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RISK DIAGNOSIS IN THE CONTEXT OF ECONOMIC CRISIS

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Abstract: *The economic crisis has turned into a global phenomenon and it was hard to believe that Romania would not experience its negative effects. Initially emerged in the USA, it extended and now includes almost all countries. The diagnosis of risk under the conditions of economic crisis is more difficult to establish than in normal conditions. In this article we are trying to explain the conditions that led to the emergence, apparition and deepening of the economic crisis, its impact on Romania and Romanian companies, how a correct diagnosis can be established in terms of economic, financial and bankruptcy risk. Eventually we have established some causes that lead to bankruptcy of many SMEs (small and medium-sized enterprises) as well as measures that should be taken to overcome the current crisis.*

Key words: *economic crisis, financial crisis, economic risk, break even point, anti-crisis measures.*

1. Introduction

The economic crisis is a manifestation of troubles and derangements of placement in conducting business and reversal from the ascending to descending stage of the cycle, expressed by increase in stock of products unsold and decrease of production, by lowering prices, unemployment and by falling stock quotes.

The start of economic crisis requires economic operators to act in order to determine qualitative changes in the conditions and factors of economic growth, in economic structures, designed to eliminate imbalances, behaviors, obsolete institutions and mechanisms, premises of transition to a new ascending stage. Economic crisis can be cyclic and non-cyclic. **Cyclic economic crisis** are repeating with at certain regularity, depending on the type of economic cycle. **Non-cyclic economic crisis** don't have certain repeatability. Some are partial, others intermediary.

Materials

1) Economic crisis

The financial crisis is a serious disorder of the financial system of a country (state finances, credit system, and monetary circulation). It occurs as a result of accidental circumstances such as decrease in budget receipts or adverse circumstances.

The current economic crisis is the culmination of a huge economic boom that lasted over 25 years. The triggering point is when Japan and the United States began to decrease interest rates to avoid recession. **Easy access to loans** with low interest rates increased the prices of assets worldwide, be it real estate or shares.

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In February 2007, the British Bank HSBC is the first large company recording heavy losses caused by the US mortgage sector.

Here are a few moments of the economic crisis of 2008:

- February 17th: Great Britain nationalized Northern Rock Bank;
- March 16th: USA, Bear Stearns is purchased by JPMorgan Chase;
- July 13th: Company IndyMac of USA collapses;
- September 14th: USA, Merill Lynch Bank is purchased by Bank of America:
- September 15th, Lehman Brothers goes bankrupt;
- September 17th: FED credits American International Group (AIG) 85 billion dollars, and HBOS, the largest British company of mortgage credits, is taken over by Lloyds;
- September 19th: USA Government drafts a plan in value of 700 billion dollars, to save the financial system;
- September 25th: Washington Mutual is sold to JPMorgan Chase;
- September 28th: Fortis Group is nationalized by the authorities of Netherlands, Belgium and Luxemburg, to avoid closing down;
- October 13th: Great Britain nationalized three banks: Royal Bank of Scotland (HBS), Lloyds and HBOS.

The economic crisis in Romania is mainly an internal crisis, caused by the erroneous mix of macroeconomic policies conducted during the recent years. The economic growth appears an unhealthy one. And that is because the domestic growth relied on consumption, financed by debt. The flax tax of 16% has stimulated consumption, which came through imports and did not lead to the increase of production capacity of Romanian companies, as it was normal. Variants had to be found to stimulate domestic production and exports. Most consumption credits went to imports.

The main cause was the excessive consumption on debt. **The budget deficit** increased from 1.3 % of GDP in 2004 to 4.8 % in 2008 and 7.6 % in 2009. GDP decreased from 501 billion lei in 2008, to 491 billion lei in 2009. The external debt increased at an infernal pace: from 24.6 billion euro in 2005 to over 64.2 billion euro in late 2009. And in the first 3 months of the year 2010 Romania borrowed from IMF, World Bank and EBRD other billion euros. How were used these credits in fighting the crisis is a difficult answer. It is certain that some countries are beginning to emerge from the crisis, but we, in March 2010, we do not know is we reached the critical point.

The international financial crisis was only the factor for triggering the domestic economic crisis, because it affected funding sources**.** We consume on debt, and now we are borrowing much more expensive.

Vulnerabilities of an unbalanced economy, with many delayed structural reforms have now become obvious. Jobs are lost, and this is just the beginning. At the end of 2005 we had over 523 thousand unemployed, but at the end of 2009, the number of unemployed persons exceeds 709 thousand people.

In 2010 the budget revenue will be lower, because we have a reduction of GDP and will be collected more difficulty because of lack of cash. It will not be enough for BNR (Romanian National Bank) to stimulate loans by lowering the interest and minimal mandatory reserves.

To end this crisis we should begin by eliminating wasteful administrative budget costs. The cheapest money is the money you already have and you can save. The savings such made may compile a plan for infrastructure investment plan, because they bring jobs and have an important drive effect in the economy. But infrastructure investment should be carried out within a multiannual budgetary schedule, the only way to reduce additional costs and to eliminate erroneous allocation of the public money.

Fiscal policies mistakes must be rectified – not necessarily to increase budget revenues to distribute more equitably the tax burden and to allow those with more difficult access to credits to successfully overcome the crisis period.

It also must be made a plan to adopt the euro, with a precise target; such a plan will increase credibility at external level (and implicitly will lower the cost of external financing) and especially will oblige us to make the required fiscal and budgetary reforms, as well as structural reforms leading to an increased production, flexibility of the labor market, modernization of agriculture, reducing bureaucracy.

Microenterprises can no longer choose, starting with 2010, to pay a tax on income of 3%, but will pay a tax on profit of 16%, like the rest of the firms in the country. The tax on profit of 16% would be paid in quarterly anticipated payments. In 2010, the basis for payments that the firms must make as a result of switching to tax on profit is their income of 2009.

Decrease of orders and lack of funding are the main problems, due to the economic financial crisis, faced by most SMEs in Romania. The phenomenon is expanding fast enough to the level of an increasing number of companies.

Representatives of the National Council of Private Small and Medium Companies (CNIPMMR) estimates that over 90% of over 690,000 companies, of which 300,000 micro-enterprises in the country are affected by the financial crisis, and the solution for recovery may come from urgent adopting the legislation necessary to activate crisis measures to support companies.

2) Risk concept

The risk means the variability of result under pressure of the environment. Riskier companies should have a higher return required by investors. The risk is often associated with profitability.

The risk is the opposite of profitability of business. A relevant diagnosis for any company must consider both the analysis of profitability and the risk diagnosis. Profitability can only be assessed on the basis of risk, and the risk analysis must be correlated with the diagnosis of profitability. The **financial balance** if the company should consider the return-risk relation. For any company, profitability /return is an indicator of performance, and the risk is a possible counter-performance.

When setting up a business, through capital contributions, the owners (shareholders) expect a certain level of profitability for each activity. If the level changes, the financial profitability will experience changes representing the risk of capital invested.

3) Operational risk diagnosis

Economic risk or operational risk means that the company is unable to adapt in due time and with the lowest cost to the economic environment changes.

The economic risk is linked to the company’s business cycle, influenced by the structure of operational costs in structure and variable (operational), i.e. the share occupied by the 2 categories in the total operating costs. The economic risk is greater for firms with high fixed costs (depreciation, administrative salaries, rent) and smaller for companies with lower technical level, where the share of fixed costs is smaller.

Variability of profit to a change in the level of company activity is called coefficient of elasticity **(operating leverage).**

The gross operating profit (Pb), or the result of operation (RE), is determined according to:

Pb = CA - CHV- CHF - Amo

CA – turnover; CHV – variable costs;

CHF – fixed costs; Amo – amortizations.

CHV/CA ratio, represents the coefficient of variable costs in the total turnover *(Cv)* according to the relation: *CHV = CA x Cv*

The relation of gross profit will be:

Pb =CA(1- Cv) - CHF-Amo

Dispersion of profit can be deduced from this relation (CT, sigma):

o-(Pb) = a (CA) x(l- Cv)

The economic risk is greater as the margin over variable costs (1- Cv) is higher and the variability of the turnover is higher.

The relation $\frac{CHF}{1-Cv}$ represents the break-even where revenues are equal with costs and the profit is equal to zero. More the turnover is most remote from the break even point, the company is less risky. The interval ranged from the break-even point (profit is equal to zero) and turnover is called safety interval.

Safety interval expresses the ability of companies to change production and to adapt to market requirements. The safety interval is higher, the company flexibility to change production and sales is higher and the economic risk is lower.

Another indicators used in the diagnosis of the operating risk is the position in relation to break-even point (PRPR), i.e. how many percentage points the company is above or below break-even point. The calculation is:

$$\text{PRPP} = \frac{\text{CA - Break - even point}}{\text{Break - even point}}$$

PRPR = <u>*C*</u>

Application:

Let 2 companies X and Y that over 3 years have the same level of activity, the same amount of total expenditure, the same operating result, but differ the structure of costs : company X has a share of variable costs of 70% of total expenditures and company Y a share of 55% of variable costs of the total expenditures.

We consider 2008 as base year, in 2009 the turnover is reduced by 20%, following the economic crisis, and in 2011 we have an increase in turnover by 25%, as a result to economic recovery. Full details are displayed in the following table:

Financial data

	Company X			Company Y		
	2008	2009	2011	2008	2009	2011
Turnover	1000	800	1.250	1000	800	1.250
Variable costs	700	560	875	550	440	688
Fixed costs	200	200	200	350	350	350
Operating result	100	40	175	100	10	212
Break-even point	667	667	667	778	778	778
Position in relation to the break even point	50%	20%	87%	29%	3%	61%

At company X, the break-even point is given by: $\frac{CHF}{1-\frac{CHV}{CA}} = \frac{200}{1-\frac{700}{1.000}} = 667$

The position in relation to the break-even point is 50% has been calculated as follows:

$$50\% = \frac{1.000 - 667}{667} x100$$

At company Y, the break-even point is given by the relation: $\frac{350}{1-\frac{550}{1.000}} = 778$

Conclusions:

1) Break-even point remains unchanged: 667 with company X and 778 with company Y, whether we have a reduction or increase in turnover.

2) In the base year, 2008, the profit for both companies is 100. The break-even point at company X is 667, and for company Y of 778. More risky is company Y which should reach a higher value for the profit to be zero. For example, at a value of turnover of 700, company X has profit, and company Y has losses.

3) In the case of the decrease in turnover by 20%, i.e. year 2009, company X will get an operating result of 40, and company Y of only 10 units. We note that company Y is more risky, because it has higher fixed costs. The position in relation to the break-even point at company X is 20% above the break-even point and at company Y of only 3% above the break-even point. At decrease in turnover, the company having higher fixed costs presents a higher operating risk.

4) In the case of increase in turnover by 25%, year 2011, company X will obtain an operating result of 175, and company Y of 212 units. We note that **company Y obtains a higher profit,** because it has higher fixed costs (actually has some advantages from the weight of variable costs which is smaller). The position in relation to the break-even point at company X is of 87 % above the break-even point and at company Y of 61 % above break-even.

At increase in turnover, the company having higher fixed costs will obtain better business results.

5) Caused that led to bankruptcy of SMEs

We consider that there are many causes that led to the widening of the economic crisis and bankruptcy of SEMs:

A) Low equity capitals

Equity capitals include share capital, reserve, revaluation reserves, retained earnings, profit or loss. Many SEMs have equity capitals at the level of share capital, i.e. 200 lei. What fixed assets can be funded with this amount? The amounts deposited upon the formation of the company cannot cover the working capital. The company must make profit to reinvest and increase thus equity capitals and properties of the company. And without a strong working capital SMEs cannot resists if payments for services rendered are not made in time. And the state has arrears to SMEs up to several months or years. The money borrowed by Romanian ought to support SMEs, the engine of development in most European countries.

B) Lack of favorable financing for SMEs

Another way would be the use of loans, but in the conditions of this crisis, the cost of financing is high, it is hard to get a credit with DAE /effective annual interest below 20%. To cover the credit the economic rate of return must be at least 20%, for payment of current interests and credits. The Government has not supported or cannot bear a part of funding costs so that SMEs can borrow from banks.

C) Lack of adequate management

Small businesses cannot afford to pay for a large number of specialists, thus formation of shareholders, who are usually directors as well, is very important. This lack of training of leaders has the following consequences:

- ✓ lack of company development strategy;
- ✓ insufficient knowledge of the market;
- ✓ low quality standards;
- ✓ Inobservance of the legislation.

Another reason is that the start of a business plan does not involve an initial marketing study or formation of a business plan, assuming that eventually it will work.

D) Mistrust of financial partners

Because of low equity capitals, small firms should borrow money. In absence of concrete measures from authorities, and because the banks prefer to lend money to the Romanian state, because the risk is smaller, SMEs are facing the situation to suspend business or to go bankrupt. Having no securities to backup their business because of absence of properties, banks do not risk, still having big problems with bad loans given so easily in the previous years.

Conclusions:

We consider that, before starting a business, especially in the context of crisis, the following aspects should be taken into account:

- ❑ when starting a business, permanent capitals (owned and liabilities) must correspond to the business plan as regards long term financing;
- ❑ return expected by shareholders be close to the one recorded in the industry where the company operates;
- ❑ the shareholder (partner) must have expertise and skills to lead a company, or to provide staff with managerial abilities;
- ❑ state involvement in supporting SMEs in terms of crediting and a greater transparency from banks when providing funds;
- ❑ use of external expert advice when needed.

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