The belt and road initiative, cultural friction and ethnicity: Their effects on the export performance of SMEs in China

Jiatao Li, Bin Liu, Gongming Qian

ARTICLE INFO

Keywords:
- Belt and road initiative
- Cultural friction
- Ethnicity
- Export performance
- China

ABSTRACT

China's Belt and Road Initiative (BRI) has provided Chinese firms with significant incentives to speed up the pace of internationalization. Yet very little international business (IB) research has been found to empirically examine such policy effects. This study explores this important issue using Chinese firms of different ethnicities in the Xinjiang Uygur Autonomous Region (XUAR) of China. We propose that the BRI has a positive formal institutional effect on the export performance of XUAR firms that target the “Belt” countries. Both cultural friction and ethnicity serve as the unique cultural contingencies that moderate the relationship between the BRI and export performance. More specifically, the cultural friction that results from the process of internationalization will negatively affect the export performance prompted by the BRI. The Uygur-owned firms will benefit more from the BRI due to their cultural similarity. Overall, the study takes the lead in investigating both internal conditions and external environments that promote and inhibit the internationalization process of small-to-medium enterprises (SMEs) in the XUAR that are geographically close to the “Belt” countries. The findings help enrich the understanding of the dual “push” and “drag” effects on the outcomes of SMEs’ international activities due to the government-led initiatives and the understanding of micro-foundation toward internationalization from an ethnicity perspective.

1. Introduction

The exploration of the influences from the dynamics of home institutions on the internationalization is highly demanded in the international business (IB) literature (Cuervo-Cazurra, Luo, Ramamurti, & Ang, 2018; Yan, Zhu, Fan, & Kalfadellis, 2018). China’s ambitious economic globalization policy now known as the “Belt and Road Initiative” (BRI) is certainly such a new institutional landscape. Specifically, the purpose of the BRI is to transform the economic core of Eurasia through rail links (the “Belt” route) and seaborne traffic (the “Road” route) to boost bilateral and multilateral trade, and stimulate economic growth (Fukuyama, 2016). Although the BRI has a long-term intention to upgrade technologies by the links with Europe, its immediate expectation is to develop the under-developed western regions of China, cope with the excess production capacity, and potentially prevent the world economic slowdown (Ferdinand, 2016).

Since then, some analysts have predicted that China would become the world’s largest exporting power and overseas investor by 2020 (e.g., Anderlini, 2015) whereas others have cautioned the potential political risks, security threats, and instable economic returns (e.g., Clover & Hornby, 2015; Gurin, How, Jackson, & Yu, 2015). In parallel, even the theoretical debates over the effects of the home-government interventions on the internationalization of firms from emerging economies are everlasting inasmuch as they may trigger either positive or negative effects (Yan et al., 2018), thus calling for a heavy focus on the home-location institutions with concomitant firm characteristics and distance influencers (Cuervo-Cazurra et al., 2018). Against this backdrop, the actual effect of the BRI on firm performance has become a most crucial question.

Although this initiative is a new phenomenon, it has increasingly come to be considered important internationally, and thus provided fertile soil for observing, to what extent, it facilitates and promotes a new wave of internationalization and how it does. This study explores BRI-driven expansion into the “Belt” countries using firms of China’s Xinjiang Uygur Autonomous Region (XUAR). This approach was chosen primarily because the XUAR is planned as the pivotal hub of transportation, commerce, and cultural education for the new Silk Road’s overland trails (the “Belt” route) that will connect China with...
Europe through the Middle East and Central Asia (Ministry of Commerce of the People’s Republic of China, 2015; Swaine, 2015). Given that XUAR is located in a remote inland area with a poorly developed economy, this area provides an ideal context to unveil the economic effects of the BRI.

Moreover, the XUAR is a multi-ethnic region with Uyghurs (a Muslim ethnic minority) and China’s majority Hans, the two dominant ethnic groups. Because these ethnic groups have different cultural backgrounds from those of the “Belt” countries but geographically proximate (Toops, 2004), it is appropriate to consider them together when discussing the importance of both national and subnational cultures to the “belt” countries into which the XUAR firms expand, given that more intensive involvements in international markets would encounter substantial difficulties (Ang, Benischke, & Hooi, 2018) but not all companies have the necessary capabilities to utilize the institutional policy at home (Ang, Benischke, & Doh, 2015; Cuervo-Cazurra et al., 2018).

Specifically, we applied the institutional theory perspective to explore how formal institutional incentives like BRI affect the performance of small-to-medium enterprises (SMEs) located in XUAR, and also to investigate how cultural contingencies manifest in cultural friction and ethnicity similarity that idiosyncratically moderate the effects of formal institution on the performance of SMEs. Using panel data on the SMEs in XUAR between 2013 and 2016, this study found that the BRI had both push and drag effects. More specifically, it pushes firms to internationalize quickly, but that rapid internationalization generates cultural friction which acts as a drag on participating firms’ internationalization endeavors. Ethnicity can, however, help firms with a Muslim ethnic minority (culturally similar to the ‘belt’ countries) effectively capitalize on the BRI policy.

In short, the study takes the lead in exploring the performance effects of the BRI. Our findings contribute to the IB literature in three ways. First, we found that firms were able to benefit from the BRI and particularly the minority-owned firms were better able to realize it. The finding provides preliminary evidence to reconcile the current debates over the grand project. It also directly responds to the calls for more investigation of the impact of institutional environment on the internationalization of a firm in an emerging context (Yan et al., 2018). Second, we contextualized the cultural friction concept (i.e., Luo & Shenkar, 2011) in SME studies, which has been empirically overlooked in previous IB research. We further pinpointed government policies by identifying their push and drag effects simultaneously, and provided new evidence to verify the effects of institutional incentives and cultural advantages. Finally, we focused on sub-national issues by directly operationalizing the ethnicity effect (c.f., Ma, Tong, & Fitza, 2013). Such focus helps engender salient heterogeneity among organizations though it has seldom been incorporated into the IB research. An examination of such effects resonates with, and further advances, the current conversation on the micro-foundations of international strategy (Ang et al., 2018) in that the entrepreneurs’ ethnicity inheritance would contribute to the heterogeneous performance of firms in the internationalization process.

The article will proceed as follows. The first section provides a brief review of the institutional theory, and then develops hypotheses concerning the BRI-related issues. The subsequent section introduces the sample and methodology. Afterwards, we present our results, and finally we conclude with a discussion of the implications of the findings.

2. Literature review and hypotheses

2.1. Belt and road initiative

A home institution may exert a significant influence upon the internationalization of a firm that lives and operates under the institution (Cuervo-Cazurra et al., 2018). The BRI, which is such a home institution, provides a rare opportunity for firms to capitalize on the national policy. Intended to strengthen economic connectivity and cooperation among Asia, Europe and Africa (Lee, Hu, Lee, Choi, & Shin, 2018; Yan et al., 2018), the BRI was unveiled in 2013 with the two routes connecting Eurasia through rail links (the “Belt” route) and sailing through Southeast Asia and Africa to Europe under the seaborne traffic (the “Road” route), respectively. They help boost bilateral and multilateral trade, and stimulate economic growth (Fukuyama, 2016; Swaine, 2015). Highlighted in the three pillars, the BRI is expected to promote economic development through infrastructure investments and new trade routes, create newer economic interdependent relationships between China and other countries, and establish a new “neighborhood diplomacy” with special focus on Asia (Lo, 2015). Expectably, SMEs in XUAR may be direct beneficiaries of the BRI policy since XUAR is planned as the central hub of transportation, commerce, and cultural education for the “Belt” route that links China with Europe through the Central Asia and Middle East due to its geographical location (Ministry of Commerce of the People’s Republic of China, 2015; Swaine, 2015).

Despite the positive expectation from the BRI as a whole (Anderlini, 2015), however, several other studies have indicated the potential political risks, security threats, and instable economic returns (e.g., Clover & Hornby, 2015). Most of the studies conducted in disciplines other than IB have delineated the societal impacts (Swaine, 2015), political risks (Gurin et al., 2015), policy interpretation (Lo, 2015; Yan et al., 2018), and logistical optimization (Lu, Hsu, & Yip, 2018). Lee et al. (2018) further cautioned the paucity of empirical evidence on the ambitious BRI though some of previous studies advocated the conducive effects on international trade and commerce. Against this background, exploration of the policy effects on, and the cultural interaction with, IB activities are certainly highly demanded from the IB perspective.

2.2. Institution and internationalization

Although the IB studies are heavily focused on multinational enterprises (MNEs) and foreign direct investment (FDI) (Delios, 2016), however, in this study, we used exporting as the mode of market entry as most SMEs in XUAR did not possess adequate firm-specific advantages (resources and skills) necessary to conduct FDI (Gaur, Ma, & Ding, 2018). Moreover, most of them are even wary of the risks involved in internationalization. Now, an opportunity has come as they could capitalize on the BRI policy to engage actively in exporting activities along the neighboring “Belt” countries. Accordingly, revisiting the substratum of institutional theory should be appropriate because the theory presents a fundamental and overarching analytical perspective for a firm’s internationalization under the BRI (Gao, Murray, Kotabe, & Lu, 2010; Hoskisson, Hitt, Wan, & Yiu, 1999). At the kernel, it tries to explain the motives and behaviors of firms as institutionally set societal norms and rules drive behaviors and responses of organizations (Ang et al., 2015; North, 1999).

Defined as the societal rules that constrain human behaviors and interactions, institutions can be further categorized into formal and informal dimensions (North, 1999; Peng, Wang, & Jiang, 2008). Specifically, any strategic decisions made by organizations tend to be isomorphic due to those formal constraints such as social, economic, and political bodies and/or informal ones that include social norms and rules (Gao et al., 2010; North, 1999; Peng et al., 2008; Qian, Liu, & Wang, 2018). Meanwhile, organizations are also able to respond to those institutional influences strategically based on their knowledge.

1 The Belt route covers 26 countries named as Afghanistan, Azerbaijan, Bahrain, Cyprus, Egypt, Iran, Iraq, Israel, Jordan, Kazakhstan, Kuwait, Kyrgyz Republic, Lebanon, Mongolia, Oman, Pakistan, Qatar, Russian Federation, Saudi Arabia, Syrian Arab Republic, Tajikistan, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, and Yemen.
and routines, etc. (Mudambi & Zahra, 2007; Oliver, 1991). In consequence, in concert with swings of pendulum in the strategic management discipline (Hoskisson et al., 1999), the institutional theory is substantially comprehensive in addressing the two directions of interactions between institutions and organizations.

The first direction is focused on influences from the external environment of a societal institution to an organization. A society’s institutions certainly influence firms’ behavior by altering the rules and norms that govern individuals and organizations (Hillman & Keim, 1995), especially in a polity with weak institution that the government maintains the majority of scarce resources (Qian et al., 2018). Firms must maintain legitimacy by following the prescribed order and rules and also by displaying conformity with the long-term goals of national and international strategic developments in order to win social acceptance, legitimacy, and the resources it can bring (Peng et al., 2008; Qian et al., 2018; Stevens, Xie, & Peng, 2016). Governments can exercise coercive power, and they can if they choose to apply it for resource allocation (Gao et al., 2010; Qian et al., 2018) and thus shape the reward and penalty structure of economic activity (Haveman, Jia, Shi, & Wang, 2017). In other words, home-country policies function as a dynamic influence that can trigger changes of behaviors in internationalization (Yan et al., 2018).

But organizations can also adapt heterogeneously to institutions. The second direction is opposite to the first (one); that is, it goes from the internal perspective of an organization to the external perspective of a societal institution. Institution theory posits that many important institutions are formed socially by groups of individuals (Stevens et al., 2016). They also respond based on the participants’ values, cultures and norms (North, 1999). This implies that participants may differ in reactions (Ang et al., 2015), and may even be able to obtain special benefits through their superior cultural immersion (Mudambi & Zahra, 2007; Oliver, 1991). The importance of addressing this internal factor is also emphasized in Terjesen, Hessels, and Li’s review paper (2016), which further implicates the benefits of international entrepreneurs’ characteristics, cultural bonding, and social capital in bringing competitive advantage even under the same institution. Put in another way, the benefits and/or damages derived from external contingencies may vary heterogeneously among organizations because of their distinctive, activated experience and knowledge (Ang et al., 2018).

However, little IB research has been found to explore the dynamics of home institution that affects the internationalization of firms (Yan et al., 2018), and particularly that of SMEs (Knight & Liesch, 2016). At the same time, organizational heterogeneity from a bottom-up perspective has not been well incorporated in the IB studies albeit the micro-foundation of international strategy has gained burgeoning tractions (Ang et al., 2018). There are quite few empirical studies to operationalize the cultural friction and ethnicity concepts that are closely related to the home institutions like BRI that involve significant cultural ingredients. Specifically, cultural friction is defined as a cultural resistance during cross-country organizational interactions (Luo & Shenkar, 2011) while ethnicity is surmised as an omitted yet salient sub-national ingredient (Ma et al., 2013). That is to say, exploration of the BRI per se, cultural friction embedded in the interactions, and ethnicity of founders or entrepreneurs could help fill the gaps in this domain.

2.3. The BRI and internationalization

It is clear that the BRI is intended to be a formal institutional force that significantly affects firms’ internationalization behavior but the economic outcomes on their internationalization are still not clear due to objective reasons (e.g., short in history). Like other emerging economies, China’s government policies and regulations avowedly seek to influence firms’ decisions by intervening in economic activities (e.g., using subsidies and directed financing) to direct the flow of trade and investment (Haveman et al., 2017; Qian et al., 2018). Government policies have a profound impact on the growth or even the survival of business endeavors (Hillman & Keim, 1995; Yan et al., 2018), since they permit and encourage what the government feels organizations should be doing and allocate resources accordingly (North, 1999). In dealing with the BRI as a new institution, all firms within the national border must respond with full support so they can further obtain legitimacy and additional resources to grow.

In the BRI context, the government strongly supports firms to go out and attract new demand in new markets. Rather than being passively compliant, most Chinese firms in the XUAR view the BRI in a positive light. They believe they will be able to take advantage of this opportunity by exploiting their geographic proximity to the “Belt” countries (Larcon, 2017). Actually, the BRI provides not only policy guidelines but also financial incentives (Ferdinand, 2016). The intention is to create a new institutional environment featuring a policy-driven exporting activity. The incentives (e.g., subsidies) provided by the government should help firms to supplement the lack of resources in international expansion, hedge against risks in transaction exposure, and consequently enhance their international competitiveness (Luo, Xue, & Han, 2010). This should matter a great deal to SMEs in particular since they generally lack sufficient equity foundation as well as resource supplies. However, they are more sensitive and adaptable to the policy changes in the formal institutional sphere (Knight & Liesch, 2016).

Therefore, such firms are able to move more successfully into the “Belt” countries when replenished with governmental subsidies, or provided with government-initiated advantage (Cuervo-Cazurra et al., 2018). The subsidies serve as fillings to the void of financial resources, thus increasing the firms’ tendency to outperform their competitors abroad. Therefore, the BRI policy is viewed as a formal institutional support that helps motivate firms to internationalize quickly and extensively.

H1. The BRI improves the export performance of firms in the XUAR to economies along the “Belt” route.

2.4. Cultural friction in internationalisation

Despite the fact that the BRI is the policy that prompts the firms in XUAR to internationalize rapidly along the “Belt” route, it will certainly produce the cultural friction that functions as a drag since any international expansion also needs to comply with the informal institutional setting in the corresponding destination countries. Instead of addressing the static cultural distance, scholars have indicated that it is the size of the drag produced by the interface between interacting cultures that disturbs international businesses saliently (Shenkar, 2001: 528). In other words, the cultural friction denotes the actual contact between two exchanging entities rather than abstract differences (Luo & Shenkar, 2011).

As in normal IB activities, the cultural friction results mainly from the interactions between two or more entities (e.g., organizations and individuals) from different countries or it arises from the speed of a firm’s foreign expansion (Luo & Shenkar, 2011). Inspired by the basic friction formula in physics, some IB scholars regard the cultural friction as an extension of the cultural distance measurement, which includes the four dimensions (i.e., power distance, individualism, masculinity, and uncertainty avoidance) between two paired countries. On top of that, difficulties in expansion into a foreign destination are also related to the speed of changes in international scope, contact surfaces, and stage of interactions (Luo & Shenkar, 2011: 7).

Actually, many of firms in XUAR have been promoted by the BRI to speed up their internationalization process and some have even been found to take radical approach from the start of international expansion. The BRI is so ambitious, involving so many countries and so much capital that the extensive interactions between organizations and individuals from different cultures are bound to create difficulties (Luo & Shenkar, 2011). Consequently, firms will find it difficult to conform to
the local social norms in the economies they target (Yang, Su, & Fam, 2012).

Social norms are deeply rooted but often unspoken (Ghemawat, 2001) while people from different countries hold different routines (Stahl & Tung, 2015). This can make them difficult to understand people from other cultures, even after adoption in other respects (Stahl & Tung, 2015). Insofar as culture defines divergent national identities, firms from different national cultures must anticipate cultural resistance or friction (Luo & Shenkar, 2011). The BRI-driven business activities will definitely produce cultural friction, and the firms concerned will encounter difficulties in gaining legitimacy and acceptance in their destination countries even with the formal institutional support (Stevens et al., 2016). That will certainly negatively affect their foreign performances.

H2. Cultural friction will moderate the positive relationship between the BRI and export performance such that the relationship will be weaker for firms with greater cultural friction.

2.5. Ethnicity in internationalization

Firms might be expected to gain an advantage from their ethnicity in a market where they face an ethnically-familiar institutional situation (Prashantham & Young, 2011). The XUAR is a multi-ethnic region (Toops, 2004). The two main ethnic groups, the Uygurs and the Hans, are found to be culturally different from most of the “Belt” countries, so are their firms. A cultural difference is reflected in a lack of knowledge about a foreign market (Oliver, 1991), and it thus affects a firm’s responsiveness and effectiveness there (Mudambi & Zahra, 2007).

More specifically, Uygur-owned firms have a congenital edge over their counterparts (e.g., Han-owned firms) because of their ethnicity similarity or advantage (Toops, 2004). Here, corporate culture shaped by founders or entrepreneurs with ethnicity similarity is a rare resource as it is not easily tradeable but applicable to a variety of tasks (Lee & Kramer, 2016). It is the aggregation of founders or entrepreneurs (individuals and teams) that are the key foundation that configures the organizations and influences their strategic decisions (Ang et al., 2015, 2018).

Anthropological and historical evidence has confirmed that Uygurs (and many other minority groups) in XUAR share the same nomadic ancestors with Central Asian races, meaning that they have similar language pedigree and ethnicity roots (Gladney, 1996). The archeological discovery of Loulan Beauty has further shown Uygurs’ closer ancestral connections to people in Central Asia even though they lawfully constitute as a minority group of China (The New York Times, 2008). The ethnicity similarity should help them to decipher, anticipate, and accommodate intersecting systems before they come into contact as well as during contact (Hui, Chen, Leung, & Berry, 2015). Such ethnicity-based similarity may also enable the firm concerned to do better as its corporate culture fits well into the destination country’s one.

As such, Uygur-owned firms are better able to acquire deep insights and accurate knowledge of the situation and of the available alternatives (Yang et al., 2012). They can start with less liability of foreignness, defined as the disadvantage of foreign participants’ in non-native status (Johanson & Vahlne, 2009), and thus incur less cost in developing an accepted position in many destination countries (Qian, Li, & Rugman, 2013). Anecdotal examples have provided a preliminary support as well. For instance, Mr. Riedli Abla, who founded his halal food company in 1995, has made a successful international expansion under the BRI program because of his Uygur ethnicity (NetEase, 2015). Accordingly, Uygur-owned firms should be better than their Han-owned counterparts in conducting international business in the “Belt” countries under the BRI.

H3. Ethnicity will moderate the positive relationship between the BRI and export performance such that the relationship will be stronger for firms of the Uygur nationality than for those of the Han nationality.

3. Methods

3.1. Sample selection

There are several reasons to choose XUAR as the focal context. First, it is policy-wise treated as the pivotal hub connecting China with the Central Asia and Middle East under the BRI (Fukuyama, 2016). It serves as a strategic location that determines the success of the BRI. Second, the local economy of XUAR is less developed compared with other coastal and inland provinces of China. As such, it represents a typical western-region that the central government wishes to develop within the BRI framework. Third, XUAR is a multi-ethnic region with a balance between Uygurs (a Muslim ethnic minority) and China’s majority Hans referring to the recent governmental statistics, functioning as an appropriate place to contextualize our proposed ethnicity effects.

The XUAR of China has a unique dual-governance system: The People’s Government of XUAR and the organization called the “Production and Construction Corps” (XPCP). They share administrative duties and jointly govern the Autonomous Region. Established in 1954, the XPCP is a regulatory body that integrates a militia, local governance and economic activity in 14 cities and 10 towns in XUAR. Either the XUAR government or the XPCP can record foreign transactions as required by the Regulations for the Registration of Foreign Trade Operations (Ministry of Commerce of the People’s Republic of China, 2004). The data from the XPCP were analyzed in this study because of the data availability. The Qixinbao software application was used to collect information about the firm characteristics as it continually compiles information from more than 100 databases, including those from the official National Enterprise Credit Information Publicity System (36kr, 2015). As in the scheme of the “Belt” component of the BRI, we selected the Central Asian and Middle East countries plus Russia and Mongolia as the destination countries for the study (see Footnote 1), covering 26 countries in total (Fukuyama, 2016).

The BRI was launched in 2013, so the four-year period 2013–16 (inclusive) was the study’s timeframe. To be identified and included, a firm had to (1) be registered in XUAR; (2) be shown on the list of XPCP; and (3) be in independent existence over the studied period. The final sample comprised 387 firms or 1548 firm-year observations.

3.2. Main variables

3.2.1. Export performance

Following the prior leads e.g., (Katsikeas, Leonidou, & Morgan, 2000), export performance was measured using the natural logarithm of each firm’s total export sales (in thousands of US dollars) to all of the “Belt” countries. Successful exporting is at the heart of the BRI for both corporate and government decision-makers, and this measure was designed to emphasize the effectiveness and flexibility dimensions of export performance (Katsikeas et al., 2000). It also has the advantage of being an objective measure of success (Lado, Martinez-Ros, & Valenzuela, 2004).

It is appropriate for the export volume to be used in the Chinese context for several reasons. First, most firms in China have witnessed a glut of production capacity in sectors ranging from iron and steel to autos. In addition to expanding “internal demand”, firms have to expand “external demand” (through exports) as well, which can help reduce product overcapacity. Second, governments (both central and local) also find it important to expand “external demand” as it helps maintain both a favorable balance of trade and an international payment surplus (Ferdinand, 2016).

3.2.2. The BRI

In addition to policy guidelines, the BRI makes available resources or special-purpose funds to support trade and investment involving the “Belt and Road” countries. The funds are allocated by the XPCP’s Bureau of Commerce. As in the funding scheme, all firms in XUAR are
treated equally. The funding data were obtained from the Bureau. Each firm’s actual amount of funding (in thousands of US dollars) in the previous year was used in the analysis.

### 3.2.3. Cultural friction
Cultural friction was measured using Luo and Shenkar’s (2011) formula

$$F = \mu + \frac{CD \cdot e^{(1-G)}}{10} \cdot N$$  \hspace{1cm} (1)

where $\mu$ is the coefficient of cultural friction. CD represents the sum of cultural distance in terms of the four cultural dimensions (i.e., power distance, individualism, masculinity, and uncertainty avoidance) between China and destination nations (to which the firm exported). The values of those cultural dimensions are available from Hofstede (2001). V represents the increase in the number of destination nations along the “Belt” route over the period. This measurement should well capture the core premise that “fast start-off from the stationary state generates higher frictional force” (Luo & Shenkar, 2011: 7) even though their discussion is put on FDI. The data on the speed ranged between -23 and 20 in firms’ exports to various different “Belt” countries. G ($G \in (0, 1)$) equals to 0 in this case as all of the firms were only exporting during the period studied while $e$ is the constant that equals to 2.7183. Cultural friction is related to the scope of foreign involvement; that is, the number of destination countries with which a firm comes into contact. N reflects the contact surface measured as the number of destination countries in the corresponding year.

It is noted that both the conceptual and mathematical operationalization of cultural friction is, in effect, based on the entity level instead of the country level in that the measurement reflects the exposure of each individual firm in different bundles of countries (Luo & Shenkar, 2011). In other words, each firm will encounter all sorts of cultural frictions in both cross-sectional and longitudinal respects.

### 3.2.4. Ethnicity
Because the cultural characteristics related to communication and socialization are embedded in ethnic traits, ethnicity was measured using a dummy set equal to 1 if a firm’s owner was Uygur and 0 otherwise. Uygur owners are easily identified because they have distinctive family names that have at least five Chinese characters. As in the attraction-selection-attrition model (Schneider, 1987), an owner usually tends to bear a marked brand of his/her firm. Given that the sample consists of SMEs, the employee diversity of a firm also tends to be monotonous. This variable was therefore considered as a reliable proxy for an organization’s culture.

In the sample, we found two family names called Ma. It can be either the family name of the Huis (Hui ethnicity) or that of the Hans. Hans’ full name has the same length as Hans as well, but it is different from what the Uygur have (Shen, 2002). This occurrence did not cause disturbance to the ethnicity investigation given similar results under different treatments. On one hand, the Hui ethnicity shares many cultural acculturations with the Hans while they do not even have their own language. Like the Hans, they have similar ethnicity disadvantage as compared to the Uygur (Shen, 2002). On the other hand, other minority groups like Khalkhas, Kazak also have (similar) long names as well, and they all share lower levels of liability of foreignness as the Uygur counterparts due to ethnic backgrounds. Therefore, we counted all those entrepreneurs with long names as Uygur ethnicity because we could not find an alternative way to help identify their specific ethnicity.

### 3.3. Control variables
Following the lead of previous studies e.g., (Barkema & Vermeulen, 1998; Giachetti & Dagnino, 2014; Mayer, Melitz, & Ottaviano, 2014; Qian et al., 2013; Vandaie & Zaheer, 2015), we controlled for firm age, size, past performance (before BRI), ownership type, GDP of the destination country, competition, and the wage rate. Firm age was measured as the number of years since it started operations. Firm size was quantified using the natural logarithm of a firm’s founding assets. The natural logarithm of a firm’s total exports to the selected “Belt” countries in 2012 was used to measure its exposure to the “Belt” countries especially before the BRI project. We accounted for state influence as government shareholding can affect a firm’s operations. We measured it using a dummy variable as 1 (absence from state influence) if the firm was completely privately-owned, and 0 otherwise. The logarithm of the destination country’s annual GDP was used to measure the potential size of the country’s market. Competition was measured as the total number of XUAR firms in each industry that conducted exporting to the ‘belt’ countries. The industries into which firms were grouped are: agricultural products, international trade, international logistics, international services, manufacturing, or construction. The overall average wage rate (for the XUAR) in each year was extracted from the China Statistical Year Book to capture the fluctuation in operating costs. Finally, year dummies were included to isolate any global effects of fluctuation in macroeconomic factors. The model of the relationship between firms’ export performance and the main explanatory variables takes the following form:

$$Internationalization_{it} = \beta_0 + \beta_1 \cdot BRI_{it-1} + \beta_2 \cdot Cultural摩擦_{it-1} + \beta_3 \cdot Ethnicity_{it} + \beta_4 \cdot GDP_{it} + X + \varepsilon_{it},$$  \hspace{1cm} (2)

Where the subscript $i$ and $t$ refer to firm and time, respectively; $X$ captures all the effects of the above-mentioned control variables. The $\beta_1$, $\beta_2$, and $\beta_3$ are the public coefficients of the corresponding variables.

### 4. Results
The descriptive statistics for the dependent, independent and control variables are presented in Table 1. The results provide preliminary support to our baseline hypothesis in which the relationship between the BRI and export performance is positive and significant ($p = 0.2858$, $p < .01$). The results on all of the control variables also show they are correlated with the dependent variable at different levels of significance, and thus indicate the appropriateness to include those controls into our analyses based on the previous studies. In particular, firm size was found to be negatively (and significantly) correlated with the absence of state influence ($p = -0.5172$, $p < .01$), as was industry competition ($p = -0.5492$, $p < .01$). These suggest that firms being fully private-owned tend to be smaller in size and they might also encounter greater competition in the industry. Yet, to check for any potential multicollinearity, we conducted a diagnostic test using the variance inflation factors (VIFs). None of the values exceeded the commonly accepted threshold of 10 (Sayari & Omri, 2017), with the maximum value of VIF being 2.19 and the mean VIF being around 1.50.

Generalized least squares models were evaluated assuming random effects as they provided the most relaxed assumptions (Orsini, Bellocco, & Greenland, 2006). Although random effect appears intuitively suitable for this special sample, we conducted a Hausman test that further confirmed the statistical appropriateness for our model selection ($p = 0.2953$). We further adopted a clustered sandwich estimator technique clustering on the firms in all of the models to account for any potential serial correlation and heteroskedasticity (Hochcke, 2007). This technique has been recommended by statisticians inasmuch as it relaxes
the strict assumption on the independence across repeated observations of one entity, and it accounts for the heteroskedasticity issues by assigning adequate weights, and generating the most conservative standard errors as compared with other specifications (Cameron & Miller, 2015; McCullagh & Nelder, 1989).3

Table 2 reports the results of hierarchical regression analyses. Model 1 is the basic model that includes all of the control variables only while models 2–4 address the three hypotheses, respectively. More specifically, Model 2 tests H1 regarding the individual effect of the BRI on the export performance of SMEs in XUAR. Model 3 examines H2 regarding the two-way interaction effect of the BRI and cultural friction, and Model 4 tests H3 regarding the two-way interaction effect of the BRI and ethnicity. Finally, Model 5 comprises all of the model variables, which also serves as an additional robustness check.

H1 predicts that the export performance of a firm is positively associated with the BRI. As predicted, the coefficient of the BRI variable is positive and significant (βh = 0.0044, p < 0.01). This provides strong support for H1, suggesting that the BRI helps improve the export performance of both Uygur- and Han-owned firms. In other words, after the launch of the BRI, the export volume increased by about 0.44% with increase in every one thousand of the BRI funding. That means a great deal to the sampled firms given that the average after-tax profit rate for Chinese SMEs are below 3% (Sohu, 2011). Therefore, the argument of government-initiated advantage (Cuervo-Cazurra et al., 2018) persists in the BRI context. More specifically, firms are able to move more successfully into the “Belt” countries when replenished with government subsidies.

The results also show full support for H2, which is tested in Model 3. Here, the coefficient of the interaction term is negative and significant at the 0.01 level (β2 = −0.0004). It clearly suggests that cultural friction plays a significant moderating role as it changes the direction of the relationship between the BRI and export performance from positive to negative though the individual effect of cultural friction is positive. Fig. 1 depicts the moderating effect of cultural friction. As shown in Fig. 1, a firm’s export performance is positively associated with the BRI and the relationship is negative with high levels of cultural friction than low levels of cultural friction. The result agrees with the tenet that a rapid internationalization would produce cultural friction that drags the export performance because of the needs to comply with the informal institutional setting in the corresponding destination countries.

In Model 4, which tests H3, the coefficient of the interaction term is positive and significant at the 0.01 level (β3 = 0.0304), indicating that the ethnicity of Uygurs helps strengthen the (positive) relationship between the BRI and export performance. The results provide further support to the significance of micro-foundation factors in which founders or entrepreneurs are the key foundation that influences their internationalization decisions and capabilities (Ang et al., 2015). Therefore, we conclude that the Uygur ethnicity should have an inherent advantage that originates from its cultural similarity or closeness. Fig. 2 illustrates that a firm’s performance increases with the BRI at a faster rate of Uygur ethnicity than Han ethnicity.

Finally, in Model 5, we find that the sign and significance levels of our key variables are mostly consistent with those found in the other models. This model also shows that the cultural friction per se is positively related to the export performance (p < .01) whereas ethnicity itself positively but insignificantly to the export performance (p > .01). The two individual effects are well expected since the theoretical and mathematical base on which cultural frictions are built incorporates much of the geographic scope of internationalization. And the scope and scale of internationalization are found to be positively correlated with each other (Boehe, Qian, & Peng, 2016). Although the ethnicity individually is not significant statistically, it did help the firm to expand into the “Belt” countries.

4.1. Robustness tests

We conducted several robustness tests to consolidate our findings. First, the interaction terms might cause potential multicollinearity problem in the models, thus obfuscating the results. We re-ran separate correlation tests among all the individual and interaction terms, and found none of the paired correlations exceeded the value of 0.5. In addition, we also re-ran the model by constructing the interaction terms with mean-centered variables, which produced the persistent results. Specifically, Model 6 shows that the BRI positively and significantly influences a firm’s export performance (β1 = 0.0077, p < .01) while cultural friction (β2 = −0.0004, p < .01) and ethnicity (β3 = 0.0286, p < 0.05) moderate the relationship between the BRI and export performance in an opposite way.

Second, the firm size might disturb the outcome variable albeit we diagnosed the absence of multicollinearity using a VIF test. We therefore dropped the variable in the model. Again, the results still remained consistent as shown in Model 7, with the coefficient for the BRI being positive (β1 = 0.0059, p < .01), that of the interaction term of cultural friction negative (β2 = −0.0004, p < .01), and that of the interaction term of ethnicity positive (β3 = 0.0286, p < .05).

Third, the industry-wise annual (average) wage rate could

**Table 1**

Descriptive statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exporting Performance</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. BRI</td>
<td>0.2858**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Cultural Friction</td>
<td>0.2924**</td>
<td>0.2129**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Ethnicity</td>
<td>−0.0018</td>
<td>−0.0751**</td>
<td>−0.0517</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Firm Age</td>
<td>−0.0999</td>
<td>0.0540**</td>
<td>−0.0511</td>
<td>−0.0754**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Firm Size (ln)</td>
<td>−0.9095**</td>
<td>0.0603</td>
<td>0.0903**</td>
<td>−0.1918**</td>
<td>0.3227**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Prior Performance</td>
<td>0.3967**</td>
<td>0.1842**</td>
<td>0.0067</td>
<td>−0.1056**</td>
<td>−0.1376**</td>
<td>−0.2441**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Absence from State Influence</td>
<td>0.0445**</td>
<td>−0.0578**</td>
<td>−0.0801**</td>
<td>0.1150**</td>
<td>−0.2754**</td>
<td>−0.5172**</td>
<td>0.0892**</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. National GDP (ln)</td>
<td>0.2131**</td>
<td>0.0484**</td>
<td>0.0721**</td>
<td>−0.0000</td>
<td>−0.0000</td>
<td>−0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>10. Competition</td>
<td>0.0471**</td>
<td>0.0660**</td>
<td>−0.0491</td>
<td>0.0826**</td>
<td>−0.0812**</td>
<td>−0.5492**</td>
<td>0.1340**</td>
<td>0.3411**</td>
<td>−0.0000</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>11. Wage</td>
<td>−0.2465**</td>
<td>−0.1168**</td>
<td>−0.0737**</td>
<td>−0.0000</td>
<td>−0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>0.0000</td>
<td>−0.3222**</td>
<td>0.0000</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Mean: 7.6212 76.7075 0.5339 0.0698 8.7649 7.9565 10.7678 0.8501 8.7596 316.726 53251.7
Std. dev: 7.1185 212.7675 2.1566 0.2548 3.8564 1.9404 6.4150 0.3571 0.0738 140.2294 7049.796
Max: 20.6157 2463 24.5181 1.0000 27.0000 14.9787 19.8558 1 8.8344 387 64630

Notes: “p < .1, ”p < .05, ”p < .01.

3We alternatively applied the robust standard error method to tackle the possible problem of heteroskedasticity. The results turned out to be qualitatively the same.
the existence of the above effects: positive individual effect of the BRI
results on the three hypotheses all remained robust so we reconfirmed
ranatest (in Model 8) with the industry-wise wage variable. Again, the
caused by the way to construct the competition measurement), we re-
petition variable in the previous models (due to the high correlation
matching with our industry groups/segments and excluding the com-
Region (taken from the China Statistical Year Book) alternatively. After
Average Wage of Employed Persons in Urban Private Units by Sector and
countries. Accordingly, we used the data from the source named as
competitive advantage of the products and/or services targeting 'Belt'
accurately capture the operating costs that may negatively affect the
competitive advantage of the products and/or services targeting 'Belt'
countries. Accordingly, we used the data from the source named as
Average Wage of Employed Persons in Urban Private Units by Sector and
Region (taken from the China Statistical Year Book) alternatively. After
matching with our industry groups/segments and excluding the com-
petition variable in the previous models (due to the high correlation
caused by the way to construct the competition measurement), we re-
ran a test (in Model 9) with the industry-wise wage variable. Again, the
results on the three hypotheses all remained robust so we reconfirmed
the existence of the above effects: positive individual effect of the BRI

\[ \beta_1 = 0.0060, \ p < .01 \], negative moderating effect for the cultural
friction \( \beta_2 = -0.0004, \ p < .01 \), and positive moderating effect for the
ethnicity \( \beta_3 = 0.0285, \ p < .05 \), respectively.

Fourth, the results might possibly be biased if some of the sampled
SMEs registered in XUAR were driven mainly by the tax preference. The
central government of China has implemented special tax policies to-
ward the inland provinces located in the Western region of China in
recent years (State Tax Administration, 2011). Although the youngest
firms (only four years in history) in our sample were established before
the policy was put into effect in 2011, we further re-tested the full
model in Model 9, including those that were older than four years only.
After dropping out 30 firms in 120 firm-year observations, all the re-
sults were qualitatively similar \( \beta_1 = 0.0059, \ p < .01 \); \( \beta_2 = -0.0004, \ p < .01 \);
\( \beta_3 = 0.0286, \ p < .05 \), respectively. The results remained
robust even if we included the firms that were at least 6 years old only,
thus ruling out the potential concern. 4

Fifth, the export performance may reversely influence the cultural
friction, thus disturbing the above findings. To mitigate a potential
occurrence, we alternatively used the cultural friction variable in a
lagged form \( t-2 \) to predict the export performance in time \( t \), dropping
the sample size to 1161 firm-year observations in Model 10. The pre-
edicted effects remained qualitatively similar even after the temporal
lagging. Specifically, the coefficient for the BRI is still positive
\( \beta_1 = 0.0067, \ p < .01 \) with the two interaction effects being con-
istent \( \beta_2 = -0.0003, \ p < .05 \); \( \beta_3 = 0.0358, \ p < .01 \).

Finally, we examined the export performance of XUAR firms that
targeted the "Road" route of the BRI as a robustness check even though
the breath of the "Road" destination countries for XUAR firms are ra-
ther limited compared to their "Belt" destination countries. 5 We expect
the sign of the individual effect of the BRI and that of the interaction
effect of the BRI and cultural friction should be the same but that of the
interaction effect of the BRI and ethnicity should be different (opposite)
given that the culture of the Uygurs are different from those of the

4 To further alleviate the concern over the tax issues, we compared the
Category of Special Income Tax Treatment Industries in XUAR [initiated by the
State Tax Administration of People's Republic of China (2011)] with our
sample, and identified that the 'international trade' category is not shown on
the special treatment list. We then created the two subsamples with one be-
longing to the specific industry and the other not. If the tax policy does matter,
we should have found significant differences between the two subsamples.
However, that is not the case given that both direction and significance level are
consistent.

5 The "Road" countries for the BRI program include Brunei, Cambodia, East
Timor, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand,
and Vietnam.
“Road” countries (since most of the “Road” countries share similar ethnic backgrounds with the Han group). As shown in Model 11, the results lend support to our prediction that the BRI helps boost the export performance of both Uygur- and Han-owned firms to the “Road” countries (β₁ = 0.0017, p < .01) and cultural friction had the moderating effect though it is less significant (β₂ = −0.0001, p < .10). As predicted, the moderating effect of ethnicity turned out to be negative and highly significant (β₃ = −0.0029, p < .01) (Table 3).

5. Discussion and conclusions

Using the institutional (theory) perspective, this study examined the new and important issue of how Chinese firms with different ethnic backgrounds can best capitalize on the BRI. Based on a sample of SMEs located in XUAR, we found that the BRI exerts positive (institutional) influences while both cultural friction and ethnicity negatively and positively moderate the relationship, respectively. Specifically, the BRI is designed to push Chinese firms to internationalize quickly, but it also leads to increase in cultural friction and thus imposes a drag on their foreign activities. The ethnicity seems to be a subnational factor that could function as another source of advantage when faced with the contextualization of cultural friction not only extends its application from FDI to exporting activities but also replenishes the institutional theory with dynamic substance. Specifically, the home institutional favorability produces general benefits among organizations, but any hasty and unplanned expansion would trigger increased frictions in destination countries that would hinder or even damage the conducive home contingencies. This brings up a pivotal caveat that both up-down and down-up institutional changes are evolving simultaneously, and thus they should be fully taken into consideration especially in the IB studies. Along this logic, future studies could examine how activities such as student exchange programs and cultural exhibitions would help alleviate the negative effects brought about by cultural friction in the process of internationalization if the data are available in the future. Further extending the knowledge of such symbiotic evolvement is worth our while.

5.1. Theoretical contributions

First, the study serves as the first empirical evidence to clarify the debates on the effects of the BRI on SMEs located in the Western Region of China that connects the Central Asian and Middle East countries. There has been a disagreement on whether the BRI has produced positive effects, (Anderlini, 2015) or negative effects, (Clover & Hornby, 2015; Gurin et al., 2015) effects. Our study has provided at least preliminary identification of sub-national (provincial) and provided new empirical evidence for those effects. Intuitively, the grand projects like BRI indeed bring in genuine benefits to participating firms through formal institutional maneuvers. Counter-intuitively, however, rapid expansion prompted by the BRI would also engender cultural frictions that inhibit the positive effects. The contextualization of cultural friction not only extends its application from FDI to exporting activities but also replenishes the institutional theory with dynamic substance. Specifically, the home institutional favorability produces general benefits among organizations, but any hasty and unplanned expansion would trigger increased frictions in destination countries that would hinder or even damage the conducive home contingencies. This brings up a pivotal caveat that both up-down and bottom-up institutional changes are evolving simultaneously, and thus they should be fully taken into consideration especially in the IB studies. Along this logic, future studies could examine how activities such as student exchange programs and cultural exhibitions would help alleviate the negative effects brought about by cultural friction in the process of internationalization if the data are available in the future. Further extending the knowledge of such symbiotic evolvement is worth our while.

Finally, we have enriched the research on sub-national paradigm by providing a direct operationalization of the ethnicity effect, which has seldom been incorporated into the IB research. Building on but departing from the preliminary identification of sub-national (provincial) effects by variance decomposition method (Ma et al., 2013), we have introduced a different dimension, ethnicity difference, in large emerging economies like China, which further impacts the IB-related performance. The findings have extended the boundary of strategic internationalization if the data are available in the future. Further extending the knowledge of such symbiotic evolvement is worth our while.
5.2. Practical contributions

The first practical implication of this study is that firms should enter international markets cautiously and only after significant learning and preparation, and the government should support those appropriate firms for international expansion. The geographic proximity cannot automatically be transformed into a competitive advantage if a firm is not able to reduce cultural friction in the course of its IB activities. However, subnational cultural closeness as embedded in those ethnicities could serve as a competitive advantage for firms when expanding into the countries that share similar heritages. Consequently, policymakers should provide preferential policies to those (minority) entrepreneurs that share cultural similarities to the destination countries in the short-run, and also encourage further cultural interactions with the BRI participating countries.

Meanwhile, we have unveiled that the ethnicity does help the Uygurs-, or precisely speaking, Muslim-owned firms, to improve their export performance as it is regarded as a kind of cultural advantage to help overcome the potential liability of foreignness. This finding can also be used as evidence to rebut the assertion that the BRI would be beneficial to the firms of majority ethnicity (Han-owned firms) at the cost of those of minority ones (Uygur-owned ones) in China (Fukuyama, 2016). International entrepreneurs could, on the other hand, abandon the attraction-selection-attrition bias as much as possible but proactively enhance the cultural diversity within their sales forces to fully utilize the ethnicity-based advantage even they suffer resource constraint.

5.3. Limitations and future extensions

Although the major objective of this study has been accomplished, these findings still require further elaboration. First, because the BRI still has a rather short history, the relationships studied here need to be re-examined in a few more years to see to what extent they persist, especially under the disturbances caused by the trade war between China and U.S.

Second, although export sales volume serves as a key indicator of international performance particularly for firms of XUAR in the BRI context, it involves only a single mode of market entry. A future study could use FDI outflows at the national and regional levels to verify the results, given that firms of Western provinces tend to have fewer resources and skills necessary for FDI. Moreover, investigation of technology upgrades on the BRI-related expansion can also be made if corresponding R&D expenses or patent number are obtainable in the future.

Fourth, this study has considered only firms based in XUAR given these constraints. The cultures in some of China’s other Western provinces (e.g., Gansu, Qinghai and Ningxia) have somewhat similar cultural characteristics. More evidence from them might permit generalization of the study’s findings.

Finally, we know that Chinese firms in XUAR that target the “Belt” countries did see their exports increase after the launch of the BRI in 2013. At the same time, we also found that imports from the “Belt” countries have remained robust since 2013 (OEC (The Observatory of Economic Complexity), 2016). The situation occurred when China experienced a significant economic slowdown. If imports from the “Belt” countries continue to be robust in the future, the finding should refute the criticism that China has used the BRI to dump its excess products on the participating economies but instead encouraging economic cooperation.

5.4. Conclusion

In a nutshell, this study has presented the first empirical evidence to ascertain the performance effects of the BRI on SMEs in XUAR, China. We have contextualized and extended the cultural friction concept, and broadened the sub-national research with a new ethnicity dimension, which together contribute to the interpretation of formal and informal institutional influences. Given BRI is still in its infancy, we encourage more empirical examination over such significant policy and how organizations would heterogeneously benefit from it.

Declaration of interest

The research is supported in part by the Research Grants Council of Hong Kong (HKUST#1605817).

Acknowledgements

We sincerely thank editor Siah Hwee Ang and the three anonymous reviewers for their excellent guidance. We give special thanks to Zhuxi Zou for his help in the data collection process and Andrew Delios and Daphne Yiu for their insightful suggestions. The earlier versions of this paper have been presented in the Annual Meeting of the Academy of International Business in 2017 and 2018. We thank the participants of these meetings for their valuable feedback.

References


J. Li, et al.


