Between Form without Substance and Substance without Form: Estimating the Brand Image of Romanian Smes

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The recent financial and economic crisis assessment of brand image depends crucially on the choice of underlying assumptions and analytical tool and is subject to considerable uncertainty. Many countries pass from economy based on intangible resources and innovation, competitiveness, and economic dynamism to digital economy. The good brand image of a company can be destroyed in a matter of minutes on the Internet by anyone, even a competitor. The rules relating to brand image accounting, measurement and reporting represent an excellent case in point, traditionally dominated by capitalization and harmonization of the regime having been disposed by international accounting standard in favour of an impairment testing regime pursuant to which periodic harmonization charges are no longer required. The paper's main purpose is to discuss according to the transition to IFRS the answer to the follow questions: Is branding image evaluation a myth? Can any of the existent brand image evaluation models generate comparison between knowledge-based organizations? In a time of economic crisis, we decided to use an econometric model that allows assessing the implications of brand image, with examples on Romanian SMEs. Results revealed the problems concerning brand image recognition and valuation of the brand image in crisis period.

Introduction

Today, there are significant social, political, and economic challenges that created to governments new threats from financial crises and other risks. Those challenges are based on demographic, climate, security, technological and economic changes.

The transition to IFRS represents the latest episode of brand image often turbulent story. One striking feature of this framework for brand image measurement and reporting is its order magnitude increase in complexity compared to typical prior practice. Application of this system requires navigation through several layers of difficult and potentially contestable choices. It is for this reason in particular that much of the recent literature relating to this issue focuses on the incentive compatibility problems which may be associated with the implementation of impairment based approaches to brand image measurement and reporting (e.g; Beatty & Weber, 2006; Hayn & Hughes, 2006). Without derogating from the importance of these findings, the focus of this paper is squarely cast on a different issue, the degree to which firms actually comply with the formal precepts of the standards governing impairment testing regimes. Prior studies appear to have been constructed on the tacit assumption of systematic standards compliance on the part of financial statement prepares.

The measurement of the brand image as a residual value is consequent with the "top to bottom" approach, according to which the good will is vied as an investment part which is based on the buyers expectance regarding the future economic benefits resulted from the enterprises group.

On the other hand, the brand image accounting estimates are often made in conditions of uncertainty because it involves the determination of their judgment. As a result, the risk of material

misstatement is greater when these estimates are involved and in some cases the auditor may determine that the risk of material misstatement is greater that requires special audit.

In our opinion, the implementation of IFRS in the EU for brand image is certainly a major breakthrough in accounting harmonization process, contributing significantly to improving the integration and competitiveness of EU capital markets by providing the legal framework for the implementation of accounting standards quality, enabling a greater extent comparability of accounting information. However, because the mechanism of endorsement of IFRS, there may be situations where the EU does not support the full adoption of international referential, practically giving rise to a variant thereof, which may hamper the process and acceptance of international accounting convergence markets without reconciliation capital of the world (mainly USA) immaterial of EU companies. We believe in this regard as absolutely necessary for the EU to adopt all IFRS referential, which, of course, requires a closer cooperation with the IASB, especially in the pre-issue new standards.

Therefore, the representation of the value of brand image own statements to a value as close to the real one, is essential for users since they base their decisions based on its level. Therefore, we can say that accounting estimates on brand image is one of the challenges of international accounting and auditing in the context of convergence.

The paper is organized as follows. The first section introduces the concept of brand image and discusses the importance of reflecting on the brand image and the main indicators proposed by the theoretical and empirical literature. The next section presents the empirical framework and results of the estimations of selected indicators under a variety of assumptions and in the final section provides concluding remarks and some accounting implications.

Literature review

Brand image inhabits an unruly and unsettled domain. Accounting theorists have long debated and rarely agreed on its nature and source. In the process they have generated a tangled collection of mostly irreconcilable explanations.

According to Sands (1963), brand image represented the value capable of being generated by an organization as a consequence of facing less than competition in the markets in which it operated. On the other hand, Gynther (1969) proposed that brand image came into being as a consequence of the existence of a range of factors which while favorable to the economic position and performance of a firm were not capable of being measured and recognized individually. Notably, the conceptual confusion relating to brand image is not limited to the accounting literature. Legal conceptions of brand image as expounded by the courts have also shown considerable variation over time, and often varied substantially from those accepted at various points in time in the accounting and commercial domains. From the early 17th century onwards, a string of cases have been decided in which courts have attempted to define the term brand image, and to determine the circumstances in which it might arise, and what it might attach to where it arises.

To overcome such problems should be recognized internationally brand image at the end of each accounting year, their transparency, prevent fraud and violations of accounting principles, to help business people (investors) contributed the Council of Europe (CoE) , which brought changes in accounting rules (referential national, European, international) and contributed to the adoption of certain international accounting standards.

Watts (2003) represents an early and high profile example of some of the criticisms which have been leveled at this approach. Other commentators, including Massoud & Rayborn (2003) have expressed similar sentiments, and questioned the desirability of a reporting

framework so reliant on subjective judgments without appropriate verification checks and balances. Others have asserted the existence of obvious technical flaws in the manner in which asset impairment standards have been drafted (Haswell & Langfield-Smith, 2008).

A study in 2006 investigated the relevance of intangible "soft" as well as intellectual capital, brand, loyalty and customer satisfaction. The authors, Larcker and Ittner, have attempted to answer the following questions:

➢ Customer satisfaction is economically relevant stock market?
➢ The economic value of consumer satisfaction is fully reflected in companies' financial documents?
➢ Does measuring consumer satisfaction provide new market?

To solve these problems have used "American Customer Satisfaction Index" (the American Consumer Satisfaction Index) and a similar index, used in Sweden. Consumer satisfaction attributes were made in relation to future performance of companies. Thus, it was shown that there is a positive relationship between customer satisfaction and market value of firms, but these issues are only partially reflected in economic documents - financial companies. Furthermore, published by the American Society for Quality Control and Customer Satisfaction Barometer by the Swedish indicators related to consumer satisfaction, suggests that the information provided by these indicators, not only partially reflected in the share price. Thus, this research suggests that non-financial indicators of consumer satisfaction are needed to estimate the future performance of companies in certain cases only.

Consistent with the concerns raised in these conceptual contributions, evidence is accumulating in the empirical literature of an array of problems associated with impairment testing regimes.

Is the brand image evaluation a myth or reality?

Over time, brand image has become one of the most controversial issues in accounting. Its value is generally determined by appraisal, which is

based on evaluator's assumptions. As such, the value of brand image is determined subjectively. Subject recognition of brand image in financial statements found both supporters and opponents among professionals.

Supporters of recognized brand image say that is "the present value of the surplus revenue that a company can get." This group claims to determine the fair value of these excess revenues is similar to determining the present value of cash flows associated with other activities and projects. Opponents of the recognition fund argue that the purchase price paid, many times proves to be based on unrealistic expectations, leading to further reductions default to zero of the brand image. Both arguments have merit. Many companies are able to achieve revenues in excess out of their investments. As such, the prices of ordinary shares of these companies must register first a book value of brand image. Consequently, investors who buy ordinary shares of such companies pay for intangible assets (reputation, brand names, etc.).

Controversy related to brand image is reference mainly to the recognition and evaluation. The brand image concept one of the first articles that make a reference to the commercial fund was published in the year 1884, although this concept is much older. Leake (1948 quoted by Bloom 2006) presents a discussion that took place in the year 1571 which utilize the expression brand image. But he is also the one who claims the first references to the term brand image in a class about which Lord Eldon commented: "the goodwill that was the subject of the sale is nothing more than the probability of an old client to come back." Since then were written numerous articles and books about this subject, the same as generations of accountants were confronted with this problem.

Is the brand image an active or not. In order to establish the arguments for and against the recognition of the brand image as an active, we will analyses the definition of the immaterial actives established by the International Organism of accountancy normalization and problems in identifying the immaterial actives which it faced. The accountancies of an element in the immaterial immobilizations category requires that an enterprise to demonstrate that the element fulfils the

definition of an immaterial immobilization and the criteria to recognize the active (it is probably that the enterprise is to obtain future economic advantages due to the active and if its costs can be evaluated.).

In the current crisis is important the reference to fair value or value in use, and disclosure which of these reference bases has been adopted. While it is likely that in most circumstances recoverable value will be determined by reference to value in use, the possibility that the fair (market) value of certain asset classes may be reliably determinable, for example, by dint of the existence of active markets for assets of the class in question, means that it will on some occasions be feasible to determine recoverable amount on a fair value basis.

An obvious problem which arises where this information is not provided is the lack of capacity on the part of the financial statement user to understand how brand image is distributed across a business, where it is concentrated and what types of underlying business activities it is principally associated with. This results in a diminished capacity on the part of financial statement users to develop detailed reporting entity impairment risk profiles.

By way of contrast, firms choosing to adopt the fair value approach to impairment testing face a lower required disclosure burden and avoid the obligation to provide details such as discount rates and assumed growth rates. The challenge presented as a consequence of the decision to adopt the fair value approach to brand image impairment testing is to find an appropriate benchmark asset portfolio, a current price for which can be reliably observed.

Theoretical background and empirical methodology

It was determined that the most appropriate model to optimize the components of intangible assets is linear programming model (LP). It is known that any model (PL) consists of two parts: the objective function and system limitations.

It employs the statistical correlation values of the indicators X and Y. We will refer to the first model for companies listed on stock exchanges. It is the first analytical methodology formulation; the objective function is a regression equation.

If we have a statistical selection of size n

$$\left(Y_t, X_{1t}, X_{2t}, \ldots, X_{kt} \right) \quad \text{with} \quad \left(1 \le t \le n \right) \qquad (1)$$

carried on the vector:

$$\left(Y, X_1, X_2, \ldots, X_k \right) \qquad (2)$$

where Y is the difference between the market value of the company and the value of equity (own - equity) of the balance sheet and X - the set of indicators expressing the company's objectives or management strategies for their extinction, then we can write the regression equation of the hyper plane related.

For linear regression function such that expresses the links between Y and X values for optimal management components research, the method of least squares (LSM) that if given the choice statistic can determine the coefficients θ_0 and θ_j with $(j = \overline{1, k})$ related.

It is based on the regression equation of the hyper plane:

$$Y = \theta_0 + \theta_1 X_1 + \theta_2 X_2 + \ldots + \theta_n X_n , \qquad (3)$$

the ratio to be determined by using the values of statistical selection (4.1), the coefficients θ_0 and θ_j $(j = \overline{1, n})$

Method m.c.m.m.p. requires minimizing a function in this case has the form:

$$\psi = \sum_{t=1}^{k} \left(Y_t - \theta_0 - \sum_{j=1}^{n} \theta_j X_{jt} \right)^2 \qquad (4)$$

Minimizing this function is performed by canceling its partial derivatives with respect θ_0 and θ_j with $(j = \overline{1,k})$:

$$\frac{\partial \psi}{\partial \theta_0} = 0; \ \frac{\partial \psi}{\partial \theta_1} = 0; \qquad \frac{\partial \psi}{\partial \theta_2} = 0 \cdots\cdots\cdots \frac{\partial \psi}{\partial \theta_n} = 0$$

(5)

This is a normal system of linear equations which is solved by the Gauss-Jordan method and thus resulting parameters $\theta_0, \theta_1 \ldots \theta_n$ of the equation called the objective function of the model (PL).

The correlation is verified by multiple correlation coefficient r, calculated as follows:

$$r = \sqrt{1 - \frac{S_Y^2 \ (k-n)}{\sigma_y^2 \ (n-1)}} \quad \text{(k – sample, n – variable)} \tag{6}$$

SY is the standard deviation of the Y values calculated with the equation adopted and σy the standard deviation of the sample statistic values.

Data and Empirical Results

In developing this model and the database has left the analysis and grouping of 12.447 listed and unlisted Romanian companies in relation to brand image indicator (Table 1). This indicator includes the following elements: reputation company manager who evaluates and employs people with valuable intellectual capital, years of experience in the profession, employee satisfaction, value added related to the employee, the report adds value to 1 Euro.

Using the data presented in Table 1 is considered as a set of five statistical observations of vector elements above, registered firms whose data were used for the numerical realization of the model system of

constraints (1) - (6) corresponding to achieving this companies over the last five years, will provide the data required.

Table 1: Group of companies based on brand image

Group	Value brand image	Firms on the interval
I	Under 20.000 euro	5.275
II	20.000 – 40.000 euro	1.002
III	40.000 – 60.000 euro	746
IV	60.000 – 80.000 euro	695
V	80.000 – 100.000 euro	756
VI	100.000 – 120.000 euro	594
VII	120.000 – 140.000 euro	467
VIII	140.000 – 170.000 euro	670
IX	170.000 – 200.000 euro	1.025
X	Over 200.000 euro	1.217
	TOTAL	12.447

Source: own calculations

X_1 sales growth is correlated with similar data from the relevant industry. Value added X_2 corresponds to the data in the financial statements of the company. For the satisfaction of people showed X_3 also monitor values of intangible assets based on market research.

Rewrite the regression equation expressing the dependence of the value of intangible asset management as Y and the three indicators X_1, X_2 and X_3, vary with time t in years,

$$Y_t = \theta_0 + \theta_1 X_{1t} + \theta_2 X_{2t} + \theta_3 X_{3t} \qquad (7)$$

To make it easier to work, the amount of the system is pre-calculated in Table 2.

Table 2: Intermediate calculations for determining the coefficients θ

t	Y_t	X_{1t}	X_{2t}	X_{3t}	Y_tX_{1t}	Y_tX_{2t}	Y_tX_{3t}	X^2_{1t}	X^2_{2t}	X^2_{3t}	$X_{1t}X_{2t}$	$X_{1t}X_{3t}$	$X_{2t}X_{3t}$
1	6	11	25	2,05	132	300	24,6	242	1250	8,41	550	45,01	102,5
2	5	4	26	2	40	260	20	32	1352	8	208	16	104
3	27	10	28	2,25	540	1512	121,5	200	1568	10,13	560	45	126
4	38	7,5	27,5	2,2	570	2090	167,2	112,5	1512,5	9,68	412,5	33	121
5	35,5	5	25	2,4	355	1775	170,4	50	1250	11,52	250	24	120
$\sum_{t=1}^{5}$	111,5	37,5	131,5	10,9	1637	5937	503,7	636,5	6932,5	47,73	1980,5	163,1	573,5

Source: author's calculation

$$S_Y^2 = \frac{(6-5,22)^2 + (5-7,03)^2 + (27-35)^2 + (38-29,35)^2 + (35,5-35,27)^2}{2,5-2} = 287$$

For standard deviation σ_Y, first calculate the average $\overline{Y}$.

$$\overline{Y} = \frac{6+5+27+38+35,5}{2,5} = 22,3$$

Taking this into account, the variance (dispersion) σ^2_Y will have the value:

$$\sigma_Y^2 = \frac{(6-22,3)^2 + (5-22,3)^2 + (38-22,3)^2 + (35,5-22,3)^2}{4-1} = 660,5$$

Resulting correlation coefficient:

$$r = \sqrt{1 - \frac{287}{660,5}\cdot\frac{(2,5-2)}{(2-0,5)}} = \sqrt{0,86} = 0,93$$

Since we obtained r> 0, means that we are dealing with a direct correlation between variables. Value is reached, r = 0,975, states that it is a high correlation, which lends credibility to the use of the formula for practical purposes.

If it is envisaged that the primary LP model solution required changing the dependent variable (Y + 273,33) with F (x) resulting from solving primal,

$$\max F_{(x)} = \max\left(Y + 546{,}66\right) = 324{,}1 \, millionEuro$$

it is clear that the same value of the objective function was obtained by solving the dual. Therefore the value of time management by optimizing both models - the primary and dual - remains the same, namely:

$$\Delta Y = 324{,}1 - 273{,}33 = 50{,}77 \, millionEuro$$

Regarding chances to overcome the crisis, Romanian firms immature to chance and have little chance of survival, while Romanian companies mature high-value intangible assets have theoretical chances much higher, but they have no guarantee that crisis will pass. It should be noted that the maturity of a company has nothing to do with her age.

Conclusions

Basically, international accounting bodies and the assessment ones pay attention to quality standards and implicitly to the methods for estimating their fair value of brand image.

Brand image are identifiable non-monetary assets, without physical substance, held for use for the production of goods or services, to be rented to third parties or be used for administrative purposes. Recognition of an element of brand image requires the company to demonstrate that the item meets the definition above: to have identifiable character, to be controlled, to obtain future economic benefits and can to be able to asses at a reliable cost.

But brand image is the difference between the consideration paid and the purchaser's share of identifiable net assets acquired. This is

a "partial brand image" method because the non-controlling interest is recognized at its share of identifiable net assets and does not include any brand image.

The results of this analysis raise more questions than they answer. Could this be a manifestation of inadequate competence or of stubborn unwillingness to yield to the precepts of the mandated reporting framework – comforted by a sense that meaningful rebuke is unlikely? Could this be a signal that policy makers have promulgated standards so complex, unwieldy and conceptually challenged that any hope of systematic compliance, still less the production of serviceable information via their application is no more than a mirage - a false impossible shore? For researchers at least, these puzzles are ripe with challenges we hope will not go long unanswered.

In our study we have shown, however, those companies applying international accounting rules are required to handle intense intangible values and the identification and management of risks related to recognition, measurement and presentation thereof. From this obligation there may result a competitive disadvantage for companies that only apply national rules that do not recognize and do not record any significant value on brand image values. The solution is convergence, translated by aligning with international accounting standards. Specifically, convergence requires a single set of standards, with the possibility of adapting their national realities, developed with the participation of representatives of several countries.

From the functional point of view the proposed model for risk analysis of intangible assets proved appropriate expectations. The objective function obtained from the multiple regression confirms its value in that it discriminates parameters correctly with dynamic variables X as experimental data and the correlation coefficient is r = 0,93.

It turned out that the intangible asset optimization using linear programming model proposed is economically efficient. Frame rate ε in efficiency between the limits 0, 9 and 1, 5 with the 95% is an economic success, and it is also protected from serious risks.

After exposure of the main conclusions we reached during this research project, consider emphasizing useful contributions to the state of knowledge in the area of issue recognition, measurement and presentation of the brand image in the context of international accounting convergence.

As regards the Romanian legal landscape on intangibles accounting as a result of the growing need for transparency, to improve the management entities, was started a process of alignment to European and international accounting standards. It sought to amend accounting rules so that they can be made compatible with IFRS issued by IASB and the Fourth European Directive.

However, returning to the restatement of accounts under brand image in excess of hyperinflationary attorney presents advantages, in principle; inconvenience is probably caused by higher costs from further processing. The auditor should consider also whether individual differences of brand image were accepted as reasonable or oriented in one direction as cumulated can have a significant effect on the financial statements. In such circumstances, the auditor must assess the brand image accounting estimates taken as a whole. Therefore, it can be said that accounting estimate on brand image is one of the challenges of international accounting and auditing in the context of convergence.

References

[1] D.B. Audretsch, A.R. Thurik: *A model of the entrepreneurial economy*, International Journal of Entrepreneurship Education, 2, 2004, pp. 143-166, Available from people.few.eur.nl.

[2] Abernethy, M., Bianchi, P., Labory, S., Lev, S., Wyatt, A., and Zambon, S.: *Study on the Measurement and Reporting of Intangible Assets and Associated Reporting Practices*, prepared for the Commission of the European Communities – Enterprise Directorate General Contract, contract n. FIF .20010720, 2003.

[3] Al Gifri, K. and Citron, D.: *The Value-Relevance of Financial Statement Recognition versus Note Disclosure: Evidence from Goodwill Accounting*, European Accounting Review, vol. 18, no. 1.

[4] Anantharaman, D.: Has SFAS 142 *Diminished the Reliability of Brand image Write offs?*, Columbia Business School Working Paper, 2007.

[5] Anson, W., *The intangible assets handbook: maximizing value from intangible assets*, Washington, DC: American Bar Association, Section of Business Law, 2008;

[6] Benzacar, K., *IFRS brings a radical change to financial statement presentation*, CMA Management, vol. 82, no.9, 2009.

[7] Bernard, Marr, *Measuring and managing intangible assets, in Performance management: multidisciplinary perspectives* / ed. by Richard Thorpe; Jacky Holloway, Basingstoke [u.a.]: Palgrave Macmillan, 2008.

[8] Bianchi, P., and Labory, S., *Macro indicators of intangible assets and economic policy, Visualising intangibles: measuring and reporting in the knowledge economy* / ed. By Stefano Zambon, Aldershot: Ashgate Pub, 2007.

[9] Bontis N., *Assessing knowledge assets: a review of the models used to measure intellectual capital*, in International Journal of management Review´, Volume 3, issue 1, March 2001, 2001.

[10] Christensen, Hans B., Nikolaev Valeri, *Who uses fair value accounting for non-financial assets after IFRS adoption*, accesat la adresa http;//areas.kenanflagler.unc.edu/Accounting/Documents/Christensen Nikolaev2009_FairPaper.pdf, 2009.

[11] Cooper, D.J. and Morgan, W., *Case Study Research in Accounting*, Accounting Horizons, vol. 22, no. 2, 2008.

[12] Davis, Joslin and Biggs, Loretta C., *Standards of Value for Professional Practices and Closely Held Businesses*, www.aaml.org/, 2005.

[13] Deaconu Adela, *Valoarea justă-concept contabil*, Ed. Economică, București, 2009.

[14] Douglas W. H., *How to Measure Anything. Finding the Value of Intangibles in Business*, Wiley & Sons, 2010.

[15] Ernst & Young, *Acquisition Accounting – What's next for you? A global survey on purchase price allocation practices*, February 2009, www.ey.com, 2009.

[16] Grundy, T., and Brown, L., *Value based Human Resource Strategy – Developing your consultancy role*, Burlington: Elsevier Butterworth-Heinemann, 2003.

[17] Hayn, C., and Hughes, P., *Leading Indicators of Brand image Impairment*, Journal of Accounting, Auditing and Finance, Vol. 21(3), pp. 223 – 265, 2006.

[18] Ipate, D. M., *Evaluarea afacerilor. Elemente fundamentale*. Editura Europolis, Constanta, 2003.

[19] McCarthy, M., and Schneider D., *Evidence from the US Market of the Association of Capitalized Non-Goodwill Intangible to Firm Equity Value* - Advances in International Accounting 9, 1996.