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DETERMINANTS OF FINANCIAL DISTRESS OF SELECTED COMPANIES IN UZBEKISTAN

Abstract: Since the global financial crisis, which was a sudden shock for all entities on the planet, the term "financial crisis" has become the subject of intensely contentious discussion. A great number of businesses were unable to withstand its waves and were unsuccessful in coping with its impact and implications. The government was also weakened during this time of crisis, and they were unable to lend helping hands to businesses in order for them to recover. Only state-owned businesses were shielded from the effects of the financial crisis and offered financial assistance from the funds made available by the government because of the vital role they play in maintaining social and economic order. As a result of the government's support for the financial crisis management policy, state-owned companies were able to maintain their financial viability and locate a path that led them out of the gloom into the light. This paper investigates the capabilities of selected state-owned companies in Uzbekistan to manage financial crises as well as the extent to which those companies are experiencing financial distress. Applying Enyi's model of relative solvency to four strategically important state-owned enterprises in Uzbekistan that are active in four distinct industries. Another couple of state-owned companies, which operate in the metal and chemical industries, are found to be in poor financial health with a probability of financial crisis that is lower than the average. However, state-owned companies in the automotive and oil and gas industries are found to be financially healthy with a very low probability of financial crisis.

Key words: financial crisis, state owned companies, financial distress, Enyi's model.

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Introduction

An increasingly competitive environment in global business calls for a financially stable profile that can be maintained over time in order to keep a good financial standing in the market. Developments in the business climate are contributing to an increase in financial burdens and a tightening of liabilities, both of which are seen as key actions towards the creation of a healthy market. Advancements in international business practices have reflected this growing consolidation of a two-sided scenario. Clear-cut

restrictions, frontiers of financial loosening, strengthening in business-related legislation, and closer government-business relations in a bold frame are sweeping out insolvent firms and keeping the market healthy, but in a deteriorating macroeconomic condition, it has been a major barrier for the health market due to temporary illiquidity and blocking the access to many suffered but rapidly recovered market players. Clear-cut restrictions, frontiers of financial loosening, strengthening in business-related legislature, and closer government-business relations

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As a consequence of this, businesses consistently face the challenge of not only withdrawing from the market for their particular sector but also withdrawing from the listing on the stock market in which they participate. As a result of customer dissatisfaction with the brand, this problem has led to a significant reduction in market share as well as profits. As a result, modern businesses recognize the importance of effective financial crisis management as a precondition for continued operation in both markets. The management of a financial crisis requires a collection of regulatory tools that also have supervisory responsibilities. It takes into account the balance sheet, the market and business climate, the performance of the stock market, and the monitoring actions for the business development strategy. However, the recent past of the global economy demonstrated that the actions taken to manage a financial crisis must vary according to the types of businesses, their sizes, the markets in which they operate, and the forms of ownership those businesses have. The fact that small and medium-sized businesses operate in regional markets that have a limited number of potential customers combined with the fact that these businesses have a lower capacity for turnover, sales, and production helps to protect them from greater external risks and impacts. Because of their larger markets, national and international chains of supply, the fact that they are listed on stock markets, their participation in large investment projects, and the deterioration in both the global and the national business environment, large enterprises face severe challenges brought on by the current financial crisis. Large companies, mindful of the magnitude of the risks that could potentially bring about a financial crisis, devise detailed plans for avoiding financial distress and search for support from a variety of sources in case they find themselves in a precarious situation. Banks may be a good source of funding to combat a crisis; however, banks are in the business of making a profit, and as such, they do not offer financial support to businesses whose financial profiles are deteriorating. If a company is either strategically important or state owned, the government might be a helpful source of survival aid for the company. The decision-makers in charge of policy may then turn their attention to the company's precarious financial situation. The government provides the business with money as part of the bailout in order to maintain the business's security and maintain the stability of the industry in which it operates. Companies that are experiencing financial difficulties almost never receive assistance from any government. The observations of history show that developed economies will only provide financial assistance for bailouts in the event that the country is facing bankruptcy as a result of widespread macroeconomic instability. On the other hand, the majority of developing nations conduct routine

financial checks on state-owned businesses and provide them with a variety of specialized support mechanisms, such as tax exemptions, funds for covering short-term illiquidity, capital investment, and funding support in the event of losses brought on by unexpected emergencies. As a result, the recovery is accomplished through the funding of the state and the relaxing of regulatory requirements.

This article is organized around an analysis of the financial distress that is experienced by state-owned enterprises in developing countries, with specific reference to Uzbekistan. Uzbekistan's economy is in the process of developing, and it is undergoing rapid growth and change. Following the implementation of a policy of gradual privatization, businesses of varying sizes and ownership structures came into existence. Businesses are able to maintain their long-term financial stability thanks to the manageable tax burden and improving business climate. Alongside the operation of private companies, the government may also own the control package or a sizeable portion of certain businesses in order to guarantee the implementation of an effective social protection policy. The industries that provide the most fundamentally important goods and services are primarily owned and controlled by the government in order to facilitate a seamless transition to a market economy that is devoid of significant levels of income inequality. Using Enyi's model of relative solvency, the authors of this paper investigate the degree of financial stability and crisis management capabilities possessed by a number of state-owned businesses.

LITERATURE REVIEW

Since the collapse of the global financial system in 2008, the management of financial crises has become a primary focus of discussions within the business community. The global financial crisis started evading the global business environment, which led to changes in the fundamental concepts of financial stability and distress terms. These changes were unearthed when the global financial crisis began evading the global business environment. The philosophical shifts that were taking place in the realm of business finance piqued the interest of researchers at a time when new territories for study were opening up. On the other hand, neither the analysis of financial distress nor the management of financial crises in state-owned companies have been thoroughly researched or studied. Harlan Platt and Marjorie Platt (2008) investigated the different ways in which businesses on three distinct continents deal with financial difficulties for the purpose of their research. They conduct a comparative analysis of the various routes that lead to financial distress as well as the factors that play a significant role in each of the three geographic regions. According to the findings of their research, differences in international accounting rules, lending practices, management skill levels, and legal

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requirements, amongst other factors, have prevented the decline of corporations from becoming commoditized. In the year 2010, Campbell, Hilscher, and Szilagyi conducted research on the measurement and pricing of the distress risk. More specifically, they developed a model of corporate failure that was based on accounting and market-based measures and applied it to the situation of businesses that had stocks that were in a distressed state during the years 1981-2008. They came to the conclusion that stocks in distress can have variable returns despite having a high market beta. Agrawal and Chatterjee (2015) took a different approach to the case by concentrating on the connection between the earnings management practices of Indian companies and the level of financial distress that they experienced in the post-crisis period of 2009-2014. According to the findings of their study, less financially troubled businesses have a higher propensity to engage in earnings management. Agrawal and Chatterjee's (2015) work highlighted some similar characteristics of distress management with Uzbekistan's case. Among the existing literature, we faced a serious lack of studies in the financial management of state-owned enterprises that can feed to the business environment of a developing economy with elements of economic transition.

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 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, we select the necessary data from the financial statements of a select group of businesses.

Table 1. Data collected

Company	PBT	TOC	TS	CA	CL
Jizzax plastmassa JSC	8385526	16672292	25057818	28916802	19229599
Toshkent shahar dori-darmon JSC	133827	1914621	2048448	23083100	35952795

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Foton JSC	8592541	13346043	21938584	16765314	2480132
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Source: *openinfo.uz*

After gathering the necessary data from the balance sheet and income statement, we begin assessing the level of financial distress by applying the model developed by Enyi, which is presented in Table 2. According to what Enyi stated in his explanations of the model, we are able to estimate the initial state of a company's financial profile by comparing the

ratio of current assets to current liabilities. If it is two to one or higher, then the company is in a healthy financial position. Initial estimates suggest that Jizzax plastmassa JSC (1.5:1), Toshkent shahar dori-darmon JSC (0.64:1), and Foton JSC (6.76:1) have different financial positions.

Table 2.

Company	MUR	OBEP	WCR	AWC	RSR	COI	POI
Jizzax plastmassa JSC	0,5029618	0,37796619	6301562,627	9687203	1,537269972	-0,53726997	0,58103607
Toshkent shahar dori-darmon JSC	0,069897384	0,03739151	71590,57863	-12869695	-179,767998	180,7679981	-6,72179768
Foton JSC	0,643826863	0,52916995	7062324,859	14285182	2,022730798	-1,0227308	1,07036835

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 enterprises in Table 3.

Table 3 Financial health and probability of bankruptcy of selected companies

Company	RSR	COI	Financial health status	Probability of financial crises
Jizzax plastmassa JSC	1,537269972	-0,53726997	Healthy	Very low
Toshkent shahar dori-darmon JSC	-179,767998	180,7679981	Poor financial health	High
Foton JSC	2,022730798	-1,0227308	Healthy	Very low

Results suggested that financial distress level and financial crisis predictions of three large enterprises in Uzbekistan are different depending on the sector. Jizzax plastmassa JSC in Uzbekistan kept health financial profile with very low probability of financial crisis, despite the ongoing crises after pandemic

Toshkent shahar dori-darmon JSC who is the key distributor of medicaments in Uzbekistan achieved low financial health and very high probability of Financial Crises. Foton JSC in metallurgical industry has a good and strong financial health with low 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,

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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.

As was mentioned above, the management of financial crises in state-owned enterprises receives financial support from the funds provided by the government due to the high importance these issues have for maintaining socio-economic equilibrium. The global financial crisis, on the other hand, provided undeniable proof that governments are unable to provide the financial assistance necessary to save businesses and prevent them from going bankrupt. When there is a prolonged period of macroeconomic

instability, the fiscal status of the public finance system frequently experiences an imbalance of revenues and expenditures, which ultimately leads to a restricted availability of funding. If state-owned businesses count on bailout support from the government, there is a chance that they will continue to be helpless even when times are difficult. It is therefore recommended that state-owned enterprises take the following steps in order to reduce their reliance on 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 in order to predict all types of risks and their sources;
- To control the receivable and payables accounts in order to ensure an optimal balance;
- To avoid becoming overly dependent on public financial support

In general, state-owned enterprises make up their own distinct category of business entities, which are subject to a different set of regulations regarding financing. Other external factors, which can arise during operational processes, will determine whether or not they experience a crisis in their performance. It's possible that different businesses in different countries and industries will feel a different impact from the scientific recommendations that have been proposed. As a result, there is an absolute requirement for additional research to be carried out in the aforementioned field.

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