

DIMENSIONING TECHNIQUES OF THE TRANSNATIONAL COMPANIES COST OF CAPITAL. THE FINANCING DECISION OF THE TRANSNATIONAL COMPANY

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The financing represents a major problem for any entity regardless of its nature. Much more the transnational companies (STN) through the scope of the performed operations, face problems in attracting the financing in optimum conditions.

At the basis of choosing the financing source stands the cost of capital, its minimisation representing the most important objective of the financial manager of the transnational company, an as great distance between gains and costs maximizing the value of the firm.

The differences between the national firms and the transnational ones determine differences as far as the size of the cost of capital is concerned also. This size of the cost of capital is influenced by a series of factors such as¹: the size of the firm, the access to the capital market, the diversification of the operations, the currency risk, the political risk etc.

As for the size of the firm, it has a direct impact on the size of the lending. A great and powerful firm can borrow more on lower costs. Also, the expenses related to the lending are smaller on the measure unit, because the lending is great.

The access to the international capital markets is much greater for the transnational companies, than for the one

of the national ones, because the former operate directly on different markets, come into contact with the capital provider, thus they have more knowledge about them, than a firm which operates locally. In many situations the branches can appeal by themselves to the local capital provider, without the involvement of a mother firm.

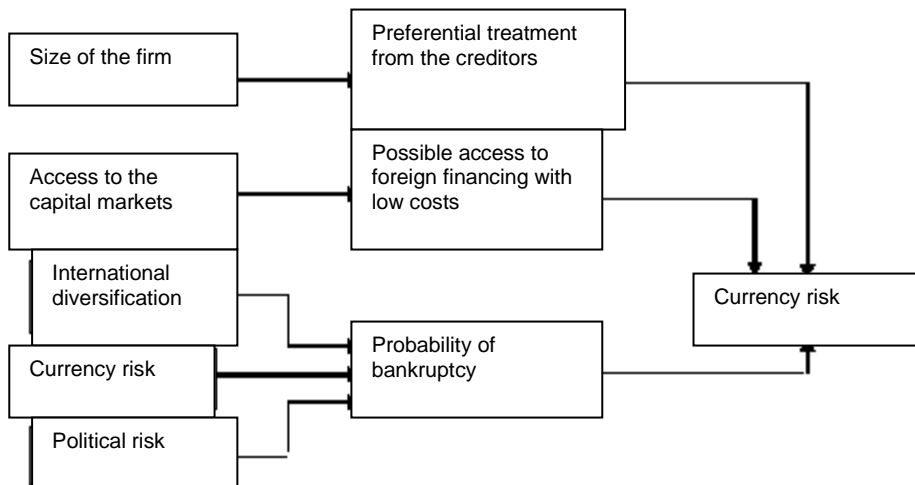
At the same time, the international diversification influences the lending and implicitly its cost. The existence of certain dispersed incomes flows in the entire world will confer them a greater stability, and the exposure to bankruptcy will be smaller.

As for the currency and political risk, we can say that the cash outputs of a transnational company are more volatile than those of a national firm. This aspect regards the report between the host country currency and the country of origin of the transnational company. The fluctuations of the exchange rate can generate additional cost of capitals, and also greater interests.

The political stability and instability form the host country influences too the cost of capital. In case the political decisions from the host country have a negative impact on the branches, the cost of capital increase and the other way around.

¹ J. Madura – International Financial Management, 6th edition, Cincinnati, South Western College Publishing 2000, pag. 474-475

Figure 1- Factors which determine the differences between the cost of capital of a STN and the one of a national firm

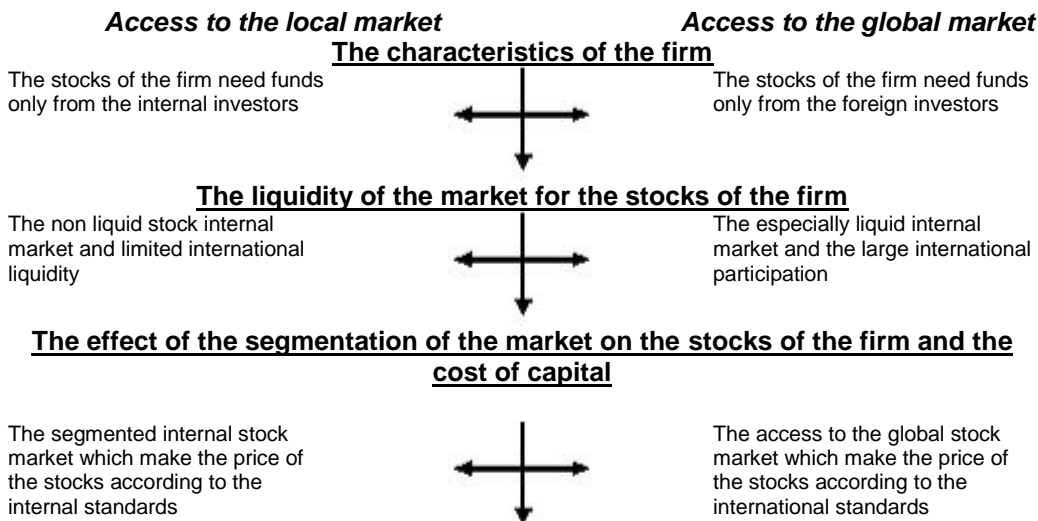


Source: C. Munteanu, A. Horobet – Transnational financing, Ed. All Back, Bucharest, 2003

The integration on the global level of the capital markets offered many firms the possibility to have access to newer and cheaper capital sources.

If a firm is resident in a country with a capital market lacking liquidities, it can appeal to sources emanating from outside the residence country or the host country.

Figure 2- The dimensions of the cost and of the availability of the capital strategy



Source: M. Moffett, A. Stonehill, D. Eiteman – Fundamentals of Multinational Finance, Addison Wesley, 2003

And as for the cost of capital determination methods of an foreign direct investment (FGI), it can be calculated through various methods (models):

A. The Capital Asset Pricing Model (M. Moffett, A. Stonehill, D. Eiteman, 2003)– used in case of the use of the own capital:

$$K_e = K_{rf} + \beta_j(K_m - K_{rf}) ,$$

where: K_e = the cost of own capital of the firm;

K_{rf} = the gain for the assets without risk (treasury notes);

K_m = the expected gain for the assets portfolio of a new market;

β_j = the systematic risk coefficient of the firm (the variation between the gain for the asset "i" and the market portfolio).

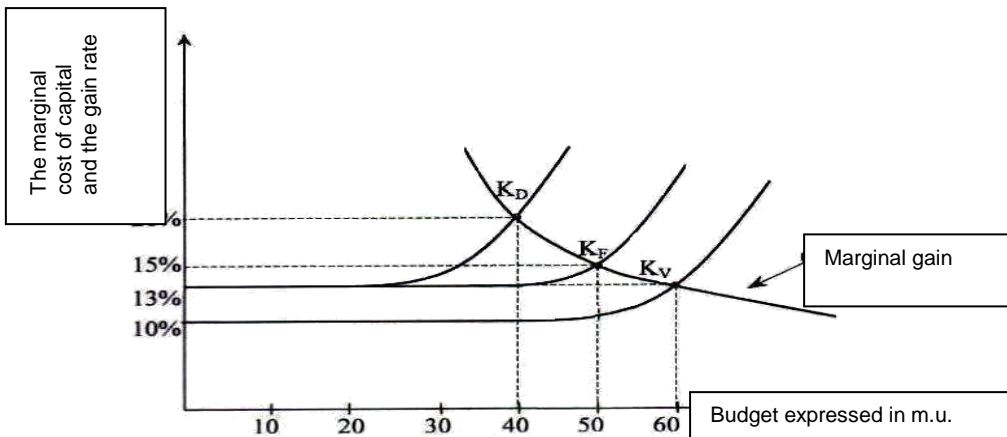
B. The Gordon Model (of capitalisation of the dividend):

$$K_e = \frac{D_1}{P_0} + g ,$$

where: K_e = the cost of own capital of the firm;

D_1 = the annual dividend per stock;

Figure 3



D. Another method of determination of the cost of capital is represented by the updated adjusted value which supposes the abandonment of the principles of the updating composite rate (CMPC) and its replacement with the

P_0 = the market value of the stock at the beginning of the period;

g = the annual increase rate of the dividend.

Between the two approaches, CAPM and the Gordon model, the major difference stands in the manner in which the risks are assumed. On the first model we focus on the non diversifying risk of the activity, while the Gordon model takes into account the total risk of the firm.

C. The method of the Weighted Average Cost of Capital (WACC) combines the cost of own capital with the cost of borrowed capital, taking into account the weight of each type of capital, so that it assures a firm along term optimum financial structure .

$$K_{WACC} = K_e * \frac{E}{V} + K_d(1-t) \frac{D}{V} ,$$

where: K_{WACC} = weighted average cost of capital;

K_d = cost of borrowed capital;

t = the marginal rate on the profit tax;

E = the market value of the firm's capital;

D = the market value of the firm's debts;

$$V = D + E .$$

principles of the multiple rates (C. Munteanu, A. Horobeț, 2003) given by:

a) the cost of capital in the absence of the indebtedness – as an updating rate for the non contractual operational flows;

b) the cost of capital before the taxation in the country of origin currency

as an updating rate for the contractual cash flows which reflect the fiscal shield given by the borrowed capital and amortisation;

c) the cost of the borrowed capital before the taxation in the country

$$VAA = -CF_0 + \sum_{t=1}^n \frac{x_t}{(1 + k_e^{ai})^t} + \sum_{t=1}^n \frac{T_t}{(1 + k_d)^t} + \sum_{t=1}^n \frac{S_t}{(1 + k_c)^t}$$

where: CF = made investment; x_t = non contractual cash flows; T_t = fiscal shield; S_t = economies from subvention interests; k_e^{ai} = the cost of capital in the absence of the indebtedness; k_d = the cost of lending capital; k_c = the cost of lending capital obtained in concessionary conditions; t = no. of years for project performance; n = normal life time of the project.

We now have a total image regarding the way of determination of the cost of capital STN. The size and its impact on the company will decisively contribute in the financing decision.

• The international financing decision of the firm

No doubt, adopting the international financing decision

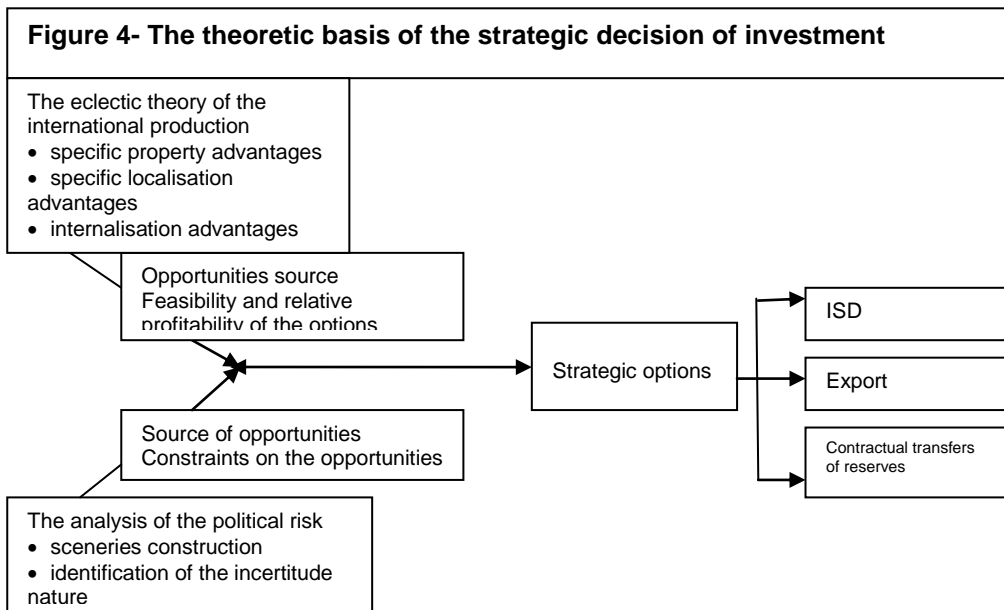
of origin currency, to update the contracted cash flows which reflect the interest economies at the concessionary lending. So:

represents the hardest task of the company management.

Practically, at the time the Administration Board decides in relation to the making of the investment, means that it answered fundamental questions such as:

- a) identifying a business opportunity which can be made though an investment;
- b) making, selecting and evaluating the investment projects;
- c) the analysis of the project profitability;
- d) identifying the cost of the project;
- e) identifying and selecting the financing sources.

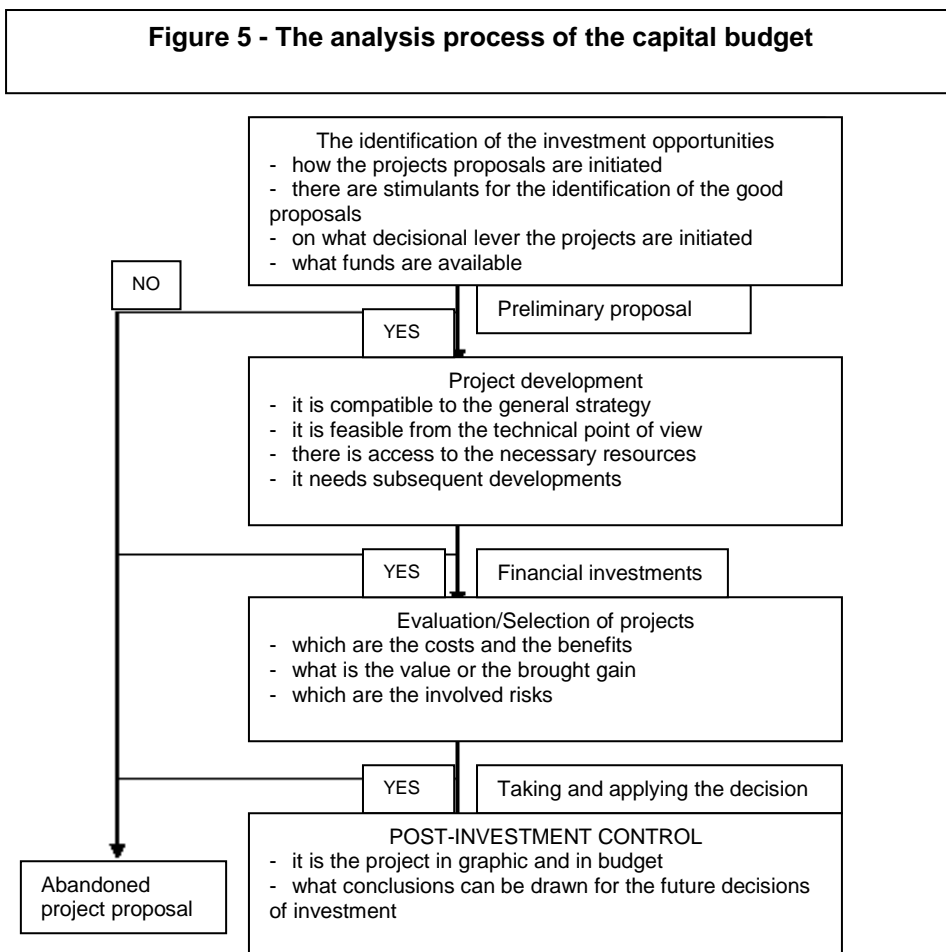
In the figure no. 4 below we present the theoretic bases of the strategic decision of investment of the transnational corporation.



An appropriate financing decision supposes a detailed analysis of the capital budget. The analysis of the capital budget is “the term given to the

process though which the firm adopts the allowance decisions of investment”.

A correct analysis of the capital budget supposes going through the following stages:



Source: C. Munteanu, A. Horobeț – Transational Finances, Ed. All Back, Bucharest, 2003

As for the substantiation of the investment strategies we can say that at the level of a company the following indicators are analysed and quantified in the decision of investment²:

A. The Profitability Internal Rate (RIR) – expresses the “economic power” of the future objective, the profit which

will be obtained on each monetary unit spent for the investment and production:

$$RIR = R_{\min} + (R_{\max} - R_{\min}) \cdot \frac{V_1}{V_1 + |V_2|}$$

where: R – internal rate;
 V₁ – the inappropriate income of a minimum rate;
 V₂ – the appropriate income of a maximum rate.

B. The updated net income – synthetically express the efficiency of an investment in the variants analysed in the

² A. Isaic Maniu, S. Ene, G. Tudose – Evaluation, feasibility, , business plan and risks of the economic activity, Ed. Independența Economică, Pitești, 2004, page 76-78

feasibility study for a certain period of time and a fixed updating rate:

$$VNA = \sum_{n=1}^{d+E} (V_n - I_n - C_n) \cdot \frac{1}{(1+i)^n},$$

where: V_n – annual income;

I_n – annual investment;

C_n – annual expenses anuale;

d – the duration of making the investment;

E – the exploitation duration.

C. The recalculated updated expense – expresses the total effort, both for the investment, and also for the production:

$$K_y = \frac{\sum_{n=1}^{d+E} \frac{I_n + C_n}{(1+i)^n}}{\sum_{n=1}^E \frac{Q_n}{(1+i)^n}},$$

where: Q_n – the volume and the value of the production.

D. The cost / profit report – points out the relation between costs and profits:

$$C/P = \sum_{t=d+1}^E \frac{P_t}{(1+i)^t} \div \sum_{t=1}^D \frac{I_t + C_t}{(1+i)^t},$$

where: P_t – annual profit.

In conclusion, we can say that the investment decision is made based on the project which presents the best indicators, with the greatest profitability and the smaller (capital and exploitation) expenses.

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