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# MODEL OF THE DIAGNOSIS OF PROFITABILITY OF THE ENTERPRISE

**Felicia RĂDUCANU**

*Universitatea Nicolae Titulescu*

## **Abstract**

*In this article the author set out to make an analysis of the essential elements that influence the profitability of the enterprise. The purpose of this analysis is to identify these elements of influence, these indicators at the microeconomic level, which give meaning to the evolution of the enterprise, so that business managers can act with precision and determination to achieve maximum profitability. Thus, elements such as economic flows, operating income, expenses, profit or loss, interim management balances, value added, gross surplus, operating profit, self-financing capacity, break-even point were taken into account. All these elements were analyzed one by one, determining for each one the factors of influence, ie those independent, causal variables, which determine their change over time and consequently the evolution of these dependent variables.*

**Keywords:** *income, expenses, profit, loss, variables, indicators.*

**JEL classification:** *D20, D50*

## **Introduction**

In the article entitled *Model of the diagnosis of the profitability of the undertaking*, the author took into account the presentation from a theoretical and practical point of view of some aspects essential to the determination of the profitability of the enterprise. Thus, starting from simple to complex, in the first part of the work he took into account the fact that the proper conduct of the activity of each enterprise is carried out according to its object of activity, in whatever field it may be, on account of multiple financial economic operations, which are reflected in the summary accounting documents, in the form of flows and stocks.

It also pointed out that flows have an immediate influence on the re-establishment of the year, while stocks have an impact, time or duration, on the financial equilibrium, the need to finance management operations and ultimately on the solvency of the undertaking.

Next, the management revenues were taken into account, including practically the value of all acts of legal enrichment of the enterprise, related or not to the current activity, pointing out that practically these revenues actually constitute the turnover achieved by the enterprise from the sale of goods and services to third parties during the financial year.

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In the article, emphasis was placed on the accounting and financial interpretation of incomes and expenses, on the analysis of intermediate management balances, on value added, on gross surplus of operations, on operating profit, on self-financing capacity and last but not least on the analysis of the break-even point.

### **Literature review**

A number of researchers have paid particular attention to the business environment and the possibility of increasing the financial results obtained by micro-enterprises. Thus, Anghelache C. (2019) addresses the issue related to the issue of measures that can influence the business environment, which is the interest charged on loans granted by banks to economic agents, in parallel with the interest charged on deposits attracted by banks on the market. It also envisages the money supply, which plays an important role in maintaining exchange rate stability, as well as in carrying out those business plans, which take into account the possibility of using bank loans. Bătcă-Dumitru C.G. and others (2019) are also concerned with the management and internal organization to increase the performance of the enterprise. A similar theme is addressed by Robu V. (2014) and Tilică, E.V. et al. (2020). Gomoii, B.C. (2017) makes in the paper was a careful passage through the accounting of economic entities coming up with practical examples throughout the analysis. Regarding the evaluation, presentation and analysis of the performance of an enterprise was the subject of the study of Jianu I. (2007). Lungu I.C., Dumitru A. P. (2007) made a thorough study highlighting the efficiency of the enterprise's performance.

### **Methodology, data, results and discussions**

Economic flows, i.e. incomes and expenditures, are mainly generated by three areas of activity, namely operation, which is the basic activity in the industrial, construction, commercial and / or service provision sectors; financial, concerning participations in the capital of other companies and other investment and exceptional shares, relating to management operations for purchases and sales, levied or paid for by the undertaking from management operations relating to the disposal of assets and to income and charges arising from capital operations.

Beyond the ordinary operating, financial and exceptional activities, elements of income and expenses from extraordinary events can occur, which are very rare and outside the decision-making power of the management of the enterprise, namely co-owners, nationalizations, modification of the tax legislation, calamities and others.

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Extraordinary items will be recorded in the profit and loss account at the net amount of their tax effects.

Management revenues include the value of all acts of legal enrichment of the enterprise, whether or not related to the current activity. Most of the revenue is the turnover achieved by the undertaking from the sale of goods and services to third parties during the financial year. As a result, to income are added sales, invoiced to customers, increase in production stocks and stocks of finished products, reversals on depreciation and provisions, interest on investments, dividends from external participation, distributed subsidies and others.

In the terminology of International Accounting Standards (IAS), revenues are increases in economic advantages, during the financial year, which result in an increase in equity, different from that which comes from the capital contributions of the owners. Income can take the form of an increase in assets, such as increased liquidity and / or receivables from the sale of products, works, services or that may take the form of debt reduction, respectively delivery of products and services for the repayment of a debt.

According to the IAS, expenses are reductions in economic advantages, during the financial year, which result in a reduction in equity different from that which comes from distributions to owners, namely refunds, dividends. They appear in the form of a reduction in assets, i.e. consumed materials, or in the form of increases in debts, respectively for the payment of wages, taxes and fees.

The expenditure constitutes all the cost items incurred by the enterprise during the year, such as consumption of raw materials, personnel expenditure (salaries + social charges), depreciation and provisions calculated during the year, interest payable, the carrying amount of assets ceded, destroyed or disappeared, taxes.

The difference between income and expense constitutes the result, i.e. the profit or loss for the financial year.

The accounting and financial interpretation of revenue and expenditure will take into account the fact that:

- » the sale of the finished product is, from the point of view of accounting, an income, even if this claim will be collected later or in the following financial year. On the other hand, the collection of an amount receivable, constituted in the previous year, will not create a new income (accounting) and only the classification will be recorded and the debt will be extinguished;
- » an energy consumption is an expense to the undertaking, even if the supplier will not be paid by the end of the financial year. The

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payment of the supplier, in the following year, will not generate a new expenditure for this year, but will only be the payment of a previous debt;

- » the annual depreciation of property, plant and equipment is recorded as operating expenses, but has no impact on the treasury unless it is necessary, for example, to replace a fully depreciated machine and a payment will be made for it;
- » provisions made to cover the future impairment of assets or to cover risks will be charged to expenses and diminish the results of the year without consequences for the treasury. If in the future the risks have become effective, then a payment will take place, if, however, the risk is totally hedged, the provision remains devoid of purpose and then it will be recorded in a revenue account in the form of reversals of provisions. It will increase the result of the exercise, but will not influence the treasury, except in tax matters.

*Interim management balances*, based on the profit and loss account, a number of value indicators on the volume and profitability of the enterprise's activity are determined.

The stepwise construction of the indicators, starting from the most comprehensive, i.e. the output of the exercise, the mark-up and ending with the most synthetic, i.e. the net profit of the year, suggested naming the cascade series of intermediate management balances.

*Value added* expresses the increase in value resulting from the use of factors of production, in particular labour and capital factors, above the value of materials, subassemblies, energy, services purchased by the undertaking from third parties. This added value represents the source of monetary accumulations from which the remuneration of the direct and indirect participants in the operating activity of the enterprise is made, such as:

- the staff, through salaries and allowances, prizes and social expenses;
- the State, through taxes, duties and similar payments fewer operating subsidies;
- creditors, through interest, dividends and commissions;
- the undertaking, by what is allocated for its self-financing capacity.

By reporting the remuneration of each participant to the value added, an assessment of the distribution of the overall revenues to the partners of the enterprise can be made.

By summing up the added values from all enterprises in the country, the *Gross Domestic Product* (GDP) is obtained. It is the only internal supply of goods and services to meet domestic and external demand for final consumption, in the private and public sectors.

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*Gross operating surplus* expresses gross accumulation from operating activity, knowing that depreciation and provisions are only calculated expenses, not paid. Therefore, until their request for investments, risks or expenses, depreciation and calculated provisions are found in the monetary accumulations of the enterprise. The gross operating surplus expresses the potential capacity to self-finance investments from depreciation, provisions and profit, to pay debts to the state budget and to remunerate capital investments, respectively shareholders and creditors.

*Operating profit* expresses the absolute magnitude of the profitability of the operating activity by deducting all expenses payable and those calculated from the revenues of the harvest receivable and those calculated. For financial calculations of profitability is calculated the profit before interest and tax. This is the difference between total income and total operating, financial and exceptional expenses, excluding interest and corporate tax. Very often EBIT is considered to be equal to operating profit, as the other items outside operating profit are insignificant.

The profit before interest and taxes has, after deducting the corporate tax (EBIT - Tax), a special significance, in the sense that it expresses the accounting potential of remuneration of shareholders with dividends and creditors, of banks, with interest.

$$\text{EBIT} - \text{Tax} = \text{Net Profit} + \text{Interest}$$

Analyzing the above relationship, it follows that the term on the left of equality expresses the net result of the exploitation of the capital invested in the assets of the enterprise, and the terms on the right express the purpose of that result, namely shareholders and creditors.

The actual amount of remuneration of shareholders and creditors is given by the available cash flow (CFD), after capital operations.

Profit before tax (EBT). it is determined by the profit or loss of exploitation, as well as by that of financial and exceptional activity. It is therefore the result of ordinary, operating, financial and exceptional activity.

$$\text{CEBT} = \text{EBIT} - \text{Interest} = \text{Operating profit} \pm \text{Financial result} \pm \text{Exceptional result}$$

The net profit expresses the absolute size of the financial profitability, with which the shareholders are remunerated for the equity invested. It is to be distributed in the form of dividends, in relation to the number of shares.

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Just as, on the basis of the balance sheet, an indicator was determined that would highlight, in a synthetic way, the potential for the development of the enterprise, namely the cash-flow. Similarly and with close significance, the *self-financing capacity* (CAT) can be determined on the basis of the profit and loss account.

The self-financing capacity reflects the financial potential for economic growth of the enterprise, respectively the financial source generated by the industrial and commercial activity of the firm after the decrease of all expenses payable at a certain maturity.

Self-financing capacity can be determined by two methods: deductive and additional. The deductive process starts from the gross operating surplus (EBE), which signifies the gross result of the industrial and commercial activity, from which the other payable expenses of the enterprise, respectively financial, exceptional are deducted successively:

$$\text{CAP} = \text{Unearned income} - \text{Payable expenses} = \text{EBE} + \text{Financial and exceptional revenues receivable} - \text{Financial and exceptional expenses payable} - \text{Corporate income tax}$$

In the additional procedure, it is based on the net result of the year to which are added the expenses, namely depreciation, provisions, payable at a certain maturity, after deducting from them the calculated income, respectively the reversals on the provisions:

$$\text{CAF} = \text{net result} + \text{Calculated expenses} - \text{Calculated income} = \text{Net profit or loss for the year} + \text{Calculated depreciation and provisions} - \text{Reversals on provisions} - \text{Share of subsidies transferred to the results account} + \text{Net book value of assets ceded} - \text{Income}$$

The analysis of the break-even point makes it possible to obtain management information useful for the forecast of the enterprise's budget on:

- turnover for which the result of the enterprise is void, i.e. sales are equal to variable fixed expenses;
- the forecast profit at a given change in turnover;
- turnover to achieve a desired profit;
- which is the turnover in order to maintain a certain profit, given that fixed expenses increase.

This method starts from the separation of expenses into variables in relation to turnover and in phases independent of the change in turnover.

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The analysis on *the basis of the break-even point* offers the possibility of determining management information that is interesting from the point of view of economic calculation, but less relevant from the point of view of economic reality. The separation in expenses into variables and fixed expenses does not remain constant over time, nor for larger variations in turnover. The method therefore yields good results only to small-scale enterprises, i.e. at workshop, factory and commercial enterprises where this separation does not undergo sensitive changes.

The profit and loss account shall reflect the economic flows of income and charges generated by the following categories of ordinary management operations:

- operations for the exploitation of assets in the enterprise's activity profile such as the production and sale of goods, the provision of services;
- financial operations involving the enterprise in the capital market, such as the purchase of shares of other enterprises, direct participation in the formation of the share capital of other enterprises and in the money market, such as the granting of loans in the form of advances, subsidiaries.

Operating and financial operations are reproducible, repetitive in nature and therefore form the day-to-day activity of the enterprise. Also, exceptional operations occurring independently of current operating and financial activity are repetitive in nature, such as transfers of fixed assets, locations, transport routes, fines, penalties.

Very rarely, the enterprise can also register extraordinary activities outside its decision-making power, such as expropriations, nationalizations, tax changes, calamities.

The income and expenditure of the enterprise reflects acts of enrichment or consumption of equity as an accounting potentiality of future receipts and payments. Some accrued income, and especially some expenses, depreciation, provisions, are only calculated, without direct impact on the treasury. Basically, they do not have a firm maturity of collection or payment.

Income can take the form of rising assets and falling debts, and expenses can come in the form of asset reduction and increased debt.

On the basis of the profit and loss account, various successive margins of monetary accumulation can be calculated from the sale of goods and services. The widest margin is the output for the year comprising production sold to third parties, production stored in current and finished products and fixed production in equipment and plant by self-dotting. To this may be added the mark-up of any individual assets of trade.

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Output for the year = Output sold + Stored production + Fixed production

*Value added* is the value added by the enterprise to the value of consumptions from third parties, namely materials, subassemblies, purchased services, being calculated according to the relationship:

Value added = Output of the year - Consumptions from third parties

Value added is the source of remuneration of employees, the state, creditors, shareholders and the enterprise itself for self-financing economic growth.

By aggregating all the added values of enterprises in the country, the Gross Domestic Product (GDP) is obtained. It constitutes the main source of formation of the domestic supply of goods and services for final consumption, private and public.

*The gross operating surplus* (EBE, earnings before interest, taxes, depreciation and amortization = EBITA), expresses the gross accumulation margin that will be distributed to the state for taxes, to creditors for interest and shareholders for dividends and self-financing of economic growth:

EBE = Added value - (Wages + Taxes indirectly)

*Operating profit* (EP) is the gross profit of exploitation:

PE = EBE - (Depreciation - Provisions)

Gross management profit (EBIT - Tax) expresses the result of the entire activity of management of the assets of the enterprise that will be distributed to shareholders and creditors.

Profit before tax (EBT) is the result of ordinary, financial and exceptional operating activity.

Net profit (PN) expresses the residual result of equity after deduction of tax and interest:

PN = EBIT - Corporate income tax ( $\pm$  Extraordinary items)

*Self-financing capacity* (CAF) is in principle equal to the net profit and depreciation:

CAF = PN + Amo



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In general, CAF is the difference between cashable income and payable expenses.

For analytical calculations, either the deductive method (from the EBE of other charges payable: interest, taxes) or the additive method (to the PN of depreciation and provisions) is used. Other types of analysis of the profit and loss account start from other groupings of expenditures of the management activity, such as:

- functional, i.e. commercial expenses, production expenses and gross margin (MB), covering sales, administrative expenses and net profit:

$$MB = \text{Sales} - \text{Cost of goods sold}$$

- direct expenditure by product, by activity center and margin on direct expenses (DBM), covering indirect costs and net profit:

$$MCD = \text{Sales figure} - \text{Direct expenses}$$

- variable expenses in relation to non-turnover, sales, and variable expenditure margin (CVM), covering fixed expenses (F) and net profit:

$$CVM = \text{Sales figure} - \text{Variable expenses}$$

Based on this grouping, considered constant over time, the *break-even point* (PR) can be calculated, respectively the turnover for whose size the revenues are equal to the expenses and the profit is zero:  $PR = F/MCV$  (%).

### Conclusions

From the article entitled *Model of the diagnosis of profitability of the enterprise*, some conclusions are drawn both theoretical and practical. First, the main elements concerning the determination of the company's profitability were considered to be shed light on the basis of the company. Thus, a first conclusion that emerges is that economic luxuries are generated by exploitation, by the financial capacity of the undertaking in terms of participations in the capital of other companies and by sales.

It was also pointed out that there are elements of income and expenses from extraordinary events, such as co-owners, nationalizations, changes in tax legislation, calamities and others.

Another conclusion that emerges from this study is that income is basically increases in economic advantages, which result in an increase in equity, being different from that which comes from the capital contributions of the owners.

Another conclusion is that the added value is practically the source of monetary accumulations from which the remuneration of the direct and indirect participants in the exploitation activity of the enterprise is made.

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A final conclusion is that the analysis on the basis of the break-even point offers the possibility of determining some interesting management information from the point of view of economic calculation. However, given that the division into expenditure into variables and fixed expenses does not remain constant over time, nor for greater variations in the figure of payments, this method gives good results to small enterprises, i.e. at workshop level, plant and commercial enterprises where this separation does not undergo any significant changes

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