, Measurement criteria is mandatory and these rules dealing with the measurement and recognition of transactions and their economic effects.

Because of this industry's long-term assets, recognition rules are different from the traditional accounting framework. Wine producing companies recognize stocks with long-life and current stocks.

⁸¹ Rui Couto VIANA, Lúcia Lima RODRIGUES, A special accounting treatment for special industries. Evidence from Port Wine Industry accounting practices, University of Porto, February 2004



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The other asset must be sold during the normal operating cycle of the company. A long-term wine is available for sale in the normal operating cycle of the company, so it should be classified as inventory.

The figure below is a brief presentation of what represents accounting regulations applicable in countries with tradition in Europe.

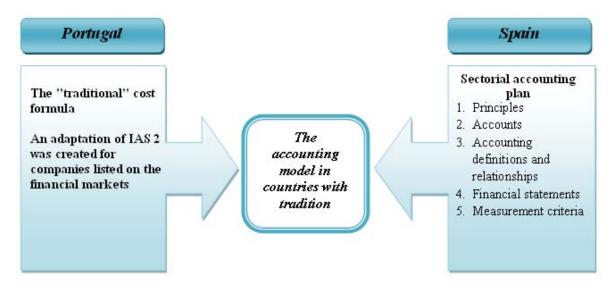


Fig. 1 - The accounting in countries with a tradition of wine industry Source: By author

Regarding the vine crops in Romania, there is no certain national standard to regulate this activity.

According to Minister of Finance Order no. 3055/2009, vineyards owned by wine producing companies are included in the tangible assets category. In the chart of accounts 82, whether grafted (noble) or hybrid vineyard, they were classified in Group No. 2 - Technical installations, vehicles, animals and plantations which, detailed after analytical contained 2.1.3.4.1 - grafted (noble) and vine rootstock and 2.1.3.4.2 - indigenous vineyards, hybrid vineyards, direct producers.

Also, its own production of wine was not registered separately depending on the period of maturation. These stocks were considered and recorded using the account "Finished products".

Since 1 January 2015, the Order of the Minister of Public Finance no. 3055/2009 was repealed by the publication of Order no. 1802 of 29 December 2014. The Order for approving the Accounting Regulations in accordance with International Financial Reporting Standards applicable to companies whose securities are admitted to trading on a regulated market accounting introduces a new category of fixed assets, the biological assets and a new category of current assets, in inventories, the agricultural products.

So, as far as biological transformation process is complete, there will no longer be applied the provisions of IAS 41 "Agriculture", the accounting of assets such as tangible or intangible assets, real estate investments and stocks being guided by relevant standards.

Applicable to agriculture, in the field of tangible assets there are followed distinctly the productive biological assets.

The productive biological assets⁸³ are any assets other than biological assets such as stocks; eg dairy animals, grape-vines, fruit trees and trees that give firewood, but not cut. Productive biological assets are not agricultural produce but, rather, are self-regenerating assests. A biological asset is a living animal or a living plant. The order states that productive biological assets are evaluated according to the general valuation rules applicable to tangible assets.

By default, in the new chart of accounts we find in Class 2 accounts specific to tangible and "productive biological assets" (217), " productive biological assets under supply " (227). These accounts have replaced the account "Animals and plantations" in Order no. 3055/2009.

⁸³ Order of the Minister of Public Finance Nr. 1802/ 2014 for the approval of accounting regulations on the annual individual and consolidated financial statements



⁸² Order of the Minister of Public Finance no. 3055/2009 for approving the accounting regulations compliant with European directives

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For inventories, the new order introduces the notion of biological assets as stocks. These

assets are those that are to be harvested as agricultural produce or sold as biological assets. Examples of biological assets as stocks are animals for meat production, livestock held for sale, fish in farms, crops such as maize and wheat, and trees being grown for lumber.

Agricultural products are the results at harvest of biological assets of the entity, for example, grapes, wool, felled trees, cotton, milk, grapes, harvested fruits etc..

If the reporting entity processes agricultural products, there result end products, such as wine, clothing, carpets, timber, cheese, sugar, processed fruit etc.84

Thus, in the new chart of accounts, some accounts have been introduced in class 3 but renamed because the name of the account 361- Animals and birds has been replaced with **Biological assets such as stocks** which determined that all associated accounts change their original name.

In this category we find: Agricultural Products (347) Biological assets such as stocks under supply (326) Biological assets such as stocks at third parties (356) Biological assets such as stocks (361) Price differences on biological assets such as stocks (368) impairment of agricultural products (3947) impairment of agricultural products at third parties (3955) impairment of biological assets such as stocks (396).

In conclusion, the correct approach with the new applicable accounting regulations would be the accounting of vines in the category of productive biological assets generating grape production over a period of time, which, when mature, can be considered as agricultural product. This method of accounting is thus in line with European regulations, specifically, IAS 41- Agriculture and IAS 2-Inventories.

Regarding wines that are produced after a period of maturation, they should not be considered as biological assets. This process of transformation of grapes into wine is analogous to the transformation of raw materials into a finished product. The wine production will be still in the category, finished products'; there is no difference between wines with a high maturation period and table wines.

In conclusion, the correct approach would be that the culture of grape is to be accounted for in terms of IAS 41, consequently considered biologically active, but for the grapes and wine production applying IAS 2 - Inventories. 85

Conclusions

Obviously, in terms of biological assets, there are significant differences between the accounting regulations in Romania and international accounting rules. In summary form, these differences relate to:

- 1. using different valuation models: historical cost in Romania, and the fair value minus estimated selling expenses in IAS 41;
- 2. clarifications on the concept and content of biological assets: while IAS 41 clarifies the notion and content of biological assets, as of January 1, 2015 by adopting Order no. 1802 Romanian regulations were aligned with European regulations introducing the notion of biological asset and agricultural product. By the end of 2014, the legislation does not contain specific provisions for this asset class. Only in the general chart of accounts there were two specific accounts agricultural activity "Animals and plantations" (2134) and "Animals and birds" (361) who were now replaced by account, "productive biological assets' (217) Agricultural products (347) biological assets such as stocks. (326)
- 3. disclosure of information: IAS 41 distinguishes between mandatory elements to be presented in the main financial statements and those that make such disclosure in the balance sheet or in the notes. Biological assets is one of the elements that must be presented in the balance sheet, possibly detailed in the notes. In addition, IAS 41 establishes a list of disclosures (aggregate gain or loss during the current period from the initial recognition of biological assets and agricultural products and the change in fair value minus estimated costs to sell of biological assets; a narrative or quantified description of each group of biological assets; information about biological assets whose title is restricted or that are pledged as security for liabilities; methods and assumptions made in determining fair value, etc..). In Romania, there is a standardized form of financial statements, only in the notes it is possible to present information in a particular manner. As a result, since 2016, in the balance sheet, information on biological assets will be found in two categories: "Productive biological assets " in the

⁸⁵ www.pwc.com/ifrs - PricewaterhouseCoopers - A practical guide to accounting for agricultural assets, November 2009



⁸⁴ http://www.ceccarbh.ro/noi-reglementari-contabile-aplicabile-de-la-1-ianuarie-2015/

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category of fixed assets and" Biological assets such as stocks". Also, important information will also be extracted from inventories under "Agricultural products".

One can assume that if national regulations do not reach the issues of IFRS, IFRS standards can be used as reference. We believe, however, that although Romania has great entities involved in agricultural activities they are not yet interested to voluntarily apply the provisions of IAS 41. This attitude can be explained by fiscal considerations (Vuță et al., 2009, p. 164) by the small number of experts on international accounting in agriculture and the lack of guidance on valuation techniques.

In conclusion, one cannot say that the problems in the wine industry in terms of economics and accounting are resolved. So it is necessary to consider a review of both national and European rules to address the specific needs of this sector.

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