# Research on The Moderated Mediation Effects Between Value Heterogeneity and Firm Performance: Conflict as Mediator and Cooperate Style as Moderator

# Danna Liang<sup>1</sup>, Najihah Hanisah Binti Marmaya<sup>2</sup>

<sup>1,2</sup>Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah (UMS), Jalan UMS 88400 Kota kinabalu, Sabah, Malaysia

Abstract:- This paper explores the mediating relationship between value heterogeneity, TMT conflict, and firm performance and studies how cooperative conflict management modulates the mediating effect. Value heterogeneity (differences in personal values, beliefs, and perspectives) within the top management team (TMT) can have a beneficial or detrimental impact on company performance, depending on how TMT conflicts arising from this heterogeneity are managed. Specifically, we propose that TMT conflict plays a mediating role in the relationship between value heterogeneity and firm performance, and cooperative conflict processing modulates the indirect effects of value heterogeneity on firm performance through TMT conflict. Through a comprehensive study of value heterogeneity, conflict mediation, and organizational performance, this study provides insights into how firms can leverage TMT's value diversity to improve performance through effective conflict management strategies.

Keywords: Top manager, Mediating effect, Moderating effect, Team diversity, conflict handing.

#### 1. Introduction

In today's competitive and dynamic business environment, diversity in decision-making teams is increasingly recognized as a source of strategic advantage. In top management teams (TMTs), the extent to which team members hold different values, beliefs, and perspectives (value heterogeneity) has been identified as a significant factor affecting organizational outcomes. While value diversity can enhance creativity, innovation, and problem solving, it also has the potential to create conflict, especially if team members don't share the same values.

According to Finkelstein and Hambrick (1990), team heterogeneity refers to differences in team members' demographic characteristics (age, gender, race, etc.), skills, experience, cognitive concepts, and values. Harrison et al. (2002) divided team heterogeneity into shallow heterogeneity and deep heterogeneity. Shallow heterogeneity mainly refers to differences in demographic characteristics (age, gender, race, etc.), which are easy to observe and measure and are also known as high-visibility heterogeneity or external heterogeneity. Deep heterogeneity, as opposed to shallow heterogeneity, refers to differences in the psychology of team members, such as personality traits, values, attitudes, preferences, and beliefs. Such heterogeneity is not easily observed or measured [9]. Due to the lack of a value theory applicable to senior managers and the technical difficulties in value measurement, there are not many studies directly studying the relationship between value difference and team conflict in senior management teams [16].

In recent years, scholars have conducted a significant number of studies on top management teams, with a primary focus on the varying relationship between top management team heterogeneity and behavioral outcomes. For the relevant results, different academics have varied study directions, notably in the area of organizational performance and the impact on organizational strategy analysis [24].

In recent years, scholars have conducted a significant number of studies on top management teams, with a primary focus on the varying relationship between top management team heterogeneity and behavioral outcomes. For the

# Tuijin Jishu/Journal of Propulsion Technology

ISSN: 1001-4055 Vol. 45 No. 4 (2024)

relevant results, different academics have varied study directions, notably in the area of organizational performance and the impact on organizational strategy analysis [17].

The relationship between value heterogeneity and firm performance is complex. While in some cases, value diversity can lead to better decisions and performance, it can also create TMT conflicts that reduce team cohesion, decision quality, and organizational outcomes. One of the key factors affecting the outcome of TMT conflict is the way the conflict is managed. Collaborative conflict management styles, such as collaboration and integration, are thought to mitigate the negative effects of conflict and even turn potential conflict into an opportunity to improve team performance. It is a strong theoretical and practical necessity to study the relationship between the values, conflicts, and performance of the executive team [16].

Effective conflict management is key to determining whether value heterogeneity leads to positive or negative outcomes. Adopting TMT for collaborative conflict management (e.g., seeking consensus, engaging in open dialogue, and aiming for mutually beneficial solutions) can mitigate the negative effects of conflict. Liu (2008) believes that "cooperation" and "adaptation" help to suppress the negative effects of relational conflict in the top management team, while conflict resolution methods with high scores on the persistence dimension, namely "competition" and "cooperation," are conducive to promoting the positive effects of task-based conflict [1].

This study aims to analyze the mediating role of TMT conflict in the relationship between value heterogeneity and firm performance. Specifically, we examine how TMT conflict mediates the impact of value heterogeneity on performance and how cooperative conflict management modulates this mediating process. By understanding these dynamics, organizations can better manage the tradeoff between value diversity and team performance, leveraging conflict in ways that enhance rather than hinder company outcomes.

## 2. Research objectives

- (1) The impact of TMT value heterogeneity on TMT conflict and firm performance
- (2) The mediating effect of TMT conflict on value heterogeneity and firm performance
- (3) The moderating effect of cooperative conflict management on TMT conflict and firm performance

# 3. Theoretical perspective

## 3.1 Value heterogeneity of TMTs

Value heterogeneity refers to the degree to which team members differ in values, beliefs, and preferences. In the context of TMT, value heterogeneity may stem from differences in personal background, professional experience, and personal beliefs. While value diversity can promote creativity, innovation, and better decision-making by encouraging the exploration of different perspectives, it can also lead to disagreements, misunderstandings, and interpersonal tensions if not managed properly.

According to Neely's (2020) Upper Echelons thesis, senior managers' experience, values, and cognitive biases influence how they evaluate strategic circumstances and decisions [29]. These executives' decision-making process can be influenced by value heterogeneity, and the way the team resolves conflicts resulting from these differences can either improve or impair performance.

Previous studies have shown that the emphasis on heterogeneity has a double-edged nature (Kim et al., 2014). On the positive side, it can increase the likelihood of thorough decision-making, enhance strategic problem solving, and encourage innovation. On the negative side, it exacerbates conflict, leading to dysfunction, delayed decision-making, and reduced team cohesion. Therefore, the relationship between value heterogeneity and firm performance is not direct but depends on how conflicts caused by value differences are managed [31].

Carpenter (2002) found that when the heterogeneity of the top management team was high, they would collect data and collide ideas from various angles when analyzing problems, which would lead to greater creativity. Hambrick, Cho, and Chen (1996) found that the diversified senior management members are more active and can start from the actual fundamental orientation level, which indicates that the stronger the heterogeneity, the higher the enterprise performance [24]. Starting from the "high-level echelon theory," researchers define heterogeneity

as the difference of different characteristics among senior managers. Obviously, the heterogeneity of management values of senior management teams is also a component feature of senior management teams. Previous studies have found that the heterogeneity of team members' values will affect the level of team conflict [28][41].

## 3.2 TMT Conflict as a Mediator

TMT conflict can be divided into two main types, namely task conflict and relational conflict [10].

Task conflict is the term used to describe arguments about concepts, assignments, and tactics that, when managed effectively, can enhance organizational performance and decision-making quality [32]. Relationship conflict is the term used to describe interpersonal issues and personal conflicts that occur among team members. Conflict in relationships is frequently viewed as detrimental since it compromises team dynamics, communication, and trust.

Conflicts caused by value heterogeneity, especially relationship conflicts, undermine the potential benefits of diversity by weakening trust and increasing the likelihood of dysfunctional decision-making. However, if task conflicts are managed in a constructive way, they can contribute to more effective decision-making by challenging assumptions and facilitating consideration of multiple alternatives.

Intra-team conflict often leads to a breakdown in the relationships among members of the senior management team [20], thereby impacting decision-making efficiency and diminishing the quality of decisions made [7][8]. Jehn (1995) posited that conflicts within teams, stemming from deteriorating relationships due to a lack of recognition among members, typically disrupt the harmonious atmosphere essential for effective teamwork. This disruption can adversely affect both member efficiency and their loyalty to the organization. Furthermore, such conflicts may result in situations characterized by indecision—where discussions lead to "yes, but no decision" outcomes—which ultimately detrimentally impacts the overall performance level of the enterprise [10].

TMT conflict is proposed to mediate the relationship between value heterogeneity and firm performance, because value diversity often leads to task conflict and relationship conflict, depending on how these conflicts are handled, thereby improving or reducing performance.

Eisenhardt (1997) and other scholars believe that conflicts arise from differences between individuals, such as differences in goals, values, motivations, and ideas [23]. Differences in team members' values will lead to different understandings and opinions on tasks [13], resulting in increased disputes among team members about tasks and task conflicts [14][15].

# 3.3 Cooperative Conflict Handling Style as a Moderator

How conflict is handled plays a key role in determining how conflict affects team dynamics and organizational performance. Among the various styles of conflict management, cooperative styles, such as collaboration and integration are particularly effective in mitigating the negative effects of conflict and improving team performance. The collaborative style emphasizes finding mutually beneficial solutions, open communication, and cooperative problem solving, which can reduce relationship tension and promote more productive outcomes.

In contrast, competitive or avoidance styles exacerbate conflict, making relationship conflict more likely to undermine team cohesion and reduce performance.

According to the resource-based view, TMT's diverse range of viewpoints, abilities, and expertise can be a useful asset for boosting strategic decision-making and, eventually, corporate performance. The secret is to cultivate a culture of productive conflict in order to manage this resource (heterogeneity). The relationship between value heterogeneity and business performance can be controlled by the conflict management strategies that TMT members choose to employ. Collaborative conflict management, for instance, can turn value heterogeneity into a strength, enhancing decision-making and producing better results for the business. Value heterogeneity can be made a burden by evasive or competitive conflict management, which can cause internal dysfunction and delayed decision-making, both of which impair business performance.

This study focuses on the moderating effect of cooperative conflict handling and hypothesizes that teams employing cooperative strategies experience more positive outcomes in value heterogeneity and TMT conflict.

#### 3.4 Mediation moderated model

Two statistical methods for examining the impact of a third variable on the relationship between an independent and dependent variable are the basic mediated model and the mediated moderation model:

#### Mediation

The link between an independent variable and a dependent variable is influenced by a third variable known as the mediator. The functioning of a relationship between two variables is explained by mediation theories.

## Moderation

The degree or direction of the relationship between an independent variable and a dependent variable is influenced by a third variable known as the moderator. In order to determine when relationships between variables arise, moderation models look for interactions.

#### Mediated moderation

Mediated moderation is a combination of mediation and moderation in which the moderator variable's direct impact on the result is mediated after first moderation.

Psychology, management, and other research fields frequently employ mediation and moderation (Holland, 2017). One well-liked tool for mediation and moderation analysis is the Hayes' PROCESS macro for SPSS.

A mediated moderation model, also known as a conditional indirect effects model, is a statistical model that examines how the effects of an independent variable on an outcome variable are moderated by a third variable. Often the b1 path of an otherwise simple mediation model is theorized to be moderated by another variable [2].

The moderated mediation model hypothesizes that the mediation effect, which is responsible for producing the effect of the independent variable on the dependent variable, depends on the value or level of the moderator [3][6]. Mediated mediations can be conceptualized more clearly through the path diagram.

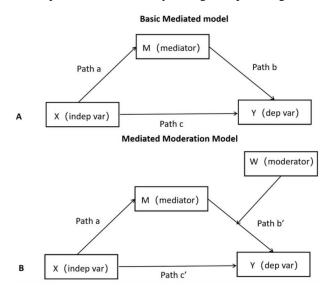


Figure 1. Conceptual path diagram of moderated mediation effect

(Sauce: Edwards and Lambert, 2007)

Therefore, the moderating variable (W) determines how strongly the independent variable (X) and the dependent variable (Y) are related. A mediated moderating effect occurs when this moderating effect is applied to the indirect path from IV to DV via a medium (M).

Figure 1 illustrates a moderated mediation model. In this path diagram, the basic mediation model is shown in Figure 1 A, and the regulating mediation model is shown in Figure 1 B. The intermediate effect paths a and b are

regulated by the fourth variable W. As before, the effect of adjustment on a and b is demonstrated by the magnitude of the intensity in the arrows from X to M and from M to Y, respectively [4].

## 4. Theoretical Framework and Hypotheses

#### 4.1 Conceptual model

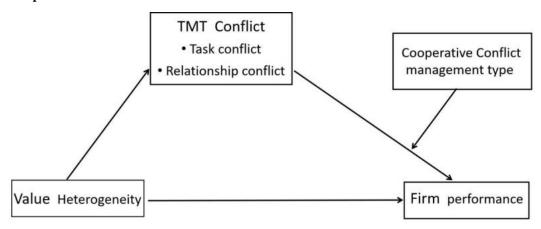


Figure 2. Research framework

There are core components of the moderated mediation model:

Independent variable (X): Value heterogeneity as the independent variable. This refers to the diversity of values, beliefs, or perspectives within the top management team (TMT). This may involve differences in personal values, organizational priorities, cognitive styles, or strategic perspectives.

Mediator (M): TMT conflict as the mediator. Conflict within TMT may stem from differences in perspectives, priorities, or decision-making methods resulting from heterogeneity in values. TMT conflict may be a mediator because it explains how or why value heterogeneity affects firm performance. Depending on the type of conflict (task conflict versus relationship conflict), it can enhance or hinder the impact of value heterogeneity on firm performance.

Dependent variable (Y): Firm performance as the dependent variable. This is the outcome variable and can be achieved in a variety of ways, such as financial performance, innovation, market share, or growth. In the context of the model, firm performance is affected by an indirect path through TMT conflict.

Moderator (W): Cooperative style as the moderator. It refers to the degree to which TMT members engage in collaborative or cooperative behavior. It affects the outcome of TMT conflicts. For example, high cooperative styles may mitigate the negative impact of conflict on performance, while low cooperative styles may exacerbate the negative impact of conflict on performance. Cooperation style regulates the mediating process by influencing the intensity or direction of the impact of TMT conflict on firm performance.

The proposed conceptual model integrates value heterogeneity, TMT conflict, firm performance, and cooperative conflict handling. The model shows that: First, value heterogeneity leads to TMT conflict [34]. Greater value heterogeneity leads to an increased likelihood of task conflict and relationship conflict within TMT. Second, TMT conflict impacts firm performance [37]. Conflict, especially relationship conflict, can negatively impact firm performance, while task conflict, if managed constructively, can improve performance. Third, cooperative conflict handling style moderates the indirect effects of value heterogeneity on firm performance through TMT conflict handling style. Specifically, when TMT adopts cooperative conflict management strategies, the negative effects of relational conflict are mitigated and the positive potential of task conflict is maximized [38].

## 4.2 Assumed development

According to Jehn et al. (1999), the impact of value heterogeneity on team performance is not only positive but also negative [13]. Value heterogeneity can bring diversified ways of thinking and acting, promote the

improvement of decision quality, and thus contribute to the improvement of performance. On the other hand, differences in the values of team members will also lead to disputes over the choice of task objectives or working methods, which will reduce the satisfaction of members, hinder the realization of organizational commitments, destroy team cooperation and cooperation atmosphere, and ultimately reduce team performance. However, Jehn et al. (1999) proposed that heterogeneity of values would have a negative impact on team performance [13]. In recent years, there have been many similar research conclusions [24]. The research found that the heterogeneity of team values is highly correlated with team performance, and the higher the heterogeneity of team values, the lower the performance in the work process [19]. Therefore, this study proposes the following hypothesis:

H1: The heterogeneity of TMT values has a negative impact on enterprise performance.

The heterogeneity of values represents the different preferences and habits of executives when interpreting information and decision-making, and the greater the heterogeneity, the greater the task conflict [38].

Task conflict promotes team members to discuss different viewpoints, increases their understanding of decision-making problems, and provides more decision-making opinions and solutions, which can often improve team performance. However, relationship conflict increases the pressure and anxiety of team members, makes them waste their energy on interpersonal relationship problems, limits the team's information processing and decision-making ability, and often reduces team performance [41].

Lankau et al. (2007), Sun Haifa and Liu Haishan (2007) showed through empirical research that there was a significant positive correlation between value differences and conflicts in senior management teams [28][41]. The conflict of the top management team is a double-edged sword. Task conflict can promote mutual discussion among team members, improve their knowledge and understanding of decision-making issues, and thus promote decision-making performance, while relationship conflict will destroy interpersonal relationships and lead to the decline of team cohesion or even disintegration [16].

Therefore, this study proposes the following hypothesis:

H2: Value heterogeneity within TMT positively affects TMT conflict (including task conflict and relationship conflict).

Smith et al. (1994) began to study. The academic community strengthened the research on executive team conflict as an intermediary variable between the heterogeneity of executive teams and performance [26]. For example, Knight et al. (1999) found that relationship conflict played a mediating role between the heterogeneity of executive teams and strategic consensus [25]. The research model of new high-level echelon theory summarized by Carpenter, Geletkanycz & Sanders (2004) also listed conflict as one of the mediating variables [27]. Lankau et al. (2007) found that conflict played a partially mediating role between organizational value heterogeneity and executive team members' satisfaction, sense of organizational commitment, and evaluation of CEO leadership effectiveness [28] [42].

Values are the guide of behavior choice. Team members with similar values are more likely to solve team problems and events in similar ways, thus reducing the occurrence of conflicts; on the contrary, the difference of values will increase the level of conflict [40].

Therefore, this study proposes the following hypothesis:

H3: TMT conflict mediates the relationship between value heterogeneity and firm performance

The higher the value heterogeneity, the greater the TMT conflict and the stronger the positive and negative impact on firm performance.

When TMT adopts cooperative conflict management, team members tend to focus on solving problems rather than winning arguments, and focus on achieving common interests. Such an approach can effectively transform dissent within the team into more constructive discussions, leading to more efficient decision making. In this environment, value heterogeneity is no longer a barrier, but can stimulate innovation from different perspectives.

Value heterogeneity can lead to conflicts within TMT, but in a collaborative conflict management approach, team members are able to focus more on the root cause and solution of the problem rather than opposing positions. This approach can promote the convergence of different perspectives, thereby reducing the negative impact of negative conflict while improving the quality and innovation of decision-making.

Therefore, this study proposes the following hypothesis:

H4 (H4a and H4b): Cooperative conflict management moderates the relationship between TMT conflict and firm performance. TMT using cooperative conflict management has less negative impact from relationship conflict and more benefits from task conflict.

Value heterogeneity can lead to conflicts within TMT, but in a collaborative conflict management approach, team members are able to focus more on the root cause and solution of the problem rather than opposing positions. This approach can promote the convergence of different perspectives, thereby reducing the negative impact of negative conflict while improving the quality and innovation of decision-making.

In cooperative conflict resolution, conflicts caused by value heterogeneity are often transformed into effective strategic decision-making processes through enhanced communication and understanding among team members and ultimately promote the improvement of enterprise performance. By working together to resolve conflicts, teams are better able to tap the value of diverse opinions and make more innovative and effective decisions. This decision-making process can improve the competitiveness of enterprises, such as better market response, more efficient resource allocation, etc., and then promote the growth of enterprise performance. Therefore, this study proposes the following hypothesis:

H5: When cooperative conflict is adopted in TMT, value heterogeneity has a stronger indirect impact on firm performance through TMT conflict.

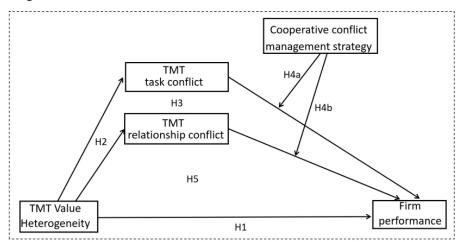


Figure 3. Summary of research Hypothesis

# 5. Results and discussion

The heterogeneity of TMT values leads to the conflict of TMT tasks and relationships, which has a positive impact on firm performance. Cooperative conflict management can adjust the impact of TMT work and task conflict on enterprise performance.

In cooperative conflict resolution, conflicts caused by value heterogeneity are often transformed into effective strategic decision-making processes through enhanced communication and understanding among team members and ultimately promote the improvement of enterprise performance. By working together to resolve conflicts, teams are better able to tap the value of diverse opinions and make more innovative and effective decisions. This decision-making process can improve the competitiveness of enterprises, such as better market response, more efficient resource allocation, etc., and then promote the growth of enterprise performance.

In the cooperative conflict handling mode, TMT can enhance the quality of decision-making and the cohesion of the team by effectively managing the conflicts caused by value heterogeneity. The "benign effect" of such conflicts can indirectly affect the overall performance of the enterprise through the decision-making behavior of the team more strongly.

The benefits of value heterogeneity (such as diverse viewpoints and more creative solutions) are more likely to be taken advantage of if TMT practices collaborative conflict management. This will improve decision-making and boost corporate performance [34]. It is more likely that conflicts coming from differing values will be handled constructively rather than destructively, which will provide better results. In conclusion, conflict resulting from value heterogeneity can either improve or worsen business performance, depending on how it is handled. To make sure that value heterogeneity improves performance, collaborative conflict management is essential because it enables the integration of many viewpoints in a way that promotes more creative and better decision-making.

This study reveals the subtle relationship between value heterogeneity, TMT conflict, and firm performance. By introducing a cooperative conflict management approach as a moderating factor, it highlights the importance of adopting collaborative conflict management strategies to harness the benefits of value diversity while mitigating its potential negative effects. The results of this study will provide valuable insights into how organizations can manage TMT conflicts and leverage value diversity to make better decisions and improve performance.

It has also been shown in practice that organizations should not shy away from value diversity within TMT but instead focus on fostering a culture of cooperative conflict management to ensure that conflicts lead to constructive outcomes rather than divisive tensions. Training programs that focus on collaborative conflict management approaches can help TMT navigate the complexity of value heterogeneity and improve company performance.

#### 6. Conclusion and future direction

This study comprehensively analyzes the relationship between value heterogeneity, TMT conflict, and firm performance and emphasizes the key role of cooperative conflict management as a moderating factor. The analysis shows that the hypothesis of this study has a certain theoretical basis. TMT heterogeneity has a positive impact on firm performance, and conflict can mediate the impact of TMT heterogeneity on firm performance. Conflict management strategies can regulate the relationship between TMT conflict and firm performance. Cooperative conflict handling can transform the potential value of heterogeneous conflict, thus promoting the improvement of enterprise performance.

The moderated mediation model presented in this study contributes to the existing literature by showing how conflict as mediation and cooperative conflict management as a mediator collectively affect firm performance in TMTs. Further empirical research is needed to explore these relationships in different organizational settings and industries to validate and extend the proposed model.

Conflict should be allowed to exist in the enterprise. TMT task conflict has a positive impact on firm performance, and cooperative conflict management strategy has a positive moderating effect. TMT relationship conflict has a negative impact on firm performance, and the negative impact on firms may be more serious [35]. Cooperative conflict management strategy will greatly reduce the impact of TMT relationship conflict on firm performance. If the relationship conflict is not handled well, it will affect the survival of the enterprise. Therefore, managers should skillfully and artistically adopt cooperative conflict management strategies to ensure that enterprises cope with negative conflicts and achieve good conflict management results so that enterprises can get better development and become bigger and stronger.

Future research could explore the interaction of value heterogeneity, TMT conflict, and cooperation styles in different cultural contexts. Are these dynamics the same in collectivist and individualistic cultures? Does national culture moderate this relationship? TMT conflict and value heterogeneity may vary by industry. Research whether certain industries or organizational environments, such as start-ups or large companies, are more susceptible to these dynamics.

# Tuijin Jishu/Journal of Propulsion Technology

ISSN: 1001-4055 Vol. 45 No. 4 (2024)

In addition to cooperative styles, other potential moderators can be explored, such as leadership style, organizational structure, and external environment. How does the environment, such as market fluctuations and competition, moderate the relationship between value heterogeneity, conflict, and performance? Whether different conflict approach styles can mitigate the negative impact of value heterogeneity and conflict on firm performance.

## Refrences

- [1] Jun Liu (2008). Theory and evidence of conflict management style of enterprise top management team. Economic Theory and Economic Management, 58-64.
- [2] Kristopher J Preacher, Derek D Rucker, Andrew F Hayes (2007). Addressing Moderated Mediation Hypotheses: Theory, Methods, and Prescriptions. Multivariate behavior research, 42(1), 185-227.
- [3] Brigid M Rose, Grayson N Holmbeck, Rachael Millstein Coakley, Elizabeth A Franks(2004). Mediator and moderator effects in developmental and behavioral pediatric research. Journal of developmental and behavioral pediatrics. 25(1):58-67. doi:10.1097/00004703-200402000-00013
- [4] Amery D Wu, Bruno D Zumbo (2008). Understanding and Using Mediators and Moderators. Social Indicators Research 87(3):367-392. DOI: 10.1007/s11205-007-9143-1
- [5] Ng, C. K. J., Kwan, L. Y. J., & Chan, W. (2024). A Note on Evaluating the Moderated Mediation Effect. Structural Equation Modeling: A Multidisciplinary Journal, 31(2), 340-356.
- [6] Jun Liu, Yongjuan Li, Pingping Fu (2007). Value sharing, conflict and performance of top management teams: An empirical test. Chinese Journal of Management. 644-653.
- [7] Pelled L, Eisenhardt K, Xin K. Exploring the Black Box: An Analysis of Work Group Diversity, Conflict, and Performance[J]. Administrative Science Quarterly, 1999, 44(1): 1-28.
- [8] Du, Y. Z., & Chen, Z. W. (2009). Top management team conflict and team decision performance: The moderating role of control mode. Journal of Management Science, 22(4), 31-40.
- [9] Jiang Cheng (2017). A Literature Review of the Relationship between Entrepreneurial Team Heterogeneity and Entrepreneurial Performance. Foreign Economics & Management. 3-17.
- [10] Jehn K. A (1995). Multimethod Examination of the Benefits and Detriments of Intragroup Conflict. Administrative Science Quarterly, 40(2): 256-282.
- [11] Eisenhardt, K. M., Kahwajy, J. L., & Bourgeois III, L. J. (1997). Conflict and strategic choice: How top management teams disagree. California management review, 39(2).
- [12] Hambrick, D., D. Nadler, and Michael Tushman (1998). Navigating Change: How CEO's, Top Teams and Boards Steer Transformation. Boston: Harvard Business School Press.
- [13] Jehn, K.A. Northcraft, G.B. Neale, M.A (1999). Why Differences Make a Difference: A Field Study of Diversity, Conflict, and Performance in Workgroups. Administrative Science Quarterly, 44 (4): 741-763.
- [14] Schwenk, C., & Valacich, J. S. (1994). Effects of devil's advocacy and dialectical inquiry on individuals versus groups. Organizational behavior and human decision processes, 59(2), 210-222.
- [15] Hong Zhang (2014). Research on the relationship between entrepreneurial team value heterogeneity, team conflict and team cohesion. Scientific management research. Vol. 32 No. 2, 90-93.
- [16] Haishan Liu (2010). A study on the impact of the heterogeneity of Executive Team's operational Management Values on Conflict and Performance. PhD Thesis.
- [17] Taiming Huang (2019). Executive team heterogeneity, CEO power and corporate performance. Master Thesis.
- [18] Jehn K A (1999). Managing Conflict in a Diverse Workplace. Managerial Excellence Through Diversity, 166-184.
- [19] Zhuoer Li, Han Jiang, Qianting Wu, Yina Liu (2018). The mediating role of team value heterogeneity and performance-psychological compatibility. Sweeping over the Management. 131-133.
- [20] Huang J-C (2012). The relationship between conflict and team performance in Taiwan: the moderating effect of goal orientation. International Journal of Human Resource Management, 23(10): 2126-2143.
- [21] Du Yunzhou, Chen Zhongwei (2009). Executive conflict and team decision performance: a moderating analysis based on control model. Management Science, 22(4): 31-40.
- [22] Jehn, K.A. Northcraft, G.B. Neale, M.A (1999). Why Differences Make a Difference: A Field Study of Diversity, Conflict, and Performance in Work groups [J]. Administrative Science Quarterly, 44 (4): 741-763.

[23] Eisenhardt, K. M., & Schoonhoven, C. B. (1990). Organizational growth: Linking founding team, strategy, environment, and growth among US semiconductor ventures, 1978-1988. Administrative science quarterly, 504-529.

- [24] Yue Yu & Qiong Lu (2019). Research on the influence of value heterogeneity on team performance-The mediating role of team interaction and the moderating effect of DLMX. Secretary. 31-44.
- [25] Knight, D., Pearce, C. L., Smith, K. G., Olian, J. D., Sims, H. P., Smith, K. A., & Flood, P. (1999). Top management team diversity, group process, and strategic consensus. Strategic management journal, 20(5), 445-465.
- [26] Smith, K. G., Smith, K. A., Olian, J. D., Sims Jr, H. P., O'Bannon, D. P., & Scully, J. A. (1994). Top management team demography and process: The role of social integration and communication. Administrative science quarterly, 412-438.
- [27] Carpenter M A, Geletkanycz M A, Sanders W G (2004). Cooper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition. Journal of Management, 30 (6): 749-778.
- [28] Lankau, M. J., Ward, A., Amason, A., Ng, T., Sonnenfeld, J. A., & Agle, B. R. (2007). Examining the impact of organizational value dissimilarity in top management teams. Journal of Managerial Issues, 11-34.
- [29] Neely Jr, B. H., Lovelace, J. B., Cowen, A. P., & Hiller, N. J. (2020). Metacritiques of upper echelons theory: Verdicts and recommendations for future research. Journal of Management, 46(6), 1029-1062.
- [30] Kim, K. H. (2014). Board heterogeneity: Double-edged sword? Focusing on the moderating effects of risk on heterogeneity-performance linkage. Academy of Strategic Management Journal, 13(1), 129.
- [31] Paulus, M. P. (2007). Decision-making dysfunctions in psychiatry-altered homeostatic processing?. Science, 318(5850), 602-606.
- [32] De Dreu, C. K., & Weingart, L. R. (2003). A contingency theory of task conflict and performance in groups and organizational teams. International handbook of organizational teamwork and cooperative working, 151-166.
- [33] Holland, S. J., Shore, D. B., & Cortina, J. M. (2017). Review and recommendations for integrating mediation and moderation. Organizational Research Methods, 20(4), 686-720.
- [34] Amason, A. C., Liu, J., & Fu, P. (2018). Value heterogeneity: An overlooked and important antecedent of TMT conflict and effectiveness. Journal of Managerial Issues, 155-182.
- [35] Liu, J., Fu, P., & Liu, S. (2009). Conflicts in top management teams and team/firm outcomes: The moderating effects of conflict-handling approaches. International Journal of Conflict Management, 20(3), 228-250.
- [36] Shammugam, S. & Marimuthu, M. (2019). Does Conflict of Top Management Team Impact the Firm Performance? A Conceptual Review on Large Companies in Malaysia. Global Business and Management Research, 11(2), 157-166.
- [37] Qiang Mei, Shengnan Xu (2012). Research on the relationship between top management team heterogeneity, team conflict and entrepreneurial performance: Conflict management as the moderating variable. Journal of Economics and Management, 94-103.
- [38] Gan, R., Chen, X., Wang, Z. & Zhang, X. (2023). Knowledge heterogeneity and corporate innovation performance: The mediating influence of task conflict and relationship conflict. Plos one, 18(10), e0292283.
- [39] Harinck F. & Ellemers N. (2014). How values change a conflict. In Social conflict within and between groups (pp. 19-36). Psychology Press.
- [40] Haifa Sun, Haishan Liu (2007). The impact of executive team values and team atmosphere on conflict Sound. Business economics and management, 32-38.
- [41] Haifa Sun, Guanping Cheng, Haishan Liu (2011). The impact of value heterogeneity on conflict and performance: an empirical study of 123 executive teams. Journal of Northeastern University (Social Science), 300-306.
- [42] Wegener, D. T., & Fabrigar, L. R. (2000). Analysis and desgin for nonexperimental data: Addressing causal and noncausal hypothesis.