

THE EFFECTIVENESS OF INTERNAL CONTROL PROCEDURES IN SMES: THE CASE OF MILK SECTOR IN EDIRNE TURKEY

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ABSTRACT

If internal control activities are not appropriately defined and set systematically, the effectiveness of SME management lacks the value that could be added by internal control procedures to protect the assets by eliminating likelihood of imperfection and fraud. The study aims to explore the use of internal control through a questionnaire conducted on the sample consisting of 57 SMEs in the milk sector of Edirne, Turkey and the results were analyzed on SPSS by comparatively assessing the findings on control environment, internal control procedures, monitoring risks; and relevant suggestions were cited.

Keywords: Internal Control Procedures, Effectiveness, SMEs.

INTRODUCTION

Ongoing changes in the global and local economic environment lead businesses and organisations to diversify their activities. Therefore, they have to perform their activities with newly added requirements of effectiveness. In order to increase the effectiveness or the results of their activities with respect to their plans, the businesses are to consider new instruments such as internal control. Internal control activities or procedures are to be defined and set in order to have the potential value that could be added after the protection of organisational assets against imperfection and fraud. Internal control is crucial to protect the assets and support management with information used in decision making (Kinney, 2000). Internal audit ensures effective organizational performance through assessments and recommendations leading toward corporate governance (Pickett, 2005). Moreover, the specifications of an internal audit unit may influence its effectiveness (Arena and Azzone, 2009). Small and Medium Sized Enterprises (SMEs) and their management are considerably open to those risks, since they have difficulties to set standards for their activities and/or use corporate governance techniques to eliminate imperfection in the organisation. Internal control procedures are used in a planned basis and the results are expected to realise the plans and be effective along with an increase in the overall effectiveness of managerial activity in any organisation. In SMEs, the misappropriations of assets prevent effectiveness unnecessarily (Glodstein, 2009). Holt and Dezoort (2009) state: even though internal auditing gives a vital governance measure, external stakeholders necessitate information about its function. However, there is generally no need to inform

them in detail for much of SMEs. Therefore, SMEs are to concentrate on internal control procedures and their effectiveness. Managements have to give priority to monitoring procedures for most probable risks that prevent organisation to be effective (Bloom et al. 2009). Resulting with a most probable deficiency in the effectiveness, Klamm and Watson (2009) give evidence that a weak or fragile control environment is positively related to weak control activities, risk assessment, information and communication and monitoring. SME managements would not lack the value that could be added by internal control procedures to protect the assets, to the degree they are used to the concept of internal control; and they have an appropriate basis to use procedures that may affect the organisation as a whole as stated by Lundin (2009). Any predisposition of management for internal auditing will be an asset for the standardisation of an internal control system in the future. Tone at the top or control consciousness of the management is a critical factor of high-quality corporate governance (Hansen et al. 2009). Risks affect the effectiveness of an organisation. Risk management and internal control system are linked together and by recent changes, redesigning of internal control processes, competencies and roles in the organisation have been required (Arena and Azzone, 2009).

This study is therefore aims to explore: whether SMEs of a local sector or industry in an area of the economy are aware of the advantages to use internal control procedures, whether they have suitable managerial or organisational basis to make use of those procedures, and how they could be assisted with external support to integrate internal control activities in their internal auditing available. SMEs need to interact with and be encouraged by other organisations that lived similar experiences (Friedman and Miles, 2001). The study reveals that SMEs are aware of the value that could be added by internal control, but they need to be informed with details of internal control and to be supported to make use of internal control. The study aims to discover the use of internal control through a questionnaire conducted on a sample consisting of the SMEs in the milk sector of Edirne, Turkey. As given by most of the literature produced on the subject, the factors affecting internal control and its procedures are: control environment including management and shareholder support, internal control procedures, risk assessment, information – communication and monitoring. Hence, the results were assessed on those factors and the predisposition of the management on internal control even though they do not have a defined internal control system in their organisation. Consequently, suggestions were cited as conclusions.

METHODOLOGY

The study employs multi-source qualitative reasoning and incorporates literature available on internal control procedures. For the study, a questionnaire had been created and was conducted to the businesses of milk sector in Edirne Province of Turkey. The questionnaire used in the study aimed to determine current inconvenience in the relevant sector and to provide suggestions for eliminating those inconveniences on internal control. The study did not have any objectives for monitoring or control.

The study aims to reveal the use of internal control through a questionnaire conducted on the sample consisting of 57 SMEs in the milk sector of Edirne Province, Turkey. The lists of the sector businesses, which are all SMEs, were provided from the Edirne Chamber of Commerce and Industry, Trade Registrar. It was appeared that 13 of them were sole proprietorships among 57 SMEs and they were all excluded from the sample, the sample was limited only to companies for the sector in order to reach companies or organisations where internal control procedures were thought to be primarily indispensable. Throughout the conduction of the questionnaire, it was also observed that 2 companies had been subject to acquisitions recently; 2 companies were being subject to liquidation and closed out; 4 companies were newly registered but they had not started their activities yet; the rest 36 companies were surveyed and for a set of 18 companies within the sector that could not be reached or respond properly: their questionnaires were rejected before the assessment since they had not respond all of the questions; and only 18 of them could be reached and surveyed properly. Thus, 50 % (i.e. 18 out of 36) of active companies in the sample could be analysed for all questions of the survey. 31.6 % of the overall sample size was surveyed for internal control procedures. The results were analysed on SPSS by comparatively assessing the findings on relevant characteristics of internal control procedures for different types of companies within the milk sector of Edirne Province in order to reveal the availability of a natural basis to use those procedures in the sub-subjects of control environment, internal control procedures, and monitoring risks. The survey consisting of 30 questions was conducted in January and February 2010 by direct interviews with the presidents of the board, general managers, members of auditing committee or accounting managers and consultants of the businesses in the sample. For all Likert-type five scaled questions in the survey, reliability application of Cronbach's Alpha was determined as 0.89 and is above the agreed level of 0.70 in the literature. Frequencies and percentage distributions of the survey results were given in Tables 1 to 6 below.

RESULTS AND DISCUSSION

The study explored that even though the surveyed businesses had inadequate internal control systems and they did not use effective internal control procedures or unconscious of the effectiveness of internal control they conduct, it appeared that most were significantly aware of the potential value that could be added by effective internal control procedures. As an evidence, they responded a hundred percent "Yes" to the question: "If internal control procedures are used, do you think that it will finally be possible to protect the assets, to reach a substantial decrease in the costs and to add value into the activities executed?". Table 1 presents descriptive statistics of the survey.

Table 1
Descriptive Statistics of the Sample

Profile		
Trade Title of SMEs surveyed:	Frequency	%
Cooperative Company	10	55.6
Limited Company	6	33.3
Joint-Stock Company	1	5.6
Association	1	5.6
Total	18	100.0
Significant increase in the production capacity compared to last year		
	Frequency	%
Yes	5	27.8
No	12	66.7
Not mentioned	1	5.5
Total	18	100.0
Some questions of the survey:		
"Is there an auditing committee for which the independence is adequately provided?"	Frequency	%
Yes	11	61.1
No	7	38.9
Not mentioned	0	0.0
Total	18	100.0
"Does the organisation have a written document on internal control procedures where jobs and relevant authority are defined?"	Frequency	%
Yes	11	61.1
No	7	38.9
Not mentioned	0	0.0
Total	18	100.0

Summarizing the other descriptive results of the survey; it appeared that 83.3 % of the respondent businesses were active for more than 3 years. Thus, sustainability had become an issue of consideration for those respondents. 28.0 % of the businesses employed more than 8 workers excluding shareholders for cooperative companies. 47.7 % of the respondent businesses possessed an average of more than or equal to 300 milk animals in their assets. 44.8 % of the surveyed businesses had more than or equal to 330 total animals. Hence, their main reason to breed animals was to use their milk. 66.6 % had an average daily production capacity of more than or equal to 1500 litres of milk. Among the responses to the question for internal control system, the respondents answered as "Yes" (61.1 %) for the question: "Is there an auditing committee for which the independence is adequate in the business?". 38.9 % of the respondents stated that their organisation did not have a written document on internal control procedures where jobs and relevant authority are described. The most important benefits of internal control system were to prevent imperfection and fraud; and to provide accuracy and reliability to accounting information, as 33.3 % and 22.2 % respectively. 61.1 % of the respondents stated that their staff did not have any education on internal control. Giving evidence for the need of upper management support, 55.6 % members of the board and 27.8 % relevant authority or department managers were stated to be primarily informed for any inconvenience determined by the internal control.

From the survey results, those difficulties or inadequacy were notified to the management 88.9 % only orally and not using written documentation. The highest reason for the respondents that the consciousness of their expert personnel was not on the desired level, was stated as 38.9 % that the internal control procedures had not been created to cover job description, authority and responsibility definitions for each of the staff. 94.4 % of the respondents thought that external auditors should declare their opinion on the competence of the internal control system. The effectiveness level of internal controls of the organisations was % 61.1 moderate and % 27.8 poor according to the respondents.

Table 2 refers to agreements of respondents to below given statements of the survey on control environment and risk management.

Table 2
Control Environment and Risk Management

<i>Statements of the Survey on Control Environment</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
Management supports the effective functioning of internal control system and staff occupation	0 %	11.1 %	22.2 %	33.3 %	33.3 %
Internal control system is concordant with business policies and objectives	11.1 %	5.6 %	16.7 %	38.9 %	27.8 %
Cooperation exists in between entities to attain internal control objectives	11.1 %	0 %	16.7 %	44.4 %	27.8 %
Auditing committee continuously reserves enough time and resource to the risks affecting internal control system	11.1 %	22.2 %	5.6 %	33.3 %	22.2 %
Job, authority and responsibility details of the staff are clearly determined and updated in time	11.1 %	27.8 %	5.6 %	27.8 %	27.8 %
<i>Statements on Risk Management</i>					
Risk assessments are done on departmental basis in the organisation	1.1 %	27.8 %	16.7 %	38.9 %	5.6 %
Plans are available to minimize risks in the organisation	22.2 %	22.2 %	0 %	38.9 %	16.7 %
All staff understood the affordable risks that are determined by the management	16.7 %	27.8 %	11.1 %	38.9 %	5.6 %
Internal control is updated for risk changes occurred in the environment	16.7 %	33.3 %	5.6 %	27.8 %	16.7 %

Table 3 and Table 4 offer other details of the survey conducted in order to present evidence on internal control procedures together with information-communication and monitoring for the surveyed companies of milk sector in Edirne.

Table 3
Internal Control Procedures

<i>Statements on Internal Control Procedures</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
Written standards exist for each process within the organisation	16.7 %	16.7 %	33.3 %	16.7 %	16.7 %
Procedures exist in order to protect records, to save assets and to prevent fraud	22.2 %	22.2 %	5.6 %	22.2 %	27.8 %
Procedures provide accurate and reliable accounting	22.2 %	5.6 %	16.7 %	38.9 %	16.7 %
Confirmation provided separately by the staff who realises and by the staff who controls	22.2 %	0 %	11.1 %	33.3 %	33.3 %
Procedures are archived in the guides in order to set standards for the future	33.3 %	16.7 %	11.1 %	33.3 %	5.6 %
Any change in regulations is transferred to the internal control system by the management	16.7 %	5.6 %	11.1 %	50.0 %	16.7 %

Table 4
Information-Communication and Monitoring

<i>Statements on Information-Communication and Monitoring</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
Organisation has an internal control structure that can be applicable by all staff	5.6 %	11.1 %	16.7 %	50.0 %	16.7 %
Procedures are set to confirm the accuracy of information as the basis for financial reporting	5.6 %	11.1 %	11.1 %	55.6 %	16.7 %
Information transfer between independent entities is confirmed by internal controls	0 %	5.6 %	16.7 %	44.4 %	33.3 %
Emergency plans exist to cope with any inconvenience in the information technology	0 %	5.6 %	5.6 %	72.2 %	16.7 %
<i>Statements on Monitoring</i>					
The effectiveness of the internal control system is regularly assessed and monitored by the management	11.1 %	16.7 %	5.6 %	27.8 %	38.9 %
The monitoring staff of auditing entity for the internal control system are not allowed to take conflicting responsibilities	33.3 %	11.1 %	16.7 %	33.3 %	5.6 %
Business uses performance criteria that are set with respect to the overall objectives and targets of the organisation	5.6 %	5.6 %	38.9 %	38.9 %	11.1 %

Table 5 and Table 6 provide general assessments and comparison of the responses on selected statements within leading titles of the surveyed SMEs respectively. Table 6 was created to compare the largest group of the survey with agreement levels of other respondents for some selected statements and given in details for the sample from Tables 2 to 5.

Table 5
General Assessments

<i>Statements on General Assessments</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
Activities are performed effectively and efficiently within the business	0 %	11.1 %	5.6 %	33.3 %	50.0 %
Financial reporting in the organisation is conducted in a reliable manner	0 %	5.6 %	16.7 %	33.3 %	44.4 %
Activities in the organisation are realised with respect to regulations	0 %	0 %	11.1 %	16.7 %	72.2 %

Table 6
Comparison of the responses on selected statements within leading titles of the surveyed SMEs*

<i>Comparing the responses of cooperative companies versus limited companies and others</i>	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
Management supports the effective functioning of internal control system and staff occupation					
<i>Cooperative companies</i>	0 %	0 %	11.1 %	22.2 %	27.8 %
<i>Limited companies and others</i>	0 %	11.1 %	11.1 %	11.1 %	5.6 %
<i>Total</i>	0 %	11.1 %	22.2 %	33.3 %	33.4 %
Risk assessments are done on departmental basis in the organisation					
<i>Cooperative companies</i>	5.6 %	22.2 %	5.6 %	27.8 %	0 %
<i>Limited companies and others</i>	5.6 %	5.6 %	11.1 %	11.1 %	5.6 %
<i>Total</i>	11.2 %	27.8 %	16.7 %	38.9 %	5.6 %
Internal control is updated for risk changes occurred in the environment					
<i>Cooperative companies</i>	11.1 %	22.2 %	0 %	16.7 %	11.1 %
<i>Limited companies and others</i>	5.6 %	11.1 %	5.6 %	11.1 %	5.6 %
<i>Total</i>	16.7 %	33.3 %	5.6 %	27.8 %	16.7 %
Written standards exist for each process within the organisation					
<i>Cooperative companies</i>	16.7 %	16.7 %	16.7 %	11.1 %	0 %
<i>Limited companies and others</i>	0 %	0 %	16.7 %	5.6 %	16.7 %
<i>Total</i>	16.7 %	16.7 %	33.3 %	16.7 %	16.7 %
Procedures are set to confirm the accuracy of information as the basis for financial reporting					
<i>Cooperative companies</i>	5.6 %	11.1 %	11.1 %	27.8 %	5.6 %
<i>Limited companies and others</i>	0 %	0 %	0 %	27.8 %	11.1 %
<i>Total</i>	5.6 %	11.1 %	11.1 %	55.6 %	16.7 %
Business uses performance criteria that are set with respect to the overall objectives and targets of the organisation					
<i>Cooperative companies</i>	0 %	5.6 %	22.2 %	33.3 %	0 %
<i>Limited companies and others</i>	5.6 %	0 %	16.7 %	5.6 %	11.1 %
<i>Total</i>	5.6 %	5.6 %	38.9 %	38.9 %	11.1 %

- Note that association title stands for cooperative association and its responses are included in the set of cooperative companies. Among the respondents, there is only one joint-stock company and stated as others for creating two sets to compare with cooperative companies.

The survey gives evidence that 27.8 % of cooperative respondents stated they strongly agree that management supports the effective functioning of internal control system and staff occupation. Therefore, they have a predisposition on the internal control procedures and for having the relevant effectiveness improved. From cooperative respondents, 33.3 % determined that business used performance criteria that had been set with respect to the overall objectives and targets of

the organisation. Hence, they had already set performance criteria as a result of mutual benefit and cooperation. They would not regret any value added by effective internal control systems.

CONCLUSIONS

SME managements of the analysed milk sector deserve to use the value that could be added by internal control procedures to protect the assets, to the degree they are used to the concept of internal control; and they have an appropriate basis to use procedures in the organisation with their above given responses.

For cooperative companies that form the largest part of the SMEs in the milk sector of Edirne Province, it appears that they are very prone to use internal control systems but they have difficulties to create standard internal control procedures and transfer the experience into a measure of ensuring sustainability in their activities.

As a conclusion, it would be appropriate to offer suggestions to support and motivate those companies of a significant sector, in this case cooperative companies mostly, and those suggestions would create a best practise and/or a pilot application for other local sectors, making the concept available for such sub-levels of an economy as macro, mezzo and micro level arrangements.

The general suggestions are as follows:

-The SMEs of a specific sector of a local area could be motivated and supported on the issue of internal control procedures in order to improve the effectiveness of their internal control system.

-The effectiveness would be most probably improved if the internal control procedures were documented in a written manner.

-The risks should be regarded as hurdles to reach sustainability and the effectiveness of internal control could ensure protection against potential risks in the environment.

-The managements, shareholders and the staff of the companies should have seminars in order to be informed on the advantages of internal control procedures.

Evaluating the responses of the largest group in the study, cooperative companies and their responses differ significantly on the subjects of management support, risk assessments, internal control updates, written standards for internal control procedures and performance criteria. Consequently, the effectiveness of internal control procedures throughout the sector could be improved by concentrating on cooperative companies in mezzo level. Since cooperatives are companies where the use of the mutual basis exists, and they are autonomous associations for common economic, social and cultural needs; mutual benefits of members or shareholders could be provided by encouraging the use of standard internal control procedures.

Managerial support is one of the leading and existing factors to improve the effectiveness of cooperative companies, since a cooperative is a form of business organisation that is owned and controlled by its shareholders or members. Hence, their shareholders will definitely want to favour the benefits of the potential value added by effective internal control system and procedures.

Suggestions on the case of the Edirne milk sector are given as follows:

- Associations, Chambers of Trade and Industry and such mezzo level organisations could be used to motivate, encourage and improve the use of internal control procedures.

- Cooperatives are having direct subsidies and are subject to direct control of state agencies and ministries (i.e., Ministry of Agriculture and its provincial entities in the case of milk sector) and they could also be subsidised for effectiveness.

- The study revealed the predisposition of cooperative companies for much more effective internal control systems and it should be seen as an opportunity to form measures on micro, mezzo and macro levels and all efforts may be integrated so as to have a specific sector of SMEs use international standards of internal auditing to reach sustainability against conjectural fluctuations such as diseases, costs and price instabilities.

- Increasing the effectiveness of internal control systems could be the subject or aim of a project for a provincial industry or sector to attain sustainability that is significantly crucial in agricultural production as the case examined in the study was milk sector.

Finally, if standard internal control procedures are set and designed particularly for the title of the company in any given sector and/or cluster, competence in managerial performance and value added through potential improvements in effectiveness will be attained. The conclusions of the study could be a starting point for future and further research on sector-specific or industrial internal control procedures and their effectiveness.



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