

# When does Improvisational Capability Matter to International Entrepreneurship? The Contingent Role of Home-Based Network Ties and the Boundary Condition of Competitive Turbulence\*

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## Abstract

**Purpose** – As a higher-order ability, improvisational capability is often employed to help a firm cope with unexpected or unanticipated issues. In light of the severe global business challenges and turbulent environmental changes, this study aimed to explore whether home-based network ties could shape the influence of improvisational capability on international entrepreneurship, alongside investigating the boundary conditions of competitive turbulence in their moderating effects.

**Design/methodology** – The sample for the international entrepreneurship sector was obtained from the Industry and Information Technology Department of Jiangsu. In September 2021, the questionnaires were sent to the targeted ventures and required the top managers to complete the survey by e-mail or telephone. The final research sample comprised 113 international new ventures. To test the hypotheses, moderated hierarchical regression analysis was conducted.

**Findings** – Our empirical results suggested that (1) unlike some previous literature, a positive effect of improvisational capability on the performance of international new ventures was not found; (2) home country-based networks (both political ties and business ties) are contingent factors that may partially stimulate the value creation of improvisational capability; and (3) in a highly competitive environment, the moderating role of business ties at home may become much stronger, however, the contingent role of political ties at home was not found.

**Originality/value** – This study mainly concentrates on the two important types of home country-based networks, political and business ties at home, that may help international new ventures access strategic resources necessary for supporting the performance implications of improvisational capability. Thus, it extends the existing improvisational theory to encompass international entrepreneurship.

**Keywords:** Competitive Turbulence, Emerging Economies, Home-based Network Ties, Improvisational Capability, International Entrepreneurship

**JEL Classifications:** F20, M16, M31

## 1. Introduction

Recently, information and communication technologies (ICT) are changing the way firms

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do international business. For instance, it can overcome geographical boundaries and time limitations between firms and customers by conducting cross-border business activities online (Gregory et al., 2019; Tseng et al., 2015). As a result of the combination of business activities with ICT in the global market, international new ventures may much effectively realize strategic objectives such as developing cutting-edge technologies, increasing market share, improving return on investment, obtaining location advantage, or enhancing organizational learning (Oxley and Yeung, 2001; Prashantham et al., 2019). Thus, international entrepreneurship is gaining worldwide attention from market practices and scientific research in recent years. Compared to domestic business, international entrepreneurship is more likely to face high environmental turbulence because of production logistics, demand uncertainty, market unfamiliarity, information asymmetry, and legitimacy insufficiency. Hence, it implies an urgent necessity for developing suitable firm-level capabilities (Bridoux et al., 2017). Recent literature in strategic entrepreneurship has proven that both operational and dynamic capabilities cannot keep a firm hold on strategic competitiveness and create a positive outcome in such a highly turbulent environment (Vera et al., 2016). Operational capability, as a zero-level ability, enables a firm to survive in a stable business environment by utilizing its existing resource base. Dynamic capability is defined as the first-order firm ability that can optimize the resource base, integrate internal and external resources, and reconfigure operational capability in a moderately changing business environment (Winter, 2003). The higher the environmental uncertainty international new ventures face, the higher the possibility is of established strategic plan feasibility decreasing. Simply following established strategic plans or solely relying on zero-level or first-order abilities will impede new international ventures from effectively dealing with unexpected events in real time. To survive and grow in an environmental storm, firms should develop “improvisational capability”, a higher-order ability, to help increase strategic flexibility and adaptability by making new plans or conducting innovative approaches rapidly (Vera et al., 2016). This would help improve the success rate in response to international environment uncertainty. Unfortunately, while some research focuses increasingly on improvisational capability both in large or small and medium firms, few studies have analyzed the effect of improvisational capability on international entrepreneurship (Brouthers et al., 2016). It leaves an obvious theoretical gap on whether improvisational capability is an antecedent necessary for international new ventures to generate superior performance in an unfamiliar international market.

To develop a deeper understanding of the role of improvisational capability in international entrepreneurship, it is necessary to further explore the contingent factors that may alter its value (Hughes et al., 2020). This is because prior works under the context of varied business types (e.g., entrepreneurial ventures, established enterprises, and family business) have found equivocal results regarding the role of improvisational capability in business performance (Hmieleski et al., 2013). While some studies have strongly suggested that firms should build on improvisational capability to deal with environmental storms, others have often argued that simply developing this capability may not always lead to positive performance (Adomako et al., 2018; Du et al., 2019; Hmieleski et al., 2013; Kyriakopoulos, 2011). Gross' (2014) research found that this capability can become effective if firms obtain strategic resource support. Hence, one possible explanation for contradictory results is whether the exercise of improvisational behavior was supported by strategic resources (Hmieleski et al., 2013; Kyriakopoulos, 2011; Liu et al., 2018; Pavlou and El Sawy, 2010). Following this logic, our study infers that the relationship between improvisational capability and the performance of

international new ventures may be contingent on social networks. This might be particularly crucial for such ventures to be able to access strategic resources in the form of valuable business knowledge, international information, and critical market opportunities (Li et al., 2019; Pinho and Prange, 2016). Moreover, the traditional view often suggests that building networks with host country partners may be one alternative choice for international firms to overcome resource constraints (Rydehell et al., 2019; Sheng et al., 2011). However, international new ventures are young firms and often unfamiliar with host country partners or local customers, implying that it is very difficult to obtain resource support from host country networks. Vicariously, home country-based networks may become possible routines for international new ventures to enrich resource bases (Boehe, 2013; Prashantham et al., 2019). Precisely speaking, this study mainly concentrates on the two important types of home country-based networks, political and business ties at home, that may help new international ventures access strategic resources necessary for supporting the performance implications of improvisational capability (Rydehell et al., 2019; Zhang et al., 2016). First, political ties at home imply that institutional connections can help international new ventures obtain necessary important institutional resources (e.g., guideline in international business, critical regulatory information, and cross-border difference information) from the government and officials. Particularly, institutional connections in the home country are very important for international new ventures from emerging economies. Firms with good ties with their home country government or officials are more likely to be trusted by the international market (Prashantham et al., 2019), thus building organizational legitimacy and obtaining industrial division more quickly. Second, business ties at home may provide important business knowledge or experience for international new ventures, such that business partners at home that have gone global may help to understand what kind of technologies, products, or services would be better accepted by the international market (Alcácer et al., 2016). Accordingly, we hypothesized that both political ties and business ties at home can impact the utilization of improvisational capability, thus influencing the performance creation of international entrepreneurship. In addition, considering that one critical driver of uncertainty in international entrepreneurship is competition, we also attempted to examine the boundary role of competitive turbulence in the proposed moderating effects of political ties and business ties at home on improvisational capability and performance outcome link. In sum, our study may contribute to the knowledge of international entrepreneurship by exploring the contingent effects of home country-based networks and the boundary condition of competitive turbulence on the value of improvisational capability.

The rest of this paper is structured as follows. Section 2 derives the research hypotheses based on theoretical analysis and literature review. Section 3 describes the research methods, such as sample, data collection, and variables measurement. Section 4 shows the empirical results. Finally, Section 5 summarizes the research findings, theoretical contributions, managerial implications, and limitations, and further provides some directions for future research.

## **2. Literature Review and Hypotheses Development**

### **2.1. Improvisational Capability and International Entrepreneurship**

Besides the dual liability of newness and foreignness, the development and diffusion of ICT also increases time pressure significantly and severe business challenges for international

entrepreneurship to make strategic decisions and implement relevant behaviors (Tseng et al., 2005). In this respect, international new ventures cannot make thoughtful and considerate plans for complicated and unanticipated business activities. Previous literature argued that improvisational capability was particularly crucial for generating innovative solutions to overcome difficulties or problems in a new environment with the characteristics of uncertainty and unpredictability in real time (Gross, 2014). This implies that improvisation presents two typical features: creativity and spontaneity (Vera et al., 2016). In this sense, we conceptualized that improvisational capability of international entrepreneurship is perceived as the ability of international new ventures to create strategic new plans to deal with unanticipated events or unexpected problems by conducting new approaches or ideas in the moment during cross-border business (Adomako et al., 2018; Stoermer et al., 2020).

Although some common problems can be successfully solved by utilizing existing knowledge, unknown problems alongside various opportunities or threats may need to be addressed by international new ventures in real time (Gross, 2014). In detail, a slow response to fleeting opportunities or severe threats would induce a high possibility of entrepreneurial failure. That is to say, under rapidly changing conditions and time pressure, new international ventures have no other choice but to adopt immediate responding behaviors for succeeding and growing in an unfamiliar international business environment. In other words, making immediate decisions and executions on order processing, product delivery, complaint handling, problem solving, and dispute resolution may help overcome customer pain points in real time and facilitate a positive business experience, further increasing customer satisfaction in international business (Tseng et al., 2005). Hence, building improvisational capability to “extemporaneously create and execute strategic new plans” is important for overcoming such unknown problems (Adomako et al., 2018). It further enables international new ventures to generate better performance. In this regard, we propose that:

H<sub>1</sub>: Improvisational capability has a general effect on the performance of new international ventures.

## 2.2. The Moderating Effects of Home Country-Based Networks

Previous literature argued that improvisational behavior without the support of strategic resources may lead to confused and disorderly decisions or actions (Du et al., 2019), implying that improvisational capability “is not inherently good or bad” for an organization (Hughes et al., 2020). Hence, a method to conduct effective improvisation should be clearly explored to help develop a better understanding of the nature and role of improvisational capability. A resource-based view suggests that better performance implications of firm capabilities requires the support of strategic resources (Bridoux et al., 2017). Accordingly, it is believed that international new ventures should enrich their resource bases to successfully improvise in an environmental storm.

According to the institutional theory, support from the home country government and officials is very necessary for international entrepreneurship, particularly for enterprises emerging from countries like China (Kiss et al., 2012; Oxley and Yeung, 2001). It is widely recognized that the Chinese government still plays a critical role in dominating resource allocation through its power in economic and political mechanisms, thus helping new international ventures gain legitimacy (Gu and Su, 2018). For instance, “the Silk Road Economic Belt and the 21<sup>st</sup>-Century Maritime Silk Road” initiative issued by the Chinese

government has provided institutional support (e.g., overseas investment guideline, international market consulting service, host country law service, and regulatory resources) for firms competing in the global market (Du and Zhang, 2018). In the case of international entrepreneurship, the Chinese government has a “strong power” to regulate industry development by enacting a series of relevant policies or directly providing financial support. Accordingly, we argue that political ties at home may enable new Chinese ventures to access low-cost regulatory resources and establish legitimacy rapidly (Zhang et al., 2016).

Considering that international new ventures might be confronted with many institutional uncertainties, they may also need institutional support for effective improvisational behaviors, such as unexpected problem solving and generating new strategic plans. Without minimal institutional support from political ties at home, improvising behavior is likely to be blind or deviant, leading to a decision failure and performance reduction (Mou et al., 2019; Hmieleski et al., 2013). Conversely, a high-level of institutional support may provide useful political information for international new ventures, making improvisational behaviors effective in improving international performance (Adomako et al., 2018). In this regard, we propose that:

H<sub>2a</sub>: The relationship between improvisational capability and the performance of new international ventures will be moderated by political ties at home, such that the relationship will become more positive as these political ties become stronger.

Home country-based business ties might also influence a focal firm’s business behavior and decision (Mou et al., 2019). For instance, if business partners at home participate in international business successfully, the focal firm will imitate peers and enter the international market for industrial division benefit (Li and Parboteeah, 2015). Moreover, business peers from the same home country may be a valuable benchmark for international new ventures to rapidly build legitimacy and effectively deal with uncertainty by conducting improvisational capability. Additionally, stronger business ties with home country partners often imply a higher social reputation and advantageous network position, which allows focal firms to build a trusted partnership with international market practitioners (Rydehell et al., 2019). Accordingly, international new ventures may have a better understanding of product market information, overseas customer demand, and global competitor strategies to effectively improvise in international business. For instance, business ties at home can help international new ventures have an adequate understanding of the kind of product or service they should provide to international customers through learning from home country peer international experiences (Kyriakopoulos, 2011), thus enhancing the positive effect of these ventures’ improvisational behaviors on performance (Zhang et al., 2016). Thus, we suggested that resource support from business networks in the home country was particularly important when international new ventures improvised in the international business environment to deal with uncertainties, especially uncertainties regarding business. In this regard, we propose that:

H<sub>2b</sub>: The relationship between improvisational capability and the performance of new international ventures will be moderated by business ties at home, such that the relationship will become more positive as the business ties at home become stronger.

### 2.3. The Joint Effects of Improvisational Capability, Home Country-Based Networks, and Competitive Turbulence in International Entrepreneurship

In a stable or dynamic environment, international new ventures mainly rely on operational or dynamic capability to maintain strategic competitiveness and realize sustainable development (Pavlou and El Sawy, 2010). However, in a highly turbulent competitive environment characterized by complexity and uncertainty, alongside various opportunities or threats, both operational and dynamic capabilities may cease effectiveness on international entrepreneurship. Instead, previous literature has found that improvisation may become more valuable “under unpredictable conditions and time pressure” (Hughes et al., 2020; Pavlou and El Sawy, 2010). Accordingly, international new ventures should increase improvisational capability to deal with various unexpected problems or unanticipated difficulties during cross-border business. In the case of international entrepreneurship, the China-USA conflict, trade friction, import or export restrictions, and even the current COVID-19 pandemic, have increased competitive turbulence and business complexity. One typical phenomenon is that many countries have required Chinese products to provide a free COVID-19 license for domestic market entry. In this sense, obtaining political or business resources from their home country may serve better for supporting the improvisational behavior of new Chinese ventures to deal with various unanticipated events.

First, a high-level of competitive turbulence often implies rapid changes in the institutional environment or political regulations. Currently, political ties at home have enabled international new ventures to access first-hand institutional information to have a better understanding of the institutional changes, thus underpinning the performance implications of improvisational capability by enhancing innovativeness (Vera et al., 2016). On the contrary, if the competition environment is not fierce, international new ventures may primarily employ operational or dynamic capabilities to drive performance creation, and will not need to conduct improvisational behaviors (Winter, 2003). Following this logic, the moderating role of political ties in the performance implication of improvisational capability will be stronger in the highly competitive environment, compared to a stable environment. In this regard, we propose that:

H<sub>3a</sub>: The moderating effect of political ties at home on the relationship between improvisational capability and the performance of new international ventures will be further bounded by competitive turbulence in such a way that the moderating effect will be stronger for a high-level of turbulence than low-level turbulence.

Second, a high-level of environmental turbulence also induces rapid changes in market mechanisms, business rules, and customer needs (Chen et al., 2018; Danneels and Sethi, 2011). As a result, customers become more price sensitive and customer preferences also become more difficult to predict (Pratono and Mahmood, 2015). At this moment, new international ventures need stronger connections with home country-based business networks to accumulate significant market knowledge to improvise in such an environment for better performance outcomes. This is because business ties at home allow international new ventures to make immediate and effective market responses to rapid changes of the international business environment using entrepreneurial improvisation. In this regard, we propose that:

H<sub>3b</sub>: The moderating effect of business ties at home on the relationship between improvisational capability and performance of international new ventures will be further bounded by competitive turbulence in such a way that the moderating effect will be stronger for high-level turbulence than low-level turbulence.

### 3. Research Method

#### 3.1. The Sample and Data Collection

China provides a proper setting for our research due to the following considerations. First, in the past decades, China has realized dramatic success in terms of international entrepreneurship, alongside rapid ICT development and economic globalization (Mou et al., 2019). Second, international new ventures often need to face a dual liability of newness and foreignness that conceals many threats or uncertainty, implying that formal planning may cease to be effective and entrepreneurs should improvise to address unexpected events or novel business environments. Hence, investigating international new venture improvisational capability in China offers an important emerging economy perspective in enhancing the understanding of how international entrepreneurship can deal with an environmental storm more effectively.

To collect original data for testing the hypotheses proposed in Section 2, a questionnaire was developed. First, we discussed new international venture improvisational capability, including conceptualization and measurement by reviewing previous literature. Second, to avoid potential cultural bias and to make our measurements fit the Chinese international entrepreneurship context, two scholars and four entrepreneurs were invited to help review the original questionnaire and revise problematic items.

The sample for the international entrepreneurship sector was obtained from the Industry and Information Technology Department of Jiangsu, which has strong connections with the international market, and its entrepreneurship is very active. We randomly selected 300 international new ventures that were launched within 7 years as targeted samples (Gu and Su, 2018). In September 2021, the questionnaires were sent to the targeted ventures and required top managers to complete the survey by e-mail or telephone. After several rounds of telephone, e-mail, and personal connections, 119 international new ventures participated in our survey. The final research sample comprised 113 international new ventures (a 37.667% response rate) after excluding 6 invalid questionnaires with contradictory answers or missing data.

#### 3.2. Variable Measurement

All perceptual items were measured using a 5-point Likert scale, with responses ranging from “strongly disagree (1)” to “strongly agree (5)”.

##### 3.2.1. *International Performance*

To measure whether and how improvisational capability and home country-based network ties influenced the performance of international new ventures, this study followed a three-item scale worked out by Pinho and Prange (2016). Informants were invited to evaluate their firm’s international performance, including international market sales growth, international

market share growth, and return on international market investment.

### 3.2.2. *Improvisational Capability*

Based on the theoretical analysis in Section 2, Vera et al.'s (2016) items were used to capture the concept of improvisational capability.

### 3.2.3. *Political Ties at Home*

To develop the measurement of political ties at home, this study followed Zhang et al.'s (2016) work, which mapped the relationship between political ties at home and international performance.

### 3.2.4. *Business Ties at Home*

The measurement of business ties at home followed a three-item scale developed in previous literature (Zhang et al., 2016).

### 3.2.5. *Competitive Turbulence*

Competitive turbulence can be defined as the degree of industrial changes or competition intensity. In this study, we followed Hodgkinson et al.'s (2016) four-item scale to capture competitive turbulence.

### 3.2.6. *Control Variable*

This study included several control variables: firm age (measured by the years of establishment), firm size (number of employees), international experience (years of entering international market), and firm ownership (state-owned enterprises were coded as "1", otherwise coded as "0"). Following previous literature on international entrepreneurship, all variables may have potential effects on the performance of international new ventures.

**Table 1.** A Confirmatory Factor Analysis, Standard Estimates, and Alpha Values (N=113)

Variable Constructs and Measurement Items	Standardized Factor Loading
<i>Improvisational Capability</i> (Vera et al., 2016) ( $\alpha=0.787$ ; $CR=0.866$ ; $AVE=0.620$ )	
(1) Our firm tries new approaches for solving problems associated with international business on the spot.	0.712
(2) Our firm thinks on its feet and identifies new opportunities for international business processes.	0.879
(3) Our firm takes risks in terms of producing new ideas in doing international business.	0.862
(4) Our firm demonstrates originality in its international business in real time.	0.675
<i>Political Ties at Home</i> (Zhang et al., 2016)( $\alpha=0.789$ ; $CR=0.792$ ; $AVE=0.563$ )	
(1) Our firm and top managers often concentrate on developing their personal ties, networks, and connections with the government and officials in the home country.	0.789

**Table 1.** (Continued)

Variable Constructs and Measurement Items	Standardized Factor Loading
(2) Our firm and top managers often utilize their personal ties, networks, and connections with officials in industrial bureaus in the home country.	0.830
(3) Our firm and top managers often utilize their personal ties, networks and connections with officials in international business bureaus in the home country.	0.614
<i>Business Ties at Home</i> (Zhang et al., 2016) ( $\alpha=0.948$ ; $CR=0.926$ ; $AVE=0.807$ )	
(1) Our firm and top managers often utilize personal ties, networks, and connections with suppliers in the home country.	0.890
(2) Our firm and top managers often utilize personal ties, networks, and connections with customers in the home country.	0.917
(3) Our firm and top managers often utilize personal ties, networks, and connections with peers in the home country.	0.888
<i>Competitive Turbulence</i> (Hodgkinson et al., 2016) ( $\alpha=0.877$ ; $CR=0.927$ ; $AVE=0.809$ )	
(1) Price competition in our industry is cut-throat.	0.929
(2) There are many “promotion wars” in our industry.	0.828
(3) Our industry is changing almost every day.	0.937
<i>Performance of International New Ventures</i> (Pinho and Prange, 2016) ( $\alpha=0.812$ ; $CR=0.889$ ; $AVE=0.727$ )	
(1) International market’s sales growth in the last year;	0.870
(2) International market’s share growth in the last year;	0.862
(3) Return on international market investment in the last year	0.826

### 3.3. Assessing the Measurement Model

#### 3.3.1. Reliability and Validity

This study analyzed the original data using the statistical software SPSS 25.0 and AMOS 22.0. Following previous literature, the reliability of the variables was assessed by Cronbach’s  $\alpha$  and composite reliability (CR). Analysis results show that Cronbach’s  $\alpha$  values of all variables (ranging from 0.787 to 0.948) and CR values of all variables (ranging from 0.792 to 0.927) exceed the usual 0.70 benchmark, implying acceptable reliability of the measurement scales.

Meanwhile, construct validity, convergent validity, and discriminant validity were used to assess the validity of all variables. On the aspect of construct validity, the measurement scales of all variables were directly adapted from previous relevant works and were then revised to fit the Chinese context (Stam and Elfring, 2008). On the aspect of convergent validity, we ran confirmatory factor analysis (CFA) in the AMOS software for analyzing the factor loadings of all variables. The CFA results showed that standardized factor loadings ranged from 0.614 to 0.937. Meanwhile, the average variance extracted (AVE) of all constructs was higher than 0.5. Both implied good convergent validity for our study. On the aspect of discriminant

validity, we used a chi-square difference test for all the multi-item constructs to check whether they were different from each other (Liu et al., 2018). Additionally, we also compared the square roots of the AVE and Pearson correlations. As shown in Table 2, the square roots of the AVE (marked in bold type) are greater than all Pearson correlations, suggesting good discriminant validity for all measures.

**Table 2.** Descriptive Statistics and Pearson Correlations

Variables	Mean	S.E.	1	2	3	4	5	6	7	8	9
1. Ownership	0.381	0.488									
2. Venture Size	14.929	7.053	0.413***								
3. Venture Age	3.867	1.184	-0.097	0.440***							
4. International Experience	2.814	1.265	-0.044	0.330***	0.532***						
5. Improvisational Capability	3.425	0.597	-0.008	0.139	0.115	0.052	<b>0.787</b>				
6. Political Ties at Home	3.449	0.631	-0.066	0.244 <sup>*</sup>	0.060	0.102	0.306**	<b>0.750</b>			
7. Business Ties at Home	4.584	0.602	-0.176 <sup>+</sup>	0.048	0.093	0.148	0.126	0.130	<b>0.898</b>		
8. Competitive Turbulence	3.637	0.666	-0.075	0.092	0.101	-0.028	0.448***	0.256**	0.180 <sup>+</sup>	<b>0.899</b>	
9. International Performance	3.012	0.680	-0.139	-0.004	0.069	-0.063	-0.020	-0.158 <sup>+</sup>	0.063	0.119	<b>0.853</b>

**Note:** (1) \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $< 0.1$ ;

(2) Numbers in bold indicate the square root of the AVE (average variance extracted)

### 3.3.2. Multicollinearity Check

Several analyses were employed to avoid or evaluate multicollinearity. First, we compared the correlation by conducting a Pearson correlation test, and the highest coefficient was 0.532 (lower than the 0.7 benchmark). Second, the highest variance inflation factor (VIF) was 2.161, well below the cut-off benchmark point of 10 (Neter et al., 1985). Third, the independent variables were mean centered to reduce the possibility of multicollinearity among the interaction terms and the individual components (Vera and Crossan, 2005). Based on these considerations, we are confident that multicollinearity was not a threat to the empirical results.

### 3.4. Common Method Variance Analysis

Since all data on the variables were self-reported, common method variance may be a serious issue that threatens our empirical results. Following previous literature, we conducted two analytical procedures to minimize or check for common method bias. First, the respondents were informed that this anonymous survey was for academic research rather than business activities, and therefore, they did not need to have any fear of personal privacy issues. Second, we conducted Harman's single-factor test, as suggested by previous literature (Hulland, et al., 2018; Podsakoff and Organ, 1986). If one general factor accounts for higher

than 50% of the covariance among the variables, there may exist a serious common method variance. On conducting an exploratory factor analysis of multi-item constructs in SPSS, we found five factors with initial eigenvalues higher than 1 (ranging from “1.369” to “4.278”). In addition, our analysis results showed that the first factor accounted for only 17.158% of the total variance, while five factors accounted for 76.982% of the total variance. These results implied that the presence of a common method bias was not a serious concern in this study.

## 4. Empirical Results

To test the hypotheses concerning the relationship between improvisational capability, home country-based networks, competitive turbulence, and the performance of international new ventures, this study conducted a moderated hierarchical regression analysis (Hmieleski et al., 2013). In Step 1, four control variables (venture ownership, venture size, venture age, and international experience) were included. Subsequently, in Steps 2, 3, and 4, we successively entered the independent variable (improvisational capability), moderator variables (political ties at home, business ties at home) and the boundary variable (competitive turbulence) to examine their main effects. Two proposed moderating effects (two-way interaction terms) were included in Step 5 to investigate whether home-based networks could shape the value of improvisational capability. Step 6 added two three-way interaction terms to explore the boundary role of competitive turbulence in the proposed moderating effects.

Hypotheses 1 proposed the improvisational capability and business performance among international new ventures. As shown in Model 2 of Table 3, improvisational capability did not have a general effect on the performance of these ventures ( $\beta = -0.040$ ,  $p > 0.1$ ). Therefore, our empirical results do not offer support for H<sub>1</sub>.

Hypotheses 2a and 2b proposed that the relationship between improvisational capability and business performance of international new ventures would be moderated by home country-based networks. As shown in Model 5 of Table 3, the directions of moderating effects in both political ties at home ( $\beta = 0.285$ ,  $p = 0.090 < 0.1$ ) and business ties at home ( $\beta = 0.304$ ,  $p = 0.069 < 0.1$ ) were in accordance with our predictions. However, their p values were lower than 0.1 (marginally significant), implying that our results only partially supported H<sub>2a</sub> and H<sub>2b</sub>.

Hypotheses 3a and 3b proposed that in a highly competitive and turbulent business environment, the performance implications of improvisational capability would increase as international new ventures kept strong political ties or business ties at home. In Model 6 of Table 3, the coefficient of the three-way interaction among improvisational capability, political ties at home, and competitive turbulence was found to not be significant ( $\beta = 0.156$ ,  $p > 0.1$ ), suggesting that there were no differences in the moderating effect of political ties at home between a highly and comparatively low competitive environment. In this regard, H<sub>3a</sub> was not supported. However, the three-way interaction among improvisational capability, business ties at home, and competitive turbulence was very positive and significant ( $\beta = 0.483$ ,  $p < 0.01$ ). It indicated that the moderating effect of business ties at home on the relationship between improvisational capability and business performance among international new ventures would become strong in a highly competitive environment. Therefore, our result provides support for H<sub>3b</sub>.

Table 3. Results of the Moderated Hierarchical Linear Regression Analysis

Variable	International Performance											
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T
<i>Firm Control Variables</i>												
Ownership	-0.229 (0.154)	1.487	-0.232 (0.155)	1.499	-0.252 (0.158)	1.601	-0.239 (0.157)	1.521	-0.228 (0.159)	1.807 (0.074)	-0.222 (0.149)	1.518
Venture Size	0.007 (0.012)	0.554	0.007 (0.012)	0.591	0.010 (0.012)	0.817	0.009 (0.012)	0.758	0.006 (0.012)	0.503	0.010 (0.011)	0.896
Venture Age	0.058 (0.071)	0.814	0.059 (0.071)	0.827	0.049 (0.071)	0.688	0.041 (0.071)	0.584	0.085 (0.071)	1.187	0.054 (0.066)	0.823
International Experience	-0.079 (0.061)	1.299	-0.079 (0.061)	1.304	-0.076 (0.174)	1.246	-0.064 (0.061)	1.049	-0.062 (0.060)	1.035	-0.060 (0.055)	1.100
<i>Main Effects</i>												
Improvisational Capability			-0.040 (0.109)	0.370	0.013 (0.114)	0.115	-0.054 (0.123)	0.442	-0.022 (0.121)	0.186	0.023 (0.111)	0.212
Political Ties at Home					-0.202 (0.108)	1.858 (0.066)	-0.222 (0.109)	2.035 (0.044)	-0.203 (0.107)	1.907 (0.059)	-0.246 (0.098)	2.504 (0.014)
Business Ties at Home					0.070 (0.110)	0.635	0.050 (0.111)	0.454	0.067 (0.111)	0.609	0.010 (0.102)	0.097
Competitive Turbulence							0.156 (0.110)	1.420	0.108 (0.109)	0.986	0.136 (0.100)	1.362
<i>Two-Way Interactions</i>												
Improvisation × Political Ties at Home										0.285 (0.167)	1.709 (0.090)	1.809 (0.073)

Table 3. (Continued)

Variable	International Performance											
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T	$\beta$ (SE)	T
Improvisation × Business Ties at Home												
<i>Three-Way Interactions</i>												
Improvisational Capability×PTies at Home×Competitive Turbulence												
Improvisational Capability×Business Ties at Home×Competitive Turbulence												
F	1.088		0.891		1.178		1.293		1.771		3.679	
R <sup>2</sup>	0.039		0.040		0.073		0.090		0.148		0.306	
Adjusted R <sup>2</sup>	0.003		0.005		0.011		0.020		0.046		0.223	
△ R <sup>2</sup>	0.039		0.001		0.033		0.017		0.058		0.158	

Note: \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.1$

## 5. Discussion and Conclusion

### 5.1. Research Findings

International entrepreneurship should be confronted with severe operation uncertainty and environmental turbulence associated with cross-border cultural differences, institutional differences, emergent events (such as the current COVID-19), and geographical limitations (Mou et al., 2019). Under such conditions, both operational capability (zero-order capability) and dynamic capability (first-order capability) cannot maintain strategic competitiveness for international new ventures. Therefore, this study introduced a higher-order capability (named “improvisational capability”) for enhancing our understanding of how to respond to environmental storms in international entrepreneurship. According to the empirical results, unlike in most earlier studies, this study did not find any direct significant effects of improvisational capability on the performance of international new ventures (as shown in Table 4). This may demonstrate that, as a higher-order firm ability, improvisational capability cannot serve for performance creation in an organization without the support of strategic resources (Rydehell et al., 2019). This re-highlighted the notion that investigating the relationship between improvisational capability and performance implication requires a contingent view.

Our research findings suggested that for international new ventures, while both political ties and business ties at home are important contingent factors, they only partially alter the value creation of improvisational capability. Although some scholars argue that improvisation does not require a wealth of resources, we believe that necessary resources are needed (Hughes et al., 2020). Compared to domestic business, international entrepreneurship often implies that international new ventures are more likely to be threatened by the dual liability of newness and foreignness. In this respect, important institutional support from political ties at home or critical business-related resources (e.g., international market information) obtained through utilizing business ties at home might provide necessary strategic resources to effectively improvise in international business (Kyriakopoulos, 2011).

**Table 4.** Results for Hypotheses

No.	Hypotheses	Supported?	T-value	P-value
H <sub>1</sub>	Improvisational capability → performance of international new ventures	Not supported	0.370	p>0.1
H <sub>2a</sub>	Improvisational capability × political ties at home → performance of international new ventures	Partially supported	1.709	p<0.1
H <sub>2b</sub>	Improvisational capability × business ties at home → performance of international new ventures	Partially supported	1.840	p<0.1
H <sub>3a</sub>	Improvisational capability × political ties at home × competitive turbulence → performance of international new ventures	Not supported	0.495	p>0.1
H <sub>3b</sub>	Improvisational capability × business ties at home × competitive turbulence → performance of international new ventures	Supported	3.945	p<0.001

Finally, our empirical results found that in a highly competitive environment, business ties at home may enhance the relationship between improvisational capability and performance of international new ventures. However, there was no difference in the moderating effect of political ties at home under the different competitive conditions. One possible explanation is that as the competitive level increases, political ties inherent with centralization, bureaucracy, and formalization may become an obstruction that impedes a firm's strategic flexibility, decision-making process, and improvisational behavior (Hodgkinson et al., 2016).

## 5.2. Theoretical Contributions

In this article, we extend the existing improvisational theory to encompass international entrepreneurship, which may contribute to our knowledge in three ways. The first contribution to international entrepreneurship is to explore the direct role of improvisational capability in the new international ventures of an emerging economy, a context which has been ignored in existing literature. Empirical results reconfirmed Hughes et al.'s (2020) argument that improvisational capability "is not inherently good or bad"; therefore, there is a need to introduce contingent factors that may make it beneficial for an organization.

Second, this study might provide empirical evidence for the moderating effects of home country-based networks on the relationship between improvisational capability and performance of international new ventures. It enriches the knowledge on social network literature by suggesting that since it is very difficult to obtain resource support from the host country network, home country-based networks may help international new ventures access strategic resources necessary for supporting the value generation of improvisational capability.

The third contribution is that we explored the boundary conditions of the proposed moderating effects of political ties and business ties at home on the relationship between improvisational capability and performance of international new ventures. Since previous literature has pointed out that improvisational capability may play an inherent role in a highly turbulent environment, this study considers competitive turbulence an important boundary condition.

## 5.3. Managerial Implications

With the recent "One Belt, One Road" initiative, an increasing number of Chinese entrepreneurs positively entered the international market for realizing strategic objectives and have tightened economic connections with many countries from Asia to Europe and Africa. However, international new ventures face many difficulties in obtaining resource support from the host country network owing to dual liabilities (the liability of newness and of foreignness) at the early stage of internationalization. Accordingly, this study identified three main managerial implications for market practice. First, international entrepreneurship is increasingly acknowledged as an important mechanism for stimulating cross-border communication and economic sustainable growth issued by many countries. However, international entrepreneurship is close with environmental uncertainty and complexity, which may pose a challenging question about how to survive and grow in an unfamiliar market. Our research findings suggest that improvisational capability is necessary, but it is not enough for international new ventures to create superior performance, potentially even resulting in a negative outcome. To successfully deal with unanticipated events, the utilization

of improvisational capability should be underpinned by strategic resources distributed across home country-based networks (political ties and business ties at home) while it is difficult to gain resource supports from host country-based networks.

Second, many studies have proven that for emerging countries, international entrepreneurship has become an important driving force to promote high-quality economic development (Kiss et al., 2012; Prashantham et al., 2019; Zhang et al., 2016). In this respect, this study also suggests that the Chinese government should deploy effective policies for helping international new ventures to stimulate the performance implications of improvisational capability, thus improving the success of international entrepreneurship. In practice, in April 2019, the Chinese central government proposed a state-level policy named “a service system for the internationalization of small and medium enterprises”, which mentioned several institutional instruments for international new ventures, such as providing legal services for international new business, enhancing the ability to deal with risk, approaching service for global resources, and building centers for products or technologies in local markets to improvise successfully in an international environment. In this regard, it is believed that international new ventures should develop ties with the Chinese government and officials to obtain institutional resource supports for effectively underpinning the performance implications of improvisational capability.

Third, our results clearly indicate that to successfully survive and grow in a highly competitive environment, international practitioners should enhance business ties with home country partners to enhance the value creation of improvisational capability. Facing high-level competition, rival strategic behaviors and market demands become very unpredictable, implying that the response times for international new ventures must become much shorter. The current COVID-19 epidemic situation is a representative example that induces the global business environment to be more competitive and requires new international ventures to adjust business plans and remake strategic decisions in real time (Hughes et al., 2020). For improvising in such an environment, we suggest that international new ventures should give first priority to the contingent role of business ties at home rather than political ties at home.

#### 5.4. Limitations and Directions for Future Research

Like all scientific research, this study also has some limitations which might provide several potential directions for future research. First, our study is limited by its research sample coverage of China, raising a skeptical question of theory generalization. Hence, future research can expand the theoretical framework to other countries, including developed economies (e.g., US, UK, Japan, and South Korea) and emerging economies (e.g., Brazil, Russia, India, South Africa) to compare research results and enhance theory generalization (Su and Kim, 2022).

Second, although our study only focused on higher-order capability (improvisational capability), both the zero-level capability (operational capability) and first-order capability (dynamic capability) are also crucial for international entrepreneurship. Moreover, such research might help build a better understanding of the relationship between firm capabilities, social networks, and international performance creation. In this regard, future research can explore the differences in the moderating effects of home country-based networks on the performance implications of these three capabilities.

Third, future research may also consider other boundary conditions (e.g., venture

ownership, top management team, and organizational reporting routine) to examine whether the moderating effects of home country-based networks on the relationship between improvisational capability and performance of international entrepreneurship are different.

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