

EXPENSES ANALYSIS BASED ON INFORMATION PROVIDED BY THE PROFIT AND LOSS ACCOUNT – COMPANY PERFORMANCE DIAGNOSIS STAGE

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ABSTRACT: *Expenses represent one component of the binomial that determines a company's financial performance, the other component being the incomes. Diagnosing performance as part of the performance management has the purpose of providing managers with a feedback on previous actions and it acts as a basis for future decisions. Profit and loss account through its format, offers the possibility to analyze changes at expenses level and the evolution of their structure. This paper aims the analysis of the expenses of a dairy company based on information provided by the profit and loss account followed by the formulation of proposals and conclusions.*

KEY WORDS: *performance, expenses, incomes, financial statements, analysis.*

JEL CLASSIFICATION: *M41, L25, D22.*

1. INTRODUCTION

The complexity of the knowledge economy, the current economic crisis and the social and environmental problems determine the increase of the financial and economic information role in making decisions. For the efficient management of a business entity it is necessary to have an economic information system developed according to the managers' information needs, whose purpose is to lead the company towards performance. The relationship between the management activity and the performance of that between action and action result, which aspect highlights the fact that the performance management exceeds the importance of measuring performance. Moreover, it is a fact already recognized that performance measurement is part of a concerted set of measures that comprise performance management.

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The conceptual IASB framework defines performance through two elements, incomes and expenses which it explains as follows:

- The incomes are “increases recorded during the accounting period as inflows or increases in the assets or decreases of the debts and are substantiated in share capital increases, other than those resulting from the shareholders’ contributions”;
- The expenses are “decreases of the economic advantages recorded during the accounting period as outflows or decreases of the value of the assets or debt increases that are substantiated in share capital decreases of the share capital, others than those resulted from their distribution to shareholders”.

By introducing the notion of time, the definitions of the two elements, also taken over in national accounting standard (O.M.P.F. 3055/2009, section 6, point 34, a, b), provides accounting with a cyclical approach and orientation predominantly towards the future, crucial in the decision making process. The future economic benefits, that the company can win or lose, represent the fundamental criterion for the recognition of these items in the financial statements. On the other hand, the definitions are based on an extensive view of accounting and its field of application. The term of economic benefits replaced by an inclusive manner that of earnings thus allowing the inclusion of the earnings of the non-profit sector. The definitions highlight the concept according to which “the balance sheet dominates the profit and loss account”, an idea motivated by the concept of measuring the performance of the company that essentially aims the measurement of the profit.

2. RESEARCH METHODOLOGY

The research methodology involved the use of research data collection methods, including all the methods that we used for collecting data and information related to the expenditure accounting in a dairy company: the method of studying the normative acts and accounting documents or documents of other types, which involved examinations from certain points of view related to the purpose and objectives of the research; the method of the case study, by which the evolution of the expenses and its implication on the company performance level were studied. In the paper, we also used methods of quantifying the data of the research performed, for a subsequent processing and interpretation of the results, such as data structuring, making comparisons, etc.

3. ANALYSIS OF THE EXPENSES

Profit and loss account is a product of the financial accounting. Financial accounting has as its main objective "providing summary information about the financial position and financial performance of the company" (Ristea et al, 2009, p. 7). Based on informations provided by the profit and loss account, a diagnostic of company performance and risk can be done. (Petrescu, 2008, p 31).

The notions of cost and expense are frequently used as synonyms but they are different. In order to express the resources consumption in the economic activity we use the notion of expense in the financial accounting and that of cost in the

management accounting. The two notions “are different because they have the marks and characteristics of the type of accounting from which they come” (Albu & Albu, 2003, p. 124). Due to the fact that merely knowing the level of expenses and costs of the company is not sufficient, it is necessary to perform an analysis based on which a series of conclusions should be drawn that should guide the manager in making current and future decisions. The cost analysis is viewed in the specialized literature as “fundamental step in the foundation of an optimal price policy that would achieve the company’s objectives” (Ciuhureanu, 2012, p. 107).

Taking into account the accounting methodology, cost is a value concept that, in terms of time, follows that of expense because expenses are items constitution costs. Between the expenses and the costs there are differences of nature given by the fact that expenses are related by the cash flows of the company, while costs are related to the achievements of the company.

According to the accounting regulations in force in our country, the expenses of the entity are “the values paid or to be paid for: consumptions of stocks and services provided, in the benefit of the entity, staff expenses, fulfilling legal or contractual obligations etc.” (O.M.P.F. 3055/2009, point 262, paragraph (1)). Moreover, “expenses are decreases of the economic benefits recorded during the accounting period as outflows or decreases of the assets value or debt increases, that are substantiated in decreases of share capitals, others than those resulted from their distribution to shareholders” (O.M.P.F. 3055/2009, point 34, paragraph (1), b)).

Information has an important place in performance management, being “an indispensable element of the progress” (Pântea&Bodea, 2013, p. 5). Based on the information related to the expenses costs are calculated and the results of this calculation have multiple valences. This type of information is used, among others, to set prices. Sale prices of the company products can be set either based on information related to costs, or based on information related to the specific conditions of the product market. The first version “is a seemingly easy method based on costs and the expected profit” (Veres, 2011, p. 289).

The structure of the profit and loss account may be made in two ways: according to their nature and according to their functions (purpose). In the first case the profit and loss account is rendered as a table, the expenses being recorded at debt and the incomes in the. The Romanian accounting regulations compliant with the European directives (O.M.P.F. 3055/2009) prefer the form of account based on nature as list, but Explanatory note 4 “Analysis of the operating result” requires detailing this result based on its purpose too. Classifying expenses based on their nature or on their purpose respectively has advantages as well as disadvantages (Man & Gădău, 2011, p. 170).

Irrespective of the form of presenting the profit and loss account, the comparison between effects and efforts, in the performance analysis determined with the help of profitability, may be made with the help of two series of assessment Indicators. These indicators can be expressed in absolute measures and relative measures. The indicators in absolute measures are obtained in the form of margins, as differences between incomes and expenses, and the Indicators in relative measures are obtained in the form of rates, as ratios between the various results and the expenses or capitals used. The form of the profit and loss account chosen by the Romanian standard

setters has the advantage that "contribute to playing a more complete picture of enterprise's performance, show greater openness to financial analysis, in estimating the forecast, and meets the information needs of a wide range users" (Man & Gădău, 2011, p. 171).

There are opinions according to which "firm performance is a concept whose dimensions have changed with the growing competitiveness and complexity of the economic environment in which businesses operate" (Pintea & Achim, 2010). In a general sense, the performance has the meaning of a prestigious result, an outstanding achievement (Mironiuc, 2006).

Starting from the aspects presented above, we believe that the analysis of the expenses can supply valuable information to managers, which information can be used for an adequate performance management because the analysis of the expenses is necessary in the decision-making process and is a stage of the business entity performance diagnosis. Another user of the financial and economic information, including analyzes of expenses, is the contractor seen in the specialized literature as "manager and organizer of a business, but especially as the one that is taking the risk of business or enterprise" (Săvoiu, 2011, p. 21).

In our opinion, the analysis of expenses should be followed by measures to reduce them. To achieve this, managers have at their disposal a number of technical means and Business Intelligence solutions (Şerbănescu, 2011).

The analysis of the expenses facilitates the understanding of the results correlated to the dynamics, structure and effectiveness of the expenses incurred. For exemplification we used the financial statements as of 31 December 2011 and 31 December 2012 of an entity in the Argeş County, namely S.C. Lactag S.A. Costeşti, with the NACE code 1051 Operation of dairies and cheese making.

According to specialists' opinion, "the study of the economical-financial performances posted by the Romanian industrial companies is important to understand their capacity to generate positive financial results during a specific period of time" (Siminică, et al, 2009).

The information required in order to analyse the dynamics and structure were taken from the profit and loss account, being presented in table 1.

Table 1. Indicators required to analyse the dynamics and structure of the expenses
(lei)

It. no.	Indicators	Symbol	2010	2011	2012
1.	Operating expenses out of which:	Ce	17,053,430	16,169,976	21,526,155
1.1.	Raw materials and consumables expenses	Cm	10,222,199	10,101,567	11,880,440
1.2.	Expenses related to goods	Cmf	904,831	965,944	2,771,248
1.3.	Staff expenses	Cp	2,225,021	2,160,276	2,820,992
2.	Financial expenses	Cf	710,322	8,270,736	700,335
3.	Extraordinary expenses	Cex	0	0	0
4.	Total expenses	Ct	17,763,752	24,440,712	22,226,490

Source: The financial statements of S.C. Lactag S.A. Costeşti

The evolution of the costs analysed is presented in table 2 as absolute change and change in the expense index.

Table 2. Dynamics of the expenses

It. no.	Indicators	2010/2011		2012/2011	
		Δ (lei)	I (%)	Δ (lei)	I (%)
1.	Ce	-883,454	94,82	5,356,179	133.12
1.1.	Cm	-120,632	98,82	1,778,873	117.61
1.2.	Cmf	61,113	106,75	1,805,304	286.90
1.3.	Cp	-64,745	97,09	660,716	130.58
2.	Cf	7,560,414	1164,36	-7,570,401	8.47
3.	Ct	6,676,960	137,59	-2,214,222	90.94

Source: Calculations made based on the financial statements of S.C. Lactag S.A. Costești

From the data presented in table no. 2 we can notice an increase in the total expenses in the accounting period 2011 compared to 2010 by 37.59% mainly as a result of the significant increase of the financial expenses (more than 11 times), which is why the analysis of the financial expense items should be deepened in order to determine the opportunity of making them in the accounting period 2011. The operating expenses record a slight decrease (by 5.18%) due to the decrease of the raw material and staff expenses, offsetting the increase by 6.75% of the goods expenses.

In the accounting period 2012 compared to 2011 the total expenses are decreased by approximately 9% entirely due to the reduction of the financial expenses while the analysed expense items record increases (the good expenses have the largest increase, by more than 186%).

Determining the share of each category of expenses in the total expenses allows assessments related to the structure of the total expenses and the contribution of the activities to their change. These shares are calculated based on the formula:

$$G = \frac{Ce, Cf, Cex}{Ct} \times 100 \quad (1)$$

where: G is the specific weight (structure) on categories of expenses.

Table 3. Structure of the total expenses on activities

Share of expenses on activities	Symbol	2010	2011	2012
Operating	Ge	96.00	66.16	96.85
Financial	Gf	4	33.84	3.15
Extraordinary	Gex	0	0	0
Total		100	100	100

Source: Calculations made based on the financial statements of S.C. Lactag S.A. Costești

In the accounting period 2011 we can notice a significant increase of the share of the financial expenses, which situation was also anticipated from the analysis of the dynamics of these expenses.

In the analysis of the expenses we can also determine the percentage contribution of each category of expenses to the percentage change of the total expenses. This contribution can be set as follows:

$$K = \frac{\Delta C_e; \Delta C_f; \Delta C_{ex}}{C_{t_0}} \times 100 \quad (2)$$

These contributions of the operating, financial and extraordinary expenses, to the percentage change of the total expenses in 2011 compared to 2010, and 2012 respectively compared to 2011 are presented in table 4.

Table 4. Contribution of the expenses on activities to the change of the total expenses (%)

Expenses	Contribution to the change of the total expenses	2011/2010	2012/2011
Operating	K_e	-4.97	21,91
Financial	K_f	42.56	-30,97
Extraordinary	K_{ex}	0.00	0,00
Total		37,59	-9.06

Source: Calculations made based on the financial statements of S.C. Lactag S.A. Costești

The algebraic sum of these contributions corresponds to the percentage change in the total expenses.

Due to the fact that the financial expenses recorded significant changes, first increasing in the accounting period 2011 compared to 2010, then decreasing in 2012 compared to 2011, their contribution to the percentage change of the total expenses was higher than that of the operating expenses.

The operating expenses have the main share in the total expenses (a situation deemed normal taking into account the specificity of the activity of the analysed entity), and within them we can determine the share of the main expense items, according to table 5.

Table 5. Structure of the operating expenses on main items (%)

Structure of the operating expenses	Symbol	2010	2011	2012
Expenses with raw materials and consumables	Gm	59.94	62.47	55.19
Expenses related to goods	Gmf	5.31	5.97	12.87
Staff expenses	Gp	13.05	13.36	13.10

Source: Calculations made based on the financial statements of S.C. Lactag S.A. Costești

The expenses with raw materials and consumables have the largest share in the operating expenses, which is a normal situation for the analysed entity whose main business is operation of dairies and cheese making. Thus, for the reduction of the expenses it is recommended to search for raw material suppliers that charge the lowest prices.

For an accurate assessment of the evolution of the expenses, this must be monitored correlated with the dynamics of the activity reflected by the Indicators that show incomes or the production and sale activity because the increase of the expenses of a business entity is justified only if at the same time a production or an income increase is recorded at a higher pace than that of the expenses or if the quality of the products, works or services is improved which determines an increase in the prices and tariffs due to which the incomes will increase more. For an economically positive situation (which should reflect an increase in the efficiency) in the case of the increase in the expenses, their dynamics should be inferior to the dynamics of the incomes: $100 < I_{Ct} < I_{Vt}$.

We will analyse this correlation between incomes and expenses using information from the profit and loss account and from Note 4 *Analysis of the operating result*, information presented in table 6.

Table 6. Indicators required to analyse the correlation between incomes and expenses

(lei)

Indicators	Symbol	2010	2011	2012
Total incomes	Vt	17,828,146	24,482,736	22,633,739
Operating incomes	Ve	17,688,401	16,661,978	22,615,630
Net turnover	CA	16,681,000	15,705,984	19,587,002
Total expenses	Ct	17,763,752	24,440,712	22,226,490
Operating expenses	Ce	17,053,430	16,169,976	21,526,155
Costs of the goods sold and of the services provided	Ch	16,580,317	14,413,289	20,588,888

Source: *The financial statements of S.C. Lactag S.A. Costești*

The dynamics of the incomes and expenses studied is as shown in table 7.

Table 7. Indicators of the change in the incomes and expenses

(%)

Indicators	Symbol	2011/2010	2012/2011
Total incomes	I_{Vt}	137.33	92.45
Operating incomes	I_{Ve}	94.20	135.73
Net turnover	I_{CA}	94.15	124.71
Total expenses	I_{Ct}	137.59	90.94
Operating expenses	I_{Ce}	94.82	133.12
Costs of the goods sold and of the services provided	I_{Ch}	86.93	142.85

Source: *Calculations made based on the financial statements of S.C. Lactag S.A. Costești*

Comparing the dynamics of the total incomes with that of the total expenses we can notice an economically negative situation in the accounting period 2011

compared to 2010 because $100 < I_{Vt} < I_{Ct}$, i.e. an increase in the total expenses higher than the increase in the total incomes. The situation of this correlation becomes economically positive in 2012 compared to 2011 because the total expenses decrease more than the total incomes, so that $100 > I_{Vt} > I_{Ct}$.

As in the case of the correlation between the dynamics of the operating incomes and of the operating expenses the situation is economically negative in 2011 compared to 2010 because the incomes decrease more than expenses, and in 2012 compared to 2011 it is positive because the incomes increase by 35.73%, and expenses decrease by 33.12%, therefore $100 < I_{Ct} < I_{Vt}$.

Comparing the dynamics of the net turnover with that of the expenses related to it, i.e. of the costs of the goods sold and of the services provided, we can notice a reversed situation compared to the first two cases because in 2011 compared to 2010 the situation is assessed as positive due to the fact that expenses decrease at a higher pace than that of the turnover, while in the financial period 2012 the net turnover increases less than the increase of the cost of goods sold and of the services provided in 2011.

These correlations between incomes and expenses can also be highlighted with the help of the economic efficiency index expenses at 1000 lei which is determined using the relationship:

$$Ct_{/1000} = \frac{Ct}{Vt} \times 1000 \quad (3)$$

where: Ct represents total costs;
 Vt – total incomes.

Table 8. Indicators required to determine $Ct/1000Vt$

(lei)

Indicators	2010	2011	2012
Total expenses (Ct)	17,763,752	24,440,712	22,226,490
Total incomes (Vt)	17,828,146	24,482,736	22,633,739
$Ct_{/1000} = \frac{Ct}{Vt} \times 1000$	996.39	998.28	982.01

Source: The financial statements of S.C. Lactag S.A. Costești and own calculations

In the analysed period the indicator expenses at 1000 lei has values below 1000, so we can assess that the activity was efficient. In the accounting period 2012 the indicator decreases, showing an efficiency increase.

Due to the fact that “in financial diagnosis the performance of a company is associated to its capacity of obtaining profit, or generally is mostly associated to its profitability, so that profitability Indicators are widely accepted to measure performances” (Monea & Guță, 2011), it is necessary to also determine the effect in the change of the expenses at 1000 lei on the gross profit (result) based on the formula:

$$\Delta_{Rb}^{Ct/1000} = -(Ct_{1/1000} - Ct_{0/1000}) \frac{Vt_1}{1000} \quad (4)$$

Thus, the change in the total expenses at 1000 lei total incomes had the following effects on the gross result in the accounting period 2011 compared to 2010, or in 2012 respectively compared to 2011:

$$\Delta_{Rb}^{Ct/1000}{}_{2011/2010} = -(998,28 - 996,39) \frac{24.482.736}{1000} = -46.405,91 \quad (5)$$

$$\Delta_{Rb}^{Ct/1000}{}_{2012/2011} = -(982,01 - 998,28) \frac{22.633.739}{1000} = 368.398,76 \quad (6)$$

The increase of $Ct/1000Vt$ resulted in the decrease of the gross result in the period 2011/2010 by 46,405.91 lei, and its decrease in 2012 compared to 2011 determined the increase in the gross result by 368,398.76 lei.

4. CONCLUSIONS

For accurate assessment of expenses from one year to another, we considered necessary to correlate them with the evolution of revenues and net turnover. Also, by presenting the effects of changed expenses on other indicators such as gross profit, there seems to be a much clearer picture of the company's financial situation.

Expenses analysis can be used as a tool in the diagnosis of performance by a series of internal and especially external users. If internal users receive information and tools of management accounting and management control, by which they may assess the performance of each product, the external users are provided only with the financial statements. For managers, the synthetic manner in which expenses are presented in the profit and loss account can be an advantage, taking into account the fact that excess information can be as harmful as the lack of information. Current and potential investors can get valuable information on which to assess whether the company is attractive to (new) investments.

It is obvious that the expenses analysis based on the profit and loss account presents some limitations mainly derived from the synthetic character of the information available, but it is the starting point for assessing the company's financial performance. The expense analysis should be seen as a necessary step in the development of diagnosing the company's performance and it must be supplemented by revenue analysis, total result analysis and also by each activity.

Given the fact that in recent decades the need for knowledge of enterprise overall performance has increased one should bear in mind that in Romania profit and loss account does not provide separate information on social and environmental expenses and incomes. Therefore, another shortcoming of expense analysis based on information provided by the profit and loss account is given by the fact that the resulting information can be used only for achieving a company's financial

performance diagnosis. We consider necessary to supplement the current legislation with mandatory rules that should require the companies to report information on social and environmental performance in order to accommodate those interested in assessing the company's overall performance.

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