How Does The Change In Foreign Market Knowledge Influence International Mode Of Entry And International Performance: A Study Of Croatian Smes

Maja Bašić1, Davor Vlajčić1, Timothy S. Kiessling2
1Faculty of Economics and Business, University of Zagreb, Department of international economics, Zagreb, Croatia
2Bilkent University, Ankara, Turkey
mbasic@fosenthe.efzg.hr
dvlajcic@efzg.hr
kiessling@bilkent.edu.tr

Abstract
Drawing from the knowledge-based internationalisation process, we examine how the change in SMEs' foreign market knowledge influences its international performance. We also examine the effects of the change in foreign market knowledge with respect to international equity and non-equity mode of entry. The study of 100 Croatian SMEs was conducted between March and July 2015 by the means of questionnaire survey. Results show that in cases of non-equity mode of entry a decrease in knowledge about foreign customers and competitors led to an increase in international performance. Moreover, we observe that Croatian SMEs' increase in knowledge about foreign distribution channels leads to equity mode of entry.

Keywords: *Croatian SMEs, International mode of entry, International performance, Knowledge about foreign market, Knowledge-based view*

Track: *Entrepreneurship*

Word count: *6.849*

1. Introduction

A large body of economic research on the topic of knowledge accentuates its importance and usage (Alavi & Leidner, 2001; King, 2009; Li et al., 2010; Sveiby, 2007; Marr et al., 2004; Nonaka et al., 2000; Yang et al., 2008; Hsu, 2012). Studies on knowledge transcend the field of economics and business studies and encompass interdisciplinary, often epistemological, studies (Davenport & Prusak, 1998; Brodie & Brodie, 2009; Choo, 2005; Schiele et al., 2014). The economic application of knowledge pioneered with Teece (1977) and Mansfield and Romeo (1984), thereby acknowledging various theories of the firm and emphasizing different sets of characteristics and behaviours of a firm (Grant, 1996). As the most important strategic resource (Hörisch et al., 2014), the knowledge-based theory argues that knowledge impacts the nature of coordination within a firm, its organisational structure, the role of management, the allocation of decision-making rights, determinants of firm boundaries and the theory of innovation (Vliamos & Tzeremes, 2012). However, the knowledge-based theory is *"...more about managing the organization's responses to knowledge absences than about managing knowledge assets"* (Spender & Scherer, 2007, p. 15).

Firms can profit from country specificity and market imperfections that occur due to the absence of knowledge or knowledge gap. Efficiency in international markets occurs with the diminishing knowledge gap between domestic and foreign market. The knowledge gap, therefore, has an influence on a firm's international mode of entry. Moreover, a choice of international mode of entry depends on the efficiency of the specific knowledge and technology transfer whose purpose is an increase in a firm's competitive global market position (Cui et al., 2006).

Therefore, this paper studies how the change in small and medium sized enterprises' (SMEs') foreign market knowledge influences their international performance and international mode of entry.

2. Theoretical approach and hypotheses development

There are a number of perspectives and contexts in which knowledge can be observed. Some of the definitions arose from information science and are based on the epistemological approach (Schiele et al., 2014; Zins, 2007; Blair, 2002), while others are more applicable to the organisational context (Ployhart et al., 2014; Nonaka, Toyama, & Hirata, 2009; Yang et al., 2008; Brodie & Brodie, 2009; Davenport & Prusak, 1998; Rennie, 1999). Knowledge taxonomies have been developed to help firms and scholars study knowledge-related topics. Within the organisational context, knowledge asset can be characterised according to knowledge location or the function of knowledge within an organisation (Yang et al., 2008; Li et al., 2010; Nonaka, Toyama, & Nagata, 2000, etc). Knowledge is not restricted to a particular firm. It resides in individuals, learning alliances, clusters, industrial and intra- and inter-organisational networks (Blomberg and Werr, 2006). This paper emphasizes knowledge as an organisational resource and examines knowledge in terms of firms' internationalizing behaviour, both international performance and international mode of entry.

We combine the knowledge-based theory with the network perspective (Penrose, 1959; Ghoshal & Bartlett, 1990, Kogut and Zander, 1993; Foss & Pedersen, 2012) and adopt Yang et al. (2008), Demarest (1997) and Hsu's (2012) perspective on organisational knowledge as a firm's capacity to deploy resources and profit from them. Furthermore, we take on the network level internationalisation perspective that considers the change in knowledge to be a crucial prerequisite for internationalisation (Johanson and Vahlne, 2009). Specifically, we examine how the change in the firm knowledge about institutions (*international institutional knowledge*), customers, suppliers and competitors (*market knowledge*) influences SMEs' international performance and international mode of entry (Casillas et al., 2009; Hohenthal et al., 2014). The paper's conceptual framework is presented in Figure 1.

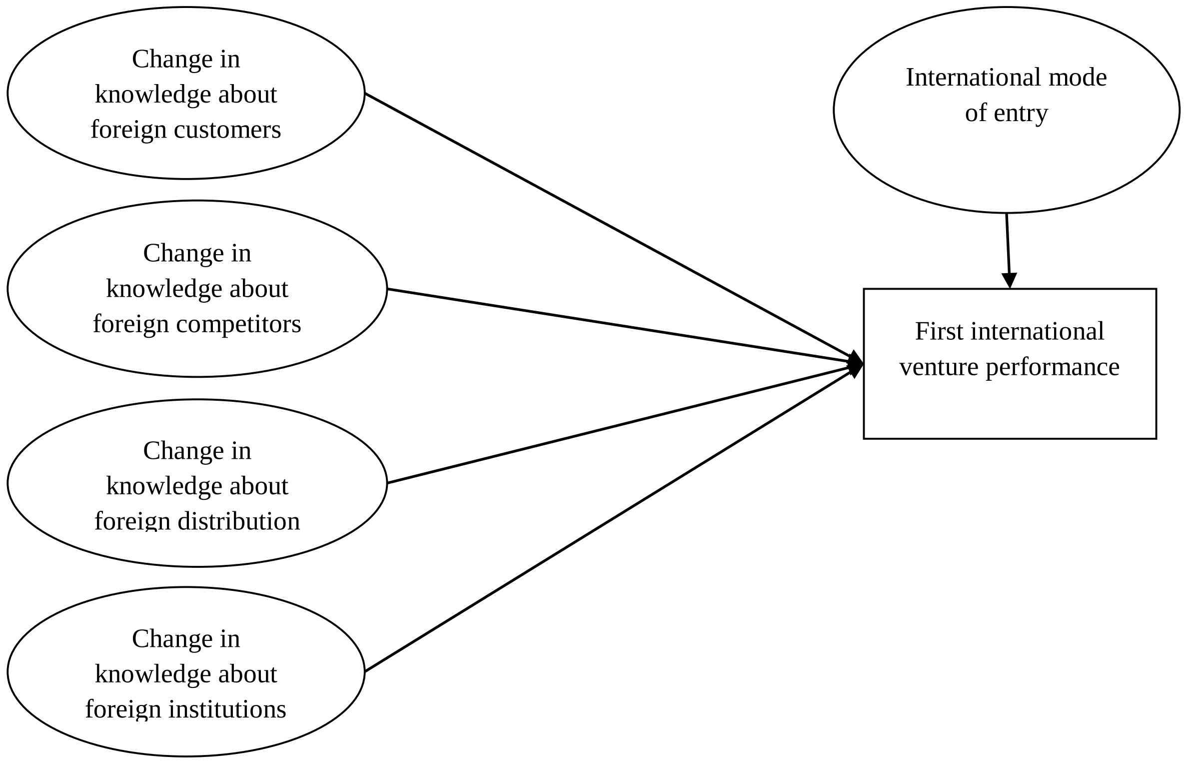

Figure 1: Conceptual framework

2.1 Foreign market knowledge and internationalisation performance

International business literature emphasizes international knowledge transfer as the main source of international organisations' competitive advantage (Bartlett & Ghoshal, 1989; Kogut & Zander, 1993; Argote & Ingram, 2000; Rugman & Verbeke, 2001; Tallman & Phene, 2007; Mudambi et al., 2014). International knowledge transfer induces internationalisation, which occurs as a result of the increase in the knowledge base and external organisational embeddedness (Eriksson et al., 1997). Embeddedness is based on organisation's internal and external technological and organisational competencies. Two types of external sources of knowledge can be employed on the foreign markets that enhance organisational embeddedness: cluster- and network-based knowledge sources (Foss & Pedersen, 2002). Cluster-based knowledge sources are found in strengths of a specific country, industry, networks, well-educated work force or local institutions like technical universities (Porter & Sölvell, 1998).

Organisational embeddedness is proportional to the level of knowledge in an organisation and emerges with the development of lasting business relationships between an organisation and other stakeholders (Andersson et al., 2007; Andersson et al., 2002; Uzzi, 1997; Figueiredo, 2011; Ciabuschi, et al., 2014; Andersson et al., 2014; Yamin & Andersson, 2011; Garcia-Pont et al., 2009). Therefore, external sources of knowledge rely on external relationships. They start with simple market (arms-length) transactions between a buyer and a seller, and evolve into business relationships. Moreover, foreign markets enable the extension of the new or existing business relationships (McLoughlin & Horan, 2002; Yamin & Andersson, 2011). In their study Martin et al. (1998) found that the pattern of international expansion of Japanese automotive component suppliers was shaped with the knowledge coming from their relationships with suppliers and buyers.

Hence, the first set of hypotheses:
H1a: Decrease in knowledge about foreign customers implies better first international venture performance.
H1b: Decrease in knowledge about foreign competitors implies better first international venture performance.
H1c: Decrease in knowledge about foreign distribution channels implies better first international venture performance.
H1d: Increase in knowledge about foreign institutions implies better first international venture performance.

2.2 Foreign market knowledge and internationalisation modes

The transfer of novel, difficult to codify and idiosyncratic knowledge affects firms' international competitive advantage (Kogut & Zander, 1993; Teece & Pisano, 2004; Liu et al., 2010, Gorovaia & Windsperger, 2010). Given the imperfections of knowledge markets (Fletcher & Harris, 2012), firms choose different international modes of entry. The initial dichotomy between equity (e.g., subsidiary) and non-equity (export) international mode of entry (Arndt & Kierzkowski, 2001) is complemented with numerous hybrid structures, such as joint ventures (Chang et al., 2013) or strategic alliances (Amine & Raizada, 2015). The rationale comes from the cost perspective that states that the cost of coordinating activities within a firm may be lower than the cost of coordinating them through external markets (Buckly & Casson, 2011). Coviello and Munro (1995, 1997) found significant correlation between different network relationships and international modes of entry in the context of small software firms. Relationships with local customers, suppliers, distributors and institutions provide new external knowledge for a firm and imply different sources or directions of knowledge transfer (Andersson & Forsgren, 2000; Medcof, 2001; Forsgreen et al., 1999; Achcaoucaou et al., 2014). Therefore, knowledge-related factors that influence firms' choice of international mode of entry include: the growth in demand for technology-intensive products, increased efficiency, economies of scale, problems associated with the organisation of the market for new knowledge, reduction in the cost of international communications and possible tax reductions (Buckley & Casson, 1976). This demonstrates that the progress and learning about foreign markets can be done more effectively by employing equity than non-equity international mode of entry.

Hence, our second set of hypotheses:
H2a: There is a difference in progress in learning about foreign customers and the internationalisation mode.
H2b: There is a difference in progress in learning about foreign competitors and the internationalisation mode.
H2c: There is a difference in progress in learning about foreign distribution channels and the internationalisation mode.
H2d: There is a difference in progress in learning about foreign institutions and the internationalisation mode.

2.3 Foreign market knowledge and international venture performance in non-equity versus equity internationalisation mode of entry

Foreign market knowledge allows firms to tailor products for specific markets (Wills et al., 1991; Zhao et al., 2014). It is found in knowledge about acquisitions (Nadolska & Barkema, 2007), foreign market entry (Sapienza et al., 2006), foreign entry modes (Padmanabhan & Cho, 1999) and core business (Chang, 1995). Knowledge about the resources and capabilities of foreign market competitors, suppliers and customers, increases firms' commitment, which is pivotal for successful internationalisation (Bonaccorsi, 1992; Erramilli & Rao, 1990; Majkgard & Sharma, 1998; Sharma & Johanson, 1987; Johanson & Vahlne, 2009). Internationalisation is a causal cycle in which firms' international activities intensify as firms gradually commit more resources to foreign markets, thereby acquiring more foreign market knowledge (Johanson & Vahlne, 1990; Casillas et al., 2015). An increase in foreign market knowledge, i.e., organisational learning (Cyert and March, 1963), originates from a firm's decision making model that stresses the role of rules, procedures and routines that respond to external knowledge sources (Easterby-Smith & Lyles, 2003; Kogut, 2000; Johanson & Vahlne, 2009). Accordingly, the lack of institutional market knowledge, business knowledge, knowledge about language, laws or rules have different effects on the perceived cost of internationalisation (Eriksson et al., 1997). Therefore, firms are motivated to use equity rather than non-equity mode of entry to absorb all the knowledge gained from cooperation with external environment. On the other hand, Argyris and Schon (1978) criticise Cyert and March's (1963) model on rational assumptions that human behaviour does not always go in line with economic rationality. Namely, "*…neo-rationalist approach which suggest that it is desirable to maximise the efficient use of knowledge in organisations, while recognizing that there are substantial largely human obstacles in its way"* (Easterby-Smith & Lyles, 2003, p. 10). Hence, we hypothesise that the change in foreign market knowledge better explains equity than non-equity international mode of entry (Achcaoucaou et al., 2014).

H3a: <u>Decrease in knowledge</u> about foreign customers leads to better international performance in cases of non-equity internationalisation mode.
H3b: <u>Decrease in knowledge</u> about foreign competitors leads to better international performance in cases of non-equity internationalisation mode.
H3c: Increase in knowledge about foreign distribution channels leads to better international performance in cases of non-equity internationalisation mode.
H3d: Increase in knowledge about foreign institutions leads to better international performance in cases of non-equity internationalisation mode.

H4a: <u>Decrease in knowledge</u> about foreign customers leads to better international performance in cases of equity internationalisation mode.
H4b: <u>Decrease in knowledge</u> about foreign competitors leads to better international performance in cases of equity internationalisation mode.
H4c: Increase in knowledge about foreign distribution channels leads to better international performance in cases of equity internationalisation mode.
H4d: Increase in knowledge about foreign institutions leads to better international performance in cases of equity internationalisation mode.

4. Methods

4.1 Data source and sample

Our study was done on the sample of companies drawn from the Croatian Chamber of Commerce database. The database contains the business register of all Croatian companies. The study was done between March and July 2015 by means of the structured questionnaire survey. All respondents were firstly contacted by email, and then by telephone to fill in the survey. The confidentiality of responses was guaranteed. Initially 183 responses were recorded. However, the final sample consists of 100 small and medium size companies. Namely, there was a large amount of responses with more than 15% of missing data, and companies that have more than 250 employees filled in the survey. Since the aim of this paper is to examine the effect of the change in knowledge on international performance and international mode of entry of small and medium-sized companies, our analysis was confined to 100 companies that contain less than 250 employees.

The study was done in the setting of the transitional Croatian economy. Since 1990s, Croatian economy underwent a tremendous amount of changes, both economic and political. Firstly, the Independence war and the privatisation process in the 1990s. Secondly, the period of political stability and economic growth in the early 2000s. Thirdly, since 2008 Croatian economy is experiencing and absorbing the economic recession that started in the developed economies with the subprime mortgage crisis. Fourthly, Croatia's 2013 accession into the European Union marks the most recent socio-economic and political transition for which the preparations lasted since 1990s. Croatia exports more than 70 per cent of its products and services into the more developed countries of the European Union (i.e., Italy, Austria and Germany), and the majority of the remaining exports go to some of its neighbouring countries such as Bosnia and Herzegovina. Therefore, Croatian SMEs portray an interesting sample for examining the impact of the changes in knowledge on international performance and international mode of entry into more developed markets.

4.2 Variables and measures

This study employs one dependent variable, four control variables and five independent variables. The constructs of the survey were taken from Musteen et al.'s (2010) study, which was conducted on the sample of Czech Republic's SMEs. The authors of the survey kindly gave us the right to use the survey which was translated to the Croatian language. Some of the constructs are the same as in the original study (e.g. international performance), and we developed the constructs of the change in foreign market knowledge.

4.2.1 Dependent variables

International performance was measured with the managers' amount of satisfaction with the company's performance in: a) the realisation of goals and objectives, b) profits, and c) sales. The responses were recorded on a five-point Likert scale (1 = very dissatisfied, 5 = very satisfied). Cronbach's alpha was $\alpha = 0.943$ (Nunnally, 1978). As recorded by Musteen et al. (2010), this is the subjective measure of performance that is a result of reluctancy of managers to provide the objective performance measures in transitional economies.

4.2.2 Independent variables

In order to evaluate the *change in SMEs' knowledge about foreign market*, we employed the Musteen et al. (2010, 2014) study on international networks and international performance and speed of internationalisation. We examined the satisfaction with the amount of knowledge in two points in time: (1) prior the internationalisation and (2) after the internationalisation. Musteen et al. (2014) depicted six types of knowledge: knowledge about foreign competitors, knowledge about foreign culture, knowledge about foreign political or legal environment, knowledge about business opportunities in foreign markets and knowledge about foreign channels of distribution. However, our study is confined to four foreign market knowledge variables. Four variables depicted are consistent with the knowledge-based theory of internationalisation (Penrose, 1959), knowledge about foreign: customers, competitors, distribution channels and institutions. All questions were evaluated on a five-point Likert scale (1 = low level of knowledge, 5 = high level of knowledge). Knowledge about foreign customers was examined through the knowledge about foreign customer preferences, foreign new customer opportunity and foreign customer needs (Cronbach's alpha: $\alpha_{t1} = 0.799$; $\alpha_{t2} = 0.839$). Knowledge about foreign competitors was examined through the knowledge about foreign competitors, foreign competition level and foreign competitor strategy (Cronbach's alpha: α_{t1} = 0.810; α_{t2} = 0.847). Knowledge about foreign distribution channels was examined through the knowledge about available foreign distribution channel quality, foreign suitability of distribution channel and existing distribution channel quality (Cronbach's alpha: α_{t1} = 0.876; α_{t2} = 0.828). Knowledge about foreign institutions was examined through the knowledge about foreign business practices, foreign market risk, foreign rules and foreign legal systems (Cronbach's alpha: α_{t1} = 0.853; α_{t2} = 0.804). Change in foreign market knowledge was calculated such that the ($Knowledge_{t2}$ – $Knowledge_{t1}$)/ $Knowledge_{t1}$. Hence, the variables of the change in foreign market knowledge were regressed on the international venture performance and international mode of entry: the change in knowledge about foreign customers, competitors, distributions channels and institutions.

International mode of entry was assessed with the question on first international mode of entry: (1) export, (2) licensing, (3) joint venture, (4) foreign subsidiary, and (5) other. In order to identify equity and non-equity international mode of entry these answers were coded in two groups (Ahsan & Musteen, 2011; Musteen et al., 2010, 2014). One group included SMEs whose mode of entry was export, licensing or other. The category "other" was put under the non-equity mode of entry as possible results of strategic alliances or franchising result in non-equity. This group was named non-equity mode of entry. On the other hand, joint venture and foreign subsidiary implied equity mode of entries and SMEs with equity international mode of entry were grouped in the other group.

4.2.3 Control variables

Consistent with Musteen et al. (2010, 2014), we controlled for the effects of firm age, firm size, and foreign experience through the number of international ties and employees with foreign work experience. Firm size was measured with the number of employees. Previous studies have found that companies with greater size have better international performance and we wanted to control for that influence. Secondly, we controlled the firm age. Firm age was measured through the year in which a firm was founded. Namely, older SMEs tend to have established products and reputation on the market which we wanted to control. Thirdly, more international contacts SMEs have they might experience greater increase in foreign market knowledge, which we wanted to control. Lastly, we controled the amount of employees with the foreign work experience as they tend to be more knowledgeable about foreign markets (Oviatt & McDougall, 1994; Jones & Coviello, 2005; Ruzzier et al., 2006; Sapienza et al., 2006; Hou et al., 2013; Harvey et al., 2011; Dabić & Harvey, 2011; Harvey et al., 2012). Although previous studies found that international experience of Croatian top managers does not influence the firms' global characteristics (Pološki Vokić et al., 2007), the time span and numerous institutional changes allow for control of this variable with respect to Croatian SMEs.

5. Data Analysis Method and Results

5.1 Method

Table 1 portrays means, standard deviations and correlations between the examined variables. All data were standardized for the purpose of analysis in order to minimize the discrepancies that might have been caused by comparing variables with different measures.

Table 1: Descriptive statistics and correlation

	Variables	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.	International performance	0.000	1.000	1									
2.	Internationalization mode	1.710	1.241	-0.202**	1								
3.	Firm size	-0.306	0.189	0.082	-0.025	1							
4.	Firm age	0.238	0.562	-0.046	0.052	-0.518***	1						
5.	International experience	-0.187	0.570	0.049	0.026	0.537***	-0.345***	1					
6.	International ties	-0.089	0.019	-0.045	-0.105	0.183**	0.001	0.036	1				
7.	Learning about international customers	-0.244	8.602	-0.306***	0.117	-0.194**	-0.011	0.045	-0.013	1			
8.	Learning about international competitors	-0.887	4.710	-0.265***	0.102	-0.195**	0.053	-0.090	0.008	0.093	1		
9.	Learning about international distribution channels	-0.715	3.538	0.002	0.135*	-0.019	0.138*	0.005	-0.031	0.054	-0.086	1	
10.	Learning about international institutions	-1.113	3.418	0.179**	0.041	0.083	0.139*	0.059	0.075	-0.144*	-0.035	0.059	1

Note: N = 100. S.D. = standard deviation. One-tailed test. All variables were standardized.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$

5.2 Results and Discussion

5.2.1 Effect of the change in foreign market knowledge and internationalisation mode on international venture performance

Surveyed Croatian SMEs pointed Slovenia (63%), Czech Republic (58%), Serbia (49%), Germany (48%), Austria (44%) and Italy (38%) as the most commonly entered markets. Studied SMEs' foreign sales averages about 39% of total sales. Table 2 shows the results of hypotheses testing done by employing the ordinary least square regression (OLS) on the international venture performance.

Table 2: The change in international market knowledge and international mode of entry on international performance

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	-0.139 (0.498)	-0.309 (0.467)	0.041 (0.498)	-0.151 (0.472)	-0.355 (0.444)	8.951 (27.305)
Firm size	0.497 (0.725)	-0.550 (0.718)	0.501 (0.713)	-0.499 (0.712)	-0.977 (0.804)	1.510 (2.081)
Firm age	0.006 (0.214)	-0.161 (0.208)	0.032 (0.211)	-0.144 (0.206)	-0.142 (0.235)	-0.970* (0.497)
International experience	0.004 (0.214)	0.100 (0.202)	0.023 (0.210)	0.106 (0.200)	0.035 (0.215)	1.166 (0.793)
International ties	-3.256 (5.518)	-2.152 (5.159)	-4.448 (5.456)	-3.147 (5.143)	-2.747 (4.955)	-97.310 (294.829)
Knowledge about foreign customers		-0.033*** (0.012)		-0.031*** (0.012)	-0.049*** (0.016)	0.013 (0.028)
Knowledge about foreign competitors		-0.052** (0.021)		-0.048** (0.021)	-0.042** (0.021)	-0.217* (0.116)
Knowledge about foreign distribution channels		-0.001 (0.027)		0.005 (0.027)	0.025 (0.029)	0.062 (0.099)
Knowledge about foreign institutions		0.044 (0.029)		0.046 (0.029)	0.056* (0.030)	0.168 (0.138)
Internationalisation mode			-0.169** (0.081)	-0.131* (0.078)		
F-statistic	0.249	2.483**	1.064	2.564**	2.237**	1.814

Table 2: The change in international market knowledge and international mode of entry on international performance						
R^2	0.010	0.179	0.054	0.204	0.216	0.461
Durbin-Watson test		2.051			2.192	1.819

Note: N = 100. OLS regression. Standard error is reported in the brackets. No multicollinearity was observed using the variance inflation indicator (VIF). (VIF < 5). The data were tested for homoskedastisity (residual plots). Durbin-Watson test did not indicate autocorrelation.
*** p < 0.01, ** p < 0.05, * p < 0.10

Model 1 illustrates the results of the OLS regression for the control variables. Model 2 tests Hypothesis 1. It examines the effect of the change in knowledge about the foreign customers, foreign competitors, foreign distribution channels and foreign institutions on the international venture performance. Model 3 examines the effect of internationalisation mode on international venture performance. Model 4 examines the total effect of changes in knowledge about foreign market and international mode of entry on international venture performance. The results imply that a decrease in knowledge about foreign customers and competitors increases the level of satisfaction with international performance.

Model 5 examines the effect of the change in foreign market knowledge on international performance of SMEs' with non-equity international mode of entry. It tests Hypothesis 3 and shows that a decrease in knowledge about customers and competitors and an increase in knowledge about institutions raise the level of satisfaction with international venture performance.

Model 6 examines the effect of the change in foreign market knowledge in SMEs with equity international mode of entry and tests Hypothesis 4. It shows that a decrease in knowledge about competitors raises the satisfaction with international performance. However, this hypothesis is only partially supported as the Model 6 is not statistically significant (F-statistic = 1.814).

5.3.2 Effect of the change in foreign market knowledge on internationalisation mode
Binary logistic regression was employed to test Hypothesis 2 (Table 3). ANOVA was performed prior the binary logistic regression in order to inspect whether there exist group differences between SMEs with different international modes of entry. The results have shown that different international modes of entry show no statistical significance in cases of change in knowledge about foreign customers (F statistic = 0.579, p-value = 0.678), foreign competitors (F statistic = 0.460, p-value = 0.765) and foreign institutions (F statistic = 0.365, p-value = 0.833). However, differences exist in the change in knowledge about foreign distribution channels on 10 per cent significance level (F statistic = 2.340, p-value = 0.061).

Table 3: The effect of change in international market knowledge on international mode of entry

Variable	**Model 1**	**Model 2**
Intercept	-50.644 (48.212)	-51.490 (47.998)
Firm size	0.943 (2.010)	1.034 (2.388)
Firm age	0.531	-0.017

Table 3: The effect of change in international market knowledge on international mode of entry		
	(0.675)	(0.750)
International experience	-1.604 (1.386)	-1.362 (1.532)
International ties	-525.088 (518.298)	-537.098 (516.142)
Knowledge about foreign customers		0.047 (0.030)
Knowledge about foreign competitors		0.027 (0.071)
Knowledge about foreign distribution channels		0.379 (0.146)*
Knowledge about foreign institutions		0.034 (0.100)
Log likelihood	84.857	72.710
Chi^2	6.321	18.467**
Pseudo R^2	0.061	0.169

Note: N = 100. Binary logistic regression. Cox and Snell R^2 reported.
*** p < 0.01, ** p < 0.05, * p < 0.10Note: N = 100. Binary logistic regression. Cox and Snell R2 reported.
*** p < 0.01, ** p < 0.05, * p < 0.10

Model 1 in Table 3 portrays the binary logistic regression with only the control variables, and Model 2 comprises the entire model that tests the change in foreign market knowledge on the mode of entry. It shows that the increase in knowledge about foreign distribution channels ($p < 0.10$) raises the probability of a SME internationalising through equity mode of entry.

Finally, Table 4 presents the summary of tested hypotheses.

Table 4: Summary of hypotheses' tests

	Paths	Expected sign	Empirical conclusion
H1a	Knowledge about foreign customers→ First international venture performance	Negative	Supported
H1b	Knowledge about foreign competitors→ First international venture performance	Negative	Supported
H 1c	Knowledge about foreign distribution channels→ First international venture performance	Negative	Not supported
H1d	Knowledge about foreign institutions→ First international venture performance	Positive	Not supported
H2a	Knowledge about foreign customers - international mode of entry	Negative	Not supported
H2b	Knowledge about foreign competitors - international mode of entry	Positive	Not supported
H2c	Knowledge about foreign distribution channels - international mode of entry	Positive	Supported
H2d	Knowledge about foreign institutions - international	Positive	Not

	Table 4: Summary of hypotheses' tests		
	mode of entry		supported
H3a	Knowledge about foreign customers→ First international non-equity venture performance	Negative	Supported
H3b	Knowledge about foreign competitors→ First international non-equity venture performance	Negative	Supported
H3c	Knowledge about foreign distribution channels→ First international non-equity venture performance	Positive	Not supported
H3d	Knowledge about foreign institutions→ First international non-equity venture performance	Positive	Not supported
H4a	Knowledge about foreign customers→ First international equity venture performance	Negative	Not supported
H4b	Knowledge about foreign competitors→ First international equity venture performance	Negative	Partially supported
H4c	Knowledge about foreign distribution channels→ First international equity venture performance	Positive	Not supported
H4d	Knowledge about foreign institutions→ First international equity venture performance	Positive	Not supported

The results imply that decreases in knowledge about foreign customers and competitors lead to better international performance in cases of non-equity mode of entry. Additionally, when SMEs enter into foreign markets by owning equity in those foreign markets, a decrease in knowledge about foreign competitors induces better international performance. It is interesting to note that a decrease, rather than an increase in foreign market knowledge leads to better international performance. Foreign market conditions might be tougher than expected, which induces the knowledge gap and creates the "*shock effect*" for SMEs, i.e., a temporary decline in the perceived knowledge about the foreign market, which is mainly tacit and embedded in products partially customized to foreign market needs and preferences (Pedersen & Petersen; 2004). Tacit knowledge impedes imitation, increases its costs and decreases the speed of knowledge transfer (Kogut & Zander, 1993; Tuppura et al., 2008). This notion corresponds to the Croatian SMEs who responded to the survey, and export to the Slovenian and Serbian markets, whose customers have similar preferences and cultural backgrounds as Croatian customers. On the other hand, in July 2013 Croatia exited the Central European Free Trade Association to fully join the European Union. No custom duties in trade with the European Union member states imply lower prices of Croatian products in the European Union member states. Higher custom duties in trade with the Central European countries imply higher prices of Croatian products in the Central European countries. Therefore, a decrease in foreign market knowledge can be attributed to the shift between foreign markets.

Competition on the developed market of the European Union might have resulted in an increase in the quality of Croatian SMEs' products. Additionally, a shift towards the European Union member states might have caused a decrease in knowledge about customers and competitors in the Central European countries, and increases in quality and international venture performance. This shift is more significant in cases of non-equity than equity mode of entry, wherein a possible rationale comes from a small sample size.

Regardless of Croatian SMEs' slight preference toward equity rather than non-equity mode of entry in cases of an increase in foreign market knowledge, a majority of changes in foreign market knowledge are not significant: (i) knowledge about foreign customers, (ii) knowledge about foreign competitors and (iii) knowledge about foreign institution. Nonetheless, an increase in knowledge about distribution channels implies equity rather than non-equity mode of entry. This notion reflects the importance of distribution channels for the Croatian SMEs' equity mode of entry.

6. Conclusion

This paper studies how the changes in foreign market knowledge affect international performance of Croatian SMEs and their mode of foreign market entry. In our hypotheses a distinction is made between the institutional and business knowledge (Eriksson et al., 1997; Cassillas et al., 2009). More specifically, we examine how the change in knowledge about foreign customers, competitors and distribution impacts the Croatian SMEs' international performance and mode of entry.

Our data indicate that a decrease in knowledge about foreign customers and competitors increases international performance of Croatian SMEs. Although this reasoning might seem unusual, it can be compared to the study of Pedersen and Petersen (2004), who found the knowledge gaps between SMEs' perceived and actual foreign market knowledge. These knowledge gaps might cause lower international performance. It is possible that the Croatian SMEs overestimated their foreign market knowledge before entry, thereby needing time to familiarise themselves with foreign customers and competitors (Pedersen & Petersen, 2004). Additionally, the transitions, which the Croatian economy experienced recently, might have caused discrepancies between formerly similar markets and resulted in a decrease in knowledge about foreign customers and competitors connected to those markets. This is especially true in cases of non-equity mode of entry because in times of uncertainty, which Croatian SMEs experienced, companies prefer non-equity modes of foreign market entry (Choo & Mazzarol, 2001; Brouthers & Nakos, 2004).

Limitations of our study pertain to its cross-sectional and static nature. We used a single country data representing a small open economy. This makes the results of the study valid for small open economies and difficult to interpret in the settings of the large open economies. Future studies should be made in a multi-country setting, include both SMEs and large companies and incorporate the secondary output variable, which would allow the generalisation of results. Other methods, such as case studies and mixed method research, could be useful to explain this phenomena.

References

Achcaoucaou F, Miravitlles P, León-Darder F. 2014. Knowledge sharing and subsidiary R&D mandate development: A matter of dual embeddedness. *International Business Review*, 23(1): 76-90.

Ahsan M, Musteen M. 2011. Multinational enterprises' entry mode strategies and uncertainties: A review and extension. *International Journal of Management Reviews*, 13: 376-392.

Alavi M, Leidner DE. 2001. Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues, *MS Quarterly*, 25(1): 107-136.

Amine LS, Raizada D. 2015. Market Entry into the Newly Opened Indian Market: Recent Experiences of US Companies in the Soft drinks Industry. *Proceedings of the 1995 Academy of Marketing Science Annual Conference*: 287-292.

Andersson U, Dahlin P, Ekman P. 2014. The Role of Internal Embeddedness for Subsidiary Influence in the Multinational Enterprise. European International Business Academy (EIBA), 40th Annual Conference, Uppsala University, Sweden, December 11-13, 2014.

Andersson U, Forsgren M. 2000. In search of centre of excellence: Network embeddedness and subsidiary roles in multinational corporations. *Management International Review*: 329-350.

Andersson U, Forsgren M, Holm, U. 2007. Balancing subsidiary influence in the federative MNC: A business network view. *Journal of International Business Studies*, 38(5): 802-818.

Andersson U, Forsgren M, Holm U. 2002. The strategic impact of external networks: subsidiary performance and competence development in the multinational corporation. *Strategic Management Journal*, 23(11): 979-996.

Argote L, Ingram P. 2000. Knowledge transfer: A basis for competitive advantage in firms. Organizational Behavior and Human Decision Processes, 82(1): 150-169.

Argyris C, Schön DA. 1978. Organizational learning: A theory of action perspective, Reading, MA: Addison-Wesley: 173.

Arndt SW, Kierzkowski H. (eds). 2001. Fragmentation: New production patterns in the world economy: New production patterns in the world economy. OUP Oxford.

Bartlett CA, Ghoshal S. 1989. Managing across borders: The transnational solution. Harvard Business School Press: Boston.

Blair DC. 2002. Knowledge management: hype, hope, or help? *Journal of the American Society for Information Science and Technology,* 53(12): 1019-1028.

Blomberg J, Werr A. 2006. Boundaryless Management-Creating, transforming and using knowledge in inter-organizational collaboration. A literature review No. 2006: 2.

Bonaccorsi A. 1992. On the relationship between firm size and export intensity. *Journal of international business studies*, 605-635.

Brodie I, Brodie L. 2009. A knowledge-information-data concept model for engineering education. *Australasian Journal of Engineering Education*, 15(3).

Brouthers KD, Nakos G. 2004. SME Entry Mode Choice and Performance: A Transaction Cost Perspective. *Entrepreneuership Theory & Practice*, 28(3): 229-247.

Buckley PJ, Casson M. 2011. Marketing and the multinational: extending internalisation theory. *Journal of the Academy of Marketing Science,* 39(4): 492-508.

Buckley PJ, Casson MC. 1976. The future of multinational enterprises. Holmes and Meier Publishers: New York.

Casillas JC, Barbero JL, Sapienza HJ. 2015. Knowledge acquisition, learning, and the initial pace of internationalisation. *International Business Review*, 24 (1): 102-114.

Casillas JC, Moreno AM, Acedo FJ, Gallego MA., Ramos E. 2009. An integrative model of the role of knowledge in the internationalisation process. *Journal of World Business*, 44: 311-322.

Chang SJ. 1995. International expansion strategy of Japanese firms: Capability building through sequential entry. *Academy of Management Journal*, 38(2): 383-407.

Chang SJ, Chung J, Moon JJ. 2013. When do wholly owned subsidiaries perform better than joint ventures? *Strategic Management Journal*, 34(3): 317-337.

Choo CW. 2005. The Knowing Organization: How Organizations Use Information to Construct Meaning, Create Knowledge and Make Decisions. Oxford University Press, USA.

Choo S, Mazzarol T. 2001. An Impact on Performance of Foreign Market Entry Choices by Small and Medium-Sized Enterprises. *Journal of Enterprising Culture*, 9(3): 291–312.

Ciabuschi F, Holm U, Martín Martín O. 2014. Dual embeddedness, influence and performance of innovating subsidiaries in the multinational corporation. *International Business Review*.

Coviello NE, Munro HJ. 1995. Growing the entrepreneurial firm: networking for international market development. *European Journal of Marketing*, 29(7): 49-61.

Coviello N, Munro H. 1997. Network relationships and the internationalisation process of small software firms. *International Business Review*, 6(4): 361-386.

Cui AS, Griffith DA, Cavusgil S, Dabic M. 2006. The influence of market and cultural environmental factors on technology transfer between foreign MNCs and local subsidiaries: A Croatian illustration. *Journal of World Business*, 41: 100-111

Cyert RM, March JG. 1963. A behavioral theory of the firm. Englewood Cliffs, NJ: 2.

Dabić M, Harvey M. 2011. The role of expatriates, inpatriates and cross-functional global teams in transition. *International Journal of Human Resources Development and Management*, 11 (2-4): 107-111.

Davenport TH, Prusak L. 1998. Working Knowledge: How Organizations Manage What They Know, Harvard Business Press, USA.

Demarest M. 1997. Understanding Knowledge Management, Long Range Planning, 30(3): 321-322.

Easterby-Smith M, Lyles M. 2003. Re-Reading Organizational Learning: Selective Memory, Forgetting, and Adaptation. *The Academy of Management Executive*, (1993-2005): 51-55.

Eriksson K, Johanson J, Majkgard A, Sharma DD. 1997. Experiential knowledge and cost in the internationalisation process. *Journal of International Business Studies*: 337-360.

Eriksson RH. 2011. Localized spillovers and knowledge flows: how does proximity influence the performance of plants? *Economic Geography*, 87(2): 127-152.

Erramilli MK, Rao CP. 1990. Choice of foreign market entry modes by service firms: role of market knowledge. *Management International Review*, 135-150.

Figueiredo PN. 2011. The role of dual embeddedness in the innovative performance of MNE subsidiaries: evidence from Brazil. *Journal of Management Studies*, 48(2): 417-440.

Fletcher M, Harris S. 2012. Knowledge acquisition for the internationalisation of the smaller firm: Content and sources. *International Business Review*, 21 (4): 631-647.

Forsgren M, Pedersen T, Foss NJ. 1999. Accounting for the strengths of MNC subsidiaries: the case of foreign-owned firms in Denmark. *International Business Review*, 8(2): 181-196.

Foss NJ, Pedersen T. 2002. Transferring knowledge in MNCs: The role of sources of subsidiary knowledge and organizational context. *Journal of International Management*, 8(1): 49-67.

Garcia-Pont C, Canales JI, Noboa F. 2009. Subsidiary strategy: the embeddedness component. *Journal of Management Studies*, 46(2): 182-214

Ghoshal S, Bartlett CA. 1990. The multinational corporation as an interorganizational network. *Academy of Management Review*, 15(4): 603-626.

Gorovaia N, Windsperger J. 2010. The use of knowledge transfer mechanisms in franchising. *Knowledge and Process Management*, 17(1): 12-21.

Grant RM. 1996. Toward a Knowledge-Based Theory of the Firm. *Strategic Management Journal*, 17: 109-122

Harvey M, Buckley MR, Richey G, Moeller M, Novicevic M. 2012. Aligning Expatriate Managers' Expectations with Complex Global Assignments. *Journal of Applied Social Psychology*, 42 (12): 3026-3050.

Harvey M, Napier N, Moeller M. 2011. Improving the probabilities of success of expatriate managers in the global organisation of the 21st century. *International Journal of Human Resources Development and Management*, 11 (2-4): 141-166.

Hohenthal J, Johanson J, Johanson. M. 2014. Network knowledge and business-relationship value in the foreign market. *International Business Review*, 23 (1): 4-19.

Hörisch J, Freeman RE, Schaltegger S. 2014. Applying Stakeholder Theory in Sustainability Management Links, Similarities, Dissimilarities, and a Conceptual Framework. *Organization & Environment*, 27(4): 328-346.

Hou W, Li S, Priem RL. 2013. How do CEOs matter? The moderating effect of CEO compensation and tenure on equity ownership in international joint ventures. *Journal of Interntional Management*, 19: 138-151.

Hsu YS. 2012. Knowledge Transfer Between Expatriates and Host Country Nationals: A Social Capital Perspective. Theses and Dissertations. Paper 33, The University of Wisconsin-Milwaukee.

Johanson J, Vahlne JE. 2009. The Uppsala internationalisation process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*. 40(9): 1411-1431.

Jones MV, Coviello NE. 2005. Internationalisation: conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36: 284-303.

King WR. 2009. Knowledge Management and Organizational Learning, Springer US.

Kogut B. 2000. The network as knowledge: Generative rules and the emergence of structure. *Strategic Management Journal*, 21(3): 405-425.

Kogut B, Zander U. 1993. Knowledge of the firm and theevolutionary-theory of the multinational-corporation. *Journal of International Business Studies*. 24 (4): 625-645.

Li ST, Tsai MH, Lin C. 2010. Building a taxonomy of a firm’s knowledge assets: A perspective of durability and profitability. *Journal of Information Science*, 36(1): 36-56.

Liu X, Lu J, Filatotchev I, Buck T, Wright M. 2010. Returnee entrepreneurs, knowledge spillovers and innovation in high-tech firms in emerging economies. *Journal of International Business Studies*, 41(7): 1183-1197.

Majkgård A, Sharma DD. 1998. Client-following and market-seeking strategies in the internationalisation of service firms. *Journal of Business-to-Business Marketing*, 4(3): 1-41.

Marr B, Schiuma G, Neely A. 2004. Intellectual capital–defining key performance indicators for organizational knowledge assets. *Business Process Management Journal*, 10(5): 551-569.

Martin X, Swaminathan A, Mitchell W. 1998. Organizational evolution in the interorganizational environment: Incentives and constraints on international expansion strategy. *Administrative Science Quarterly*: 566-601.

McLoughlin D, Horan C. 2002. Markets-as-networks: notes on a unique understanding. *Journal of Business Research*, 55(7): 535-543.

Medcof JW. 2001. Resource-based strategy and managerial power in networks of internationally dispersed technology units. *Strategic Management Journal*, 22(11): 999–1012.

Mudambi R, Pedersen T, Andersson U. 2014. How subsidiaries gain power in multinational corporations. *Journal of World Business*, 49(1): 101-113.

Musteen M, Datta DK, Butts MM. 2014. Do international networks and foreign market knowledge facilitate SME internationalisation? Evidence from the Czech Republic. *Entrepreneurship: Theory and Practice,* 38(4): 749-774.

Musteen M, Francis JD, Datta DK. 2010. The influence of international networks on internationalisation speed and performance: A study of Czech SMEs. *Journal of World Business*, 45 (3): 197-205.

Nadolska A, Barkema HG. 2007. Learning to internationalise: the pace and success of foreign acquisitions. *Journal of International Business Studies*, 1170-1186.

Nonaka I, Toyama R, Hirata T. 2009. Managing flow: a process theory of the knowledge-based firm.

Nonaka I, Toyama R, Nagata A. 2000. A firm as a knowledge-creating entity: a new perspective on the theory of the firm. *Industrial and Corporate Change*, 9(1): 1-20.

Nunnaly J. 1978. *Psychometric theory*.

Oviatt BM, McDougall PP. 1994. Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1): 45-64.

Padmanabhan P, Cho KR. 1999. Decision specific experience in foreign ownership and establishment strategies: Evidence from Japanese firms. *Journal of International Business Studies*, 25-43.

Penrose ET. 1959. The theory of the growth of the firm. John Wiley and Sons: New York.

Ployhart RE, Nyberg AJ, Reilly G, Maltarich MA. 2014. Human Capital Is Dead; Long Live Human Capital Resources! *Journal of Management*, 40(2): 371-398

Pološki Vokić N, Marić I, Hernaus T. 2007. Globalna orijentacija i globalne kompetencije vrhovnih menadžera u Hrvatskoj. *Društvena istraživanja*, 16 (3): 533-556.

Porter ME, Sölvell Ö. 1998. The role of geography in the process of innovation and the sustainable competitive advantage of firms. In *The Dynamic Firm*, Chandler AD, Hagström P, Sölvell Ö(eds). Oxford University Press: 440-457.

Rennie M. 1999. Accounting for knowledge assets: do we need a new financial statement? *International Journal of Technology Management*, 18(5): 648-659.

Rugman AM, Verbeke A. 2001. Subsidiary-specific advantages in multinational enterprises. *Strategic Management Journal*, 22(3): 237-250.

Ruzzier M, Hisrich RD, Antoncic B. 2006. SME internationalisation: past, present and future. *Journal of Small Business and Enterprise Development*, 13 (4): 476-497.

Sapienza HJ, Autio E, George G, Zahra SA. 2006. A capabilities perspective on the effects of early internationalisation on firm survival and growth. *Academy of management review*, 31(4): 914-933.

Schiele F, Laux F. Connolly TM. 2014. Applying a Layered Model for Knowledge Transfer to Business Process Modelling (BPM). *International Journal On Advances in Intelligent Systems*, 7(1/2): 156-166.

Sharma DD, Johanson J. 1987. Technical consultancy in internationalisation. *International Marketing Review*, 4: 20-29.

Spender JC, Scherer AG. 2007. The philosophical foundations of knowledge management: Editors' introduction. Organization, 14(1): 3–26.

Sveiby KE. 2007. Disabling the context for knowledge work: the role of managers' behaviours. Management Decision, 45(10): 1636-1655.

Tallman S, Phene A. 2007. Leveraging knowledge across geographic boundaries. *Organization Science*, 18(2): 252-260.

Teece DJ. 1977. Technology transfer by multinational firms: the resource cost of transferring technological know-how. *The Economic Journal*: 242-261.

Teece D, Pisano G. 2004. Handbook on knowledge management 2. Springer Science & Business Media B.V.

Tuppura A, Saarenketo S, Puumalainen K, Jantunen A, Kylaiheiko K. 2008. Linking knowledge, entry timing and internationalisation strategy. *International Business Review*, 17: 473–487.

Uzzi B. 1997. Social structure and competition in interfirm networks: the paradox of embeddedness. *Administrative Science Quarterly*, 42(1): 35–67.

Vliamos SJ, Tzeremes NG. 2012. Factors influencing entrepreneurial process and firm start-ups: evidence from central Greece. *Journal of the Knowledge Economy*, 3(3): 250-264.

Wills J, Samli AC, Jacobs L. 1991. Developing global products and marketing strategies: a construct and a research agenda. *Journal of the Academy of Marketing Science*, 19(1): 1-10.

Yamin M, Andersson, U. 2011. Subsidiary importance in the MNC: What role does internal embeddedness play? *International Business Review*, 20(2): 151-162

Yang Q, Mudambi R, Meyer KE. 2008. Conventional and Reverse Knowledge Flows in Multinational Corporation. *Journal of Management*, 34(5): 882-902.

Zhao M, Park SH, Zhou N. 2014. MNC strategy and social adaptation in emerging markets. *Journal of International Business Studies*, 45(7): 842-861.

Zins C. 2007. Conceptual Approaches for Defining Data, Information, and Knowledge. *Journal of the American Society for Information Science and Technology*, 58(4): 479–493.