Impact of investments in training and advertising on the market value relevance of a company's intangibles: The effect of the economic crisis in Spain

Lidia García-Zambrano*, Arturo Rodríguez-Castellanos, Jose Domingo García-Merino

University of the Basque Country UPV-EHU, Avda. Lehendakari Aguirre, 83, 48015 Bilbao, Spain

A R T I C L E   I N F O

Article history:
Received 26 January 2017
Received in revised form 8 June 2017
Accepted 10 June 2017
Available online xxx

JEL classification:
M1034

Keywords:
Intellectual Capital
Investment in training
Investment in advertising
Depreciation
Business value

A B S T R A C T

This paper seeks to analyze the influence investment in that investment in intangible resources, specifically training and advertising, has on the corporate market value.

A sample of the main Spanish companies, those quoted on the IBEX-35, revealed that both investing in training and in advertising separately have a positive relationship with the Market/Book ratio a year ahead (in both periods analyzed, 2006–2009 and 2008–2011). Regarding the joint effect, a positive and significant impact is also seen in both periods. The results are even more relevant for the second period (2008–2011) and we could therefore check how investments made during the current period of crisis have had a higher impact on market value.

The relevance of our paper for academics and practitioners should be noted, as there were no previous similar studies in Spain relating investments in these types of intangibles and market value using IBEX-35 companies. Practitioners likewise need to consider the positive effect on competitiveness of investment in competencies (human and relational competencies).

© 2017 Published by Elsevier España, S.L.U. on behalf of AEDEM. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Some authors (Martelo & Cepeda, 2016) acknowledge that knowledge is the most valuable source of corporate intangible resources. Training is one of the essential factors that determine the efficiency of the organizations, given the speed at which the required skills and knowledge change and as employees are considered as an essential competitive resource to obtain a lasting competitive advantage. Furthermore, an increasingly greater number of companies are striving to maintain customers, with the main reason being the value of the clients for the companies. Therefore, this paper focuses on the influence of Intellectual Capital on business value. We have taken Human Capital and Relational Capital as the main dimensions of Intellectual Capital.

Some models are put forward that analyze the impact of the accumulated investment in each dimension on the market value of the company, along with a further one that analyses the joint impact of these IC dimensions on the market value of the company over two periods: 2006–2009 (beginning of the crisis) and 2008–2011 (during the crisis). We have deemed it convenient to analyze these two periods to separate the effect of investments in competencies on market value according to the period analyzed; we expect that the investments made when the crisis began had a higher impact on market value during the crisis, showing how the market more value those companies that have focused on competencies during a crisis period.

The paper is structured as follows: Section 2, on the grounds for the Resource Based View, justifies the key role of intangible resources in business competitiveness. It likewise reviews the literature that considers the relevance of knowledge-based intangibles, that is, Intellectual Capital. The same section also considers the effect on the value of the company of the two dimensions of Intellectual Capital, that is, Human Capital and Relational Capital, and the investments made in it. The methodology used is subsequently set out in Section 3. The results obtained are contained in Section 4 and the paper then concludes.

2. Human Capital and Relational Capital: concepts and value creation

The Resource Based View has made a decisive contribution to strategic management. Different authors noted that companies...
have or control a wide variety of resources and combinations of them (capabilities) that are essential for the company to be able to operate. These resources have intrinsically different levels of efficiency, some of which are superior to others. Therefore, companies endowed with superior resources will have a greater likelihood of performing better (Barney, Ketchen, & Wright, 2011; Barney, 2001; Priem & Butler, 2001). Amit and Shoemaker (1993) highlighted five differentiating characteristics: inimitable, rare, valuable, non-transferable and non-substitutable.

Intangible resources or “intangibles” are those that, lacking a financial or physical form and being constructed by the company over time, combine all these requirements with greater facility and therefore become the key factor of business competitiveness more frequently (Bradley, 1997; Lev, 2001). This statement is particularly applicable to the intangible resources based on knowledge, that is, to Intellectual Capital (IC).

Subramaniam and Youndt (2005, p. 451) state that IC is “the sum of all knowledge firms utilize for competitive advantage”. In short, as we have previously stated, IC is the sum of all knowledge-based intangibles.

When grouping and classifying IC elements, there is a certain consensus about three components or basic dimensions: Human Capital (HC), Structural Capital (SC) and Relational Capital (RC) (Bueno, 2011; Kaufmann & Schneider, 2004). IC is also related to the creation of value in the company (García-Merino, Arregui-Ayastuy, Rodríguez-Castellanos, & García-Zambrano, 2010; Schiuma & Lerro, 2008). We understand, therefore, that proper management of these resources will allow companies to obtain competitive advantages and better business results.

We are going to focus on the Human Capital and Relational Capital dimensions of IC. There are some studies that argue that the main resources for obtaining a sustainable competitive advantage are those related to Human Capital and/or Relational Capital (Smither & Ployhart, 2014; Unger, Rauch, & Frese, 2011).

Human Capital is the set of productive capabilities that the staff of the firm acquires by accumulating specific or general knowledge (Becker, 1967). Several authors (Diop, Pascont, & Mahmoud, 2013; Smithey & Ployhart, 2014) consider that it is the dimension that provides greater value for the company.

There are some empirical studies that have shown the positive relationship between Human Capital and results (Raineri, 2016; Smithey & Ployhart, 2014). Investment in employee training is considered as the main variable covering investment in HC (Singh, 2010; Vidal & Hurtado, 2012). Employee training is a factor of strategic importance as it generates HC, which involves obtaining sustainable competitive advantages that lead to better business results. In fact, some studies found a positive relationship between investment in training and different representative variables of value creation (Danvila & Sastre, 2009; Huselid & Becker, 1996; Kochan & Osterman, 1994).

We consider that the capacity to create value can be measured using the Market/Book Value ratio (M/B ratio), calculated as the market value of the company divided by the book value of equity investments, with the latter being defined as the difference between total assets and liabilities. This ratio has been considered as an indicator of future possibilities of corporate growth, as it states the relationship between how the market measures the future performance of companies and the net value of their material and financial assets. However, those future performance results will be the combination of intangible resources and material and financial assets, thus developing capabilities which will be a source of competitiveness for the company (Subramaniam & Youndt, 2005). For that very reason, the M/B ratio is also a proper indicator to measure the market value relevance of a company’s intangibles. However, it frequently happens that investments in intangible resources do not generate immediate returns: an intermediate period is necessary for those investments to have a positive effect on corporate performance. Furthermore, due to depreciation, the value of intangibles at a given time reflects only one part of the investments made during previous periods. Thus, we can define HC value stock in training as the accumulated investment in training using a depreciation rate in order to take into consideration the loss value of these resources.

Therefore, we set up the following hypothesis:

**H1.** The accumulated investment in employee training positively impacts the market value relevance of a company’s intangibles.

On the other hand, Relational Capital can be defined as “the combination of knowledge that is incorporated in the organization and people, as a consequence of the value derived from the relationships which they maintain with market agents and with society in general” (Bueno, 2011, p. 23). There are some authors that have established a direct link between some aspects of Relational Capital, such as customer satisfaction and/or loyalty indicators, and measures of actual market or financial performance (Allen & Wilburn, 2002; Kara, Spillan, & De Shields, 2005).

There are several studies that consider investment in advertising as the main variable to represent Relational Capital (Corrado, Hult, & Sichert, 2009; Gopal & Goswami, 2017; Heiens, Leach, Newson, & MacGrath, 2016). In a similar way as the training investment case, some studies have found a positive relationship between investment in advertising and business results (Gopal & Goswami, 2017; Joshi & Hanssens, 2010; Viterino, 2014).

And as before, we define the “RC value stock in advertising” as the accumulated investment in advertising using a depreciation rate.

Similarly, we present the following hypothesis:

**H2.** The accumulated investment in advertising positively impacts the market value relevance of a company’s intangibles.

On the other hand, we consider the possible joint effect of both investments (training and advertising) to be even more important:

**H3.** The accumulated investments in employee training and in advertising jointly positively impact the market value relevance of a company’s intangibles.

In addition, we believe that the competitive advantage generated by the investment in intangibles is not so clearly defined in a period of high economic growth. However, in a period of economic crisis, those companies that have invested in intangibles, especially if these investments are a combination of different types of intangibles, have a competitive advantage that results in a greater value creation (García–Merino, Arregui–Ayastuy, & Vallejo–Alonso, 2013; García-Zambrano, Rodríguez-Castellanos, & García-Merino, 2014). Thus, we present a fourth hypothesis:

**H4.** The positive joint impact of accumulated investments in employee training and advertising on the market value relevance of a company’s intangibles is more intense during a period of economic crisis.

---

2 Numerous authors have estimated the stock of capital, not only related to tangible resources, but also related to intangibles, through accumulated investments using a depreciation rate. Thus, Corrado et al. (2009) did so for the macroeconomic field, and Lev and Sougiannis (1999) and Lev et al. (2005) for the microeconomic field.
دریافت فوری
متن کامل مقاله
امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات