

The impact of accounting information system on reducing the severity of crisis during the crisis period

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Abstract

The economic crisis affects significantly both the whole economy in macro sense and the financial structure of corporations' in micro sense. Because there are negative changes in the financial structures of corporations, managers must be more careful and take more rational decisions during these times.

Being successful in crisis period depends on the success of crisis management. The best way to manage crisis is to prevent it. Effectively managed accounting information system contributes to businesses to prevent, to manage and to cease crisis. The financial data reported by accounting information system contributes to early warning systems about transparency. For decisions which will be taken during crisis period, the need for reliable information about the financial position of companies' increases, and the existence of reliable information decreases the severity of crisis.

By considering the conceptual structure constituted in line with the main aim of the study, a hypothesis is formed. "Issues that may arise in the accounting information system in times of crisis show that there is a significant relationship between accounting information system and the crisis."

The result of analysis indicates that according to view of managers; there is a significant relationship between accounting information system and the crisis and the effective use of accounting information system in times of crisis is a factor that will prevent deepening the crisis.

Keywords: The Economic Crisis, Crisis Management in Businesses, Accounting Information System

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1. Introduction

Today, environmental and competitive conditions of corporations' changes in parallel with the globalization, expansion of market and competition lines, and technological changes. Crisis is inevitable for corporations which cannot adapt to these changes. The signs related to crisis may not be detected correctly and on time by businesses. Another important feature of the crisis is they are the situations that can contain the events leading to organizational losses and also the situations in which time pressure is felt deeply by corporations. The duration of crisis varies and they can cause the destruction of corporations time to time.

The importance of accounting information system that records and reports the operations of businesses systematically increases during the crisis periods. Because in time of crisis the accounting and accounting data need for different purposes and expectations is more than usual.

In this context in the study it is aimed that revealing the expectations of businesses about accounting in crisis period, determining the contribution of accounting information system to businesses and also it is intended that revealing the impact of corporate governance on accounting information system.

For this purpose, firstly economic crisis and their impacts on businesses are briefly mentioned. Also the contribution of accounting on crisis management is considered. Lastly, the role of corporate governance and accounting information system during the crisis period in SME's operating in the city Konya is examined by field study.

2. Crisis Management and The Impact of Crisis on Businesses

The concept of crisis can be described as a "turning point" that prevents ordinary activities and leads to extraordinary undesirable conditions, "a can of worms", or "deteriorations emerged suddenly or dangerous moments" (Dincer, 1998).

According to Eberhard, the concept of crisis is a situation which jeopardizes the integrity of the organization, threatens the main objective of the organizations, and creates the tension and confusion among the members of the organization due to the limited decision making time (Ataman, 2002).

3. Crisis Management;

Crisis management are the activities having potentials to emerge in the businesses or the activities to analyze the ongoing crisis period, solve the problems lead to crisis and overcome the crisis period with minimal degradation process (Pearson & Clair, 2005).

The Process of Crisis Management, eliminating or mitigating the impact and the dimension of crisis by means of knowing the factors previously that can be the reasons of the situation thanks to arising symptoms related to crisis (Reduction), increasing the efficiency of techniques to be applied at the outset of the crisis (Onset Management), the actions to be taken against the effects of the incidents which caused the crisis (Response Management) and the rapidly adjustment of financial and emotional losses to eliminate the effects of the crisis.

Crisis Management Approaches; one of the main priority of crisis management should also be able to prevent the crisis environment entirely when the symptoms of crisis perceived or emerged. However, in case of crisis environment cannot be prevented despite of all cautions are taken and there is a crisis environment in this case businesses must take the necessary actions to deal with minimum losses from the crisis.

- Proactive Crisis Management Approach; it depends on determining the entity's capacity and its own resources and determining its strengthens and weaknesses in addition to analyzing

the external environment and demonstrating the realizable objectives and alternative strategies (Dincer, 1998). Planning system including the environmental analysis, early warning system enabling the receipt of crisis signals, efficient information system in order to make rapid and timely decision making, establishing flexible organizational structure and the efforts for organizational development, improving the performance and establishing the crisis team that will take active role in crisis management are the methods to respond crisis.

- Reactive Crisis Management Approach; This approach primarily focused on determining the emergence time of the crisis and taking actions in most appropriate time to solve the problems. In this frame, an efficient information collection system must be structured in order to take effective decision in crisis period and for all employees orientation workings must be done to help the corporations' management (Ozturk, 1994: 30). In order to overcome the crisis successfully, businesses must be carefully review the all operations and must take necessary measures.

4. The Impact of Crisis on Businesses

Crisis certainly has a negative or positive impact on businesses in a financial aspect without regarding its magnitude. Businesses need more fund especially in crisis periods. Funders both aggravate the fund terms and conditions and increase the costs of funds. The worsening sales, uncollectible receivables, changing prices and the adverse effects make difficult to find fund for businesses. In this case, businesses are faced with the necessity to make decisions between two alternative funding ways to meet the needs. Either they will try to meet the fund needs from the domestic sources or will apply the institutions for external financing (Akguc, 1994).

5. Accounting Information System in Crisis Periods and Its Role

The importance of accounting function which reports and records all business activities systematically increases especially in crisis periods. The typical increase in the volume, space expansion and complexity status requires effective management of accounting information system. This obligation is important for especially senior managers to take accurate, timely and strategic decision making and to apply them successfully. The effectiveness of strategic decisions largely depends on obtaining the relevant information from company's accounting system and relevant sources and using desired properties and the information compatibly with strategic decisions.

According to research about to causes of the crisis in the businesses, the most important cause is welded due to management. If a company's management is incompetent, it should be considered that the accounting information system of the entities is neglected. With accounting information system the data about the activities of businesses is collected and recorded. In this way, the necessary information for planning, control and decision-making is provided.

In the report published by UNCTAD (United Nations Conference on Trade and Development) in 1999, it is stated that "The failure of financial institutions and companies in the Far East, heavily indebted companies and high external borrowing trend in private sector are based on the deficiencies in transparency and accountability". This situation shows that how the establishment of accounting information system is important for businesses (Can et.al. 2014).

The businesses that effectively manage the accounting information system have such advantages in reducing the negative effect of the crisis and turning the crisis into an opportunity. Because in time of crisis, accurate, right and reliable, objective, clear and understandable information that can facilitate to take rapid and effective decisions by businesses are provided by accounting information system. This information contributes to set up early warning system, be quick in decision process, in corporate

governance, in cost reduction and configure the saving strategies, in effective communication and cash and working capital management issues (Dastan, 2009).

6. Contribution of Accounting Information System in terms of Corporate Governance

Accounting information system presents direct information to corporate managers. Accounting information especially has important responsibilities about preparation of financial information reports in transparent and accountable manner. In this context, the expectations of the companies from the accounting information system can be realized with the understanding of corporate governance (Ozkol et.al. 2005).

7. The Contribution of Accounting Information system in terms of Working Capital Management

In time of economic crisis, businesses can be faced either systematic risk or non-systematic risks. The negative consequences of these risks affect the businesses which cannot operate in foreign markets, have limited new market opportunities and have inadequate liquidity to perform commercial activities. Therefore, the importance of the cash management during the crisis period increases (Sarıkamış, 2000).

Working capital management requires the establishment of an appropriate balance between risk and profitability. Because, if working capital remains inactive, this reduces profitability and working capital deficit increases the default risk of the company (Sakrak, 2001). During crisis periods, information and documents that will provide fast enough, flexible and accurate mobility in order to decide correctly in management of working capital elements successfully must be provided by accounting information system.

8. The conceptual Model and the Methodology of the Research

In this part of the study, the detailed information about the methodology of the field study which is carried out to examine the theoretical model developed under this literature and its results will be given. In this context, with the help of information obtained from the result of the either theoretical or field study, the role of accounting information system and corporate governance in time of crisis in the businesses will be tried to demonstrate.

In this regard, the basic frame of the study has been established to investigate the role of accounting information system during the crisis period. In the research carried out using the survey method, the effect of accounting information system will be measured in this regard. The study has an importance in terms of evaluating the accounting information system and corporate governance of SME's operating in Konya during the crisis period and creating practical and theoretical discussion environment primarily for entities in the research and also in Turkey and in the world.

The aim of the research; the main objective of the study is detecting the statistical significance of the impact of accounting information system used in surveyed entities during the crisis periods. The sub goals determined depending on the main objective are as follows:

Revealing the importance of financial indicator and information in measurement, management of the crisis and in overcoming and readiness of potential crisis and in such an environment, and determining the role and the contribution of accounting information system in solving problems within the frame of finance function.

The research hypotheses developed in line with the main objective of the research by taking into conceptual framework are as follows:

Hypothesis 1: There is a significant relationship between corporate governance and accounting information system.

Hypothesis 2: Problems that may arise in accounting information system in time of crisis shows that there is a significant relationship between accounting information system and the crisis.

Hypothesis 3: The effective use of accounting information system in time of crisis is an important factor in terms of contributing to the resolution process in order to prevent the deepening of the crisis.

Hypothesis 4: The level of contribution of accounting information system on the role of accounting information system in enterprises in time of crisis is high.

Hypothesis 5: There is a significant relationship between crisis management and accounting information system.

Hypothesis 6: Accounting information system is an important tool to overcome crisis periods easily.

Literature Review; in the preparation of data collection tool and in the formation of the scale used in the research, it is benefited from the studies of Sakrak (1999), Omurbek (2003), Dastan (2009), Dinc and Abdioglu (2009), Can (2010), Cetin (2011), Bengu, Can, Demirgunes (2014), Tugay, Dalgar and Teksen (2014).

The questionnaire form was sent by e-mail to the people who are on the management position of the entities and asked to answer the forms consisting 3 sections as A-B-C. In the scale; A- The general information of the participants, B- The relationship between accounting information system and corporate governance, C- The opinions about accounting information system in time of crisis.

275 enterprises out of 460 which are recorded in Konya Chamber of Industry are included in the study. The feedback rate is found as 80 %, 220 samples obtained out of 275.

Analysis and Findings: in the research, data were coded and loaded and analyzed by using SPSS software 22.0. The tables was formed for the analysis of the hypothesis, frequency of tables and alpha reliability coefficient and statistical tests for p values are applied and "5 point likert scale" was formed and the reliability test of the scale is measured with "Cronbach Alpha Coefficient" .

The total correlation of the articles of the scale related to "The intended purpose of the accounting information system" ranged from 0,357 to 0,716. The alpha coefficient of internal consistency reliability of the 9 articles was obtained as a high reliability as 0,828.

The total correlation of the articles of the scale related to "The relationship between accounting information system and corporate governance ranged from 0,554 to 0,667. The alpha coefficient of internal consistency reliability of the 6 articles was obtained as a high reliability as 0,843.

The total correlation of the articles of the scale related to "The problems that may arise in the accounting information system in time of the crisis" ranged from 0,619 to 0,714. The alpha coefficient of internal consistency reliability of the 5 articles was obtained as a high reliability as 0,853.

The total correlation of the articles of the scale related to "The role of accounting information system in time of the crisis" ranged from 0,613 to 0,739. The alpha coefficient of internal consistency reliability of the 10 articles was obtained as a high reliability as 0,903. Managers' all views are positive to "contribution level of the relationship between accounting information system and corporate governance" and it is seen that participation is statistically significant. Presenting information to managers in the expectation that they can be in an amenable position and the regulation of financial information reports in transparent, accountable and responsible manner were two issues that participants mostly attended. Managers reported favorable opinion to "The problems that may arise in accounting information system in time of crisis" and "The role of accounting information system in time of crisis" and it is seen that statistically significant.

9. The Overall Results of the Research Findings

Hypothesis 1: According to the result of one-sample t test applied for each statement taking place in the scale title of which is "Participating Managers' Views about the contribution level of the relationship between corporate governance and accounting information system, there is a significant relationship with respect to each statement and the hypothesis is accepted, since $p < 0,05$.

Hypothesis 2: According to the result of one-sample t test applied for each statement taking place in the scale title of which is "The Problems that may arise in Accounting Information system in time of crisis", there is a significant relationship with respect to each statement and the hypothesis is accepted, since $p < 0,05$.

Hypothesis 3: According to the result of one-sample t test applied for each statement taking place in the scale title of which is "The Role of Accounting Information System in time of Crisis", there is a significant relationship with respect to each statement and the hypothesis is accepted, since $p < 0,05$.

Hypothesis 4: According to the result of one-sample t test applied for each statement taking place in the scale title of which is "The Role of Accounting Information System in time of Crisis", there is a significant relationship with respect to each statement and the hypothesis is accepted, since $p < 0,05$.

Hypothesis 5: According to the result of one-sample t test applied for each statement taking place in the scale title of which is "The Role of Accounting Information System on Crisis Management", there is a significant relationship with respect to each statement and the hypothesis is accepted, since $p < 0,05$.

Hypothesis 6: According to the result of one-sample t test applied for each statement taking place in the scale title of which is "The Role of Accounting Information System on Crisis Management", there is a significant relationship with respect to each statement and the hypothesis is accepted, since $p < 0,05$.

10. Conclusion

Today's understanding of crisis management demonstrates the importance of accounting information system to survive in an intensifying competitive environment and to be present in the future. In this context, for the businesses that cannot understand the importance of accounting information system, to protect and continue their existence in the current crisis and competition environment is getting difficult each passing day. This study is important in terms of showing the existence of both positive and corporate relationship between crisis period, crisis management, corporate governance and accounting information system regarding the role of accounting information system and corporate governance on businesses in time of crisis

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