

# Relationship between top management team internal social capital and strategic decision-making speed

Strategic  
decision-  
making speed

1617

## The intermediary role of behavioral integration

Jiajun Gu

*School of Business Administration,  
Zhejiang Gongshang University, Hangzhou, China*

Fenghua Xie

*School of Business Administration,  
Zhejiang University of Finance and Economics, Hangzhou, China, and*

Xingsi Wang

*School of Business Administration, Zhejiang Gongshang University,  
Hangzhou, China*

### Abstract

**Purpose** – The purpose of this paper is to explore the relationship between top management team (TMT) internal social capital and strategic decision-making speed, and further explore role of TMT behavioral integration in their relationship. It reveals how TMT internal social capital impacts strategic decision-making speed.

**Design/methodology/approach** – On the basis of the social capital theory and upper echelons theory, at first, a model about TMT internal social capital and strategic decision-making speed is proposed by exploratory case study. Then, the data obtained via questionnaire from 67 TMTs by software SPSS 19.0 and AMOS 17.0 are analyzed, and the theoretical hypotheses as mentioned above are verified.

**Findings** – The empirical study found that different dimensions of TMT internal social capital have significant positive impact on TMT behavioral integrity; TMT behavioral integrity has significant positive impact on strategic decision-making speed; and TMT behavioral integrity as an intermediary variable played a brokering role in the relationship between TMT internal social capital and strategic decision-making speed.

**Originality/value** – The study enriches the empirical test on the relationship between TMT internal social capital and decision speed, thereby helping the authors further understand how to improve the speed of strategic decision making in TMT.

**Keywords** Social capital, Decision making, Knowledge management, Internal social capital, Top management team (TMT)

**Paper type** Research paper

### 1. Introduction

In the era of time-based competition (TBC), firms need to make strategic decisions fast and effectively in response to constantly changing external environment, so as to gain time advantages (Suarez and Lanzolla, 2007; Avichai, 2012). Upper echelons theory proposed by Hambrick and Mason (1984) emphasizes that the maker of organizational strategic decisions is the top management team (TMT) rather than the individual. TMT, as the strategic decision maker, controls the whole decision-making



process and plays a key role in speeding up the decision making. On the basis of existing literature, TMT exerts influence on the strategic decision-making speed in two aspects, namely, team characteristic factor and team process factor (Gu and Wang, 2013). At present, more and more researches show that strategic decision-making effectiveness depends greatly on the quality of relational network between TMT members or social capital. In other words, the team social capital has great influence on both team operation process and strategic decision-making process.

However, the research probe into TMT strategic decision-making speed from the perspective of fusion between social capital and strategic management is relatively deficient. So this paper introduces the core concept (namely, TMT behavioral integration) of the team operation process to probe the influence mechanism of TMT internal social capital and strategic decision-making speed. And combining the social capital theory and upper echelons theory, this paper puts forward the basic proposition through case study, initially builds up the relational model of TMT internal social capital, TMT behavioral integration, and strategic decision-making speed. Then on the basis of these, this paper combines questionnaire and the data obtained via questionnaire by software SPSS 19.0 and AMOS 17.0 are analyzed to further verify the intermediary role of TMT behavioral integration.

Through this study it is hoped that one can find the relevant practical basis for the optimization of TMT strategic decision-making process and TMT strategic decision-making speed, enrich the research scope and depth of rapid decision theory, and at the same time expand the application of social capital theory in the team aspect, with a view to providing new ideas for the research on TMT and strategic decision-making speed.

## 2. Literature review

### 2.1 Literature review of TMT internal social capital

On the basis of existing literature and from the social capital resource point of view, the team social capital is regarded as a group of useful resources which is obtained through social relationship of members in the team society structure and a wider range of official and unofficial organization structures. It consists of two parts. One is "bonding" social capital, namely, the useful resources derived for the firms from internal connection capability of team members. The other is "bridging" social capital, namely, the useful resources derived for the firms from connection capability between team members and external organizations or stakeholders (Adler and Kwon, 2002; Oh *et al.*, 2004; Oh and Labianca, 2006). Shipilov and Danis (2006) first proposes the concept of TMT social capital, namely, "the ability of TMT members to get and exchange resources by using social relational networks based on norms, trust and expectation." On the basis of the literature research, this paper considers that TMT internal social capital refers to the resources invested by the TMT members to build and maintain interconnected internal social relational networks as well as opportunities, wills and abilities to exchange resources in it.

### 2.2 Literature review of TMT behavioral integration

Since the 1990s, the team behavioral integration becomes a new filed of TMT research. The TMT behavioral integration proposed by Hambrick (1994) and Hambrick *et al.* (1996) refers to collective interaction of TMT members in terms of ideas, value judgment and behavior. The research by Simsek and Veiga (2005) expands the TMT behavioral integration theory and develops a TMT behavioral integration scale with high reliability

and validity. TMT behavioral integration includes three dimensions – cooperation behavior, information exchange and joint decision making. Cooperation behavior refers to voluntary mutual assistance among TMT members. Information exchange refers to internal proposal of more high-quality and innovative viewpoints by TMT members. Joint decision making refers to the emphasis on interdependence among TMT members and behavioral integration. The research on TMT behavioral integration avoids the shortcoming of probing into TMT operation process in terms of single factor (such as leadership, cooperation, communication and conflict). It can reflect the internal operation mechanism of TMT in a more comprehensive and specific way.

On the basis of the literature at home and abroad, it can be seen that scholars are mainly from the individual level (leadership), team level (team demographic traits, rights disposition of TMT, membership characteristics of TMT, team culture) and the organizational level (industry situation, nature of organization, the development stage and so on), the three aspects to research on the antecedents of behavioral integration (Pitcher and Smith, 2001; Kim and Mauborgne, 1996; Simsek and Veiga, 2005; Zhenhua and Haifa, 2009). While the study on the influence mechanism of the result variable are mainly conducted from levels of team and organization of behavior integration: decision effect (Jehn and Bendersky, 2003; Gu and Xie, 2009), team conflict (Mooney and Sonnenfeld, 2001), choice of strategic opportunities (Lubatkin *et al.*, 2006) and organizational performance (Carmeli and Schaubroeck, 2006; Gu and Xie, 2009).

### 2.3 Literature review of TMT strategic decision-making speed

Eisenhardt (1989), Judge and Miller (1991) define the strategic decision-making speed as a strategic decision-making duration, that is, the time taken from initial proposal of strategic decision to deliberation. Such a definition is widely recognized. Scholars measure strategic decision-making speed based on two aspects – rapid response ability of TMT to environmental changes and time used for making major decisions (Eisenhardt, 1989; Judge and Miller, 1991; Wally and Baum, 1994). The strategic decision-making speed is both a key factor for distinguishing corporate strategic decision making and core content in rapid strategic decision-making process of a firm.

The former research results indicated that the factors that affect strategic decision-making speed are multiple, but the explanatory power of each factor is different. Rajagopalan *et al.* (1993), Richter and Schmidt (2005) put forward the overall framework of the influencing factors of the decision-making process on the basis of a large amount of literature review. They classified these factors as organizational factors, environmental factors and special decision-making factors. After that, scholars have further expanded the research and started to conclude the process model for determining strategic decision-making speed. The most famous of them are the structure model of strategic decision-making speed (Wally and Baum, 1994) and the rolling model of strategic decision-making speed (Zhang Jianlin and Hu Bei).

2.3.1 *Relevant theoretical review.* When the social capital theory is introduced to corporate strategic management field, scholars pay more and more attention to influence corporate strategic activity and performance (Young, 2005; Shipilov and Danis, 2006; Zhang *et al.*, 2008; Qian and Yu, 2008). Coviello and Munro (1995) points out the influence of social networks on opportunity identification/development and strategic decision making. In the perfectly competitive market, firms can get adequate information to make decisions regarding their production to achieve optimal resource allocation and maximize economic efficiency. The Chinese scholar Zhou Xiaohu (2006) puts forward the research on corporate social capital and strategic management. He thinks that corporate social

capital is the important strategic resource of a firm and has great influences on corporate strategic decision making. External social capital can accelerate strategic information collection to snatch more strategic opportunities. Meanwhile, internal social capital can play a role in the strategic decision-making process, which is mainly reflected in timely transmission and high sharing of information among strategic decision makers. With regard to strategy implementation effect, social capital can service as an implementation mechanism. That is, information authenticity and goal/behavior consistency of the decision-making members can be ensured by using these methods such as supervision among members, default rules among members and isolation treatment due to rule violation, with a view to minimize internal transaction cost, smooth transaction channels, strength trust and reduce opportunistic behavior.

In terms of the literature review, team behavior integration and social capital have a close relationship to strategic decision making. Goal/behavior consistency of TMT members is an important prerequisite to accelerate strategic decision making (Gu and Xie, 2009), while the goal/behavior consistency is established and promoted in internal social interaction of team members. Hambrick thinks that interpersonal relationship and task process that have relationships with TMT behavioral integration reflect the participation degrees of the team members in internal interaction. Through unofficial exchange, TMT members can build closer social network relationships to promote information/resource flowing and exchange within the organization and guide thoughts, behavior and performance of the members (Brown and Starkey, 1994; Ravis and Schultz, 2006). The effectiveness of strategic decision making depends greatly on the quality of relational networks or social capital of the TMT member. In other words, the team social capital has great influences on the team operation process and strategic decision-making process.

In summary, although domestic and foreign scholars have made some progress on the relationship between TMT social capital and TMT strategic decision making, there is still a lot of research space. Existing researches show that social capital of the firm's TMT can help decision makers rapidly find strategic opportunities and get adequate decision-making information to improve decision-making effectiveness. However, most researches focus on the influence of TMT external social capital on strategic decision making (Bian and Qiu, 2000; Collins and Hitt, 2006). Few researches are conducted regarding TMT internal social capital. Moreover, fewer researches are conducted regarding the mechanism of interaction between TMT social capital and strategic decision making, especially the mechanism of influence of TMT social capital on strategic decision-making speed. Therefore, this research is intended to reveal the mechanism of interaction between internal social capital, behavioral integration and decision making of the firm's TMT and fills the theoretical gap in this regard.

### 3. Research method

With regard to strategic decision-making speed, foreign researches are more than Chinese ones. To ensure reasonability and feasibility of the research under Chinese conditions, it is intended to find living examples that support the interaction mechanism of internal social capital, behavioral integration and strategic decision-making speed of TMTs by using supplementary research methods (multi-case analysis method and interview method). Cross-case analysis and in-depth interview methods are adopted to find the composition of TMT internal social capital and behavioral integration under Chinese conditions and analyze specific expression forms and specific influence process between them. Besides, the case analysis of strategic

decision-making process is an important way to get original data that reveals the interaction mechanism of internal social capital, behavioral integration and strategic decision-making speed of TMTs, and helps probe into the logicity and reasonability of the relationship between concepts and preliminarily build concept relationship models and proposition hypothesis. On this basis, the next step is to employ the large sample survey and statistical data analysis software such as SPSS 19.0 and AMOS 17.0 to empirically test the research hypothesis and concept models and build structural models for internal social capital, behavioral integration and strategic decision-making speed of TMTs so as to further revise and improve the concept models.

#### **4. Research I: in-depth interview and cross-case analysis**

##### *4.1 Sample selection*

The theoretical sampling principle is followed for case selection. In the research, three cases are selected for an in-depth analysis. Under TBC background, we focus the research object on local private firms with more market dynamics and get in touch with them. Considering that TMT social capital and behavioral integration may be influenced by such factors as firm nature, scale and development, three firms selected by us distinctly differ from each other in establishment time, current development, industry involved, main business, business line, etc. They have their irreplaceable characteristics. Particularly, internal TMT composition structure, power allocation and the decision making mechanism of these firms may be different due to their difference in development stage and corporate scale. As the firms have been established for different years, the tenures of their TMT members are not completely identical. Diversified sample data help improve the explanatory power of the research conclusions to a certain extent. This also helps explore the differences (Table I).

##### *4.2 Data collection*

TMTs of three domestic firms are selected for the research. Semi-structured interviews are held separately with these TMTs around the themes of internal social capital, behavioral integration and strategic decision-making speed. A total of 11 TMT members participate in the interviews, of which four are from Company A, three from Company H and four from Company C. The interview outline is finalized by the research group members after repeated revisions based on the literature analysis. It mainly covers the following issues: basic conditions (including team structure, power allocation, etc.) of TMT, decision-making process (whether conflicts will occur, communication method, decision-making mechanism, behavior consistency, etc.) and social network relationships (interpersonal relationship conditions, whether they share objectives, communication efficiency, etc.) among internal TMT members. While holding in-depth interviews with TMT members, the research group members actively gather information (including paper materials such as brochure, staff codes, management systems and rules of the firm, etc.) related to the research. Additionally, the group also gathers the secondary data through industry websites and official websites of firms for sorting and analysis.

##### *4.3 Data analysis*

The data analysis for the research is divided into three parts. Part 1: corresponding data of the case firms is defined based on the concepts of TMT behavioral integration and strategic decision-making speed so as to further ascertain their TMT behavioral integration degree and strategic decision-making speed (see Table II). Part 2: based on

Sample firm	Company A	Company H	Company C
Year of establishment	2001	2009	2011
Industry involved	Testing	Education	Automobile manufacturing
Nature of company	Private firm specialized in scientific and technological services	University students' innovative undertaking firm	Private hi-tech firm
Development stage	Mature period	Growth period	Start-up period
Main business	Non-destructive testing of pressure vessels, pressure piping, large bridges, grid structures, steel structures of buildings, etc.	Adult, correspondence and distance education	R&D, manufacturing and sales of new energy automobiles and various modified vehicles
Business region	More than 20 provinces, cities and regions such as East China, South China, North China, Northeast and Northwest	Hangzhou, Quzhou, Ningbo, etc., in Zhejiang	Currently concentrate in the Yangtze River Delta Region
Interview time and object	Two interviews with the general manager, one hour for each on average; one interview with the assistant to the general manager for 1.5 hours; two interviews with deputy general manager in charge of technology, one hour for each on average; and two interviews with deputy general manager in charge of projects, one hour for each on average	One interview with the board chairman for 1.5 hours; one interview with deputy general manager in charge of finance for two hours; and two interviews with deputy general manager in charge of marketing, about one hour for each on average	Three interviews with board chairman and general manager for 2.5 hours; one interview with deputy general manager in charge of marketing for two hours; one interview with deputy general manager in charge of administration for two hours; and three interviews with the assistant to the general manager for three hours

**Table I.**  
Main features  
of case firms and  
interview time

**Source:** Internal information and websites of the firms

the analysis on the data/materials such as interview text and second-hand information of the firms, open codes are used to identify four key elements of TMT internal social capital (see Table III). Part 3: based on cross-case comparison and relevant theoretical literature, the models of interaction relationships among four key elements of TMT internal social capital, TMT behavioral integration and strategic decision-making speed are preliminarily built.

Domestic and foreign researches basically follow the three-dimensional (social capital structure, relationship and cognition) model proposed by Nahapiet and Ghoshal (1998). Zhang Jinhua (2010) considers that TMT internal social capital can be estimated based on network scale, density and embedded resources. Li (2013) evaluates TMT internal social capital by using trust, shared vision and member correlation in the research. Many domestic and foreign scholars divide TMT internal social capital according to different research requirements (Young, 2005; Kim and Cannella, 2008; Jipeng, 2013). On the basis of existing literature and three-dimensional model, the case materials are encoded and analyzed through the grounded theory in the research. It is found during the research that TMT internal social capital comprises four key



Sample firm	TMT behavioral integration		Strategic decision-making speed	General evaluation
	Cooperation behavior	Information exchange		
Company A	For the sake of personal benefits, the divergence caused by unbalanced benefit distribution impedes smooth decision making during discussion	A consensus is reached through frequent and rapid information exchange among TMT members	Perceived speed Be aware of the market environment changes and able to make new judgment of future development of the firms. Certain time is needed for TMT to achieve consistent objectives. This is not so smooth	General evaluation Relatively quick
Company H	TMT members share highly consistent corporate visions and values and fully trust each other. They share out the work and cooperate with one another	During discussions, everyone speaks out freely. Before official meetings, TMT members communicate much on unofficial occasions without any purpose. They exchange ideas and thoughts in a relaxed atmosphere	Perceived speed TMT is able to achieve common goals through adequate discussions within a short time. CEO is good at seizing the market opportunities to make decisions decisively	General evaluation Good
Company C	The team members have built harmonious relationship and are willing to exchange information and share resources	Regular meetings are held. TMT often gets together during festivals and holidays. They frequently make official or unofficial communication in a delightful atmosphere	Perceived speed In the internet thinking mode, TMT prepares strategic planning and makes strategic decisions. They are good at diversifying risks. They uphold rapid action and give priority to efficiency	General evaluation Good

Source: Interview data

**Table II.**  
TMT behavioral integration and strategic decision-making speed state of case firms

K 45,10	Open code example (interview text)	First-level concept (frequency)	Second-level concept
<b>1624</b>	We often communicate privately. Most conversations are not about work. Besides, we spend most time together (H)	Unofficial communication (24)	Interaction intensity
	We often sit together for casual talking and understand what we think (A)		
	Under the leadership and control of the general manager during the decision-making process, other TMT members have the power to discuss adequately and continuously improve the decision schemes (H)	Adequate discussion (21)	
	We execute democratic centralism for major decisions. Everyone can speak out their opinions and concerns at the outset. They can propose decision schemes and comments according to their respective duties (C)		
	We (four personnel) take charge of one area, respectively. So, we treat issues from a different point of view and express opinions. The general manager makes the final decision. When the issue involves a more important module, we are likely to solicit comments from the person in charge of this module in most cases (C)		
	Our team may be different from others. My two shareholders have been together with me for 6-7 years. Thus, we know each other very well. We are very good friends (H)	Network density (16)	Network density
	Sometimes, we visits each other's office not for discussing some issues (A)		
	He has many resources inside and outside the industry. For example, someone can be relied on for solving this issue (C)	Embedded resources of network (10)	
	Some general manager will directly give us the contact information of the relevant person and provide us with relevant resources (A)		
	We all absolutely trust each other (H)		
	Sometimes I cannot attend the decision-making meeting. However, I still give absolute support to the company's decision. Even if the company's decision is incorrect, I will assume responsibilities (C)	Trust among colleagues (17)	Holistic trust sense of the team
	I believe the decision cannot be made so quickly without enough trust between us (H)		
	Everyone has the power to give decision advice in respective duty field. All actively participate in decision making while accepting the general manager's decision-making authority (C)	Superior-subordinate trust (13)	
	We want to develop well and do chain business which is always our development direction. A consensus is reached on this point (H)	Shared vision (12)	Shared values
	Some top and middle management members think that it is very difficult for the company to go public. Thus, we'd better devote efforts to develop the company and maintain its private ownership. They do not support the company's listing (A)		
	They propose many adventurous development thoughts from heart (H)		

**Table III.**  
Four key elements  
of TMT internal  
social capital

(continued)



Table III.

Open code example (interview text)	First-level concept (frequency)	Second-level concept
There must be differences. The deputy manager and I are unwilling to conduct cooperation. However, one general manager insists on the cooperation (C) If the proposed schemes are beneficial to the company, there will be a slim chance of being vetoed, provided that the laws are abided by (A)	Common cognition (10)	

elements – interaction intensity, network density, holistic trust sense of the team and shared values (see Table III).

Structural social capital is evaluated transversally and longitudinally by interaction intensity and network density. Interaction intensity means the degree of interaction between team members. Network density means the interaction frequency of team members. The definitions made by Kang *et al.* (2003) and Jianglin *et al.* (2007) are cited. Holistic trust sense of the team, as a key factor for measuring relational social capital, includes the degree of trust among TMT members and the degree of TMT members' trust of CEO and reflects the degree of openness, support and tolerance among team members. By evaluating cognitive social capital based on shared values, the business understanding consistency of team members can be estimated and individual reaction and cooperation behavior of team members can be further explained.

In the above section, the research gives a description of performance and features of TMT internal social capital, TMT behavioral integration, strategic decision-making speed, etc., of three case firms. In order to further make clear the performance of the case firms in various aspects for ease of comparison/analysis in different cases, TMT internal social capital, TMT behavioral integration and strategic decision-making speed are evaluated and encoded. Five levels (high, relatively high, ordinary, low and very low) are used to indicate the indicator (TMT internal social capital and TMT behavioral integration) level of the case firms in the descending sequence. Five levels (quick, relatively quick, ordinary, slow and very slow) are used to indicate the indicator (strategic decision-making speed) level of the case firms in the descending sequence. After preliminary encoding, the researcher invites interviewees and experts to make proper review and correction. The encoding results are shown in Table IV.

	TMT internal social capital			TMT behavioral integration			
	Structural social capital	Relational social capital	Cognitive social capital	Cooperation behavior	Information exchange	Joint decision making	Strategic decision-making speed
Company A	High	Relatively high	Ordinary	Ordinary	Relatively high	Relatively high	Relatively quick
Company H	Relatively high	High	High	High	High	Relatively high	Quick
Company C	Relatively high	Relatively high	Ordinary	High	High	High	Quick

Table IV. Relationships among TMT internal social capital, TMT behavioral integration and strategic decision-making speed

**Notes:** High, the interviewee puts great emphasis on this concept and express it many times; relatively high, the interviewee stresses this concept; ordinary, this concept is mentioned for fewer times in the interview; low, this concept is mentioned for very few times in the interview; very low, this concept is not mentioned in the interview. It is the same as other tables. So, no more explanation will be given

#### 4.4 Research hypothesis and theoretical model

On the basis of exploratory cross-case comparison/analysis and theoretical research, the hypotheses are presupposed regarding the relationships among TMT internal social capital, TMT behavioral integration and strategic decision-making speed. Three exploratory case analysis results basically support and validate positive influence thereon. Specific analysis is as follows.

*4.4.1 TMT internal social capital and TMT behavioral integration.* In the above case research on TMT internal social capital and behavioral integration (see Table IV), it is easy to notice that Company A, Company H and Company C show relatively high level in terms of TMT internal social capital. They can provide relatively good team atmosphere for collective interaction and goal consistency. This helps the team members fully share their resources during the decision-making process, strengthen cooperation and take uniform actions. The internal social capital of these TMT members will accelerate their information search, and thus create favorable conditions for integrating their thoughts. On the basis of this, the following initial hypothesis propositions are proposed in the research:

- H1a.* There is a significant positive correlation between TMT internal interaction intensity and cooperation behavior.
- H1b.* There is a significant positive correlation between TMT internal interaction intensity and information exchange.
- H1c.* There is a significant positive correlation between TMT internal interaction intensity and joint decision making.
- H2a.* There is a significant positive correlation between TMT internal network density and cooperation behavior.
- H2b.* There is a significant positive correlation between TMT internal network intensity and information exchange.
- H2c.* There is a significant positive correlation between TMT internal network intensity and joint decision making.
- H3a.* There is a significant positive correlation between holistic trust sense of internal TMT team and cooperation behavior.
- H3b.* There is a significant positive correlation between holistic trust sense of internal TMT team and information exchange.
- H3c.* There is a significant positive correlation between holistic trust senses of internal TMT team and joint decision making.
- H4a.* There is a significant positive correlation between TMT internal shared values and cooperation behavior.
- H4b.* There is a significant positive correlation between TMT internal shared values and information exchange.
- H4c.* There is a significant positive correlation between TMT internal shared values and joint decision making.

*4.4.2 TMT internal social capital and strategic decision-making speed.* In the above case research on TMT internal social capital and strategic decision-making speed

(see Table IV), it is easy to notice that Company A, Company H and Company C show relatively high level in terms of TMT internal social capital. Network relationships of the team members facilitate effective internal information flowing and knowledge transfer. This generates huge information benefits, reduces the time needed by the decision makers for collecting information and accelerates common cognition of decision-making issues. Consistent behaviors are more likely to occur at different stages of decision-making information processing, scheme design and selection. On this basis, the following initial hypothesis propositions are proposed in the research:

- H5a.* TMT internal interaction intensity has a significant impact on the speed of strategic decision making.
- H5b.* TMT internal network density has a significant impact on the speed of strategic decision making.
- H5c.* Holistic trust sense of TMT internal team has a significant impact on the speed of strategic decision making.
- H5d.* TMT internal shared values has a significant impact on the speed of strategic decision making.

*4.4.3 TMT behavioral integration and strategic decision-making speed.* In the above case research on TMT behavioral integration and strategic decision-making speed (see Table IV), it is easy to notice that Company A, Company H and Company C show relatively high level in terms of TMT behavioral integration. The team with a high level of behavioral integration places more emphasis on sharing and cooperation. In a harmonious atmosphere, they act uniformly to accelerate information collection, processing and prediction during the strategic decision-making process, thus speeding up the strategic decision making. On this basis, the following initial hypothesis propositions are proposed in the research:

- H6a.* There is a significant positive correlation between TMT cooperation behavior and strategic decision-making speed.
- H6b.* There is a significant positive correlation between TMT information exchange and strategic decision-making speed.
- H6c.* There is a significant positive correlation between TMT joint decision making and strategic decision-making speed.

*4.4.4 TMT internal social capital and TMT behavioral integration and strategic decision-making speed.* The above case research regarding TMT internal social capital, TMT behavioral integration and strategic decision-making speed shows that the theoretical presuppositions for three exploratory case researches are basically supported. Structural dimensions of TMT internal social capital and TMT behavioral integration are preliminarily presupposed. More literature and theoretical analysis as well as empirical validation are needed for the research on action mechanism of the influence of TMT internal social capital based on behavioral integration on strategic decision-making speed. The following initial hypothesis propositions are proposed in the research:

- H7.* TMT behavioral integration acts as the intermediary between TMT internal social capital and strategic decision-making speed.

The relationship model of the research is shown in Figure 1.

**5. Research II: theoretical model testing and correction**

*5.1 Research design*

The scale of TMT internal social capital is prepared based on the team social capital scale of Jianglin *et al.* (2007) and TMT characteristics. It contains three dimensions and four key elements. Structural social capital includes two key elements – network density and interaction intensity. Relational social capital includes one key element – holistic trust sense of the team. Cognitive social capital includes one key element – shared values. There are totally 16 questionnaire items, three for network density, four for interaction intensity, six for holistic trust sense of the team and three for shared values.

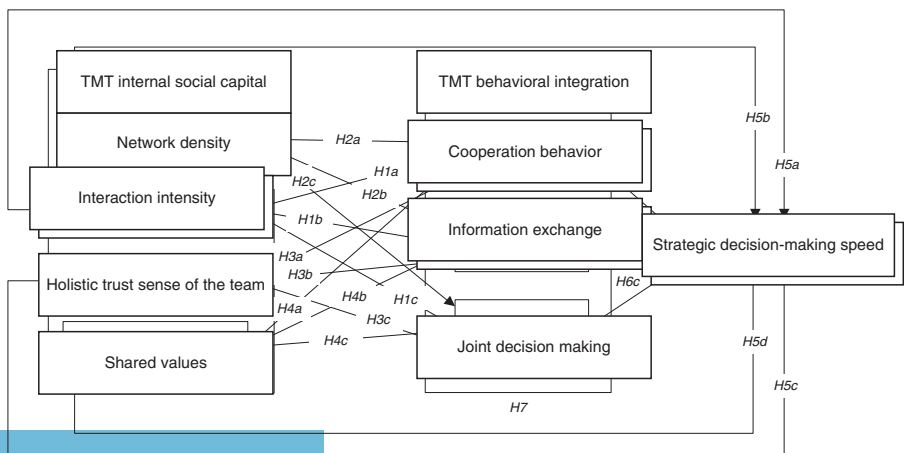
The scale used by Simsek and Veiga (2005) is adopted for TMT behavioral integration. It contains three dimensions – cooperation behavior, information exchange and joint decision making. There are totally nine questionnaire items, three for each dimension.

The scales of Judge and Miller (1991) and Wally and Baum (1994) are referenced for strategic decision-making speed. Five measuring questions are mainly used. Likert scale (five-point) is used to measure the above variables. The respondents are required to make choice (one point for completely disagree to five points for completely agree) based on their feeling of their team.

*5.2 Data selection and collection*

In the actual research in terms of the team, basic requirements on data collection are that at least 50 percent or above members shall participate in the survey (Hiller *et al.*, 2006). In view of great difficulty in collecting TMT samples, it is very difficult for the questioners to get in touch with all team members and get actual data. Thus, when selecting samples for the purpose of this paper, it is specified that the questionnaire will be included in the statistics only when two or more members from the same TMT have participated in the survey. This practice is aimed to improve external validity of sample data.

The research questionnaire issuing and collection take 11 months. On-site answer filling, online issuing and questionnaire mailing are employed. In all, 384 questionnaires are sent out, of which 303 are received. The return rate reaches 79 percent. Of these, 29 questionnaires are nullified due to some reasons such as incomplete filling and serious



**Figure 1.** Model of relationships among TMT internal social capital, TMT behavioral integration and strategic decision-making speed

information missing. Besides, 33 teams which only return one questionnaire are excluded. In the end, 241 effective questionnaires returned by 67 domestic firm TMTs are selected. Effective questionnaires account for 80 percent.

5.3 Data analysis

5.3.1 Data reliability and validity testing. In the research, SPSS 19.0 software is used to conduct the reliability and validity analysis of collected data. Cronbach’s  $\alpha$  is used to analyze the reliability of each measuring indicators, as shown in Table V. Table V shows that  $\alpha$  of key elements of TMT internal social capital, TMT behavioral integration and strategic decision-making speed is above 0.8. This indicates good consistency. In the validity testing, KMO values (measure of sampling adequacy) are used to evaluate data reliability. KMO values of all variables are above standard value, 0.7. This indicates much relevancy between variable dimensions. Scales are subject to validity testing.

5.3.2 Structural equation modeling analysis. Structural equation modeling can predict and test the interaction relationships between multiple independent or dependent variables at the same time. AMOS 17.0 software is used for structural equation modeling to analyze the relation structure of latent variables so as to further validate the research hypothesis. The final model testing results show that all standardized path coefficients between observed indicators and latent variables are above 0.6. This means that correlation validity is relatively good and the fitting indicators of the models meet relevant requirements. Many times of correction and comparison of initial models lead to good fit of final models, as shown in Table II. As the model contains eight variables and 30 measurement items, it is relatively difficult to achieve a relatively high fit. So, the case that partial indicators fail to meet the standard (0.9) is acceptable (Bentler and Chou, 1987) (Table VI).

Structural equation modeling is used to test the action mechanism of TMT internal social capital and strategic decision-making speed. The final structural model is shown in Figure 2. Except for H2a, H5a, H5b and H5c, all other hypotheses pass the testing.

Item	Cronbach’s $\alpha$	KMO value	Item	Cronbach’s $\alpha$	KMO value
TMT internal social capital		0.896	TMT behavioral integration		0.829
Interaction intensity	0.903		Cooperation behavior	0.864	
Network density	0.825		Information exchange	0.855	
Holistic trust sense of the team	0.852		Joint decision making	0.857	
Shared values	0.820		Strategic decision-making speed	0.867	0.862

**Table V.** Variable reliability and validity analysis result

Fit index	$\chi^2/df$	RMSEA	GFI	AGFI	CFI	NFI
Value	1.245	0.032	0.887	0.862	0.978	0.900

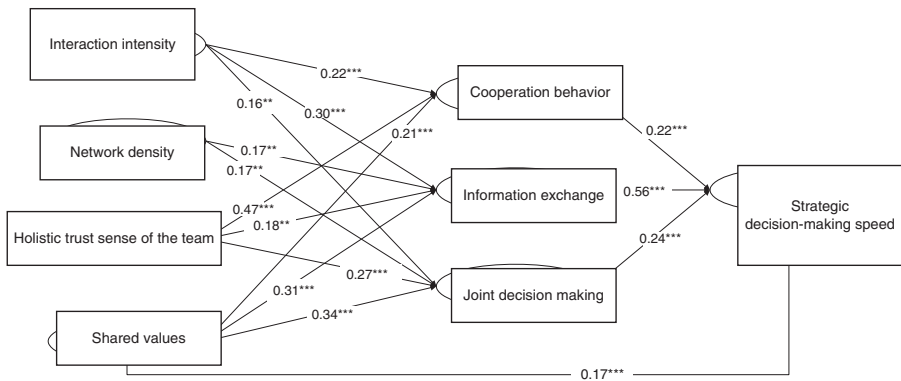
**Table VI.** Structural equation modeling fitting result

**6. Research conclusions and discussions**

*6.1 TMT internal social capital and TMT behavior integration*

The research shows that three key elements (interaction intensity, holistic trust sense of the team and shared values) of TMT internal social capital act as a positive predictor for three dimensions of TMT behavioral integration. So the following assumptions are established: *H1a*: there is a significant positive correlation between TMT internal interaction intensity and cooperation behavior. *H1b*: there is a significant positive correlation between TMT internal interaction intensity and information exchange. *H1c*: there is a significant positive correlation between TMT internal interaction intensity and joint decision making. *H3a*: there is a significant positive correlation between holistic trust sense of internal TMT team and cooperation behavior. *H3b*: there is a significant positive correlation between holistic trust sense of internal TMT team and information exchange. *H3c*: there is a significant positive correlation between holistic trust sense of internal TMT team and joint decision making. *H4a*: there is a significant positive correlation between TMT internal shared values and cooperation behavior. *H4b*: there is a significant positive correlation between TMT internal shared values and information exchange. *H4c*: there is a significant positive correlation between TMT internal shared values and joint decision making. High interaction intensity can reduce emotional conflicts, reasonably induces positive effect of cognitive conflicts and improve the team's action efficiency. Mutual trust of the team members can reduce protection inclination for knowledge, resources and the like, and intensify willingness to provide more valuable knowledge resources for knowledge sharing. High-level trust facilitates forming the team synergy effects and improving the team performance (Lingjiang *et al.*, 2012; Ghilic-Micu and Stoica, 2003; Joshi *et al.*, 2009). High agreement on values facilitates the team members to create a good communication and collaboration atmosphere, where a consensus is reached on the team and decision goals and consistent actions are taken.

The difference from original hypothesis is that network density of TMT members gets involved in the team behavioral integration by promoting the members' information exchange and decision making and has insignificant relationships with TMT cooperation behavior. So we draw the following conclusion: *H2a*: there is not a significant positive correlation between TMT internal network density and cooperation behavior. *H2b*: there is a no significant positive correlation between TMT internal network density and information exchange. *H2c*: there is not any significant positive correlation between



**Figure 2.** Structural equation model of the relationship between TMT internal social capital and strategic decision-making speed with TMT behavioral integration as the intermediary

Notes: \*\*\*, \*\*Significant at <0.01 and <0.05 levels, respectively



TMT internal network intensity and joint decision making. The possible explanation based on TMT demographical features is that TMT members have more diversified knowledge structures and professional background. This kind of complementary team composition further deepens function division and power allocation of members. So, TMT members are more independent in fulfilling their duties. This weakens the positive relationship between network density and TMT cooperation behavior. Furthermore, the limitations on sample quantity may also influence the relationship between network density and cooperation behavior of TMT members.

### *6.2 TMT internal social capital and TMT strategic decision-making speed*

Three dimensions of TMT behavioral integration acts as a positive predictor for strategic decision-making speed. Namely the following conclusions are established. *H5a*: TMT internal interaction intensity has a significant impact on the speed of strategic decision making. *H5b*: TMT internal network density has a significant impact on the speed of strategic decision making. *H5c*: holistic trust sense of TMT internal team has a significant impact on the speed of strategic decision making. *H5d*: TMT internal shared values have a significant impact on the speed of strategic decision making. From the structural equation model of Figure 2, we can find that the four elements of TMT internal social capital have different effects on the speed of strategic decision making. Among them, the impact of shared values on strategic decision-making speed is far greater than other factors. That is to say, the cognitive social capital plays a more important role in the process of improving the strategic decision-making speed compared with the structural and relational social capital. Shared values measure the common understanding and consensus of TMT members on the goal. Li (2008) concluded that shared vision and goals among decision makers can promote information sharing and improve the quality of information exchange in the decision-making process. Previous studies have also found that the timely acquisition of high-quality information is one of the important factors of rapid strategic decisions (Eisenhardt, 1989). On the other hand, shared vision and goals mean that the common cognition, cooperation intention and action consistency between TMT members will reduce the conflict and cognitive differences, so as to speed up the process of strategic decision making.

### *6.3 TMT behavior integration and TMT strategic decision-making speed*

Three dimensions of TMT behavioral integration act as a positive predictor for strategic decision-making speed. So the following assumptions are established: *H6a*: There is a significant positive correlation between TMT cooperation behavior and strategic decision-making speed. *H6b*: There is a significant positive correlation between TMT information exchange and strategic decision-making speed. *H6c*: There is a significant positive correlation between TMT joint decision making and strategic decision-making speed, which is consistent with the results of the research conducted by Gu and Xie (2009) on the relationship between TMT behavioral integration and strategic decision-making speed. Their research shows that TMT members can quickly reach a consensus through rapid decision-making information collection, integration and processing as well as high-efficiency discussions, so as to reduce the decision-making time. The research results further show that the factor load of information exchange to strategic decision-making speed is as high as 0.56. Compared with cooperation behavior and decision-making participation behavior, the level of information exchange among TMT members has a greater influence on strategic

decision-making speed. Like the research by Eisenhardt (1989), instant information obtained more by the firm TMT members for strategic decision making is one of five major factors that influence the decision-making speed. The goal of fast strategic decision making cannot be achieved without cooperation behavior of TMT members and their mutual support and dependence in the decision-making process.

#### *6.4 TMT internal social capital, TMT behavior integration and TMT strategic decision-making speed*

TMT behavioral integration acts as an intermediary for the relationship between TMT internal social capital and strategic decision-making speed. *H7* is established: TMT behavioral integration acts as the intermediary between TMT internal social capital and strategic decision-making speed. TMT behavioral integration acts as partial intermediary between cognitive social capital and strategic decision-making speed. Reasonable explanations for the presence of partial intermediaries is that the influence process of TMT internal social capital on strategic decision-making speed is a complicated and dynamic mechanism and it also exerts indirect influence by other means in addition to the action of behavioral integration mechanism. This merits further exploration.

### **7. Implications from a Chinese management perspective**

In the research, the social capital and upper echelons theories are combined to probe into the application of social capital concept in TMT and study the factors that influence strategic decision-making speed from a fresh perspective. The research results provide the following enlightenments for TMT management of domestic firms.

First, TMT internal social capital, as the tie and impetus for transforming external resources, is endogenous, unique and inimitable. TMT internal social capital is the result of spirit, emotion and other resources invested by TMT members during working together for a long time. Thus, long-time intercourse is a must for forming the features that promote mutual close cooperation and are difficult to be observed, imitated and measured, such as norms, trust, cognition and exchange mode. Hence, the firm management shall realize that fostering TMT internal social capital is a long process of investment and accumulation.

Second, with regard to strengthening structural and relational dimensions of TMT internal social capital, a set of reasonable and efficient communication mechanism shall be established among TMT members, which stresses the importance of unofficial communication and guarantees timely transfer and sharing of strategic information. Specifically, regular meeting system, afternoon tea meeting, etc., can be made to increase the intensity and frequency of communication among the TMT members and can foster trust relationship and team collaboration ability. With regard to strengthening cognitive dimension of TMT internal social capital, the firm management shall give special emphasis to corporate culture fostering in TMT. In most cases, many domestic small- and medium-sized firms equate corporate culture with entrepreneur or leader (CEO) culture, which prejudices the fostering of cultural perception and inherent identification of other TMT members. Therefore, the firms shall reasonably design corporate cultures and make strengthening cultural identification of TMT members and fostering collective values and shared visions a long-time work.

Third, the firm shall guard against the formation of "small circles" with political motives while strengthening unofficial and trust relationships of TMT. Once internal political clique of TMT is formed, it will bring massive devastation to the

decision-making process and results. So, the firms can establish scientific and reasonable decision-making management mechanisms and systems. Meanwhile, the TMT remuneration and welfare systems shall be improved continuously to enhance their organizational justice sense and the degree of satisfaction toward work, so as to avoid the negative effect caused by internal political activity.

Finally, TMT behavioral integration based on high-level trust/interaction and shared values is more effective. In particular, trust and open relationship environment is more needed for information sharing among the team members. Formation of TMT internal social capital exactly provides the condition for enhancing behavioral integration. So, the creation of more “open, shared and transparent” exchange opportunities within the firms for TMT members helps attain the team goals and improve decision-making efficiency.

### 8. Research limitation and prospects

By starting with the dynamic variable – behavioral integration affiliated to team operation process – the research discovers that TMT behavioral integration can be used to explain the action mechanism between TMT internal social capital and strategic decision-making speed, so as to provide a new pathway for researching how TMT social capital influences strategic decision-making process and effectiveness. However, the following deficiencies still exist. First, during the data analysis of the research, the influence of diversity factors such as firm nature and industry background is not explored. Second, in the research, the action of TMT external social capital is neglected. Current research cannot give explanations regarding whether TMT internal social capital acts as a “bridge” between TMT external social capital and strategic decision-making process/effectiveness, and what are the differences between the effects of TMT internal and external social capital on strategic decision making. Third, the research conclusions are still at preliminary theoretical stage. Theoretical models need to be improved. How to effectively combine the theories (such as team’s social capital, strategic management of firms and human resources management) and continuous enriching and deepening of existing theoretical results on strategic decision making will dominate future researches, which are of great significance.

### Acknowledgment

This work was supported by the philosophy social sciences fund of Zhejiang Province of China (Project No. 16NDJC028Z), philosophy social sciences fund of Zhejiang Province of China (Project No. 13NDJC047YB), soft science program of Zhejiang Province of China (Project No. 2015C35005) and by Zhejiang Provincial Natural Science Foundation Project of China “Study on the influence mechanism of an failure attribution affecting the customer misbehavior under situations of service failure”(Project No. LY17G020015).

### References

- Adler, P.S. and Kwon, S. (2002), “Social capital: prospects for a new concept”, *The Academy of Management Review*, Vol. 27 No. 1, pp. 17-40.
- Avichai, S.A. (2012), “Speed-marketing: a new strategy for fast decision-making”, *Advances in Management*, Vol. 5 No. 11, pp. 4-11.
- Bentler, P.M. and Chou, C.P. (1987), “Practical issues in structural modeling”, *Sociological Methods & Research*, Vol. 16 No. 1, pp. 78-117.

- Bian, Y. and Qiu, H. (2000), "Corporate social capital and its efficacy", *Social Sciences in China*, No. 2, pp. 87-99.
- Brown, A. and Starkey, K. (1994), "The effect of organizational culture on communication and information", *Journal of Management Studies*, Vol. 31 No. 6, pp. 807-828.
- Carmeli, A. and Schaubroeck, J. (2006), "Top management team behavioral integration, decision quality, and organizational decline", *The Leadership Quarterly*, Vol. 17 No. 5, pp. 441-453.
- Collins, J.D. and Hitt, M.A. (2006), "Leveraging tacit knowledge in alliances: the importance of using relational capabilities to build and leverage relational capital", *Journal of Engineering and Technology Management*, Vol. 23 No. 3, pp. 147-167.
- Coviello, N.E. and Munro, H.J. (1995), "Growing the entrepreneurial firm: networking for international market development", *European Journal of Marketing*, Vol. 29 No. 7, pp. 49-61.
- Eisenhardt, K.M. (1989), "Making fast strategic decisions in high-velocity environments", *Academy of Management Journal*, Vol. 32 No. 3, pp. 543-576.
- Ghilic-Micu, B. and Stoica, M. (2003), "Trust and fear in the virtual organization", *Economy Informatics*, Vol. 3 No. 24, pp. 16-20.
- Gu, J. and Wang, X. (2013), "Research review and prospect of fast strategic decision making of firms", *Science Research Management*, Vol. 34 No. 12, pp. 153-160.
- Gu, J.J. and Xie, F.H. (2009), "Research on the top management team behavioral integration, strategic decision speed and firm performance towards time-based competition[C]", *International Conference on Information Management, Innovation Management and Industrial Engineering, Xi'an, China IEEE Computer Society, December 26-27*.
- Hambrick, D.C. (1994), "Top management groups: a conceptual integration and reconsideration of the 'team' label", *Research in Organizational Behavior*, Vol. 16, pp. 171-213.
- Hambrick, D.C. and Mason, P.A. (1984), "Upper Echelons: the organization as a reflection of its top managers", *Academy of Management Review*, Vol. 9 No. 2, pp. 193-206.
- Hambrick, D.C., Cho, T.S. and Chen, M. (1996), "The influence of top management team heterogeneity on firm's competitive moves", *Administrative Science Quarterly*, Vol. 41 No. 4, pp. 658-684.
- Hiller, N.J., Day, D.V. and Vance, R.J. (2006), "Collective enactment of leadership roles and team effectiveness: a field study", *The Leadership Quarterly*, Vol. 17 No. 4, pp. 387-397.
- Jehn, K.A. and Bendersky, C. (2003), "Intragroup conflict in organizations: a contingency perspective on the conflict outcome relationship", *Research in Organizational Behavior*, Vol. 25, pp. 187-242.
- Jianglin, K., Shitao, J. and Jianmin, S. (2007), "Research on team social capital dimension development and structure testing", *Studies in Science of Science*, No. 5, pp. 935-940.
- Jipeng, Q. (2013), "Research on influence of TMT social capital on merger and acquisition performance", *China's Prices*, No. 2, pp. 85-87.
- Joshi, A., Lazarova, M.B. and Liao, H. (2009), "Getting everyone on board: the role of inspirational leadership in geographically dispersed teams", *Organization Science*, Vol. 20 No. 1, pp. 240-252.
- Judge, W.Q. and Miller, A. (1991), "Antecedents and outcomes of decision speed in different environmental contexts", *Academy of Management Journal*, Vol. 34 No. 2, pp. 449-463.
- Kang, S.C., Morris, S.S. and Snell, S.A. (2003), "Extending the human resource architecture: relational archetypes and value creation", CAHRS Working Paper #03-13, Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies, Ithaca, NY.
- Kim, W.C. and Mauborgne, R.A. (1996), "Procedural justice and managers' in-role and extra-role behavior: the case of the multinational", *Management Science*, Vol. 42 No. 4, pp. 499-515.

- Kim, Y. and Cannella, A.A. (2008), "Toward a social capital theory of director selection", *Corporate Governance: An International Review*, Vol. 16 No. 4, pp. 282-293.
- Li, C.-R. (2013), "How top management team diversity fosters organizational ambidexterity: the role of social capital among top executives", *Journal of Organizational Change Management*, Vol. 26 No. 5, pp. 874-896.
- Li, W. (2008), "The relationship between TMT's social capital and decision quality", *Journal of Shanxi Finance and Economics University*, Vol. 30 No. 9, pp. 83-88.
- Lingjiang, D., Wan, X. and Li, H. (2012), "Research on relationships between team social capital, knowledge sharing behavior and team efficacy", *Statistics and Decision*, No. 20, pp. 119-121.
- Lubatkin, M.H., Simsek, Z., Ling, Y., et al. (2006), "Ambidexterity and performance in small-to medium-sized firm: the pivotal role of top management team behavioral integration", *Journal of Management*, Vol. 32 No. 5, pp. 646-672.
- Mooney, A.C. and Sonnenfeld, J. (2001), "Exploring antecedents to conflict during strategic decision making: the importance of behavioral integration", paper presented in the Academy of Management Meeting, BPS Division.
- Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital, and the organizational advantage", *The Academy of Management Review*, Vol. 23 No. 2, pp. 242-266.
- Oh, H. and Labianca, G.J. (2006), "A multilevel model of group social capital", *Academy of Management Review*, Vol. 31 No. 3, pp. 569-582.
- Oh, H., Chung, M. and Labianca, G. (2004), "Group social capital and group effectiveness: the role of informal socializing ties", *Academy of Management Journal*, Vol. 47 No. 6, pp. 860-875.
- Pitcher, P. and Smith, A.D. (2001), "Top management team heterogeneity: personality, power, and proxie", *Organization Science*, Vol. 12 No. 1, pp. 1-18.
- Qian, S. and Yu, H. (2008), "Empirical research on the relationship between corporate TMT social capital and corporate performance [C]", *Collected Papers of the 3rd (2008) Annual Conference of China's Management, China Chinese Research Council of Modern Management (Chinese Research Council of Modern Management), Changsha, November 1-2*.
- Rajagopalan, N., Rasheed, A.M.A. and Datta, D.K. (1993), "Strategic decision processes: critical review and future directions", *Journal of Management*, Vol. 19 No. 2, pp. 349-384.
- Ravisi, D. and Schultz, M. (2006), "Responding to organizational identity threats: exploring the role of organizational culture", *Academy of Management Journal*, Vol. 49 No. 3, pp. 433-458.
- Richter, A. and Schmidt, S.L. (2005), "How does strategy process influence strategy content? Antecedents of consistency between resource allocation decisions and corporate strategy", *Schmalenbach Business Review*, Vol. 57 No. 4, pp. 332-350.
- Shipilov, A. and Danis, I.W. (2006), "TMG social capital, strategic choice and firm performance", *European Management Journal*, Vol. 24 No. 1, pp. 16-27.
- Simsek, Z. and Veiga, J.F. (2005), "Modeling the multilevel determinants of top management team behavioral integration", *Academy of Management Journal*, Vol. 48 No. 1, pp. 69-84.
- Suarez, F.F. and Lanzolla, G. (2007), "The role of environmental dynamics in building a first mover advantage", *Academy of Management Review*, Vol. 32 No. 2, pp. 377-392.
- Wally, S. and Baum, J.R. (1994), "Personal and structural determinants of the pace of strategic decision making", *Academy of Management Journal*, Vol. 37 No. 4, pp. 932-956.
- Young, C.S. (2005), "Top management teams' social capital in Taiwan: the impact on firm value in an emerging economy", *Journal of Intellectual Capital*, Vol. 6 No. 2, pp. 177-190.
- Zhang, Y., Yang, J. and Ren, B. (2008), "Social capital, previous experience and business startup – one interaction effect model and its enlightenment", *Management World*, No. 7, pp. 91-102.

- 
- Zhang, J. (2010), *TMT Demographic Characteristics: Social Capital and Firm Performance [D]*, School of Management, Huazhong University of Science & Technology, Wuhan.
- Zhenhua, Y. and Haifa, S. (2009), "The construction and measurement of top management team behavioral integration", *Journal of Business Economics*, Vol. 218 No. 12, pp. 28-36.
- Zhou, X. (2006), "Overview of research on internationalization strategy of small and medium-sized firms based on socialcapital theory", *Foreign Economics & Management*, Vol. 28 No. 5, pp. 17-22.

**Corresponding author**

Fenghua Xie can be contacted at: [xfh402@163.com](mailto:xfh402@163.com)

---

For instructions on how to order reprints of this article, please visit our website:

[www.emeraldgroupublishing.com/licensing/reprints.htm](http://www.emeraldgroupublishing.com/licensing/reprints.htm)

Or contact us for further details: [permissions@emeraldinsight.com](mailto:permissions@emeraldinsight.com)



Reproduced with permission of copyright owner. Further reproduction prohibited without permission.