

ANALYSIS OF MARKETING FORMS AND ECONOMIC PERFORMANCE OF FOREIGN TRADE OPERATIONS SYSTEM BASED ON EFFICIENCY INDICATORS

Lect. Ph.D Lăpăduși Mihaela Loredana
Prof. Ph.D Căruntu Constantin
University “Constantin Brâncuși”
Faculty of Economical Science
Tg-Jiu, Romania

Abstract: In the context of irreversibility globalization trends of all business of the company size, the sector of foreign trade transactions has a particular significance. Almost all aspects of economic performance of these operations are discussed not only in terms of costs and benefits, but also in terms of meaning efficiency indicators system. The foreign trade operations, as a result of economic activity and a form of economic interaction, is an indispensable element of international economic relations, which, through its mechanism contributes to the involvement of operators from different countries in the development and intensification of international economic transactions.

JEL classification: F23, M16.

Key words: performance, foreign trade operations, efficiency indicators, export efficiency, the ABC method, rates method, balance sheet method, imports rentability.

The general approach of this work is the vision of economic performance analysis of foreign trade operations based on system efficiency indicators, subordinate to business growth company aim.

The role of indicators is to enable the decision structures to know better and to consider what can solve the problems identified, as can to substantiate decisions. Indicators are the connecting link between information - analysis - a decision that is fundamental operating sequence of decision-making system.

Analytical methods based on forms of trading

In the current economic frame, the foreign trade activity of any business is conducted in a dynamic and aggressively environment, assuming a permanent ratio to domestic and international demand, anticipation of competition movements. Such a framework must need and use the analysis as a tool for surveillance of foreign trade operations .

Same time with the development and processing of economic activities of businesses were developed and perfected a variety of methods for analyzing the efficiency and profitability of economic activities. A very important issue is that of selecting the method that suits best to assess the work under investigation.

In order to highlight the importance of using certain types of financial economic analysis and comprehensive diagnostic analysis to the form of marketing used, we will present some methods of analysis of the main types of marketing forms.

The analysis of overall foreign trade operations accordingly to the nature of performances obtained or the organizational structures, means adopting a complex of methods of analysis, respectively an analysis methodology. Thus methodology of analysis of foreign trade activity as a whole has the following principles:

- determine the economic efficiency of foreign trade from the stand point of national economy;
- determine the economic efficiency of foreign trade activity in each organizational entity and its aggregation on organizational levels;
- highlight qualitative side of foreign trade activity, causing all the economic effects that occur as a result of this work;
- follow basic idea of determining the contribution of foreign trade activity in GDP growth

The principles which should underpin the financial economic analysis methodology of foreign trade actions are:

- determine the economic efficiency of operation in relation to manner how to harmonize of the macroeconomic and microeconomic interests;
- determine the operations which have significant contributions to the economic efficiency of foreign trade activity;
- highlight the qualitative side of foreign trade operations in the context of integrated economies;
- evidence and assessing long-term effects and calculating the profitability of their operations in light of it ;
- surprise operation efficiency of foreign trade in line with manufacturer's efficiency.

It is very important that the methodology of analysis in the foreign trade operations, the basic cell activity in this area, leading to obtain the necessary information for policy makers in selecting appropriate strategies to ensure economic development in the context of the restrictions desired to sustainable development.

The most used methods of economic analysis used in marketing to the marketing form that is used in foreign trade operations are:

ABC method - the method is based on a selective analysis of the components of an economic phenomenon or a result depending on the position they occupied in the whole frame. The method starts from the premise that 80% of results are generated by 20% of the factors of influence and, same time, their distribution is curved Pareto. ABC analysis steps are: identifying and formulating the problem to be solved, the demarcation of elements belonging to quantitatively factor, determining qualitative factors, determining the global parameter, the ordering of items according to the global setting, the design curve ABC. Relationship of calculation used by the ABC method is:

$$\bar{I} = \frac{\sum di}{\sum d} \text{ sau } \bar{I} = \sum gi$$

consisting of:

- \bar{I} - average value of indicator which characterize the studied phenomena;
- d- the sum of quantitatively factor;
- i - qualitative factors,;
- g – appropriate weight.

The method has multiple applications, including: selection of products, analysis of operations in a work process, reduce inventory, determining the load of equipment,

sizing of storage facilities, preparation of energy balances.

In the marketing activity the ABC method is used to determine consumer needs, sales volume, establishing products portfolio, establishing customer portfolio, etc

The weighted average coefficient of structure - is used to determine the results of the company, such as rate of return, benefits obtained, labor productivity, cost savings, etc. Weighted average of structure or variety (K_a) is related to coefficient range (K_s), the relationship between them providing informations about the extent to which production was carried out on all sorts and so:

$K_s = 1 = K_a$ - when the forecast for all the sorts was accomplished 100% or proportional surpass;

$K_s = 1 > K_a$ - when the forecast of different sorts of developments is in a range to another;

$K_s < 1 = K_a$ - when the forecast is progressing various sorts, but overall it was made 100%;

$K_s < 1 > K_a$ - when the total volume forecast sorts evolved different, taking values higher or lower compared to those proposed;

This method of analysis can be used to determine the structure of supply depending on the extent to which its different components are required.

The balance sheet method - is used when the relationship between the elements studied are the type of sum or difference. It is used in economic analysis when is intended to ensure a balance between resources and needs in different fields.

If the analyzed factor is: $R = a + b - c$ then the analysis is made thus:

$$\Delta R = R_1 - R_0$$

$$R_1 = a_1 + b_1 - c_1$$

$$R_0 = a_0 + b_0 - c_0$$

Influences of elements on studied factor R are:

$$\Delta_R^a = a_1 - a_0$$

$$\Delta_R^b = b_1 - b_0$$

$$\Delta_R^c = -(c_1 - c_0)$$

In marketing this type of analysis can provide information about sales volume, profit level, the costs level, etc. Based on such analysis can determine the optimal sales price depending on the prevailing similar products by competitors.

Rate method - is an operational tool in the analysis and internal assessment of the company. Rates involve calculating the ratios between the effects and efforts to achieve the effects. This method gives information about the effectiveness of ongoing activities by the company. Expression rates can be as follows:

$R = \text{effect} / \text{exertion} \rightarrow$ express the obtained effect on exertion unit

or

$R = \text{exertion} / \text{effect} \rightarrow$ express the exertion needed in order to obtain a unit of effect.

In the marketing activity the method can be applied to calculated the effectiveness of promotions in relation to the effects they have produced on the level of sales and consequently on business profitability. They provide both information regarding the availability of material, financial and human resources that society has at one time and they can mobilize in order to achieve goals.

For economic and financial analysis of foreign trade operations can be used

arrays of indicators. The matrix provides a framework for calculating the efficiency of international trade operations trying to capture as many indicators that could provide information about the effectiveness and appropriateness of the transaction. Obviously, the case will be used only relevant indicators. If a matrix is built at the microeconomic level, ie at an international transactions meant to achieve, are considered indicators that highlight the efforts and effects by category of resources in or out of the economic cycle.

Marginal analysis method - using this method can calculate the marginal productivity, marginal cost, and marginal profit as:

▪ the margin productivity: $Wm = \frac{\Delta CA}{\Delta T}$;

▪ the margincost: $Cm = \frac{\Delta Ch}{\Delta Q}$;

▪ the margin profit: $Pm = \frac{\Delta P}{\Delta CA}$.

consisting of:

ΔCA - increasing of turnover;

ΔT - increasing by a unit of used employees;

ΔCh - expenses addition;

ΔQ - production addition equal one unit.

ΔP - profit addition obtained to an increase of turnover equal to ΔCA .

If we consider the information that can provide these methods of analysis and we correlate them with various forms of international trade could get a summary statement as follows:

Table no. 1

	ABC Method	Average structure coefficient	Balance sheet method	Rates method	Margin analysis method
Direct commercial transactions	Yes	Yes	Yes	Yes	Yes
Indirect commercial transactions	Yes	No	Yes	Yes	Yes
Compensation / Counterpart	Yes	No	Yes	No	Yes
Auctions	Yes	No	Yes	No	Yes
Special trade operations	No	No	Yes	No	Yes

Based on the results obtained can make decisions about increasing or restricting activity, price levels can then be compared with market prices, etc

As an enlightening example we might have in the wine export to European markets. Romania is among the top 10 wine producers in the world, member of the Wine Office since 1928. Although our country has an excellent soil and climatic conditions, Romanian wine exports are modest compared with production.

Despite the recognized quality of the wine and the yields high enough that Romanian wines can get, the prices that the company VINROM SA could obtain was below countries on the international wine market. If exporting company VINROM S.A. adopts a system of commission (intermediate), is required to surrender foreign trade company a fee equal to 2% of exports achieved. In terms of the exporter if the situation was favorable, the accounting sheet analysis method used for export operation, in that, no matter how low the price was still the company, due to the large volume of transactions obtained an average gross profit good enough. The average price obtained for a liter of wine is around 2 euros, as opposed to 4-5 euro or more is obtained as the same quality wines.

The cause to the prices obtained was so low and why the partners preferred in bulk shipments of wine (type of delivery used in wines of lower quality), is the type of glass and especially the quality of corks. International markets a wine must be bottled where white in a white bottle or up light cream at maximum, and if the wine is red, the bottle color must be glass dark brown, green, and brown. For all types of the wine is imperative that the bottles are sealed with a cork longer then 4 cm, when disposing of glass does not break, leaving pieces of cork on the neck of the bottle .

Applying the marginal cost method concluded that if attention is paid to the category are packaged wine bottles, which does not involve additional expenditure, but a more rigorous supply management and its correlation with programme supplies/deliveries and if costs increase per liter to 0,75 euros, 0,30 euros difference in how much a low quality cork up to 1.05 euros as the cost of a quality stopper (cork very good, cooked in oil) the prices will be able to obtain comparable with the prevailing world price and an increase in orders by about 10%. If we perform a calculation we see the benefits that could ensue for producers and traders.

Table no. 2

Exported volume = 300.000 liters	Exported volume = 330.000 liters
Cost/l liter initial = 1,90 euro/liter, from: - 1,40 euro/liter content; - 0,30 euro/liter cork; -0,20 euro/liter bottle.	Cost/l liter initial = 2,69 euro/litru from: - 1,40 euro/liter content; - 1,05 euro/liter cork; - 0,24 euro/liter bottle.
Initial total cost = $V \times C_i$ $C_{ti} = 300.000 \times 1,90 = 570.000$ euros	Initial total cost = $V \times C_i$ $C_{ti} = 330.000 \times 2,69 = 887.700$ euros
Initial total profit = $V \times P_i$ $P_{ti} = 300.000 \times 2,49 = 747.000$ euros	Initial total profit = $V \times P_i$ $P_{ti} = 330.000 \times 3,99 = 1.316.700$ euros
Initial commission= $P_{ti} \times 2\%$ $C_i = 747.000 \times 2\% = 14.940$ euros	Initial commission = $P_{ti} \times 2\%$ $C_i = 1.316.700 \times 2\% = 26.334$ euro
Producer profit = $P_{ti} - C_{ti} - C_i$ $P_p = 747.000 - 570.000 - 14.940 = 162.060$ €	Producer profit = $P_{ti} - C_{ti} - C_i$ $P_p = 1.316.700 - 887.700 - 26.334 = 402.666$ €
$\Delta C = C_1 - C_0 = 2,69 - 1,90 = 0,79 \text{ euro / litru}$ $\Delta P = P_1 - P_0 = 3,99 - 2,49 = 1,50 \text{ euro / litru}$	
<p>Increase by 10% the volume of wine exported and reorganizing old bottling system it obtained a profit margin of:</p> $P_m = \frac{402.666 - 162.060}{1.316.700 - 747.000} = \frac{240.606}{569.700} = 0,42$	

In conclusion both producer and trader (the commission) approximately doubled its gross profit achieved by increasing only 10% of the volume of wine exported and quality packaging and bottling.

The economic efficiency indicators of foreign trade operations

The indicators used to assess the foreign trade operations and matrix of indicators proposed for the operations of export and import contain a large number of indicators and are considered open systems for elections precisely those elements that have maximum power information. Due to the complexity analysis system and that each indicator provides information about a particular item or phenomenon; consider that the characterization of foreign trade operations is necessary to use a system of indicators. To express the economic efficiency of foreign trade is necessary to use a complex of indicators to highlight priority issues namely: indicators for use at work, indicators of capital consumption, material consumption indicators, and indicators of profitability. Moreover, different authors established a system of indicators of profitability, which it considers sufficient to determine the economic efficiency of foreign trade

As indicators for export efficiency could be considered:

▪ *the return product course/flow (Cr)* - expresses the cost of one unit in lei exchange a product or a product group. This allows comparison of national social workload materialized in the product exported to the foreign currency amount received for it. It is calculated as the ratio between the domestic price of export complete product (Pi) and external price

$$(Pe): Cr = \frac{Pi}{Pe};$$

▪ *foreign currency contribution (Av)* - is the newly created value, expressed in foreign currency and conducted through the activity of trade. Can be calculated as absolute value or rate. Absolute value equals the difference between external price (Pe) and materials costs (M) and the rate is divided by external price

$$Av = Pe - M$$

$$Rav = \frac{(Pe - M)}{Pe}$$

▪ *the return course of foreign currency contribution (Ca)* - expresses labor exploitation incorporated into an exported product. It is calculated as the ratio between internal intangible costs, ie labor and overhead costs (Ci) and the contribution rate

needed to achieve product obtained from its export $Ca = \frac{Ci}{Av}$.

▪ *foreign currency benefit (Bv)* - expressed the foreign currency earnings in the export activity of a product and the price is calculated by deducting the total expenditure of the internal external, material and immaterial (M + Ci) to the related product. It can calculate the absolute value or rate.

$$Bv = Pe - (M + Ci)$$

$$Rbv = \frac{[Pe - (M + Ci)]}{Pe}$$

▪ *the degree of recovery of raw materials (Gv)* - expressed increasing value of raw materials incorporated in the product to be exported. It is calculated as the ratio of

external price of the product and value in global commodity prices (Mp) incorporated in the product: $G_v = \frac{P_e}{M_p}$.

Other system of establishment the external trade rentability is:

⇒ *indicators of ordering the stock for export:*

-return course of gross export (Crb = Cr);

-return course of net export (Cm) – is used for the products with a high degree of processing;

-adjusted return course (Crc) – takes into account the effective cost (Pc) and no production price or delivery price.

- credit return course of export

⇒ *indicators of foundation the export operations profitability:*

- net foreign currency contribution (Av);

-foreign currency benefit (Bv);

- area /exported merchandise index;

⇒ *indicators of merchandise import rentability:*

- return course of gross export;

- area /exported merchandise index;

⇒ *indicators of quality characterization of efficiency and rentability of external trade:*

-FOB price of export and import operations;

-foreign currency price per exported and imported merchandise ton;

-exchange rate index;

⇒ *indicators to analysis the foreign trade special operation rentability:*

-rentability of switch and aller-retour operations;

-rentability of merchandise re-export;

-rentability of processing or Lohn operations;

⇒ *indicators of efficiency of investments related to external trade*

Dan Dumitru Popescu proposes in his "Fundamentals of the economic efficiency of foreign trade" formation of two systems of different indicators: an indicator system of a profitable business and profitability indicator of system operations. The profitability indicator of proposed operation consists in: the return of export operations, the return of materials and equipment, net foreign exchange contribution, the net rate of return of contribution, the share of expenditure on fuel and energy in external price profit and profit rate, return rate of import operation.

The conclusion is that before making a transaction in foreign trade is necessary to consider the world market situation, respective product prices in different markets, the price of raw materials needed to produce, the production capacity, labor productivity and other data on which to calculate a series of indicators that could provide a return statement about opportunity of export or import the product.

Economic efficiency of foreign trade is to encompassing all spheres of the effects generated by foreign trade operations and activities occurring direct and indirect, immediate or in future.

The efficiency of foreign trade should be considered and in terms of its contribution to national economy development and its integration into the global economy. In the same context the return or profitability of foreign trade is reflected in macroeconomic indicators through financial – foreign currency and material indicators.

REFERENCES

1. Belu, M.G. Operațiuni de comerț exterior. Aplicații, Studii de caz, Ed. ASE, București, 2008.
2. Bușe, L. Analiză economico - financiară, Ed. Economică, București, 2005.
3. Căruntu, C. Analiza economico-financiară a firmei. Concepte. Metode. Aplicații, Ed. Universitaria, 2009.
4. Giurgiu A. Comerțul intraeuropean. O nouă perspectivă asupra comerțului exterior al României, Ed. Economică, București, 2008.
5. Popa, I. Tranzacții de comerț exterior, Ed. Economică, București, 2002.
6. Popa, I. Tehnica operațiunilor de comerț exterior, Ed. Economică, București, 2008.
7. Popescu, D.D. Fundamente ale eficienței economice a comerțului exterior, Ed. Europa Nova, București, 1996.
8. Popescu D.D. Creating Value through Company Analysis, H'ART Publishing Science, București, 2007.