Russian Roulette: Survival of Foreign SMEs in Emerging Economies During Crisis - Evidence from Romania

Cosmina Lelia Voinea

Abstract: The survival circumstances for foreign SMEs in emerging economies during an economic crisis are extremely difficult. In this research we focus on examining underlying firm and corporate level characteristics, which are not affected directly by strategic decisions, as a response to the crisis among foreign SMEs operating across 12 industries in Romania. Our empirical findings show that the type of industry, the country of origin, the industrial development and political systems of home and host countries have a significant relationship to the companies’ survival. These findings indicate the increasing intricacy of the relationships between various host economies, players of economic origins but also political institutions, as well as underline the global interconnectedness and home-host dynamics wave effects.

INTRODUCTION

The most recent economic crisis was considered the most severe and intense great recession since World War II. Many countries experienced economic decline; even though the ad-hoc mechanisms for preventing the collapse of the international payments systems were effective, the crisis left behind it a lot of concern about the future (Nabli, 2011). However, not all countries were affected by the crisis equally (Rose & Spiegel, 2009). In particular, emerging economies which could not rely on borrowed reserves via swap lines had to make rapid adjustments when the crisis developed (Aizenman et al., 2010). Emerging economies represent an interesting context for observing the performance of foreign firms; they have an uncertain institutional framework, on-going processes of refining regulatory framework, a low regulatory burden for foreign firms etc. Such economies thus present a mixture of attraction and rejection magnets for foreign firms, in some ways making life easy for these firms but in other ways posing just as many challenges as the advantages offered.

Considering all this, international business scholars make the point that emerging economies represent the place and source for future theory testing, revelations and exploration (Uhlenbruck & De Castro, 2000; Oviatt, 1997). Additionally, the fast growing emerging markets offer a diversity of strategic goal opportunities for foreign firms. Regardless of their pedigree, all foreign firms are always on the lookout for various strategic objectives across the boundaries of emerging economies and, from what various studies and empirical phenomena have shown us, emergent economies are more than able to deliver (Uhlenbruck & De Castro, 2000).

In the context of emerging economies in transition, economic downturn and crisis circumstances only enhance the difficulties faced by foreign firms in terms of surviving in such environments. Many companies have thus had to implement substantial changes compared to the way they used to operate, in order to survive. During economic recession is emerging economies the contextual uncertainty and bounded rationality enhance the external environment’s volatility or unpredictability. On the other hand, as stated by Booth (1993), failure, chaos and change are ubiquitous. Managers try to redefine failure, chaos and change, concentrating on changing failure to success, or else ignore these factors. Moreover, change per se is so rapid that the prediction of future shock is a reality (Booth, 1993). In such a context, many companies go bankrupt, due to their inflexibility and insufficient dealing with changes (in this case the crisis).

As stated earlier, this crisis has not had the same impact on all countries. Rose and Spiegel (2009) obtained non-significant results when trying to connect incidence and severity of the crisis and countries’ national characteristics, such as regulatory framework, financial conditions and macroeconomic, institutional and geographic features. As the number of foreign enterprises in countries all around the world is on the rise, with increasing interconnectedness at all levels, the recent economic crisis resulted in a decrease, or even turned many economic indicators negative, not only locally in particular countries, but as a chain reaction too (Internationalization Monitor, 2010).

Given that all institutions, enterprises, or other entities are somehow connected to banks or financial institutions (where the crisis broke out) through financial products and have continuous transactions with each other, they also experienced problems, originating in the banking industry. A decline in many economic indicators of firms, governments and other entities followed these events. Also, problems with solvency occurred, due to a decline in the value of riskier assets, while consumer demand decreased as well (Poole, 2010). Thus, although of great importance, we will not consider any strategic actions, since these act as a reflection of firms’ management capabilities and their reaction to the crisis. Firm characteristics are, however, of
crucial importance, since they represent the pre-set or fixed conditions and organisational capabilities, which can further the understanding of survival or bankruptcy as a result of a crisis environment.

Therefore, we assume that attributes resulting from the macro-level cannot always be influenced (in a shorter period of time) by managers; hence, firm’s characteristics and the level of its interaction with the market and nonmarket environment and its flexibility and ability to adapt, can all play an important role in dealing with and surviving a crisis (Baron 1995; Cook & Macaulay, 2010). Characteristics such as a firm’s financial condition, its age, size, type of industry, country of origin, represent indicators of the firm’s functioning which are relevant during a crisis too and which reflect the crisis’ consequences on the firm’s performance or survival. Thus, in this research we examine underlying firm and corporate level characteristics, which are not affected directly by strategic decisions as a response to the economic recession among foreign companies that survived the crisis, in the context of an emerging economy.

The empirical analysis we have conducted focuses on the period before and after the crisis, in order to establish the critical characteristics of survival among foreign SMEs located in Romania. We focused on Romania because, as international business scholars have pointed out, emerging economies (such as Romania) represent the place and source for future theory testing, revelations and exploration (Gaußelmann et al., 2011; Uhlenbruck & De Castro, 2000; Oviatt & McDougall, 1997). Additionally, fast growing emerging markets offer a diversity of strategic goal opportunities for FI (Baack & Boggs, 2008, Enderwick, 2009). Romania is classified as an emerging economy (WEO, 2014). The growth of its GDP has recently increased rapidly, from 19,578 in 1992 to 122,696 (both in million US dollars) in 2006 (WEO, 2014). Therefore, this study has chosen to use data from foreign SMEs operating in Romania. The data for this study were gathered using a (postal and email) questionnaire survey, conducted among strategic decision makers (managing directors or owners) of SMEs, in the summer of 2013.

In section two, the issues and theories that are relevant to this study are described, followed by a presentation of issues around methodology in section three. Section four is dedicated to the analysis and empirical results, as well as a presentation of the testing of our hypothesis. Section five interprets the results and reflects on their implications for theory, followed by our conclusions and future research ideas.

FIRM LEVEL CHARACTERISTICS AND PERFORMANCE DURING ECONOMIC CRISIS

In the current literature, much has been written about the most recent crisis and its negative consequences on economies (Radun, 2010; Bexley et al. 2010; Nabli, 2010; Rose & Spiegel, 2008, 2009; Sturgeon & Van Biesenbroeck, 2010). For example, Bexley et al. (2010) mention that 305 banks went bankrupt in 2009, while during the period of the 1980s-early 1990s, this number reached 1600. Therefore, it is not possible to blame the crisis as the only reason for all the company bankruptcies during this period. Witteloostijn (2000) states that the decline of an organisation can be caused by internal factors, such as organisational inertia, escalating commitments, the threat-rigidity effect and external factors, such as strategic competition and turbulence. These factors are also mentioned in a model proposed by Cameron (1988). Besides external factors, there are also firm-related determinants which can influence a firm’s performance, its survival or death during conditions of extreme economic downturn. In the following sections we discuss the relationship between companies’ financial indicators, their size (based on their employment base and fixed assets), their host country experience, the type of industry in which they operate and finally the country of origin of the SME and their survival during and after the most recent crisis (Grubber-Muecke & Hofer, 2015; Baack & Boggs, 2008).

Financial Conditions of Firms:

Several financial indicators can predict a company’s failure. Mensah (1984) argues that bankruptcy is gradual and thus can be predicted at least three years in advance. In a time of economic recession, the possibility that a company will fail is higher; such an outcome is not only caused by internal factors having to do with the company itself (Mensah, 1984). External factors, such as inflation, interest rates and credit availability, as well as the business cycle can, according to Mensah (1984), influence the financial state of a firm, over time. Moreover, in order to examine each of these external factors, different financial indicators are more suitable.

Mossman et al. (1998) have found that Altman’s (1968) model, based on financial ratios, was the most accurate one in predicting a firm’s failure one year prior to its bankruptcy. However, when it came to three years prior to the bankruptcy, the cash flow model, developed by Aziz et al. (1988) served as the best one for distinguishing between bankrupt and non-bankrupt firms. Mossman et al. (1988) also state that none of the four tested models are able to capture the data adequately and that they are not able to reliably predict a firm’s failure more than two years in advance (Mossman et al., 1988).

Even though different field studies propose different financial ratios as the most important indicators, in general it can be assumed that these indicators are concerned with ratios measuring profitability, liquidity and solvency (Altman, 1968). Thus, in order to discuss the financial condition of firms, we will use Altman’s (1968) Z-score model and its components, which provide a clear and all-encompassing overview, including: working capital/ total assets, retained earnings / total assets, earnings before interest and taxes/ total assets and net worth / book value of total debt.

In the original model (Altman, 1968), the financial indicators are: working capital/ total assets; retained earnings / total assets; earnings before interest and taxes/ total assets; net worth/ book value of total debt and sales / total assets. However, this original model is only suitable for publicly held manufacturing companies, whereas in our research we focus on companies with different ownerships, originating in different industries. Therefore, instead of five financial indicators, the adjusted model uses only four,
without the indicator sales / total assets, controlling for the industries’ diversity (Altman et al., 2008).

**Working capital/ total assets:** a firm which has constant operating losses will have declining current assets, in relation to total assets. If the firm struggles with continuing losses caused either by the seasonality of the market where it operates (i.e. decline in demand) or by poor management decisions regarding product/service management, marketing etc., the firm will lose its ability to fund its day-to-day operations. At the opposite pole, a company with a high working capital/total assets ratio will be more trustworthy, as seen by its suppliers, since the higher ratio indicates that it is able to pay its liabilities on time.

**Retained earnings / total assets:** This indicator measures a firm’s cumulative profitability over time. Although the firm’s age is implicitly considered here, newer firms may show a lower ratio (because of less time to gain cumulative profits) and therefore higher probability of failure (Altman et al., 2008). When too much borrowed capital accumulates, companies can struggle or even become unable to pay it back to lenders. This issue can be even more critical when a company encounters a sudden relapse in market demand (e.g. resulting in lower sales). Though there are ways to overcome these problems (which is beyond the scope of this paper), such a situation can ultimately lead to a firm’s bankruptcy.

**Earnings before interest and taxes / total assets:** This ratio represents productivity when it comes to the firm’s assets, eliminating tax or leverage factors and calculated by dividing a firm’s total assets into its earnings, before interest and tax reductions. Thus, the earning power of a firm’s assets is closely related with its solvency. If a firm cannot gain enough profit from utilising its assets, whether fixed or current, over time it will lose its efficiency and will in turn encounter problems, having to do with paying its suppliers, paying its employees, leading to a reduction or stop in investments in R&D, marketing, etc. This can be the case especially during a period of economic decline, when some industries suffer from low sales, such as the car industry (Sturgeon & van Biesebroeck, 2010). Those firms that cannot keep up with their competitors are more likely to go bankrupt.

**Net worth / book value of total debt:** net worth/ book value of total debt shows the degree to which a firm’s assets can decline in value, before liabilities exceed assets, leading to the firm becoming insolvent. Similarly to the previous ratios included in the Z-score model, this situation occurs when a company cannot utilise its assets efficiently enough, in order to keep the level of its assets higher than the level of its liabilities, which can be caused by an environmental shock (crisis) (Hannan & Freeman, 1984). After having argued individually about how all four components (Altman’s Z-score) of a firm’s financial condition can influence its survival or bankruptcy path, we are able to formulate the following hypothesis:

**Hypothesis 1:** The higher the value of Altman’s Z-score model, the higher is the probability for the firm’s survival during economic crisis.

**Resources:**

**Tangible resources:** large firms have more resources that they can use to withstand shocks, while smaller firms, because of their smaller margins for error, cannot easily reduce their scope and therefore their rate of the bankruptcy tends to be higher (Hannan & Freeman, 1984). Numerous authors (e.g. Evans, 1986; Witteloostuijn, 2000; Hannan & Freeman, 1989; Gwemawat & Nabeluff, 1985) have stated that the size of a firm (referring to size as a tangible resource, measured by number of employees and fixed assets) is related to a firm’s chance of failure. Gwemawat & Nabeluff (1985) have made the point that, since there are cost asymmetries and different perceptions of costs between small and big firms, these operate differently, at different scales, when facing divergent levels of cost. If scale economies are not dominant, smaller firms deal with decline in demand better, since larger firms will be the first to deal with the costly overcapacity. Therefore, larger firms tend to be the first to exit the market (Witteloostuijn, 2000). Nevertheless, their exit does not necessarily lead to total bankruptcy. Firms can leave some of their business only partially operating (e.g. in terms of their downsizing capacity).

Lee (2009) provides evidence that when it came to performance, the size of a firm matters: bigger companies were shown to outperform smaller ones. However, the results of this study and others like it often do not control for various factors which can play a role, such as firm strategies or entry barriers (Caves &Pugel, 1980; Lee, 2009).

Evans (1986) as well as Hannan & Freeman (1989) have also provided evidence that bigger companies are less likely to fail. However, the relationship between size of firm and chance of failure is often moderated by a firm’s entry mode (Witteloostuijn, 2000).

Although these studies did not take place within a economic recession situation, the results might have some validity for companies within a crisis situation. Hence, we can assume that the size of a firm plays an important role when determining its survival and formulate the following hypothesis:

**Hypothesis 2:** The larger the tangible resources of a firm, the higher is the likelihood that it will survive during an economic crisis.

**Intangible resources / experience:** authors like Dunne et al. (1988), Hannan & Freeman (1989), Evans (1986) and Witteloostuijn (2000) confirm, based on their empirical results, that the age of a company (as a measurement of its experience) is important in determining the company’s survival. Those companies which can adapt to a changing environment may be less likely to fail (Pangarkar, 2007). Companies which have already experienced critical situations in the past and have managed to survive them may be more successful in dealing with a crisis, compared to younger companies.

This is supported by Altman’s (1968) study, in which he found, based on the financial indicators analysis, that the incidence of failure is higher in newer firms. In addition,
young, newly established foreign firms have different priorities than older firms; these differences in terms of priorities are pushed forward by their liability of newness. Moreover, these firms lack sufficient intangible resources, such as experience, knowledge accumulation, social capital and relationship networks in the host setting (Hillman et al., 2004; Boddewyn & Brewer, 1994; Hillman & Hitt, 1999; Hillman, 2003).

The liability of newness offers ground to argue that this lack of intangible resources, such as experience and unfamiliarity with the local environment, the lack of roots and reputation in a particular setting, can create prospects and incentives to deal with recession circumstances. Additionally, a credible reputation is intrinsic to social capital, the tacit resource attained through network building. Furthermore, the liability of foreignness suggests that newly established firms with very limited host experience are more liable and much more prone to risks in the context of a hostile crisis environment. Therefore, we are able to formulate the following hypothesis:

**Hypothesis 3:** Firms with more host country experience are more likely to survive a economic crisis.

**Type of industry:**

The recent economic recession had a different impact on companies in different types of industries. The type of industry can also be a factor which distinguishes the firms which survived from those which went bankrupt. The pace of development and growth of an industry reflects the characteristics of firms and vice versa. Also, the demand for particular goods and services can either increase or decrease, in more extreme ways in some industries when compared to others, depending on the characteristics of particular goods and services. In particular, it has been argued that the banking and financial industry, the automotive industry, the construction industry and the housing industry were hit by the recent crisis the hardest (Sturgeon & van Biesebroeck, 2010).

However, some industries were protected by governments, due to the high degree of interconnectedness between these particular industries and the strategic importance for the overall national economic situation (Sturgeon & van Biesebroeck, 2010; Poole 2010). Thus, because of the different degree of interconnectedness between industries, different level of government interventions happened in different industries, and thus not all companies were equally affected by the crisis. Therefore, we can formulate the following hypothesis:

**Hypothesis 4:** The survival rate of companies during economic recession differs among different industries.

**CORPORATE LEVEL CHARACTERISTICS AND PERFORMANCE DURING A CRISIS**

**Country of origin:**

As argued by Guillen & Garcia-Canal (2009), since 1990 numerous SMEs from emerging, upper-middle-income, developing or oil-rich countries have emerged in the global competitive landscape. Since these countries differ in terms of political regimes and stage of economic development, multinational companies may have had to adapt to different environments. Thus, modern SMEs from these countries usually tend to possess better political capabilities and adaptability than traditional ones, since they are more used to dealing with unstable governments in their home countries (Guillen & Garcia-Canal, 2009). Therefore, we propose the following hypothesis:

**Hypothesis 5:** The impact of economic recession on a company’s survival differs according to its country of origin.

**Psychic distance:**

In a more profound way, as in the previous section, the differences between countries also indicate psychic differences existing between the country of origin of the foreign firm and its host country, regarding political systems, level of industrial development, culture, language, all of which are examined by Dow & Karunaratna (2006) in their research. These differences represent a macro-level factor, which constitutes the environment within which firms’ managers operate (Dow & Karunaratna, 2006).

The concept of psychic distance, as a relevant issue in international trade, was brought to closer scrutiny by researchers from the Uppsala School, who introduced the Internationalisation Theory (Johanson & Vahlne, 1977; Hosseini, 2006). The underlying argument for inclusion of psychic distance in Internationalisation Theory involved an assumption that companies start the process of their internationalisation in countries that are less psychically distant (Melin, 1992). According to this theory, in countries that are psychically closer, it is easier for a firm to adapt to the environment, resulting in a higher probability of success in that market, when compared to countries with a psychically more distant environment (O’Grady & Lane, 1996; Hosseini, 2006).

However, O’ Grady & Lane (1996) also refer to another possible conclusion, according to which starting the internationalization process by entering a country close to home may result in poor performance and, possibly, failure. The possible reason for this can be that possible differences in psychically close countries (markets, environments) are underestimated; for this reason, this has been named the psychic distance paradox (Hosseini, 2006). In the present research, we focus on countries’ differences in terms of political systems and industrial development, something which has also been studied by Dow & Karunaratna (2006). Countries’ industrial development is connected to business norms and communication, amongst other things; therefore, Dow & Karunaratna (2006) assume that trade between countries with more similar levels of industrial development will be more intense. Following this idea, we assume that the possibility of foreign firms’ survival will also differ, on the basis of the differences in industrial development of each firm’s home country.

The same argument can be applied to the political system in a firm’s home, in comparison to its host country. This is because the existing political system can have a great
influence in many areas, in communication norms when it comes to business-to-government relations, as well as business-to-business relations and business-to-customer interactions (Dow & Karunaratna, 2006).

While being aware of the possible psychic distance paradox (Hosseini, 2006), in our research we hold the assumption that the closer the psychic distance between home and host country, the higher the probability that a company will succeed in this environment; this is also relevant in dealing better with the recent crisis and its consequences. According to these arguments, our next two hypotheses can be formulated:

Hypothesis 6a: Foreign firms from home countries with an industrial level similar to the host country will be less prone to bankruptcy.
Hypothesis 6b: Foreign firms from home countries with a similar political system to that of the host country will be less prone to bankruptcy.

METHODOLOGY

Sample and Data:
In our study, the unit of analysis is represented by foreign subsidiaries located in Romania. These units are considered at the subsidiary level, which means that even if the two companies are related through a common parent, they represent two separate entities. The total working sample consists of 4000 foreign companies from 36 home countries, including units which were active before the crisis and have remained active after the crisis too, as well as companies which were active before the crisis but have not remained economically active after it.

Our study’s sample is highly representative in terms of the structure of the host economy; the active companies account together for almost 90,000 employees and approximately 1-billion-euro turnover. Also, according to official statistics, the FDI sectors represented together cca. 45% of Romania’s foreign trade. The data were provided by the Romanian Central Bureau of Statistics in the summer of 2012, in terms of the period prior to the recession. The database contains information and annual reports of the companies, for the period between 2007 and 2011. In order to analyse the data, we employed a variety of techniques as follows: To examine which companies, with particular characteristics, survived the crisis, we performed a cross-sectional analysis. Furthermore, to find out the predictive relationship between companies’ characteristics and to compare the significance of each independent variable, a logistic regression analysis was the most appropriate technique.

Variables:

Dependent variable:
Survival status depicts the state of the foreign firm as economically active or non-active. Companies which survived are defined as companies that have remained economically active after the crisis, while non-active companies are those which went bankrupt during the crisis. In the analysis, active companies are coded as ‘1’ (meaning survival), whereas non-active ones are coded as ‘0’ (meaning bankruptcy).

Independent variables:
The variable ‘financial condition of the firm’ is measured through Altman’s Z-score model (1968).

The calculation of the Z'-score proceeds as follows:

\[ Z'' = 6.56(X1) + 3.26(X2) + 6.72(X3) + 1.05(X4) + (3.25) \]

Where: \( X1 = \) Working capital/ total assets
\( X2 = \) Retained earnings / total assets
\( X3 = \) Earnings before interest and taxes / total assets
\( X4 = \) Net worth/ book value of total debt
\( Z = \) Overall index.

The constant (3.25) is included for comparability with the original Z-score (Altman et al., 2008). This score is calculated and examined for each company for the year 2007 \((Z_{2007})\), in order to see whether there were any indications of financial problems in the following year. According to Altman (1968), companies with a Z-score lower than (1, 81) are in a “distress zone” and thus are very prone to going bankrupt.

In this research, those companies that had the lowest score \((Z''<1.81)\), both before the crisis and afterwards, and which went bankrupt in the following year, cannot be reliably considered as having gone bankrupt because of the crisis, since they were more prone to going bankrupt even if they had not been influenced by the crisis. Therefore, when interpreting our results, we have kept this in mind in order to avoid misinterpretation.

Next the Z''-score of each company (for non-active companies in the last year of their active state and for active companies in the last year during which data were available) (further mentioned as “last year”) \((Z_{\text{last}})\) is calculated, in order to examine its relationship with its survival. Also, the difference between \(Z''\) of the “last year” and \(Z''(2007)\), \((Z_{\text{diff}})\) is calculated, in order to see whether companies with a declining/rising \(Z''\) score were more prone to bankruptcy/survival. We expect to see a decline tendency for a high percentage of the companies sampled, which would also justify the negative influence of the crisis on them.

The variable ‘tangible resources’ is measured as the size of a company’s employment base (number of employees) and the size of the company’s fixed assets.

The variable ‘intangible resources’ is measured as the experience of a foreign firm in the host country, based on the years from when the company was established in the host country (Romania) until the final year of its activity (thus, the overall number of years which the company operated in Romania).

The variable ‘type of industry’ is a categorical variable, as follows: (1) agriculture and food; (2) automotive; (3) construction; (4) mining; (5) computers and electronics manufacturers; (6) transport and communication; (7) finance, banking, and insurance; (8) health care; (9) housing
and real estate (industry representativeness is presented in Figure 1).

Figure 1. Industry representativeness of sample foreign SMEs in Romania

The variable ‘country of origin’ is a dummy variable of the home country of the foreign firms.

The variable ‘psychic distance’ captures the difference between political systems, in terms of the political ideology that exists in the home country of the foreign firm and the host country; it also captures the difference in terms of industrial development between home and host countries.

The data for this variable are based on Dow & Karunaratna’s (2006) instrument, aiming to measure psychic distance stimuli, derived from Beck’s (Beck et al., 2001) political ideology scale, which according to Dow & Karunaratna (2006), represent a good indicator for the more general psychic distance measure. These indicators are measured on a metric scale.

RESULTS

Table 1 presents the overview of the preliminary assumptions and the required ratios which are met.

Table 1. Preliminary assumptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Skewness Statistic</th>
<th>Kurtosis Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survival status</td>
<td>4000</td>
<td>-1.200</td>
<td>15.74</td>
</tr>
<tr>
<td>Tangible resources before crisis</td>
<td>4000</td>
<td>6.320</td>
<td>49.495</td>
</tr>
<tr>
<td>Tangible resources final year/at bankruptcy</td>
<td>4000</td>
<td>6.223</td>
<td>51.274</td>
</tr>
<tr>
<td>Tangible resources average/during crisis</td>
<td>4000</td>
<td>6.305</td>
<td>51.121</td>
</tr>
<tr>
<td>Intangible resources</td>
<td>4000</td>
<td>2.340</td>
<td>7.420</td>
</tr>
<tr>
<td>Political distance</td>
<td>4000</td>
<td>4.546</td>
<td>22.869</td>
</tr>
<tr>
<td>Industrial development</td>
<td>4000</td>
<td>2.155</td>
<td>5.619</td>
</tr>
<tr>
<td>Country of origin</td>
<td>4000</td>
<td>2.386</td>
<td>19.346</td>
</tr>
<tr>
<td>$Z_{2007}$</td>
<td>4000</td>
<td>11.159</td>
<td>143.955</td>
</tr>
<tr>
<td>$Z_{final year of life}$</td>
<td>4000</td>
<td>-7.087</td>
<td>87.716</td>
</tr>
<tr>
<td>$Z_{diff}$</td>
<td>4000</td>
<td>8.400</td>
<td>83.934</td>
</tr>
<tr>
<td>Tangible resources_assets size</td>
<td>4000</td>
<td>6.934</td>
<td>53.402</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>4000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the total number of observations, 62.5% of the foreign companies remain active while 37.5% companies went bankrupt. When comparing the -2\* log-likelihood of the model, which represents the overall fit of the model, where none of the independent variables are included in the model (264.631) and the model where these are included, it can be seen that the latter has a significantly lower value at 0.05 level (164.808). Thus, our model correctly predicts 81.5% of all cases. The results of hypotheses testing are presented in Table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type_indust</td>
<td></td>
<td>18.887</td>
<td>0.026</td>
<td></td>
</tr>
<tr>
<td>(1) Agriculture and food</td>
<td>-0.035</td>
<td>0.002</td>
<td>0.968</td>
<td>0.966</td>
</tr>
<tr>
<td>(2) Automotive</td>
<td>19.951</td>
<td>0.000</td>
<td>0.998</td>
<td>4.621E8</td>
</tr>
<tr>
<td>(3) Construction</td>
<td>1.430</td>
<td>1.777</td>
<td>0.182</td>
<td>4.177</td>
</tr>
<tr>
<td>(4) Mining</td>
<td>-0.952</td>
<td>1.510</td>
<td>0.219</td>
<td>0.386</td>
</tr>
<tr>
<td>(5) Computers &amp; electronics manufacturers</td>
<td>-1.321</td>
<td>2.591</td>
<td>0.107</td>
<td>0.267</td>
</tr>
<tr>
<td>(6) Transport and communication</td>
<td>-0.702</td>
<td>0.806</td>
<td>0.369</td>
<td>0.496</td>
</tr>
<tr>
<td>(7) Finance, banking, and insurance</td>
<td>0.399</td>
<td>1.939</td>
<td>0.661</td>
<td>1.491</td>
</tr>
<tr>
<td>(8) Health care</td>
<td>-1.435</td>
<td>3.536</td>
<td>0.060</td>
<td>0.238</td>
</tr>
<tr>
<td>(9) Housing and real estate</td>
<td>-2.217</td>
<td>6.616</td>
<td>0.010</td>
<td>0.109</td>
</tr>
<tr>
<td>Tangible resources before crisis</td>
<td>-1.122</td>
<td>0.058</td>
<td>0.809</td>
<td>0.894</td>
</tr>
<tr>
<td>Tangible resources final year/at bankruptcy</td>
<td>-1.08</td>
<td>0.054</td>
<td>0.816</td>
<td>0.897</td>
</tr>
<tr>
<td>Tangible resources average/during crisis</td>
<td>0.222</td>
<td>0.057</td>
<td>0.811</td>
<td>1.248</td>
</tr>
<tr>
<td>Intangible resources</td>
<td>0.020</td>
<td>2.802</td>
<td>0.094</td>
<td>1.020</td>
</tr>
<tr>
<td>Political distance</td>
<td>-4.249</td>
<td>6.569</td>
<td>0.010</td>
<td>0.014</td>
</tr>
<tr>
<td>Industrial development</td>
<td>-2.224</td>
<td>4.365</td>
<td>0.037</td>
<td>0.108</td>
</tr>
<tr>
<td>Country of origin</td>
<td>9.392</td>
<td>8.036</td>
<td>0.005</td>
<td>11997.616</td>
</tr>
<tr>
<td>Z, 2007</td>
<td>0.215</td>
<td>2.248</td>
<td>0.134</td>
<td>1.133</td>
</tr>
<tr>
<td>Z, final year of life</td>
<td>0.116</td>
<td>3.103</td>
<td>0.078</td>
<td>1.123</td>
</tr>
<tr>
<td>Tangible resources assets size</td>
<td>0.000</td>
<td>1.041</td>
<td>0.308</td>
<td>1.000</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.580</td>
<td>0.532</td>
<td>0.466</td>
<td>0.560</td>
</tr>
</tbody>
</table>

First, we examined the relationship between the Z-scores (Z_2007) at the time when the companies were not affected by the crisis, in terms of the companies’ survival. In order to examine the strength of its relationship with the dependent variable, the Wald statistic was used, which provides the measure of statistical significance for each estimated coefficient in the model (Hair et al., 2010). The Wald statistics for Z_2007 has a value of 2.248 at 0.134 level of significance. This, however, represents a non-significant impact on the estimation probability. In order to examine the direction of the relationship, either an original logistic coefficient (see B column in Table 2) or an exponentiated logistic coefficient (see Exp(B) in Table 2) can be used (Hair et al., 2010). Both of these have different values because the exponentiated logistic coefficient is the logarithm of the original coefficient and therefore cannot have a negative value. Variable Z_2007 shows a positive relationship (Exp(B)= 1.133), which means that with increasing the Z-score, the probability of the companies’ survival increases. Therefore, Hypothesis 1 is partially supported.

The tangible resource base of the company has a non-significant predictive accuracy in terms of the company’s survival. The tangible resources before the crisis show a negative relationship with the survival (Exp(B)= 0.894): it could be assumed that companies with a bigger employment base are more prone to bankruptcy during a crisis. However, the value of B-coefficient -0.112 is close to zero, thus, the result can be misleading. Moreover, the Wald statistics (0.058) for variable tangible resources before the crisis are non-significant, at 0.05 level of significance (0.809).

The same results also apply to the tangible resources at the final year, thus the resources during the final year of existence for the companies which did not survive. Furthermore, the variable tangible resources during the crisis shows a positive relationship with the company status as being active / having survived; as in the previous cases, the result of the Wald statistics (0.057) is non-significant (0.811), at a 0.05 level of significance. When taking into account the companies’ size, based on the size of their fixed assets, there is a non-significant and weak relationship (Sig.= 0.369; Wald= 1.099) between this variable and the dependent variable. Therefore, Hypothesis 2 is not supported.

When testing for the Hypothesis 3 regarding the impact of the intangible resources (host country experience) on a company’s status (survival or bankruptcy) we observed a positive relationship, and because of this we accept Hypothesis 3.
of significant. Based on these results, it can be said that with an increasing country difference, the probability of companies’ survival during a crisis increases.

The difference between the host and home country’s level of industrial development shows a negative relationship with the dependent variable \( (B = -2.224) \). As in the previous case, this is significant \( (\text{Sig.} = 0.037) \), with the value of the Wald statistics being 4.365. Thus, Hypothesis 6a is supported.

The variable political distance has a negative relationship with the dependent variable \( (B = -4.249) \). The impact of this variable is significant \( (\text{Sig.} = 0.010) \), at 0.05 level of significance, with a value of the Wald statistics at 6.569. Therefore, Hypothesis 6b is supported.

The variable type of industry exhibits a significant impact on companies’ survival \( (\text{Sig.} = 0.026) \), with the value of Wald statistics at 18.887, which is the highest value among all the independent variables. This means that the chance of a company’s survival is significantly different depending on the type of industry. Therefore, Hypothesis 4 is supported.

The transport and communication industry exhibits the strongest negative relationship with the survival status, meaning that in our context and sample, the transport and communication industry were the ones who were affected the most by the crisis. This implies that the largest number of companies which did not survive the crisis originated in this industry. Furthermore, the strongest positive relationship with the dependent variable can be seen within the industry of computers and electronics manufacturers.

DISCUSSION AND CONCLUSIONS

The main goal of this paper has been to examine the relationship between specific characteristics of companies in terms of their survival after the emergence of the great economic depression. We have focused on foreign companies located in Romania, which, according to UNCTAD (2009), was one of the countries most affected by the recent economic and financial downturn.

Our results show that both firm level and corporate level characteristics have a significant relationship to the survival of foreign companies in an emerging economy. Namely, firm’s financial condition, its intangible resources, the type of industry, the country of origin, the differences in terms of industrial development and political systems between home and host countries, have all been proven to influence the survival status of the companies that were analysed.

The influence of the type of industry on companies’ survival proved to be significant, as expected. Some industries, such as the food industry, the healthcare industry and the energy and sustainability related sectors, were less negatively affected by the crisis, whereas other industry types, such as the housing, financial and banking industries, as well as the automotive industry, were affected more negatively.

Hence, we focused on some companies from these industries in our research and we then extended our focus to other important industries, namely construction, mining, computers and electronics, as well as transportation and communication, in order to gain better reliability in our analysis. Nevertheless, as was mentioned before, some of the core or most important industries, such as the banking industry and the automotive industry were in some cases artificially protected by governments during the recession (Sturgeon & van Biesebroeck, 2010; Poole 2010) in different countries. Therefore, any conclusions about whether these industries possess specific characteristics, such as companies’ flexibility to adapt more adequately to new situations, cannot be specified by this research.

A more in-depth analysis of the influence of governmental and other players' actions on companies’ functioning should be conducted, in order to reach a better understanding about the crisis’ positive or negative consequences. The reason for this may be, as mentioned above, that some industries in general, or some individual companies, received support which protected them from bankruptcy. Some authors, such as Baron (1995) and Hillman & Hitt (1999) have taken the approach of examining firms’ non-market strategies, concluding that companies (industries) using these strategies can then profit from them. This can in turn influence their performance but can also provide an advantage to other firms, even in free market economies.

Previous issues, regarding different interventions, could also apply to the size of the companies represented, in terms of the size of their employment base and fixed assets. This is because larger companies with more tangible assets and a larger employment base are often under media pressure; also, governments tend to keep them in mind more, as they are important employers compared to smaller companies (Getz, 1997; Meznar & Nigh, 1995). They also have a better chance to influence political actions, while smaller companies more often turn to collective action (Hillman & Hitt, 1999). This should in turn benefit bigger companies rather than smaller ones.

This, however, was not significantly confirmed by our analysis. We assume that one reason for this could be that in a time of crisis, smaller firms are able to implement quick actions to overcome the crisis, whereas the implementation of such actions can be harder to do for bigger companies, because of their larger number of employees. Moreover, we also assume that it could be more difficult for larger companies to deal with the overcapacity during a crisis as well as to sell some of their excessive assets, since investment activity of the market and of other players declines in such periods.

Caves and Porter (1977) as well as Porter (1979) state that the differences between the performance of small and big firms vary across industries (also, see Lee, 2009). In addition, variations in market share and market concentration are important factors when looking at firms’ performance, caused by the firms’ absolute size. Market power can then be reflected by variables such as capital intensity, R&D expenses, or the intensity of advertising (Lee, 2009). Market concentration can also be a predictor of market power, since firms in concentrated industries can exploit the advantages of collusions, by increasing their profit margins. However, here too, this relationship is influenced by other factors, e.g. the level of entry barriers (Lee, 2009).
Regarding firms’ intangible resources, as mentioned before, during longer periods of time, firms may develop their reputation and knowledge and learn to implement strategic actions in more efficient and flexible ways (Hsu & Hannan, 2005; Suchman, 1995). The argument which also supported this hypothesis was that, in order to gain the previously mentioned knowledge and capabilities, younger firms tend to focus more on market-related issues, whereas older companies tend to prioritise institutional issues (Hillman & Hitt, 1999) and are also usually more experienced in dealing with crises. One possible reason could be that the crisis emerged relatively fast, first hitting hard the financial industry, to which both young and old companies are connected through their investments, contracts and other financial assets; this meant that their chances of manoeuvring or swiftly adapting to the new situation were limited. Also, especially in the booming industry sectors, such as computers and electronics manufacturers or other new industries, many younger companies were facing a fast changing environment or had to deal with high seasonality, giving them the ability to adapt to the crisis more quickly. Moreover, because of the high and ever-increasing interconnectivity of some industries, due to globalisation, both young and older companies could have been in, or were somehow connected to, industries with a high level of governmental or other interventions. Therefore, the difference in survival of younger and older companies after the outbreak of the crisis is not so straight forward.

The difference between political systems, when comparing home and host countries, was one of the elements referring to the country difference measure in this research. This proved to have a significant negative influence on companies’ survival, as expected. The same results emerged also for the second separate element of the country difference, the industrial development. As stated by Guillen & Garcia-Canal (2009), modern SMEs from non-traditional countries of origin may actually possess a better capability and adaptability than companies from traditional countries. This is because they are more used to dealing with unstable governments, in their home countries, and can therefore better deal with difficult circumstances, such as a crisis, and their consequences.

When considering Romania as a democratic and industrially emerging country, this result does not necessarily mean that companies from non-democratic or “non-developed countries” are always more successful in surviving the crisis. When it comes to democracy and industrial development, Romania is not considered a country with the best political system and industrial development. The range of political systems of foreign SMEs ranges from Constitutional Monarchy in Liechtenstein to parliamentary democracy (e.g. Germany) and there are also countries with combined political systems, such as the United Kingdom, with unitary parliamentary democracy as well as constitutional monarchy. None of the companies included in the sample, however, originates from current communist countries. Therefore, a wide range of different political systems and levels of industrial developments between countries is not included in our sample. To overcome this problem, future research could lead to different results when it comes to these two variables. However, in our opinion, because of the increasing globalisation, the difference in industrial development between countries will gradually decrease and the same will also apply to political systems.

On the other hand, Romania is an economy in transition, with low corporate tax rates, which can be of high importance in a time of crisis. Firms in Romania can benefit from high investments in R&D which, since 2002 (and until 2008), increased by 16%, while the share of companies with R&D decreased by 1%. Moreover, Romania is a member of EU and is well located geographically. However, it seems that it will take longer for EU-countries to recover. Also, even if the crisis had not hit all countries at the same time, this would not necessarily have meant that the countries hit first would have been the first to recover (Internationalisation Monitor, 2010).

Future research about the impact of the crisis on companies’ survival will be a big challenge and will require a wide approach in order to better understand the relevant issues. Also, a comparison could be made between different countries, ranging from those which were hit by the crisis the most, to those countries which were hit by the crisis the least. This will allow researchers to understand the different patterns according to which firms react to shocks in their market or during a global crisis, as this paper has discussed.

Another venue which we have not been able to explore in our research is the possible and very probable connection between the characteristics mentioned above and the issue of management capabilities. For example, the companies’ management, in the context of working in a dynamic environment, in which there is a need to constantly enforce innovations, could be more flexible, or could be better prepared for unexpected situations than companies in a static environment. Harrigan (1980) states that there are some industries and particular firm characteristics where strategic changes can be implemented more easily (Witteloostuijn, 2000). This also depends on the experience of the management team.

Our empirical findings are relevant to multiple-home / single-host FDI. We also suggest future investigation into other types of research contexts, in order to generalise our findings, that is, we suggest that a multiple-home/ multiple-host investigation could be conducted, to cover other nation-level factors that are not covered in our study (cultural distance, political environments; see Gomes-Casseres, 1990; Kogut & Singh, 1988). Studies have shown that investors consider industrialised economies and emerging economies as two distinct groups and confirm relevant differences in foreign entry modes for the two types of economies (Disdier & Mayer, 2004). Our findings set incentives for future comparison with industrialised economies and point to the need to provide clear arguments about whether such groups of economies should be regarded as different.

This study contributes to the field in various ways. Firstly, the host country that we have focused on is new for the entry mode literature. Even though abundant, previous studies have looked at industrialised economies and to the best of our knowledge, none of the earlier studies has taken a deeper look at economies in transition as well as at
characteristics of foreign firms that contribute to their survival during difficult economic circumstances, such as crisis and recession.

REFERENCES


[93]. www.unctad.org

[94]. www.worldbank.org

[95]. International Monetary Fund's World Economic Outlook (WEO) Database, April 2013 edition.