

Internal Control System Role in Moderating the Effect of Organizational Culture and Organizational Performance: An Empirical Evidence from Developing Economy

Diala Jehad Ershaid¹, Akilah Abdullah², Mudzamir Mohamed²

¹(Ph.D Scholar, TunkuPuteriIntan Safinaz School of Accountancy(TISSA-UUM), Universiti Utara Malaysia)

²(TunkuPuteriIntanSafinaz School of Accountancy (TISSA-UUM), Universiti Utara Malaysia)

Abstract: *This paper aims to examine internal control mechanism and its moderating impact on organization culture and organizational performance among listed Jordanian companies. The paper used the survey method to collect data from 190 managers of listed companies in Jordan. The results showed that internal control system moderates the relationship between organizational culture and organizational performance. Importantly, result of the study indicates that both internal control system (control environment, control activities, risk assessment, information and communications system and monitoring) and organizational culture (bureaucratic, innovative and supportive) have a joint effect in reducing losses and frequent shut-down of the companies. Furthermore, the results of this study provide beneficial information to investors in Jordan in order to evaluate the impact organizational culture and internal control system have on organizational performance. It also contributes to the literature and provides direction for future research in the context of developing economies.*

Keywords: *organizational performance, internal control system, organizational culture*

Date of Submission: 28-11-2019

Date of Acceptance: 13-12-2019

I. Introduction

Organizations are trying to put suitable mechanisms in place to continuously improve their business performance for them to achieve higher growth, constant improvement, greater profitability and survive the growing competition especially in the present dynamic corporate world (Salajegheh, Chamanifard, Chamanifard & Nikpour, 2015). Businesses are usually caught in the complex environment as changes are sometimes predictable and sometimes not unpredictable. Therefore, most companies frequently spend vast amount of time, finance and other scarce resources for the purpose of achieving high performance results. The dynamic business environments demand that companies should put in place effective control systems which are able to manage all the business aspects especially in the present highly competitive globalized situation. Businesses cannot run away from the new challenges; thus, it requires them to deploy the latest managerial practices and tact. They also need effective internal control system to be implemented in their organizations (Fard & Karimi, 2015). Therefore, it is necessary for companies to investigate the significant factors that influence firm performance. However, Danneels and Sethi (2011) found that inability of organizations to understand their environment as well as other factors expose them to difficulties in achieving their desired goals.

Researchers have argued that organizational culture (OC) influences firm performance. Based on insights from the contingency theory, instituting a vibrant culture in firms with diverse stakeholders constitute a lot of challenges for managers (Lee & Gaur, 2013). Hence, responsive and forward-looking organizations usually focus on their larger operating environment. Additionally, large organizations usually make use of the contingency approach to prepare for anticipated turbulence (Kreitner & Kinicki, 2007; Bedeian & Wren, 2009). Moreover, it was discovered that ineffective OC is one of the main causal factor of low productivity among business organizations (Eaton & Kilby, 2015). Therefore, business leaders should emphasize effective OC in order to enhance performance and increase their productivity (Viegas-Pires, 2013). In view of these perspectives, the present study aims to assess cultural components among Jordanian listed companies. Thus, assessment is essential in order to see how socio-cultural elements are affecting the development of knowledge management and listed firms' performance in the Jordanian context.

Although current empirical studies have found a relationship between OC and performance, this linkage could be more explicit through other influences. For instance, internal controls may have a role to play in this association. Internal control constitutes the entire system that enables management to make an assessment of the effectiveness of business functions and the extent in which organizational assets are being effectively utilized (Shannak, Masa'deh, Al-Zu'bi, Obeidat, Alshurideh, & Altamony, 2012). This type of mechanism is vital in facilitating organizational functions, ensuring consistency and reducing inefficiencies in the main

functions of the organization (Masa'deh, Al-Dmour, & Obeidat, 2015; Mahadeen, Al-Dmour, Obeidat, & Tarhini, 2016). As noted by scholars, internal control system performs the role of a double-check tool for management to make sure that assets are properly apportioned and used. Furthermore, it ensures that operations are conducted in a manner that enables attainment of organizational goals (Al-Syaidh, & Al-Zu'bi, 2015; El-Masri, Orozco, Tarhini, & Tarhini, 2015).

There is no doubt that an effective internal control system constitutes a pillar of effective management, and by extension, improvement in firm's performance (Badara, 2015). As a way of responding to current dynamics of the business operating environment, numerous organizations are contending with huge problems, especially in the wake of recent financial crisis which led to the bankruptcy of some large organizations. Most of these corporate failures have been linked to compromised internal controls (Philee, 2010). Internal control system can positively influence organizational performance by instituting practices, policies and procedures that enables fraud detection and also minimize errors (Amponsah, Adu, & Amisah, 2015). Internal control and OC among business organizations have been widely research topics in the business and management literature in the past decades. However, there are conceptual ambiguities that are yet to be clarified and definitions that are still subject to debates.

In view of discussions in the preceding paragraphs, this paper aims to examine the influence of OC on organizational performance. Additionally, the study discusses the influence of internal control system as a moderator of this relationship. This will lead to further understanding of the relationship among business organizations in Jordan and other countries.

II. Literature Review

Over the past few decades, company performance has been a widely researched topic and has been an area of keen interest among practitioners (Hussein, Mohamad, Noordin & Ishak, 2014) due to its importance. A lot of debates are ongoing on the ways through which effective internal control systems influence organizational performance although scholars are yet to agree on what actually constitute these concepts. With increasing globalization, business corporations should develop competitiveness and take market positions that can improve their performance (Bhattacharya, Hemerling, & Waltermann, 2010). A good internal control system provides mechanisms for organizations to effectively manage their financial and non-finance operations. Furthermore, accountability is enthroned if tasks and projects are implemented with robust systems, plans and strategies that will provide greater value and customer satisfaction. Saad and Zhengee (2016) state that business organizations consider their financial performance as a core area which deserve a lot of attention. This is because all other areas are secondary and depend largely on the finances of the firm. This position is understandable because financial performance constitutes the pillar of other organizational functions and because they can only be performed through effective and solid financial support.

Contrary to the position of Saad and Zhengee (2016), Holbeche (2005) argue that managers emphasize more on ensuring a balance between operational and financial performance. In their own contribution to the discussion, Mat and Smith (2014) state that conventional performance measures do not ensure assessment of the competitive environment because performance depends on diverse systems and situations. However, Sarwoko, Surachman, and Hadiwidjojo (2013) argue that quantitative factors such as productivity, profit, return on investment (ROI), sales and qualitative factors such as skills, knowledge and business expertise, have limitations if evaluated individually. As such, researchers suggest that financial performance (FP) and non-financial performance (NFP) should be incorporated into company performance assessment to enable better outcomes (Agbim, Oriarewo, & Zever, 2014).

Organizational Culture

Practitioners and Scholars are keenly interested in OC (Denhardt, 1991; Zamanou & Glaser, 1994; Jreisat, 1997) perhaps because of its role in enhancing effectiveness and performance of business corporations (Cameron & Ettington, 1988; Denison & Spreitzer, 1991; Heskett & Kotter, 1992; Sørensen, 2002). Scholars have also noted that no single type OC should be considered as superior to the other, and that different cultures are more suited to different work environments, corporate philosophies and types of organizations (Schneider, Ehrhart, & Macey, 2013). Hence, it is better for an organization to focus on the type of culture that will ensure better performance (Iliuta, 2014). Wallach (1983) was the pioneer of explaining organizational culture and it has been conceptualized into three cultural dimensions: (1) bureaucratic, (2) innovative and (3) supportive – to varying degrees. The framework is adapted for the purpose of this study. These dimensions provide a useful and measurable typology (Choi, 2009; Koberg & Chusmir, 1987). These dimensions are further explained as follows:

Bureaucratic Culture

Wallach (1983) noted that bureaucratic culture (BC) is strictly hierarchical and compartmentalized with clear authority lines and work is organized systematically. The system is based on power and control and mostly abound in entities that are matured, stable and very cautious. These types of entities are power-oriented, conservative, well-established, highly regulated, and procedural. The culture functions well in organizations that have huge market share and operates in stable markets. Highly creative and very ambitious personnel may not perform optimally in such organizations. However, well-trained staff that follows laid-down procedures and protocols may find such cultures a very good environment. Bureaucratic culture is similar to a mechanistic culture according to Burns and Stalker (1961).

Innovative Culture

The innovative culture (IC) is based on values that enhance a shared view of the organization and its emphasis on sustainable market. The culture questions why things are carried out in a certain way and not others. It then goes ahead to develop alternative and better ways. It should be noted that innovation is a culture, not a one-time event. Innovative organizations are creative places to work. They are filled with challenges, risks, and stimulate creativity. However, burn-out and stress are common due to the pressure to achieve. Since innovation is not about coming up with an idea but more about applying an idea to obtain value. Nemeth (1997) states that innovative culture strengthens cohesion, loyalty and some clear rules of attitudes and appropriate behaviors. Furthermore, it promotes the autonomy of working teams, managers' support to projects, departmental relationships, trust, and sincerity (Shrivastava & Souder, 1987).

Supportive Culture

A supportive culture (SC) permits a new business unit to thrive and operates side by side with the existing functions without significant disruptions. According to Nadim (2004) p.232 "The new business, to be successful, requires end-to-end management, has to be free from bureaucratic barriers, have discretionary spending power, requires rapid, intuitive decision making, and many other requirements that make it distinct and separate from the requirements of an ongoing, operational line of business". Specifically, a SC enables the new unit to operate differently from the existing ones and simultaneously align with the ongoing business. In supporting environments, comfort is provided in the workplace. Staff relationships are very cordial, friendly and helpful thus enabling a harmonious environment similar to an extended family. Organizations that operate in this way are very trusting, safe, sociable. They encourage open relationships and foster collaboration.

According to Vayanos and Hammoud (2007) and Bashayreh and Junoh (2014), only few studies have been conducted in the Arab region pertaining to OC and its assessment particularly in an economy like Jordan. In the views of Hofstede (1984) the Arab culture is different from Asian or European culture as there exist a high level of power distance. A study conducted by House, Hanges, Javidan, Dorfman and Gupta (2004) concluded that Arab managers need to be highly self-centered and protective. This is also due to their family backgrounds that are greatly influenced by tribal systems. Likewise, in the Jordanian culture, family cultures are also very important to understand and enhance the implication and applicability of work practices. Hence, it is better for an organization to focus on the type of culture that will create a better performance (Iliuta, 2014). Majority of research has concentrated on developed economies (Hafsi & Farashahi, 2005). Studies by Fusch and Gillespie (2012) and Flamholtz and Randle (2012) have explained that OC has the potential to enhance FP as well as NFP in a strategic manner. Al-Mawali (2013) suggests that the trade and business culture in Jordan is increasing in complexity due to a variety of internal and external elements such as competition, economic fluctuations, technology evolutions and changing customer demands. Hence, in such a situation, obtaining robust support and facilitation from leaders would be key to achieving the desired organizational performance. Furthermore, no two OCs are the same even in a single business sector or industry (Schneider et al., 2013). Based on unique individual and geographic values, there is an important gap in our understanding concerning the effect of cultural prospects among Jordanian listed companies.

Thus, this study will contribute to knowledge of both practitioners in organizations and researchers in this field of study. It is also important for those who are eager to expand the topic and do similar research in Jordan as the economy has been facing tougher and complex work environments and changing work conditions (Obeidat, Masa'deh, Al-Suradi, & Tarhini, 2016). Theoretical arguments support the idea that OC is related to organizational performance and long-term effectiveness (Ahmed, 1998; Cameron & Quinn, 2011; Saffold, 1988; Zheng, Yang, & McLean, 2010). Many researchers have proven that OC is related to firm performance (Mathew, 2007; Ojo, 2005; Racelis, 2010; Rose, Kumar, Abdullah, & Ling 2008; Sokro, 2012. Zhang and Duan (2010) contend that OC is a major issue that has been extensively researched in relation to its link with organizational effectiveness in line with the resource-based theory.

Internal Control System

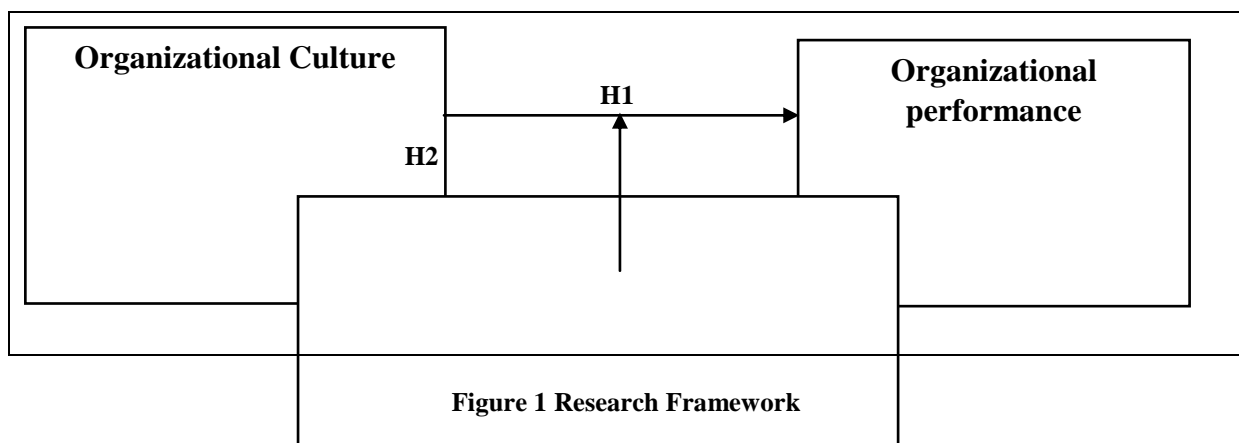
Internal control system is defined as “a process, effected by an entity’s board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance” COSO (2013). Internal control system gives managers some level of assurance that the organization’s key goals will be attained (Postan, 2010; Ssuuna, 2011; O’Leary, Iselin & Sharma, 2006; Kiabel, 2013). The International Federation of Accountants (IFAC, 2012) states that the best security tool that organizations could install to ensure effective performance is a robust internal control mechanism. Therefore, an effective internal control could be a good weapon for organizations to ensure effectiveness and efficiency. Organizational performance could be enhanced significantly by establishing effective internal controls. Organizations that have poor internal control mechanism could lose their value and market share (Chirwa, 2003; Tseng, 2007; Greenley & Foxall, 1997). Numerous scales have been developed to measure internal control systems and its sub factors like risk control environment (CE), control activities (CA), assessment (RA), information and communication systems(ICS), and monitoring (M) (Njoki, 2015; Al-Thuneibat, Al-Angari, & Al-Saad, 2016; Njeri, 2014; Muraleetharan, 2013; Ejoh & Ejom, 2014; Oppong et al., 2016).

High performing organizations are responsive in developing key elements that could help them to retain a competitive environment and thus, culture plays a key role in this regard (Øgaard, Larsen, & Marnburg, 2005). Additionally, internal control system has the ability to adapt OC to enhance firm’s performance through stimulating control environment and control activities which in turn will improve organization ability to deal efficiently with any contingent factors. (Wright, 2009). On general grounds, the internal control system comprises of factors some of which have a very high impact on the success and organizational effectiveness. Multiple control systems, accrual accounting, and earnings management can be linked to internal control system and OC (Pfister & Hartmann, 2011). In connection to Jordan, internal control systems have been highlighted as having a lot of problems. This includes inadequate qualified staff, lack of technical expertise and assistance; unavailability of seasoned staff members. This is traditionally due to the fact that internal control systems handling is a complex phenomenon and requires varied expertise and seasoned people to practice (Rahahleh 2011; Khasharmeh, 2009).

Previous studies have yielded inconsistent results between OC and firm performance (Flamholtz& Randle, 2012; Unger, Rank, & Gemünden, 2014; Han, 2012; Domnişoru, Ogarcă, & Dragomir, 2017, Zare & Mohammadi, 2016; Reginato & Guerreiro, 2013). A moderating variable is introduced when there is weak or inconsistent relationship between the endogenous and exogenous variables (Baron & Kenny, 1986). The present study aims to test the moderation of internal control systems. There is a possibility that buffering role of internal control system may enrich these relationships. According to Rae and Subramaniam (2008), internal control systems can moderate between several organizational factors and outcomes. Notably, the present study will be able to fill in the gap of understanding the moderating effect of internal control systems on the relationship of OC with financial and non-financial business performance. Based on the aforementioned past evidences, it assumes that there would be robust theoretical and contextual findings for scholars on the topic.

Research Framework and Research Hypotheses

The research framework of the study was designed to determine the influence of organizational culture and internal control system on organizational performance. The framework projects organizational culture as a key influencer while internal control system acts as a buffer in this relationship. Largely, the study tries to point out some important gaps in the literature after a critical appraisal in order to explain ways through which organizational performance could be predicted. Figure 1 depicts the research framework.



Based on the arguments about this relationship, the following hypotheses are postulated:

H1: Organizational culture significantly influences organizational performance.

H2: Internal control system moderate between organizational culture and organizational performance.

III. Methodology

The study was conducted using the survey method. Survey questionnaire attached to a cover letter were circulated among departmental heads and managers of companies registered with the Jordanian stock exchange. The companies' managers and the departmental heads were the informants since they are knowledgeable about the firm's internal control and its OC. Out of the 233 questionnaires distributed in October 2018, only 119 questionnaires were filled and returned. A follow up calls and emails to each of the non-responding firms yielded a further 89 returned questionnaires. However, 18 out of the returned questionnaires were not useful and thus discarded. Consequently, about 190 completed questionnaires, translating to a response rate of 81.5%, were retrieved and utilized for analysis. Possible non response bias was investigated using the t-test for early and late responses in line with suggestion of Armstrong and Overton (1977). There were no statically significant differences discovered in the mean score of the internal control system, OC and firm's performance between the early and late respondents.

In measuring the research variables, OC were measured by bureaucratic, innovative, and supportive cultures as adopted from Wallach (1983). Respondents were asked to choose their preference from a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), to indicate the emphasis place on each OCs items in their organizational performance. Participated managers were asked to select their preference from a five-point Likert ranging from 1 (strongly disagree) to 5 (strongly agree), to indicate the emphasis they place on diagnostic and interactive system in use of internal control systems their organization. Internal control system was measured by using five items also adapted from Aldridge and Colbert (1994). Finally, firm's FP and NFP was measured by using items adapted from Govindarajan (1984), Hoque and James (2000), and Widener (2007) as per Table 1. The selected instrument is conceptually consistent with Kaplan and Norton (2005), balance scorecard. Following the procedures used by previous researchers, participating managers were asked to indicate their organization's performance in comparison to their competitors by using five Likert scale ranging from 1 (very poor performance) to 5 (very good performance) (Abernethy & Lillis, 1995; Merchant, 1984).

Analysis of Results

Data was analyzed with the Smart PLS 3 software. Table 1 presents the outer convergent validity for internal control system construct in respect of all its variables. The recommended threshold for factor loading is 0.70 and this was exceeded by all items in the construct. This is a reflection of consistency among items of the construct (Hair, Hult, Ringle, & Sarstedt, 2014). Similarly, reliability test was performed and it was confirmed that all values of composite reliability exceeded the recommended threshold of 0.70. They range from 0.916 to 0.975 as shown in Table 1. Additionally, the recommended threshold of average variance extracted (AVE) was met. Values exceeded 0.50 which was recommended by Fornell and Bookstein (1982) to ensure that the latent construct is able to explain above half of the variance of its indicators averagely.

Table 1: Outer Model, Convergent Validity and Composite Reliability

Construct	Items	Loadings	CR	AVE
Organizational Culture (OC)	Bureaucratic Culture (BC)		0.964	0.690
		0.880	0.922	0.746
		0.886		
		0.867		
		0.821		
	Innovative Culture (IC)		0.916	0.785
		0.883		
		0.868		
		0.907		
		Supportive Culture (SC)		0.938
		0.859		
		0.856		
		0.886		
		0.870		
		0.862		
Internal Control System	Control Environment (CE)		0.975	0.597
			0.940	0.693
		0.840		
		0.848		
		0.846		
		0.847		

Construct	Items	Loadings	CR	AVE
		0.814		
		0.835		
		0.798		
	Control Activities (CA)		0.926	0.678
		0.704		
		0.809		
		0.901		
		0.860		
		0.872		
		0.777		
	Risk Assessment (RA)		0.928	0.720
		0.817		
		0.865		
		0.842		
		0.912		
		0.801		
	Information and Communications System (ICS)		0.922	0.747
		0.808		
		0.894		
		0.861		
		0.891		
	Monitoring (M)		0.888	0.619
		0.817		
		0.793		
		0.885		
		0.856		
		0.531		
Organizational Performance			0.945	0.713
	Financial Performance (FP)		0.947	0.899
	Overall organizational profitability.	0.947		
	Return on Investment.	0.950		
	Non-Financial Performance (NFP)		0.919	0.697
	Customer satisfaction.	0.847		
	Product/ services quality.	0.903		
	Development of new products / services.	0.857		
	Developing employee competencies and skills.	0.861		
	Employee satisfaction	0.691		

Latent variable correlation which indicates correlations between measures of potentially overlapping constructs is presented in Table 2. There is an indication that the scores of all square root of the AVE surpass the correlations with other constructs (elements in the rows and columns). This is an indication that discriminant validity was attained in this study.

Table 2: Discriminant Validity-Square Root of AVE

Constructs	BC	CA	CE	FP	ICS	IC	M	NFP	RA	SC
BC	0.864									
CA	-0.265	0.823								
CE	-0.282	0.839	0.833							
FP	0.585	-0.405	-0.422	0.948						
ICS	-0.155	0.916	0.801	-0.315	0.864					
IC	0.837	-0.292	-0.325	0.592	-0.227	0.886				
M	-0.290	0.786	0.914	-0.488	0.751	-0.336	0.787			
NFP	0.573	-0.383	-0.388	0.879	-0.293	0.557	-0.445	0.835		
RA	-0.240	0.860	0.814	-0.420	0.845	-0.308	0.772	-0.369	0.848	
SC	0.865	-0.259	-0.309	0.578	-0.200	0.883	-0.352	0.578	-0.267	0.867

In the previous subsection, this study’s measurements validity and reliability were discussed. We proceed to the bootstrapping approach to test research hypotheses. Path coefficient of the research hypotheses is illustrated in Table 3. The first research hypothesis (H1) predicts that, OC is positively associated with organizational performance. The coefficient on the path from each of bureaucratic, innovative and supportive culture to organizational performance (H1) was supported as the p-value is greater than 0.001. In particular, ($\beta = 0.468, t = 5.555, p = 0.000$). These results indicate a significant positive nexus between OC and organizational performance. Likewise, it can be discerned that hypothesis H2 was supported ($\beta = 0.164, t = 2.576, p < 0.01$). The result signifies that internal control system moderates the relationship between OC and performance, which

implies that the relationship between OC and performance would increase in a firm with high internal control system, OC becomes more important for explaining performance.

Table 3: Path coefficient of the research hypotheses

Relationships	Std. Beta	Std. Error	T- Statistics	P-value	Decision
ORGC -> PERF	0.468	0.084	5.555	0.000***	Supported
ORGC*INTERCS-> PERF	0.164	0.064	2.576	0.010***	Supported

Note: Significant at the *: P<0.05 level; **: P<0.01 level; ***: P<0.001.

OCS = Organizational Culture; INTCS = Internal Control System; FP = Organizational Performance.

IV. Discussion of the Findings

The result of this study revealed that organization culture is significant to organizational performance, which indicates that managers of Jordanian listed companies in Amman Stock Exchange (ASE) believe that their company has better performance when they are more focused on OC. Hence, H2 is supported. The finding of this study justified that the Jordanian listed companies in Amman Stock Exchange with more knowledge in the form of the different OCs have better ability to learn and manage changes in the market faster. It affects the skills, abilities, and attitudes of employees, which, in turn, affects the performance of the firms. The findings demonstrated that organization culture can be used to mobilize, assemble, and manage all intangible resources in order to enhance the growth of listed companies in Jordan and this is in line with the findings of other studies (Ogbonna & Haris, 2000; Martins & Terblanche, 2003; Kim, Lee & Yu, 2004; Oparanma, 2010; Zheng et al., 2010; Pfister & Hartmann, 2011; Al-Rfou ,2012; Duke II & Edet, 2012; Ng'ang'a & Nyongesa, 2012; Han, 2012; Shahzad, Luqman, Khan, & Shabbir, 2012; Flamholtz & Randle, 2012; Ahmed & Shafiq , 2014; Unger et al., 2014, Bashayreh & Junoh, 2014; Nikpour, 2017). Undoubtedly, organization culture does contribute to the growth of listed companies in Jordan. The empirical findings of the study are consistent with the RBV and Contingency theory, the theories emphasized on the role of intangible resources and organizational capabilities, which include analyzing organization culture in generating a firm's sustainable competitive advantages. This is because the results show that organization culture influences the Jordan listed companies' performance in ASE. The moderating test indicate that internal control system moderates the relationship between OC and organizational performance. It shows that when the level of internal control system is high, the relationship between OC and organizational performance becomes stronger. It indicates that listed company managers in Jordan manage their organizational resources, i.e., bureaucratic, Innovative, and supportive culture accordingly to the internal control system applied in the company. It has been observed over the past few years that a firm's survival mainly depends on understanding the importance of effective OC to improve performance and productivity by business managers and emphasis should always be to strive for the improvement of performance by reconfiguring their capabilities (Viegas-Pires, 2013). Therein, OC can be seen as one of the important prospects (Irefin & Mechanic, 2014; Nikpour, 2017). This result is in line with prior researchers which looked at the relationship between OC and internal control system and reported positive relationship (Domnişoru, et al., 2017, Zare & Mohammadi, 2016; Reginato & Guerreiro, 2013). In general, the results of the moderating effects of internal control system on the relationship amid OC and organizational performance support the literature on the contingency theory that organization's resources and capabilities aligned with the environmental factors determine the firm's long-term competitiveness.

V. Conclusion, Limitations and Future Research

In conclusion, this study has investigated the influence and role of internal control system as a moderator of the link between OC and organizational performance. Internal control system can provide significant and tangible contribution to support performance improvement among Jordanian listed companies either through a partial or complete moderation. This study also examined the joint association between the OC and the organizational performance. It was found that OC (bureaucratic, innovation and supportive culture) have a positive relationship with organizational performance. The finding of this study also revealed a positive relationship between both internal control system and OC with organizational performance. In other words, the results of this study indicated that OC and internal control system can ensure effective monitoring of companies by management to improve performance in Jordanian listed companies.

Nevertheless, this study has some of limitations that should be reported for the benefit of future research. First, the study was conducted in Jordan which is a developing country. It is possible that companies in other settings may differ from their Jordanian counterparts. This is because of the size of the Jordanian economy, the politico-economic uncertainty and nature of market competition, economic policies or structures, national culture, legal and regulatory constraints that might differ among developing countries. These possible differences may restrict generalizing the result beyond the context of Jordan to encompass the whole developing

countries. Results from this study can help researchers to further explore the relationships in different countries and contexts. Second, firm performance was measured by using a survey questionnaire, asking the managers to self-assess their organization's performance. Such self-assessment may introduce bias in the performance measure. Regardless of these limitations, the findings reported in this study and further research would help improve our understanding regarding the possible influence of internal control system in facilitate organizational performance.

References

- [1]. Abernethy, M. A., & Lillis, A. M. (1995). The impact of manufacturing flexibility on management control system design. *Accounting, Organizations and Society*, 20(4), 241-258.
- [2]. Agbim, K. C., Oriarewo, G. O., & Zeven, T. A. (2014). Moderating effects of individual entrepreneur and enterprise characteristics on the relationship between business, environmental scanning behavior and entrepreneurial performance. *Journal of Business Studies Quarterly*, 6(1), 248.
- [3]. Ahmed, M., & Shafiq, S. (2014). The impact of organizational culture on organizational performance: A case study of telecom sector. *Global Journal of Management & Business Research*, 14(3), 21-30.
- [4]. Ahmed, P.K. (1998). Culture and Climate for Innovation. *European Journal of Innovation Management*, 1(1), 30-43.
- [5]. Aldridge, C. R., & Colbert, J. L. (1994). Management's Report on Internal Control, and the Accountant's Response. *Managerial Auditing Journal*, 9(7), 21-28.
- [6]. Al-Mawali, H. (2013). Performance consequence of management account system information usage in Jordan. *Business & Economic Horizons*, 9(1), 22-31.
- [7]. Al-Rfou, A. N. (2012). Competition and organizational performance: Empirical evidence from Jordanian firms. *Journal of Economics*, 3(1), 13-17.
- [8]. Al-Syaidh, N. H. J., & Al-Zu'bi, Z. (2015). Transformational Leadership and its Impact on the Effectiveness of Employees' Behavior in the Public and Private Jordanian Hospitals. *Jordan Journal of Business Administration*, 11(1), 33-47.
- [9]. Al-Thuneibat, A. A., Al-Angari, H. A., & Al-Saad, S. A. (2016). The effect of corporate governance mechanisms on earnings management: Evidence from Saudi Arabia. *Review of International Business and Strategy*, 26(1), 2-32.
- [10]. Amponsah, S., Adu, K. O., & Amisah, A. (2015). Assessing Internal Controls among Insurance companies in Ghana.
- [11]. Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of marketing research*, 14(3), 396-402.
- [12]. ASE (2017). Privatization in Jordan. Retrieved from <http://www.ase.com.jo>
- [13]. Badara, M. S. (2015) Empirical Evidence of Performance Measurement of Internal Audit Function on its Effectiveness. *Academic Journal of Management Science Research*, 1(1), 1-10.
- [14]. Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- [15]. Bashayreh, A. M., & Junoh, A. M. (2014). Organizational Performance: Study on Jordanian Insurance Sector. *Sains Humanika*, 2(2).
- [16]. Bedeian, A., & Wren, D. (2009). *The Evolution of Management Thought*. Hoboken, NJ: John Wiley & Sons.
- [17]. Bhattacharya, A., Hemerling, J., & Waltermann, B. (2010). *Competing for Advantage. How to Succeed in the New Global Reality*. The Boston Consulting Group.
- [18]. Burns, T., & Stalker, G. M. 1961. *The management of innovation*. London: Tavistock.
- [19]. Cameron, K. S., & Ettington, D. R. (1988). The conceptual foundations of organizational culture Higher education. *Handbook Theory Res*, 4, 429-447.
- [20]. Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- [21]. Canh, N. T., Liem, N. T., Thu, P. A., & Khuong, N. V. (2019). The Impact of Innovation on the Firm Performance and Corporate Social Responsibility of Vietnamese Manufacturing Firms. *Sustainability*, 11(13), 3666.
- [22]. Chirwa, E.W. (2003). Determinants of commercial banks' profitability in Malawi: A co-integration approach. *Applied Financial Economics*, 13(1), 565-571.
- [23]. Choi, S. (2009). The emergence of shared leadership from organizational dimensions of local government. *International Journal of Leadership Studies*, 5(1), 94-114.
- [24]. COSO (2013), "Report of the national commission on fraudulent financial reporting", available at: www.coso.org/Publications/NCFRR.pdf (accessed 23 March).
- [25]. Danneels, E., & Sethi, R. (2011). New product exploration under environmental turbulence. *Organization Science*, 22(4), 1026-1039.
- [26]. Denhardt, R.B. (1991), *Public Administration: An Action Orientation*, Brooks/Cole Publishing, Pacific Grove, CA.
- [27]. Denison, D. R., & Spreitzer, G. M. (1991). Organizational culture and organizational development: A competing values approach. *Research in organizational change and development*, 5(1), 1-21.
- [28]. Domnişoru, S., Ogarcă, R., & Dragomir, I. (2017). Organizational culture and internal control.
- [29]. Duke, I. L., & Edet, G. H. (2012). Organizational culture as a determinant of non-governmental organization performance: Primer evidence from Nigeria.
- [30]. Eaton, D., & Kilby, G. (2015). Does Your Organizational Culture Support Your Business Strategy?. *The Journal for Quality and Participation*, 37(4), 4.
- [31]. Ejoh, N., & Ejom, P. (2014). The impact of internal control activities on financial performance of tertiary institutions in Nigeria. *Journal of Economics and Sustainable Development*, 5(16), 133-143.
- [32]. El-Masri, M., Orozco, J., Tarhini, A., & Tarhini, T. (2015, July). The Impact of IS-Business Alignment Practices on Organizational Choice of IS-Business Alignment Strategies. In PACIS (p. 215).
- [33]. Fard, P. G., & Karimi, F. (2015). The relationship between organizational trust and organizational silence with job satisfaction and organizational commitment of the employees of university. *International Education Studies*, 8(11), 219.
- [34]. Flamholtz, E. G., & Randle, Y. (2012). Corporate culture, business models, competitive advantage, strategic assets and the bottom line: Theoretical and measurement issues. *Journal of Human Resource Costing & Accounting*, 16(2), 76-94.
- [35]. Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 10(4), 440-452.

- [36]. Fusch, G. E., & Gillespie, R. C. (2012). A practical approach to performance interventions and analysis: 50 models for building a high-performance culture. FT Press.
- [37]. Govindarajan, V. (1984). Appropriateness of accounting data in performance evaluation: an empirical examination of environmental uncertainty as an intervening variable. *Accounting, organizations and society*, 9(2), 125-135.
- [38]. Greenley, O.E. & Foxall, G.R. (1997). Multiple stakeholder orientation in UK companies and the implications for company performance. *Journal of Management Studies*, 34(2), 259-284.
- [39]. Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). Washington, DC: Sage Publications.
- [40]. Han, H. (2012). The relationship among corporate culture, strategic orientation, and financial performance. *Cornell Hospitality Quarterly*, 53(3), 207-219.
- [41]. heng, W., Yang, B., & McLean, G. N. (2010). Linking organizational culture, structure, strategy, and organizational effectiveness: Mediating role of knowledge management. *Journal of Business research*, 63(7), 763-771.
- [42]. Heskett, J. L., & Kotter, J. P. (1992). Corporate culture and performance. *Business Review*. Vol, 2(5), 83-93.
- [43]. Hofstede, G. (1984). Cultural dimensions in management and planning. *Asia Pacific Journal of Management*, 1 (2), 81-99.
- [44]. Holbeche, L. (2005). The high-performance organization: creating dynamic stability and sustainable success. Routledge.
- [45]. Hoque, Z., & James, W. (2000). Linking balanced scorecard measures to size and market factors: Impact on organizational performance. *Journal of Management Accounting Research*, 12 (1), 1-17.
- [46]. House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.
- [47]. Hussein, N., Mohamad, A., Noordin, F., & Ishak, N. A. (2014). Learning organization and its effect on organizational performance and organizational innovativeness: A proposed framework for Malaysian Public Institutions of Higher Education. *Procedia-Social and Behavioral Sciences*, 130, 299-304.
- [48]. IFAC (2012a). Evaluating and improving internal control in organizations. Available at: www.ifac.org/site/default/files/publications
- [49]. Iliuta, D. O. (2014). The Link Between Organizational Culture and Performance Management Practices: A Case of It Companies from Romania. *Annals of Faculty of Economics*, 1(1), 1156-1163.
- [50]. Irefin, P., & Mechanic, M. A. (2014). Effect of employee commitment on organizational performance in Coca Cola Nigeria Limited Maiduguri, Borno state. *IOSR Journal of Humanities and Social Science*, 19(3), 33-41.
- [51]. Jreisat, J. E. (1999). *Public organization management: The development of theory and process*. Praeger Publishers.
- [52]. Kaplan, R. S., & Norton, D. P. (2005). The balanced scorecard: measures that drive performance. *Harvard business review*, 83(7), 172.
- [53]. Khasharmeh, H. A. (2009). An Empirical Study of Qualification and Criteria Required of Public Auditors in Jordan. *Global Journal Of Business Research*, 3 (2).
- [54]. Kiabel, B. D. (2013). Internal auditing and performance of government enterprises: A Nigerian study. *Interdisciplinary Studies Journal*, 3(2), 51-62.
- [55]. Kim, S., Lee J., & Yu K. (2004). Corporate culture and organizational performance. *Journal of Managerial Psychology*, 19 (4).340-359.
- [56]. Koberg, C. S., & Chusmir, L. H. (1987). Organizational culture relationships with creativity and other job-related variables. *Journal of Business research*, 15(5), 397-409.
- [57]. Kreitner, R., & Kinicki, A. (2007). *International OB: Managing across cultures*. Boston: McGraw-Hill.
- [58]. Lee, J. H., & Gaur, A. S. (2013). Managing multi-business firms: A comparison between Korean chaebols and diversified US firms. *Journal of World Business*, 48(4), 443-454.
- [59]. Mahadeen, B., Al-Dmour, R. H., Obeidat, B. Y., & Tarhini, A. (2016). Examining the effect of the organization's internal control system on organizational effectiveness: A Jordanian empirical study. *International Journal of Business Administration*, 7(6), 22-31.
- [60]. Martins, E. C., & Terblanche, F. (2003). Building organisational culture that stimulates creativity and innovation. *European journal of innovation management*, 6(1), 64-74.
- [61]. Masa'deh, R., Al-Dmour, R. H., & Obeidat, B. Y. (2015). Strategic IT-Business Alignment as Managers' Explorative and Exploitative Strategies. *European Scientific Journal*, 11(7), 437-457.
- [62]. Mat, T. Z. T., & Smith, M. (2014). The impact of changes in environment and AMT on management accounting practices and organizational strategy, structure and performance. *Journal of Applied Management Accounting Research*, 12(1), 55-67.
- [63]. Mathew, J. (2007). The relationship of organisational culture with productivity and quality: A study of Indian software organisations. *Employee Relations*, 29(6), 677-695.
- [64]. Merchant, K. A. (1984). Influences on departmental budgeting: An empirical examination of a contingency model. *Accounting, organizations and society*, 9(3-4), 291-307.
- [65]. Muraleetharan, P. (2013). Control activities and performance of organization (Special reference in Jaffna District). *International Journal of Marketing, Financial Services & Management Research*, 2(4), 10-16.
- [66]. Nadim, A. (2004). Supportive culture as a co-producer of successful new business development. In *VentureWell. Proceedings of Open, the Annual Conference* (p. 227). National Collegiate Inventors & Innovators Alliance.
- [67]. Nemeth, C. J. (1997). Managing innovation: When less is more. *California management review*, 40(1), 59-74.
- [68]. Ng'ang'a, M. J., & Nyongesa, W. J. (2012). The impact of organizational culture on performance of educational institutions. *International Journal of Business & Social Science*, 3(8), 211-217.
- [69]. Nikpour, A. (2017). The impact of organizational culture on organizational performance: The mediating role of employee's organizational commitment. *International Journal of Organizational Leadership*, 6(1), 65.
- [70]. Njeri, J. N. (2014). Influence of Boards of management Governance Practices on Teachers' Job Satisfaction in secondary schools in Ndeiya Division, Limuru, Kenya. University of Nairobi.
- [71]. Njoki, K. J. (2015). An assesment of the utilization of information and communication technology (ICT) in the effective management of secondary schools in Kathiani District, Kenya (Doctoral dissertation, Mount Kenya University).
- [72]. O'Leary, C., Iselin, E. & Sharma, D. (2006). The relative effects of elements of internal control on auditor's evaluations of internal control. *Pacific Accounting Review*, 18(2), 69-96.
- [73]. Obeidat, B.Y., Masa'deh, R. Al-Suradi, M., & Tarhini, A. (2016). The Impact of Knowledge Management on Innovation: An Empirical Study on Jordanian Consultancy Firms. *Management Research Review*, 39 (12), 25-40.
- [74]. Øgaard, T., Larsen, S., & Marnburg, E. (2005). Organizational culture and performance—evidence from the fast food restaurant industry. *Food Service Technology*, 5(1), 23-34.
- [75]. Ogbonna, E., & Harris, L. C. (2000). Leadership style, organizational culture and performance: empirical evidence from UK companies. *International Journal of Human Resource Management*, 11(4), 766-788.

- [76]. Ojo, O. (2010). Organisational culture and corporate performance: Empirical evidence from Nigeria. *Journal of Business System, Governance and Ethics*, 5(2), 1-12.
- [77]. Oparanma, A. O. (2010). The organizational culture and corporate performance in Nigeria. *International Journal of African Studies*, 3(2), 34-40.
- [78]. Oppong, M., Owiredu, A., Abedana, V., & Asante, E. (2016). The impact of internal control on the performance of faith-based NGOs in Accra. Available at SSRN 2803451.
- [79]. Pfister, J., & Hartmann, F. (2011). Managing organizational culture for effective internal control: From practice to theory. *The Accounting Review*, 86(2), 738-741.
- [80]. Philee, H. (2010). Information Technology and Internal Controls. Available at: <https://ssrn.com/abstract=1338814>.
- [81]. Postan, J. (2010). Performance of financial control. *Theoretical and Applied Economics*, 17 (7), 77-86.
- [82]. Racelis, A. D. (2010). The influence of organizational culture on the performance of Philippine banks. *Social science diliman*, 6(2).
- [83]. Rae, K., & Subramaniam, N. (2008). Quality of internal control procedures: Antecedents and moderating effect on organizational justice and employee fraud. *Managerial Auditing Journal*, 23(2), 104-124.
- [84]. Rahahleh, M. (2011). The Impact of Multiple Authorities that Conduct Internal Control on Public Fund in the Control Process in Jordan. *European Journal of Economics, Finance and Administrative Sciences*, 28, 44-60.
- [85]. Reginato, L., & Guerreiro, R. (2013). Relationships between environment, culture, and management control systems. *International Journal of Organizational Analysis*, 21(2), 219-240.
- [86]. Rose, R. C., Kumar, N., Abdullah, H., & Ling, G. Y. (2008). Organizational culture as a root of performance improvement: research and recommendations. *Contemporary management research*, 4(1), 43-56.
- [87]. Saad, M. A. S., & Zhengee, T. (2016). The impact of organizational factors on financial performance: Building a theoretical model. *International Journal of Management science and Business Administration*, 2(7), 51-56.
- [88]. Saffold III, G. S. (1988). Culture traits, strength, and organizational performance: Moving beyond "strong" culture. *Academy of management review*, 13(4), 546-558.
- [89]. Salajegheh, S., Chamanifard, R., Chamanifard, S., & Nikpour, A. (2015). The Relationship between Quality of Work Life and Organizational Performance: The Moderating Role of Demographic Variables (A Case Study of Foreign Exchange Units of Tejarat Bank, Iran). *Asian Journal of Research in Business Economics and Management*, 5(9), 128-141.
- [90]. Sarwoko, E., Surachman, A., & Hadiwidjojo, D. (2013). Entrepreneurial characteristics and competency as determinants of business performance in SMEs. *IOSR Journal of Business and Management*, 7(3), 31-38.
- [91]. Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual review of psychology*, 64, 361-388.
- [92]. Shahzad, F., Luqman, R. A., Khan, A. R., & Shabbir, A. L. (2012). Impact of organizational culture on organizational performance: An overview. *Interdisciplinary Journal of Contemporary Research in Business*, 3(9), 975-985.
- [93]. Shannak, R., Masa'deh, R., Al-Zu'bi, Z., Obeidat, B., Alshurideh, M., & Altamony, H. (2012). A theoretical perspective on the relationship between knowledge management systems, customer knowledge management, and firm competitive advantage. *European Journal of Social Sciences*, 32(4), 520-532.
- [94]. Shirivastava, P. and Souder, W. E. (1987): "The strategic management of technological innovations: a review and a model". *Journal of Management Studies*; 24 (1), January: 25-41.
- [95]. Sokro, E. (2012). Analysis of the relationship that exists between organisational culture, motivation and performance. *Problems of Management in the 21st Century*, 3(3), 106-199.
- [96]. Sørensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative science quarterly*, 47(1), 70-91.
- [97]. Ssuuna, P. M. (2011). Effects of internal control systems on financial performance in an institution of higher learning in Uganda: a case of Uganda Martyrs University (Doctoral dissertation, Uganda Martyrs University).
- [98]. Tseng, C. Y. (2007). Internal control, enterprise risk management, and firm performance. University of Maryland, College Park.
- [99]. Unger, B. N., Rank, J., & Gemünden, H. G. (2014). Corporate innovation culture and dimensions of project portfolio success: The moderating role of national culture. *Project Management Journal*, 45(6), 38-57.
- [100]. Vayanos, P., & Hammoud, M. (2007). Promoting the growth and competitiveness of the insurance sector in the Arab world.
- [101]. Viegas- Pires, M. (2013). Multiple levels of culture and post M&A integration: A suggested theoretical framework. *Thunderbird International Business Review*, 55(4), 357-370.
- [102]. Wallach, E. J. (1983). Individuals and organizations: The cultural match. *Training & Development Journal*.
- [103]. Widener, S. K. (2007). An empirical analysis of the levers of control framework. *Accounting, Organizations & Society*, 32 (7), 757-788.
- [104]. Wright, R. M. (2009). Internal audit, internal control and organizational culture (Doctoral dissertation, Victoria University).
- [105]. Zamanou, S., & R. Glaser, S. (1994). Moving toward participation and involvement: Managing and measuring organizational culture. *Group & Organization Management*, 19(4), 475-502.
- [106]. Zare, M., & Mohammadi, M. H. K. (2016). Effect of Culture on Quality of Internal Controls in Companies Listed on Tehran Stock Exchange. *International Journal of Humanities and Cultural Studies (IJHCS)* ISSN 2356-5926, 1782-1789.
- [107]. Zhang, J., & Duan, Y. (2010). The impact of different types of market orientation on product innovation performance: evidence from Chinese manufacturers. *Management Decision*, 48(6), 849-67.

IOSR Journal of Business and Management (IOSR-JBM) is UGC approved Journal with SI. No. 4481, Journal no. 46879.

Diala Jehad Ershaid." Internal Control System Role in Moderating the Effect of Organizational Culture and Organizational Performance: An Empirical Evidence from Developing Economy ". IOSR Journal of Business and Management (IOSR-JBM), Vol. 21, No. 12, 2019, pp 08-17.