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Trademark Landscape of a Southern Region of Colombia, 2010-2017

^{1,3,4}Cristian Rincon-Guio ²Carlos Wilmer Oviedo Cordoba, ³Edgar Leonardo Camero Ortiz, ⁴Marcela Gonzalez Garcia, ⁴Jose Alfonso Mendoza Gallego, ⁴Angel Miguel Quiroga Ariza and ^{1,4}Oscar Jaramillo Castano

¹Fundacion Universitaria Navarra (UNINAVARRA), Neiva, Colombia ²Universidad Cooperativa de Colombia (UCC), Neiva, Colombia ³Universidad Surcolombiana (USCO), Neiva, Colombia ⁴Corporacion Universitaria Minuto De Dios (UMINUTO), Neiva, Colombia

Abstract: This study describes the behaviour of applications and registrations of trademarks in the department of Huila, Colombia. The analysis was carried out for the applications made between 2010 and 2017. A retrospective observational descriptive study was performed and the source of information was a national database named "Industrial Property Statistics (SIPI) and considered only trademark applications, trademark status, goods and services classes, nice classes and the proposer. It was found that of the total number of applications made, 56.84% were registered and 24.51% were rejected. About 57% of the proponents obtained trademark registration of which the same 8% obtained 32% of the total registrations requested. There was a direct relationship between the number of applications and the number of registrations per year. In addition, an inverse relationship was found between the number of applications made per year and the number of records approved with respect to the year of application. Additionally, a direct relationship was evidenced between the number of applications made by the bidder and the registration of the brands. These results contribute to the theory and practice of business administration, brand management, organization management and economic development and competitiveness. In addition, it serves as a baseline both nationally and internationally for future studies related to business development and brand management in developing countries.

Key words: Trademark application, trademark landscape, business success factor, intellectual property, managementm, applications

INTRODUCTION

Business development plays a transcendental role in economic growth (Audretsch and Keilbach, 2004). Likewise, the creation, survival and success of companies allow and promote the social welfare and wealth of a country (OECD., 2014; Shwab, 2017; Wennekers *et al.*, 2005). This business scenario is dynamic and worrisome, since, globally, it appears that more than 50% of the companies that are created fail over time, some within the first 5 years (Johnson, 2005; Mills and Timmins, 2004) and others within the first 7 years (Bartelsman *et al.*, 2005; Santarelli and Vivarelli, 2007).

This behaviour is visible in both developed and developing countries. In Latin America, between 20 and 30% of new companies fail in the first year increasing 10 points annually and more than half of the new companies fail in the first 5 years. Likewise, in Colombia of every 10 companies created, only four remain active (Angel and Pulido, 2010; Hernandez, 2013, Martinez, 2006).

Different studies have identified and demonstrated determinants the survival of companies (Gonzalez-Loureiro and Puig, 2016). According to these investigations, it can be seen that factors such as economic environment (Audretsch, 1991; Jose et al., 2006; Etchebarne et al., 2008, Highfield and Smiley, 1987; Holmes et al., 2010; Huggins et al., 2017) the ability to innovate (Audretsch, 1995; Cefis and Marsili, 2006; Hall, 1987) the growth, size and age of the companies (Sandoval and Marin, 2008; Navaretti et al., 2014; Bentzen et al., 2012; Dunne et al., 1988; Evans, 1987; Pervan et al., 2017) the level of concentration of companies in the market (Audretsch and Mahmood, 1994; Hannan and Carroll, 1992) and strategic decisions (Levinthal, 1997; Rauch and Rijsdijk, 2013; Shepherd, 2015).

Within this last group of factors, intangible determinants are found. These have gained ground as differentiating agents in companies (Nomen, 1996) due to

two innovative visions. The first is related to strategic management and the processes of generating value in companies and the second has to do with the communication of companies which has moved from product communication to brand communication and finally to the communication aimed at strengthening the image and reputation of the companies themselves (Villafane, 2012). This indicates that Intellectual Property (IP) is a fundamental driver of economic development (Garcia and De La Hoz, 2016; Greenhalgh and Longland, 2005; Rodriguez, 2008).

Various researchers mention that there is a direct association between brands and the success of companies as they influence these results, a differentiating factor with which companies face competition and earn higher market shares (Lanza et al., 2002; Ramello, 2006; Rodriguez, 2008). In addition, brands have achieved greater importance than assets (Aaker, 1991), since, their value can be increased by supporting new products or entering new markets (Barwise et al., 1990). In addition, companies with high-value brands (Yoo et al., 2000) achieve competitive advantages in relation to positioning, high financial margins, expansion opportunities and customer loyalty (Aaker, 1992; Bertone and Cabanellas, 2003; Erdem et al., 2006; Hoeffler and Keller, 2002; Keller, 1993; Netemeyer, 2004; Oliveira-Castro et al., 2008; Ogrizek 2002; Rao et al., 2004).

Today, there is a boom in the adoption of industrial property rights by companies this is reflected in the global increase of applications and their registration where according to the World Intellectual Property Indicators the trend has been positive, showing a growth of 16.4% between 2015 and 2016-1.2% higher than between 2014 and 2015. In addition to the aforementioned, the dynamics of trademark registration show a similar trend, although, this behaviour is different in terms of growth averages per year 2015-2016 saw an increase of 4.3% in applications whereas 2014-2015 only increased by 23.2%.

However, in Colombia this situation is not trending positive. The country ranks 49, 37 and 66 in applications for patents, trademarks and designs, respectively. In addition, there is no clarity regarding the impact of intangible resources on the results of national companies, since, the different studies carried out in the country have addressed survival determinants related to the economic sector and then only in some cities (Angel and Pulido, 2010; Sandoval and Marin, 2008 Jose *et al.*, 2006; Hernandez, 2013; Martinez, 2006; Montoya *et al.*, 2010; Parra, 2010; Manrique *et al.*, 2017; Rincon-Guio *et al.*, 2018).

Regarding the study of trademark registration, no baseline has been established in the country. Taking this into account, the objective of this study is to describe the behaviour of trademark registration between years 2010 and 2017 by companies in the department of Huila.

MATERIALS AND METHODS

A retrospective observational descriptive study was performed and the source of information was a national database named Industrial Property Statistics (SIPI). The study considered only trademark applications and trademark status for applications classified as goods and services, nice and proposer between 2010-2017 in state of Huila.

Data analysis was restricted to applications with a date of completion between the study period. The analysis was performed for the UNINAVARRA Research Department team using the statistical program IBM-SPSS®Version 24.

Central tendency and dispersion measurements were used for the quantitative variables. In addition, bivariate analysis was performed to correlate trademark applications, registrations, denied applications and the distinct proposers. Various statistical confidence tests were applied such as Spearman's Rho and (χ^2) .

RESULTS AND DISCUSSION

During the period of study, 563 applications were submitted of which 97.69% corresponded to brands, followed by slogans at 1.78% (Fig. 1). In addition, of the applications presented, most corresponded to good class (Fig. 2).

The 2017 period saw the greatest number of applications with 21.49% (n = 121), followed by 2016 with 20.78% (n = 117) (Table 1). In addition, there was a gradual increase in applications between each period with an average increase of 20.37% with 2013 being the period with the highest increase (60.61%). In contrast, 2012 had a decrease of applications of 29.79% with respect to the previous year, although, for the final period the applications tripled with respect to the initial period (Fig. 3).

According to the application periods, it was evidenced that 56.84% applications were registered, although, 24.51% are still in the process of being reviewed. In addition, 14.92% were rejected and 3.73% abandoned the process (Table 2).

Of the applications submitted and according to the Trademark class, 56.36% of brands were registered while

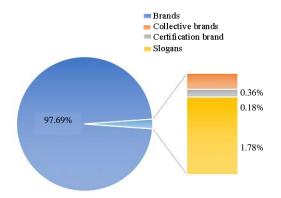


Fig. 1: Trademark application by class

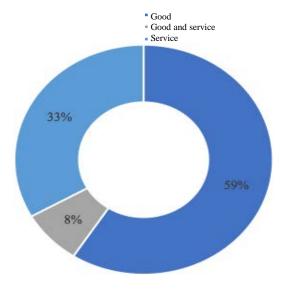


Fig. 2: Trademark application by goods and services classes

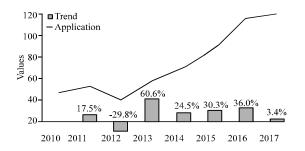


Fig. 3: Trademark application and trend by perriod

100% of applications were collective brands and certification brands (Table 3) (Fig. 3). Furthermore, most of these records corresponded to good class (Fig. 4 and 5).

Table 1: Trademark applications by period

Period	Applications	Applications (%)	Trend (%)
2010	40	7.10	-
2011	47	8.35	17.50
2012	33	5.86	-29.79
2013	53	9.41	60.61
2014	66	11.72	24.53
2015	86	15.28	30.30
2016	117	20.78	36.05
2017	121	21.49	3.42
Total	563	100.00	-
Average	-	=	20.37

Table 2: Trademark registration, denied in process and abandoned by

app	ncauon period				
Application period	Total a applications	Abandoned (%)	In process (%)	Denied (%)	Registered (%)
2010	40	2.50	-	10.00	87.50
2011	47	2.13	-	21.28	76.60
2012	33	9.09	-	18.18	72.73
2013	53	5.66	-	20.75	73.58
2014	66	3.03	1.52	21.21	74.24
2015	86	3.49	3.49	19.77	73.26
2016	117	2.56	39.32	14.53	43.59
2017	121	4.13	72.73	4.13	19.01
Total general	563	3.73	24.51	14.92	56.84

Table 3: Applications and registrations by trademark class Registered Trademark Abandoned Denied In process class (%) (%) (%) (%) Brands 3.45 25.09 15.09 56.36 Collectives 100 brands Certification 100 brands 20.00 10.00 70 Slogans Total 3.73 24.51 14.92 56.84

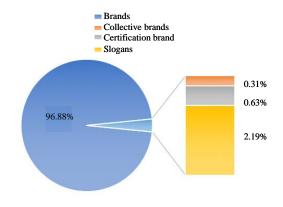


Fig. 4: Registrations by trademark class

Of the applications submitted in 2010, 87.5% were registered. This period demonstrated the highest in number of registrations as the following periods showed a decrease in the registrations obtained, falling to 19.91% (Table 4).

According to, the periods where registrations were awarded, there was a gradual increase of this activity an

Table 4: Trademark registrations respect application period

		Perio	od of regist	ration							
Application period	Total applications	2010	2011	2012	2013	2014	2015	2016	2017	Total registrations by application period	Registration period by application period (%)
2010	40	15	20							35	87.50
2011	47		15	17	3	1				36	76.60
2012	33			9	15					24	72.73
2013	53				14	18	6	1		39	73.58
2014	66					18	29	1	1	49	74.24
2015	86						26	30	7	63	73.26
2016	117							6	45	51	43.59
2017	121								23	23	19.01
Total	563	15	35	26	32	37	61	38	76	320	56.84
Registration trend			133.33%	-25.71%	23.08%	15.63%	64.86%	-37.70%	100%		

Table	5:Distribution of trademark applications by top nice classes						
		Total	Abandoned	In process	Denied	Registered	Class
Rank	Class	applications	(%)	(%)	(%)	(%)	share
1,30	Coffee, tea, cocoa, rice, flour, bread, pastry and confectionery,	141	47.62	28.26	39.29	18.44	25.04
	sugar, honey, yeast, salt, mustard, vinegar, condimental and						
	spices						
2, 35	Advertising, business management, business administration	56	4.76	5.80	7.14	12.81	9.95
	and office functions						
3, 1	Chemicals for use in industry, science and photography as well	30	4.76	1.45	2.38	7.81	5.33
	as in agriculture, horticulture and forestry; Unprocessed artificial						
	resins, unprocessed plastics fire extinguishing and fire prevention						
	compositions; Tempering and soldering preparations substances for						
	tanning animal skins and hides adhesives for use in industry; Putties						
	and other paste fillers compost, manures, fertilizers; Biological						
	preparations for use in industry and science						
4, 41	Education, entertainment and sporting activities	29	4.76	5.80	1.19	5.94	5.15
5, 43	Services for providing food and drink; Temporary accommodation	27		6.52	8.33	3.44	4.80
6, 29	Foodstuffs of animal origin and vegetable	25		1.45	5.95	5.63	4.44
7, 25	Clothing	24	4.76	5.80	3.57	3.75	4.26
8, 32	Beers mineral and aerated waters and other non-alcoholic beverages	21		5.80	2.38	3.44	3.73
	fruit beverages and fruit juices; Syrups and other preparations for makin	g					
	beverages						
9, 42	Scientific and technological services, design and development of	17	4.76	3.62	2.38	2.81	3.02
	computer hardware and software						
10, 3	Bleaching preparations ad other substances for laundry use cleaning and	15		2.17	5.95	2.19	2.66
	abrasive preparations scarps, perfumery and cosmetics						
	Remaining classes	178	28.57	33.33	21.43	33.75%	31.62

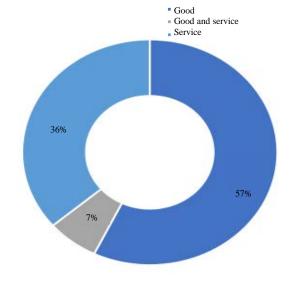


Fig. 5: Trademark registration by goods and services classes

average of 39.07% with 2011 being the period with the highest increase (133.3%). The 2016 had an overall a decrease of applications of 37.7% with respect to the previous year. Although, for the final period, the number of registrations doubled (Fig. 6).

According to, the nice classification about 70% of the applications are concentrated in only 10 categories, being coffee, tea, cocoa, rice, flour, bread, pastries and confectionery, sugar, honey, yeast, salt, mustard, vinegar, sauces and spices 30 in total. Where 25% applied, almost 50% were abandoned and close to 20% have been registered (Table 5).

Additionally, applications were made by 412 different proposers of which 4.12% (n = 17) presented 18.12% (n = 102) with an average of 6 applications per proposer. Of these applications, 80.4% were registered.

Brands are platforms that drive companies and allow them to grow in the market. As mentioned above, brands differentiate one product from another and one company

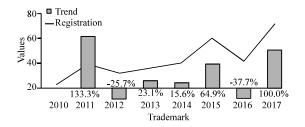


Fig. 6: Trademark registration and trend by period

from another, reflect quality and confidence to the consumer and generate a reputation for both the company and the products.

The objective of this study was to describe the behaviour of applications and brand registration in the Department of Huila, Colombia. The analysis was carried out around the applications made between 2010 and 2017. The total number of applications made during the study period was 563 of which 320 (56.84%) were registered and 138 (24.51%) were rejected. These applications were made by a total of 412 proponents where 235 (57%) obtained the registration. Of these 235 proponents, 8% (17) obtained 32% (102) of the requested registrations. It was also found that the most rejected applications were brands (15%). Additionally, according to nice classifications, the most requested classes of applications were 30 (goods) followed by 35 (services) these two classes represent about 30% of the applications, 10% of the records and 70% of the rejections.

The results obtained allowed us to demonstrate that there is a direct relationship between the number of applications and the number of registrations per year, presenting a dynamic of proportional increase for each variable. However, there is also evidence of an inversely proportional relationship between the number of applications made per year and the number of records approved with respect to the year of application that is the records obtained according to the application period decrease with the passage of each year. This is associated with the increase in rejected applications and the increase in the review times of each application.

Additionally, a direct relationship between the number of applications and the required class was evidenced, since, the requests were related to agricultural products and business advisory services. This dynamic is the same for the records obtained and the rejections made.

CONCLUSION

In addition to this, a direct relationship was found between the number of applications made by the proponent and the registration of the applications as the number of rejections made to the applications was low, causing most of the requested marks to be registered.

RECOMMENDATIONS

The results found in this study contribute enormously to the theory and practice of business administration, brand management, organization management and economic development and competitiveness. In addition, it serves as a baseline both nationally and internationally for future studies related to business development and brand management in developing countries.

REFERENCES

Aaker, D.A., 1991. Managing Brand Equity. Free Press Publisher, ?New York, USA., ISBN:9780029001011, Pages: 299.

Aaker, D.A., 1992. The value of brand equity. J. Busi. Strat, 13: 27-32.

Angel, M.F. and D.U. Pulido, 2010. [The success of SMEs in Colombia: A case study in the health sector (In Spanish)]. Manage. Stud., 26: 77-96.

Audretsch, D.B. and M. Keilbach, 2004. Does entrepreneurship capital matter?. Entrepreneurship Theor. Pract., 28: 419-430.

Audretsch, D.B. and T. Mahmood, 1994. The rate of hazard confronting new firms and plants in US manufacturing. Rev. Ind. Organiz., 9: 41-56.

Audretsch, D.B., 1991. New-firm survival and the technological regime. Rev. Econ. Stat., 73: 441-450.

Audretsch, D.B., 1995. Innovation, growth and survival. Intl. J. Ind. Organiz., 13: 441-457.

Bartelsman, E., S. Scarpetta and F. Schivardi, 2005. Comparative analysis of firm demographics and survival: Evidence from micro-level sources in OECD countries. Ind. Corporate Change, 14: 365-391.

Barwise, P., C. Higson, A. Likierman and P. Marsh, 1990. Brands as separable assets. Bus. Strategy Rev., 1: 43-59.

Bentzen, J., E.S. Madsen and V. Smith, 2012. Do firms growth rates depend on firm size?. Small Bus. Econ., 39: 937-947.

Bertone, L. and G. Cabanellas, 2003. [Trademark Law]. 2nd Edn., Editorial Heliasta, Buenos Aires, Argentina, (In Spanish).

Cefis, E. and O. Marsili, 2006. Innovation Premium and the Survival of Entrepreneurial Firms in the Netherlands. In: Entrepreneurship, Growth and Innovation, Santarelli, E. (Ed.). Springer, Boston, Massachusetts, ISBN:978-0-387-28868-0, pp. 183-198.

- Dunne, T., M.J. Roberts and L. Samuelson, 1988. Patterns of firm entry and exit in U.S. manufacturing industries. RAND. J. Econ., 19: 495-515.
- Erdem, T., J. Swait and A. Valenzuela, 2006. Brands as signals: A cross-country validation study. J. Marketing, 70: 34-49.
- Etchebarne, M.S.L., R.C. Garcia and V.V.W. Geldres, 2008. [The entrepreneurial orientation at the firm level (In Spanish)]. Multi. Bus. Rev., 1: 15-25.
- Evans, D.S., 1987. The relationship between firm growth, size and age: Estimates for 100 manufacturing industries. J. Ind. Econ., 35: 567-581.
- Garcia, S.B. and J.B. De La Hoz, 2016. [Impact of intellectual property in national and business development under the context of the current globalization (In Spanish)]. Rev. Prop. Immaterial, 22: 5-18.
- Gonzalez-Loureiro, M. and F. Puig, 2016. [Challenges in the internationalization and survival of new manufacturing ventures (In Spanish)]. Cuadernos Administracion, 31: 7-16.
- Greenhalgh, C. and M. Longland, 2005. Running to stand still?-The value of R&D, patents and trade marks in innovating manufacturing firms. Intl. J. Econ. Bus., 12: 307-328.
- Hall, B.H., 1987. The relationship between firm size and firm growth in the US manufacturing sector. J. Ind. Econ., 35: 583-606.
- Hannan, M.T. and G.R. Carroll, 1992. Dynamics of Organizational Populations: Density, Legitimation and Competition. 1st Edn., Oxford University Press, Oxford, UK., ISBN:9780195361131, Pages: 304.
- Hernandez, C., 2013. [Survival of micro-enterprises in the Magdalena Department 2009-2012: A logistic approach (In Spanish)]. Perfil Coyuntura Economica, 22: 197-204.
- Highfield, R. and R. Smiley, 1987. New business starts and economic activity: An empirical investigation. Intl. J. Ind. Organiz., 5: 51-66.
- Hoeffler, S. and K.L. Keller, 2002. Building brand equity through corporate societal marketing. J. Pub. Policy Market., 21: 78-89.
- Holmes, P., A. Hunt and I. Stone, 2010. An analysis of new firm survival using a hazard function. Appl. Econ., 42: 185-195.
- Huggins, R., D. Prokop and P. Thompson, 2017. Entrepreneurship and the determinants of firm survival within regions: Human capital, growth motivation and locational conditions. Entrepreneurship Reg. Dev., 29: 357-389.
- Johnson, P., 2005. Targeting firm births and economic regeneration in a lagging region. Small Bus. Econ., 24: 451-464.

- Jose, E.J., A.M. Angelica and R.M. Fernanda, 2006. [Productivity and its determinants: The case of the Colombian industry (In Spanish)]. Rev. Desarrollo Soc., 57: 77-122.
- Keller, K.L., 1993. Conceptualizing, measuring and managing customer-based brand equity. J. Market., 57: 1-22.
- Lanza, D.R., A.B.V. Casielles and R.I. Arguelles, 2002. [The brand value: Perspectives of analysis and estimation criteria (In Spanish)]. Cuadernos Gestion, 1: 87-102.
- Levinthal, D.A., 1997. Adaptation on rugged landscapes. Manage. Sci., 43: 934-950.
- Manrique, J.D.P., J.C.M. Torres and J.C.C. Reyes, 2017. [Health sector innovation capacities in Barranquilla: A prospective analysis at 2025 (In Spanish)]. Rev. Economia Reg., 11: 127-154.
- Martinez, A.F., 2006. [Determinants of the survival of industrial companies in the metropolitan area of Cali 1994-2003 (In Spanish)]. Soc. Economy Mag., 11: 112-144.
- Mills, D. and J. Timmins, 2004. Firm dynamics in New Zealand: A comparative analysis with OECD countries. Master Thesis, New Zealand Treasury, Wellington, New Zealand.
- Montoya, A., I. Montoya and O. Castellanos, 2010. [Situation of the competitiveness of SMEs in Colombia: Current elements and challenges (In Spanish)]. Colombian Agron., 28: 107-117.
- Navaretti, G.B., D. Castellani and F. Pieri, 2014. Age and firm growth: Evidence from three European countries. Small Bus. Econ., 43: 823-837.
- Netemeyer, R.G., B. Krishnan, C. Pullig, G. Wang and M. Yagci *et al.*, 2004. Developing and validating measures of facets of customer-based brand equity. J. Bus. Res., 57: 209-224.
- Nomen, E., 1996. [Intangible assets and company policy (In Spanish)]. Harv. Deusto Bus. Rev., 71: 20-26.
- OECD., 2014. [Economic Prospects of Latin America 2014: Logistics and Competitiveness for Development]. United Nations Economic Commission for Latin America and the Caribbean, Santiago, Chile, ISBN:9789264203655, Pages: 169 (In Spanish).
- Ogrizek, M., 2002. The effect of corporate social responsibility on the branding of financial services. J. Financial Serv. Marketing, 6: 215-228.
- Oliveira-Castro, J.M., G.R. Foxall, V.K. James, R.H.B.F. Pohl and M.B. Dias *et al.*, 2008. Consumer-based brand equity and brand performance. Serv. Ind. J., 28: 445-461.
- Parra, J.F., 2010. [Determinants of the probability of closing new businesses in Bogota (In Spanish)]. J. Faculty Econ. Sci., 19: 27-53.

- Pervan, M., I. Pervan and M. Curak, 2017. The influence of age on firm performance: Evidence from the Croatian Food Industry. J. East. Eur. Res. Bus. Econ., 2017: 1-9.
- Ramello, G.B., 2006. What's in a sign? Trademark law and economic theory. J. Econ. Surv., 20: 547-565.
- Rao, V.R., M.K. Agarwal and D. Dahlhoff, 2004. How is manifest branding strategy related to the intangible value of a corporation?. J. Marketing, 68: 126-141.
- Rauch, A. and S.A. Rijsdijk, 2013. The effects of general and specific human capital on long-term growth and failure of newly founded businesses. Entrepreneurship Theor. Pract., 37: 923-941.
- Rincon-Guio, C., A.M.M. Ramirez, J.R. Polania, K.P. Torres and J.D. Charry, 2018. Insurance health companies of a southern region of Colombia: Company behaviour and survival 2012-2016. Clin. Pract., 15: 739-747.
- Rodriguez, G.M., 2008. [On the essential role of brands in economic development (In Spanish)]. J. Econ. Law Soc. Econ. Law UPC., 5: 81-95.

- Sandoval, A.A. and R.F.Q. Marin, 2008. Cessation of activities of SMEs in the metropolitan area of Cali (2000-2004): An analysis of business survival. Cuadernos Administracion, 21: 249-277.
- Santarelli, E. and M. Vivarelli, 2007. Entrepreneurship and the process of firms entry, survival and growth. Ind. Corporate Change, 16: 455-488.
- Shepherd, D.A., 2015. Party on! A call for entrepreneurship research that is more interactive, activity based, cognitively hot, compassionate and prosocial. J. Bus. Venturing, 30: 489-507.
- Shwab, K., 2017. The global competitiveness report 2016-2017. Master Thesis, World Economic Forum, Cologny, Switzerland.
- Villafane, J., 2012. The management of business intangibles. Comunicacao Soc., 8: 101-113.
- Wennekers, S., A. Van Wennekers, R. Thurik and P. Reynolds, 2005. Nascent entrepreneurship and the level of economic development. Small Bus. Econ., 24: 293-309.
- Yoo, B., N. Donthu and S. Lee, 2000. An examination of selected marketing mix elements and brand equity. J. Acad. Market. Sci., 28: 195-211.