International Journal of Economics, Commerce and Management
United Kingdom Vol. V, Issue 7, July 2017
http://ijecm.co.uk/ ISSN 2348 0386

FINANCIAL CRISIS MANAGEMENT IN LARGE STATE OWNED ENTERPRISES IN UZBEKISTAN: DISTANCE TO DEFAULT AND FINANCIAL DISTRESS ANALYSIS

Omonulla Hamdamov
Senior Researcher, Tashkent Financial Institute, Tashkent, Uzbekistan
o.hamdamov@bk.ru

Abstract

Financial crisis has become a hotly debated term since the global financial crisis which was a sudden shock and for all entities in the planet. Numerous companies failed in coping with its impact and implications and could not withstand its waves. Government also weakened in crisis period and they also could not lend helping hands to enterprises to recover. Only state owned enterprises were protected and provided with bailout money from the government funds due to their importance for the socio-economic stability. It enabled state owned companies to stay solvent and to find a hole to the light in the darkness of crisis thanks to government-supported financial crisis management policy. This paper examines the financial crisis management capability and financial distress status of selected state owned enterprises in Uzbekistan. Using Enyi's model of relative solvency in four strategically important state-owned enterprises operating in four different industries in Uzbekistan. State owned companies in automotive and oil and gas industries are found financially health with very low probability of financial crisis, another couple who operate in metal and chemical industries are in poor financial health with below than average probability of financial crisis.

Keywords: financial crisis, state owned companies, financial distress, Enyi's model

INTRODUCTION

Increasingly competitive environment in global business requires a sustainable financial profile to remain in a good financial status in market. Advancements in international business practices has reflected the growing consolidation of a double edged scenario: developments in business climate are serving for increase of financial burdens and tightening of liabilities, which is seen as key action towards creation of a healthy market. Clear-cut restrictions, frontiers of financial loosening, strengthening in business-related legislature and closer government-business relations in a bold frame is sweeping out insolvent firms and keeping the market healthy, but in a deteriorating macroeconomic condition, it has been major barrier for health market due to temporary illiquidity and blocking the access to many suffered but rapidly recovered market players. Consequently, companies are continuously facing a trouble of not only exiting from the market of their industry, but also from the listing of stock market they play. This trouble has carrying a huge loss in market share and profit due to consumer negativity to brand. Therefore, current businesses focus on financial crisis management as prerequisite for long-term operation in both markets. Financial crisis management is a set of regulatory tools with supervisory functions. It embraces balance sheet, market and business climate, stock market performance and business development strategy monitoring actions. However, recent history of global economy proved that financial crisis management actions have to be different across types, sizes, markets and ownership forms of enterprises. Small and medium sized enterprises operate in local markets with smaller consumer population and they have smaller turnover, sale and production capacities, which secure them from greater risks and external impacts. Large enterprises face harsh challenges of financial crisis because of larger market, national and international chain of supply, being listed in stock markets, participation in large investment projects and deterioration in both global and national business environment. Considering the scale of potential risks which can lead to financial crisis, large enterprises set specific map of avoiding financial distress and try to find the sources of support in distress period. Banks may be a good source of counter crisis funding, but banks are pure profit seekers – they do not provide financial support for company with a worsening financial profile. Government may be a good source of survival aid, if an enterprise is strategically important or state owned one. Then policymakers may turn face to the enterprise with unstable financial condition. Government allocates bailout money to keep the enterprise safe for ensuring the stability for the whole industry it operates. All governments always do not lend helping hands to companies in financial distress. Historical observations shows that developed economies provide bailout funding only in condition of bankruptcy caused by macroeconomic instability in the country. In contrary, most of developing countries regularly monitor the financial performance of state owned enterprises and provide them particular support tools such as tax exemption, money for covering short-term illiquidity, capital investment and funding support in case of losses from emergency. Therefore, recovery is achieved by state funding and regulatory easing.

This paper is structured around the financial distress analysis of state owned enterprises in developing countries in the context of Uzbekistan. Uzbekistan is a developing economy with rapid growth and transformation. After gradual privatization policy, all sizes of enterprises emerged in different ownership forms. Soft tax burden and developing business climate allow businesses to keep long-term financial stability. In parallel with private businesses, government owns the control package or a considerable share of some enterprises in order to ensure a favorable social protection policy. The sectors which supply the primarily necessary goods and services are mainly owned and controlled by the government to enable the smooth transition to market economy without huge income inequality. In this paper we examine the financial stability and crisis management capabilities of selected state owned enterprises through Enyi's model of relative solvency.

LITERATURE REVIEW

Financial crisis management has become a central topic of business debates since the collapse of global financial system in 2008. Changes in the basic concepts of financial stability and distress terms, their fundamentals in new business environment were unearthed when global financial crisis started evading the global business environment. Transformations in the philosophy of business finance fired the interest of researchers, as new untouched areas of research were emerging. However, financial distress analysis and financial crisis management in state owned companies are still uninvestigated or understudied. In their research, Harlan Platt and Marjorie Platt (2008) studied the financial distress models of firms in three different continents. They run a comparative analysis of paths to financial distress and key factors in all three geographic regions. Their study showed that international differences in accounting rules, lending practices, managements skill levels, and legal requirements among others has kept corporate decline from becoming commoditized. In 2010, Campbell, Hilscher and Szilagyi studied the measurement and pricing of the distress risk by offering a model of corporate failure originated from accounting and market-based measures in the context of companies with distressed stocks in 1981-2008. They found that distressed stocks can bear variable returns with high market beta. Agrawal and Chatterjee (2015) approached to the case from another edge by focusing on the relationship between earnings management of Indian firms and financial distress in post crisis period of 2009-2014. Results of their study suggested that less distressed firms have engaged in higher earnings management. Among existing literature, we faced a serious lack of studies in financial management of state owned enterprises which can feet to the business environment of a developing economy with elements of economic transition. Agrawal and Chatterjee's (2015) work highlighted some similar characteristics of distress management with Uzbekistan's case.

METHODOLOGY

There are many models to analyze and predict the financial stability and financial distress level of a firm. Altman's z-score model is sufficiently famous among both business rounds and academia. This model is truly convenient and classifies across ownership and markets. Nowadays many modified formulas of Altman's z-score model exist, since probably it was a fundament for some other similar models. Being presented in 2005, Enyi's relative solvency model is new, but famous and effective. It is different from Altman's z-score both in terms of mathematical expression and approach to the financial distress. In this study we analyze the financial distress and distance to default status of selected state owned enterprises by exploiting Enyi's relative solvency model.

Enyi's model relies on the sequences steps of arithmetic calculations. There are two basic fulcrum indicators of the model: OBEP (operational break-even point) and RSR (relative solvency ratio). The initial step of model is begun with calculating the mark-up ratio (MUR), which indicates the ability of a company management to recover the costs and maximize the profit.

$$MUR = \frac{PBT}{TOC}$$

$$PBT = TS - TOC$$

Here, PBT – profit before tax, TOC – total operating cost, TS – total sales.

The second step is calculation of break-even point (OBEP). Enyi defined OBEP as "the point or stage of activity where cumulative contribution margin on recovered production outputs equal the total cumulative production costs and losses of the learning periods".

$$OBEP = \frac{1 + MUR}{2 * MUR}$$

Enyi defined OBEP as "the point or stage of activity where cumulative contribution margin on recovered production outputs equal the total cumulative production costs and losses of the learning periods".

Next step is the measuring the required volume of working capital which is central to operation of the company to sustain operational break even.

$$WCR = TOC \times OBEP$$

Another fulcrum indicator is relative solvency ratio (RSR). RSR measures the liquidity of a company.

$$RSR = \frac{AWC}{WCR}$$

Here, AWC is available working capital which is the difference between current assets and current liabilities of a company.

There is a couple of indicators to reflect the possibility of crisis and level of capital to lead to the crisis. Choice of insolvency (COI) shows the probability of insolvency.

$$COI = 1 - RSR$$

Possible stage of insolvency shows the minimum level of solvency to go bankruptcy.

$$POI = OBEP \times RSR$$

ANALYSIS AND RESULTS

To begin with, we select the necessary data from financial statements of selected state owned enterprises.

Table 1. The Data

Company	PBT	TOC	TS	CA	CL
Uzavtosanoat JSC	68562567,36	24725995,46	93288562,82	1143835455	173597510,1
Uzmetkombinat JSC	38694122	139701593	178395715	404855298	243454608
Uzbekneftegaz NHC	10778848	12285463	23064311	5977271833	3009260037
Uzkimyosanoat JSC	1273078,1	1334438,2	2607516,3	18363152,9	1390175,2

Source: www.openinfo.uz

After collecting necessary balance sheet and income statement data, we start measuring the financial distress level by using Enyi's model as shown in Table 2.As Enyi stated in his model explanations, we can estimate initial state of financial profile of accompany by comparing current asset to current liabilities ratio. If it is 2:1 or above, the company is in a good financial condition. Initial estimation indicates that Uzavtosanoat JSC (6.59 : 1), Uzkimyosanoat JSC (13.21 : 1) and Uzbekneftegaz NHC (1.99 : 1) have a favorable financial stance, since Uzmetkombinat JSC (1.66 : 1) faced deterioration in financial stability. However, other financial indicators may impact on financial status.

Table 2. Model indicators of selected state owned enterprises

Company	MUR	OBEP	WCR	AWC	RSR	COI	POI
Uzavtosanoat JSC	2,77	0,68	16821515,51	970237944,5	57,68	-56,68	39,24
Uzmetkombinat JSC	0,28	2,31	322040716,8	161400690	0,50	0,50	258,63
Uzbekneftegaz NHC	0,88	1,07	26454035,21	2968011796	112,20	-111,20	120,04
Uzkimyosanoat JSC	0,95	1,02	25321869,96	16972977,7	0,67	0,33	0,69

Source: Author's calculations from official financial statement published on www.openinfo.uz.

In Enyi's model, scale of RSR and COI have exact criterion of financial distress status. Companies with 0.01 – 0.25 RSR (or 0.99 – 0.75 COI coefficient) are insolvent or high probability of financial distress. RSR coefficient ranged from 0.26 to 0.99 (0.74 to 0.01 COI coefficient) is classified as a company with poor financial stance. 1 and above in RSR indicates the absolute financial health. Using the calculated data in Table 2, we determine the distress level of selected state owned enterprises in Table 3.

Table 3. Financial health status and probability of financial crisis of selected state owned enterprises

Company	RSR	COI	Financial health status	Probability of financial crisis
Uzavtosanoat JSC	57,68	-56,68	Healthy	Very low
Uzmetkombinat JSC	0,50	0,50	Poor financial health	Middle
Uzbekneftegaz NHC	112,20	-111,20	Healthy	Very low
Uzkimyosanoat JSC	0,67	0,33	Poor financial health	Middle

Results suggested that financial distress level and financial crisis predictions of four large state owned enterprises in Uzbekistan are different depending on the sector. Uzbekneftegaz National Holding Company, who is the key provider of oil and gas in Uzbekistan kept health financial profile with very low probability of financial crisis, despite the ongoing global oil market instability.

Uzavtosanoat JSC who is the key shareholder in all automotive companies in Uzbekistan achieved absolute financial strength with extremely low probability of financial crisis. Uzmetkombinat JSC in metallurgical industry and Uzkiyosanoat in chemical and pharmaceutical industry have a poor financial health with mid rate of financial crisis probability.

CONCLUSION

Financial crisis management in state owned enterprises, as we discussed above, is financially supported by the government funds due to their high importance for socio-economic stability. However, global financial crisis showed clear evidences of the incapability of the governments in providing bailout funding to secure them from bankruptcy. In macroeconomic crisis period fiscal status of the public finance system often faces the imbalance of revenue and spending, which results in the limited availability of funding. There may be a probability of staying helpless in harsh times at state owned enterprise, if they rely on government's bailout support. Therefore, state owned enterprises are recommended to take following measures to avoid dependence to public financial support:

- To monitor the market profile, access and entry conditions, and to avoid being a monopolist in order to share the entire market risk;
- To regularly monitor the macroeconomic condition and to set a risk map to predict all types of risks and their sources;
- To control the receivable and payables accounts to ensure an optimal balance;
- To avoid bank lending and to create a safety nets in case of market failure.

Overall, state owned enterprises are a separate type of business entities with different financing rules. Ensuring their crisis-free performance depends on other external factors, arise in operational processes. Proposed scientific recommendations may have different impact on the enterprises across industries and countries. Therefore, there is a necessity for further research to be conducted in the above mentioned area.

REFERENCES

Campbell, J., Hilscher, J. and Szilagyi, J. (2011). Predicting Financial Distress and the Performance of Distressed Stocks. Journal of Investment Management. Vol. 9. No. 2. pp. 14-34.

Enyi, E. (2005). Applying Relative Solvency to Working Capital Management - The Break-Even Approach. SSRN Electronic Journal. DOI: 10.2139/ssrn.744364.

Geng, Z., Tan, L., Gao, X., Ma, Y., Feng, L. and Zhu, J. (2011). Financial Distress Prediction Models of Listed Companies by Using Non-Financial Determinants in Bayesian Criterion. 2011 International Conference on Management and Service Science, Wuhan, China. pp. 1-5.

Gepp, A. and Kumar, K. (2015). Predicting Financial Distress: A Comparison of Survival Analysis and Decision Tree Techniques. Procedia Computer Science. Vol. 54. pp. 396-404.

Kalckreuth, U. (2005). A “Wreckers Theory” of Financial Distress. Discussion Paper Series 1: Economic Studies. No. 40. Deutsche Bundesbank. Germany.

Omelka, J., Beranová, M. and Tabas, J. (2013). Comparison of the Models of Financial Distress Prediction. ACTA Universitatis Agriculturae et Silviculturae Mendelianae Brunensis. Vol. 61. No.7. pp. 2587-2592.

Oz,I. and Yelkenci,T. (2017). A Theoretical Approach to Financial Distress Prediction Modeling. Managerial Finance. Vol. 43 No. 2. pp.212-230.

Platt, H. and Platt, M. (2008). Financial Distress Comparison Across Three Global Regions. Journal of Risk and Financial Management. pp. 129-162.

Sheikhi, M., Sham, M. and Sheikhi, Z. (2012). Financial Distress Prediction Using Distress Score as a Predictor. International Journal of Business and Management. Vol. 7. No.1. pp. 169-181.