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# Internationalization of high-technology ventures from emerging economies

Evidence from Moldova

Turcan, Romeo V.

Publication date:

Document Version Accepted author manuscript, peer reviewed version

Link to publication from Aalborg University

Citation for published version (APA):

Turcan, R. V. (2011). Internationalization of high-technology ventures from emerging economies: Evidence from Moldova. Paper presented at The 14th McGill International Entrepreneurship Conference, Odense, Denmark.

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## Internationalization of high-technology ventures from emerging economies:

### **Evidence from Moldova**

#### Introduction

International entrepreneurship (IE) as a new scholarly domain emerged as a result of a "creative tension" (Autio, 2005, p. 9) produced by Oviatt and McDougall's (1994) seminal paper in which Oviatt and McDougal brought to fore the emergent behavior of new ventures that were internationalizing right from their start-up or immediately after (Oviatt and McDougall, 2005b). We define IE as a process of discovering and exploiting international venture ideas that are intended to create new values in organizations and in the marketplace (Turcan and Mäkelä, 2004). Since its inception, the extant research on IE has focused mainly on international new ventures (INVs) from developed economies (Yamakawa et al., 2008), and paid virtually no attention to the internationalization of new, high-technology ventures from emerging economies.

With this paper we aim to contribute towards filling in this gap in the IE literature by exploring *how* and *why* new high-technology ventures internationalize from an emerging economy, namely Moldova. Moldova is a country landlocked between Romania and Ukraine that became independent in 1992 as a result of collapse of USSR.<sup>2</sup> Of specific interest to this paper is the fact that during Soviet Union there were 6 military high-technology factories in Moldova producing various ranges of high-technology products (incl., software and hardware, and biotech products) for aircrafts, submarines, and land missile careers. In addition to these, there were a dozen of R&D labs located in Moldova that were supporting these and other factories from the Soviet Union military war complex located outside Moldova.<sup>3</sup>

In the following section the extant research on the internationalization of new, high-technology ventures from emerging economies will be discussed, followed by the presentation of the research methodology. Preliminary findings of the research will conclude the paper.

# Theoretical background

In this research we side with Yamakawa et al. (2008, p. 60) who maintain that "if research on entrepreneurship and internationalization is to keep up with practice, it seems imperative that at least some of our attention be devoted to these cutting-edge cross-border entrepreneurial

<sup>&</sup>lt;sup>1</sup> For review of extant IE research, please refer to Coombs et al. (2009), Coviello and Jones (2004), Dominguinhos and Simoes (2004), Keupp and Gassmann (2009), Kraus (2011), Rialp et al. (2005), Turcan and Carter (2003).

<sup>&</sup>lt;sup>2</sup> For more information about Moldova, please visit www.cia.gov.

<sup>&</sup>lt;sup>3</sup> The lead author had the opportunity to be employed as technology engineer and later as marketing consultant at one of these factories in Moldova, and to take part in the conversion program that involved all military factories in Moldova.

activities moving from [emerging economies to developed economies]". Although scarce, the research on INVs from emerging economies is gradually emerging (see e.g., Dib et al., 2010; Lopez et al., 2009; Naude and Rossouw, 2010; Thai and Chong, 2008; Zhang et al., 2009; Zhou et al., 2010; Zou and Ghauri, 2010). The extent findings point for example to learning capability and networking capability as capability upgrading constructs that differentiate INVs from emerging economies from traditional internationalizing ventures (Dib et al., 2010; Naude and Rossouw, 2010; Zhang et al., 2009; Zhou et al., 2010). From the extant theorybuilding research, the findings suggest that INVs from emerging economies internationalize gradually and do not follow the internationalization patterns suggested by INVs (from developed economies) studies and become born regional rather than born global (Lopez et al., 2009; Thai and Chong, 2008; Zou and Ghauri, 2010).

Despite the above attempts, earlier criticism of the research on internationalization of new venture from emerging economies (Yamakawa et al., 2008) as well of the research of entrepreneurship in emerging economies (Bruton et al., 2008) is still valid today. For example, 4 out of 7 studies identified above ask *what* type of question thus testing existing theories, rather than asking *how* and *why* type of questions in order to develop theory. At the same time, 4 out of 7 studies base their empirical work on INVs from China; the other three being from Brazil, Costa Rica, and Vietnam. Although some of the papers are trying to compare INVs with traditional internationalizing ventures with the context of an emerging economy, there is no yet attempt to compare INVs from emerging economies with INVs from developed economies or to have an emerging economy cross-country comparison of INVs.

As to the conceptualization of INVs from emerging economies, it has been suggested to position the research on INVs from emerging economies within the strategy tripod that consists of industry-based view leg, resource-based view leg, and institution-based view leg (Peng et al., 2008; Yamakawa et al., 2008). The variables that define the former leg are industry evolution and concentration, knowledge-intensity of the industry, local industry internationalization, global integration of industry, industry venture capital, and regime of appropriability in industry (Fernhaber et al., 2007). The variables that define the second leg relate to network and knowledge (Oviatt and McDougall, 2005a), as well as to organizational learning, and entrepreneurial orientation (Yamakawa et al., 2008). The variables of the latter leg are the three fundamental pillars of institutions, namely regulative, normative, and cognitive (Scott, 2001). Given that INVs "...have no prior corporate history in the industry, and hence no prior market presence" (Fan and Phan, 2007, p.1114), one may expect the behaviour of INVs in the early years of their existence is shaped substantially by the liability of newness and the liability of foreignness (Yamakawa et al., 2008; Zahra, 2005). From the institution-based view, legitimacy is viewed as playing a key role in overcoming the above liabilities and concerns.

This paper is in response to a call for a theory building research to advance our knowledge and understanding of *how* and *why* INVs internationalize from emerging economies, thus contributing to the growing body of IE research.

## Methodology

To address the above research questions, a multiple-case study strategy (Yin, 2003) was adopted for the purpose of theory building (Bradshaw and Wallace, 1991; Glaser and Strauss, 1967), relying on purposeful sampling the logic and power of which lie in selecting information-rich cases for study in depth (Eisenhardt, 1989). Six international new ventures were identified through the Moldovan Association of Private ICT Companies (www.ict.md). Data were collected using two methods: in-depth, semi-structured interviews with decision makers and their key stakeholders, and secondary data sources. During the first phase of data collection that took place between July 2010 and February 2011 a total of 12 in-depth interviews were conducted (the second phase will comprise of follow-up interviews).

All interviews were recorded, transcribed verbatim, and sent back to interviewees, thus contributing to the enhancement of the construct validity. Databases were created for each case to organize and document data collected that were transferred to QSR NVivo program that handles qualitative data analysis research projects.

# **Preliminary findings**

At this stage of the theory-building process, within-case analysis (Miles and Huberman, 1994) was conducted, whereby each case company was explored and described in detail. According to Dubin (1969), the very essence of description is to name the properties of things, and the more adequate the description, the greater the likelihood that the concepts derived from the description will be useful in subsequent theory building.

Each case company is explored and described in detail, employing even-list matrix as suggested by Miles and Huberman (1994) for within-case analysis. The interview transcripts and secondary data pertinent to each case were coded in an iterative manner, working back and forth between theory, emerging patterns and data. Within-case analysis was the basis for developing early constructs surrounding the internationalization of new ventures from an emerging economy.

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