WHAT ARE THE CHARACTERISTICS OF THE CORPORATE FINANCE PROCESS MAKING DECISION WITHIN EAST EUROPEAN EMERGING COUNTRIES?

Triandafil Cristina Maria

Academy of Economic Studies, Bucharest, +4 0721 641 525, *brezeanupetre@yahoo.com*

Petre Brezeanu, Professor

Finance Doctoral School, Academy of Economic Studies, Bucharest, +4 0740 464 952, *cristina_triandafil@yahoo.com*

Abstract: The European East Emerging countries represent an interest research topic both in terms of macroeconomic environment and corporate finance decision. Their evolution within the process of nominal and real convergence process requires a challenging analysis of the way the main macroeconomic environment affects corporate segment. This analysis will focus in a first stage on the macroeconomic environment, highlighting out the way it evolved during the transition process from the centralized and planed economy to the market oriented one. Secondly, the focus will be oriented on the corporations based in these countries. Their finance decision will be analyzed in comparison with the corporations located into the emerging countries and moreover a deep interest will be granted to their leverage, especially from the point of view of the way finance mechanisms can be valorized based on their balance sheet data.

Key-words: rating, sovereign risk, idiosyncratic risk

JEL Classification Numbers: G21, G30, G33

Introduction

There are 50 emerging markets at the worldwide level. In order to get a deeper insight of the importance of these countries in the global economical architecture, a few statistics must be highlighted out: 1/5 of the global out put is produced by them, 4/5 of the total population lives in these countries and 8,5% of the stock market capitalization at the global level belongs to these countries. The BRIC countries (Brazil, Russia, India and China) will be the largest economies by 2050 and in 2007 their cumulated GDP represents 48% of the global GDP.

The strongest points that are always pointed out as for the emerging countries imply strong currency, budget surpluses and a high rate of local consumption. The lack of correlation between their financial systems and the largest capital markets enabled specialists to conceive them as an important element in case of financial crises since investors have the opportunity to direct the capital inflows towards them in order to get a higher protection. The negative aspects imply higher volatility, lack of transparency and liquidity. At the global level, there is a keen interest directed towards emerging countries because of the potential growth perspectives offered to the multinational companies and to the low labor cost. Outsourcing became one of the most important strategies developed by all world-wide level corporations.

East European emerging countries imply a different research effort in terms of macroeconomic analysis because of the specific features determined by the transition process to the market-oriented economy. Their strategic geographic position and their growth perspectives have been pointed out as two of the main advantages offered to the other developed European countries. Overall, their global market can be valued at more than 50 billion EUR which represents a huge opportunity for the companies of the developed countries in terms of products valorization.

Corporate segment is the most important growth resource for the East European emerging countries. It is appreciated as being the most important welfare mobile owing to the fact that it contributes in a fundamental way to keep up a decent living standard level. Thus it is important for the enterprises to have all the finance mechanisms opportunities in order to expand. But macroeconomic environment is a key factor in their case since it has been acknowledged that as for the emerging countries, the correlation between country and corporate rating is more substantial than in the case of the developed countries. The stability of the macroeconomic environment as well as the degree of economical growth, the inflation rate or the level of the capital market liquidity and transparency affect corporate segment. This paper is related to the work of Xianghong and Zhao who studied the impact of the macroeconomic environment on the

corporate default, but also to the work of Revoltella, Haiss and Fink and of Berglof and Pajuste who highlighted out the particularities of the corporate governance systems within Central and Eastern Europe. Similar research efforts on this topic have been made by Cavallo and Valenzuella and also by Huang and Kong, Peter and Grandes, Borensztein who studied the relationship between corporate and sovereign spreads having as point of reference the corporate default premia limited to the case of publicly traded firms. This study is more closed to the work of Borensztein who underlined the specific aspects of the corporate finance within emerging markets, but we propose to be mode analytic in our research; we will concentrate on the micro-level approach, taking as point of reference the financial data corresponding to the enterprises located both into developed and East-European emerging countries.

The paper is structured as follows: section 2 is dedicated to the case-study which contains a deep analysis both in terms of descriptive statistics of the financial structure specific to companies located into East European emerging countries and also in terms of capital structure determinants. Last section is dedicated to the conclusions.

Section 2

This section focuses on the corporate finance decision within East emerging countries.

There will be tested 3 relationships between capital structure and various financial indicators reflecting liquidity, profitability and activity of the enterprise in order to highlight out potential specific features of the finance mechanisms characteristic to companies located into East European emerging countries.

2.1 Database and methodology description

The sources the information was obtained from were the following:

- Hewlett-Packard Credit Division containing information relative to the Financial Statements of various companies located both in emerging East European countries (Poland, Slovenia, Slovakia, Bulgary, Czech, Romania);
- Economic Intelligence Unit site regarding the macroeconomic environment of the emerging East European countries.

The assembley of financial indicators that will be analyzed is the following: Current Liquidity ratio (I_1), Quick Liquidity ratio (I_2), Short Term Debt Cash-Flow Coverage (I_3), Return on Tangible Net Worth (I_4), Earnings before Taxes/Total Assets (I_5), Operating Expenses/Net sales (I_6), Debt/Tangible Net Worth (I_7), Interest Coverage (I_8), Short Term Debt/Total Debt (I_9), Leverage multiplier (I_{10}), AR turnover (I_{11}), AP turnover (I_{12}), Working Capital Turnover (I_{13}), Total Assets Turnover (I_{14}), Altman Z-score (I_{15}).

The methodology that will be followed up is based on the analysis of the output regression built up by the OLS procedure.

The dependent variable will be represented by 2 financial indicators reflecting the capital structure of the company: leverage multiplier and the weight of the short term debt into the total debt. Leverage multiplier represented by the report between total assets and equity has been selected in order to get an insight into the self-financing policy of the enterprise. This variable is significant for the East European emerging countries because it reflects the internal finance resources. Indeed, in the context of capital market and banking system underdevelopment degree, internal finance resources are valorized to a high extent; moreover, since companies located into these countries are perceived as riskier, their internal finance resources are very important in order to get additional external resources.

The level of assets usually perceived as an indicator reflecting the size and the activity dynamic has been perceived lately by the finance resources providers as a covenant for the company and its importance becomes much higher in the case of the companies located into East European countries.

The independent variables which are considered to exert an influence on the capital structure and on the finance decision are Earnings before Taxes/Total Assets (I_5), Operating Expenses/Net sales (I_6), Debt/Tangible Net Worth (I_7), Working Capital Turnover (I_{13}), Total Assets Turnover (I_{14}), Return on Tangible Net Worth (I_4).

The output statistic will be analyzed in order to highlight out the impact of every indicator on the capital structure.

2.2 Descriptive statistics analysis of the financial indicators

It is obvious that most of the companies located into emerging countries had adopted financing structures based on long term debt since a higher weight of the short term debt into the total debt will make them being perceived as riskier. The financial effort implied by the long term debt is considered to be softer than the one implied by the short term debt.

The standard deviations corresponding to the financial indicators of the companies located in emerging countries are high.

Table no.1– Descriptive statistics of the corporate rating for companies located in emerging countries

Descriptive Statistics (emerging.sta)

	Mean	Confid. -95.000%	Confid. 95.000	Sum	Minimum	Maximum
VAR1	1.232353	1.150821	1.313884916	62.85	0.71	2.25
VAR2	0.832353	0.749112	0.915593998	42.45	0.11	1.95
VAR3	1.914706	-2.01051	5.839917453	97.65	-1.01	99.62
VAR4	35.2919	26.8066	43.77720084	1799.887	-13.22	131.92
VAR5	40.17451	-2.22191	82.57093339	2048.9	-4.65	822
VAR6	8.782941	5.643163	11.92271901	447.93	-1.05	49.6
VAR7	4.820922	2.455366	7.186477441	245.867	-7.24	45.58
VAR8	3.35098	1.450728	5.251233033	170.9	-5.44	41.61
VAR9	94.15098	91.11233	97.18963215	4801.7	49.2	100
VAR10	5.586039	3.458177	7.713901303	284.888	-6.24	43.21
NEWVAR11	25.52392	-9.66817	60.71601801	1301.72	2.02	900.66
NEWVAR12	14.4851	2.833387	26.1368088	738.74	1.43	293.3
NEWVAR13	25.70922	-5.84364	57.26206901	1311.17	-634.8	361.5
NEWVAR14	12.64373	-5.84446	31.13191102	644.83	1.2	472.82
NEWVAR15	13.96863	-5.43839	33.37564754	712.4	1.94	497

Variance	Std.Dev.	Standard Error	Skewness	Std.Err. Skewness	Kurtosis	Std.Err. Kurtosis
0.084034353	0.289887	0.040592	1.163369	0.333464	2.408033	0.65592
0.087594353	0.295963	0.041443	1.248806	0.333464	4.31809	0.65592
194.7722494	13.95608	1.954242	7.139862	0.333464	50.98487	0.65592
910.1966381	30.16947	4.22457	0.890227	0.333464	0.882396	0.65592
22722.67121	150.7404	21.10788	4.89671	0.333464	23.07088	0.65592
124.6231652	11.16347	1.563199	2.438823	0.333464	5.648299	0.65592
70.74037531	8.41073	1.177738	4.099043	0.333464	18.18413	0.65592
45.64819702	6.756345	0.946078	4.1371	0.333464	21.07631	0.65592
116.724709	10.80392	1.512852	-2.68184	0.333464	7.316524	0.65592
57.23845368	7.56561	1.059397	3.962093	0.333464	17.68527	0.65592
15656.37509	125.1254	17.52107	7.118525	0.333464	50.77356	0.65592
1716.249129	41.42764	5.80103	6.385535	0.333464	43.14059	0.65592
12585.72437	112.1861	15.7092	-3.56969	0.333464	25.86702	0.65592
4321.052276	65.73471	9.204701	7.13858	0.333464	50.97237	0.65592

4761.224396	69.00163	9.66216	7.137892	0.333464	50.96566	0.65592

Source: own processing

The instability conferred by the macroeconomic environment is dominant in the case of the emerging countries.

The variance corresponding to the leverage multiplier is 57.23; the Altman Z-score has also a high variance -3.341,502.

From this perspective, we can assume that macroeconomic environment had a strong impact on the corporate rating. The macroeconomic volatility implied by the emerging countries environment affects the evolution of the financial variables.

2.3 Statistical perspective on the corporate finance decision within East emerging countries

In order to get a deeper insight regarding the particularities implied by the finance decision within East emerging countries, there have been performed three regression test. The regressions conceived the corporate rating as dependent variable and all the other variables as independent ones, including the country rating.

The first statistical test focuses on the relation between the leverage multiplier and indicators reflecting the profitability (I_5) and the size (I_6 and I_7) of the enterprise.

This relation can be modeled as:

L = -0,03726*P + 0,585511*NS – 0,10551*T

Where

L = leverage multiplier

P= EBT/TA

NS= Operating expenses/Net Sales

T= Debt/Tangible Net Worth.

Analyzing the output of the first regression, it is obvious that there is not a deep correlation between the leverage multiplier as an indicator of the capital structure and the liquidity and dynamic activity indicators for the companies based in the emerging countries.

Nevertheless, the Earnings Before Taxes reported to total Assets and the Total Debt reported to Tangible Net Worth are correlated negatively with the leverage multiplier. The second negative correlation is in line with the assumption that as for companies located into East European countries, their finance decision is based mainly on internal financing and they are reluctant to indebtedness. As far as they focus on self financing, equity level is high.

Table no. 2 – Output of the capital structure regression

Regression Summary for Dependent Variable: VAR10 (new.sta)

R= ,52996761 R^2= ,28086567 Adjusted R^2= ,01119030

F(3,8)=1,0415 p<,42516 Std.Error of estimate: 1,3260

	BETA	St. Err. of BETA	B	St. Err. of B	t(8)	p-level
Intercpt			-6,56923	6,23822	-1,05306	0,323077
VAR5	-0,03726	0,313018	-0,21126	1,774713	-0,11904	0,908179
VAR6	0,585511	0,366229	1,299479	0,812807	1,598756	0,148542
VAR7	-0,10551	0,356449	-0,06206	0,209657	-0,29599	0,774773

Source: own processing

The second correlation strengthens the idea that finance decision of the companies located into East European countries does not imply automatically the reinvestment of the profit although internal resources is dominant as finance mechanism.

This assumption reflects the fact that self financing implies mainly contributions brought by stockholders while the profit is distributed as dividends and not reinvested.

The positive correlation is established between the dimension of the company and the level of equity. As far as the company manages to have a high level of sales, its equity will increase.

The second regression conceives the weight of the short term debt into total debt as dependent variable (I_9) and as independent variables there have been used the same as in the case of the first regression.

The correlations are the same as in the case of the first regression. The weight of the short

Table no. 3 – Output of the capital structure regression

Regression Summary for Dependent Variable: VAR9 (new.sta)

R= ,29933243 R_c= ,08959990 Adjusted R_c= -----

F(3,8)=,26245 p<,85060 Std.Error of estimate: 1,8980

	BETA	St. Err. of BETA	B	St. Err. of B	t(8)	p-level
Intercpt			93,91898	8,929264	10,51811	5,81E-06
VAR5	-0,25637	0,352192	-1,84917	2,54029	-0,72794	0,487409
VAR6	0,248579	0,412064	0,701848	1,163435	0,603254	0,563048
VAR7	-0,03599	0,401059	-0,02693	0,300099	-0,08974	0,930703

Source: own processing

term debt into the total debt is correlated negatively with profitability and the weight of

the fixed assets and positively with the size of the company.

The relation can be modeled as follows:

S= -0,25637 P + 0,248579*NS – 0,03599*T

Where:

S = short term debt reported to total debt

P= EBT/TA

NS= Operating expenses/Net Sales

T= Debt/Tangible Net Worth

The output statistic reflects the fact that their financing policy does not imply a differentiation between the short term and the long term approach. The financial indicators are correlated in the same way both with equity level and short term debt.

For the period to come, it is obvious that this differentiation will be implemented under the context of stock exchange development.

The third regression conceives the short term debt reported to total debt as dependent variable and as independent variables working capital (I_{13}), accounts receivables turnover (I_{11}), current liquidity ratio (I_1) and return on tangible net worth (I_4).

The relation can be modeled as follows:

S= -0,06308Lq + 0,000467*RT + 0,086124*AR + 0,309613WC

Where

S = short term debt reported to total debt

Lq = current liquidity ratio

RT = return on tangible net worth

AR = accounts receivable turnover

WC = working capital turnover

Table no. 4 – Output of the capital structure regression

Regression Summary for Dependent Variable: VAR9 (new.sta)

R= ,31905440 R_c= ,10179571 Adjusted R_c= -----

F(4,7)=,19833 p<,93146 Std.Error of estimate: 2,0154

	BETA	St. Err. of BETA	B	St. Err. of B	t(7)	p-level
Intercpt			97,34638305	2,620085	37,1539	2,66E-09
VAR1	-0,06308	0,373947	-0,598695	3,548986	-0,16869	0,870808
VAR4	0,000467	0,380508	0,000350906	0,28597	0,001227	0,999055
NEWVAR11	0,086124	0,385685	0,038984824	0,174583	0,223302	0,829677
NEWVAR13	0,309613	0,363823	0,074424036	0,087455	0,851001	0,422921

Source: own processing

Output statistic highlights out a negative correlation between liquidity ratio and the weight of short term debt into total debt which is in line with the assumption that a high level of indebtedness determines outflows of liquidities.

The positive correlations are established between the accounts receivable turnover, working capital turnover, the return on tangible net worth and the indebtedness indicator which reflects the fact that an increase of the activity of the company will be supported by a more aggressive financing policy based on external resources.

Conclusions

The article concentrates on the particularities of the finance corporate decision within East emerging countries.

The statistic output highlights out the short term approach of the financing policy. There has been no differentiation between the correlations established at the level of various financial indicators and the short term debt/long term debt.

For the years to come, in the context of the capital market development, there will be a switch from the short term approach of the financing decision to the long term one.

The intensity of the negative correlation between liquidity indicator and indebtedness degree will decrease since the financing policy will be conceived having as reference the long term approach which will reflect higher projection degree.

Their financing policy focuses mainly on internal resources valorized by the practical contributions brought by shareholders within the company while profit is mainly distributed as dividends and not reinvested.

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