



# What drives business performance of small and medium-sized enterprises in cross-border electronic commerce?

A study comparing developed and emerging markets

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## Doctoral Research

Overall research question: How do differences between countries impact selling & shopping in cross-border e-commerce?

### Study 1:

**(a) What are the drivers impacting the business performance of SMEs in cross-border e-commerce? (b) And, how do these drivers differ between SMEs from developed markets and SMEs from emerging markets?**

Study 2: How do firm-owner characteristics impact the business performance of SMEs in cross-border e-commerce, and how does this differ between countries?

Study 3: What is the interplay between consumer perceptions of countries and perceptions of websites of online shops from these countries?

## Introduction

- Cross-border e-commerce is an increasingly important choice for revenue growth (Hong, Wang, and Kafouros, 2014; Tolstoy, Jonsson, and Sharma, 2016)
- Yet, SMEs are struggling with achieving expected business performance (Pezderka & Sinkovics, 2011; Tolstoy, Jonsson, and Miles, 2016)
- Surprisingly, research in this field is limited in number (Colton, Roth and Bearden 2010; Tolstoy, Jonsson, and Sharma, 2016)
- Furthermore, existing literature is limited in scope, focussed on MNEs and developed markets (Colton, Roth, and Bearden, 2010; Tolstoy, Jonsson, and Sharma, 2016)
- Therefore, generalizability of previous findings are questioned (Baker and Sinkula, 2009; Sok, Cass, and Miles, 2016)

## Theoretical background: Resource Based View of the firm

Explains the internal capabilities and resources of firms' competitive advantage (Barney, 1996; Kraaijenbrink, Spender, and Groen, 2010)

Determining the relevant capabilities and resources we follow recent studies that also the RBV to assess effects on business performance:

- SMEs in competitive markets (e.g. Lional and Carter, 2015; Musteen, Datta, and Butts, 2014), and
- Firms in international e-commerce (e.g. Colton, Broth, and Bearden, 2010; Savrul, Incekara, and Sener, 2014)

## **RBV: relevant marketing capabilities & resources**

Customer Orientation: The focus of the firm on processes for creating customer value in such a way that a customer's interest is put first (Deshpande Farhley, and Webster, 1993; Narver & Slater, 1990; Reukert, 1992)

Foreign Marketing Orientation: Refers to the processes needed to acquire knowledge and experiences that are specific to individual country markets (Inkpen and Beamish, 1997; Lord and Ranft, 2000)

Marketing Communication Activities: Refers to communication activities deployed in foreign markets to attract foreign customers to the online shop (Morgan, Feng, and Whitler, 2018; Rust et al., 2004; Sok, Cass, and Miles, 2016)

# Conceptual model



## Developed versus emerging market SMEs

Developed markets	Emerging markets
More competitive than emerging markets (Jaber, 2016; Hong, Wang, and Kafouros, 2015)	Characterized by under-developed institutional environments, high levels of state ownership and weak market-based mechanisms (Hong, Wang, and Kafouros, 2015; Ramamurti, 2012)

Chances are that SMEs from developed markets have had more time to gain operating experience in their domestic market than SMEs from emerging markets (Jaber, 2016; Hong, Wang, and Kafouros, 2015).

## Data

Sample of 453 owners of and directors of SMEs from 20 European countries

- 75.5% respondents from micro firms (number employees  $\leq 10$ )
- 18.3% respondents from small firms (number employees 11 – 50 employees)
- 6.2% respondents from SMEs (number of employees 51 – 250 employees)

(European Commission, 2013)

Split into 2 groups: developed market SMEs (n = 258) and emerging market SMEs (n = 195)

(MSCI Market Classification)



# Sample statistics

	Developed market SMEs	Emerging market SMEs
<b>Sample characteristics</b>		
Number of respondents	258	195
<b>Firm characteristics (averages)</b>		
Firm size*	15.72	13.24
Size management team**	2.093	1.964
Average number of years online	8.729	7.841
Number of years online cross-border	7.016	5.451
<b>Respondent characteristics</b>		
<b>Role in the company</b>		
Owner	116 (44.96%)	98 (50.26%)
Co-owner	38 (14.73%)	29 (14.87%)
Director	11 (4.26%)	12 (6.15%)
E-commerce Manager	73 (28.29%)	44 (22.56%)
Other	20 (7.75%)	12 (6.15%)
<b>Age (average)</b>		
Age (average)	42.2	40.13
<b>Gender</b>		
Male	193 (74.81%)	140 (71.79%)
Female	65 (25.19%)	55 (28.21%)

\*Number of employees

\*\*Number of members management team



## **Measures independent constructs**

CO & FMO: as reflective constructs using five-point multi-items scales based on preexisting scales

Marketing communication activities: as a formative construct by asking what type of activities the firm conducts in foreign countries to attract customers to their online shop, offering a list of activities common in e-commerce such as SEO, SEA, affiliate marketing, advertising activities and social media

## Measure dependent construct: business performance

- Measurement in terms of objective achievement
- Comparing performance cross-border relative to performance in the home market
- Using multiple survey measures on four key performance indicators commonly used in e-commerce;
  - conversion ratio,
  - online turnover,
  - average basket value, and
  - number of returning customers

## Validity & reliability

- Using lavaan package in R (Rosseel et al., 2017)
- Cronbach's alpha .70 for CO, .63 for FMO, and .78 for BP
- Confirmatory factor analysis
- Partial measurement invariance

Table 1 Goodness-of-fit indices for CFA

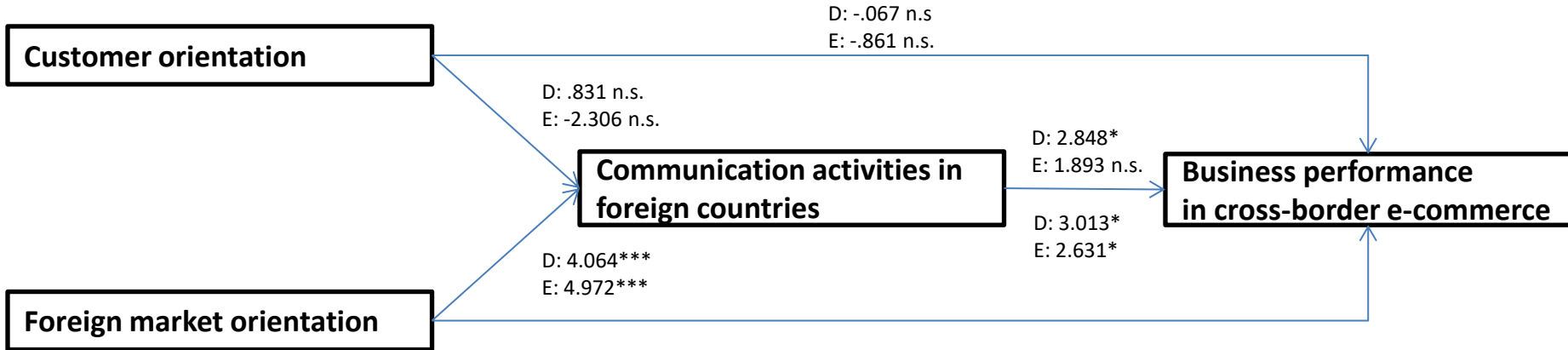
Group	N	$X^2$	df	CFI	NFI	TLI	GFI	AGFI	RMSEA	SRMR
DM-SMEs	258	24.896	64							
EM-SMEs	195	48.570	64							
Total	453			.990	.932	.978	.998	.995	.026	.040



## EPC-interest

- Measure of the expected change in the parameter of interest when freeing a particular equality constraint
- To test whether measurement differences could confound substantive analysis
- The results indicated the two groups are comparable

# Results Structural Equation Modeling



D: developed market SMEs,  
 E: emerging market SMEs  
 \* p<.05, \*\* p<.001, \*\*\*p<.000.

CFI	NFI	TLI	GFI	AGFI	RMSEA	SRMR
.976	.914	.966	.997	.993	.039	.043

## Implications (1-2)

- Like multinationals, FMO is highly relevant for business performance of SMEs in cross-border e-commerce (e.g. Colton, Roth, and Bearden, 2010)
  - SMEs should gain enough knowledge about foreign markets
  - SMEs should allocate resources to foreign market activities
  - Policy makers and consultants should provide knowledge about foreign markets and marketing communication activities in foreign markets
- Unlike multinationals, CO is less relevant (Brockman, Jones, and Becherer, 2012)
  - Question to audience: possible explanation?

## Implications (2-2)

- Results hold for both SMEs from developed and from emerging countries, however, we did find differences which indicate that:
  - Developed market SMEs use FMO not only for marketing communication activities, but also for other activities to positively impact business performance. What kind of activities could that be?
  - The number of years active in cross-border e-commerce is relevant for developed market SMEs, yet not for emerging market SMEs. But the strength of the relationships in the model is equal for both groups. How can that be explained?



## Contributions

- Underpinning importance of including both marketing capabilities and resources (Sok, Cass, and Miles, 2016)
- First indication that generalizability of previous findings among MNEs to SMEs cannot be assumed (Baker and Sinkula 2009)
- First indication that generalizability of findings among developed market SMEs to emerging market SMEs also cannot be assumed (Theoharakis and Hooley 2008)



## Limitations & future research

- Firm- and owner characteristics have been suggested as extension of RBV for small firms (Kraaijenbrink, Spender, and Groen, 2010)
- Do physical and cultural distance matter in cross-border e-commerce? (Ojala, 2015)
- Inclusion of Asian countries as Asia-Pacific is the first largest B2C e-commerce region in the world



Thank you for your attention!  
Questions?

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