The model of intellectual capital evaluation in publicly listed companies

Rima Tamošiūnienėa and Simona Survilaitėb

aFaculty of Economics and Finance Management, Mykolas Romeris University, Vilnius, LT-08303, Lithuania, rintami@mruni.eu and bFaculty of Economics and Finance Management, Mykolas Romeris University, Vilnius, LT-08303, Lithuania, simona.fortress@gmail.com.

Abstract

The majority of publicly listed companies are trying to adapt to investors requirements and to provide as much information about company as possible. Company’s potential of generating value added and ability to increase potential percentage of dividends attracts investors. Nevertheless, it appears that financial reports of publicly listed companies do not reflect all information, which is disposed by a respective company. Intellectual capital, being the most important factor of value added creation, is not being reflected in the financial reports and not even being managed by directors or managers. This paper provides the model of intellectual capital evaluation in publicly listed companies, which could potentially be a tool for evaluation, control and management.

Keywords: intellectual capital, publicly listed companies, value added.

Introduction

The importance of intellectual capital in publicly listed companies is being observed and accentuated by many scientists and economists (Berg, 2006; Bontis, Richards, and Serenko, 2011; Bourdieu, 2005; Codinhoto et al., 2009; Galindo and Mendez-Picazo, 2013; Grimaldi, Cricelli, and Rogo, 2013; Heskett et al., 1994; Jensen et al., 2012; Kaplan and Norton, 2000; Kotler, 2000; Kumar and Grisaffe, 2004; Luthans et al., 2004; Mačerinskienė and Survilaitė, 2011, 2012; Malmelin, 2007; McGrath, 2007; Menon et al., 2005; Mollebjerg, 2009; Proctor, 2013; Pulic, 2000; Ulaga and Eggert, 2005; Zeithaml, 1988). Although it is agreed that intellectual capital increases value added of a respective publicly listed company, there is no accepted and widely used tool created and implemented. This paper suggests the model of intellectual capital evaluation in publicly listed companies, which could help to evaluate, measure, control and manage intellectual capital with value added generation purpose.

The creation and aspects of the model of intellectual capital evaluation in publicly listed companies

Intellectual capital is the factor of value added creation, fostering and generation in publicly listed companies. The basic issue with intellectual capital theory is description, structure and evaluation methods. Many authors indicate different, although similar, intellectual capital features. In order to investigate intellectual capital further, structural parts must be indicated and described. Nevertheless, the variety of different interpretations leads to mismatches in intellectual capital theory.

Investigation of intellectual capital theory provides different structural part approaches. The majority of authors (Bourdieu, 1986; Putnam, 1993; Saint – Onge, 1996; Sveiby, 1996; Stewart, 1997; Edvinsson and Malone, 1997; Draper, 1997; Bontis, 1998; Van Buren, 1999; O’Donnell and O’Regan, 2000; Boufoun, 2003; Swart, 2006; Ramirez, Lorduy, and Rojas, 2007; Malmelin, 2007; Namvart et al., 2009) indicate that human capital is the main intellectual capital part. Nevertheless, according to scientific literature, multiple intellectual capital structural parts are distinguished as well.

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- Structural capital (Bourdieu, 1986; Edvinsson and Malone, 1997; Putnam, 1993; Saint – Onge, 1996; Stewart, 1997; Draper, 1997; Bontis, 1998; Roos et al., 1998; Bounfour, 2003; Swart, 2006; Ramirez, Lorduy, and Rojas, 2007; Namvar et al., 2009)
  - Customer capital (Saint – Onge, 1996; Stewart, 1997; Draper, 1997; Roos et al., 1998; Bontis, 1998; Van Buren, 1999)
  - Relational capital (Ramirez, Lorduy, and Rojas, 2007; Malmelin, 2007; Namvar et al., 2009)
  - Social capital (Bourdieu, 1986; Coleman, 1988; Putnam, 1993; Grootaert, 1997; Rose, 2000; Uzzi and Gillespie, 2002; Parts, 2003; Mačerinskiené and Vasiliauskaitė, 2004; Swart, 2006; Danchev, 2006)
  - Innovational capital (Draper, 1997; Van Buren, 1999; Bounfour, 2003; Namvar et al., 2009)
  - Organizational capital (Draper, 1997; Malmelin, 2007; Namvar et al., 2009)
  - Process capital (Draper, 1997; Van Buren, 1999; Namvar et al., 2009)
  - Communicational capital (Hartman and Lenk, 2001; Hartman and Wang, 2004; Malmelin, 2007)
  - Reputation capital (Fombrun and Rindova, 1996; Fombrun and van Riel, 2004)
  - Juridical capital (Malmelin, 2007)
  - Psychological capital (Bandura, 1997; Masten and Reed, 2002; Snyder et al., 2002; Luthans and Avolio, 2004; Carver et al., 2010)
  - Market assets (Brooking, 1996; Bounfour, 2003)
  - Human centered assets (Brooking, 1996)
  - Intellectual property assets (Brooking, 1996)
  - Infrastructure assets (Brooking, 1996)
  - External structure (Sveiby, 1996, 1997; Petrash, 1997; O’Donnell and O’Regan, 2000)
  - Internal structure (Sveiby, 1996, 1997; Petrash, 1997; O’Donnell and O’Regan, 2000)
  - Employee competence (Sveiby, 1997)
  - Brand equity (Kapferer, 1997; Keller, 1998)

The intellectual capital structural parts were classified according to similarities and common features accordingly: intellectual capital is the sum of human capital, structural capital (also known as an internal structure) and relational capital (also known as an external structure). Human capital structural parts are considered psychological capital, human centered assets and employee competence. Structural capital (also known as an internal structure) structural parts are as follows: innovational capital, organizational capital, process capital, reputation capital, juridical capital, market assets, intellectual property assets, infrastructure assets. In addition to this, relational capital (also known as an external structure) is comprised of social capital, communicational capital and brand equity. The proposal of such intellectual capital classification came from willingness to collect all possible structural parts, to compare them and to find any of similarities.

According to scientific literature review, the model of intellectual capital evaluation in publicly listed companies was proposed (Picture 1.1.).
This model aims to determine how much a respective director or manager needs to invest in intellectual capital in order to increase publicly listed company’s value added with a certain amount. It is supposed that management decides to invest X amount into a human capital, X amount into a structural capital, and X amount into a communicational capital, and how this will affect value added. In addition to this, manager can also set the goal, for instance: publicly listed company’s management wants to increase the value added by 5%. The model would show, how much it is needed to invest into a specific intellectual capital part. What is more, this model also aims to determine, which intellectual capital components have the greatest impact on the value added of publicly listed company.

Also an extended model is being created for the clarification purposes. In the extended model smaller elements of intellectual capital structural parts are being listed. Nevertheless, such model is just a proposal and was not tested empirically. Expert evaluation could potentially evaluate the weight of factors in order to combine a formula, which would calculate main variables.

Conclusions

The model of intellectual capital evaluation in publicly listed companies was created and proposed using scientific literature review in order to fulfil two basic needs: how to describe intellectual capital and its main structural parts; how to adapt to investor’s needs and manage intellectual capital in order to increase value added of the respective company. The significant issue appeared during the investigation of intellectual capital theory: discrepancies and mismatches of understanding intellectual capital structural parts. In this paper an updated intellectual capital structure was proposed with the intention to facilitate and make clear picture of the intellectual capital consistency. As a result of an updated intellectual capital structure, the model of intellectual capital evaluation in publicly listed companies was created and proposed. Although such model could be helpful for management, it still needs to be empirically tested, thus requiring more research on this subject.

References

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