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The role of opportunity feasibility beliefs and bribery on resource acquisition speed and new venture emergence

Abstract

Venture creation is an entrepreneurial process initiated by nascent entrepreneurs to identify and exploit opportunities. Beliefs of opportunity feasibility are found to facilitate new venture emergence in developed economy contexts. This paper examines how opportunity beliefs influence venture creation in an emerging economy context. The results of the Chinese Panel Study of Entrepreneurial Dynamics show that opportunity beliefs are negatively related to new venture emergence and the speed of resource acquisition, respectively. Further, entrepreneurs' bribery behavior moderates the relationship between opportunity beliefs and the speed of resource acquisition. Our research provides important theoretical and policy implications for entrepreneurs and policy makers, especially in emerging economies.

Keywords: opportunity belief, bribery, resource acquisition speed, venture creation, emerging economy

Once upon a time, a tortoise and a hare had an argument about who was faster. They decided to settle the argument with a race. The hare was complacent and fell asleep, and the tortoise won the race!

1. Introduction

New venture emergence has been a key theme of entrepreneurship literature (Alvarez & Barney, 2007). The entrepreneurship process contains actions initiated by nascent entrepreneurs who recognize and pursue an opportunity, and extant research has argued a fundamental role of opportunity beliefs in this process (e.g., Davidsson, 2015; Edelman & Yli-Renko, 2010; Shepherd et al., 2007). Opportunity beliefs are

defined as a nascent entrepreneur's confidence that a venture idea is economically feasible and meets market demands (Grégoire et al., 2010). Research suggests that such opportunity confidence directly leads to the successful emergence of new ventures, based on data collected from developed countries (e.g., Vilanova & Vitanova, 2020; Hechavarria et al., 2012; Dimov, 2010). This line of literature assumes that resources required for start-ups can be easily obtained from the market.

The institutional context in emerging economies, however, is often characterized by a varying extent of corruption (Bruton et al., 2008; De Jong et al., 2012; Zhang, 2015; Ge et al., 2017), where resources are largely controlled by the government (Child & Lu, 1996; Bruton et al., 2008). Furthermore, entrepreneurs from different countries have different psychological characteristics, including entrepreneurial beliefs (McGrath & MacMillan, 1992). Therefore, the current research aims to address an unanswered question: how does the opportunity feasibility belief of nascent entrepreneurs in emerging economies influence the emergence of new ventures?

The windows of opportunity are often short-lived (Busenitz & Barney, 1997), threatened by fast technological advancement and fierce competition (Qin et al., 2017). This temporal nature is crucial to entrepreneurial actions and the performance of the ventures (Chen & Hambrick, 1995; Delmar & Shane, 2004). Since resources are an essential part of opportunity evaluation decisions by nascent entrepreneurs (Haynie et al., 2009), the speed of resource acquisition is therefore critical to new venture emergence (Shepherd et al., 2015; Delmar & Shane, 2004). Indeed, resource acquisition and leveraging are at the center of the transition from opportunity recognition to opportunity exploitation (Webb et al., 2010; Grégoire et al., 2011). Consequently, the second related question is: what is the role that the speed of resource acquisition plays in the relationship between nascent entrepreneurs' opportunity feasibility beliefs and new venture emergence?

We draw on social cognitive theory (Bandura, 1986) and insights of entrepreneurial

actions (McMullen & Shepherd, 2006) to address these research questions. Social cognitive theory suggests that social environments, such as institutional environments, play an essential role in shaping individuals' cognition including belief, behavior and, ultimately, outcomes (Bandura, 1986; Wood & Bandura, 1989). Existing research finds that the impact of environment on venture creation tends to be demonstrated via the entrepreneur's perceptions (Choi et al., 2008). In the context of emerging economies, nascent entrepreneurs' opportunity beliefs may vary in response to the environment (Newman et al., 2019), such as demonstrations of overconfidence, which is an exaggerated belief about one's subjective judgments that might not truly reflect reality (Hayward & Hambrick, 1997; Hayward et al., 2006), and causes disappointing outcomes (Simon & Shrader, 2012). We contend that such a belief may have a negative relationship with new venture emergence and the speed of resource acquisition.

A critical milestone of entrepreneurship is whether entrepreneurial actions occur (McMullen & Shepherd, 2006). As bribery has become an usual and acceptable entrepreneurial action in the context of emerging economies (Baron et al., 2018; Cuervo-Cazurra, 2016), we propose that bribery moderates the relationship between opportunity beliefs and the speed of resource acquisition, and affects the relationship between opportunity beliefs and new venture emergence. We test the hypotheses using the Chinese Panel Study of Entrepreneurial Dynamics (CPSED), collected from one of the largest emerging economies.

Our research makes several important contributions to existing literature. Firstly, our finding that the opportunity feasibility belief is negatively related to new venture emergence challenges existing theories which suggest a positive belief-emergence linkage based on data from a developed economy where market transactions dominate (e.g., Dimov, 2010; Vilanova & Vitanova, 2020), which unfortunately neglects weak institutional environments in emerging economies. Our research thus extends and enriches prior research on the relationship between opportunity beliefs and new

venture emergence. Secondly, our work reveals an important process and mechanism – the speed of resource acquisition – through which opportunity beliefs and venture creation is linked. Prior research has focused on the direct effect of opportunity beliefs on new venture creation (Dimov, 2010; Vilanova & Vitanova, 2020; Townsend et al., 2010; Hechavarria et al., 2012). Our research extends the literature by identifying the mediation role of resource acquisition speed. Our work is among the early attempts to unpack the mechanism of the influence of beliefs on venture creation. Specifically, this research adopts a temporal perspective in the entrepreneurial process and examines the factor of the speed of resource acquisition. Thirdly, we identify a contingent condition of bribery actions by nascent entrepreneurs, under which the negative influence of opportunity beliefs on the speed of resource acquisition is weakened. Our research contributes to a better understanding of the role bribery actions play in the entrepreneurial process. This may partially explain why entrepreneurship is still prosperous in weak institutional environments (e.g., Tonoyan et al., 2010).

2. Literature review

2.1. Opportunity feasibility beliefs and resource acquisition speed

According to social cognitive theory (Bandura, 1986; Wood & Bandura, 1989), social contexts, such as the institutional environments, shape individuals' cognition and beliefs, which in turn regulate their behavior and affect behavioral outcomes. Opportunity feasibility beliefs capture nascent entrepreneurs' confidence in a venture idea for value creation (Grégoire et al., 2010), which increases nascent entrepreneurs' commitment to gestation activities (Trevelyan, 2011), and engagement in entrepreneurial actions (Packard et al., 2017). Therefore, entrepreneurs with high opportunity beliefs are inclined to exploit opportunities by taking speedy actions, such as acquiring resources which are driven by market forces in developed economies (Mitchell & Shepherd, 2010). Prior research has focused on the efficiency of resource acquisition (Kamarudin et al., 2014; Sufian & Kamarudin, 2014), indicating an

emphasis on the temporal dimension, or speed. Indeed, the speed of entrepreneurial actions is critical to new venture emergence (Shepherd et al., 2015), and its survival and performance (Chen & Hambrick, 1995; Delmar & Shane, 2004).

In emerging economies, nascent entrepreneurs' opportunity beliefs may be amplified by numerous opportunities created by rapid economic growth, which is the case with China (Huang et al., 2020). They may take it for granted that resources can be acquired easily, resulting in an overestimation of the ease of resource acquisition (Hayward et al., 2006). Over-optimism and overestimation jointly lead to overconfidence, which leads to either quick actions or slow actions (Newman et al., 2019). In emerging economies, the government has control over resources and resource allocation (Bruton et al., 2008). Nascent entrepreneurs with high opportunity beliefs may not take actions to acquire resources until they are in urgent need of doing so, as a result of their illusion about the ease of resource acquisition. Consequently, they may be trapped in the "hare and tortoise" puzzle, as illustrated in the introductory story. In other words, resource acquisition is decelerated by high opportunity beliefs. Thus,

H1: The opportunity feasibility belief is negatively associated with resource acquisition speed.

2.2. Resource acquisition speed and new venture emergence

Prior research shows that a greater number of entrepreneurial actions increase the likelihood of venture creation (Carter et al., 1996; Samuelsson, 2001). Recent studies further indicate that the rate of entrepreneurial actions, as measured by the number of start-up activities over a period of time, positively associates with new venture emergence (Litchstein et al., 2007; Capelleras & Greene, 2008). Research in developed economies shows the faster entrepreneurs act, the more likely they will avoid retaliation of competitors (e.g., Capelleras et al., 2010), which might promote

venture creation.

Resource acquisition is the key to opportunity exploitation (Haynie et al., 2009; Webb et al., 2010) and new venture emergence (Shepherd et al., 2015; Yu & Wang, 2021). In emerging economies, an identified opportunity may be exploited by competitors quickly (Qin et al., 2017), as scarce resources controlled by the government may be obtained by rivals due to the lack of transparency in resource allocation in weak institutional environments (Child & Lu, 1996). Therefore, for the often short-lived opportunities (Busenitz & Barney, 1997), the speed of acquiring resources determines nascent entrepreneurs' opportunity exploitation and the chance of successfully turning an opportunity into a new venture. Thus, we hypothesize,

H2: Resource acquisition speed is positively associated with new venture emergence.

2.3. Opportunity feasibility beliefs and new venture emergence

Drawing on data from developed countries, previous studies reveal a positive role of opportunity beliefs in new venture emergence (e.g., Vilanova & Vitanova, 2020; Hechavarria et al., 2012; Dimov, 2010), as opportunity beliefs may enhance entrepreneurial efforts in the gestation process (Edelman & Yli-Renko, 2010), and increase entrepreneurs' expectation and commitment to venture creation (Cassar & Friedman, 2009; Baron et al., 2016).

According to social cognitive theory (Bandura & Locke, 2003; Vancouver et al., 2002), entrepreneurs are embedded in social contexts which influence their opportunity beliefs. Thus, beliefs may vary depending on the environment (Newman et al., 2019; Choi et al., 2008). As hypothesized in H1, in emerging economies, nascent entrepreneurs with high opportunity beliefs tend to overestimate their ability

to acquire resources that are controlled by the government, thus their speed of resource acquisition is slowed down. The lower speed in turn undermines their progress of venture creation (Litchstein et al., 2007; Capelleras & Greene, 2008), leading to their “being certain of success only to end up disappointed” (Simon & Shrader, 2012). Thus,

H3: The opportunity feasibility belief is negatively associated with new venture emergence.

2.4. The role of bribery in resource acquisition speed and new venture emergence

Bribery is viewed as an acceptable instrumental behavior in the entrepreneurial process through paying financial incentives to government officials who control resources (Baron et al., 2018). In our study, bribery is defined as entrepreneurs’ instrumental behaviors of paying financial incentives to government officials to ensure smooth and efficient progress in the entrepreneurial process. Bribery should be distinguished from a relevant Chinese concept of *Guanxi*, which refers to informal networks and business relations (Horak et al., 2020), and is usually characterized by emotional involvement, trust, and mutual obligation (Burt & Burzynska, 2017; Horak et al., 2019; Bian, 2017; Chen et al., 2015). *Guanxi* can have a bright side in terms of trust, cooperation, and loyalty. However, it has also a dark side due to its likelihood of bribery, cronyism, and corruption (Horak et al., 2020). Indeed, *Guanxi* may often be nurtured and built through entertainment activities outside work such as dinner, karaoke, sports, etc. (Liu et al., 2017) and also bribery, e.g., gifts (Xin & Pearce, 1996). Nascent entrepreneurs’ bribery behavior involves multiple government entities (e.g., tax, financial, legal, commercial, and planning agencies) in various activities (e.g., searching information, fundraising, gaining license/permission, and securing government contracts) (Baron et al., 2018). The more bribery activities taken with different government agencies, the more barriers nascent entrepreneurs are likely to overcome, leading to a higher speed of resource acquisition. More bribery activities

also counterbalance entrepreneurs' overconfidence, as they develop a more accurate evaluation of the institutional environment, which urges them to take quicker actions in resource acquisition. Thus,

H4: Bribery moderates the relationship between opportunity feasibility beliefs and resource acquisition speed. Specifically, the negative association between opportunity feasibility beliefs and resource acquisition speed is mitigated when more bribery behaviors are involved.

Based on the moderation role of bribery in the belief-speed relationship, when little bribery is involved, the opportunity belief negatively affects resource acquisition speed, which in turn negatively affects new venture emergence. Thus, when the level of bribery is low, resource acquisition speed mediates the relationship between opportunity beliefs and new venture emergence. With increasing levels of bribery, the negative association between opportunity beliefs and resource acquisition speed is mitigated, thus the mediation role of resource acquisition speed should diminish or vanish. Therefore,

H5: When the level of bribery is low, resource acquisition speed mediates the relationship between opportunity feasibility beliefs and new venture emergence.

The conceptual framework is illustrated in Fig. 1.

Fig. 1 here.

3. Methodology

3.1. Dataset

To address the research questions, we used data from the Chinese Panel Study of Entrepreneurial Dynamics (CPSED), which was conducted annually by the Entrepreneurship Research Center of Nankai University for three years (see Zhang et al., 2011). CPSED follows the design and procedures of its US version – the Panel Study of Entrepreneurial Dynamics (PSED, see Reynolds, 2000; Gartner et al., 2004), which is a national survey on individuals in the process of starting a business.

3.2. Sample

Participants in eight Chinese cities were investigated, including Beijing, Tianjin, Hangzhou, Guangzhou, Wuhan, Shenyang, Chengdu, and Xi'an. From 2009 to 2012, three waves of surveys were performed. In the first wave, random dialing calls were made to 20,424 individuals. The first question in the phone interview was designed to identify participants who would like to start a new business, by asking “Are you trying to start a business now, alone or with others?” The next two questions distinguished individuals who actively engaged in start-up activities from those who were only thinking about it (“Are you going to be an owner or one of the owners?”, and “Have you implemented any ongoing business-organizing activities in the preceding 12 months?”). 601 respondents with affirmative answers to all of the three questions were identified as “nascent entrepreneurs”.

In the second wave, 321 of the 601 respondents were reached successfully and completed a phone interview. They were asked “Are there any changes in your entrepreneurship project?” (No major changes; a few changes in the project; I have switched to another project; I have given up the project). If the answer was “I have given up the project”, the respondent was excluded from the sample, resulting in 204

eligible respondents. Incomplete responses on key measurements or control variables were further excluded, resulting in 139 valid responses. There is no difference between the 139 valid responses and the 204 eligible responses in demographics (*Age*: $t=0.399$, $p=0.690$; *Gender*: $t=0.104$, $p=0.917$; *Experience in Government*: $t=0.664$, $p=0.507$; *Education*: $t=0.710$, $p=0.478$; *Studying Abroad*: $t=0.042$, $p=0.966$). The sample selection procedure is shown in Fig. 2.

Fig. 2 here.

3.3. Measurement

3.3.1. Opportunity feasibility beliefs

The opportunity feasibility belief was measured in Wave I as nascent entrepreneurs' perception of uncertainty in the environment where opportunities were identified. The measurement was adapted from Dimov (2010) which contained 11 items. The item "obtaining working capital" was not included in the CPSED, since we focused on the stages when new firms had not yet been created, and thus working capital associated with business operations after venture creation was less relevant. We used the mean value of these items as the measurement of opportunity feasibility beliefs ($\alpha = 0.7$). The results of confirmative factor analysis showed a good fit of the measurement of opportunity feasibility beliefs as a single factor ($\chi^2/df = 2.01$, CFI = 0.85, RMSEA = 0.08). The measurement is shown in Appendix A.

3.3.2. New venture emergence

New venture emergence was measured by the following question in Wave II: "Is the monthly revenue of this new business more than the monthly expenses?" ("1"="yes", "0"="no"). We followed previous studies which used profit as the

measurement of new venture emergence. A review study on venture creation (Davidsson & Gordon, 2012) suggests that “the occurrence of the first instance of a period of positive cash flow or profitability” should be included in the outcome measurement of venture creation.

3.3.3. Bribery

Following Baron et al. (2018), respondents were asked whether they or their firms had offered bribes in six categories of business activities in the Wave I interview (“1”=“yes”, “0”=“no”). The number of affirmative answers was used as the bribery score, indicating the level of bribery that nascent entrepreneurs are involved in. The measurement is shown in Appendix B.

3.3.4. Resource acquisition speed

During the phone interview in Wave I, respondents were asked to answer whether sixteen actions had been taken by then, and if so, when (the year and month when the actions were taken were recorded). During the phone interview in Wave II, respondents were asked whether they had implemented the actions that had not been taken at the time of Wave I. Resource acquisition actions included six out of the sixteen actions, specifically, “obtaining raw materials,” “purchasing or renting equipment or properties,” “collecting information about customers,” “seeking financial support,” “contacting suppliers,” and “hiring employees.”

The speed of resource acquisition was measured by the number of actions taken, divided by the length of time. A higher speed indicated that more actions were taken in a given time period. To calculate this variable, we firstly summed up the number of resource acquisition actions taken by the end of Wave II. Then we calculated the timespan between when an action was first taken and the date of Wave II. The number

of actions divided by the length of the timespan yielded the speed of resource acquisition (Lichtenstein et al., 2007). For example, since Wave II surveys were completed by September 2010, a respondent took the first resource acquisition action in October 2009 and had six actions taken by the end of Wave II would have a speed score of 0.5, or six actions in the twelve months.

3.3.5. Control variables

We adopted three groups of control variables to rule out alternative explanations. The first category related to entrepreneur characteristics which were shown to influence new venture performance (e.g., Yang & Yang, 2022; Jiang et al., 2018), including *Age* (logarithmic), *Gender* (“1” for males and “0” for females), *Education* (“1” for bachelor or above, and “0” otherwise), *Studying Abroad* (“1” for having foreign study experience and “0” otherwise), *Experience in Government* (“1” for having work experience in government agencies and “0” otherwise), *Entrepreneurial Training* (“1” for having entrepreneurial training before and “0” otherwise), and *Entrepreneurial Motivation* (“1” for opportunity-motivated entrepreneurship and “0” otherwise).

The second category was firm-level variables, including *Technology* (“1” for tech-based entrepreneurship and “0” otherwise), *Capital* (“1” for sufficient external financial support and “0” for insufficient external financial support), *Marketing Efforts* (“1” for having initiated marketing efforts and “0” otherwise), and *Competitor Analysis* (“1” for having collected and analyzed information about competitors and “0” otherwise).

The third category was environment-level variables, including *Marketization* measured by the market development index (Fan & Wang, 2006) and *Industry*. There

are three categories of industries in China – primary, secondary and tertiary (see Appendix C). We created two dummy variables, *Secondary Industry* (“1”=“yes”, “0”=“no”) and *Tertiary Industry* (“1”=“yes”, “0”=“no”) to code the *Industry* variable (thus if *Secondary Industry*=0 and *Tertiary Industry*=0, the business is in the primary industry).

4. Data analysis

4.1. Descriptive statistics and correlations

Descriptive statistics and correlations are shown in Table 1. The results were based on the 139 valid responses with complete information on key variables and control variables. Similar results of correlations and hypothesis testing were found when responses with missing values were included.

Table 1 here.

4.2. Hypothesis testing

We used hierarchical regression method to test H1 to H4. This method tests whether the independent variable explains significant degrees of variance in the dependent variable after accounting for all other variables. It is often used to test moderation and interaction effect, and models with control variables, and thus is considered a suitable method as all of the models in our study contain multiple control variables.

The main effect equations are:

$$speed = \beta_0^1 + \beta_1^1 belief + \sum_{i=2}^{15} \beta_i^1 X_i + \varepsilon \quad (M1)$$

$$emergence = \beta_0^2 + \beta_1^2 speed + \sum_{i=2}^{15} \beta_i^2 X_i + \varepsilon \quad (M4)$$

$$emergence = \beta_0^3 + \beta_1^3 belief + \sum_{i=2}^{15} \beta_i^3 X_i + \varepsilon \quad (M3)$$

The moderation effect equation is:

$$speed = \beta_0^4 + \beta_1^4 belief + \beta_2^4 bribe + \beta_3^4 belief \times bribe + \sum_{i=5}^{18} \beta_i^4 X_i + \varepsilon \quad (M2)$$

Where *emergence* is the dependent variable (whether a new venture achieves profits), *belief* is the independent variable (entrepreneurs' opportunity feasibility beliefs), *bribe* is the moderator (the extent of bribery behavior), *speed* is the mediator (the speed of resource acquisition actions), X_i are the fourteen control variables, and ε is the error term.

Table 2 here.

Table 3 here.

Table 2 and Table 3 report the coefficients in the regression models. In the two tables, model M0 is the model with control variables only. In Table 2, model M1 tests the predictive power of opportunity feasibility beliefs on resource acquisition speed, while model M2 tests the moderation effect of bribery on the belief-speed relationship. In Table 3, model M3 tests the predictive power of opportunity feasibility beliefs on new venture emergence, while model M4 tests the predictive power of resource acquisition speed on new venture emergence.

H1 predicts a negative relationship between opportunity feasibility beliefs and resource acquisition speed. As shown in M1 of Table 2, the coefficient of opportunity feasibility beliefs is negative and marginally significant ($\beta = -0.156$, $p = 0.090$), suggesting that the opportunity feasibility belief negatively predicts resource acquisition speed, thus H1 is supported.

H2 predicts a positive relationship between resource acquisition speed and new venture emergence. As shown in M4 of Table 3, the coefficient of resource acquisition speed is significantly positive ($\beta = 0.327$, $p = 0.000$), suggesting that resource acquisition speed positively predicts new venture emergence, thus H2 is supported.

H3 predicts a negative relationship between opportunity feasibility beliefs and new venture emergence. As shown in M3 of Table 3, the coefficient of opportunity feasibility beliefs is negative and marginally significant ($\beta = -0.172$, $p = 0.073$), suggesting that the opportunity feasibility belief negatively predicts new venture emergence, thus H3 is supported.

H4 predicts a moderation effect of bribery on the relationship between opportunity feasibility beliefs and resource acquisition speed. Bribery and opportunity feasibility beliefs were centered on before yielding the interaction term and entered into the full model for enhanced interpretation of the interaction effect (Aiken & West, 1991). As shown in M2 of Table 2, the coefficient of the interaction is significant ($\beta = 0.209$, $p = 0.015$). Fig. 3 further shows the direction of the moderation effect. Specifically, compared to a low level of bribery (one standard deviation below the mean), a high level of bribery (one standard deviation above the mean) mitigates the negative influence of opportunity feasibility beliefs on resource acquisition speed, as the slope of the curve is smaller. Thus H4 is supported.

Fig.3. here.

We used bootstrapping method to test H5. Traditional mediation tests (e.g., Baron & Kenny's test, Sobel z-test) are criticized for methodological flaws including measuring mediation by lack of the direct effect rather than by the size of the indirect effect, demanding an unnecessary significant effect of the mediator on the dependent variable, and low test power (Zhao et al., 2010). To address these issues, Hayes and colleagues developed a refined bootstrapping method (Preacher & Hayes, 2008; Hayes, 2013). A mediation effect is supported if the confidence interval retrieved from the test of a mediation path or model excludes 0 (Zhao et al., 2010). In the moderated mediation model, the opportunity belief is the independent variable, new venture emergence is the dependent variable, resource acquisition speed is the mediator, and bribery is the moderator. The bootstrapping results are shown in Table 4. The moderated mediation model is supported (*Index*= 0.1235), as the 95% confidence interval excludes zero [0.0072, 0.2794]. Specifically, when bribery is low (Mean=0), resource acquisition speed mediates the effect of opportunity beliefs on new venture emergence, as the confidence interval excludes zero [-1.0774, -0.0307], while when bribery is medium (Mean=2.0647) or high (Mean=4.1437), the mediation effect of resource acquisition speed is not found, as both of the confidence intervals [-0.6526, 0.0600] and [-0.3143, 0.4296] include zero. Thus H5 is supported.

Table 4 here.

4.3. Reliability and validity

4.3.1. Sensitivity analysis

We performed sensitivity analysis using income as another measurement of new venture emergence. If the results were the same, the predicting power of the models

and robustness of the research findings were ensured. Nascent entrepreneurs were asked in Wave II “Did this new business receive income from sales of goods or services for more than six months?” Reynolds and Miller (1992) propose four gestation markers of new firms: personal commitment, financial support, hiring, and sales. Successive income of more than six months indicates stable sales activity, thus it is suitable proxy of new venture emergence.

An affirmative answer was coded “1” and a negative answer was coded “0”. Using the same independent variable, mediator, and moderator, as shown in Table 5, the moderated mediation model was again supported (*Index*= 0.1118) by a 95% confidence interval of [0.0128, 0.2620]. Similarly, resource acquisition speed mediates the effect of opportunity beliefs on new venture emergence when bribery is low as the confidence interval [-0.3089, -0.4165] excludes zero, and the mediation effect is absent when bribery is medium or high as both of the confidence intervals [-0.6367, 0.0525] and [-1.0299, 0.0266] include zero. Therefore, robustness of the research findings was confirmed.

Table 5 here.

4.3.2. Common method bias

Common Method Bias (CMB) refers to systematic errors due to a common method used to measure the constructs (Podsakoff et al., 2003). For example, in a survey research, because all items are measured by a single method of survey instrument, the observed values may share variances above the true covariation among them. Thus, it might lead to inaccurate or wrong conclusions if CMB is not controlled for. Harman’s single-factor test is one of the commonly used techniques to identify CMB. It was performed by entering all focal variables into an exploratory factor analysis. CMB is likely to cause concern if a single factor emerges from the unrotated factor solution, or

if the first factor accounts for the majority of the variance (Podsakoff & Organ, 1986). In our result, multiple factors emerge and the first factor extracted only accounts for 18% of total variance. Thus, the results are less likely to suffer from CMB.

4.3.3. Endogeneity

We further attempt to address concerns on potential reverse causality and other endogeneity issues. First, we find that opportunity beliefs negatively associate with speed of resource acquisition and new venture emergence. Conceptually, it is less logical to argue a reverse relationship that a higher level of resource acquisition speed or new venture emergence leads to a lower level of opportunity beliefs. Second, opportunity beliefs and bribery were measured in Wave I, while resource acquisition speed was measured in Wave II. Our results reveal the influence of prior opportunity beliefs on subsequent resource acquisition speed. The timespan between the two waves of interviews effectively controls for the concern of endogeneity (Berry, 2014).

Third, we performed propensity score matching (PSM) to address the concern of endogeneity. The main effect of opportunity beliefs on new venture emergence was tested. Following Rosenbaum and Rubin (1983), we first constructed a Logit regression model to calculate propensity scores and performed propensity score estimation. Next, we matched the sample in the control and treatment conditions based on propensity scores, and the matching results were satisfactory. Finally, we performed the Logit regression model again with the matched sample. The results showed that the opportunity feasibility belief was still negatively associated with new venture emergence ($\beta = -0.212$, $p = 0.067$). The test results of other effects were similar. Hence, endogeneity concern in the results is minimized.

5. Discussion and Conclusion

5.1. Theoretical contribution

Prior research suggests a positive influence of opportunity feasibility beliefs on new venture emergence (e.g., Dimov, 2010; Vilanova & Vitanova, 2020). However, our results reveal a negative relationship between opportunity beliefs and new venture emergence drawing on the CPSED data in an emerging economy. Specifically, those with higher opportunity beliefs show significantly lower likelihood of venture creation. Similarly, opportunity beliefs are negatively related to resource acquisition speed. The inconsistent findings from the available research may be attributed to different institutional environments, which shape nascent entrepreneurs' cognition including beliefs in a different way, and ultimately affects entrepreneurial outcomes (Bandura, 1986; Wood & Bandura, 1989). Cognitive characteristics and beliefs of nascent entrepreneurs vary across different social contexts (McGrath & MacMillan, 1992; Newman et al., 2019), which may have different effects on venture creation. We further find that bribery mitigates the negative relationship between opportunity beliefs and resource acquisition speed. Furthermore, resource acquisition speed mediates the negative association between opportunity beliefs and venture creation when bribery is low. Our research contributes to the literature in several ways.

First, we are among the first to explore and identify a negative impact of opportunity beliefs on venture creation using empirical evidence from China. This finding of the unexpected impairing influence of opportunity beliefs on venture creation challenges previous research which argues a positive influence of opportunity beliefs. Our research thus extends and enriches the existing literature. On the one hand, prior research used data from developed countries (e.g., Dimov, 2010; Vilanova & Vitanova, 2020), where a market economy dominates and it may be relatively easier for nascent entrepreneurs to obtain resources for start-ups. By contrast, in emerging economies, resources are controlled by governments. Nascent entrepreneurs' access to them may be difficult, due to the lack of transparent resource allocation in weak institutional environments (Bruton et al., 2008). On the other hand,

nascent entrepreneurs' opportunity beliefs may be distorted due to vast opportunities created by the rapidly developing economies (Huang et al., 2020). Their opportunity beliefs may be exaggerated and not truly reflect the reality (Hayward et al., 2006). Such overconfidence often predicts disappointing outcomes (Simon & Shrader, 2012), such as a lower resource acquisition speed and a lower likelihood of new venture creation, as shown by our results. Our study extends prior research on the relationship between opportunity beliefs and new venture emergence. It highlights the importance of institutional environment when examining the influence of opportunity beliefs.

Second, we advance the literature by examining the role of resource acquisition speed in the relationship between opportunity beliefs and venture creation. Prior research focuses on how beliefs directly influence new venture emergence and overlooks the impactful temporal factor of speed. Specifically, we find that nascent entrepreneurs with unrealistic opportunity beliefs decelerate resource acquisition activities, which may result from overconfidence in the entrepreneurial environment (Hayward et al., 2006; Newman et al., 2019). Although research acknowledges the critical role of resources in opportunity evaluation (Haynie et al., 2009) and exploitation (Webb et al., 2010; Chen et al., 2015; Shepherd et al., 2015), less attention has been paid to the speed of resource acquisition (Delmar & Shane, 2004). Our study contributes to a better understanding of the temporal dimension of entrepreneurial actions (i.e., resource acquisition speed), which is not only important to new venture emergence (Shepherd et al., 2015), but also to the survival and performance of the new ventures (Chen & Hambrick, 1995; Delmar & Shane, 2004). The results further show that resource acquisition speed mediates the effect of opportunity feasibility beliefs on new venture emergence, under the contingent condition of bribery. Our work is among the early attempts to unpack the mechanism through which opportunity beliefs influence venture creation in the context of emerging economies.

Third, we contribute to the literature by examining the moderating role of bribery, the common instrumental behavior in emerging economies (Baron et al., 2018). In particular, the negative association between opportunity beliefs and resource acquisition speed is weakened when more bribery actions are involved. Most research views bribery as behaviors obstructing the social, political, and economic institutions (Park, 2003; Chandler & Graham, 2010), and barriers to market entry (Rodriguez et al., 2005; Uhlenbruck et al., 2006). However, our results show that bribery promotes the conversion of opportunity beliefs into quicker resource acquisition actions, indicating a “soothing” role of bribery in the entrepreneurial processes in emerging economies. Such entrepreneurial activities unfortunately reflect the reality of a weak institutional environment where nascent entrepreneurs have to bribe government officials who have control over resources to speed up resource acquisition. This research also sheds light on why entrepreneurship is still prosperous in a weak institutional environment (e.g., Bruton et al., 2008; Tonoyan et al. 2010).

5.2. Practice and policy implications

Our findings provide important practice and policy implications. First, the findings of a negative influence of opportunity beliefs on resource acquisition speed and new venture emergence suggest nascent entrepreneurs should be mindful of the potential negative effect of their opportunity beliefs, which may reflect overoptimistic perceptions of the challenging environment. Thus, they should be careful with the beliefs they foster about entrepreneurial opportunities – whether they are based on realistic and accurate evaluation of the institutional environment or not. Such opportunity beliefs tend to be first-person beliefs – beliefs that the nascent entrepreneurs themselves have identified an opportunity. One way to avoid the risk of overconfidence is by developing a third-person opportunity belief – a belief that an opportunity exists for someone else (Shepherd et al., 2007). Another practical solution is through discussion with experts to verify the opportunity feasibility belief. Entrepreneurial education and training may also help them avoid overconfidence and

increase the speed of resource acquisition actions, contributing to a higher chance of successful venture creation. Second, our finding that bribery may pave the way to turn beliefs into actions and new venture emergence point to the unfavorable effect of weak institutional environment on entrepreneurship in emerging economies. Policy makers should aim to improve the institutional environment for sustainable entrepreneurship. With the increasing power of market forces in resource allocation, a transparent institutional environment should contribute to thriving entrepreneurship in the long run.

5.3. Limitations and future research

We acknowledge the limitations of this research and provide directions for future research. First, our sample is limited to nascent entrepreneurs in China. Although it is one of the largest emerging economies, its institutional environment may include unique characteristics. The findings could be extended by comparing the results of different emerging economies. For example, the bribery issue in China is linked to local governments instead of the central government, whereas the reverse is true in Indonesia (Gong, 2002). Future studies could compare the results among emerging economies with different levels and characteristics of bribery. Second, the CPSED is a self-report survey, which may invoke potential problems such as CMB. Although many techniques have been adopted to ensure reliability and validity of the results, other research methods and data from multiple sources are expected in future research to further validate the research findings. Third, it merits further investigation on nascent entrepreneurs' personality traits, such as regulatory focus (e.g., Tumasjan & Braun, 2012; Luo et al., 2016), that might affect the proposed relationships and venture creation outcomes.

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Appendix

A. Measurement of opportunity feasibility beliefs

In your region, how certain are you to accomplish each of the following? (“1” = “very low certainty”, “5” = “very high certainty”)

- a. Obtain raw materials
- b. Attract employees
- c. Obtain start-up capital
- d. Deal with distributors
- e. Attract customers
- f. Compete with other firms
- g. Keep up with technological advances
- h. Obtain a bank’s help
- i. Obtain venture capitalists help
- j. Comply with national and local regulations

Adapted from Dimov (2010).

B. Measurement of bribery:

Whether bribes are offered in the following business activities (“1”=“yes”, “0”=“no”):

- a. to get licenses or permits to operate the business
- b. to deal with the settlement of taxes
- c. to gain government contracts
- d. to deal with customer services
- e. to deal with courts or judges
- f. to deal with law enforcement agencies

Adapted from Baron et al. (2018)

C. Industrial categorization in China

Primary industry: agriculture, forestry, animal husbandry and fishery.

Secondary industry: mining, manufacturing, construction and energy.

Tertiary industry: service industries including retailing, financial business, real estate, accommodation and catering, software and information technology, transportation, education, and entertainment.

Table 1

Descriptive statistics and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Age (Ln)	3.431	0.314	1																	
2. Gender	0.779	0.416	0.092	1																
3. Education	0.358	0.481	-0.012	-0.121	1															
4. Studying abroad	0.044	0.206	-0.011	0.114	0.238**	1														
5. Experience in government	0.515	0.501	0.283**	-0.093	0.072	-0.076	1													
6. Entrepreneurial Training	0.387	0.488	-0.042	0.035	0.036	0.074	-0.091	1												
7. Entrepreneurial Motivation	0.813	0.390	-0.059	-0.103	0.016	-0.081	0.089	0.044	1											
8. Technology	0.466	0.500	0.181*	0.117	0.021	0.087	0.029	0.085	0.018	1										
9. Capital	0.564	0.497	0.071	0.033	0.017	-0.052	0.086	0.050	0.087	-0.07	1									
10. Marketing efforts	0.245	0.431	0.103	0.028	0.098	0.100	0.065	0.108	0.126	0.108	0.065	1								
11. Competitor analysis	0.769	0.422	-0.178*	-0.010	0.093	0.061	-0.112	0.196**	0.097	0.137	0.059	0.231**	1							
12. Marketization	14.693	0.564	-0.019	0.034	0.062	0.054	-0.021	-0.091	-0.113	0.030	-0.014	-0.071	-0.002	1						
13. Secondary industry	0.144	0.352	0.295**	0.050	-0.039	0.062	0.121	-0.006	0.053	0.221**	-0.100	0.098	-0.047	-0.111	1					
14. Tertiary industry	0.822	0.384	-0.274**	-0.094	0.049	-0.038	-0.100	-0.029	-0.059	-0.213**	0.117	-0.099	0.056	0.079	-0.279**	1				
15. Opportunity feasibility beliefs	2.895	0.519	-0.013	0.070	0.076	0.065	0.060	0.223**	0.250**	0.0001	0.256**	0.105	-0.038	-0.110	0.005	0.001	1			
16. Bribery	1.882	2.021	-0.104	0.110	-0.022	0.048	-0.084	0.011	-0.065	-0.038	0.017	-0.006	0.066	-0.058	0.012	0.009	-0.111	1		
17. Resource acquisition speed	0.170	0.103	-0.261**	-0.040	-0.118	-0.036	0.074	-0.023	0.014	-0.242**	0.063	-0.089	-0.046	-0.071	-0.072	0.120	-0.038	0.081	1	
18. New venture emergence	0.515	0.501	-0.074	0.098	-0.032	0.018	0.041	0.007	-0.011	-0.096	0.194**	0.143*	0.121	0.006	-0.111	0.143*	-0.099	0.104	0.345**	1

Note: *p < .05, **p < .01. Control variables: 1-14.

Table 2

Effect of opportunity feasibility beliefs and bribery on resource acquisition speed

	Resource Acquisition Speed		
	M0	M1	M2
<i>Age (Ln)</i>	-0.319***	-0.330***	-0.312***
<i>Gender</i>	0.057	0.063	0.068
<i>Education</i>	-0.104	-0.094	-0.088
<i>Studying Abroad</i>	0.048	0.061	0.012
<i>Experience in Government</i>	0.175**	0.181**	0.164*
<i>Entrepreneurial Training</i>	0.048	0.082	0.074
<i>Entrepreneurial Motivation</i>	0.110	0.149*	0.138
<i>Technology</i>	-0.104	-0.111	-0.146
<i>Capital</i>	-0.007	0.033	0.027
<i>Marketing Efforts</i>	-0.021	-0.009	0.012
<i>Competitor Analysis</i>	-0.175**	-0.188**	-0.194**
<i>Marketization</i>	0.019	0.156	0.027
<i>Secondary Industry</i>	0.396**	0.390**	0.388**
<i>Tertiary Industry</i>	0.351*	0.329*	0.314*
<i>Belief</i>		-0.156*	-0.184**
<i>Bribery</i>			0.011
<i>Belief * Bribery</i>			0.209**
<i>F</i>	2.058*	2.144*	2.317***
<i>R²</i>	0.189	0.207	0.246

Note: *p < .1, **p < .05, ***p < .01. Control variables: *Age* to *Tertiary Industry*.

Table 3

Effect of opportunity feasibility beliefs and resource acquisition speed on new venture emergence

	New venture emergence		
	M0	M3	M4
<i>Age (Ln)</i>	-0.075	-0.087	0.053
<i>Gender</i>	0.227**	0.233***	0.170**
<i>Education</i>	0.025	0.029	0.023
<i>Studying Abroad</i>	-0.025	-0.012	-0.021
<i>Experience in Government</i>	0.122	0.127	0.030
<i>Entrepreneurial Training</i>	-0.053	-0.015	-0.033
<i>Entrepreneurial Motivation</i>	0.040	0.083	0.011
<i>Technology</i>	-0.075	-0.082	-0.040
<i>Capital</i>	0.080	0.123	0.108
<i>Marketing Efforts</i>	0.124	0.138	0.131*
<i>Competitor Analysis</i>	0.074	0.059	0.195**
<i>Marketization</i>	0.072	0.070	0.019
<i>Secondary Industry</i>	0.191	0.185	0.032
<i>Tertiary Industry</i>	0.257	0.232	0.149
<i>Belief</i>		-0.172*	
<i>Speed</i>			0.327***
<i>F</i>	1.194*	1.353*	0.004**
<i>R²</i>	0.119	0.142	0.200

Note: *p < .1, **p < .05, ***p < .01. Control variables: *Age* to *Tertiary Industry*.

Table 4

Mediation effect of resource acquisition speed

Path	Beta	LLCI	ULCI	Robust in Sobel Test	Robust in Goodman Test
<i>Direct effect</i>					
Beliefs → Emergence	-0.638	-1.4757	0.1994	-	-
<i>Conditional indirect effect</i>					
Bribery: 0					
Beliefs → Speed → Emergence	-0.4735	-1.0774	-0.0307	Yes	Yes
Bribery: 2.0647					
Beliefs → Speed → Emergence	-0.2148	-0.6526	0.0600	Yes	Yes
Bribery: 4.1437					
Beliefs → Speed → Emergence	0.0457	-0.3143	0.4296	Yes	Yes
<i>Index of Moderated Mediation</i>					
Mediator: Speed	0.1253	0.0072	0.2794		

Note: The 95% confidence interval is based on 5,000 resamples. LLCI: the lower level of the confidence interval, and ULCI: the upper level of the confidence interval. Beliefs: Opportunity feasibility beliefs, Speed: Resource acquisition speed, and Emergence: New venture emergence.

Table 5

Sensitivity analysis of mediation effect

Path	Beta	LLCI	ULCI	Robust in Sobel Test	Robust in Goodman Test
<i>Direct effect</i>					
Belief → Emergence	-0.1160	-0.7982	1.0301	-	-
<i>Conditional indirect effect</i>					
Bribe: 0					
Beliefs → Speed → Emergence	-0.4225	-0.3089	-0.4165	Yes	Yes
Bribe: 2.0647					
Beliefs → Speed → Emergence	-0.1917	-0.6367	0.0525	Yes	Yes
Bribe:4.1437					
Beliefs → Speed → Emergence	0.0408	-1.0299	0.0266	Yes	Yes
<i>Index of Moderated Mediation</i>					
Mediator: Speed	0.1118	0.0128	0.2620		

Note: The 95% confidence interval is based on 5,000 resamples. LLCI: the lower level of the confidence interval, and ULCI: the upper level of the confidence interval. Beliefs: Opportunity feasibility beliefs, Speed: Resource acquisition speed, and Emergence: New venture emergence.

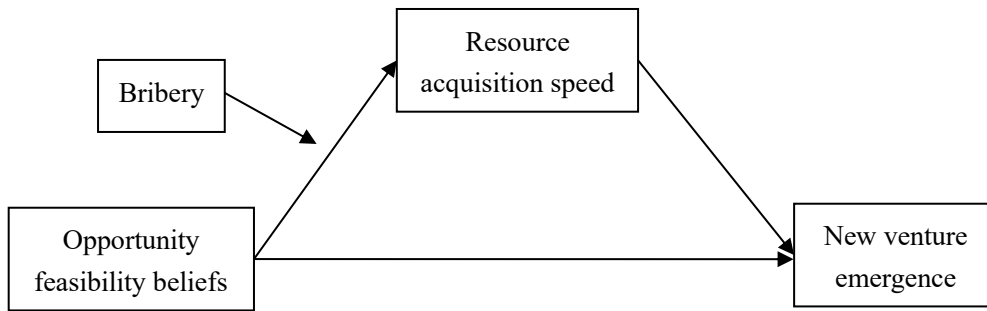


Fig. 1. Theoretical framework

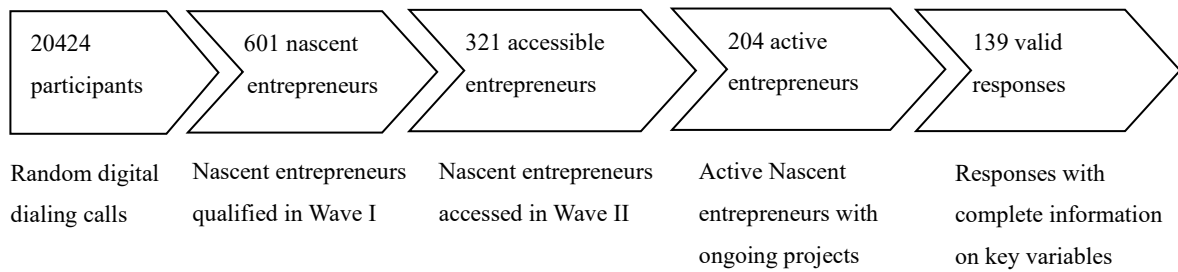


Fig. 2. Sample selection procedure

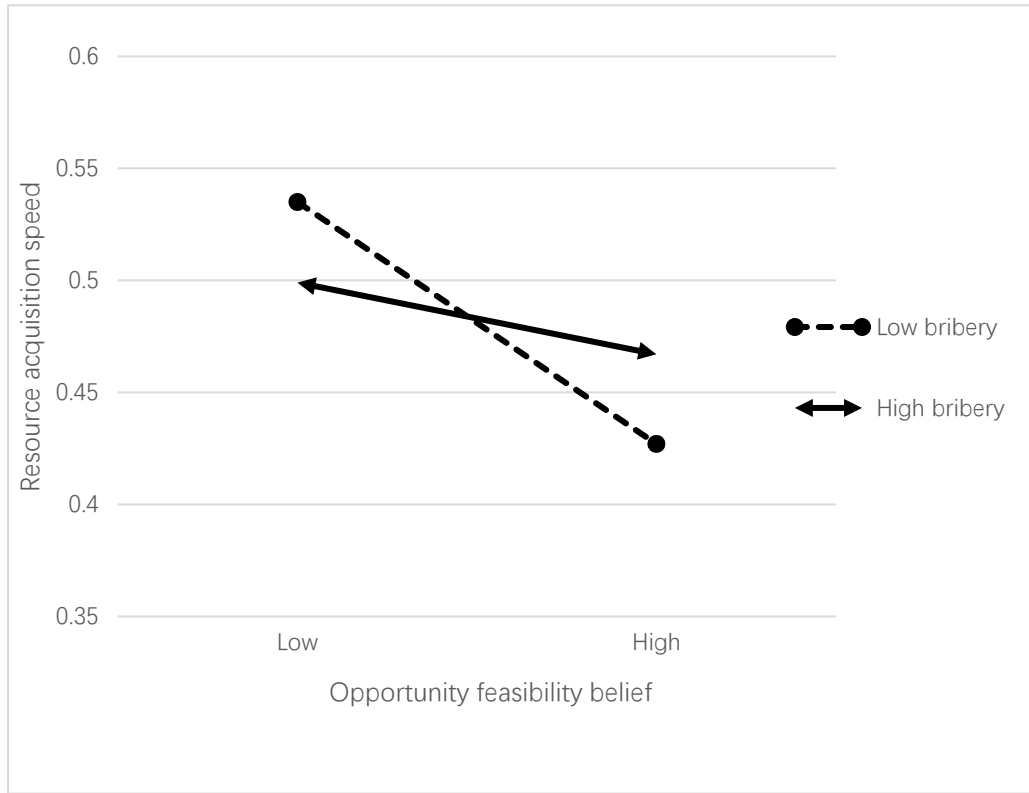


Fig.3. Bribery × opportunity feasibility beliefs on resource acquisition speed