Nº 29

# AD-MISTER

INIVERSIDAD FAFIT : MEDELLÍN - COLOMBIA : IIILIO - DICIEMBRE 2016 : ISSN 1692-0279 : E-ISSN: 2256-4322

SCHULZE

AURÉLIEN DOUESNEL

OLIVIA GRÉGOIRE

JEL: M1 F23

DOI: 10.17230/ad-minister.29.1 www.eafit.edu.co/ad-minister





AD-minister No. 29 julio-diciembre 2016 pp. 5 - 22 · ISSN 1692-0279 · eISSN 2256-4322

## INTERNATIONALIZATION AND FIRM PERFORMANCE IN CHINDIA COUNTRIES: A META-ANALYTIC REVIEW

INTERNACIONALIZACIÓN Y DESEMPEÑO DE LAS EMPRESAS EN CHINDIA: UN ANÁLISIS META-ANALÍTICO

LINDA SCHULZE<sup>1</sup>

AURÉLIEN DOUESNEL<sup>2</sup>

OLIVIA GRÉGOIRE<sup>3</sup>

JEL: M1, F23

RECEIVED: 03/11/2015 MODIFIED: 02/05/2016 ACCEPTED: 16/06/2016

DOI: 10.17230/ad-minister.29.1 www.eafit.edu.co/ad-minister Creative Commons (CC BY)

#### **ABSTRACT**

For more than four decades, researchers have examined theoretically and empirically the relationship between internationalization and firm performance. While existing studies have provided important contributions, the stream of research still lacks consistency due to ambiguous findings on the internationalization-firm performance relationship. Moreover, previous research has often been limited to developed countries. The present study focuses on the emerging Chindia countries and determines the direction and the strength of the internationalization-firm performance relationship. Additionally, we have identified moderators of the relationship. Drawing on 21 studies, based on 9026 firms, we utilize a meta-analytic review to assess our hypotheses. Our results show that there is a significant and positive internationalization-firm performance relationship in Chindia countries. The effect of internationalization in India and China does not significantly differ. Moreover, we find that the effect of internationalization is significantly stronger in the United States as compared to the Chindia countries. The time period of data collection did not play an important role as a moderator. The present study contributes to the International Business literature by examining how and to which extent internationalization influences firm performance and offers implications for theory and practice as well as recommendations for future research.

#### **KEYWORDS**

Internationalization; firm performance; Chindia; BRICS; China; India; US.

#### RESUMEN

Durante más de cuatro décadas, los investigadores han examinado teórica y empíricamente la relación entre la internacionalización y el desempeño de las empresas. Si bien los estudios anteriores han aportado contribuciones importantes, las investigaciones actuales tienden a carecer coherencia debido a conclusiones ambiguas sobre la relación entre la internacionalización y el desempeño de las empresas. Además, en muchos casos, los estudios anteriores se han limitado a los países desarrollados. El presente estudio se enfoca en los países emergentes de Chindia y determina la dirección y la fuerza de la relación internacionalización-desempeño de empresas. Además, se identifican moderadores de esta relación. Basándose en 21 estudios y 9026 empresas, utilizamos un análisis meta-analítico para evaluar nuestras hipótesis. Nuestros resultados demuestran que existe una relación significativa y positiva entre la internacionalización y el desempeño de las empresas en Chindia. El efecto de la internacionalización en India y en China no presenta diferencias significativas. Por otra parte, definimos que el efecto de la internacionalización es considerablemente más fuerte en Estados Unidos en comparación con los países Chindia. El periodo de recolección de datos no tuvo un papel importante como moderador. El presente estudio constituye una contribución a la literatura sobre negocios internacionales examinando cómo y en qué medida la internacionalización tiene una influencia sobre el desempeño de las empresas y sugiere implicaciones para la teoría y la práctica así como recomendaciones para futuras investigaciones.

<sup>1</sup> Otto-von-Guericke University, Germany. Email: linda.schulze@st.ovgu.de

<sup>2</sup> Université de Strasbourg, France. Email: aurelien.douesnel@em-strasbourg.eu

<sup>3</sup> Université Catholique de Louvain, Belgium. Email: Olivia.gregoire@student.uclouvain.be

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

#### PALABRAS CLAVE

Internacionalización; desempeño de empresas; Chindia; BRICS; China; India; Estados Unidos.

#### INTRODUCTION

The influence of the degree of internationalization on firm performance is a fundamental part of International Business (Glaum & Oesterle, 2007). Despite many years of empirical research in the field of internationalization, there has been no consensus on the strength or nature of the internationalization-firm performance relationship (e.g.: Glaum & Oesterle, 2007; Ruigrok, Amann & Wagner, 2007). A Metaanalytic review by Ruigrok and Wagner (2004) suggests a positive and significant relationship between internationalization and firm performance. However, this study mainly considered data from developed countries. Therefore, the results lack generalizability across different national contexts. Since research has suggested that internationalization strategies implemented by developed countries differ from those of emerging countries (Gaur & Kumar, 2010), the present study focuses on the relationship between internationalization and the performance of firms that originate from the emerging countries. Specifically, we will be investigating the relationship in Chindia countries. Chindia is an acronym that refers to China and India together. While the fast-growing Chindia countries once were inward looking countries, they have demonstrated a clear trend toward internationalization and have emerged as important sources of outward foreign direct investment in the global economy (Athreye & Kapur, 2009; Gill & Singh, 2012; Oswal, 2010). Despite the need to study the internationalization-firm performance relationship in those emerging countries, empirical research is still sparse in this field. Our study seeks to analyze the internationalization-firm performance relationship by investigating data from China and India. The paper makes the following major contributions to International Business literature. First, we aim to examine the magnitude and direction of the internationalization-firm performance relationship in China and India. Second, we identify potential methodological and conceptual moderators of the relationship. This study tests differences of the internationalization-firm performance relationship in the United States and Chindia as well as in China and India. Moreover, we examine whether the impact of internationalization on firm performance has changed over time or not.

We investigate the internationalization-firm performance relationship and identify moderators by utilizing a meta-analytic review including information from 21 independent studies on 9026 firms in India, China and the United States of America. The following meta-analysis is organized accordingly. The theoretical framework and research model are described below. Then, the research method is introduced and findings are presented. The results will be discussed next, and practical and theoretical implications will be drawn. The paper ends with the presentation of limitations and directions for future research.

AD-minister No. 29 julio-diciembre 2016 pp. 5 - 22 · ISSN 1692-0279 · eISSN 2256-4322

#### THEORETICAL BACKGROUND

The theoretical framework for this meta-analysis depicts the relationship between internationalization and firm performance. The framework will be explained in the following sections, starting with the internationalization-firm performance relationship concept in the Chindia countries. Later, the potential moderators, namely national context and year of data collection, are being discussed. By way of summary, the theoretical framework is being illustrated in Figure 1.

#### Internationalization and Firm Performance in the Chindia countries

Several theories try to explain the internationalization process of firms and how international firms perform (Dunning, 1988; Vernon, 1966). Classical theory suggests that firms that expand their businesses internationally, increase their performance only as long as these firms have a clear competitive advantage that enables them to overcome the costs and risks associated with expansion across borders (e.g.: Hymer, 1976; Kindleberger 1969; Dunning 1977). However, the classical internationalization theory focused on developed countries, and did not consider the unique economic, social and political conditions of developing countries such as India and China. Therefore, Matthews (2006) introduces a new theory to explain the internationalization process of emerging market firms. Emerging countries, contrary to developing countries, expand their business internationally in order to address their relative disadvantage instead of exploiting their competitive advantage. Emerging market firms aim to acquire advantages externally through exploiting international networks in order to obtain valuable resources. Thus, firms in emerging countries benefit from internationalization through obtaining a competitive advantage. At first glance, empirical evidence not always seems to support this theoretical rationale in the Chindia countries. While, for example, Gaur and Kumar (2009), Huo and Hung (2015) as well as Hajela and Akbar (2007) found a positive relationship between internationalization and firm performance, Kumar and Singh (2008) as well as Xiao, Jeong, Moon, Chung, and Chung (2013) found a negative one. It has been argued that contradicting results may be due to a non-linear internationalization-firm performance relationship (U-shaped, inverted U-shaped, or S-shaped) (Geringer, Beamish, & Costa, 1989; Gaur and Kumar, 2009; Wu, Wu & Zhou, 2012; Ficici, Wang, Aybar, & Fan, 2014). Contractor (2007) found that the positive, negative and U-shaped relationships between internationalization and firm performance represent different stages of the S-shaped or three-stage model (Contractor, 2007). In the early internationalization stage, particularly firms from emerging economies such as India or China suffer from liability of origin, liability of foreignness or double-layered acculturation (Zaheer, 1995). Therefore, a negative relationship between internationalization and firm performance is likely to occur. The great costs associated with internationalization, are outweighed in

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

the later stage of the internationalization process through benefiting from scale economies, an increase in market power and from organizational learning (Kogut 1985; Kim, Hwang, & Burgers, 1993; Wiersema and Bowen, 2011). In addition, the unusual conditions that firms in China and India face provide particularly high incentives to internationalize. While China and India are large emerging countries, their domestic markets are relatively small as compared to those of developed countries. Thus, internationalization enables them to achieve economies of scale. Moreover, Indian and Chinese firms can spread the risk arising from operating in politically and economically unstable economies through internationalization (Rugman, 1979). These arguments indicate that Indian and Chinese firms benefit from internationalization as a result of obtaining a competitive advantage through the acquisition of valuable resources and the avoidance of unfavourable conditions in the home country. Thus, we hypothesize:

Hypothesis 1. Internationalization has a positive effect on firm performance in Chindia countries.

#### Comparing the internationalization-firm performance in India and China

Indian and Chinese companies have become important actors in the global landscape. The Chindia countries have experienced rapid growth and have undertaken changes in the economy and firms' openness to the world over the last few years leading to large foreign direct investment (Asakawa & Som, 2008; Athreye & Kapur, 2009; Oswal, 2010; Gill, & Singh, 2012). Both countries have implemented policies to encourage outward foreign direct investment (Gill, & Singh, 2012). Moreover, firm internationalization has been relatively young in both India and China (Athreye & Kapur, 2009). Studies revealed that both Indian and Chinese firms choose mergers and acquisition as a common mode of internationalization (Kumar & Gaur, 2007: Andersson & Wang, 2011). While internationalization in China and India has been similar in some aspects, they have also shown clear differences. Whereas Chinese outward foreign direct investment often involves state-owned firms, Indian outward foreign direct investment mostly involves private-owned enterprises. The two countries prefer to invest more strongly in different industries and different regions (Athreye & Kapur, 2009). So far, however, there have been no studies comparing the link between internationalization and firm performance of the two countries. We argue that, despite the differences in the internationalization background, the impact of internationalization on firm performance is relatively similar. This is due to the fact that both countries face the unique conditions of emerging economies (Cuervo-Cazurra, 2012). From the comparison of the general strategies of internationalization, we can draw our second hypothesis:

Hypothesis 2. The impact of internationalization is not significantly different between China and India.

### Comparing the internationalization-firm performance in the United States and Chindia

Gaur and Kumar (2010) argue that the influence of internationalization on firm performance differs between advanced and developing countries. Internationalization is still a rather new phenomenon in the two fastest growing emerging countries, India and China. The unique conditions of those countries lead to different internationalization strategies as opposed to developed countries. Traditionally, firms internationalized due to firm-specific advantages. However, firms in India and China have lower levels of those firm specific assets such as technology. Therefore, firms from the Chindia countries do not expand overseas in order to exploit firm specific advantages, but in order to acquire strategic resources and capabilities (Matthews, 2006; Deng, 2007; Athreye & Kapur, 2009). However, so far, there has been no empirical research comparing the impact of different internationalization strategies in Chindia countries and advanced countries. Kirca, Hult, Roth, Cavusgil, Perryy, Akdeniz, and White (2011) argue that since emerging countries lack firmspecific assets they are less likely to generate a higher yield from those assets than developed countries. In addition, they state that developed country firms are more likely to internalize their firm specific assets. Thus, we hypothesize:

Hypothesis 3. Internationalization has a stronger effect on firm performance in the United States as compared to Chindia.

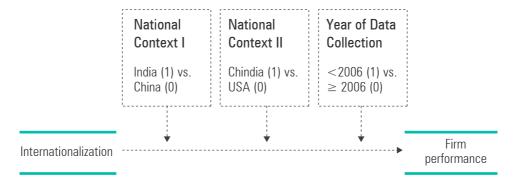
#### The impact of time on the internationalization-firm performance

Economies undergo significant changes over time. Emerging countries in particular face a rapid internationalization and a turbulent environment (Athreye & Kapur, 2009). For example, India and China have been challenged by the Global Financial Crisis that led acquisitions to fail and export demand to go down (Athreye & Kapur, 2009; Aizenman, 2015). Therefore, the internationalization process is not stable over time. Moreover, the arbitrage from internationalization has been diminishing over the past decades. According to Hymer (1976), market imperfections are the reason why firms internationalize. However, Ruigrok and Wagner (2004) argue that the benefits of market imperfections had a greater impact in the past. The opportunities arising from market imperfections in India and China may have declined, for example, due to fewer trade barriers as a result of the establishment of trade agreements such as APTA. Thus, a decrease in the benefits of market imperfection may negatively influence the impact of internationalization on firm performance. Hence, we conclude that the internationalization-firm performance relationship is dependent on the time period. We further argue that the impact of internationalization will be lower in more recent years due to above mentioned reasons. Thus, we hypothesize:

Hypothesis 4. The impact of internationalization on firm performance decreased over time.

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

Figure 1. Theoretical framework of the internationalization-firm performance relationship.



#### **METHODOLOGY**

A comprehensive literature review process was conducted in order to capture the most representative sample of literature in the field of internationalization in Chindia countries, including independent published and unpublished studies. To ensure the completeness and representativeness of the electronic databases used in the meta-analysis, we searched EBSCOhost, Jstor, Science Direct, Emerald Insight, Wiley Online Library, Google and Google Scholar for studies using the keywords internationalization, ratio of foreign sales to total sales (FSTS), ratio of foreign assets to total assets (FATA), ratio of foreign employees to total employees, ratio of exports to total sales, international diversity, firm performance, financial performance, profitability, profit, return on investment (ROI), return on assets (ROA), return on equity (ROE), return on stock (ROS), organizational performance, operational performance, market share, and sales growth. We conducted a second search within the most cited journals in the internationalization literature using Google Scholar. Finally, we examined the references from the internationalization articles identified in the literature search for additional studies. We reviewed the title and abstract of each search result to identify potential studies for the present meta-analysis. This procedure was re-applied until no additional literature was found.

Studies were selected for inclusion in the meta-analysis on the basis of three criteria. First, the studies needed to examine internationalization as well as performance measures. Second, the present meta-analysis only includes empirical studies that report sample sizes and correlation coefficients. If the correlation coefficient was not provided, the studies were checked for the availability of t-statistics and beta-coefficients. Third, the studies to be included were only considered independent from each other when all reported effect sizes were obtained from different samples. Thereby biases arising from an overrepresentation of specific samples were avoided. Upon completion of the literature search and the selection process, we obtained a total sample of 21 independent studies including 9026 firms. Table 1 represents an overview of all studies used for the meta-analysis.

Table 1. Overview of studies included in the meta-analysis.

Study	Number of firms	Data collection	Country	Industry	Firm size	Internationalization	Performance	
Xiao et al. (2013)	430	2007	China	Manufacturing		Level of firms international involvement	ROS, ROA	
Zhou, Lu and Wu (2007)	129	2003	China		SM	Outward Internationalization and Inward Internationalization	Export, profitability and sales	
Ren, Eisingerich and Tsai (2014)	176	2011	China	Manufacturing	SM	Proportion of a firm's export sales to the total sales revenue	Innovation performance	
Zhou and Wu (2014)	376	2010	China	Manufacturing		Scope of internationalization	Sales growth and profitability	
Huo and Hung (2015)	316	2011	China	IT		FSTS	Sales	
Chen and Tan (2012)	887	2009	China		L	FSTS-ISTS-IGC	Tobin's Q	
Luo and Park (2001)	113	1997	China		L	export ratio	ROA	
Wen and Zhou (n/a)	32	2011	China	Manufacturing		FSTS	ROA, ROE, ROS	
Yuan and Pangarkar (2014)	206	2005	China		L	Geographic and subsidiary expansion	ROA	
Karthik, George and Singla (2015)	3599	2012	India		ML	FATA	Tobin's Q	
Gaur and Kumar (2009)	240	2001	India	Manufacturing and Service		Sales	ROS	
Hajela and Akbar (2013)	29	2008	India	Sofware	SM	FATA	ROA	
Manoj Motiani, Rajnish Kumar Rai (2013)	367	2012	India	Pharmaceutical		FSTS	ROA	

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

Table 1. Overview of studies included in the meta-analysis (continued).

Study	Number of firms	Data collection	Country	Industry	Firm size	Internationalization	Performance	
Contractor, Kumar and Kundu (2007)	269	2001	India	Manufacturing and Service	ML	FSTS	ROA ; ROE ; ROS	
Pattnaik and Elango (2009)	787	2003	India	Manufacturing	L	FSTS	ROI	
Kumar and Singh (2008)	75	2001	India	Pharmaceutical	ML	DOI	ROA; ROE	
Rajshekhar and Granot (2011)	150	2008	India		SM	International orientation	International performance	
Hsu and Pereira (2006)	110	2000	US		L	FSTS, FPTP, FATA	ROE, ROS, ROI	
Hsu and Boggs (2003)	118	1998	US		L	FSTS	ROA	
Fernhaber and McDougall- Covin (2014)	210	2012	US	High- technology	L	FSTS	ROS, ROA	
Lee, Upneja, Özdemir & Sun (2014)	279	2010	US	Hotel		DOI	ROA	
Li, Qian & Qian (2012)	278	2009	US	High- technology	S	FSTS	ROS	

Information of all included studies for the coding process were extracted independently by all three authors, and were subsequently compared and discussed to avoid coding errors. The coding sheet comprised information on effect sizes, sample sizes as well as measurement reliabilities of internationalization and performance measures. To uncover the effects of control and moderating variables, we extracted information from each study on the following variables: year of data collection, country of data selection, firm size, type of industry, and performance measures. An overview of the information extracted from the studies can be found in Table 1. First, we calculated the simple mean effect size of the relationship between internationalization and firm

performance. Effect sizes were corrected for measurement and sampling error as proposed by Hunter and Schmidt (2004). The corrected effect size was obtained by considering the measurement reliabilities and the weight of all sample sizes of the included studies. In case information on the reliability of internationalization or firm performance measure was not given, the mean reliability value was derived from the reliability of all other included studies. Once we obtained the sample-size-weighted and Cronbach's-alpha-adjusted mean effect sizes, we calculated the z-score, standard errors and the 95%-confidence interval to test for its statistical significance (Ellis, 2010). In the next step, we examined the homogeneity of populations: we tested whether individual effect sizes reflect a single population effect size or not. Therefore, we computed the Q statistic and tested whether it exceeds the chi-square value at a five percent level. In case the Q statistic exceeded the chi-square value at a five percent level, we rejected the hypothesis of population homogeneity (Ellis, 2010). A rejection of the hypothesis implies that the distribution of effect sizes is heterogeneous, requiring us to check for moderators. To check for moderators, the dataset was split into subgroups and the Q between groups was analyzed. The Q between groups were compared with the chisquare value to examine whether a moderating effect on the knowledge management and firm performance relationship exists or not. Subgroups had to include a sufficient amount of studies  $(k \ge 5)$ , in order to conduct a moderator analysis. Formulas used in this meta-analysis are demonstrated in Table 2.

Table 2. Formulas relevant for the meta-analysis.

Abbreviation	Meaning	Formula
r	Simple mean effect size	$\frac{\sum r_i}{k} \\ \sum (r_i * N_i)$
r <sub>n</sub>	Weighted mean effect size	$\frac{\sum (r_i * N_i)}{\sum_{r_i} N_i}$
r <sub>na</sub>	Weighted mean corrected for measurement error	$\sum \left(\frac{\overline{r_i}}{\sqrt{\alpha_{xi}} * \sqrt{\alpha_{yi}}} * N_i\right)$
V	Variance	$\frac{k}{\sum [N_i * (r_i - r_{n\alpha})^2]}$
SE	Standard error	$\frac{\sum N_i}{ \overline{v} }$
Z score	Standard normal equivalent	$\sqrt{\overline{k}}  r_{nlpha} $
CI	Confidence Interval	$\frac{\frac{ r_{n\alpha} }{SE}}{r_{n\alpha} \pm (1.96 * SE)}$
Q	Q statistic	$\sum_{n_{\alpha}} r_{n\alpha} \pm (1.96 * SE)$ $\sum_{n_{\alpha}} (N_{i} - 1) * (r_{i} - r_{n\alpha})$

Note:  $r_i = \text{effect size of study } i$ , k = number of studies,  $N_i = \text{number of observations per sample}$ ,  $\alpha_{xi} = \text{Cronbach alpha of the independent variable in study } i$ ,  $\alpha_{yi} = \text{Cronbach alpha of the dependent variable in study } i$ 

#### **RESULTS**

Table 3 presents the results of the meta-analysis regarding the internationalization-firm performance relationship. The table reports simple mean effect sizes, weighted mean effect size corrected for measurement error, variance, standard error, standard

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

score, the confidence interval and the Q statistic. These statistical values enable us to assess whether the previously developed hypotheses can be rejected or not. The first observation is that the relationship between internationalization and firm performance is positive in the Chindia countries ( $r_{n,\alpha}$ = 0.12). Moreover, the positive relationship is significant as the confidence interval excludes zero (CI = 0.08, 0.16) and the standard score exceeds the critical value (z = 6.37; p < 0.05). Thus, internationalization improves firm performance in Chindia and our first hypothesis is supported. In addition, the relatively high Q statistic exceeds the critical value (Q = 46.52; df = 20;  $\alpha$  = 0.05), which enables us to reject the homogeneity hypothesis. It is therefore recommended to search for moderators affecting the internationalization-firm performance relationship to explain the variation of effect sizes.

Table 3. Results of bivariate and moderator analysis.

Internationalization	k	N	r	r <sub>n,a</sub>	Var	SE	Z	95% CI		Q	Δα	<b>J</b> 2
Internationalization								lower	upper	u	ΔU	r
Internationalization → Firm Performance	16	8031	0.09	0.12	0.01	0.02	6.37	0.08	0.16	46.52		
National Context I	21	9026	0.12	0.14	0.01	0.02	7.10	0.10	0.17	68.77	7.75**	11.28%
US	5	995	0.23	0.25	0.01	0.05	4.61	0.14	0.36	14.49		
Chindia	16	8031	0.09	0.12	0.01	0.02	6.37	0.08	0.16	46.52		
National Context II	16	8031	0.09	0.12	0.01	0.02	6.37	0.08	0.16	46.52	0.01	0.02%
China	9	2665	0.11	0.12	0.01	0.03	4.39	0.07	0.18	19.04		
India	7	5366	0.06	0.12	0.01	0.03	4.44	0.07	0.17	27.48		
Time Analysis	21	9026	0.12	0.14	0.01	0.02	7.10	0.10	0.17	68.77	0.01	0.02%
<2006	12	6979	0.10	0.14	0.00	0.02	8.65	0.11	0.17	20.99		
≥2006	9	2047	0.15	0.13	0.02	0.05	2.56	0.03	0.23	47.76		

Notes: r = mean effect size;  $r_n =$  sample-size-weighted mean effect size;  $r_{n,\alpha} =$  sample-size-weighted and Cronbach's-alpha-adjusted mean effect size; \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.005

The moderators examined in this meta-analysis were the national context and the time period in which data was collected. For the national context we compared the different effects of internationalization in China as opposed to India as well as in Chindia as opposed to the United States. The internationalization-firm performance relationship is significant and positive for both China ( $r_{n,a}$  = 0.12; p < 0.05) and India ( $r_{n,a}$  = 0.12; p < 0.05). However, the impact of internationalization in the two countries does not differ significantly. Thus, we reject the second hypothesis.

Hypothesis 3 suggests that the effect of internationalization in Chindia is significantly lower than in the United States. As one can see, the results demonstrate a significant difference in effects between them. United States firms are much more successful in improving firm performance ( $r_{n,a}$  = 0.25; p < 0.05) when they choose to go abroad compared to firms in Chindia ( $r_{n,a}$  = 0.12; p < 0.05). Also, the heterogeneity is relatively high (H = 11.28%) and therefore, this moderator explains a lot of the variance of effect sizes of the internationalization-firm performance relationship. Thus, this provides evidence to support the third hypothesis. Finally, no support was found for the fourth hypothesis which tried to prove a decreased impact of internationalization on firm performance. Instead, we found no significant difference in the time before 2006 ( $r_{n,a}$  = 0.14; p < 0.05) and after 2006 ( $r_{n,a}$  = 0.13, p < 0.05).

#### DISCUSSION

The present meta-analytic review investigates the impact of internationalization on firm performance in Chindia countries. Using data from 21 independent studies including 9026 firms, our meta-analysis examined the internationalization-firm performance relationship and its potential moderators. In this chapter, we discuss the theoretical and practical implications of our findings. We also identify limitations and provide directions for future research.

#### Theoretical implications

In examining the relationship between the performance of firms and internationalization in Chindia countries, we aim to make an important contribution to the existing literature. First, by aggregating empirical studies, we found a positive and significant relationship between internationalization and a firm's performance in China and India. A second important theoretical contribution is that it extends literature through the examination of potential moderators that influence the internationalization-firm performance relationship in Chindia countries. Our results suggest that the effect of internationalization on firm performance is significantly greater in the United States as compared to Chindia. Therefore, our results support the theory that claims that internationalization in developed countries differs from internationalization in developing countries. The findings are similar to a meta-analytic review by Kirca et al. (2011) that analyzes the relationship between multinationalization and firm performance. They found that multinationalization in advanced country firms with a high R&D or a high advertising intensity has a greater impact on firm performance than internationalization in developing country firms with a high R&D or high advertising intensity. In order to understand the differing effects of internationalization on firm performance in developing countries, it is crucial to understand the conditions of developing country firms.

Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

An extension of traditional theory or attention to new streams of theory may help understand the internationalization processes in developing countries (Cuervo-Cazurra, 2012; Mathews, 2006). While, for example, the OLI framework developed by Dunning (1981) explains the internationalization process in advanced countries, it fails to explain internationalization in emerging countries (Dunning, 2006). The LLL model proposed by Mathews (2006) is more suitable for addressing internationalization in those countries. Furthermore, our results shed light on the effect of internationalization on firm performance in India and China. We found that there is no significant difference in the impact of internationalization in the two countries. This may be due to similar internationalization patterns as they are both latecomers (Mathews, 2006) and as they are both facing the unusual conditions of emerging countries. Lastly, we did not find the time period to be a moderator of the internationalization-firm performance relationship. Thus, the impact of internationalization did not significantly increase or decrease over time. This finding is also similar to the findings from a meta-analysis by Ruigrok and Wagner (2004) that analysed the internationalization-firm performance relationship in developed countries between 1974 and 2004.

#### Practical implications

The meta-analytic review provides several practical implications. Our findings demonstrate a positive impact of internationalization on firm performance. Therefore, it is beneficial for firms in the Chindia countries to internationalize. Managers should, thus, focus on appropriate internationalization strategies for their companies. Firms not yet internationalized that have linkages with other companies should use them to enable experiential learning and to create a global network (Mathews 2006; Elango and Pattnaik, 2007). Moreover, government officials should facilitate the internationalization process in developing countries through fostering suitable conditions for firms to internationalize. Actions by the government may be: enabling policies, fostering an appropriate infrastructure and having supporting institutions (UNIDO, 2008). In addition, the positive impact of internationalization does not seem to be affected by the investigated time period. Thus, the positive effect of internationalization did not change over time and is therefore relatively stable. Another important finding is that despite differences in internationalization strategies it is equally beneficial for firms to internationalize in China and India. However, our results suggest that internationalization has a stronger effect on firm performance in the US as compared to Chindia countries.

#### Limitations and Future Research

Our study poses some limitations that occurred during the research process and that should be considered when interpreting the results. The limitations may have

#### AD-minister No. 29 julio-diciembre 2016 pp. 5 - 22 · ISSN 1692-0279 · eISSN 2256-4322

a potential influence on the statistical power of the results put forward. The first limitation arises from a lack of detailed research context descriptions of the included studies. Some studies were missing information, on for example, the year of data collection, correlation coefficients or Cronbach alphas for which estimates had to be used. Moreover, the small number of studies included in the meta-analysis and the lack of information did not enable us to examine all of the potential moderators such as industry or firm age. Since not all moderators could be identified, a lot of the variance of the internationalization-firm performance relationship could not be explained. Another limitation is, that most of the studies included in the meta-analysis are published studies. Therefore, there may be an overrepresentation of significant studies (Duval & Tweedie, 2000). Moreover, there may also be an overrepresentation of successful firms. This is due to the fact that unsuccessful studies are more likely to have left the market during the data collection period (Rubera & Kirca, 2012).

Finally, the limitations and the results of our study on the internationalization-firm performance relationship in Chindia countries suggest several directions for future research. Future meta-analytic reviews would benefit from including a higher number of independent studies for a greater statistical power and in order to explore other moderators. Potential moderators influencing the relationship may be firm size, firm age and industry (e.g.: Ficici et al., 2014; Yuan & Pangarkar, 2015). Furthermore, future research may identify mediators between internationalization and firm performance. Lastly, more unpublished studies should be included in future meta-analytic studies to control for publication bias (Dickersin, 1990).

#### CONCLUSION

The purpose of this paper was to provide an overview and an aggregate idea of the performance of firms that are internationalizing in the Chindia countries. By performing a meta-analysis based on previous literature, we assessed the impact of internationalization on the performance of Chinese and Indian firms and compared it with the United States. Moreover, we analysed whether the time period in which firms internationalize had a significant impact on the internationalization-firm performance relationship. Thus, we made an important contribution to literature in International Business. From this analysis we found that Chindia firms have a great incentive to internationalize since the correlation between the performance and the internationalization is positive and significant. Moreover, there seems to be no significant difference of performance between firms in India and China. However, comparing Chindia with the US, our findings showed that internationalization lead to better performance in the US. Finally, internationalization does not seem to be a time variant.

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire

Internationalization and firm performance in Chindia countries: a meta-analytic review

#### REFERENCES

- Andersson, R. & Wang, J. (2011). The internationalization process of Chinese MNCs: A study of the motive for Chinese firms to enter developed countries. Unpublished PhD Dissertation, University of Gothenburg, Sweden. Retrieved from https://gupea.ub.gu.se/bitstream/2077/26634/1/gupea 2077 26634 1.pdf
- Asakawa, K., & Som, A. (2008). Internationalization of R&D in China and India: Conventional wisdom versus reality. Asia Pacific Journal of Management, 25(3), 375-394.
- Athreye, S., & Kapur, S. (2009). The internationalization of Chinese and Indian firms: trends, motivations and policy implications. Industrial and Corporate Change, 18(2), 209-221.
- Chen, S., & Tan, H. (2012). Region effects in the internationalization-performance relationship in Chinese firms. Journal of world business, 47(1), 73-80.
- Contractor, F. J. (2007). Is international business good for companies? The evolutionary or multi-stage theory of internationalization vs. the transaction cost perspective. Management International Review, 47(3), 453-475.
- Contractor, F. J., Kumar, V., & Kundu, S. K. (2007). Nature of the relationship between international expansion and performance: The case of emerging market firms. Journal of World Business, 42(4), 401-417.
- Cuervo-Cazurra, A. (2012). How the analysis of developing country multinational companies helps advance theory: Solving the Goldilocks debate. Global Strategy Journal, 2(3), 153-167.
- Deng, P. (2007). Investing for strategic resources and its rationale: The case of outward FDI from Chinese companies. Business Horizons, 50(1), 71-81.
- Dickersin, K. (1990). The existence of publication bias and risk factors for its occurrence. Jama, 263(10), 1385-1389.
- Dunning, J. H. (1988). The eclectic paradigm of international production: a restatement and some possible extensions. Journal of international business studies, 2, 1-31.
- Duval, S., & Tweedie, R. (2000). Trim and fill: a simple funnel-plot-based method of testing and adjusting for publication bias in meta-analysis. Biometrics, 56(2), 455-463.
- Eden, D. (2002). From the Editors. Academy of Management Journal, 45(5), 841-846.
- Elango, B., & Pattnaik, C. (2007). Building capabilities for international operations through networks: a study of Indian firms. Journal of international business studies, 38(4), 541-555.

- Ellis, P. (2010). The Essential Guide to Effect Sizes: Statistical Power, Meta-Analysis, and the Interpretation of Research Results. *Cambridge University Press*.
- Fernhaber, S., & McDougall-Covin, P. (2014). Is more always better? Risk trade-offs among internationalizing new ventures. *European Business Review*, *26*(5), 406-420.
- Ficici, A., Wang, L., Aybar, B., & Fan, B. (2014). The Correlation between the Internationalization Processes and Performance of Firms: The Case of Emerging Market Firms of the BRIC Countries. *Journal of Economics and Political Economy*, 1(1), 4-25.
- Field, A. P. (2001). Meta-analysis of correlation coefficients: A Monte Carlo comparison of fixed- and random-effects methods. *Psychological Methods*, *6*(2), 161-180.
- Gaur, A. & Kumar, V. (2009). International Diversification, Business Group Affiliation and Firm Performance: Empirical Evidence from India. *British Journal of Management*, 20, 172–186.
- Gaur, A., & Kumar, V. (2010). Internationalization of emerging market firms: a case for theoretical extension. Advances in international management: The past, present and future of international business and management, 23.
- Geringer, J. M., Beamish, P. W., & Costa, R. C. (1989). Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal*, 10, 109-119.
- Gill, A., & Singh, L. (2012). Internationalization of firms from China and India: theory, evidence and policy. *Millennial Asia*, 3(1), 23-44.
- Glaum, M., & Oesterle, M. J. (2007). 40 years of research on internationalization and firm performance: more questions than answers? *Management International Review*, 47(3), 307-317.
- Hajela, A., & Akbar, M. (2007). Impact of internationalization on SME Performance: A study of Indian software firms. Unpublished working paper, Indian Institute of Management, Lucknow, India. Retrieved from http:// www.inderscienceonline.com/doi/pdf/10.1504/IJTLID.2013.051699.
- Hsu, C. & Boggs, D. (2003). Internationalization and Performance: Traditional Measures and Their Decomposition. *Multinational Business Review*, 11(3), 23-50.
- Hsu, C. C., & Pereira, A. (2008). Internationalization and performance: The moderating effects of organizational learning. *Omega*, *36*(2), 188-205.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire Internationalization and firm performance in Chindia countries: a meta-analytic review

- Huo, D., & Hung, K. (2015). Internationalization Strategy and Firm Performance: Estimation of Corporate Strategy Effect Based on Big Data of Chinese IT Companies in a Complex Network. *Journal for Economic Forecasting*, 2, 148-163.
- Hymer, S. H. (1976). The international operations of national firms: A study of direct foreign investment. Cambridge, MA: MIT press. Vol. 14. (pp. 139-155).
- Karthik, D., George, R., & Singla, C. (2015). International Diversification and Firm Performance: The contingent influence of Product Diversification. Unpublished Working Paper, Indian Institute of Management Ahmedabad, Research and Publication Department. [Retrieved from http://www.iimahd.ernet.in/assets/ snippets/workingpaperpdf/13042529052015-03-32.pdf.
- Kim, W. C., Hwang, P., & Burgers, W. P. (1993). Multinationals' diversification and the risk return trade off. Strategic Management Journal, 14(4), 275-286.
- Kindleberger, C. P. (1969). American business abroad. *The International Executive*, 11(2), 11-12.
- Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perryy, M. Z., Akdeniz, M. B., & White, R. C. (2011). Firm-specific assets, multinationality, and financial performance: A meta-analytic review and theoretical integration. *Academy of management journal*, 54(1), 47-72.
- Kogut, B. (1985). Designing global strategies: Comparative and competitive value added chains. *Sloan management review*, *26*(4).
- Kumar, V., & Singh, N. (2008). Internationalization and performance of Indian pharmaceutical firms. *Thunderbird International Business Review*, *50*(5), 321-330.
- Lee, S., Upneja, A., Özdemir, Ö., & Sun, K. A. (2014). A synergy effect of internationalization and firm size on performance: US hotel industry. *International Journal of Contemporary Hospitality Management*, 26(1), 35-49.
- Li, L., Qian, G., & Qian, Z. (2012). Early internationalization and performance of small high-tech "born-globals". International Marketing Review, 29(5), 536-561.
- Mathews, J. A. (2002). Competitive advantages of the latecomer firm: A resource-based account of industrial catch-up strategies. *Asia Pacific Journal of Management*, 19, 467–488.
- Matthews, John A. (2006) Dragon multinationals: New players in the 21st century. *Asia Pacific Journal of Management*, 23, 5-27.

- Oswal, P. (2010). The Internationalization of Indian Firms: Strategic Issues, Organizational Transformation, and Performance. Unpublished PhD Dissertation, University of St. Gallen, Switzerland
- Park, S. H., & Luo, Y. (2001). Guanxi and organizational dynamics: Organizational networking in Chinese firms. Strategic management journal, 22(5), 455-477.
- Pattnaik, C., & Elango, B. (2009). The impact of firm resources on the internationalization and performance relationship: A study of Indian manufacturing firms. *Multinational Business Review*, 17(2), 69-88.
- Rajshekhar, G. & Javalgi, P. & Granot, T. (2011). The internationalization of Indian SMEs in B-to-B markets. *Journal of Business & Industrial Marketing*, 26(7), 542-548.
- Ren, S., Tsai, H. T., & Eisingerich, A. B. (2015). Case-based asymmetric modeling of firms with high versus low outcomes in implementing changes in direction. *Journal of Business Research*. In Press.
- Rubera, G., & Kirca, A. H. (2012). Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration. *Journal of Marketing*, 76(3), 130-147.
- Rugman, A. M. (1979). International diversification and the multinational enterprise. Lexington, MA: Heath.
- Ruigrok, W., & Wagner, H. (2004). Internationalization and firm performance: Meta-analytic review and future research directions. Conference Paper, *Annual meeting of the Academy of International Business*, Stockholm, Sweden.
- Ruigrok, W., & Wagner, H. (2004). Internationalization and firm performance: Meta-analytic review and future research directions. In annual meeting of the Academy of International Business, Stockholm, Sweden.
- UNIDO (2008). Patterns of internationalization for developing country enterprises: alliances and joint ventures.

  Retrieved from https://www.unido.org/fileadmin/user\_media/Publications/documents/Patterns\_of\_internationalization for developing country enterprises contents.pdf.
- Vernon, R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80, 190-207.
- Wiersema, M. F., & Bowen, H. P. (2011). The relationship between international diversification and firm performance: why it remains a puzzle. *Global Strategy Journal*, 1(1-2), 152-170.
- Xiao, S. S., Jeong, I., Moon, J. J., Chung, C. C., & Chung, J. (2013). Internationalization and performance of firms in China: Moderating effects of governance structure and the degree of centralized control. *Journal of International Management*, 19(2), 118-137.

#### Linda Schulze · Aurélien Douesnel · Olivia Grégoire

Internationalization and firm performance in Chindia countries: a meta-analytic review

- Yuan, L., & Pangarkar, N. (2015). Performance implications of internationalization strategies for Chinese MNCs. *International Journal of Emerging Markets*, 10(2), 272-292.
- Zaheer, S. (1995). Overcoming the liability of foreignness. Academy of Management Journal, 38(2), 341-363.
- Zhou, L., & Wu, A. (2014). Earliness of internationalization and performance outcomes: Exploring the moderating effects of venture age and international commitment. *Journal of World Business*, 49(1), 132-142.