



## CEO-TMT Exchange, TMT Psychological Empowerment and Firm Performance: The Moderating Effects of TMT Incentive Pay

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### Abstract

This study is an attempt to investigate the associations of CEO-TMT exchange; psychological needs and incentive pay are highlighted to elucidate the complicated psycho-socio cognitive dynamics among top management team (TMT) members and are valued of their competence and, subsequently, their effect on firm performance. The study adopts the upper echelon perspective, by collecting sample from firms in Jordan, using the structural equation model (SEM). The research results show that both of CEO-TMT exchange and psychological empowerment have significant effects on firm performance. TMT psychological empowerment plays a mediating role in linking CEO-TMT exchange with firm performance. Moreover, incentives pay a moderate with psychological empowerment to support in enhancing firm performance. An integrated consideration of CEO-TMT exchange and TMTs perceive empowerment may provide a more understanding of empowerment process, team-level, leader dynamics and interactions. CEO-TMT compensation system design also can provide very strong incentives to stimulate TMT members. Limitations and implications are discussed.

**Keywords:** Upper-echelons perspective, incentive pay, psychological empowerment, CEO-TMT exchange, firm performance.

### INTRODUCTION

Conversely, research in workplace team context has shown the power distribution of team members proximal work environment and, consequently, strength on various team outcomes (Smith, Houghton, Hood, & Ryman, 2006). Research has also presented us with quite a few insights about the determinants and consequences of psychological empowerment (Chen, Kirkman, Kanfer, Allen, & Rosen, 2007). Nonetheless, an examination of the degree to which top management team (TMT) members perceive empowerment is consequential (Ling, Simsek, Lubatkin, & Veiga, 2008), and understanding how TMT empowerment affects firm performance (Smith et al., 2006).

Although a little investigation has been made into the ways in which CEO-TMT uses their psychological characteristics sources to overcome these biases and/or relationship between TMT

socio-psychometric characteristics and the properties of the firm outcome (Lin & Rababah, 2014), research on upper echelons theory has yet to fully explain the processes that convert TMT characteristics into firm performance (Souitaris & Maestro, 2010). Therefore, an examination of psycho-cognitive dynamics among TMT members thus will have great filtering mechanisms that may explain how attributes dispose TMT toward specific strategic behaviors and performance implications for a firm (Nadkarni & Herrmann, 2010).

Additionally, upper echelon approach in an organization typically “often yields better explanations of organizational outcomes” (Hambrick, 2007: 334) that focuses on ways to achieve and maximize organizational performance. There is omission also in the study of the upper echelon especially the TMT compensation can affect firm performance. Researchers have suggested that team process should be considered a moderator of the link between TMT process and performance (Hambrick, 1994). Although the importance of TMT incentive pay has been not stressed in past theorizing, “The literature on executive compensation, steeped in classic economics logic, has little to say about how executives might differ in their reactions to incentive arrangements”(Hambrick, 2007: 340). However, incentive pay is considered important because of the potential benefits that can result from it, including increased commitment, building, and improved quality of decision. Incentive and ability were seen as the primary moderators of deep-level processing of information in social psychological models of social perception and judgment (Chaiken & Trope, 1999).

The study contributes to the upper echelons literature by examining the deep-level cognitive dynamics among TMT members and their effects on TMT collective psychological strength and then firm outcomes. Contributing to TMT research also, by builds a far-reaching model that reveals the intricate interplay between a CEO and the rest of team member’s empowerment can advance organizational performance sensory abilities within the broad context of a psychological process (Cho & Hambrick, 2006), advances the generalizability of a team-level empowerment (Chen et al., 2007), and understanding how top management affects firm performance (Smith et al., 2006).

However, an integrated consideration of CEO-TMT psychological empowerment provides a more complete picture of how a dominant coalition functions, and that such consideration in combination with the idea of TMT incentive pay as a moderate mechanism may help to TMT compensation system design, and introduces the possibility that the effects of TMT incentive pay as a moderator variable, as a view also is critical avenue of upper echelon research in which these moderators are conceptualized and measured.

The study also advances the generalizability of the upper echelons theory by responds to the recent call upon doing research in the Arab Middle East. The “majority of empirical upper echelons studies have used samples of American firms” (Hambrick, 2007: 339), with very few empirical studies conducted in non-US settings (Papadakis & Barwise, 2002). As a result, an examination of TMT issues in the Eastern context can expand the theoretical and practical implications of the upper-echelons theory (Cannella, Park, & Lee, 2008).

## **THEORETICAL BACKGROUND AND HYPOTHESES**

### **CEO–TMT exchange quality and its influence on TMT psychological empowerment**

Upper-echelons perspective proposes that the values, cognitive bases, and breadth of perspective of top executives will lead a firm’s directions and determine its strategic and ultimate effectiveness (Carpenter, Geletkanycz, & Sanders, 2004). Conversely, upper echelon literature has not yet paid significant attention to the sequential relationships among TMT social/psychological characteristics, strategic choices and their impact on performance (Lin &

Shih, 2008). Yet researchers have been equivocal about the general importance of CEOs role in affecting such firm-level outcomes (Ling et al., 2008). Indeed, the examination of CEO-TMT exchange is consequential because it's the interactions, and relationships of top executives that form the cornerstone of the upper-echelons theory (Hambrick & Mason, 1984).

Equally, psychological empowerment refers to a process of enhancing feelings of self-efficacy among team members (Conger & Kanungo, 1988). This study advances the conceptualization and measurement of psychological empowerment at team level (Hyatt & Ruddy, 1997; Kirkman, Rosen, Tesluk, & Gibson, 2004), which emerges from collective or socially-constructed cognitions or reflects "team members' collective belief that they have the authority to control their proximal work environment and are responsible for their team's functioning" (Mathieu, Gilson, & Ruddy, 2006: 98) and is composed of four shared cognitive attributes (Chen et al., 2007; Spreitzer, 1995). Meaningfulness refers to the value of a task in terms of team members' ideas or standards, and it can energize people to work (Spreitzer, Kizilos, & Nason, 1997). Potency, or self-efficacy, reflects the degree to which member's perceived ability to accomplish work-related tasks (Conger & Kanungo, 1988; Chen et al., 2007), autonomy or self-determination to choose how team members carry out their tasks (Mathieu et al., 2006). As to impact, it reflects the degree to which team members feel their tasks affects their organization (Chen et al., 2007).

To characterize TMT process concerns, the study focuses a psycho-socio integration which is comprised of TMT cognitive, social behavior and task by CEO-TMT exchange, such as information exchange and joint decision, which have advance constructive dialogues among TMT members (Simsek, Veiga, Lubatkin, & Din, 2005), and expands team information-processing capacity (Hambrick, 1994), leading to greater team potency (Kirkman et al., 2004). Equally, the basis of CEO-TMT exchange is the relationship between leaders and members built on reciprocity, which is influenced by emotional support and valuable resources this exchange provides (Wilson, Sin, & Conlon, 2010).

As research aims to demonstrate, TMT members will be motivated to accomplish their tasks if they feel empowered by the CEOs. High-quality CEO-TMT exchanges can increase value congruence (Ford & Seers, 2006) and promote collective efficacy (Zhao & Seibert, 2006), which can improve members' perception of their impact on the organization (Lin & Rababah, 2014). The study expects that high-quality CEO-TMT exchanges will lead to the development of entrenched individualized relationships within a TMT and foster a climate of mutual trust (Dooley & Frxyell, 1999), thus advancing the collective belief in team empowerment (Lin & Rababah, 2014).

*Hypothesis 1: CEO-TMT exchange is positively related to TMT psychological empowerment.*

### **TMT Psychological Empowerment and Firm Performance**

However, access to the information resources require distribution of power on a team members, has been also identified as a capacity to mobilize resources' which has relates to team decisions and firm outcomes (Lin & Rababah, 2014). Although TMT members with such empowerment are able to make more informed decisions quality that is more aligned with organization performance. The more perceived team empowerment, the more TMT members feel they need to account for a firm's strategic decisions (Kirkman & Rosen, 1999), which can advance information search and idea inquiry for decisions and then enhance firm outcomes.

Conversely, team members who feel that their task are meaningful and that by completing their job responsibilities (Lin & Rababah, 2014), they to be have an impact on others and organization, because empowerment provides an opportunity for members to determine work

roles and accomplish meaningful jobs. When TMT members are confident to make decisions, the more TMT members feel they need to account for a firm's strategic decisions that are high-impact to a firm outcome (Kirkman & Rosen, 1999). As results, prepare the firm for taking new competitive initiatives, increasing the probability of being extend in the marketplace.

*Hypothesis 2: TMT psychological empowerment will be positively associated with firm performance.*

### **TMT Psychological Empowerment as a Mediator**

The upper-echelons perspective states that the relationships between executive profiles and firm outcomes are punctuated by various intervening mechanisms (Hambrick, 2007). However, to date the TMT literature has paid little, if any, attention to how TMT psychological states mediate the effects of CEO-TMT interplay and TMT deep-level characteristics on outcomes (Amason, 1996; Peterson, Smith, Martorana, & Owens, 2003). Conversely, the degree of top team empowerment has been viewed critical in most studies of team effectiveness, in which TMT will lead a firm's directions and determine its strategic and ultimate firm performance. Research has shown that self-efficacy, an important element of psychological empowerment, mediates the relationship between TMT personality and performance outcome, because positive emotions and the traits (e.g., self-efficacy, confidence) lead people to think and feel they are successful.

Researchers have also shown that empowerment in team elevates strategic decision making, which in turn diminishes firm performance (Chen et al., 2007; Mathieu et al., 2006; Spreitzer, 1995). At a team level, CEO-TMT also can increase team potency, a key dimension of psychological empowerment (Boies & Howell, 2006). Indeed, TMTs members may therefore feel more empowerment to seek an innovative approach (Bass, 1999), by participative decision making process, because CEO-TMT exchange may interactions within-team member differentiation in predicting team-outcomes (Boies & Howell, 2006).

*Hypothesis 3: TMT Psychological empowerment partially mediates the relationship between CEO-TMT exchange and firm performance.*

### **TMT Incentive Pay as a Moderator**

Both practitioners and academicians attempt to show that motivation causes performance (Carpenter & Sanders, 2002; Boies & Howell, 2006; Fey & Furu, 2008). Researchers have analyzed the relationship between incentive pay and firm performance, as a positive should be observable. However, the most widely studied of executive pay, have received the greatest amount of attention in the business press and management research, and, reflect the different pay sectors, organization, and environment (Wiersema & Bantel, 1993). Firms that rely more heavily on incentive pay will have better subsequent performance than those that do not (Tosi, Werner, Katz, & Gomez-Mejia, 2000).

Further, TMT incentive pay, there have been no attempts to examine its significance with TMT psychological empowerment. These propositions have not been directly tested, but they are indirectly supported by some evidence. Conversely, there are studies based on psychological theories arguing that incentives may motivate performance under certain conditions (Fey & Furu, 2008). For instance, the pay program cannot possibly have its intended effect without consider the interactive effects of executive characteristics and compensation (Hambrick, 2007). In the same time, incentive systems as formal corporate control mechanisms (Tosi et al., 2000). Compensation has a positive effect on participation decision, and executive motivation (Gomez-Mejia & Balkin, 1992). The relationship between psychological needs and intrinsic motivation, intrinsic motivations are likely to be important as contributors have a high degree of autonomy and self-determination and are valued for their competence (Roberts, Hann, & Slaughter, 2006).

The study expects that the positive aspects of TMT incentive/long-term pay as a moderator effects upon the relationship between TMT psychological empowerment and firm performance.

They are noting that the lack of payment methods-systems is leads to the decrease of self-efficacy (Gkorezis & Petridou, 2012; Conger & Kanungo, 1988). Spreitzer, (1995) argued that rewards as financial rewards are related to psychological empowerment, and because the diffusion of information between the various levels enforces the feeling of autonomy (Nonaka, Krogh, & Voelpel, 2006), it may be also determinant of the wholeness of a TMT's efforts, and ultimately its ability to contribute to high firm performance.

Equally, payment-for-complexity relationships may lead to cooperative behavior and, as a result, high firm performance when it is extended to TMT members (Carpenter & Sanders, 2002). TMT members' long-term pay structures align top executives contributes to a behaviorally integrated top team (Hambrick, 1995), and also relevant to team functioning. In addition, individual incentives enhance empowerment by recognizing and reinforcing personal competencies, and providing individuals with incentives for participating in and affecting decision-making processes at work (Spreitzer, 1995), also positively reflected in TMT member pay, and subsequent firm performance is likely to benefit.

Regarding TMTs incentive pay, which provides a factors confidence, take the risk, and provides commitment of TMT members in a manner specific to decision, they feel empowering and satisfaction at their working environment, thus advancing the collective belief in team empowerment, and advance firm performance. This led to the following hypothesis:

*Hypothesis 4: TMT incentive pay will positively moderate the relationships between TMT psychological empowerment and firm performance.*

## **RESEARCH DESIGN AND METHODOLOGY**

### **Research Design and Sample Selection**

An organization is "the reflection of its top managers" (Hambrick & Mason, 1984: 193). TMT is a group of executives, identified by a firm's CEO, who decide the strategic directions and actions of the firm (Carpenter et al., 2004). In this study, the research sample is drawn from Jordan. Jordan is an important Middle Eastern country that connects western nations and the Arab world. As compared with other Arab countries, Jordan has a fairly dynamic, market-oriented economy (Lin & Rababah, 2014). Jordanian society is easier than other Arab countries due to the fact that Jordan is relatively liberal.

For the Jordanian sample, the final usable sample includes 716 executives in 210 firms. The average capital of the sample firm age of 18.82 years (s.d.= 12.94). About 27% are in the industrial sector, 12% in the banking and financial services sector, 49% in the services sector, and 12% in the insurance sector. The average TMT size is 5.34 (S.D. 2.20) and the sample averages 45.30 years of age (S.D. 6.06). Further, respondents had an average of 20 years of experience in the firm's industry and had been top executive for 9.42 years with an average age of 45.91 years with (S.D. 6.98). 85% of the sample was male and 95.9% are married.

### **Measurements of Variables.**

#### *Independent Variables.*

**CEO-TMT exchange:** CEO-TMT exchange was evaluated by the mean value of team members' LMX information collected with a five-item measure adapted from Linden, Wayne, & Stilwell (1993) ( $\alpha = .86$ ). Respondents were asked to indicate the extent of their CEO agreement with each statement on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). CFA results

showed the model fitted the data well ( $\chi^2= 5.21$ ,  $df= 5$ ; NNFI= .99, CFI= .99, SRMR= .04, RMSEA= .01).

**Psychological empowerment:** Kirkman et al.'s (2004) 12-item, 7-point Likert-type (1= strongly disagree; 7= strongly agree) scale was adapted to measure TMT empowerment. The 12 items reflect four dimensions of psychological empowerment: meaning ( $\alpha= .91$ ), impact ( $\alpha = .85$ ), potency/self-efficacy ( $\alpha= .89$ ), and autonomy ( $\alpha = .86$ ). Cronbach's  $\alpha$  for the overall scale was (.95). CFA results showed acceptable model fit indices ( $\chi^2= 3.25$ ,  $df= 2$ ; NNFI= .98, CFI= .99, SRMR= .02, RMSEA= .05).

#### *Dependent Variable.*

**Firm performance:** The five 7-point (1= far low than competitors; 7= far high than competitors) items used in this study are adapted from (Garg, Walters, & Priem, 2003). These include such indicators as profitability, sales growth rate, market share growth rate, return on investment, and overall firm performance. CFA results also showed good psychometric property of the variable and the fit indices were all higher than the acceptable thresholds ( $\chi^2 = 29.28$ ,  $df = 5$ ; NNFI = .94; CFI = .95; SRMR = .05; RMSEA = .10).

#### *Moderating Variable.*

**Incentive pay:** The study used five items to measure this construct. Three items were adapted from (Ling et al., 2008). To emphasize the importance of long-term compensation for TMT, and the extent of the members team feeling. The study is developed two items as the follows: Our management team focuses on long-term compensation which offers us more self-determination and job security inside the firm. My company provides profit based incentive pay so that, our team feel as entrepreneurs. TMT members were asked to complete this scale on ranging from 1 "highly disagree" to 7 "highly agree". The results supported aggregating individual scores to the team level. The overall measure reliability was adequate ( $\alpha = .87$ ). CFA also showed an acceptable value and fit index  $\chi^2 = 9.197$ ,  $df = 5$ , NNFI = .99, NFI = .99, CFI = .99, RMR = .01, and RMSEA = .05.

#### *Control Variables.*

To decrease the likelihood of spurious results, several control variables are added to the model (Lin & Rababah, 2014). The study controlled for variables that may affect psychological empowerment and firm performance, including TMT-level information (i.e. average age, team size, education heterogeneity & FFM personality heterogeneities), industry-level variables (i.e. environmental dynamism and munificence), and firm-level characteristics (i.e. size, age, and organizational slack) (Papadakis & Barwise, 2002).

#### **Statistical Analysis.**

##### *Structural Equation Modeling (SEM) and Moderating Hierarchical Regression Analysis.*

Structural equation modeling (SEM) can closely examine the relationships between observed indicators and latent variables while simultaneously controlling for measurement errors. To assess model fit, the chi-square  $\chi^2$  test was used, and the four fit indices of (CFI), (NNFI), (RMSEA), and (SRMR) are applied, following Hu and Bentler (1999). The full measurement model was evaluated by incorporating the control variables into the model. To test the moderating hypotheses, the study uses hierarchical regression analysis (Cohen, Cohen, West, & Aiken, 2003). For interaction effects, first the mean-centered independent variables were entered and then multiplicative terms were created between the mean-centered variables (Chen, Lin, & Michel, 2010).

**Table (1) Means, Standard Deviations, and Correlations**

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CEO-TMT exchange	4.51	.86													
2. Psychological empowerment	2.75	.88	.27**												
3. Incentive pay	3.41	1.23	.12	.39**											
4. Firm performance	3.42	1.15	.25**	.47**	.37**										
5. Environmental munificence	4.86	1.45	.02	.17*	-.07	.10*									
6. Environmental dynamism	5.74	.79	-.01	.02	-.04	-.13*	.01								
7. Firm slack	4.84	1.24	-.02	-.10	-.05	-.05	-.03	-.07							
8. CEO tenure	26.8	8.42	-.04	.07	.06	.06	-.09	.12	-.02						
9. TMT size	5.35	2.20	-.04	-.17	-.26*	-.11*	-.00	-.10	.07	-.15*					
10. TMT age	1.31	.33	.02	.05	.07	.09	.06	-.04	-.08	.00	.01				
11. TMT education heterogeneity	.52	.30	.07	.00	-.03	.00	.02	-.01	.01	.03	.10	.02			
12. Firm size	2.42	.49	.02	.08	.14*	.11*	-.03	-.02	-.00	-.13	.27**	.10	.10		
13. Firm age	1.19	.56	.08	.02	.00	.15*	.07	.00	.04	-.02	.15*	.06	.17*	.09	

N = 210, \*\*p< .01, \*p< .05

**Hypotheses Testing and Results.**

Table (1) presents the means, standard deviations and intercorrelations for the variables examined in the study. Table (2) presents the value of fit indices for the nested models. The significant difference ( $\Delta\chi^2=2103.288$ ,  $\Delta df=64$ ,  $p<.001$ ) between the hypothesized model (Model 2) and null structural model (Model 1) provided the basis for further examination of various nested models. To determine whether a CEO-TMT exchange presented a direct relationship with firm performance, CEO-TMT exchange-firm performance relationship (Model 3) adds to the hypothesized mediated model. Significant differences between Model 2 and Model 3 ( $\Delta\chi^2=12.343$ ,  $\Delta df=5$ ,  $p<.001$ ) suggested that adding CEO-TMT exchange-firm performance relationship into the hypothesized model indeed improved model fit. The results revealed the fact that CEO-TMT exchange-firm performance relationships exhibited a significantly incremental contribution to Model 3. Then, the study obtained Model 3 as the final model ( $\chi^2=415.102$ ,  $df=251$ ,  $p<.001$ ; NNFI=.95, CFI=.95, RMSEA=.04 and SRMR=.05).

**Table (2) Comparisons of Nested Structural Models**

Models	$\chi^2$	Df	NNFI	CFI	SRMR	RMSEA
1. Null structural model	2530.733***	320				
2. Hypothesized model	427.445***	256	.94	.94	.05	.05
3. CEO-TMT exchange → Firm performance	415.102***	251	.95	.95	.05	.04

**Note:**

1. \*\*\*  $p<.001$
2. Model 3: adding CEO-TMT exchange-empowerment –firm performance paths into Model 2; the final model.

Figure (1) presents the completely standardized path estimates for the examined relationships.

Consistent with expectations, CEO-TMT exchange ( $\beta = .26$ ), was positively related to psychological empowerment ( $p < .05$ ), supporting H1. Also, psychological empowerment was positively related to firm performance, supporting H2 ( $\beta = .39, p < .001$ ).

The study performed a bias-corrected bootstrap analysis to calculate the estimates and confidence intervals for the mediated effects (MacKinnon, Lockwood, & Williams, 2004), as this can improve the power when conducting mediation tests (Lin & Rababah, 2014). The results showed that the indirect effect of CEO-TMT exchange on firm performance was ( $\beta = .13, p < .001$ ). Moreover, the 95% confidence intervals of the paths from CEO-TMT exchange to psychological empowerment and then firm performance was (.066 ~ .910). Therefore, H3 was supported.

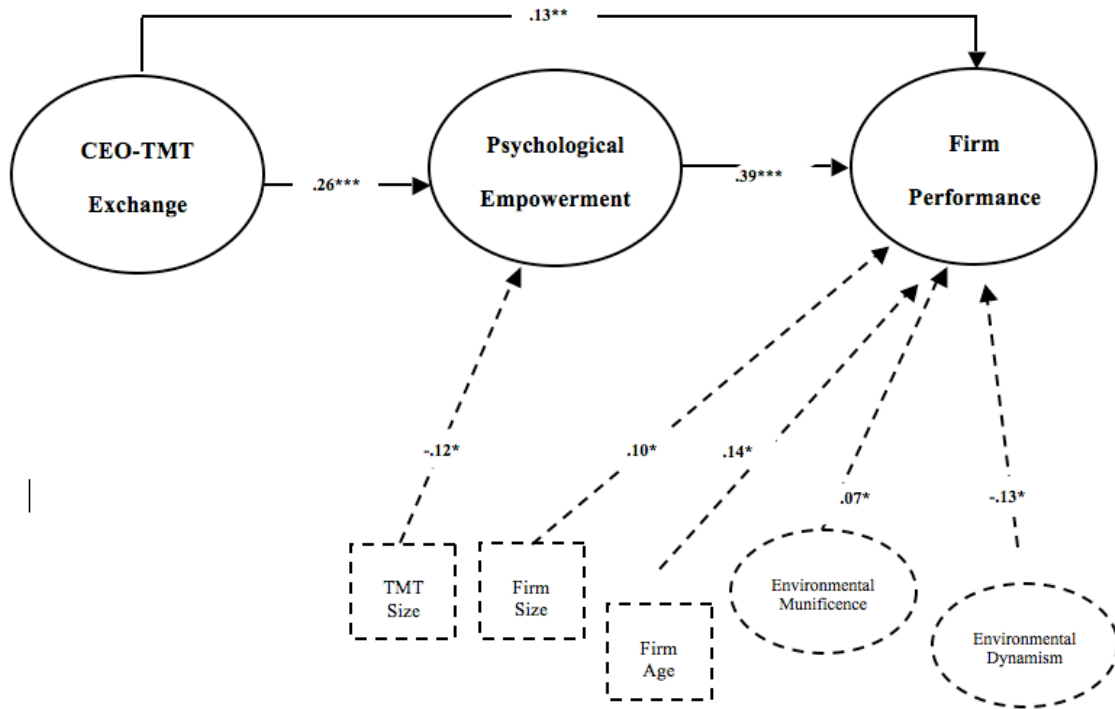
Finally, as shown in Table 3, hypothesis 4, which predicted TMT incentive pay would positively moderate that relationship between TMT psychological empowerment and firm performance was supported in model 3 ( $\beta = .43, t = 7.12$ ),  $P > .05$ , and in model 4 ( $\beta = .44, t = 7.23$ ),  $P > .05$ . To estimate the level effect of TMT incentive pay explained by the interactions, the study conducted hierarchical regression analyses by creating two simple regressions of TMT psychological empowerment on firm performance, the change can be estimated when the interaction term was entered (Rabah, 2017b). As the moderating effects shown in Figures 2, plotting the interactions terms also were supporting the clarification.

**Table 3 Results of Regression Analysis (Dependent Variable Firm Performance)**

Variables		Model 1	Model 2	Model 3	Model 4
<b>Control</b>	CEO tenure	.086	.052	.044	.036
	TMT size	-.177**	-.088	.025	.033
	TMT age	.052	.046	.028	.034
	TMT educational heterogeneity	.041	-.036	-.020	-.016
	Firm size	.165*	.102*	.021	.010
	Firm age	.164*	.150*	.134*	.132*
	Environmental munificence	.147*	.073*	.125*	.115*
	Environmental dynamism	-.134*	-.127*	-.097*	-.110*
	Firm slack	-.045	-.011	-.011	-.008
<b>Independent</b>	TMT empowerment		.436***	.285***	.277***
<b>Moderating</b>	TMT incentive pay			.439***	.443***
<b>Interaction</b>	TMT empowerment x TMT incentive pay				.103*
<b>R</b>		.337	.535	.657	.665
<b>Adjusted R<sup>2</sup></b>		.073	.250	.400	.408
<b>Δ R<sup>2</sup></b>		.113	.286	.432	.442
<b>F</b>		2.840	7.97***	13.67***	12.99***

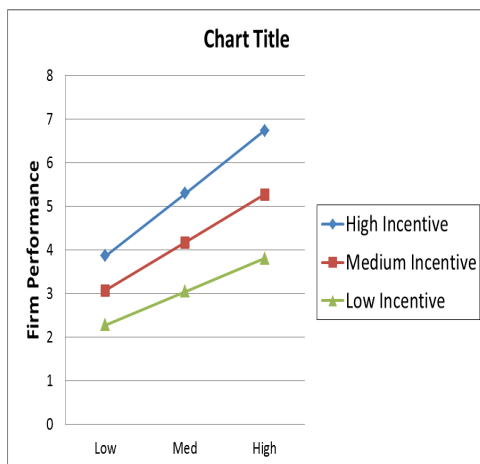
n = 210; \*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p \leq .001$



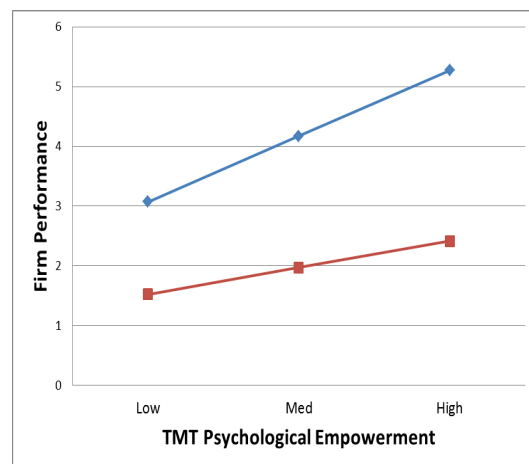


**Figure 1 Completely Standardized Estimates of the Final Model**

Note: 1. This is a simplified version of the examined model. To simplify the figure, the direct links between CEO-TMT exchange and firm performance are taken.  
 2. Control variables are depicted by dash line.  
 3. The path coefficients are standardized parameter estimates. N = 210, \* p < .05, \*\* p < .01, \*\*\* p < .001.



(a) Continuous Moderator



(b) Categorical Moderator

**Figure 2 Moderating Role of TMT Incentive Pay**

## **RESEARCH ANALYSIS AND RESULTS**

### **Research Discussion**

The study examines the relationships among CEO-TMT exchange, TMT psychological empowerment, and firm performance, which addresses the upper echelons perspective. The results support the theoretically derived causal model and key hypothesized relationships. The findings of this study show that high mean levels of CEO-TMT exchange appear to directly and indirectly enhance psychological empowerment and firm performance. This study extends Hambrick's (2007) and Carpenter et al.'s (2004) research, which established the critical theoretical link between effective mechanisms at upper-echelons perspective, TMT process and firm performance.

The findings of this study also show that TMT psychological empowerment has a significant and positive correlation with firm performance. The study concludes that psychological empowerment enhances TMT performance. The findings of this study are consistent with recent upper echelons studies which have asserted that TMT psychological empowerment has an effect on performance outcome (Rababah, 2017a).

The significance of TMT psychological empowerment is also shown by its mediating role in the relationships between CEO-TMT exchange and firm performance. The partially mediating effect of psychological empowerment highlights the importance of TMT as the ultimate empowerment that generates strong top team performance and good firm outcomes. This study contributes to the upper echelons and empowerment literature by examining the collective psychological strength among TMT members and advance firm outcomes (Jackson, Joshi, & Erhardt, 2003). Contributing to empowerment research, by builds a far-reaching model that reveals a TMT interaction, to shape its members psychological and abilities in the workplace in which advance organizational performance (Lawrence, 1997).

Moreover, TMT incentive pay had a moderating effect, which, in association with psychological empowerment as perceived by TMT members, which can indeed enhance their perception and firm outcomes. The study shown that compensation system can provides very strong incentives to stimulate TMT psychological empowerment to complete a task and advance firm performance. They have proposed that reward is to be linked to dimensions of psychological empowerment, self-efficacy, it seems logical when a project needs various and important skills to create a sense of enabling, and self-determination when people complete a task will feel autonomous and having choices in determining the task (Gkorezi & Petridou, 2012).

This study contributes to the CEO-TMT literature. Examining the role of CEO-TMT exchange as a moderating in bridging the relationship between TMT psychological empowerment and firm performance, reveals the comprehensive influence that CEO-TMT exchange can have, as the internal dynamics and dispositional tendencies (Lin & Rababah, 2014). Further, an integrated consideration of CEO-TMT exchange facilitating the relationship between executives' perceived empowerment and its resulting outcome highlights the significance of psychological processes in performance outcome, and both have significant strategic and behavioral implications (Ling et al., 2008; Peterson et al., 2003).

Additional, this study contributes to the upper echelons research. TMT research has been widely examined in Western firms, almost exclusively; US based (Glunk, Heijltjes, & Olie, 2001). This study takes a critical first step to explore firms in a variety of industries in Jordan. Therefore, the knowledge and understanding of Middle East business and their current TMT style may facilitate confidence in business relations, identifiable firm CEOs have prevailed over

the TMT processes and increases the generalizability of findings in the upper echelons research stream.

This study advances the conceptualization and measurement of psychological empowerment at team level. The study invokes a perceptual approach to psychological empowerment that is closely aligned to the work team context, as a set of cognitions (Thomas & Velthouse, 1990), also addresses the concept of psychological empowerment to increased task motivation of team members' collective and their organizational tasks (Conger & Kanungo, 1988), and different drivers for team dynamics and performance (Kirkman et al., 2004).

This study also contributes to the team psychological empowerment research. Beyond gaining a greater understanding of the relative role of TMT processes in capturing the key interrelated and reinforcing elements of TMT psychosocial empowerment which has been related to the firm performance. Team members may therefore feel more empowerment, because CEO-TMT exchange may interactions within-team member differentiation in predicting team-outcomes (Boies & Howell, 2006). Thus, the cognitive constraints and biases of top executives have been considered important sources of organizational performance, and the facilitation of CEO-TMT exchange interactions among team member to shape its members psychological and abilities in the workplace in which effects on outcomes (Lawrence, 1997).

### **Research Implications**

This study examines the extent to which certain CEO-TMT exchange is related to specific the psychological states and incentive pay of TMT members, as well as firm outcome. Consequently, the study has numerous implications, including bridging executive dynamics and identifying factors for predicting various firm-level outcomes.

First, upper echelon research should focus simultaneously on both the CEO and TMT characteristics, because their effects seem to be complementary. In the same vein, CEOs will be more apt to guide their firms and foster a climate that reinforces TMT organizational tasks. The study findings suggest that CEO-TMT boards should attempt to cross-functional interactions and interpersonal and informational exchanges. Executive training should foster the ability of firm executives to enhance TMT performance. For instance, training programs can highlight communication, problem-solving, and cross-functional courses.

Second, because aggressive CEO-TMTs try to create mechanisms to reduce risk (Papadakis & Barwise, 2002). It is importance for CEO decision to providing efficacy information. Therefore, TMT long-term pay indirectly reflects the degree to which TMT incentives work together, which reduces the risk of self-interested behavior. The organizations used intrinsic and extrinsic rewards for team members to improving project outcomes (Miller, Wiseman, & Gomez-Mejia, 2002). The notion here is that CEO interested in empowering their team members, they should develop an incentive pay system which will reward performance. On the other words, when TMTs willingness to share information and knowledge between members, they reflected the benefits incentive pay, which are building psychological empowerment members.

Thirdly, the preliminary findings of the present study are consistent with recent studies indicating that Jordanian culture is low in power distance because it has the region's highest skilled workers (Alkailani, Azzam, & Athamneh, 2012). In considering the opposing forces of low TMT psychological empowerment and CEO-TMT exchange, an empowering style of leadership becomes important for doing business in Jordan (Carmeli, Schaubroeck, & Tishler, 2011).

Fourth, to prepare a firm for development of high performance, it is critical for the firm to manage a few executive process concerns and mechanisms. The findings of this study indicate

that a more complete understanding of what drives levels of firm performance may need to include some focus on how TMT members feel empowered within their work roles and the relationship they have with CEOs. CEOs thus need to make good use of their power and develop individualized relationships with a TMT and foster a climate of mutual trust (Dooley & Frxyell, 1999) so as to advance firm effectiveness.

Fifth, under different environment conditions, the most appropriate strategies can be selected and/ or formulated when the strategy is harmonious with environment requirements. In other words, TMTs can respond flexibly to changes in the environment, which it becomes an even more significant factor in top team sociobehavioral integration (Chen et al., 2010), and those dynamic teams can generate more actions and, through these actions, better performance.

Finally, in cultural managerial implications, although organizational and environmental factors are complex and have unstable influences, TMT attitude is an important determinant of a cultural shift towards market orientation, but it occurs under conditions of high external risk and uncertainty. Moreover, given the lack of clarity and/or agreement on the practices of business, CEO-TMT exchanges in Jordan attempt to manage the company and emphasize the culture more as a dynamic process.

#### **Research Limitations and Future Directions**

This study provides evidence that advances an unexplored area of a TMT research. This study fills in the gap by investigating key CEO-TMT concerns and empowerment through the use of self-report measures provided by senior executives. An exploration of core self-evaluation framework in real business work teams may also provide useful results (Judge, Erez, Bono, & Thoresen, 2002). Further, respondents in this study represent at least 50% of the senior executives in a firm. Future studies can attempt to gather data from all TMT members (Carpenter et al., 2004). Future research could also consider using multi-source data to reduce the possibility of common method bias to increase the reliability of results (Lee & Nie, 2014).

Although this study takes a first step in exploring the CEO-TMT exchange, psychological empowerment, incentive pay and firm outcomes. Examination of the new mediating/moderating mechanisms highlights the TMT process, which is required to shape TMT psychological states and can be a strong indicator of a firm outcome. Future research should devote attention to the study of how members' characteristics such as demographic variables affect their collective psychological states and performance outcome.

The sample in this study comes from Jordan. The generalizability is affected by the geographic, industry, and firm dimension scope (Wagner & Kemmerling, 2014). Due to the fast changing environmental factors especially those closely related to culture and society. One of the misleading recommendations researchers do is to generalize findings obtained from one culture to other cultures without careful consideration of major differences exist among these cultures (Alkailani et al., 2012). Despite the merits of sampling from the population of Jordan's companies, the generalizability of research findings can be improved by selecting research samples and by implementing cross-cultural comparisons, such as, to other Arabic communities or countries with a similar cultural background.

In sum, this study's examination of CEO-TMT exchange and incentive pay as driving forces of psychological empowerment, as well as association and valued advantages of firm performance, by using the upper echelon perspectives has shed light on the TMT research and practitioners. The study has thus highlighted the role of CEOs is critical in managing the interaction, in creating an atmosphere conducive for top managers to succeed and monitoring the maladaptive behaviors to advance performance of firms.

## REFERENCES

- Alkailani, M., Azzam, I. A., & Athamneh, A. B. (2012). "Replicating Hofstede in Jordan: Ungeneralized, reevaluating the Jordanian culture". *International Business Research*, 5(4), 71-80.
- Amason, A.C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39, 123-148.
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, 8(1), 9-32.
- Boies, K., & Howell, J. M. (2006). Leader-member exchange in teams: An examination of the interaction between relationship differentiation and mean LMX in explaining team-level outcomes. *The Leadership Quarterly*, 17(3), 246-257.
- Cannella, A. A., Park, J.-H., & Lee, H.-U. (2008). Top management team functional background diversity and firm performance: Examining the roles of team member colocation and environmental uncertainty. *Academy of Management Journal*, 51(4), 768-784.
- Carmeli, A., Schaubroeck, J., & Tishler, A. (2011). How CEO empowering leadership shapes top management team processes: Implications for firm performance. *The Leadership Quarterly*, 22(2), 399-411.
- Carpenter, M. A., & Sanders, W. G. (2002). Top management team compensation: The missing link between CEO pay and firm performance. *Strategic Management Journal*, 23, 367-375.
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management*, 30(6), 749-778.
- Chaiken, S., & Trope, Y. (1999). *Dual process theories in social psychology*. New York: Guilford.
- Chen, G., Kirkman, B. L., Kanfer, R., Allen, D., & Rosen, B. (2007). A multilevel study of leadership, empowerment, and performance in teams. *Journal of Applied Psychology*, 92(2), 331-346.
- Chen, M.-J., Lin, H. C., & Michel, J. G. (2010). Navigating in a hypercompetitive environment: The roles of action aggressiveness and TMT integration. *Strategic Management Journal*, 31(13), 1410-1430.
- Cho, T. S., & Hambrick, D. C. (2006). Attention as the mediator between top management team characteristics and strategic change: The case of airline deregulation. *Organization Science*, 17(4), 453-469.
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3 ed.). Mahwah, NJ: Lawrence Erlbaum.
- Conger, J. & Kanungo, R. (1988). The empowerment process: integrating theory and practice. *Academy of Management Review*, 13(3): 471-482.
- Dooley, R. S., & Frxyell, G. E. (1999). Attaining decision quality and commitment from dissent: The moderating effects of loyalty and competences in strategic decision making teams. *Academy of Management Journal*, 42, 389-402.
- Fey, C. F., & Furu, P. (2008). Top management incentive compensation and knowledge sharing in multinational corporations. *Strategic Management Journal*, 29(12), 1301-1323.

- Ford, L. R., & Seers, A. (2006). Relational and team climates: Pitting differentiation versus agreement. *The Leadership Quarterly*, 17, 258–270.
- Garg, V. K., Walters, B. A., & Priem, R. L. (2003). Chief executive scanning emphases, environmental dynamism, and manufacturing firm performance. *Strategic Management Journal*, 24(8), 725-744.
- Gkorezis, P., & Petridou, E. (2012). The effect of extrinsic rewards on public and private sector employees' psychological empowerment: a comparative approach. *The International Journal of Human Resource Management*, 23(17), 3596–3612.
- Glunk, U., Heijltjes, M. G., & Olie, R. (2001). Design characteristics and functioning of top management teams in Europe. *European Management Journal*, 19(3), 291-300.
- Gomez-Mejia, L. R., & Balkin, D. B. (1992). Determinants of faculty pay: An agency theory perspective. *Academy of Management Journal*, 35(5), 921-955.
- Hambrick, D. C. (1994). Top management groups: A conceptual integration and reconsideration of the "team" label. In B.M. Staw, & L. L. Cummings (Eds.), *Research in organizational behavior*, 16. (pp. 171–213). Greenwich, CT: JAI Press.
- Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, 32(2), 334-343.
- Hambrick, D. C. (1995). Fragmentation and the other problems CEOs have with their top management teams. *California Management Review* 37(3), 110-127.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193-206.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1-55.
- Hyatt, D. E., & Ruddy, T. M. (1997). An examination of the relationship between work group characteristics and performance: Once more into the breach. *Personnel Psychology*, 50, 553–585.
- Jackson, S. E., Joshi, A., & Erhardt, N. L. (2003). Recent research on team and organizational diversity: SWOT analysis and implications. *Journal of Management*, 29(6), 801-830.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. (2002). Discriminant and incremental validity of four personality traits: Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology*, 83(3), 693-710.
- Kirkman, B. L., & Rosen, B. (1999). Beyond self-management: Antecedents and consequences of team empowerment. *Academy of Management Journal*, 42(1), 58-74.
- Kirkman, B. L., Rosen, B., Tesluk, P. E., & Gibson, C. B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *Academy of Management Journal*, 47(2), 175-192.
- Lawrence, B. S. (1997). The black box of organizational demography. *Organization Science*, 8(1), 1-22.
- Lee, A. N., & Nie, Y. (2014). Understanding teacher empowerment: Teachers' perceptions of principal's and immediate supervisor's empowering behaviours, psychological empowerment and work-related outcomes. *Teaching and Teacher Education*, 41(0), 67-79.

- Lin, H. C., & Rababah, N. (2014). CEO–TMT exchange, TMT personality composition, and decision quality: The mediating role of TMT psychological empowerment. *The Leadership Quarterly, 25*(5), 943-957.
- Lin, H.-C., & Shih, C.-T. (2008). How executive SHRM system links to firm performance: The perspectives of upper echelon and competitive dynamics. *Journal of Management, 34*(5), 853-884.
- Linden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology, 78*(4), 662-674.
- Ling, Y., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. (2008). Transformational leadership's role in promoting corporate entrepreneurship: Examining the CEO-TMT interface. *Academy of Management Journal, 51*(3), 557-576.
- MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*, 99–128.
- Mathieu, J. E., Gilson, L. L., & Ruddy, T. M. (2006). Empowerment and team effectiveness: An empirical test of an integrated model. *Journal of Applied Psychology, 91*(1), 97-108.
- Miller, J. S., Wiseman, R. M., & Gomez-Mejia, L. (2002). The fit between CEO compensation design and firm risk. *Academy of Management Journal, 45*(4), 745-756.
- Nadkarni, S., & Herrmann, P. (2010). CEO personality, strategic flexibility, and firm performance: The case of the Indian business process outsourcing industry. *Academy of Management Journal, 53*(5), 1050-1073.
- Nonaka, I., Krogh, G. V., & Voelpel, S. (2006). Organizational knowledge creation theory: Evolutionary paths and future advances. *Organization Studies, 27*(8): 1179–1208.
- Papadakis, V. M., & Barwise, P. (2002). How much do CEOs and top managers matter in strategic decision-making? *British Journal of Management, 13*(0), 83-95.
- Peterson, R. D., Smith, D. B., Martorana, P. V., & Owens, P. D. (2003). The impact of chief executive officer personality on top management team dynamics: One mechanism by which leadership affects organizational performance. *Journal of Applied Psychology, 88*(5), 795-808.
- Rababah, N. M. (2017a). The role of psychological empowerment and innovation on firm performance: An empirical study of SMEs in Saudi Arabia. *International Journal of Economics, Commerce and Management, 5*(6), 298-318.
- Rababah, N. M. (2017b). The interface between CEO-TMT and its effects on the firm performance. *The International Journal of Business & Management, 5*(11), 32-46.
- Roberts, J. A., Hann, II-H., & Slaughter, S. A. (2006). Understanding the motivations, participation, and performance of open source software developers: A longitudinal study of the apache projects. *Management Science, 52*(7), 984-999.
- Simsek, Z., Veiga, J. F., Lubatkin, M. H., & Dino, R. N. (2005). Modeling the multilevel determinants of top management team behavioral integration. *Academy of Management Journal, 48*(1), 69-84.
- Smith, A., Houghton, S. M., Hood, J. N., & Ryman, J. A. (2006). Power relationships among top managers: Does top management team power distribution matter for organizational performance? *Journal of Business Research, 59*(5), 622-629.

- Souitaris, V. & Maestro, B. M. (2010). Polychronicity in top management teams: The impact on strategic decision processes and performance of new technology ventures. *Strategic Management, Journal*, 31(6), 652-678.
- Spreitzer, G. (1995). Psychological empowerment in the workplace: dimension, measurement and validation. *Academy of management Review*, 38(5), 1442-1465.
- Spreitzer, G. M., Kizilos, M. A., & Nason, S. W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of Management*, 23(5), 679-704.
- Thomas, K. & Velthouse, B. (1990). Cognitive elements of empowerment: An interpretive model of intrinsic task motivation. *Academy of management Review*, 15, 666-681.
- Tosi, H. L., Werner, S., Katz, J. P., & Gomez-Mejia, L. R. (2000). How much does performance matter? A meta-analysis of CEO pay studies. *Journal of Management*, 26(2), 301-339.
- Wagner, S. M., & Kemmerling, R. (2014). Supply chain management executives in corporate upper echelons. *Journal of Purchasing & Supply Management* 20(0), 156-166.
- Wiersema, M., & Bantel, K. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal*, 35(1), 91-121.
- Wilson, K. S., Sin, H.-P., & Conlon, D. E. (2010). What about the leader in leader-member exchange? The impact of resource exchanges and substitutability on the leader. *Academy of Management Review*, 27(7), 708-726.
- Zhao, H., & Seibert, S. E. (2006). The big five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology*, 91(2), 259-271.