COMPANY ACTIVITY FINANCIAL RISK

Caruntu Genu Alexandru, Holt Gheorghe

Constantin Brâncuşi University of Târgu Jiu, Faculty of Economics and Business Administration, *e-mail:cgenuc@gmail.com*

Abstract

In economic and financial activity, risk is an inherent financial decisions, encountered in daily agenda of managers of companies. Unexpected changes in the price of a product development not only affect the financial results of a company, but can cause even bankruptcy. In fact, the nature of financial decisions involve uncertainty. Financial decisions are made based on cash flows under future contracts, which are par excellence incerte. Activitatea an enterprise that holds any weight in the industry is subject to risks, since it can not predict with certainty different components of its outcome (cost, quantity, price) and operating cycle (purchase, processing, sales).

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Clasificare JEL: M40, M41

Risk can be defined as an event, circumstance, action or complex contingencies that could occur in the future activity of an enterprise, with negative effects on sectoral activity and its overall. Categories of risks that expose întrerpinderea are operating risk, product risk, market risk, the risk of image, liquidity risk, solvency risk, credit risk, interest rate risk, foreign exchange risk, default risk risk economic term risk means variability profit competitional. Riscul the average return in the last years. In forecasting, risk expresses the variability expected profit rentabilitate.Într hoping against another practical way, risk can be expressed as yield variability depending on the workload of the company.

The risk may be a result of economic circumstances, the specific activity of the enterprise, the quality of management at all hierarchical levels of functional organization structure and business, relations with clients, suppliers, various lenders. Managers tend to assume risk fluctuates. Individual variations in behavior from experience and existing enterprise context.

For managers risk taking is a must.

Thus, the attitude of managers in relation to risk may vary depending on conditions such as: the profit, cash and sales amount to a reference current position of the organization and its eventual disappearance.

Financial risk of a firm's debt stems from how its expression in solvency risk and liquidity. Financial risk is characterized by the influence on profits leverage enterprise.

Financial risk is defined by I. Stancu that variability in outcome indicators under the company's financial structure. It occurs when the economic rate of return is achieved by using low interest rate loans borrowed capital.

Financial risk characterization and quantification of exposure to this risk category is based on:

- Breakeven method;
- Financial leverage;
- Factor explaining the financial return by highlighting leverage.

Financial risk analysis based on breakeven using the same methodology as operating risk, taking into account interest expense as fixed cost elements.

Calculate a turnover equivalent to a global breakeven (CA) using the following relationship:

$$CA_{prg} = \frac{CF + D}{1 - \frac{CV}{CA}} = \frac{CF + D}{R_{mcv}}$$

where:

CF = fixed costs;

Cv = variable costs;

CA = total turnover;

D = interest as a fixed expense;

 R_{mcv} = rate margin variable costs.

Financial risk assessment is based on the following indicators:

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• absolute position indicator:

• relative position indicator:

$$\frac{\mathit{CA} - \mathit{CA}_{\mathit{prg}}}{\mathit{CA}_{\mathit{prg}}}$$

• modulus of elasticity:

$$e = \frac{(\Delta PC / PC_0)}{(\Delta CA / CA_0)}$$

where:

PC = current profit (after deducting interest);

CA = turnover.

Illustrate the influence loan company based on profitability indicators below the enterprise A and B:

Table no. 1. indicators

indicators	company A		company B	
	N	N+1	N	N+1
Turnover (thousands. RON)	10.000	12.000	10.000	12.000
Variable costs (thousands. RON)	6.000	7.200	6.000	7.200
The share of variable costs (%)	60	60	60	60
Fixed Expenses (thousands. RON)	3.000	3.000	3.000	3.000
Operating profit (thousands. RON)	1.000	1.800	1.000	1.800
Interest	-	-	200	200
Current income	1.000	1.800	800	1.600

Breakeven for neîndatorată company is:

$$CA_{prg} = \frac{3.000}{1 - 0.60} = \frac{3.000}{0.40} = 7.500$$
 thousands. RON

For a production volume and costs 10,000 th firm is nul. Pragul profit for firm profitability is indebted:

$$CA_{prg} = \frac{3.000 + 200}{1 - 0.60} = \frac{3.200}{0.40} = 8.000$$
 thousands. RON

For a production volume and costs 10.666 thousand profit company B is zero.

Absolute position indicator reflects the turnover distance breakeven. The turnover is removed from break-even enterprise is more elastic, can reduce their workload with a higher amount to reach breakeven and becomes less risky. On the other hand, turnover close to break-even offers business opportunities to small maneuver, as the amount that may reduce their turnover is less.

Absolute position indicator for firm A is:

$$10.000 - 7.500 = 2.500$$
 thousands. RON $12.000 - 7.500 = 3.500$ thousands. RON.

A company can reduce workload to breakeven with 2,500 thousand.

Absolute position indicator for firm B is:

$$10.000 - 8.000 = 2.000$$
 thousands. RON $12.000 - 8.000 = 4.000$ thousands. RON

Company B can reduce workload to breakeven 2,000 thousand, so neîndatorată A company is less risky. Relative position indicator for company A records the following values:

$$\frac{10.000 - 7.500}{7.500} = 0.33 \quad \text{, respectiv} \quad \frac{12.000 - 7.500}{7.500} = 0.46$$

And relative position indicator for company B record values:

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$$\frac{10.000 - 8.000}{8.000} = 0.25 \quad \text{, respectiv} \quad \frac{12.000 - 8.000}{8.000} = 0.5$$

Relative position indicator for turnover of 10,000 lei is 33% and turnover of 12,000 lei is 46%. Company A is placed above breakeven by 33% and 46%.

Relative position indicator for company B record the 25% turnover of 10,000 lei and 50% for turnover of 12,000 thousand.

Elasticity coefficient of elasticity highlights current results in relation to the activity.

Elasticity coefficient neîndatorată company has the following value:

$$e_{\scriptscriptstyle A} = \frac{\frac{1.800 - 1.000}{1.000}}{\frac{12.000 - 10.000}{10.000}} = \frac{0.8}{0.2} = 4$$

$$e_{\scriptscriptstyle B} = \frac{\frac{1.600 - 800}{800}}{\frac{12.000 - 10.000}{10.000}} = \frac{1}{0.2} = 5$$

Elasticity coefficient can be calculated with the following formula:

$$e = \frac{CA_0}{CA_0 - CA_{prg}}$$

$$e_{\scriptscriptstyle A} = \frac{10.000}{10.000 - 7.500} = 4$$

$$e_B = \frac{10.000}{10.000 - 8.000} = 5$$

Company A is less risky because the elasticity coefficient ami record low level 4.

Financial risk is also measured and leveraged using the formula:

$$\sigma Rf = \sigma Rec (1+L)$$

where:

 σRf = standard deviation of return on equity;

 $\sigma Rec = standard deviation of return on equity;$

L = leverage, debt and equity ratio D / Cpr (financial structure of the company)

From business indebtedness influence on return on equity can be illustrate a financial risk assessment model based on the financial leverage of debt.

Financial leverage can be played from a simplified balance sheet structure and rates of return characteristics (Figure 1):

economically active (Re)	Equity (Rf)	
` ,	Liability (Rd)	

Fig. 1 Structure of balance and rates adequate return

Economic activity (AE) corresponding economic rate of return (Rec), equity (CPR) financial rate of return (Rf) and debt (D) - interest rate (Rd).

Result for the year (Rex) can be determined as the difference between the result of operation (Re) and interest paid on borrowed capital (d) disregarding the incidence exceptional results, financial income and income taxes:

$$Rex = Re - d$$

Operation result can be calculated according to the economic rate of return:

$$Re = Ae \times Rec$$

Interest is calculated as a product between the debt and the interest rate (Rd). Return on equity of the company is dependent on the relationship between economic rate of return and the interest rate:

- If Rec> Rd, then Rf> Rec and leverage has a positive effect on the company (effect,, leverage ²). Using borrowed during operation lead to increased return on equity, the increase is even greater as the leverage is higher without exceeding a threshold of indebtedness considered normal in terms of financial risk;
 - If Rec = Rd, then Rf = Rec and indebtedness is neutral in terms of financial return. Level Equity is equal to

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the return on invested capital;

• if Rec <Rd, then Rf <Rec, and leverage has a negative effect on the financial profitability of the company, increasing its financial risk. Borrowed more expensive than the effects they generate, and this will lead to lower return on equity proportion indebtedness.

Financial risk can be measured by highlighting the leverage factor and firm profitability using the formula:

$$R_{f} = \frac{CA}{Ae} \times \frac{\text{Re}}{CA} + \left(\frac{CA}{Ae} \times \frac{\text{Re}}{CA} - Rd\right) \times \frac{D}{Cpr}$$

Acts indirectly on the rate of financial return:

- rotation speed of economic activities as / Ae;
- commercial profitability rate Re / CA;
- the difference between the economic rate of return and interest rates;
- indebtedness of the company called and, financial lever arm D / CPR.

The indicators used can determine how they affect the financial structure of the company in return for a financial datorării sizes that the financial risk indicators. It is necessary to establish firm elasticity with respect to market conditions.

In conclusion, the theoretical analysis of risk, it can be stated that the company can be identified as a source of risk to financial risk financial structure (leverage, interest expense amount).

To increase the financial profitability of the enterprise are necessary measures to ensure the accelerated speed of rotation of assets, increase business profitability, increase return on assets and on this basis the interest rate spread, optimization of capital structure based on the financial leverage of debt.

Bibliography

- 1. Bătrâncea I Bătrâncea LM, Borlea SN, financial analysis of the economic entity, Ed.Risoprint, Cluj-Napoca, 2007;
 - 2. Caruntu Genu Alexandru Financial Management Company, Universitaria Publishing House, Craiova 2009.
 - 3. George Holt, Căruntu Genu Alexandru Capital company Universitaria Publishing House, Craiova 2011
 - 4. Stancu, I. Finance, Economic Publishing House, Bucharest 2007
 - 5. Vintilă, G. enterprise financial management, Didactic and Pedagogic Publishing House, Bucharest 2006