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Interconnecting financial performance and internationalization: a case of a rare metal producer

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Abstract

The paper aims to outline the causes that affected a rare earth metal producer Molycorp Silmet's internationalization based on case study evidence. Moreover, based on statistical analysis, it aims to study how its internationalization and financial performance were interconnected. It concludes that 1) its export fluctuations mostly resulted from external factors and that despite such fluctuations, the firm's financial health was mostly good, 2) high concentration on a single target market can lower profitability, 3) fluctuations in target market shares can increase or decrease a firm's profitability, but they are not interconnected with its bankruptcy probability.

Keywords: internationalization, export, financial performance, rare metals, Estonia.

1. Introduction

Rare earth metal (REM) reserves have been discovered in 34 countries – from these, 15 in Asia and Australasia, 10 in Africa, six in Europe and three in America (Chen 2011). Most rare earth metals are produced in China, but it started protecting its environment via export quotas and taxes, and since summer 2015, resource taxes instead of them, which affected prices (Mancheri 2015; Massari & Ruberti 2013). Thus, many producers from other countries decided to increase exports (Biedermann 2014; Chen 2011) as REMs are critical for hi-tech and several other producers due to lack of substitutes (Golev *et al.* 2014; Klinger 2015). Considerable fluctuations in supply and demand can have a remarkable impact on firms' financial performance, especially for those operating outside China and mostly focusing on export markets. Therefore, it is very important to study the interconnections between the internationalization of firms – or in a nar-

rower sense, target market choices – and their financial performance.

The best option for such research would be to study those firms that sell most of their products internationally and as such face high price fluctuations. Thus, this study focuses on such a REM manufacturer. Derived from the above, the study has two objectives. First, based on case study evidence, it aims to outline the causes that affected a REM producer's internationalization. Second, based on statistical analysis, it aims to study how its internationalization and financial performance were interconnected. The study focuses on an Estonian REM producer Molycorp Silmet that produces around 1/5 of the world's niobium and 1/10 of tantalum and exports almost all of its production.

Following the two objectives, the literature review section outlines two streams of literature: internationalization literature and literature on the

financial performance of firms and its measurement. The empirical analysis presented herein starts from causes of internationalization based on case study evidence and, thereafter, a statistical analysis is conducted to study the interconnection between the case firm's financial performance and internationalization activities. The paper ends with conclusions, together with managerial and research implications.

The study makes several contributions. First, the causes of nonlinear internationalization – considerable fluctuations in exports by countries – have been rarely studied (Vissak 2014; Vissak & Francioni 2013). Second, it has not been studied if changes in shares of major export market groups affect the financial performance of REM producers. Finally, the study helps to understand what challenges a high-technology firm producing almost unique products must face due to global market forces.

2. Literature review

Although internationalization processes have been actively studied since the 1970s, we can still agree with Mtigwe (2006: 5) that "to date there appears to be no universally accepted

model of international business, let alone the same theory of international business" and with Welch & Paavilainen-Mäntymäki (2014: 2) that a majority of studies on internationalization processes

"have not taken a processual approach that incorporates time, dynamism and longitudinal observations."

International business scholars have mostly focused on increasing involve-

ment in internationalization and studied two types of internationalizers: 1) slow/incremental which start from exporting to a few close countries and continue with farther markets and more complicated operation modes and 2) fast, 'born globals' that enter distant markets since their foundation. Still, it is not enough to focus only on growth. For instance, Nadkarni *et al.* (2006: 139) stated: "the international environment presents one of the toughest managerial challenges /.../ This is evident in the widespread internationalization failures around the world in terms of slow speed of international entries, withdrawals from foreign markets, divestments, and closure of foreign operations". As a result, recently, more attention has been paid to 3) nonlinear internationalization – "market exit and/or export decrease from any market by 25% or more" (Vissak & Masso 2015: 661). Thus, in Table 1, a short overview of three streams of internationalization research – slow, fast and nonlinear – is given and some factors affecting such internationalization paths are brought out.

Stream of literature	A typical internationalization process	Factors leading to such an internationalization process
the *Uppsala* (U-) *model* (Johanson & Vahlne 1977, 1990, Johanson & Wiedersheim-Paul 1975), *innovation-related internationalization (I-) models* (Bilkey 1978; Morgan & Katsikeas 1997), *the Finnish model* (Welch & Luostarinen 1988)	*slow and incremental:* closest and/or similar countries are entered first usually by exporting; later, after learning from these activities, other countries will be entered and other modes used	experiential knowledge is necessary for internationalization, but firms acquire it predominantly through their foreign operations (especially according to the U-model), thus, learning takes time
the literature on fast internationalizers: born globals and international new ventures (Knight & Cavusgil 1996; Kuivalainen *et al.* 2007; Madsen & Servais 1997; Oviatt & McDougall 1994; Weerawardena *et al.* 2007; Wolff & Pett 2000; Zander *et al.* 2015)	*very fast:* during the first three years since establishment, firms enter culturally and geographically distant foreign markets and achieve a high (usually, 25 percent or higher) export share; in some cases, they even skip the exporting stage	firms can learn from their founders, owners and/or other network partners, not only from their own foreign activities; some have unique resources and/or or narrow but important skills
the literature on nonlinear internationalization (Benito and Welch 1997; Cuervo-Cazurra *et al.* 2007; Javalgi *et al.* 2011; Matthyssens & Pauwels 2004; Turner 2012; Vissak 2014; Vissak & Francioni 2013; Vissak & Masso 2015; Welch & Welch 2009)	*fluctuating:* firms experience fluctuations in international involvement: they exit some markets permanently or temporarily or decrease their involvement there (de-internationalize), later some re-enter some markets (re-internationalize) or enter others; such fluctuations can occur several times	external and internal factors: including changed external environment (exchange rates, costs, competition, demand, export quotas), changes in business partners' situation, unstable foreign orders, lost or gained access to resources, managers' changes in the firm's strategy

Table 1
An overview of research on internationalization processes.

REM producers' internationalization paths have not yet attracted attention in the literature, so it is not possible to find studies on how many firms belong to each of the above categories but some factors affecting their exports have been brought out. For instance, Biedermann (2014), Golev *et al.* (2014), Mancheri (2015) and Massari & Ruberti (2013) stated that due to export controls imposed by China, Chinese producers could not export as much as they wanted to, while producers in some other countries decided to export more as prices increased.

There is a myriad of literature on the financial performance of firms and it has been measured in a multitude of ways. The classical approach – a univariate analysis – uses single indicators (see Balcaen & Ooghe 2006; Dimitras *et al.* 1996). For that purpose, financial ratios indicating

the profitability of assets (ROA) or sales (ROS) have been especially popular. Although ROA has been widely used, it has several limitations (for instance, it is not fully clear which assets and periods to include in the ratio denominator) and thus, ROS should be preferred when analyzing performance changes. In the calculation of ROS, a cash flow based ROS should be preferred over an accrual based formula, as cash flows can provide a more realistic picture of a firm's performance and its possible forthcoming failures (Laitinen & Laitinen 1998).

A more complex way to measure firms' performance is by using bankruptcy models. A bankruptcy model results in a score, bankruptcy probability or a binary outcome of survival or failure (Altman & Narayanan 1997; Dimitras *et al*. 1996; Bellovary *et al*. 2007). Of these, models resulting in a bankruptcy probability can be considered the best option, as they allow the comparison of a firm's performance dynamically on a unified scale (for instance, from 0% to 100% or from 0 to 1). Classically, binary logistic regression has been used for the creation of probabilistic bankruptcy models.

Although the production sector has been the most prominent research object for bankruptcy prediction scholars, no well-known models exist that would have been specifically composed for firms manufacturing metals (although some of such firms have been included in samples among other industrial firms). Thus, literature focusing on models created for manufacturing firms should be applied. The most prominent logit models are those provided in the pioneering study by Ohlson (1980), whose study encompassed three models to measure bankruptcy probability at three different time points. The models created by Ohlson have very high prediction abilities (ranging between 93 and 96%) and have rarely been outperformed by other logit models (see Appendix A in Bellovary *et al*. 2007). Thus, we will use this classical model in this study.

3. Method

This article is based on case study evidence as this method is suitable for studying causes of nonlinear internationalization processes (Vissak 2014; Vissak & Francioni 2013) and changes in financial performance. It allows researchers to understand how and why something happened, combine new empirical insights with previously developed theories and investigate complex phenomena taking into account their real-life context (Eisenhardt 1989; Yin 1994; Welch *et al*. 2011). Our data analysis followed three phases suggested by Miles & Huberman (1994): 1) organizing the data through discarding irrelevant data and writing summaries, 2) creating tables and figures for making conclusions and 3) collecting further data for verifying the initial conclusions. We used archival records, annual reports (from 2000-2014) and other materials as data sources.

We measured Molycorp Silmet's performance with two different indicators. First, we applied univariate analysis with a profitability ratio. We used one of the most common profitability measures to measure financial performance:

operating cash flow divided by net sales (CF/S). As for most of the years, the firm did not have nonperforming accounts receivable and its amount of accounts receivable has not fluctuated considerably, we did not convert the sales measure in the denominator of cash flow based profitability ratio; instead we applied an accrual based measure (net sales from the income statement). From the three bankruptcy models created by Ohlson (1980), we applied the first model which measures the probability of bankruptcy one year before the event. It should be noted that in the case of Ohlson's bankruptcy model, values are in the range of 0 and 1, where 1 denotes the 100% likelihood of bankruptcy.

The case firm's nonlinear internationalization (specifically, its sales dynamics at different target markets) was reflected by the following measures. Firstly, the target market proportions were brought out for three market groups: the European Union as the firm's home region, the United States as its current owner's home market and the rest of the world (mostly South-East Asia). Such a

distribution of markets also reflects the aggregate breakdown through different continents. Also, the firm's aggregate turnover over all target markets was used in the statistical analysis. Three variables were calculated to measure sales dispersion over different international target market groups. These variables are: a) standard deviation of the proportions of the above-mentioned target market groups, b) difference between the proportion of the largest and the smallest target market group, c) the proportion held by the target market group having the largest share.

Both nonlinear internationalization and performance measures were calculated for the period of 1999-2014, as earlier data were not publicly available. The interconnection between internationalization and financial performance measures was studied with Spearman's rank correlation coefficients. As the changes in Molycorp Silmet's internationalization behavior can alter its performance with a time lag, we found correlations with export variables from period t and performance indicators from periods t and t+1.

4. Results and discussion

The firm's predecessor was founded in 1927 but then it processed oil shale. It was nationalized in 1941 and destroyed during the World War II similarly to several other enterprises located in Estonia (Vissak 2014). In 1946 it started producing uranium oxide (production was ceased in 1990) and in 1970, rare earth metals and

rare metals. In Soviet time it had 5500 employees. In 1997, the firm was fully restructured and privatized; then it had 1600 employees. Thereafter, ownership changed several times. The current owner Molycorp (operating in 10 countries and 25 locations) acquired it in April 2011. Silmet wished to increase its capacity for producing rare earth

oxides (REO) and rare earth metals – niobium and tantalum (its main products) but also cerium, lanthanum, didymium, praseodymium and others. It also needed Molycorp's raw materials while the latter needed access to the European market. Molycorp Silmet annually produces up to 700 t of rare metals and 3,000 t of REO.

Period	Internationalization	Factors that led to such internationalization	The firm's activities
2000-2001	exports increased considerably	demand and prices increased	started investing in reducing environmental risks
2002	exports decreased considerably	demand and prices fell	developed some new products
2003	exports still decreased	demand and prices fell and U.S. dollar weakened but some competitors exited the market	ceased the activities of its rare earth metals factory for 3 months
2004	exports stabilized	demand stabilized	invested in production, focused mainly on rare metals and started buying some raw materials from Brazil
2005	exports increased considerably	demand and prices of rare metals and, to some extent, rare earth metals increased	Zimal (Switzerland) acquired a 50%+1 share in the firm, it continued investing in technology and new product development
2006	exports increased	prices of rare earth metals continued increasing: demand increased and China started protecting its environment more	continued investing
2007	exports increased	U.S. dollar weakened, China restricted exports of rare earth metals	continued investing in technology and new product development
2008	exports increased	prices increased in the beginning but thereafter, started falling	focused on cutting costs
2009	exports decreased	the economic crisis, demand and prices fell, especially for niobium	stopped all major investment projects
2010	exports increased considerably	due to a Brazilian competitor's problems, demand for ferro-niobium-tantalum alloy increased and demand for rare earth metals started recovering	decreased production costs in the first quarter but continued investing in the second quarter, bought back its shares from Zimal
2011	exports increased	demand for tantalum but also other metals increased, prices for tantalum increased considerably	due to change in ownership, started importing several raw materials from Molycorp, it invested in increasing production capacity
2012	exports decreased slightly	demand fluctuated and in the end of 2012, prices fell	doubled niobium production, invested in increasing efficiency, production capacity and flexibility, opened a modern laboratory
2013	exports decreased considerably	prices decreased, demand for niobium and tantalum was low	increased production capacity of REMs and made adjustments in its technology to start using American raw materials
2014	exports decreased considerably	prices decreased slightly, exchange rates were unfavorable	invested in increasing efficiency, production capacity and flexibility
2015	export data are not available yet	demand and prices fluctuated, Molycorp had major financial difficulties, a considerable part of Molycorp Silmet's tantalum and niobium production building burned down	continued operating and started reconstructing its production building after the fire

Table 2
An overview of Molycorp Silmet's internationalization in 2000-2015.

Molycorp Silmet's nonlinear internationalization – fluctuating foreign sales (see Figure 1) – was caused by several factors (see Table 2): changes in supply and demand, resource costs, prices and exchange rates, but it was also affected by owner-ship changes, Molycorp Silmet's efforts to increase its competitiveness and by Chinese economic policies (Golev *et al.* 2014; Massari & Ruberti 2013). Most of these factors were external, while in internationalization literature, also several internal factors – for instance, knowledge, international experience and relationships - have been identified (see Table 1). As this is a very specific industry and the number of potential producers is low, such aspects seem to affect their internationalization less.
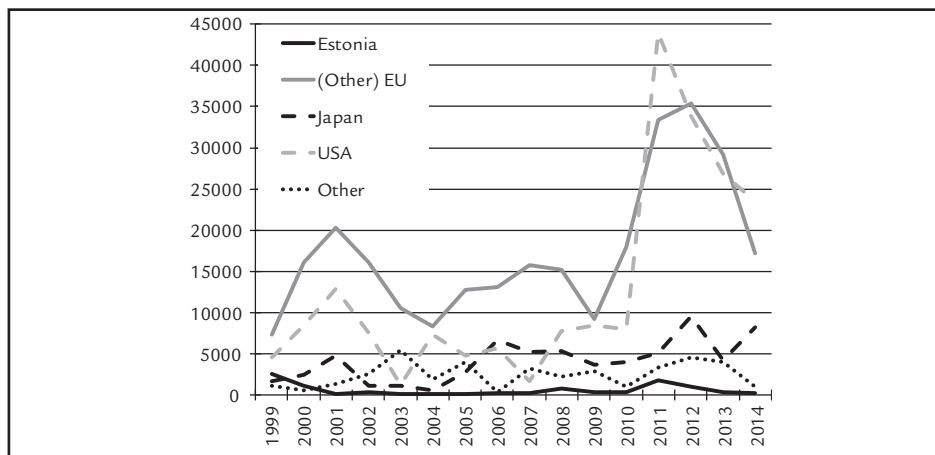

Figure 1
Molycorp Silmet's turnover by markets, thousand EUR.

Table 3 illustrates the values of two indicators chosen to measure Molycorp Silmet's financial performance from 1999 to 2014. It can be seen that fluctuations have been remarkable. Bankruptcy probability ranged between the best score 0.03 in 2013 and the worst score 0.74 in 2012, whereas most of the values remained under the critical cut-off point of 0.5, reflecting that Molycorp Silmet has been in good financial health for most of its existence. The cash flow based profitability has also fluctuated from negative to positive values, whereas the latest years indicate a positive CF/S.

Year	Ohlson score	CF/S	EU sales %	USA sales %	Other sales %	Standard deviation of target market shares	Difference between maximum and minimum target market share	Maximum target market share
1999	0.35	0.02	57.7%	26.4%	15.9%	21.7%	41.8%	57.7%
2000	0.16	0.05	60.2%	29.5%	10.3%	25.2%	49.9%	60.2%
2001	0.09	0.11	51.7%	32.8%	15.5%	18.1%	36.2%	51.7%
2002	0.42	-0.01	59.4%	27.3%	13.3%	23.6%	46.1%	59.4%
2003	0.58	-0.02	57.4%	6.6%	36.0%	25.5%	50.9%	57.4%
2004	0.57	-0.04	46.2%	40.4%	13.4%	17.5%	32.9%	46.2%
2005	0.19	-0.04	52.6%	19.5%	27.9%	17.2%	33.2%	52.6%
2006	0.31	0.05	51.3%	22.0%	26.7%	15.8%	29.3%	51.3%
2007	0.33	0.04	61.4%	6.4%	32.2%	27.6%	55.1%	61.4%
2008	0.13	0.04	51.0%	25.0%	24.0%	15.3%	27.1%	51.0%
2009	0.33	0.06	38.7%	34.4%	26.9%	6.0%	11.8%	38.7%
2010	0.08	0.01	58.5%	25.5%	16.0%	22.3%	42.4%	58.5%
2011	0.13	0.08	40.2%	50.1%	9.7%	21.1%	40.5%	50.1%
2012	0.74	0.10	43.2%	40.2%	16.6%	14.6%	26.6%	43.2%
2013	0.03	0.18	45.7%	41.6%	12.7%	18.0%	33.0%	45.7%
2014	0.17	0.16	34.8%	47.0%	18.2%	14.4%	28.8%	47.0%

Table 3
Financial performance and internationalization indicators' values for 1999-2014

Note: all values have been rounded, but in statistical analysis exact values have been applied.

Tables 4 and 5 outline the Spearman correlation coefficients between Molycorp Silmet's export market shares and export market dispersion on one hand and the profitability ratio and bankruptcy score on the other hand. It can be seen that the shares of the target market groups have only affected CF/S from period t, namely an increase in the EU's share in total sales has led to deterioration of CF/S, and on the contrary, an increase in USA's share in total sales has led to improvement of CF/S. Still, these effects are nonexistent when comparing past target market proportions (from year t) with future financial performance (from year t+1). Thus, the target market group choice has influenced cash flow based profitability only in the same year. Table 4 also indicates that with an increase in the share of the main target market group, cash flow based profitability will decrease, thus increased concentration on a single target market group can prove to be financially unviable. Again, such an association is not present in the case of lagged financial performance (see Table 5). Interestingly, none of the applied internationalization variables associate with bankruptcy probability, thus it can be proposed that this variable is more influenced by other managerial decisions, not internationalization choices. An important result is also that CF/S is positively associated with the aggregate turnover from both periods t and t+1, thus clearly indicating the presence of return to scales. Namely, larger exports will result in increased profitability.

		EU sales %	USA sales %	Other sales %	Standard deviation of target market shares	Difference between maximum and mini-mum target market share	Maximum target market share	Aggregate sales
Ohlson score	SCC	0.071	-0.202	0.356	0.022	0.006	-0.021	-0.533
	Sig. (2-tailed)	0.795	0.454	0.175	0.935	0.983	0.940	0.033
CF/S	SCC	-0.524	0.603	-0.293	-0.380	-0.395	-0.472	0.728
	Sig. (2-tailed)	0.030	0.013	0.270	0.146	0.130	0.065	0.001

Table 4
Spearman correlation coefficients (SCC) between two financial performance variables from period t and seven internationalization variables from period t (n=16).

		EU sales %	USA sales %	Other sales %	Standard deviation of target market shares	Difference between maximum and mini-mum target market share	Maximum target market share	Aggregate sales
Ohlson score	SCC	-0.007	-0.068	-0.156	0.202	0.213	0.097	0.079
	Sig. (2-tailed)	0.980	0.810	0.580	0.470	0.446	0.732	0.780
CF/S	SCC	-0.177	0.315	-0.353	-0.179	-0.174	-0.158	0.659
	Sig. (2-tailed)	0.527	0.253	0.197	0.523	0.536	0.536	0.008

Table 5
Spearman correlation coefficients (SCC) between two financial performance variables from period t+1 and seven internationalization variables from period t (n=15).

Thus, the following conclusions can be made from the above research. The changes in the shares of Molycorp Silmet's major target market groups affected its cash flow based profitability in the same year but were not associated with bankruptcy probability neither in the same year nor in the following year. Also, concentration on a single market group reduced cash flow based profitability in the same year, but other indicators of target market dispersion did not have such an effect.

5. Conclusions

The results showed that several factors – mostly external – lead to Molycorp Silmet's export fluctuations. Furthermore, despite such fluctuations, the firm's financial health was mostly good. We also concluded that fluctuations in the target market shares are not interconnected with bankruptcy probability but they can increase or decrease a firm's profitability. Also, we found that lower profitability can result from high concentration on a single target market group. Thus,

managers should not regard nonlinear internationalization – export volume or share fluctuations – as a sign of failure, especially as such fluctuations can often be caused by external factors. It would be interesting to study more rare metal producers in the future to find out if their nonlinear internationalization has been affected by similar factors. Moreover, their performance and its interconnections with internationalization need further attention.

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7. References

ALTMAN, E.I., NARAYANAN, P. An international survey of business failure classification models. *Financial markets, Institutions & Instruments*, v. 6, n. 2, p. 1-57, 1997.

BALCAEN, S., OOGHE, H. 35 years of studies on business failure: an overview of the classic statistical methodologies and their related problems. *The British Accounting Review*, v. 38, n. 1, p. 63-93, 2006.

BELLOVARY, J.L., GIACOMINO, D.E., AKERS, M.D. A review of bankruptcy prediction studies: 1930 to present. *Journal of Financial Education*, v. 33, n. 4, p. 3-41, 2007.

BENITO, G.R.G., WELCH, L.S. De-internationalization. *Management International Review*, v. 37, n. 2, p. 7-25, 1997.

BIEDERMANN, R.P. China's rare earth sector – between domestic consolidation and global hegemony. *International Journal of Emerging Markets*, v. 9, n. 2, pp. 276-293, 2014.

BILKEY, W.J. An attempted integration of the literature on the export behavior of firms. *Journal of International Business Studies*, v. 9, n. 1, p. 33-46, 1978.

CHEN, Z. Global rare earth resources and scenarios of future rare earth industry. *Journal of Rare Earths*, v. 29, n. 1, p. 1-6, 2011.

CUERVO-CAZURRA, A., MALONEY, M.M., MANRAKHAN, S. Causes of the difficulties in internationalization. *Journal of International Business Studies*, v. 38, n. 5, p. 709-725, 2007.

DIMITRAS, A.I., ZANAKIS, S.H., ZOPOUNIDIS, C. A survey of business failures with an emphasis on prediction methods and industrial applications. *European Journal of Operational Research*, v. 90, n. 6, p. 487-513, 1996.

EISENHARDT, K.M. Building theories from case study research. *Academy of Management Review*, v. 14, n. 4, p. 532-550, 1989.

GOLEV, A., SCOTT, M., ERSKINE, P.D., ALI, S.H., BALLANTYNE, G.R. Rare earths supply chains: Current status, constraints and opportunities. *Resources Policy*, v. 41, n. 4, p. 52-59, 2014.

JAVALGI, R.G., DELIGONUL, S., DIXIT, A., CAVUSGIL, S.T. International market reentry: A review and research framework. *International Business Review*, v. 20, n. 4, p. 377-393, 2011

JOHANSON, J., VAHLNE J.-E. The internationalization process of the firm: a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, v. 8, n. 1, p. 23-32, 1977.

JOHANSON, J., VAHLNE J.-E. The mechanism of internationalization. *International Marketing Review*, v. 7, n. 4, p. 11–24, 1990.

JOHANSON, J., WIEDERSHEIM-PAUL, F. The internationalization of the firm: four Swedish cases. *Journal of Management Studies*, v. 12, n. 3, p. 305–322, 1975.

KLINGER, J.M. A historical geography of rare earth elements: From discovery to the atomic age. *Extractive Industries and Society*, v. 2, n. 3, p. 572-580, 2015.

KNIGHT, G.A., CAVUSGIL, S.T. The born global firm: A challenge to traditional internationalization theory. In: CAVUSGIL, S.T., MADSEN, T. (EDS.). *Advances in International Marketing*, 8. Greenwich, CT: JAI Press, 1996. p. 11-26.

KUIVALAINEN, O., SUNDQVIST, S., SERVAIS, P. Firms' degree of born-globalness, international entrepreneurial orientation and export performance. *Journal of World Business*, v. 42, n. 3, p. 253-267, 2007.

LAITINEN, E.K., LAITINEN, T. Cash management behavior and failure prediction.

Journal of Business Finance & Accounting, v. 25, n. 7/8, p. 893-919, 1998.

MADSEN, T.K., SERVAIS, P. The internationalization of born globals: An evolutionary process. *International Business Review*, v. 6, n. 6, p. 561-583, 1997.

MANCHERI, N.A. World trade in rare earths, Chinese export restrictions, and implications. *Resources Policy*, v. 46, n. 2, p. 262-271, 2015

MASSARI, S., RUBERTI, M. Rare earth elements as critical raw materials: Focus on international markets and future strategies. *Resources Policy*, v. 38, n. 1, p. 36-43, 2013.

MATTHYSSENS, P., PAUWELS, P. Strategic flexibility in export expansion: growing through withdrawal. *International Marketing Review*, v. 21, n. 4/5, p. 496-51, 2004.

MILES, M.B., HUBERMAN, A.M. *Qualitative data analysis: an expanded sourcebook.* London: Sage, 1994.

MORGAN, R.E., KATSIKEAS, C.S. Theories of international trade, foreign direct investment and firm internationalization: a critique. *Management Decision*, v. 35, n. 1/2, p. 68-78, 1997.

MTIGWE, B. Theoretical milestones in international business: the journey to international entrepreneurship theory. *Journal of International Entrepreneurship*, v. 4, n. 1, p. 5-25, 2006.

NADKARNI, S., PÉREZ P.D., MORGANSTEIN, B. Mindsets and internationalization success: an exploratory study of the British retail grocery industry. *Organization Management Journal,* v. 3, n. 2, p. 139-154, 2006.

OHLSON, J.A. Financial ratios and the probabilistic prediction of bankruptcy. *Journal of Accounting Research,* v. 18, n. 1, p. 109-131, 1980.

OVIATT, B.M., MCDOUGALL, P.P. Toward a theory of international new ventures. *Journal of International Business Studies*, v. 25, n. 1, p. 45-64, 1994.

TURNER, C. Deinternationalisation: towards a coevolutionary framework. *European Business Review,* v. 24, n. 2, p. 92-105, 2012.

VISSAK, T. Nonlinear internationalization in the context of nonlinear economic development: the case of Krenholm Group. *Transformations in Business and Economics,* v. 13, n. 2A, p. 431-447, 2014.

VISSAK, T., FRANCIONI, B. Serial nonlinear internationalization in practice: A case study. International Business Review, v. 22, n. 6, p. 951-962, 2013.

VISSAK, T., MASSO, J. Export patterns: typology development and application to Estonian data. *International Business Review*, v. 24, n. 4, p. 652-664, 2015.

WEERAWARDENA, J., SULLIVAN MORT, G., LIESCH, P.W., KNIGHT, G. Conceptualizing accelerated internationalization in the born global firm: a dynamic capabilities perspective. *Journal of World Business*, v. 42, n. 3, p. 294-306, 2007.

WELCH, C., PAAVILAINEN-MÄNTYMÄKI, E. Putting process (back) in: research on the internationalization process of the firm. *International Journal of Management Reviews,* v. 16, n. 1, p. 2-23, 2014.

WELCH, C., PIEKKARI, R., PLAKOYIANNAKI, E., PAAVILAINEN-MÄNTYMÄKI, E. Theorising from case studies: towards a pluralist future for international business research. *Journal of International Business Studies*, v. 42, n. 5, p. 740–762, 2011.

WELCH, C.L., WELCH, L.S. Re-internationalisation: exploration and conceptualization. *International Business Review*, v. 18, n. 6, p. 567-577, 2009.

WELCH, L.S., LUOSTARINEN, R. Internationalization: evolution of a concept. *Journal of General Management*, v. 14, n. 2, p. 34-57, 1988.

WOLFF, J.A., PETT, T.L. Internationalization of small firms: an examination of export competitive patterns, firm size, and export performance. *Journal of Small Business Management,* v. 38, n. 2, p. 34-47, 2000.

YIN, R.K. Case study research design and methods. London: Sage, 1994.

ZANDER, I., MCDOUGALL-COVIN, P., ROSE, E.L. Born globals and international business: evolution of a field of research. *Journal of International Business Studies,* v. 46, n. 1, p. 27-35, 2015.