DOI : 10.18843/rwjasc/v6i4(1)/03
DOI URL : http://dx.doi.org/10.18843/rwjasc/v6i4(1)/03

MULTINATIONALITY -PERFORMANCE RELATIONSHIP: A REVIEW AND RESEARCH AGENDA

José Satsumi López-Morales,

Economic – Administrative Department
Instituto Tecnológico de Veracruz, México.

José G. Vargas-Hernández,

Universidad de Guadalajara,
México.

María Mercedes Gómez-Casas

Economic – Administrative Department
Instituto Tecnologico de Veracruz,
México.

ABSTRACT

The aim of this paper is make a review of the literature of the empirical studies about the multinationality-performance relationship. The surveys developed during the period 2003-2014 were reviewed. The results identified some gaps and future research agenda to be addressed such as: use of moderator and mediator variables in the multinationality-performance relationship, the use of non-financial/accounting indicators as indicators of performance, carry our comparative surveys between countries and regions and the inclusion of internationalization motivation.

Keywords: Multinationality, Performance, Relationship, Multinationals, Literature review.
JEL: M1, M16.

INTRODUCTION:

The multinationality-performance relationship has developed an important interest in the research about international business. It has been a relevant topic studied by scholars around the world from 30 years ago (Contractor, 2012; Kirca, et al. 2011; Ruigrok & Wagner, 2003). However, despite this relevance, a narrow consensus has been given by the empirical literature (Kirca, Roth, Hult & Cavugsil, 2012).Besides, it is important to point out that the terms: 'internationalization degree', 'international diversification', 'geographical diversification' and 'international expansion' refers to the same phenomena. It means that it is possible to find studies with these names (Kirca et al., 2011).
How was explained the multinationality and performance relationship is an important issue in international business literature, so the topic is a relevant phenomenon to review.Answer the questions what has been done? And which are the main gaps about this topic?, are the main aims of this paper. Due to this, the paper is organized as follows: first, the theoretical support about this phenomenon is shown. Second, an extensive review of empirical studies carried out by different scholars around the world in the last 20 years is presented. And third, according with the literature review results, the future research agenda about this phenomenon is explained.

KEY CONCEPTS AND THEORETICAL SUPPORT:

The multinationality-performance relationship is a relevant topic in the international business theory. This phenomenon has been studied from 30 years ago (Contractor, 2012). In accordance with this, the empirical evidence has identified five forms of this relationship, such as:
Positive linear relationship: Higher levels of multinationality are related with positive revenues (Vernon, 1971).
Negative linear relationship: Higher levels of multinationality are linked with negative earnings (Gomes & Ramaswamy, 1999; Michel & Shaked, 1986).
U-Curve: Multinationality- performance relationship is non-linear and results in a U shaped -curve (Lu & Beamish, 2001; Capar & Kotabe, 2003; Ruigrok &Wagner, 2003).
Inverted U-Curve: Other researchers likewise discovery the multinationality- performance relationship to be non-linear but to result in an inverted U-curve (Daniels & Bracker, 1989; Geringer et al. 1989; Hitt, Hoskinson & Kim, 1997; Gomes & Ramaswamy, 1999; Li & Qian, 2005). Inverted U-shaped relationships can be clarified by the incremental Uppsala model (Johanson & Vahlne, 1977) which hypothesizes that multinationality starts on geographically nearby countries, in which the business environment is more familiar to firms, and returns are likely to be positive. However, when entering into more complex markets, firms begin to face managerial problems that end up in compromising returns. Therefore, in the end the marginal cost of multinationality will exceed the marginal benefits and negatively compromise firm performance (Li, 2007).
S-Curve Hypothesis: Lately, endeavoring to mix the results resulting in inverted U- and U-shaped relationships, other surveys verified and found support for a horizontal S-shaped relationship (Sullivan, 1994; Contractor et al., 2003; Lu & Beamish, 2004; Li& Quian, 2005).
Likewise, Contractor, Kumar & Kundu, (2007) suggests that the empirical surveys seem inconsistent. The major part of the results found the S-curve hypothesis, according to which multinationality produces positive revenues up to certain grade of investment in operations abroad, i.e. as large as the degree of multinationality does not exceed a critical threshold.
Moreover, i.e. if the degree of multinationality grow up, there is an increase in managerial costs, and the minimal product of multinationality becomes negative. Therefore, there is a dynamic interaction among the costs and revenues of multinationality, so the resulting relationship with the performance become a cyclical S-curve. Thus, the S- curve assumption try to explain some of the contradictory empirical finding in the international management literature by denoting to the degree of multinationality as an important factor of the multinationality- performance relationship.
In accordance with this, some surveys in international management research discover the multinationality-performance relationship show unreliable results (Lu & Beamish, 2004). A number of surveys have found empirical support for the hypotheses of a linear positive relationship between

multinationality and performance (Vernon, 1971; Grant, 1987) other surveys have found no significant relationship (Morck & Yeung, 1991) or provided proof of a negative relationship (Denis et al. 2002).

LITERATURE REVIEW:

The literature in the last 10 years has been focused in discover if the multinationality affects the performance of the firm. There are several studies that have been made in research in depth of this relationship, some of these studies have been published in top journals, such as: *Management International Review, the Journal of International Business Studies the Academy of Management Journal, the Journal of Finance* (Hennart, 2007).

This literature depicts some issues associated to the multinationality. Some studies suggest that the firms can transfer resources to achieve economies of scale. (Tallman & Li, 1996). Besides taking advantage of the imperfect markets (Dunning, 1988) and expand opportunities (Kogut, 1985). All of this generates an impact of diverse consequences in their performance.

On the other hand, operates in different markets bring as consequence an increase of operation costs. Highlighting those operating in different markets where is shown a major cultural heterogeneity (Gomes & Ramaswamy, 1999). This means that a major cultural heterogeneity most will the costs.

The firms not become multinationals if not observe opportunities to get benefits. Therefore the expansion abroad should impact in a positive way to the performance. In other words, if not obtained benefits in the performance, it do not seek the expansion abroad. (Wise-Lozano, 2000), nevertheless this assumption has not fulfilled in all the cases being that while not reach benefits in the performance the firms go abroad (Gomes & Ramaswamy, 1999; Thomas & Eden, 2004). The previous approaches suggest that do not exist a consensus about the effects of the multinationality in the performance in the firms (Elango & Prakash- Sethi, 2007). Thus is important carry out contributions to the body of knowledge about this phenomenon.

METHODOLOGY:

For this paper, qualitative technique of literature review is employed. For this, the research began with a review of available literature related to the topic of multinationality-performance relationship, from 2003-2014 from different source of electronic data. This period was selected to be a representative of recent trends in international business activity, where the international activity of the firms have increased (Contractor, 2012; Li, 2007).

Table 1 show different surveys carried out during the period 2003- 2014. These analyses depict a great disparity between results. This difference is due to the different contexts in the countries, the different economic sectors of the firms and the size of the simple. As we can see exists a difficult in order to can identify a unique behavior in the multinationality- performance relationship. Likewise, multinationality is a broad phenomenon and its effects on the firms are complex (Annavarjula & Beldona, 2000).

Moreover, different indicators are used in order to operationalize the variables (multi-nationality and performance). This fact is due to the diverse factors: the availability of data, the time limitations and the scope of the surveys. In the case of performance, the most part of the indicators are based in accounting/financial scope, probably due to the main aim of the firms are gain benefits.

In the case of multinationality the indicators are more diverse. It is true that FSTS is the most used item; FETE and FATA are used too. Likewise some studies used OCTS and some indexes are derived from different measures (Chang, 2011; Rieck, Cheah, Lau, & Lee, 2004). Moreover, the indicators of multi-nationality are not only focused in financial/ accounting approaches, it is based too in dimensional indicators as FETE and FOTO (Ferreira de Andrade & Ribeiro-Galina, 2013; Contractor, Kundu & Hsu, 2003).

In addition, other important factors founded, are the regions and the size of the samples. In the first case, we can observe there exists surveys in emerging markets (Bolaji & Chris, 2014; Pan & Tsai, 2012) and in developed countries (Ruigrok, Amann & Wagner, 2007, Wagner, 2004). In the second case, some surveys with a small samples (Bolaji & Chris, 2014; Loncan &Nique, 2010) and surveys

with big samples (Bobillo, López- Iturriaga & Tejerina- Gaite, 2012). These factors probably make that the obtained results are not conclusive.
The findings in the paper conclude that multinationality is a factor that prompts the company to maximize his performance (Bolaji & Chris, 2014). In other hand, the multinationality affects negatively the performance (Ferreira de Andrade & Ribeiro-Galina, 2013). In addition, Ruigrok & Wagner (2003) found that the shape of multinationality- performance relationship is differentiate according the performance indicator used (U curve using ROA as performance measure, and inverted U curve for OCTS).

CONCLUSIONS AND RESEARCH AGENDA:

The main aim of this paper is present an updated review of the literature about the multinationality-performance relationship. The review in the previous section has identified some important 'gaps' that are not been addressed for the scholars. Multinationality- performance relationship have different axis for been explained in order to understand better this phenomenon.
Some conclusions and recommendations can be given about this paper. The use of different indicators that are not based only in financial/accountant measures. This can limit the results only to study the financial aspects of the firms. Likewise, it is important to point out to include moderator and mediator variables such as: Type of ownership, product diversification, innovation and entrepreneurial orientation, certain practices in human resources and marketing. In addition is important to carry out comparative studies in different regions and countries (Gaur & Kumar, 2009).
Another future research can include the understanding the motives of internationalization as part of the multinationality- performance relationship. The importance of this topic as part of the internationalization process has been indicated in the literature about international business (Li, 2007; Hitt, Tihanyi, Miller & Conelly, 2006). This deepens in the motivation that make to the firms to go abroad is important in order to understand the internationalization process in firms.
Likewise, some surveys have used multidimensional measures of multinationality (Kirca, Roth, Hult & Cavusgil, 2012; Qian, Yang &Wang, 2003). Although this is an advance in the topic even is far the possibility of develop an universal measure multinationality due to diverse factors as the size of the firm, country and available data. Therefore, it is important for each survey´s measure of multinationality to fit with the study's theoretical intent in order to maximize the measure's content validity (Annavarjula & Beldona, 2000).
Finally, this review try to provide answer to the question: Multinationality affects the performance of the firms? And after the literature review and in support with the findings, we can conclude that the multinationality affect positive and negatively the performance of the firm and in all the cases the firms that go abroad are searching the increase of their performance, but in some cases it is not possible as evidence the obtained results (Ferreira de Andrade & Ribeiro-Galina, 2013)

REFERENCES:

[1] Annavarjula, M., & Beldona, S. (2000). Multinationality-performance relationship: a review and reconceptualization. *International Journal of Organizational Analysis*, 8: 48-67. doi: 10.1108/eb028910

[2] Bobillo, A. M., López- Iturriaga, F & Tejerina- Gaite, F. (2012). The effects of international diversification on firm performance: An empirical study across twelve European countries. *International Journal of Management*. 29, 4. 531- 542

[3] Bolaji, H. & Chris, A. (2014). Relationship between internationalization of firms and economic performance: A case study selected banks in Nigeria. Journal of Economics and Sustainable Development. 5, 5, 160-166.

[4] Capar N. & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies.*34, 345-355.

[5] Capar, N. (2009). An Analysis of the Relationships between International Diversification, Producto Diversification, Firm Resources and Performance. Academy of Management Annual Meeting Proceedings.
[6] Chang, J. (2011). The early and rapid internationalization of Asian emerging MNEs, *Competitiveness Review*. 21, 2, 171 – 187. doi:10.1108/10595421111117452
[7] Chiang, Y-C, Yu T-H. (2005). The relationship between multinationality and performance of Taiwan firms. *The Journal of American Academy of Business*130-135.
[8] Contractor, F. J., Kumar, V., & Kundu, S. K. (2007). Nature of the relationship between international expansión and performance: The case of emerging market firms. *Journal of World Business*, 42 (4), 401- 417.
[9] Contractor, F.J. (2012). Why do multinational firm exist? A theory note about the effect of multinational expansion on performance and recent methodological critiques. *Global Strategy Journal*, 2, 318–331. doi: 10.1111/j.2042-5805.2012.01045
[10] Contractor, F.J., Kundu,S.K. & Hsu C.C. (2003).A three-stage theory of international expansion: The link between multinationality and performance in the service sector.*Journal of International Business Studies*, 34, 1. doi: 10.1057/palgrave.jibs.8400003.
[11] Denis, D.J., Denis, D.K. & Yost, K., 2002. Global diversification, industrial diversification, and firm value. Journal of Finance, 57, 1951-1979.
[12] Dunning, J. H. (1988). The Eclectic paradigm of internationalproduction: A restatement and some possible extensions. *Journal of International Business Studies*, 19,1, 1-31. doi:10.1057/palgrave.jibs.8490372
[13] Elango, B. & Prakash- Sethi, S. (2007). An exploration of the relationship between country of origin (COE) and the internationalization performance paradigm. *Management International Review*. 47, 369- 392.doi: 10.1007/s11575-007-0021-5
[14] Ferreira de Andrade, A.M. & Ribeiro-Galina, S.V. (2013). Efeitos da internationalization sobre o desempenho de multinacionais de economías em desenvolvimiento. Revista de Administracao Contemporanea. 17, 2, 240-262.
[15] Gaur, J. & Kumar, V. (2009). International diversification, business group affiliation and firm performance: Empirical evidence from India. *British Journal of Management*, 20, 172-186. Doi: 10.1111/j.1467-8551.2007.00558.x
[16] Genthon, C. (2008). International diversification, performance and offshoring: The case of the computer services industry. XVIII international RESER conference "New horizons for the role and production of services. 25- 26.
[17] Gomes, L., & Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationality and performance. *Journal of International BusinessStudies*, 30: 173-188. doi:10.1057/palgrave.jibs.8490065.
[18] Grant, R. M. 1987. Multinationality and performance among British manufacturing companies. *Journal of International Business Studies*, 18, 79-89. doi:10.1057/palgrave.jibs.8490413
[19] Hennart, J. F. (2007). The Theoretical Rationale for a multinationality- performance relationship. *Management International Review*, 47, 423.452. doi: 10.1007/s11575-007-0023-3
[20] Heyder, M., Makus, C. & Theuvsen, L. (2011). Internationalization and firm performance in agribusiness: Empirical evidence from European Cooperatives. *International Journal on Food System Dynamics*. 2,1, 77-93.
[21] Hitt, M. A., Hoskisson, R. E. & Kim, H. (1997). International diversification: effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal*. 40,4, 767-798.doi: 10.2307/256948
[22] Hitt, M.A., Tihanyi, L., Miller, T. & Conelly, B. (2006). International Diversification: Antecedents, Outcomes, and Moderators. *Journal of Management*. 32, 831. Doi: 10.1177/0149206306293575
[23] Johanson, J. & Vahlne, J.E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8, 1, 23–32. doi:10.1057/palgrave.jibs.8490676

[24] Kirca, A.H., Hult, T., Roth, K., Cavusgil, T., Perry, M., Akdeniz, B., Deligonul, S., Mena, J., Pollitte, W., Hoppner, J., Miller, J., & White, R. (2011). Firm- specific assetss, multinationality and financial performance: a meta- analytic review and theoretical integration. *Academy of Management Journal*, 51,1, 47-72. Retrieved from: http://paulcollege.unh.edu/sites/default/files/amj_2011.pdf
[25] Kirca, A.H., Roth, K., Hult, T., Cavusgil. (2012). The role of context in the multinationality-performance relationship: A meta analytic review. *Global Strategy Journal*. 2, 108- 121. DOI: 10.1111/j.2042-5805.2012.01032.x
[26] Kirca, A.H., Roth, K., Hult, T.M. & Cavusgil, T. (2012). The role of context in the multinationality- performance relationship: A meta-analytic review. *Global Strategy Journal*, 2, 108-121.
[27] Kogut, B. (1985). Designing global strategies: profiting from operating flexibility. *Sloan Management Review*. 27-38. doi:10.1002/tie.5060280105
[28] Lee, T., Chan, K. , Yeh, J.H. & Chan, H.Y. (2010). The impact of internationalization on firm performance: A quantile regression analysis. *International Review of Accounting Banking and Finance*. 2, 4, 39-59.
[29] Li, L. (2007).Multinationality and performance: A synthetic review and research agenda. *International Journal of Management Reviews*. 9, 2, 117-139. doi: 10.1111/j.1468-2370.2007.00205.x
[30] Li, L., & Qian, G. (2005). Dimensions of international diversification: Their joint effects on firm performance. *Journal of Global Marketing*, 18, 3/4, 7-35.doi:10.1300/J042v18n03_02
[31] Loncan, T. & Nique, W. M. (2010). Degree of internationalization and performance: evidence from emerging Brazilian multinationals. *Journal Globalization, Competitiveness & Governability*.4, 1, 40-51. Retrieved from: http://gcg.universia.net/pdfs_revistas/articulo_146_1272367197563.pdf
[32] Lopes-Barakat, L., Leonardo-Cretoiu, S. & Ryan-Ramsey, J. R. (2011). UNCTAD's Degree of Internationalization and Its Effect on Subjective and Objective Performance: Evidences from Brazilian TNCs. XXXV Encontro da ANPAD. Rio de Janeiro/ RJ – 4 a 7 de setembro de 2011.
[33] Lu, J.W. & Beamish, P. W. (2001). The internationalization and performance of SME´s. *Strategic Management Journal*. 22, 565-586.doi:10.1002/smj.184
[34] Michel, A. & Shaked, I. (1986). Multinational corporations verses domestic corporations: Financial performance and characteristics.*Journal of International Business Studies*, 89-100.
[35] Morck, R. & Yeung, B., 1991, Why investors value multinationality, *Journal of Business*, 64(2), 165-187.
[36] Pan, W. H. & Chao Y.S. (2010). The joint effects of geographical diversification to MNE´s performance through China investment. *The Journal of Global Business*. 6,1. 274-282. Recuperado de: http://www.jgbm.org/page/7%20Yuang-Shiang%20Chao%20.pdf
[37] Pan, W.H. & Tsai, W. H. (2012). Internationalization, regional diversification and firm performance: the moderating effects of administrative intensity. I*nternational Journal of Business and Social Science*. 3, 18, 274-282.Recuperado de: http://ijbssnet.com/journals/Vol_3_No_18_Special_Issue_September_2012/32.pdf
[38] Qian, G., Yang, L. & Wang, D. (2003). Does multinationality affect profit performance? An empirical study of US SMEs, *Journal of General Management*, 28, 4, 37- 46.
[39] Ramsey, Lopes-Barakat & Cretoiu (2012). Internationalization and its possible impact on subjective and objective performance: Evidence from Brazilian TNCs. *Transnational Corporations*. 21, 2. 21-46.
[40] Rieck, O., Cheah, J., Lau, A., & Lee, S. (2004). The relationship between degree of internationalization and Firm Performance in the telecommunications Industry. In *ITS Europe 16th European Regional Conference* (pp. 4-6).
[41] Ruigrok, W. & Wagner, H. (2003). Internationalization and performance an organizational learning perspective. *Management International Review*. 43, 2003/1, 63–83.Recuperado de:

http://www.jstor.org/discover/10.2307/40835634?uid=2134&uid=2&uid=70&uid=4&sid=21104459361103

[42] Ruigrok, W., Amann, W., Wagner, H. (2007). The internationalization- performance Relationship at Swiss firms: A test of the S- shape and extreme degrees of Internationalization. *Management International Review*. 47, 349- 368. doi: 10.1007/s11575-007-0020-6

[43] Sullivan, D. (1994). Measuring the degree of internationalization of a firm. *Journal of International Business Studies.* 25, 325-342.doi:10.1057/palgrave.jibs.8490203.

[44] Tallman, S. & Li. J. (1996). Effects of international diversity and product diversity on the performance of multinationals firms. *Academy of Management Journal*. 39, 1, 179- 196.

[45] Thomas, D.E. & Eden, L. (2004). What is the shape of the multinationality-performance relationship? . *The Multinational Business Review.*12, 1, 89-110. Recuperado de: http://www.voxprof.com/eden/Publications/eden-thomas-shape-mne-peformance-rel.pdf

[46] Vernon, R. (1971). Sovereignty at bay; the multinational spread of U.S. enterprises. New York: Basic Books.

[47] Wagner, H & Ruigrok, W. (2004). Internationalization and performance: a meta-analytic review and future research directions. Academy of International Business meeting, Stockolm Sweden.

[48] Wise-Lozano, J.A. (2000). Performance entering a new market, IV Congress of Management in Mexico, EGADE, ITESM, Monterrey, Mexico 2000.

Table 1. Review of the literature (2003- 2014)

Authors	Multinationality Measure	Performance Measure	Sample	Results
Capar & Kotabe ,2003.	FSTS Foreign Sales/Total Sales	ROS	81 German firms.	"U" shaped curve in the multinationality- performance relationship. At higher levels of multinationality increase the performance.
Contractor, Kundu & Hsu, 2003.	FSTS Foreign Sales/Total Sales FETE Foreign Employees/ Total Employees. FOTO Foreing Officers/ number total offices.	ROS ROA	103 Service firms in 11 serviceindustries.	Knowledge-based sectors reap the positive (Stage 2) benefits ofinternationalization earlier (that is at a lowerDOI). Knowledge-based sectors 'over-internationalize,' reaching the suboptimal Stage 3, whereas capital-intensive sectors do not.
Qian, Yang & Wang ,2003.	Measurement threshold for multinationality where: MNE must have a threshold of 30 % or more foreign sales, a DMF must have 15 % or less, and an IMF must have between 15 and 30 %.	ROS	271 US firms.	Separate between multinational, domestic and intermediate firms. Support the hypothesis that the multinationals haves a higher performance that domestic and intermediate firms.
Thomas & Eden, 2004.	Foreign Market Penetration: FSTS Foreign Production Presence: FATA Country Scope Total number of foreign affiliates the number of countries where the MNE has foreign affiliates	ROE ROA Excess Market Value Average Market Value	151 US firms	Multidimensional indicators that comprise the depth and broad of the multinationality. The results suggest that the multinationality- performance relationship presents a different behavior between the short and long time. The net of benefits of the multinationality are probably higher in the long term. The multinationality-performance relationship is

				nonlinear in the long term.
Rieck, Cheah, Lau, & Lee, 2004.	FSTS OCTS	Tobin's q (Market-Based)	50 firms of the telecommunications sector.	Inverted "U"shaped curve in the multinationality-performance relationship.
Wagner & Ruigrok ,2004	FSTS	ROS	83 German firms.	Inverted "U"shaped curve in the multinationality-performance relationship.
Lu & Beamish ,2001.	Number of overseas subsidiaries. Number of countries in which a firm had overseas subsidiaries in a given year.	ROA (Accounting-Based). Tobin´s Q (Market-Based).	1489 Japanese firms	Inverted "S" shaped in the multinationality- performance relationship.
Chiang & Yu,2005	FATA	ROE	119 No financial firms in Taiwan.	Inverted "S" curve between multinationality and the performance.
Contractor, Kumar& Kundu ,2007.	FSTS	ROA ROE ROS	142 manufacturing firms and 127 Indian service firms.	A "U" shaped curve. The service sector firms obtain positive benefits before their similar in the manufacturing sector.
Elango & Prakash-Sethi ,2007.	FATA	Gross Profit Margin: Gross Profit / Total Revenue Operating Profit Margin: Operating Income/ Total Revenue	1721 firms oriented toward technology and from 16 different countries.	This survey study the influence of the conditions in the origin country in the multinationality- performance relationship. The conditions in the country of origin impact the multinationality- performance relationship. The multinationality-performance relationship is linear positive in countries with small economies but with a liberalized country. Inverted "U" was founded in big economies but little liberalized.
Ruigrok, Amann & Wagner ,2007.	FSTS	ROA	87 MNC´s from Switzerland in a period between 1998 and 2005.	Multinationality- performance relationship in "S" form turned to right preceded for a stage of increase in the performance. The firms that operate with high levels of internationalization present a low performance and high averages of variation in the performance.
Genthon ,2008.	FSTS	ROS	34 firms from informatic sector (18 from US and 16 non US), period 1998-2006.	The results suggest that international activity is not profitable result for the firms in the informatics sector. The survey concludes that the firms with excess of earnings in his local market waste these in the international markets.

Gaur & Kumar, 2009.	FSTS	ROS	240 Indian firms in the manufacturing sector.	Positive relationship between multinationality and performance. "U" shaped multinationality-performance relationship. Business group affiliation moderates the multinationality- performance relationship.
Capar, 2009	FSTS	ROS ROA market-to-book value	114 firms	The effect of international diversification on performance would be greater for single business firms than for diversified firms. The effect of international diversification on firm performance was greater for single-business firms than for diversified firms in two of the one-year lag models.
Pan & Chao, 2010.	Geographical Diversification FATA+ FSTS/2	ROA	248 MNC¨s from Taiwan	The results show a low positive relationship in high levels of regional diversification and by countries. After some degree of expansion, the performance of the firm becomes decreasing due to the increase of the transaction and administration costs.
Lee, Chan, Yeh & Chan, 2010	Depth= Ration of Number of Foreign Investment Sites in the Top Two Foreign Countries and Number of Total Foreign Investment Sites	Tobin´s Q (Market-Based).	4,667 Taiwanese firm-year observations	Breadth (i.e., number of foreign countries in which a firm has investment sites) has positive effects on market-based performance (Tobin's Q). The results suggest that the effect of breadth on Tobin's Q varies dramatically across the market value distribution.
Loncan & Nique ,2010	FSTS	ROA Tobin´s Q	5 Brazilian MNC´s	The results indicate a positive influence of the multinationality in the performance.
Chang, 2011	Degree of Internationalization: FSTS+ FATA	ROS	115 firms from Asia between 2003- 2006.	The results indicate that institutional heritage of an emerging multinational and his own internationalization strategy is susceptible of create specific preferences for operating in different geographic regions. The results indicates that the rates of national growth, global market growth and the influence of R& D impact the degree of internationalization of the emerging multinationals in Asia.

Lopes-Barakat, Leonardo-Cretoiu & Ryan-Ramsey, 2011.	UNCTAD Index: FSTS, FATA, FETE	Objetctive Performance: Ebtida index ROS ROA Subjective Performance Sales, Sales Growth, Profit and Market Share	41 Brazilian groups	The more internationalized a firm is, the better it performs overseas. Firms with a higher degree of internationalization were found to be more satisfied with foreign sales, sales growth, profits and market share. Internationalization leads to a higher percentage of foreign profits over total, and an increase in foreign return on sales. International experience is not a significant indicator of the degree of internationalization.
Heyder, Makus & Theuvsen, 2011	FSTS Network Spread Index	ROA ROS	21 European cooperatives in the dairy and meat sectors	Internationalization has a significant positive impact on firm performance. Higher levels of internationalization are associated with positive returns. Multinationality- Performance relationship in S-curve hypothesis.
Kirca, Roth, Hult & Cavusgil, 2012	Depth of multinationality: foreign sales to total sales ratios, foreign assets to total assets. Breadth of multinationality: Number of countries, number of foreign subsidiaries.	Revenue-based performance measures that do not account for the costs of operations (e.g., sales, sales growth) and profit maximization measures (e.g., ROA, ROS, ROE, ROI) that incorporate the cost element	Meta-analytic data from 47,849 firms across 152 independent samples reported in 141 studies	The findings indicate that the effects of multinationality on performance depend on type of multinationality, firm strategic motivations, industry characteristics, and home country factors. The findings indicate that the search for more complex M-P relationships (i.e., U-shaped, inverse U-shaped, horizontal S-curve) has the potential to expand our understanding, only when the characteristics of different research contexts, measurement issues, and firm characteristics are taken into account in the theoretical development and research design stages of studies. C
Bobillo, López-Iturriaga &Tejerina-Gaite, 2012	FSTS FATA FETE		1721 firms from 12 European countries in 2000- 2009	The results suggest that the industrial firms have more difficult that the service firms in reach a positive effect in multinationality- performance relationship.
Pan & Tsai, 2012	Country Diversification: FATA FSTS Regional Diversification: Entropy measure	ROE	281 firms from Taiwan	Inverted U-shaped relationship. Lower level of regional diversification, obtaining economics of scope and scale, are expected to exhibit higher performance

Ferreira de Andrade y Ribeiro-Galina , 2013	FATA FETE FSTS	ROA	33 MNC´s from emerging economies.	The findings suggest that between more is the multinationality the performance of a firms is less.
Bolaji & Chris, 2014	FATA	ROA	Five Banks from Nigeria	International expansion can bring better economic performance to firms from developing economies. Internationalizing firms must be wary of the potential challenge of over internationalization which may negate the expected economic benefit.

Source: Own elaboration

FSTS: foreign assets over total assets, FETE: foreign employees over total employees, FATA: Foreign Assets to Total Firm Assets, FOTO: Foreign Officers/ number total offices. OCTS: Operating Costs to Total Sales. ROA: Return on Assets, ROS: Return on Sales, ROE: Return on Equity, ROI: Return on Investment

-----