

PROFITABILITY AND THE PROFITABILITY THRESHOLD OF FREE TRADE ZONES IN ROMANIA

1. Introduction

Free trade zones are the most complete form of suspensive customs systems. Basically the law stipulates that in a particular area of the national territory goods can be introduced for processing and trade, without imposing tariff and non-tariff restrictions as compared to the national trade.

Free zone plays an important role in facilitating the transition from a centralised to a free-market economy. This process of transformation can be controlled and shaped in subtle and sophisticated ways others than the global liberalisation of the national economy. From this perspective, the role of the free zone is not only to produce new merchandise and service for the internal and external markets but mostly to facilitate the passage from the centralised market to the free economy, to introduce new management methods and new executive technologies for the host country.

One of the criteria that lie at the basis of the establishment of a free zone, namely to invest capital in such an area, is the profile, cost and degree of qualification of the local workforce [1, 31].

Finally, one can affirm that, even though each country has its own specific national features, resources, customs and traditions, as well as a certain level of economic development, it will seek to utilise these in an original and thorough manner so as not to neglect previous experience which can generate many valuable ideas.

2. The advantages and profitability of the location of a free zone

The free zone, with its well determined structure, both from a geographical and administrative point of view, may represent an instrument

of modernising certain areas, in a relatively short period of time. Inasmuch as the free zones can ensure Romania's gradual integration into the world economy, they could be considered a useful instrument, complementary to other instruments activating the economy.

The main advantages brought about by the creation of free zones in Romania are:

- increase of Romanian exports and foreign currency influx, given the limited potential for competitive export;
- modernisation of the national economy;
- providing employment and improving the level of work skills;
- facilitating the transition from the autarchic to the open economy and the integration of the Romanian economy into the world economy.

In the analysis of profitability, non-significant factors are those generated by the state, for instance the rent paid to the authorities by the local enterprises. Rents are a private revenue for the authorities (that is due to the state in the end) and a private cost for the local enterprises. It is important to measure all the costs as thoroughly as possible. Nevertheless, it is essential for the state to know whether, on the whole, the budget will lose or win (in local currency) and whether the balance of payments will benefit from the creation of those areas. It is possible that the local citizens may earn profit compared to the financial losses sustained by the state which will justify the adoption of this project.

3. The advantages and profitability of entrepreneurs investing in the free zones in Romania

The attractiveness of a free zone in our country depends greatly on the advantages it can offer to foreign investors and not only, which are reflected in increased foreign currency influx.

The strategy adopted by the authorities regarding the fiscal and financial advantages and stimuli, will represent one the base components of Romania's global strategy to attract foreign investment in free zones.

Any initiation of a free zone project begins with the motivation of functioning with at least three advantages namely:

- tax deductions or exemptions for various periods, in most cases for 5 to 10 years. There can be total exemptions for shorter periods of time.

- Tariff concessions for services such as simpler, easier to fill documentation, prompt issuing of import / export authorisations, general assistance provided by the free zone administration;
- Financial assistance.

As far as the free zones in Romania focused on promoting export, the package of advantages which can be granted to investors is:

- the seaboard geographical location;¹
- available industrial capacities;
- an internal market with considerable absorption capacity (greater than that of the majority of neighbouring countries);
- competent, affordable workforce;
- there are no customs or other taxes on the goods it imports or exports which are not destined for the internal market.

Profitability for entrepreneurs¹ is the second key element for the success of the free zone which is normal since a company that does not earn profit from a particular business will eventually abandon it or will improve it by means of adequate strategies.

The cost-profit analysis for a free zone for investors includes:

Costs formed by:

- the return of foreign credits;
- the return of loans in convertible currency;
- investments expenses not covered by loans (in or outside the zone);
- exploitation costs (salaries paid by the state, the zone or the local enterprises, purchase made by the state, the zone or the local enterprises).

Income generated by:

- reception of foreign loans;
- refunding of debts, by the state or the zone authority;
- sales of the local enterprises;
- taxes.

¹ It is claimed that a free port in Constanța would attract Japanese investors, willing to invest in: fish processing units, a chain of casinos on the sea coast, production and trade of wine and furniture, manufacture of Romanian marble. Similarly, many Japanese and South Korean investors have shown interest in the free zone near Drobeta Turnu Severin. For companies that frequently use the Rhine - Danube navigation route, the establishment of a transshipment point within the modern Constanța Sud port would bring major advantages. In connection with this issue, the Austrian company Voest Alpine which participated in the modernisation of the old port has already declared its interest in such a transshipment point. (*Caraiani Gheorghe, Cazacu Cornel - Zonele Libere*, Editura Economică, 1995, pg. 478-479).

² These include several obvious participants already mentioned: the government of the host country, local enterprises and the local authorities themselves. (*Koch Richard - Dicționar de management și finanțe*, Editura Teora, București, 2001 pg. 79).

4. Facilities for economic agents that invest in free zones

Given the conditions provided for by the legislation aimed at attracting foreign investment, one can talk about an encouraging background for potential investors in Romania, in the sense of the liberalisation of the investment environment. The decision of foreign companies to invest in the free zones is influenced by: political, economic and monetary stability, the zone's infrastructure, available inexpensive human resources, and concessions granted by means of total or partial tax exemptions. Foreign investors benefit from the advantages entailed by Law no. 241 / 1998 (published in the National Registry 483 / 16 June 1998) for the sanctioning of the Emergency Governmental Ordinance no. 92 / 1997 concerning the promotion of direct investment. There are various facilities granted to economic agents that invest in free zones [2, 48]:

- the economic agents are exempt from payment of VAT, excise and profit tax throughout the duration of their activity. The transfer abroad of the profit is made in accordance with the law;
- on liquidation or limitation of the activity, foreign physical or legal entities can transfer abroad their capital and profit, after paying all their duties to the Romanian state and their partners;
- the Romanian materials and accessories entering the free zone and used for manufacturing goods are exempt of customs duties, in agreement with export formalities;
- Romanian goods used for buildings, the repair work and maintenance of sites within the free zone are exempt of customs duties, in agreement with export formalities;
- Financial operations related to the activities organised in the free zone are made in free convertible currency;
- Any building with any purpose may be built, in accordance with the Romanian legislation;
- Goods in a free zone can be transferred to another free zone without payment of customs duties; the goods can also be introduced in the country in agreement with the conditions and formalities related to import or temporary storage;
- Investments in the free zones cannot be expropriated, requited or submitted to other similar measures, except for cases of public interest in agreement of the legislation and after payment of damages proportionate with the investment, which must be prompt, adequate and effective.

Table 1 presents the advantages granted to investors by a newly established free zone (Arad – Curtici) and an older free zone (Galați).

Table no. 1

Advantages granted by the free zones Arad-Curtici and Galați

Free zone Arad - Curtici	Galați free zone
<ul style="list-style-type: none"> - Profit tax exemption for the activities in the Arad Curtici free zone; - Custom duties exemption; - VAT exemption for the activities done in the zone; - Financial operations are made in convertible currency; - Profits resulting from the difference in transport taxes for merchandise brought in by the gross and exported again after packaging; - Possibility to change the origin of the merchandise; - Land concession and renting buildings for up to 50 years; - The possibility to assemble finite products, by bringing in components from other areas; - The possibility to extend the market share at the meeting point of the West and East, accessible by railway, road and plane; - The possibility to employ skilled work force; - The possibility to store goods in warehouses in the Arad-Curtici free trade zone and sell them gradually as the market is favourable to obtaining the anticipated profit. 	<ul style="list-style-type: none"> - VAT, excise and profit tax exemptions throughout the duration of the activity; - Transferring the profit abroad, according to the law; - On liquidation or limitation of the activity, foreign physical or legal entities can transfer abroad their capital and profit, after paying all their duties to the Romanian state and their partners; - The Romanian materials and accessories entering the Galați Free Zone and used for manufacturing goods are exempt of customs duties, in agreement with export formalities; - The Romanian goods used for buildings, the repair work and maintenance of sites within the free zone are exempt of customs duties, in agreement with export formalities; - Financial operations related to the activities organised in the free zone are made in free convertible currency; - Any building with any purpose may be built, in accordance with the Romanian legislation; - Goods in a free zone can be transferred to another free zone without payment of customs duties; the goods can also be introduced in the country in agreement with the conditions and formalities related to import or temporary storage; - Investments in the free zones cannot be expropriated, requited or submitted to other similar measures.

Source: *Tribuna economică* Collection, 2002.

5. The method of the profitability threshold

The universality of the profitability threshold allows the use of the *turnover – cost analysis* for the economic comparison of potential location. The problem can be solved graphically or algebraically and entails distinct stages:

- A. Determining the C_F – *fixed costs (investments)*. They include:
 - Feasibility;
 - Infrastructure;
 - Installations.
- B. Determining the C_V – *variable (operating) costs*. They include:
 - Repairs;
 - Consumable materials;
 - Transport;
 - Salaries.

In the first stage, for each location option the C_{Fi} are determined, these being independent of the turnover; the variable costs are also determined, $C_V = c_v \times N_g$, these being dependent on the turnover N_g .

Then the total costs C_T are determined, for each variant i .

$$C_{Ti} = C_{Fi} + C_{Vi} = C_{Fi} + c_{vi} \times N_g$$

2. On a cumulative diagram the variations of the total costs C_{Ti} will be represented for the proposed locations.

3. Following the analysis of the results we will select the locations involving the lowest costs for a particular free zone. Several feasible variants will result according to the respective turnover, which will be interpreted and utilised by means of a logical scheme.

For example, suppose an entrepreneur has identified three potential locations A, B and C for a free zone, situated in different geographical areas (Oradea, Turnu Severin, Iași). For each location, he calculates the fixed costs C_F and the variable costs C_V in relation to the turnover, exchange operations, taxes, rent, etc., expressed in monetary units (m. u.) as shown in Table no. 2.

Table no. 2

The Method of profitability threshold

	CF m. u. month (mil.lei /month)	CV m. u. month (mil.lei /month)	CT = CF + cV x Ng. m. u. month (mil.lei /month)
A	30,000	65	95,000
B	60,000	45	105,000
C	80,000	35	145,000

In order to determine the total costs of each potential location, $N_g = 1000$ lei/month was used, a value by which one can construct the three representations of the total costs, on graph paper, identifying as exactly as possible the intersection points (Fig. 1).

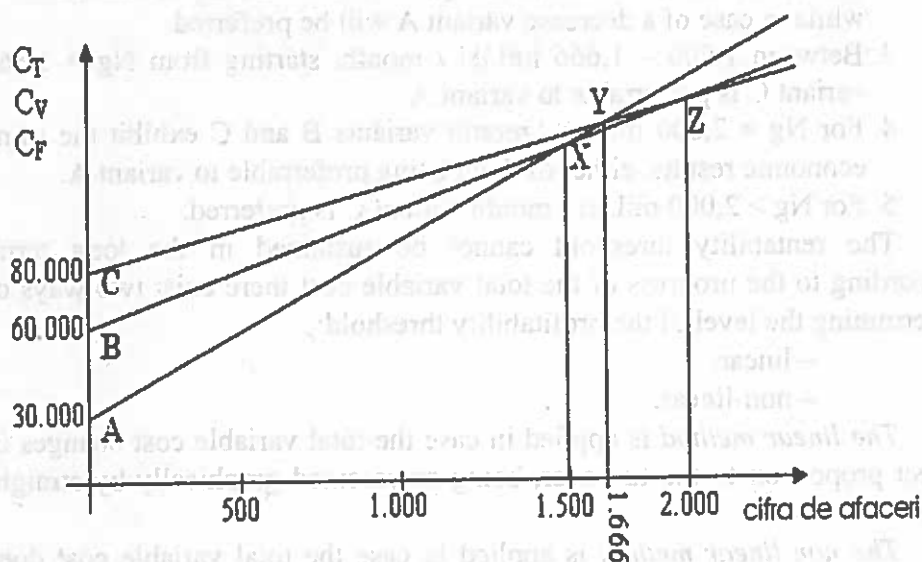


Figure 1. Graphic representation by means of the profitability threshold method²

Greater accuracy in identifying the variants' option thresholds is obtained algebraic formulae:

– for threshold X, the intersection of variants A and B:

$$N_x = (CF_B - CF_A) / (cV_A - cV_B) = (60.000 - 30.000) / (65 - 45) = 30.000/20 = 1.500 \text{ mil. lei/ month of vari}$$

² Adapted from Gondor Mihaela - *Estimarea rentabilității și a parametrilor asociați pentru un portofoliu de investiții*, [Estimation of the rentability and associated parameters for an investment portfolio], Editura Universității "Al. I. Cuza", Iași, 2003, pg.132.

– for threshold Y, the intersection of A and C :

$$N_y = (CFC - CFA) / (cVA - cVC) = (80.000 - 30.000) / (65 - 35) = 50.000/30 = 1.666 \text{ mil. lei/ month}$$

– for threshold Z, the intersection of variables B and C :

$$N_z = (CFC - CFB) / (cVB - cVC) = (80.000 - 60.000) / (45 - 35) = 20.000/10 = 2.000 \text{ mil.lei/ month}$$

The diagram allows us to visualise and analyse the complexity of the possible situations:

1. Between 0 – 1,500 mil. lei / month variant A will be preferred to variant B and, obviously, to variant C.
2. For $N_g = 1,500$ mil. lei / month, variants A and B again have more favourable results than C; the future will decide between variants A and B: if a turnover increase is predicted variant B will be selected, while in case of a decrease variant A will be preferred.
3. Between 1,500 – 1,666 mil.lei / month, starting from $N_g > 1,666$ variant C is preferable to variant A.
4. For $N_g = 2,000$ mil.lei / month variants B and C exhibit the same economic results, either of them being preferable to variant A.
5. For $N_g > 2,000$ mil.lei / month variant C is preferred.

The rentability threshold cannot be sustained in the long term. According to the progress of the total variable cost there exist two ways of determining the level of the profitability threshold:

- linear;
- non-linear.

The linear method is applied in case the total variable cost changes in direct proportion to the turnover, being represented graphically by straight lines.

The non-linear method is applied in case the total variable cost does not change in proportion to the turnover as it actually happens in reality.

The critical level of the rentability threshold is relevant given that:

- it provides information concerning the minimal level of activity required to obtain profit;
- it permits the elaboration of hypotheses and creating simulations for the evolution of the profit;
- it serves to explain the modification of the result of the exploitation.

Starting from the rentability threshold one may also determine the position indicator of the turnover (A) compared to the threshold turnover [3, 29, 30, 37]:

A=CA-CA threshold

$$A (\%) = (\text{CA-CA threshold}) / \text{CA threshold} = 100$$

The position index in absolute expression is also called *absolute flexibility* and measures the capacity of the free zone to adapt to market demands. In relative expression, the position index is called *volatility quotient*. The level of flexibility depends on the management type. On an experimental basis, the following zones have been established:

- instability: the turnover CA is above the CA threshold by up to 10%;
- relative stability: CA(10%-20%) CA threshold;
- comfort: CA >20% CA threshold.

References

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