

Effects of Financial Risk Management on Firm's Profitability: Panel Data Econometrics of Selected Micro-Financial Institutions in Kenya

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Abstract

Proactive risk management is essential to the long-term sustainability of microfinance institutions (MFIs), but many microfinance stakeholders are unaware of the various components of a comprehensive risk management regimen. This study was set out to establish the effect of financial risk management on profitability of firms listed in the Nairobi Securities Exchange (NSE) of Kenya, from year 2006-2012. In the context of globalization, we are witnessing an unprecedented diversification of risk situations and uncertainty in the business world, the whole existence of an organization being related to risk. The notion of risk is inextricably linked to the return. Return includes ensuring remuneration of production factors and invested capital but also resources management in terms of efficiency and effectiveness. A full financial and economic diagnosis cannot be done without regard to the return – risk ratio. Stock profitability analysis should not be dissociated from risk analysis to which the company is subdued. Risk analysis is useful in decision making concerning the use of economic financial potential or investment decisions, in developing business plans, and also to inform partners about the enterprise's performance level. Risk takes many forms: Operational risk, financial risk and total risk, risk of bankruptcy (other risk categories) each influencing the business activity on a greater or lesser extent. Financial risk analysis, realized with the use of specific indicators such as: financial leverage, financial breakeven and leverage ratio (CLF) accompanying call to debt, presents a major interest to optimize the financial structure and viability of any company operating under a genuine market economy.

Keywords: Risk analysis, Financial Risk, Financial Leverage, Breakeven points

1. Introduction

The goal of Financial Risk Management is to measure and manage risks across a diverse range of activities used in financial sectors. Risk can be defined as a hazard, a chance of bad consequences, loss or exposure to mischance. Risk is an integral part of financial services. When financial institutions issue loans, there is a risk of borrower Default Zumbach, G., (2006). t. When banks collect deposits and on-lend them to other clients (i.e. conduct financial intermediation), they put clients' savings at risk. Any institution that conducts cash transactions or makes investments risks the loss of those funds. Development finance institutions should neither avoid risk (thus limiting their scope and impact) nor ignore risk (at their folly). Like all financial institutions, microfinance institutions (MFIs) face risks that they must manage efficiently and effectively to be successful. According to Tay, A., Wallis, K., 2007, if the MFI does not manage its risks well, it will likely fail to meet its social and financial objectives. When poorly managed risks begin to result in financial losses, donors, investors, lenders, borrowers and savers tend to lose confidence in the organization and funds begin to dry up. When funds dry up, an MFI is not able to meet its social objective of providing services to the poor and quickly goes out of business.

Managing risk is a complex task for any financial organization, and increasingly important in a world where economic events and financial systems are linked. Global financial institutions and banking regulators have emphasized risk management as an essential element of long-term success, Perignon, C., Smith, D., (2010). Rather than focusing on current or historical financial performance, management and regulators now focus on an

organization's ability to identify and manage future risks as the best predictor of long-term success. For the micro-financial institutions, effective risk management has several benefits:

- **Early warning system for potential problems:** A systematic process for evaluating and measuring risk identifies problems early on, before they become larger problems or drain management time and resources. Less time fixing problems means more time for production and growth.
- **More efficient resource allocation (capital and cash):** A good risk management framework allows management to quantitatively measure risk and fine-tune capital allocation and liquidity needs to match the on and off balance sheet risks faced by the institution, and to evaluate the impact of potential shocks to the financial system or institution. Effective treasury management becomes more important as MFIs seek to maximize earnings from their investment portfolios while minimizing the risk of loss.
- **Better information on potential consequences, both positive and negative:** A proactive and forward-thinking organizational culture will help managers identify and assess new market opportunities, foster continuous improvement of existing operations, and more effectively align performance incentives with the organization's strategic goals.

The increased emphasis on risk management reflects a fundamental shift among bank managers and regulators to better anticipate risks, rather than just react to them. This approach emphasizes the importance of "self-supervision" and a proactive approach by board members and managing directors to manage their financial institutions, Morariu, A., Crecană, C., D., (2009). Historically, banks have waited for external reviews by regulators to point out problems and risks, and then acted on those recommendations. In today's fast changing financial environment, regulators are often left analyzing the wreckage only after a bank has had a financial crisis. To foster stronger financial institutions, the revised CAMELS3 approach among US regulators emphasizes the quality of internal systems to identify and address potential problems quickly. According to the Federal Reserve Bank, comprehensive risk management are practices designed to limit risk associated with individual product lines and systematic, quantitative methods to identify, monitor, and control aggregate risks across a financial institution's activities and products, Berheci, M., (2009).

For MFIs, better internal risk management yields similar benefits. As MFIs continue to grow and expand rapidly, serving more customers and attracting more mainstream investment capital and funds, they need to strengthen their internal capacity to identify and anticipate potential risks to avoid unexpected losses and surprises, Tay, A., Wallis, K., (2007). Creating a risk management framework and culture within an MFI is the next step after mastering the fundamentals of individual risks, such as credit risk, treasury risk, and liquidity risk. Further, more clarity about the roles and responsibilities of managers and board members in risk management helps build stronger institutions. A comprehensive approach to risk management reduces the risk of loss, builds credibility in the marketplace, and creates new opportunities for growth. This paper summarizes some of the tools and approaches used by conventional financial institutions and suggests ways in which MFIs might further adapt and innovate to create the optimal risk management culture within their own organizations, Bontemps, C., Meddahi, N., (2005).

Risk and return are two interdependent aspects in the activity of a company, so the question is assuming a certain level of risk to achieve the profitability that it allows. Return can only be assessed but on the basis of supported risk. This risk affects economic asset returns first, and secondly of capital invested. Therefore it can be addressed both in terms of business, as the organizer of the production process driven by intention to increase property owners and adequate remuneration of production factors and the position of outside financial investors, interested in carrying the best investment, in financial market conditions with several areas of return and different risk levels.

Risk assessment should consider managing change: *people change, methods change, the risk change* (Morariu, A., Crecană, C., D., (2009). Consequently, profitability is subject to the general condition of risk where the organization operates. Risk takes many forms, each affecting the agents' economic activity on a lesser or greater extent. For economic and financial analysis at the micro level presents a particular interest those forms of risk that can be influenced, in the sense of reduction, through the actions and measures the economic agents can undergo.

2. Review of Related Literature

2.1 Financial Risk in Economic Theory and Practice

According to Alexander, C., Sheedy, E., (2008), financial activity, in its many segments is influenced by unexpectedly restrictive elements as evolution, often unexpected, not depending directly on economic agents. Impact of various factors (market, competition, time factor, inflation, exchange rates, interest, commissions,

human factors and not least the company culture) often makes financial decision become a decision under risk. Financial risk characterizes variability in net profit, under the company's financial structure. There are no financial template features; each business activity prints its own significant variations from case to case. In the case of retailers, "intangible assets are less important, but *stocks* are significant, and the appeal to credit provider is frequently used, being very useful for treasury business" OMFP, 3055/2009, Art. 306, al., (2009) and Andreou, E., Ghysels, E., (2006).

An optimal capital structure will maximize enterprise value by balancing the degree of risk and expected return rate. Management of financial risk is an integral part of planning and financial control, submitted to strategic and tactical decisions for a continuous adaptation to inside and outside company conditions, constantly changing and it requires:

- Identification of areas that are prone to risk;
- Likelihood estimation of financial risk production;
- Determining the independence relations between financial risk and other significant risks (operational risk, market risk - interest rate fluctuations);
- Delimitation of risk and keeping it under observation to stop or diminish (minimize) the effect;
- Identify causal factors for financial risk, in order to define potential adverse effects induced on the overall activity of the company;
- Determining the risk as quantifiable size, as well as the effects associated to risk occurrence;
- Determining the routes to follow and strategies to fit the company's financial activity in an area of financial certainty.

Financial risk issues can be found at the heart of Romanian accountant's normalizers. According to the OMFP 3055/2009, the Board must prepare for each financial year a report, called a Managers' report, which must include, besides an accurate presentation of development and performance of the entity's activity and its financial position, also a description of main risks and uncertainties that it faces.

Thus, *Managers report* must provide information on: the objectives and policies of the entity concerning financial risk management, including its policy for risk covering for each major type of forecasted transaction for which risk coverage accounting is used, and entity's exposure to market risk, credit risk, liquidity risk and cash flow. Required disclosures provide information to help users of financial statements in evaluating the risk financial instruments, recognized or not in balance sheet.

According to Joffre, P., Simon, Z., (2007), the main categories of financial risk affecting the company's performance are:

- 1) Market risk that comprises three types of risk:
 - a) **Currency risk:** The risk that the value of a financial instrument (*Financial instrument* is defined according OMFP 3055/2009, Art. 126, as: "...any contract that simultaneously generates a financial active for an entity and a financial debt or equity instrument for another entity") will fluctuate because of changes in currency exchange rates; the lowering of exchange rate can lead to a loss of value of assets denominated in foreign currency thus influencing business performance;
 - b) **Fair value interest rate risk:** The risk that the value of a financial instrument will fluctuate due to changes in market interest rates;
 - c) **Price risk:** The risk that the value of a financial instrument will fluctuate as a result of changing market prices, even if these changes are caused by factors specific to individual instruments or their issuer, or factors affecting all instruments traded in the market. The term "market risk" incorporates not only the potential loss but as well the gain.
- 2) **Credit risk:** The risk that a party of financial instrument will not to comply with the undertaking, causing the other party a financial loss.
- 3) **Liquidity risk:** (Also called funding risk) is risk that an entity meets in difficulties in procuring the necessary funds to meet commitments related to financial instruments. Liquidity risk may result from the inability to quickly sell a financial asset at a value close to its fair value.
- 4) **Interest rate risk from cash flow:** Is the risk that future cash flows will fluctuate because of changes in market interest rates. For example, if a variable rate debt instruments, such fluctuations are to change the effective interest rate financial instrument, without a corresponding change in its fair value.

According to Berheci, M., (2009), financial management environment is characterized by a high interest rate volatility, which translates in terms of risk and indiscriminate harms the value and profitability of any enterprise.

Interest rate risk the balance sheet is reflected by changes in market value of an asset, as the present value of an asset is determined by discounting cash flows using interest rate or weighted average cost of capital, Jianu, I., (2007).

3. Methodology, Model Specification, Data and Variables

3.1 Financial risk assessment

Financial risk assessment is performed by using specific indicators such as: financial leverage, financial breakeven and leverage factor (CLF) whose values express fluctuations in net profit, under the company's financial structure change.

Financial risk or capital concerns the company's financial structure and depends on the manner of funding the activity: if it is wholly financed by equity, it will not involve financial risk. This risk appears only if loan financing sources involving charge to pay interest and shows a direct influence on financial profitability (of equity), Petrescu, S., (2010).

Debt, the size and cost drives the variability of results and automatically changes the *financial risk*. The size of influence of financial structure on firm performance has produced financial leverage effect, which can be defined as the mechanism through which debts affects return on equity, return on the ratio of benefits (net income) and equity. Between economic profitability and financial return there is a tight correlation. Financial return is rooted in economic returns. The difference between the two rates is generated by company policy options for funding. Usually, on equal economic rate return, financial profitability rates vary depending on finance source – from own equity or borrowed capital.

In economic theory the link between financial profitability rates (R_f) and economic rate of return (R_e) is highlighted by the following equation:

$$R_f = R_e + (R_e + d) \cdot \frac{D}{CPR}$$

Where: d = average interest rate; D = total debts; CPR = own equity;

$\frac{D}{CPR}$ = financial leverage (LF).

According to Petrescu, S., (2010), if for calculation of return rates *profit tax* is taken into account, the relationship becomes:

Where: i = the tax rate.

$$R_f = \left(R_e = R_e + (R_e - d) \cdot \frac{D}{CPR} \right) (1 - i)$$

We can see the influence that *financial structure*, respective “all financial resources or capital composition that financial manager use to increase the needed funding” Mironiuc, M., (2007), has on the overall *profitability* of the company. By reporting *total debt (D)* to *own equity (CPR)* is *determined financial leverage (LF)* (or leverage ratio) reflecting the proportion of grants to loans and grants to its own resources. The report should not exceed the value 2, otherwise the debt capacity of the enterprise is considered saturated, and borrowing above this limit lead to the risk of insolvency, both to the borrower and the lender. The financial Leverage effect (ELF) results from the difference between financial and economic return and “expresses the impact of debt on the entity's equity, the ratio between external and domestic financing (domestic resources)” Morariu, A., Crecană, C., D., (2009), thus reflecting the influence of *financial structure* on the performance of an entity:

$$R_f = R_e + (R_e + d) \cdot \frac{D}{CPR} \quad ELF = (R_e - d) \cdot LF$$

Depending or not on the consideration of income tax, net or gross rates of return can be measured, i.e. net or raw financial leverage effect, as follows:

<i>Indicator</i>	<i>Gross values</i>	<i>Net values</i>
Economic rate of return (Re)	$Rebr = \frac{Re\ exp}{Cpr + D}$	$Ren = Rebr \cdot (100 - i)$
Financial rate of return (Rf)	$Rfbr = \frac{R\ exp - Ch\ fin}{Cpr}$	$Rfn = Rfbr \cdot (100 - i)$
Financial leverage effect (ELF)	$ELF = Rfbr - Rebr$ $ELFbr = LF \cdot (Rebr - d)$	$ELFn = Rfn - Ren$ $ELFn = ELFbr \cdot (100 - i)$

Debt is favorable while the interest rate is inferior to the rate of economic profitability, which has a positive influence on financial rate of the company. Financial leverage is even greater as the difference between economic profitability and interest rate is higher, in this respect can be seen several cases presented in Table 1.

Table no. 1 Correlation between economic rentability and interest rate

Situation	Signification
Re > d Rf > Re ELF is positive	<ul style="list-style-type: none"> Economic profitability is higher than interest rate, respective to the cost of borrowing. In this situation, for the enterprise, it is more advantageous to make use of the medium term loans to finance the work, thus ensures an additional profit. Debt is Indebtedness has a benefit effect for the firm, “leveraged”; company wants to maximize the ratio D/CPR; The use of debt should be approached cautiously so as not to limit the financial independence of the company and reduce its additional debts opportunities in times of crisis. <p>Return on assets > Cost of borrowed capital</p>
Re = d Rf = Re, ELF = 0	<ul style="list-style-type: none"> Debt is Indebtedness is neutral in terms of financial profitability, so it has no effect The situation is the results of financing activities solely to their capital, eliminating debt without financial risk.
Re < d Rf < Re, ELF is Negative = Club Effect	<ul style="list-style-type: none"> Economic profitability is inferior to interest rate. Indebtedness has a negative effect on the financial profitability of the company, increasing its financial risk (“club effect”). The company does not have to use medium and long-term loans as economic return on assets is insufficient to cover interest rate risk of insolvency being increased. Company seeks to maximize the report D/CPR. <p>Return on assets < Cost of capital borrowed</p>

Leverage effect allows evolution stimulation for financial profitability according to the change in funding policy of the enterprise being an important parameter for strategic business decisions, Zaiț, D., (2008). Based on the balance sheet and profit and loss account of two studied companies’ rates of return and financial leverage are determined, as presented in table no. 2.

Table no. 2 Calculating rates of return and leverage effect

Indicators		N-4	N-3	N-2	N-1	N
1. Operating result (Rexp)	ALFA:	269572	173011	69686	165209	1017456
	BETA:	5248964	5077872	5516027	4849245	5881879
2. Own equity (Cpr)	ALFA: <i>Average in At</i>	3007624 58%	3111526 65%	3141245 67%	3222358 67%	4253659 83%
	BETA: <i>Average in At</i>	7546071 65%	12276110 90%	15498531 92%	17283339 78%	21996910 80%
3. Total debts (D)	ALFA: <i>Average in At</i>	2190733 42%	1689622 35%	1579626 33%	1578604 33%	872877 17%
	BETA: <i>Average in At</i>	4074725 35%	1374198 10%	1415468 8%	4829197 22%	5640590 25%
4. Exercise gross result (Rbr)	ALFA:	323588	240465	123855	213651	1119538
	BETA:	6020035	5614312	6068405	5799166	6477679
5. Financial expenses (Chfin)	ALFA:	639	232	0	41	590
	BETA:	4309	38	0	474956	585135
6. Profit tax (Ip)	ALFA:	83529	36563	29136	44012	195968
	BETA:	1590105	887150	1018354	930410	1012742
7. Percentage share ($i=Ip/Rbr$)	ALFA:	25,81%	15.21%	23.52%	20.60%	17.50%
	BETA:	26.41%	15.80%	16.78%	16.04%	15.63%
8. Interest rate ($d = Chfin/D$)	ALFA:	0.03%	0.01%	0.00%	0.00%	0.07%
	BETA:	0.11%	0.00%	0.00%	9.84%	10.37%
9. Refference interest (BNR) [9] <i>Deviations</i>		20.27%	9.59%	8.44%	7.46%	9.46%
		-	-10.68%	-1.16%	-0.97%	2.00%
10. Gross economic rate of return (Rebr)		5.19%	3.60%	1.48%	3.44%	19.85%
	ALFA	45.17%	37.20%	32.61%	21.93%	21.28%
	BETA					
11. Gross financial rate of return (Rfbr)		8.94%	5.55%	2.22%	5.13%	23.91%
	ALFA	69.50%	41.36%	35.59%	25.31%	24.08%
	BETA					
12. Gross financial leverage effect (ELFbr)		3.76%	1.95%	0.74%	1.68%	4.06%
	ALFA	24.33%	4.16%	2.98%	3.38%	2.80%
	BETA					
13. Return rate on net economic (Ren)		3.85%	3.06%	1.13%	2.73%	16.37%
	ALFA	33.24%	31.32%	27.14%	18.41%	17.95%
	BETA					
14. Return rate on net financial (Rfn)		6.63%	4.71%	1.70%	4.07%	19.72%
	ALFA	51.14%	34.83%	29.62%	21.25%	20.31%
	BETA					
15. Net financial leverage effect (ELFn)		2.79%	1.65%	0.57%	1.34%	3.35%
	ALFA	17.91%	3.51%	2.48%	2.84%	2.36%
	BETA					
16. Financial leverage (LF)	ALFA	0.728	0.543	0.503	0.490	0.205
	BETA	0.540	0.112	0.091	0.279	0.256

From the analysis of the data presented in Table 2 we may see the following conclusions:

- 1) Economic and financial rates of return, in the case of S.C. ALFA S.A. follows an upward trend recently analyzed aspect reflecting the increased efficiency in the use of equity capital invested, while for S.C. BETA S.A. evolution is a descendant one.
- 2) Return on equity (equity efficiency) was higher than the rate of economic profitability (economic efficiency of assets, invested capital respectively) throughout the period under review following a positive financial leverage ($ELF > 0$) and higher economic efficiency cost of borrowing ($Re > d$).

- 3) Reducing financial leverage for S.C. ALFA S.A. reduced the favorable effect of the debt presence on financial efficiency rate, which was due to lower weight ratio of total debt and equity growth.
- 4) Total debt increased during *N-1* and *N* years for S.C. BETA S.A. resulted in increased financial leverage that potentiates financial return ahead as the economic rate of return.

Some financiers, as Modigliani and Fisher argue that it is more advantageous for the company to finance from loans than from equity, Petrescu, S., (2010), as the cost of borrowed capital (debt interest) is always deductible company's tax, while the cost of equity (preserved benefits and dividends) is not tax deductible for the company. Shareholders tend to fall into debt to get more tax saving, in this way, "indebted enterprise value appears to be higher than the company that is not under debt" Mironiuc, M., (2007).

3.2 Financial breakeven return

Establishing the company's position in relation to financial return breakeven for financial risk analysis is determined taking into account fixed costs and fixed financial costs, meaning interest expenses. In this situation turnover is calculated corresponding to a financial breakeven return or "financial standstill".

According to Quiry, P., Le Fur, Y., Pierre Vernimmen (2008, breakeven thus depends on four fundamental variables: The three parameters that influence the stability results of operations are:

- 1) Stability of turnover
- 2) Costs structure
- 3) Firm position in relation to its dead point
- 4) Financial expenses level, respective the debt policy practiced by the company.

Based on these values safety indicators or position indicators are estimated, presented in Table 3.

Table no. 3 Indicators of financial risk - financial breakeven

Indicators	Calculation formula
Financial breakeven	$CA_{critic} = Cf + Ch_{fin} + 1 - \frac{CV}{CA} - \frac{Cf + Ch_{fin}}{Rcv}$
Safety margin or enterprise's position in relation to financial deadlock (<i>Msf</i>) An increase of this indicator shows a reduction in financial risk registered by a certain firm and vice versa.	$Msf = CA - CA_{critic}$
Gains in efficiency (Se) or return index	$Is = \frac{CA - CA_{critic}}{CA_{critic}} \times 100\%$
Gains in efficiency (Se) or return index	$Se = \frac{CA - CA_{critic}}{CA_{critic}} \times 100\%$

Where: **CA_{critic}** = financial breakeven; **Cf** = fixed expenses; **Ch_{fin}** = financial expenses
CV = variable expenses; **CA** = turnover; **Rcv** = variable expenses rate margin.

Financial risk deepens economic risk (in addition to repayment of loans, interest costs need to be paid), and finally generates a payment default of the company that can lead to bankruptcy risk, Berheci, M., (2009).

3.3 Financial leverage Ratio (CLF)

Financial risk assessment and evaluation can be made based on financial leverage factor (CLF). It expresses the sensitivity of net income (*Rnet*) to operating results variations (*Rexp*) and measures the percentage increase in net income in response to increase with one percentage of results from operations. Calculation relationship is as follows:

$$CLF = ER_{net}/R_{exp} = \frac{\Delta R_{net}}{\Delta R_{exp}} \div \frac{\Delta R_{exp}}{R_{exp}}$$

$$\text{Respective: } \mathbf{CLF} = \frac{\Delta R_{net}}{\Delta R_{exp}} = \frac{I_{R_{net}}}{I_{R_{exp}}} - \frac{100}{100}; \quad \mathbf{CLF} = \frac{\Delta R_{net}}{\Delta R_{exp}} = \frac{I_{R_{net}}}{I_{R_{exp}}} \times \frac{R_{exp}}{R_{net}}$$

The CLF calculation takes into account only the current result and financial expenses, only that correlates with the operation, which reduces net income relationship:

$$\mathbf{R_{net}} = ((R_{exp} - Ch_{fin}) \cdot (1 - i))$$

In these circumstances, financial leverage coefficient gains expression:

$$\mathbf{CLF} = \frac{d}{d R_{exp}} ((R_{exp} - Ch_{fin}) \cdot (1 - i)) \times \frac{R_{exp}}{(R_{exp} - Ch_{fin}) \cdot (1 - i)} = \frac{R_{exp}}{(R_{exp} - Ch_{fin})}$$

It notes that the financial leverage ratio is directly proportional to financial expenses which increase higher the value of CLF and therefore increase in financial risk. Financial risk as measured by financial leverage ratio meets varying degrees depending on knowing the coefficient values from zero to infinity, Central Bank of Kenya, (2012).

Financial risk	Explanation
Inexistent	<ul style="list-style-type: none"> At the deadlock ($R_{exp} = 0$) because: $\mathbf{CLE} = \frac{0}{R_{exp} - Ch_{fin}} = 0$
Minor	<ul style="list-style-type: none"> At financing from own equity, financial expenses being zero: $\mathbf{CLE} = \frac{R_{exp}}{R_{exp} - 0} = 1$
Maximum	<ul style="list-style-type: none"> At financing from loans whose interest may equal the result from operation ($Ch_{fin} = R_{exp}$) and therefore: $\mathbf{CLE} = \frac{R_{exp}}{0} \rightarrow 1 \infty$

Based on profit and loss account of the two studied companies we determine financial risk indicators presented in Table no. 4.

Table no. 4 Indicators of financial risk

Indicator		N-4	N-3	N-2	N-1	N
1. Turnover (CA)	ALFA: BETA:	10857306 14024801	8692434 13372495	6980275 13920741	6996586 14360395	6111666 15569710
2. Fixed expense (Cf)	ALFA: BETA:	2331830 3686934	1762848 2766074	1824424 3265100	1661113 3563091	1537812 3234868
3. Variable expenses rate margin (RMcv)	ALFA: BETA:	23.96% 63.71%	22.27% 58.66%	27.14% 63.08%	26.10% 58.58%	41.81% 58.55%
4. Financial expenses (Chfin)	ALFA: BETA:	639 4309	232 38	0 0	41 474956	590 585135
5. Cf+Chfin	ALFA: BETA:	2332469 3691243	1763080 2766112	1824424 3265100	1661154 4038047	1538402 3820003
6. Operating result (Rexp)	ALFA: BETA:	269572 5248964	17301 5077872	69686 5516027	165209 4849245	1017456 5881879
7. Rexp - Chfin	ALFA: BETA:	268933 5244655	172779 5077834	69686 5516027	5516027 4374289	1016866 5296744
8. Financial breakeven (CAcritic) (5/3)	ALFA: BETA:	9734877 5793368	5793368 4715716	6723464 5176171	6363832 6893204	3679535 6523855
9. Safety margin or enterprise's position (Ms) (1-8)	ALFA: BETA:	1122429 8231433	775816 8656779	256811 8744570	632754 7467191	2432131 9045855
10. Safety range or relative position indicator (Is)	ALFA: BETA:	11.53% 142.08%	9.80% 183.57%	3.82% 168.94%	9.94% 108.33%	66.10% 138.66%
11. Gains in efficiency (Se) or return index	ALFA: BETA:	10.34% 58.69%	8.93% 64.74%	3.68% 62.82%	9.04% 52.00%	39.79% 58.10%
12. Financial leverage factor (CLF= Rexp/(Rexp - Chfin))	ALFA: BETA:	1.00238 1.00082	1.00134 1.00001	1.00 1.00	1.00025 1.10858	1.00058 1.11047

It can be noticed that, based on the data in Table 4, the companies have a comfortable situation in terms of financial risk, because financial expenses have insignificant values, and in N-2 year their absence allowed to obtain a financial leverage ratio equal to 1, companies' exposure to financial risk being minor. Actual turnover for the two companies were above breakeven financial (over critical turnover) in the analyzed period, aspect which allowed the recording of safety margins, safety spaces and positive efficiency gains. In the case of *S.C. ALFA S.A.* the entire period financial risk is minor due to low level of financial costs, the company preferring to use only its own resources to finance the activity. Poor values of financial leverage ratio (very close to 1) support the previous statements.

Greatest financial risk to which *S.C. BETA S.A.* is exposed to is manifested in financial year *N*, when the value of coefficient CLF is maximum, respectively 1,11047 which shows increasing dependence of net result on the operating result, and consequently, increased financial risk due to the gap between the index and results of operations index of financial expenses ($IR_{exp} < ICh_{fin}$). However, financial risk is minor, the society proves superior financial performance as turnover is well above the critical turnover (financial breakeven), range safety hovering well above the 20% in the analyzed period.

4. Conclusions

Debt had a positive effect on financial profitability manifested as a "financial leverage" (positive leverage effect). Extremely low level of debt and lower value of financial liabilities inferior to own equity makes companies not risky in terms of financial solvency. In this situation, for both companies, is more advantageous to use the medium and long term loans to finance business, thus ensuring them an additional profit. Using debt should be made with caution in order not to limit the financial independence of firms and reduce additional debt opportunities in times of crisis. Analysis of financial risk and leverage effect that accompany the call to debt, presents a major interest to optimize the financial structure and viability of any company operating under a real market economy.

The use of loans can be risky for the entity and its shareholders, but this method of financing becomes advantageous for entity shareholders simply because they are able to hold an asset more important than equity value, increasing their economic power. The financing of company expansion activity can be achieved by a significant increase in borrowed capital provided economic returns exceed the average interest rate. Company's risk assessment on the basis of leverage coefficients is required for the predicted behavior analysis for estimating future results, which must be taken into account in decision making process.

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