STATEMENT OF INCOME AND EXPENSES – SOURCE OF INFORMATION FOR THE ANALYSIS OF ENTERPRISE'S BUSINESS EFFICIENCY

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Abstract: Enterprise's financial statements should meet specific requirements, such as true and fair presentation; materiality; comparative information; offsetting. They should fairly and truly present the property and financial position of the enterprise, its financial performance during the reporting period, the changes in the cash flows and equity. The balance sheet, the statement of income and expenses and the statement of cash flows present the respective comparative information for the previous reporting period in terms of each section, group and item therein. The information is presented for two subsequent reporting periods, which allows to analyze and evaluate the changes in the property and financial position of the enterprise, in its financial performance and the cash flows for the current reporting period in comparison to the previous one. Furthermore, this allows the identification and valuation of the effect of the factors on the changes occurred in the different aspects of the enterprise's position and business. On such basis, timely and reasonable decisions can be made for achieving and maintaining financial stability of the enterprise in operational and strategic aspect.

Moreover, the information of the enterprises' financial statements should be understandable, appropriate, reliable and comparable.

The statement of income and expenses of enterprises applying the national accounting base (Bulgaria's National Accounting Standards) is an important source of information for the analysis of their business efficiency. As a mandatory element of the enterprises' annual financial statements, the statement of income and expenses contains information that clearly, truly and fairly presents the expenses and income from ordinary activity, the income tax expenses (corporate income tax), as well as the financial results (profits or losses) in accordance with the way of their formation.

The information in the statement of income and expenses allows to analyze the efficiency of the business in two aspects. The first one is by using absolute indicators that characterize the business efficiency, for example, different profit values: accounting profit, book profit; profit from operating activity. The second aspect of the analysis is by using relative indicators that characterize the business efficiency. There are two groups of indicators. The first one covers the indicators characterizing the efficiency of income and expenses, and the other one – return indicators defined on expense and income basis.

This publication highlights the different aspects of the business efficiency analysis based on the information from the enterprise's statement of income and expenses.

The subject matter of this study covers the specific methodologies for analysis of the business efficiency based on the information from the enterprise's statement of income and expenses.

The publication is aimed at achieving methodologies for analysis of business efficiency that are feasible and useful for the business practice by using the information from the enterprise's statement of income and expenses.

Keywords: income, expenses, efficiency, analysis, statement.

1.   INTRODUCTION

In the Accountancy and Analysis Department of UNWE (University of National and World Economy) – Sofia, students of education and qualification degree "Master" study in master's programme with specialization "Accountancy and Business Analysis". "Analysis of Financial Statements of Non-Financial Enterprises" is one of the important disciplines in the curriculum of the master's programme. The syllabus of the discipline comprises topical issues with regard to different methodologies for analysis and assessment of the information presented in the financial statements of the non-financial enterprises. Enterprises' financial statements should fairly and correctly present the financial performance, the property and financial position, the cash flows and the efficiency of their business.

"Analysis and assessment of business efficiency based on the data presented in the enterprise's Statement of income and expenses" is an important topic in the syllabus of the discipline "Analysis of Financial Statements of Non-Financial Enterprises". This topic is especially topical in the conditions of competitive and dynamic market, which is characterized with some degree of entropy. The good position of the enterprise on the market, the supply of

competitive products, keeping regular clients and attracting new ones, mastering new market niches and new markets are factors that affect the size and the dynamics of net sales revenue and sales gains, thus affecting the accounting and book profit. For the purposes of the good management of the sales gains, the financial management of the enterprise needs to optimize the expenses forming the full cost of production.

2. ANALYSIS AND ASSESSMENT OF BUSINESS EFFICIENCY

The analysis and assessment of business efficiency based on the data in the Statement of income and expenses are made by means of a system of absolute and relative indicators.

The following absolute indicators may be used for the purposes of the analysis: 1) accounting profit; 2) book profit; 3) earnings from operations; 4) sales profit.

The system of relative indicators for analysis and assessment of business efficiency may comprise the following indicators: 1) expenses per revenue of BGN 100 – revenue efficiency; 2) gross and net revenue-based rate of return; 3) revenue per expenses of BGN 100 – expense efficiency; 4) gross and net expense-based rate of return; 5) revenue-based rate of return of operations; 6) expense-based rate of return of operations; 7) rate of return based on net sales revenue – rate of return of sales (efficiency of the enterprise's sales activity).

We will present the methodologies for analysis of business efficiency in accordance with the data from the business of an enterprise operating in the economy of the country.

We have the data from the Statement of income and expenses of Karina OOD, which are presented in table 1.

Table 1 (BGN'000)

Expenses	Current year	Previous year	Revenue	Current year	Previous year
1.Expenses on raw materials and supplies	246	2695	1.Net sales revenue, including:	15295	19230
2.Expenses on hired services	4808	5856	a/ production	10572	13850
3.Amortization	4732	5484	b/ goods	302	405
4.Remunerations	410	562	c/ services	4421	4975
5.Social security	125	220	2.Other operating income	382	1340
6.Other expenses, including:	2432	4120			
a/ book value of sold goods	1580	3290			
Total operating expenses	**12753**	**18937**	**Total operating income**	**15677**	**20570**
7.Expenses for impairment of financial assets, including:	352	1205	3.Interest income	12	112
a/ foreign exchange losses	352	1205	4.Foreign exchange gains	843	985
8.Interest expenses	42	43	5.Other financial income	428	460
9.Other financial expenses	3	2			
Total financial expenses	**397**	**1250**	**Total financial income**	**1283**	**1557**
10.Earnings from ordinary activity	3810	1940	6.Loss from ordinary activity	0	0
Total expenses	**13150**	**20187**	**Total revenue**	**16960**	**22127**
11.Accounting profit (total revenue – total expenses)	3810	1940	7.Accounting loss (total revenue – total expenses)	0	0
12.Income tax expenses	210	140			
13.Other taxes alternative to corporate income tax	0	0			
14.Profit (11 - 12 - 13)	3600	1800	8.Loss	0	0

Total (total expenses + 12 + 13 + 14)	16960	22127	Total (total revenue + 8)	16960	22127

This table shows that the accounting profit for the current year in comparison to the previous year has increased by BGN 1870 thousand (3810 - 1940). This increase is due to the decrease of expenses by BGN 7037 thousand (13150 - 20187), and to the decrease of revenue by BGN 5167 thousand (16960 - 22127). In this particular case the amount of expense decrease is higher than the revenue decrease, which has positive effect on the dynamics of the accounting profit and results in its increase by BGN 1870 thousand [(-5167) - (-7037)]. At the same time, the expense decrease rate is 34,86 % [(7037: 20187) x 100], and the revenue decrease rate is 23,35 % [(5167: 22127) x 100].

The book profit for the current year in comparison to the previous year has decreased by BGN 1800 (3600 – 1800).

The total amount of expenses, including income taxes, for the previous year is BGN 20327 thousand, and for the current year it is BGN 13360 thousand. During the current year the enterprise has achieved expense decrease by BGN 6967 thousand (13360 - 20327). The expense decrease is higher than the revenue decrease, which explains the increase of the book profit for the current year in comparison to the previous year.

The enterprise's earnings from operations for the previous year are in the amount of BGN 1633 thousand (20570 - 18937), and for the current year – BGN 2924 thousand (15677 - 12753), i.e. we can see an increase in the amount of these earnings by BGN 1291 thousand (2924 -1633). This increase of the earnings from operations is due to the higher decrease of operating expenses in the amount of BGN 6184 thousand (12753 - 18937) in comparison to the decrease of the operating revenue in the amount of BGN 4893 thousand (15677 - 20570).

In accordance with the Statement of income and expenses, we can calculate the amount of the sales profit. In this case, the enterprise reaches net revenue from sale of production, goods and services. Therefore, the amount of the sales profit from all activities of the enterprise can be identified, without making a breakdown by types of activities, for example, sale of production, sale of goods, sale of services.

The total sales profit is calculated as a difference between the net sales revenue and the total expenses for all activities carried out by the enterprise. For the purposes of the analysis, the sales profit is presented in table 2.

Table 2

Indicators	Current year	Previous year	Difference
1. Net sales revenue, including (BGN'000):	**15295**	**19230**	**-3935**
a/ production	10572	13850	-3278
b/ goods	302	405	-103
c/ services	4421	4975	-554
2. Operating expenses, including (BGN'000):	**12753**	**18937**	**-6184**
a/ expenses on raw materials and supplies	246	2695	-2449
b/ expenses on hired services	4808	5856	-1048
c/ amortization	4732	5484	-752
d/ remunerations	410	562	-152
e/ social security	125	220	-95
f/ other expenses, including:	2432	4120	-1688
- book value of sold goods	1580	3290	-1710
3. Earnings from operations, BGN'000	2924	1633	1291
4. Gross sales profit, BGN'000	**2542**	**293**	**2249**
5. Accounting profit, BGN'000	3810	1940	1870
6. Book profit, BGN'000	3600	1800	1800

7. Distribution ratio	0,9449	0,9278	0,0170
8. Net sales profit, BGN'000	**2401,89**	**271,86**	**2130,03**

As seen from table 2, the gross sales profit (before sales income tax) has increased by BGN 2249 thousand (2542 - 293). This increase is due to the bigger amount of decrease of operating expenses by BGN 6184 thousand (12753 - 18937) in comparison to the net sales revenue the decrease of which is in the amount of BGN 3935 thousand (15295 - 19230).

For the purposes of defining the net sales profit, income tax distribution ratio is calculated. With the help of this ratio the income tax relevant to the sales activities is distributed. The income tax (corporate income tax) distribution ratio is calculated as a ratio of the book profit to the accounting profit. The gross sales profit is multiplied by the corporate income tax distribution ratio so calculated for the purposes of defining the amount of the net sales profit.

Table 2 shows that the net sales profit for the current year has increased by BGN 2130,03 thousand (2401,89 - 271,86) in comparison to the previous year. The net sales profit increase rate is 783.50 % [(2130,03: 271,86) x 100].

Based on the information in the Statement of income and expenses of the enterprise as well as on the data in table 2, we calculate the values of the relative indicators for analysis and assessment of business efficiency.

Table 3 is drawn for the purposes of the analysis.

Table 3

Indicators	Current year	Previous year	Difference
1. Expenses per revenue of BGN 100, BGN	78,77	91,87	-13,09
2. Gross revenue-based rate of return, %	22,46	8,77	13,70
3. Net revenue-based rate of return, %:			
a/ model 1	21,23	8,13	13,09
b/ model 2	21,23	8,13	13,09
4. Revenue per expenses of BGN 100, BGN	126,95	108,86	18,09
5. Gross expense-based rate of return, %	28,97	9,61	19,36
6. Net expense-based rate of return, %:			
a/ model 1	26,95	8,86	18,09
b/ model 2	26,95	8,86	18,09
7. Revenue-based rate of return of operations, %	18,65	7,94	10,71
8. Expense-based rate of return of operations, %	22,93	8,62	14,30
9. Gross rate of return of sales, %	16,62	1,52	15,10
10.Net rate of return of sales, %	15,70	1,41	14,29

The indicator "Expenses per revenue of BGN 100", i.e. the revenue efficiency, is calculated as a ratio between the total amounts of expenses (including income tax expenses) and of revenue, multiplied by one hundred. It shows the expenses incurred by the enterprise to gain revenue of BGN 100. The data in the last table shows that the expenses per revenue of BGN 100 have decreased by BGN 13,09 (78,77 - 91,87), which means that the revenue efficiency has been improved. The effect of changes in the total amounts of expenses and revenue, as well as of their items, may be defined by means of the subsequent replacement methods and the shareholding.

The gross revenue-based rate of return is calculated as percentage ratio between the accounting (gross) profit and the total amount of revenue. With regard to the enterprise in question, the gross rate of return of revenue for the current year has increased by 13,70 % (22,46 - 8,77) in comparison to the previous year.

The net revenue-based rate of return may be calculated in two ways (models). The first one is as percentage ratio between the book (net) profit and the total amount of revenue. The objectively existing relationship between

the indicator "Expenses per revenue of BGN 100" and the net revenue-based rate of return is of specific importance for the financial management of every enterprise. The second model for calculation of the net revenue-based rate of return is based namely on this relationship. The difference between 100 and the expenses per revenue of BGN 100 is the net revenue-based rate of return. The benefit of this model for the economic practice is the ability to identify the effect of direct factors on the changes in the value of the indicator "Expenses per revenue of BGN 100" and on the net revenue-based rate of return simultaneously. Table 3 shows that the two models have the same results for the net revenue-based rate of return.

The indicator "Revenue per expenses of BGN 100" is calculated as a ratio between the total amounts of revenue and expenses (including income tax expenses), multiplied by one hundred. It shows the revenue generated by the enterprise relevant to expenses of BGN 100. In its nature, the indicator shows the efficiency of expenses. The data in table 3 shows that during the current year the revenue per expenses of BGN 100 has increased by BGN 18,09 (126,95 - 108,86) in comparison to the previous year. This means that during the current year the enterprise's revenue per expenses of BGN 100 has increased by BGN 18,09 in comparison to the previous years, or that the efficiency of expenses has been improved.

The gross expense-based rate of return is calculated as percentage ratio between the accounting profit and the amount of expenses, less income tax expenses. In this way we can compare the values used in the model for calculation of the gross expense-based rate of return. Table 3 shows that the gross expense-based rate of return of the enterprise under question has significantly increased during the current year in comparison to the previous year. The increase is 19,36 points (28,97 - 9,61).

The net expense-based rate of return may be calculated in two ways. The first of them (model 1) is as percentage ratio between the book profit and the total amount of expenses, including the income tax expenses. The second model is interesting for the economic practice, as it is expresses the objectively existing relationship between the revenue per expenses of BGN 100 and the net expense-based rate of return. In its nature, the difference between the indicator "Revenue per expenses of BGN 100" and 100 expresses the net expense-based rate of return. The benefit of this model for the economic practice is defined by the opportunities for detailed analysis of the impact of direct factors on the dynamics of the indicator "Revenue per expenses of BGN 100" and on the changes occurred in the net revenue-based rate or return.

The data in table 3 shows that the two models of analysis have the same results for the net expense-based rate or return. The value of the indicator for the current year has increased significantly by 18,09 points (26,95 - 8,86) in comparison to the previous year.

The analysis of the indicators "Expenses per revenue of BGN 100", "Net revenue-based rate of return", "Revenue per expenses of BGN 100" and "Net expense-based rate of return" allows to identify and assess the impact of both the changes in the total amounts of revenue and expenses and the changes in the amount of different items comprised therein. The detailed review of the impact of changes in the different revenue and expense items gives the financial management the opportunity to make operational decisions for improvement of the values of the key business efficiency indicators. For example, the analysis of the impact of net sales revenue may be reviewed in details by identifying the impact of direct factors on the dynamics of the net sales revenue. These are the following factors: changes in the physical amount of sold production; changes in the product range structure of sold production; changes in the net sales prices of separate products. In their nature, such factors affect the dynamics of the net revenue- and expense-based rate of return.

Earnings from operations have the biggest relative share in the book profit. The data in table 2 shows that the relative share of the earnings from operations in the book profit for the previous year is 90,72 % (1633: 1800), and for the current year this share is 81,22 % (2924: 3600). In other words, the relative share of earnings from operations in the book profit of the enterprise decreases by 9,50 points (81,22 – 90,72) for the current in comparison to the previous year.

This objective fact brings forth the interest to the relative shares for analysis of the enterprise's operations efficiency.

The revenue-based rate of return of operations is calculated as percentage ratio of the earnings from operations to the amount of revenue from the same activity of the enterprise. Data in table 3 shows that the revenue-based rate of return of operations for the current year has decreased by 10,71 points (18,65 - 7,94) in comparison to the previous year. This increase is due to the increase of earnings from operations by BGN 1291 thousand (2924 – 1633), as well as to the changes in the amount of operating expenses, and namely their decrease.

We should underline that when calculating the revenue-based rate of return, irrespective which revenue is used in the analysis model (total amount of revenue, operating revenue and net sales revenue), we can see a difference between the mathematical formula and the economic interpretation of the impact of the factors. In this particular case, the formula shows that the decrease of operating revenue of the enterprise has resulted in increase of the revenue-based rate of return of operations. Such assumption is economically unjustified, as the objective of the enterprise's management is not to generate less revenue, but on the contrary – to increase the amount of generated revenue.

Expense-based rate of return of operations, calculated as percentage ratio between the earnings from operations and the amount of operating expenses, has increased by 14,30 points (22,93 - 8,62) for the current in comparison to the previous year. Such increase is due to the increase of the earnings from operations by BGN 1291 thousand (2924 – 1633) and to the decrease of operating expenses by BGN 6184 thousand (12753 – 18937).

The gross rate of return of sales is calculated as percentage ration of the gross sales profit to the net sales revenue. The data in table 3 shows that the value of this type of rate of return indicator has increased by 15,10 points (16,62 - 1,52) for the current in comparison to the previous year. At the same time, the net rate of return calculated as percentage ratio of the net sales profit to the net sales revenue has increased by 14,29 points (15,70 - 1,41). This means that the efficiency of the enterprise's sales activity has improved significantly.

3.   CONCLUSION

Proposed methodologies for analysis and assessment of business efficiency in accordance with the information from the enterprise's Statement of income and expenses are useful for the economic practice. Under the conditions of open economy and globalization in all areas of business life, knowledge about business efficiency is crucial for the prosperity of every enterprise and its position on the competitive market. The analysis of business efficiency, including on the basis of the Statement of income and expenses, allows the enterprise to assess its position both with regard to its competitors and with regard to the industry it operates.

REFERENCES

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