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VALUE DRIVERS IMPLEMENTATION FOR THE FORESTRY INDUSTRY

The article presents the theoretical concept of value creation and the definition of existing systems of value drivers. Based on the analysis of forestry development trends, the need and need to use value drivers in the forestry industry has been identified. Based on the research of scientific approaches to the identification and classification of cost drivers, the authors have summarized the classification of cost drivers for the forest industry. Taking into account the forestry sectoral development features the system of cost drivers for forestry has been proposed.

Keywords: value, value drivers, forestry industry, value drivers' tree.

Багацкая Е., Дядюша В. Внедрение драйверов стоимости для лесной отрасли. Изложена теоретическая концепция создания стоимости компании и определения существующих систем драйверов стоимости. На основании анализа тенденций развития лесной промышленности выявлены потребность и необходимость использования драйверов стоимости в лесной промышленности. Обобщена классификация драйверов стоимости для лесного хозяйства. С учетом отраслевых особенностей развития предложена система драйверов стоимости для лесного хозяйства.

Ключевые слова: стоимость, драйверы стоимости, лесная промышленность, дерево драйверов стоимости.

Background. Nowadays, the problem of shareholder value growth remains relevant. Managers of the largest and most of international companies are looking for the best drivers to create added value for owners and attract new investors. Defining the main value drivers of an enterprise for maximizing stockholder returns is a usual practice around the world. In Ukraine, such experience is not widespread that creates a need to investigate this subject and implement the practice of the most developed countries.

Analysis of recent research and publications. The study of value formation and defining main drivers of an enterprise belongs mostly to the foreign scientists. As theoretical definition of value drivers is unified in foreign publications, scientists mostly concentrated on the drivers identification and drivers networks formation for different economy sectors. For example, J. Titko I. Shina [1] identified non-financial value drivers in banking

sector, J. Hall [2] describes value drivers for industrial companies, T. Horak, U. Kister, and R. Dacshelt [3] concentrated on the automatization and implementation value drivers tree in the business process system of an enterprise. Some works of A. Burrows [4] are devoted to contemporary issues of the value drivers tree implementation in a business process modelling and business performance analysis. Besides value drivers identification is a meaningful subject of research for the analytics of the largest business-consulting companies, such as LEC consulting [5]. Among Ukrainian recent articles value drivers identification is described in the works of N. Obushna, Y. Rovnyj [6], O. Lahovska [7]. We proposed a solution to the problem of identifying industry-specific value drivers for the food industry in article [8], but for other economy sectors, the scientific justification of value drivers is not a completed task yet.

The aim of the article is to reveal the necessity of the value drivers implementation in the forestry industry in compliance with their identification as well as find out the influence they have on the overall performance of an enterprise.

Materials and methods. To achieve the purpose, general and special scientific methods are used to study theoretical basis of value creation of the company; comparative and analytical methods are used to investigate existing systems of value drivers; synthesis method is used to justify the need of using value drivers in the forestry industry; induction method is used to reveal and propose the most acceptable drivers for the forestry industry.

Results. The concept of a company's value has raised as far back as the 16th century. [9] The example of the value creation process can be the words of a judge Lord Elton: "the value of the company, which is the subject of commerce, is nothing but the probability that old customers will back to the old place, even without the old merchant or shopkeeper" [10]. It confirms that earlier company aimed to keep customer loyalty to find main value drivers. But now the goal is a little differ – maximize shareholder value. Despite different purposes, this shows that scientists understood the need for value drivers defining even a century ago.

Now move to the essence of value driver. During the analysis of scientific works such definitions were chosen as the most appropriate for this notion. In the business dictionary we can find value driver as an important factor that determines or causes an increase in value of a business, as viewed by investors [11].

J. Hall [2] consider that value drivers are any variables that affect the value of the business. V. Bocharov [12, p. 14] describes value drivers as systems of key value factors by which business is managed.

Ukrainian scientists N. Obushna and Y. Rovnyi [6] believe that value factors are the components that determine the scale of an increase (decrease) in the value of an enterprise, which leads to an improvement (deterioration) in the well-being of the owners and shareholders of the enterprise.

In our previous research [8] we defined value drivers (calling them factors) as a key factors of value creation and highlighted the following groups of cost drivers. These drivers have been identified based on value-creating factors research at the food industry: *group 1* – technological factors – a level of technology, capacity utilization; *group 2* – transactional factors – a level of cash payments in economic circulation; *group 3* – institutional factors: a degree of participation of the enterprise in formal and informal integrated structures, type of interaction of the management of the enterprise with local authorities; *group 4* – innovative factors. We have added environmental and developmental factors of related industries as drivers of value for food companies.

Generalizing the thoughts of scientists, we can conclude that some researchers call it drivers, some – indicators, and others – factors. But they define the same purpose – to increase the value of the company to satisfy investors' requirements. In all developed countries implementing value drivers are widespread in all industries and the practice of using them is successful. Unfortunately, in Ukraine, such practice is implemented mostly by international companies. But there is a necessity of applying value driver's strategy on the national enterprises.

The modern forestry industry is one of those who require reforms. Besides, the reformation process is supposed to be started in the nearest future. It can become a challenge for companies in this sphere. To cope with it companies should create own system of value drivers.

Recently the head of the State Forestry Agency announced that E-wood sales auctions will be created and it'll help to determine its volume in the country and set competitive prices. [13] In the future, it will create the balance of wood resources existing in the state and plan long-term investments. It can become a big breakthrough in establishing and developing transparency in this sphere.

Besides, on January 16, 2020, the Parliament passed a law on amendments to the Tax Code of Ukraine [14], which was carried out by improving the administration of taxes. According to this law, the rent rate for each breed will be applied without bits of detail, which will make it easier to calculate the rent for permanent forest users. In addition, adopting a single rate for most forestry businesses will reduce the tax burden on rent payments.

Such changes in legislation are positive for investors but law improvement and adaptation to international standards are only one component that can attract free money in this industry. Another key one is value creation. And it is possible only with the help of value drivers defining and practical usage.

It is worth mentioning that almost all activities in the industry come from the money received from the sale of the wood, goods, and services provided by state forestry enterprises. If you look at other countries in Europe and the world in general, you probably will not find any civilized country that does not allocate funds from the forestry budget. Unfortunately, Ukraine

is unique in this case. And without government financing companies need to find new ways of efficiency improvement. So it is one more reason for forestry enterprises to implement value driver's systems.

Each scientist defines their own set of value drivers for the firm. Some drivers are general for all companies and industries but some are special for the enterprise.

Some researches divide them into three categories: growth drivers, efficiency drivers, and financial drivers and tend to manage these value drivers in four ways: invest in value-creating growth opportunities, invest in operating efficiency, divest in value-destroying activities, reduce capital cost [5, p. 4]. Others define such drivers as sales growth rate, operating profit margin, income tax rate, incremental investment in working capital, incremental investment in fixed capital, replacement of fixed capital, cost of financing (cost of capital) and forecast duration (the planning period) [15, p. 2].

According to A. Rappaport [16, p. 193] there are seven macro value drivers, the most important of which are sales growth rate, operating profit margin, income tax rate, working capital investment, fix capital investment, cost of capital, value growth duration.

The most important value drivers from the viewpoint of banking experts are: knowledge and competence of bank employees, effective remuneration and motivation system, and operating efficiency of employees.

Coming from the value drivers mentioned above, we can see that all drivers are divided into the same groups. Inside these groups, value drivers can be different according to the sphere in which the company operates.

Taking into account the previous analysis of value drivers in connection with forestry industry investigation, we have defined such value drivers that we suppose are the most appropriate to forestry industry: sales growth, EBIT margin (not EBITDA because depreciation factor in the forestry industry reflect the forest reproduction policy, which is of particular economical importance, is also of great environmental and social importance. So we cannot exclude depreciation factor), net profit margin, cost reduction, capital structure, cost of capital, capital investment, customer diversification, size of potential market (area if forestry land) and barriers for entering (*Figure 1*). Our proposition is based on the forestry industry analysis, conducted in the papers of Ukrainian scientists [17; 18] where sales, EBIT, costs, net profit etc. as the most appropriate indicators of the forest industry performance are used.

Sales growth is the most used and meaningful factor in all industries and has an influence on all the other financial drivers. Therefore, sales growth is a cornerstone driver of the value tree. By means of sales increasing, management has the ability to increase the number of customers and build a well-known brand that leads to rising of goodwill and in such way – the company's value increasing.

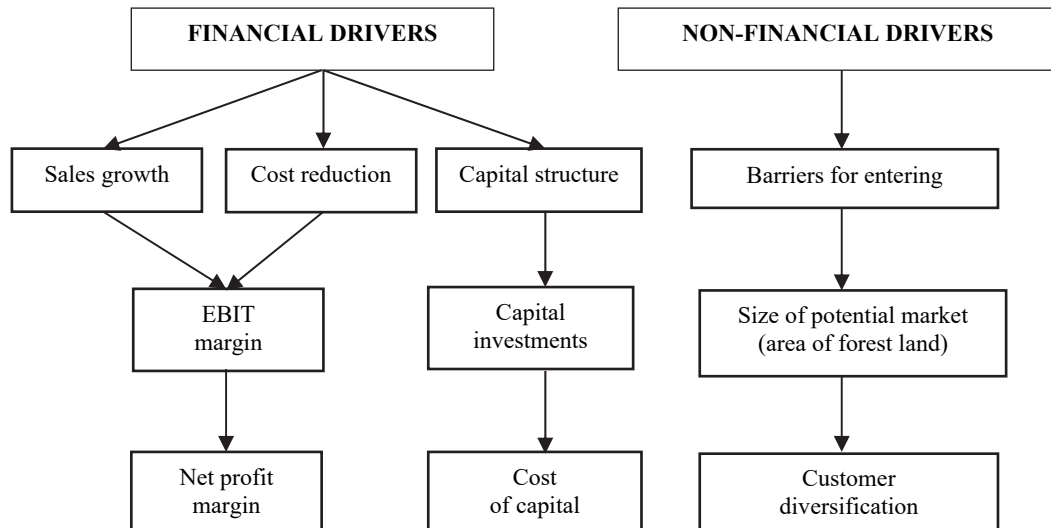


Figure 1. Value drivers of forestry industry

Source: created by the authors based on [5; 15–18].

Customer diversification is an important non-financial driver which is mostly under the influence of sales decisions. The company should understand that expansion of the market should be accomplished by a widening of the consumer network. This can not only raise the sales but also reduce risks. It also should be noted that the size of the potential market has a significant role in the rising of sales. In the forestry, we can't hope on the market growth as the industry has limited borders.

The EBITDA margin is also a widely spread driver, but the numbers differ for all industries. Taking into account our remark about forest reproduction policy, we propose to use EBIT margin in forestry enterprises because it can be compared with other firms without consideration of capital structure and level of real investments that can vary according to management systems at the enterprises. From the other hand the net profit margin takes into account all types of activity and shows situation in a specific company. It means that such indicator is not truly comparable with competitors but has a huge influence on investors decision.

Increasing the company's marginality depends on the effectiveness of the cost reduction program. As the company can decrease its costs without losses in production by supporting effective management strategy, marginality is supposed to become higher.

Another key driver for the forestry industry as for any other industry is capital structure. The companies need to find the optimal level of debt and equity that will rise the financial leverage of the enterprise. For the analyzed industry, this level is higher comparing with others from production and agrarian sector because of a lower level of taxation that creates an additional advantage for investors.

The cost of capital is one of the most important drivers that is influenced not only by the internal situation of the company but also the economic, political, and social environment. For the companies which

operate in the countries with an unstable economy, there is a risk of the high cost of capital that demands very high returns on invested capital. Ukraine comprises countries with an unstable economic situation. So management of the companies needs to determine the cost of capital very carefully considering all risks existing in nowadays economy.

The value of the company highly depends on capital investment. Only investment in activity improvements or in rising of the business leads to additional value creation.

Barriers for entering is identified as one of the most appropriate drivers. It is caused by strong state regulation. There is a huge amount of prohibitions and requirements in this sphere that creates sharp barriers for entering the market.

Based on the drivers mentioned above we noticed that key drivers are invested capital and cost of capital. All others are outgoing from these two and supplement them. By identifying the links between these drivers, we can see the impact of each driver on the overall value of the business.

Return on invested capital (ROI) is under the influence of operating margin and capital turnover while the weighted average cost of capital depends on the cost of equity and cost of debt. Besides, WACC and ROIC must be adjusted for the tax rate. The difference between the return on invested capital and the weighted average cost of capital forms the added value of the company (*Figure 2*).

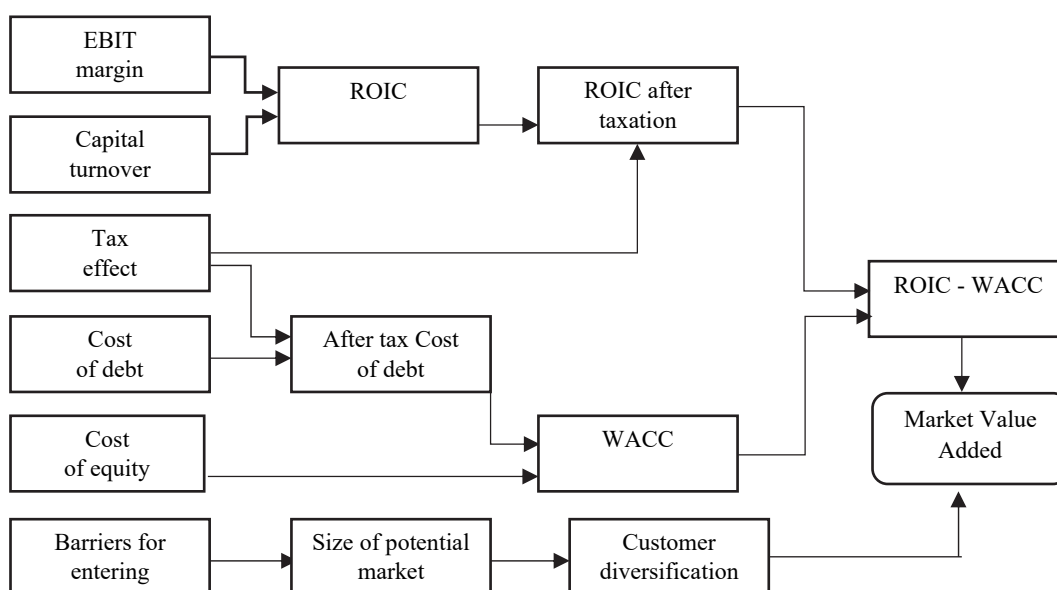


Figure 2. Value driver tree for the forestry industry

Source: created by the authors.

In the process of value driver's tree designing we should understand the next peculiarities:

- it should be taken into account that positive changes in one of the drivers can cause a negative effect on another. The shift of drivers shouldn't decrease the general effect;

- when the management of the company change one driver, it leads to the effect of changing the overall combination of drivers.

In order to define value drivers for the forestry industry, the company should firstly, determine the impact of each one on the operating activity of the enterprise and secondly, create a set of drivers that is called value drivers' tree.

Conclusion. Thus value creation system is built on the main drivers which can vary according to industry and even can be individual for each company. The majority of scientists that study this topic define value drivers as the main factors that make for increasing the owner's value. For the forestry industry, there is a need of creating value driver trees because the reformation process has already started by the government of Ukraine and it is a great challenge for the industry to cope with it almost without the state financing program. This process will attract investors which pay attention to the value of an enterprise. After investigation of all peculiarities of the forestry enterprise performance in Ukraine, we determined value drivers which are the most suitable for the researched industry. They are sales growth, EBIT margin, net profit margin, cost reduction, capital structure, cost of capital, capital investment, customer diversification, size of the potential market, and barriers for entering. Return on invested capital and weighted average cost of capital have been identified as the most important drivers. All investors want to get more profits from a project and only the difference between ROIC and WACC can show real earnings. On the other side, it shows for the company it is value-added.

During the designing of value driver tree management of the company should take into account that value driver tree creates links between all drivers and change of one driver can lead to a rather different situation in the final result.

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Багацька К., Дядюша В. Впровадження драйверів вартості для лісової галузі.

Постановка проблеми. Концепція управління підприємством, заснована на вартості (цінності), визнана однією з найбільш ефективних сьогодні й широко використовується в закордонних компаніях. Драйвер вартості визначається як вагомий фактор, який спричиняє зростання вартості бізнесу з погляду інвестора. Проте для українських підприємств проблема ідентифікації драйверів вартості часто залишається поза увагою, зокрема через недостатнє висвітлення цього питання в наукових працях.

Аналіз останніх досліджень і публікацій українських та закордонних науковців привів до висновку, що термін "драйвер вартості" є найбільш прийнятним для опису процесу створення вартості підприємством під дією економічних сил, та висвітлив невирішену проблему ідентифікації драйверів вартості для підприємств різних секторів економіки.

Мета статті – обґрунтувати необхідність впровадження драйверів вартості в лісовій промисловості відповідно до їх ідентифікації, а також з'ясувати вплив драйверів вартості на загальну результативність підприємства.

Матеріали та методи. У процесі дослідження використано методи: порівняльний і аналітичний, синтезу, індукції.

Результати дослідження. У розвинених країнах теорія і практика застосування драйверів вартості поширена в усіх галузях. В Україні теоретичні концепції є недостатньо узгодженими, а практику впровадження драйверів вартості використовують здебільшого міжнародні компанії. Проте інтеграція України у світові ланцюги створення вартості актуалізує необхідність застосування стратегії драйверів вартості і на вітчизняних підприємствах, зокрема й у лісовій галузі, яка перебуває на стадії реформування. Така система може базуватися на відповідних галузевих драйверах.

Висновки. За результатами дослідження стану лісової галузі та з огляду на аналіз драйверів вартості визначено найвідповідніші з них для цієї галузі: зростання продажів, операційна рентабельність, чиста рентабельність, темп зменшення витрат, структура капіталу, вартість капіталу, капітальні інвестиції, диверсифікація клієнтів, розмір потенційного ринку (площа лісових угідь) та бар'єри для входу. З метою імплементації драйверів вартості для підвищення ефективності менеджменту запропоновано дерево драйверів вартості для галузі.

Ключові слова: вартість, драйвери вартості, лісова промисловість, дерево драйверів вартості.