

ІННОВАЦІЇ. ІНВЕСТИЦІЇ. КОНКУРЕНТОСПРОМОЖНІСТЬ

INNOVATIONS. INVESTMENTS. COMPETITIVENESS

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ENHANCING INNOVATION CAPACITY WINERIES BY OPTIMIZING THE CAPITAL STRUCTURE

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Низяєва С.А. Підвищення інноваційного потенціалу виноробних підприємств за умови оптимізації структури капіталу

Розглянуто вплив структури капіталу виноробного підприємства на його інноваційний потенціал. Виявлено, що в умовах кризи капітал виноробних підприємств, в основному, сформовано за рахунок позикового капіталу, переважно короткострокової кредиторської заборгованості. Установлено, що для організації повноцінної інноваційної діяльності необхідна стратегічна оцінка показників вартості капіталу.

Ключові слова: інновації, інноваційна діяльність, інноваційний потенціал, вартість капіталу підприємства, структура капіталу підприємства.

Низяева С.А. Повышение инновационного потенциала винодельческих предприятий при условии оптимизации структуры капитала

Рассмотрено влияние структуры капитала винодельческого предприятия на его инновационный потенциал. Выявлено, что в условиях кризиса капитал винодельческих предприятий, в основном, сформирован за счет заемного капитала, преимущественно краткосрочной кредиторской задолженности. Установлено, что для организации полноценной инновационной деятельности необходима стратегическая оценка показателей стоимости капитала.

Ключевые слова: инновации, инновационная деятельность, инновационный потенциал, стоимость капитала предприятия, структура капитала предприятия.

Nizyaeva S.A. Enhancing innovation capacity wineries by optimizing the capital structure

The effect of capital structure wineries on its innovative capacity. It was established that in a crisis assets wineries, mostly generated by debt, mainly shortterm payables. It is established that the organization of a complete innovative activity requires a strategic evaluation of the cost of capital.

Keywords: innovation, innovation potential, cost of capital of the company; capital structure of the company.

In a market economy enterprise development associated with innovative activity, which depends on its innovation potential. The innovative potential of the company is a real possibility they owned enterprise for innovative change and innovation. Implementation of innovative activities connected with investments for the company and therefore it is important to find the optimal sources of financing innovation. Each of the possible ways of investing all the investments in shares of common or preferred, providing long-term loans or retained earnings has a cost to the investor (shareholder, owner). A reference implementation of the feasibility of an attachment is considered to be income that the investor can obtain by making alternative investments with the same (similar) risk. Insufficient development of capital markets, the gaps in the training of financial managers in many companies resulted in poor attention to domestic firms capital structure. Hence the urgency is the cost of capital (cost of capital or the cost of capital), the formation of particular importance is the optimization of the capital structure, the ratio matched components of capital in accordance with the objectives and management processes of the company.

Analysis of recent research and publications

In modern business environment issues and the formation of the innovation capacity of enterprises engaged in domestic famous scientists: O. Fedonin [1] L. Fedulova [2] A. Grinyova [3] S. Illyashenko [4] N. Krasnokutskaya [5], W. Shepherd [6] W. Willow [7] and others. Already formed the main research approaches to this area of research. However, the question remains unresolved identify the impact of optimizing the capital structure, the innovative potential of enterprise, dependence of innovative activity of enterprises of the value of its equity. In addition, difficulties arise in determining the value of the innovation potential of its assessment, depending

on the structure and cost of capital, which is the target of capital invested in innovation.

Optimal capital structure of the enterprise forms a ratio of debt and equity funds that provide maximum market value by achieving the most effective proportionality coefficient financial profitability and sustainability.

So, now actively developing two main areas of capital theory are the theory of trade-offs (a modified version of Modigliani – Miller theorem) and model subordination funding sources with a clear hierarchy of attracting funds. [8] This concept of the "right side of the balance sheet" as their supporters recognize the impact of capital structure on its value. American scientist and economist M. Pinehar belongs to the opposition of theoretical and practical direction, namely the supporters of the concept of "the left side of the balance sheet". On the basis of resistance of these systems there is a need of a clear definition of the purpose of financial management and consideration of psychological factors that influence the decision making process.

The aim of the article is to study the optimization of the capital structure as one of the ways to increase the innovative capacity wineries.

The main material

For the proper functioning and development of the wineries need to increase its strength, the possibility of attracting investment and learning for innovation development that continually build innovative capacity. Based on the traditional properties Innovation: Scientific novelty and industrial applicability commercial implementation [9] is a logical representation of the innovation capacity of enterprises as a combination of innovation receptivity company, its research, and market potential. These features, of course, rely on the availability of a set of

interrelated resources company and certain conditions of their most effective use for making different kinds of innovation, the transformation of innovations in innovation or innovation, replication and bring it to market or consumer.

For wineries innovation potential, on the one hand "is a measure of readiness to perform tasks that ensure the achievement of the goal of innovation, which is the degree of readiness for the project or program of innovative strategic change" [2], on the other is "a set of innovative resources are in a relationship, and factors (procedures) that create the necessary conditions for the optimal use of these resources in order to achieve relevant targets innovation and increase the competitiveness of the enterprise as a whole" [7].

The current state of the wine industry is characterized by lack of funding and problems. Today, Odessa area have more than 60% of the grape acreage Ukraine. And they are located in so – called "wine latitude", that is on the same latitude of the best vineyards in the world which are Bordeaux, Burgundy and Champagne. The output of the grapes of Odessa region are presented in Table. 1, which shows that the area of vineyards in all wineries Odessa region for 2003-2011 did not change (increased from 40.2 ha to 40.5 ha or 0.75%), at the same time, the area of vineyards in the fruit-bearing age even significantly decreased (from 35.8 hectares to 30.2 hectares, or 15.7%).

Data on the production of beverages in the Odessa region are presented in Table. 2, which show that despite the negative trend of declining gross harvest of grapes and its quality wine production in the Odessa region is growing quite rapidly.

Table 1. Grape production in all categories of the Odessa region in 2003 – 2011

Name of indicators	Years								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
All categories of farms									
The area of vineyards, ha	40,2	40,5	40,4	39,0	40,5	40,5	40,5	40,5	40,5
including fruit-bearing age	35,8	35,3	34,3	31,9	30,7	30,2	30,2	30,2	30,2
Gross yield, thousand tons	210,7	179,4	193,3	167,4	142,5	154,2	168,5	194,5	202,3
including farms									
The area of vineyards, ha	32,8	33,1	32,9	31,6	33,1	33,0	35,4	36,4	37,1
including fruit-bearing age	28,6	28,1	27,1	24,8	23,5	23,0	24,2	24,8	25,2
Gross yield, thousand tons	101,5	77,5	76,8	69,1	80,6	85,1	99,6	102,3	105,8
The rate of return,%	43,0	12,6	22,1	35,1	22,1	20,3	19,1	19,8	20,1

The analysis shows that the dynamics of the production of various types of wine enterprises of Odessa is positive. However wine production assortment structure changed during the studied period (2005 – 2011) is not the best way, which does not meet the demands of the modern consumer. In addition, there is a discrepancy wine varietal composition for effective

functioning of viticulture and wine – sub. Wine industry needs such varieties as "Merlot", "Muscat", "Odessa Black" "Chardonnay", "Saperavi" varieties of groups "Pinot" and others. But the varieties listed in the total make up only 20% [10, 11, 12](Table 3).

Table 2. Wine production for 2005 – 2011 production enterprises of Odessa region (thousand dal.)

Name of wine	Years						
	2005	2006	2007	2008	2009	2010	2011
Wine "Champagne"	857	1123	1289	1304	1499	1370	3991
Wines (alcohol from 9% to 13%)	1870	2127	2674	2077	2196	2651	6931
wine Soda	171	208	304	296	269	159	187
Wines of alcoholic more than 15%	1508	1583	1681	2288	2314	3173	5421
Wines strong white and red	214	73	87	226	270	136	369
Dessert Wines White and Red	785	1086	936	1142	1357	1684	2257
Wines of alcoholic strength exceeding 15%	509	424	658	920	687	1353	1549
All wines produced	5914	6624	7629	8253	8592	10526	16526

Table 3. Wine production in the Odessa area in 2011

Wine materials	In fact produced wine, dal	2011 y% to 2010	The structure of production,%
<i>Total, including:</i>	8062302,4	70,4	100
Champagne and Sparkling	1860988,1	70,9	23,1
Brandy	754803,5	41,9	9,3
For the production of wines:			
Dinner	3376375,4	80,2	41,9
Fortified	1569232,1	80,2	19,5
<i>For making</i>			
Dinner	19902,6	114,3	0,3
Fortified	-	0,0	-
other	481000,7	57,2	5,9

To increase the investment attractiveness of the wineries it is need to produce a sufficient number of vintage and vintage collectible wines that will enable enterprises to increase the image, to expand the market.

The analysis also shows that the industry has not entered a large number of production facilities is congestion of lines of primary processing of grapes into wine materials averaged 42.5% and bottling lines – 53% [13, 14, 15]. Thus, the capacity of JSC "Odessavinprom" capable of processing 13 tons of grapes, but the equipment for primary processing retrieved only by 68.2% due to shortages of raw materials. Production capacity for bottling lines is 2175 thousand dal. finished wine products actually produced 2 times less available opportunity - the degree of use of recycling lines is 48.1%.

The development of wineries in the Odessa region is characterized by the same for all manufacturers difficult economic conditions. Therefore, the benefits and the vector of individual characteristics depend on the initial potential wineries.

Analysis of the innovative potential of wineries includes examining factors such as:

— Availability of resources for innovation, as well as their distribution at all stages of the innovation process;

— The ability to respond to the innovative actions of competitors and to take into account trends in the industry in which the company operates;

— Management's ability to analyze the business technology environment;

— Structural and socio-cultural features of the plant, affecting the nature of entrepreneurial behavior, the ability of management to make decisions on the implementation of business initiatives [4, 6].

An alleged and for the future modernization of enterprises wine industry and the introduction of modern manufacturing techniques carried out on 7 main areas [13, 15]:

— Refitting initial winemaking as a main link provides a radical improvement in the overall wine industry;

— Modernization of enterprises food bottling ;

— Modernization of the canning industry enterprises;

— Modernization of enterprises alcohol industry;

— The creation of new industries, expansion of existing facilities and upgrading of enterprises producing and decorating glass containers;

— New taropakuvalnyh production;

— Creation of new productions of food (bakery, confectionery, candy, sausage and other directly).

In their practice on a regular basis is working on the technical audit, updating and upgrading existing plants, modern and innovative technology.

In modern conditions the development of innovative activities is largely dependent on funding, in turn, the deficit of own and borrowed funds in the business of innovation and unacceptable conditions of credit, hampering the process.

The main problem that arises in determining the optimal capital structure is the need to consider a number of factors that can affect the optimality (efficiency) of such structures. The modern theory of capital management necessitates, first, the coordination of performance management indicators of efficiency and productivity of capital; secondly, the feasibility of keeping the impact on capital management system, using a set of additional criteria. According to I. Blanka [16], the optimal capital structure, defined as the ratio of use of own and borrowed financial resources, maximizes its market value. The main tools is to optimize the capital structure of the criteria: maximization of the projected financial return; minimize the cost of capital; minimize financial risks. Thus, the system of indicators characterizing the efficiency of equity businesses include: return on equity turnover ratio of equity and equity payback period. Factors that affect the value of these parameters are: net income, revenue and average balances of equity. This first-order factors, and those which depend on their size – factors subsequent orders.

The main parameter that characterizes the enterprise value is the cost of capital (cost of capital or the cost of it). According to current trends in theory and practice of financial activities, the cost of capital of the company recommended to calculate on the basis of the so-called model of weighted average cost of capital (Weighted Average Cost of Capital = WACC):

$$WACC = Kvk \frac{VK}{K} + Kvk \frac{PC}{K},$$

where Kvk – expected rate of cost of equity;

PDA – the expected rate cost of debt capital;

K – total capital of the company;

VC – total equity;

PC – the amount of loan capital. [16]

Now, the main obstacles to the development of innovative wineries are limited financial resources. Therefore, the development program for the formation mechanism of the enterprise innovation should focus on sub financing of innovation. Before embarking on the development of procedures for the selection and funding sources of innovation activities necessary [16]:

- Analyze the available sources of funding for the enterprise innovation;
- Determine the necessary amount of funds ;
- Estimate the size available to the Company equity;
- Select source to replenish the missing resources.

All sources of financing innovation can be divided into two groups: own and borrowed. Making a choice

in favor of a particular type of financial resources is necessary, first of all, to assess their value to the company.

Making a choice in favor of a particular type of financial resources should seek to optimize their structure so that the WACC was minimal, $WACC \rightarrow \min$. So things work in theory. However, studies show that bank loans is almost inaccessible for wineries due to their high price and in fact the only source of funding for innovative projects have own funds of economic entities (primarily depreciation and income funds). Therefore, special importance is the problem of rational use of available at the enterprises of funds. [16]

To understand the patterns studied in the last three years were analyzed liabilities balances a number of wineries (Table 4-6). Analysis of liabilities showed that the company is mainly working on *zayemnomu* capital. In general, the structure of working capital business loan wine industry is dominated by source of funding. In particular, at "Odessavinprom" *zayemni* deposits amounted to 95% (2008) 94.05% (2009) 92.65% (2010) at "Odessa factory of sparkling wines" this ratio for the three years studied varies accordingly 91% (2008), 39% (2009) and 45.96% (2010). JSC "Odessa Cognac Factory" also uses a significant portion of funds *zayemnyh* respectively 58% (2008), 72.24% (2009) and 74.68% (2010). Less risky is to develop sources of funding for "Kiliyskyy winery": respectively 32% (2008) 29.9% (2009) and 33.49% (2010). This approach to financing working capital feel quite risky as even permanent part financed by short-term borrowing resources. Throughout 2008 and 2010. the average for the analyzed companies the share of equity in the structure of sources of financing working capital tended to decrease. The net profit was only CJSC "Victoria". Thus, we can state the increasing role of debt – to nearly 90%.

As it is known in the theory and practice of financial analysis problem of the optimum ratio of equity and debt capital has unique solution. Thus, each company must define its relationship to the structure and basic working capital turnover rate of working capital and other factors. The calculated weighted average cost of capital is a key criterion for evaluating the effectiveness of management indicator of capital structure . This figure includes the company influenced by many factors, the main ones are [16]:

- Average interest rate prevailing in the financial market ;
- The availability of different sources of financing (bank loans, commercial loans, issue of shares and own bonds, etc.);
- At branch operations that determine the duration of the operating cycle and liquidity of assets;
- Ratio of operating and investing activities;
- Life cycle of the enterprise;
- The level of risk undertaken by operating, investing and financing activities.
- Consideration of these factors is in the process of purposeful management of equity and cost of debt of the company.

Table 4. Liabilities structure wineries for 2008-2010

Companies	Years						Increasing temp, %	
	2008		2009		2010		2009/ 2008	2010/ 2009
	thousand uah.	%	thousand uah.	%	thousand uah.	%		
Enterprises own capital								
CJSC "Victoria"	10929	35	12261	22,52	15619	22,78	12,19	27,39
CJSC "Odesavinprom"	8134	5	9306	5,95	14506	7,35	14,4	55,88
JSC "Odessa Factory Of Sparkling Wines"	53541	9	44602	61	75004	54,04	-16,7	68,16
JSC "Odessa Cognac Factory"	179037	42	162969	27,76	164704	25,32	-8,97	1,06
CJSC "Kiliyskyy Wine Plant"	9265	68	8322	70,1	6920	66,51	-10,18	-16,85
Loan enterprise capital								
CJSC "Victoria"	20570	65	42179	77,48	52948	77,22	105,05	25,53
CJSC "Odesavinprom"	143245	95	147129	94,05	182851	92,65	2,71	24,28
JSC "Odessa Factory Of Sparkling Wines"	48870	91	28517	39	63781	45,96	-41,65	123,66
JSC "Odessa Cognac Factory"	251706	58	424090	72,24	485771	74,68	68,49	14,54
CJSC "Kiliyskyy Wine Plant"	4276	32	3549	29,9	3484	33,49	-17	-1,83

Table 5. Equity structure wineries in 2010

Companies	Appellation											
	Share capital		In. additional capital		Reserve capital		Retained earnings		Treasury stock		All	
	thousan d uah.	%	thousan d uah.	%	thousand uah.	%	thousand uah.	%	thousand uah.	%	thousand uah.	%
CJSC "Victoria"	98	0,63	19	0,12	299	1,91	15203	97,34	-	-	15619	100
CJSC "Odesa- vinprom"	16403	113,08	1556	10,73	862	5,94	-4315	-29,75	-	-	14506	100
JSC "Odessa Factory Of Sparkling Wines"	48041	64,05	54554	72,74	-	-	-27591	-36,79	-	-	75004	100
JSC "Odessa Cognac Factory"	90594	55,02	49765	30,20	453	0,28	23901	14,5	-	-	16470 4	100
CJSC "Kiliyskyy Wine Plant"	1250	18,05	4313	62,33	-	-	1357	19,61	-	-	6920	100

Table 6. Structure of debt wineries in 2010

Companies	Appellation											
	For future payments and payments		Long-term liabilities		Long-term bank loans		Short-term bank loans		Lender. receivable for goods, works (services)		Current liabilities estimated	
	thousand uah	%	thousand uah	%	thousand uah	%	thousand uah	%	thousand uah	%	thousand uah	%
CJSC "Victoria"	-	-	6947	13,1	-	-	80	0,15	43861	82,85	2060	3,9
CJSC "Odesavinprom"	10	0,005	-	-	46806	25,6	31865	17,43	67482	36,91	36688	20,06
JSC "Odessa Factory Of Sparkling Wines"	-	-	-	-	-	-	34000	53,3	23594	37	6187	9,7
JSC "Odessa Cognac Factory"	2547	0,52	-	-	-	-	62818	12,93	358381	73,78	62025	12,77
CJSC "Kiliyskyy Wine Plant"	-	-	-	-	-	-	-	-	1833	52,61	1651	47,39

Conclusions

In modern terms the process of successful operation and Economic Development wineries largely depends on the level of its innovation potential. Factors influencing innovation potential wineries, differ in composition and strength. By nature they are completely or partially objective reasons: first, the production process has three related phases (viticulture, primary and secondary production), the distribution factors and their effects over time; Secondly, the volume and quality greatly depends on the nature and geography (seasonality, climatic conditions, etc.); Thirdly, as a result of adverse conditions after crisis deterioration in general economic conditions, disproportional development

and disparity relationships and producer prices of industrial raw materials and processing enterprises, outdated material and technical base, inefficiency of state support for domestic wine, unstable market grapes and wine. To adjust the innovative capacity requires a strategic evaluation of the cost of capital, to develop ways to increase the cost of capital wineries. Analysis of financial and economic activity of the Odessa area wineries found that the structure of their debt capital saw an increase in current liabilities, the share of bank loans was negligible. Therefore, an important increase innovation potential aspect of wineries is to optimize the capital structure, its efficient investment in innovation development.

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