

The Effect of Cash Flow Stability and Financial Policies on Brand

Ghodratollah TALEBNIA¹
Fatemeh FADAEIYAN²

¹Tehran Science and Research Branch, Islamic Azad University, Tehran, Iran

²Department of Accounting, Tehran Science and Research Branch Islamic Azad University, Tehran, Iran,

²E-mail: fatemeh_fadaeiyan@yahoo.com

Abstract *In this paper, we determine the relationship between cash flow stability and financial policies on brand of 124 companies listed on Tehran Stock Exchange during 2008-2014. The financial policies consist of credit rating, financial leverage ratio, and cash assets ratio. The results of this study indicated that cash flow stability and credit rating has a significant positive impact on brand and financial leverage ratio has a significant negative impact on brand. However, there was no relationship between cash assets ratio and brand. In other words, the increased stability of cash flows and credit rating and the reduced financial leverage ratio positively affect brand, but the increased or decreased cash assets ratio does not affect brand.*

Key words Cash flow stability, credit rating, financial leverage ratio, cash assets ratio, brand

DOI: 10.6007/IJARAFMS/v5-3/1807

URL: <http://dx.doi.org/10.6007/IJARAFMS/v5-i3/1807>

1. Introduction

Brand reputation is developed during years of activity. An unwise action may inflict irreparable loss on a brand, with its negative impacts lasting for many years. On the other hand, a wise action may considerably increase brand reputation within a short while. Today, brand is the most important parameter in the valuation of companies and financial limitations affect investment fluctuations (Rudanco, 2011). The interests of investors in an enterprise include future interests, future cash flows, and payment of future cash interests accompanied with high reputability of brand (Pablo Fernandez, 2001). Investors seek information on these interests, among which future interests and future cash flows are attracting more attention. To estimate future cash interests, they need information on brand, future interests, free cash flow and debt of the companies.

Given that volume of transactions in our capital market is not comparable to the advanced countries and brand credit and cash flows are two fundamental factors in the estimation of cash flows and the increased financial leverage ratio is an important factor in the reduction of corporate investment (Chamanrouyan, 2009), special attention should be paid to two variables of financial leverage and cash flows and their impact on financial performance. As our capital market is too much younger than those of advanced countries, the attraction of investors greatly matters to the managers. In line with this objective, determination of relationships between such factors as the stability of cash flows, credit rating, financial leverage ratio, and cash assets ratio, as well as their impacts on brands may pave the way for the achievement of the ultimate goal. Considering the importance of this issue and insufficient research on brand, we decided to study the effect of stability of cash flows and financial policies on brand. In this study we attempt to determine the relationship between the stability of cash flows, credit rating, financial leverage ratio, cash assets ratio and brand. Our first goal is to determine the effect of stability of cash flows and financial policies on brand. Our second goal is to provide useful information to investors, creditors, financial analysts, managers, owners, and other users.

2. Methodology of research

The statistical population consists of the companies listed on Tehran Stock Exchange. The inclusion requirements are as follows:

1. Companies who have been listed before 2008;
2. Companies whose fiscal year end on March 20 (to increase comparability);
3. Companies which have not changed their fiscal year during the period under study (2008-2014);
4. Companies whose financial information is accessible in variable definition part;
5. Companies which are not a part of financial corporations such as banks, financial institutions, investment companies and financial brokerage companies.

Given the above conditions, only 124 companies were qualified and included in the statistical population. This study is a library research in that it uses the resources and financial statements of the companies listed on the stock exchange. In terms of goal, this study is an applied research with a comparative-inferential approach and uses regression analysis method. In terms of data collection, this study is a descriptive-observation research with correlation approach which investigates the correlation between variables. In terms of data nature, this study is a quantitative research.

2.1. Research Variables and Measuring Method

The dependent variable in this study is Braper brand. Brand is an artificial variable which is 1 if the mean assets return ratio of three consecutive years of the company is more than the mean return of the concerned industry, and is 0 if otherwise. Company assets return ratio is measured by dividing net profit of the current year by book value of total assets.

The independent variables of the research are as follows:

Cash Flow Stability (CFS_{i,t}):

Cash flow stability is measured as follows (Chamanvar & Yan, 2009)

$$CFS_{i,t} = \frac{CF_{i,t} - CF_{i,t-1}}{CF_{i,t-1}} \quad (1)$$

Where:

CFS = Cash flow stability of company i in year t ;

$CF_{i,t}$ = Cash flow of company i in year t ;

$CF_{i,t-1}$ = Cash flow of company i in year $t-1$.

Credit Rating (CreRat_{i,t})

To measure credit ratings of the companies, we collected the data on total adjustment points. After computing the above formula, we determined a coefficient for each company. Then we arranged the companies based on the coefficients and determined the ratings. The companies whose ratings were below the average total index of the concerned industry were classified as financially limited companies (Bronberg *et al.*, 2009). Below is the method of measuring total adjustment point of companies:

$$\text{Total points of company} = (\text{EPS growth percentage} \times \text{EPS growth coefficient}) + (\text{total assets growth percentage} \times \text{total assets growth coefficient}) + (\text{predictable profit margin growth percentage} \times \text{profit margin growth coefficient}) \quad (2)$$

$$(\text{EPS growth coefficient} + \text{total assets growth coefficient} + \text{profit margin growth percentage}) \times 100$$

$$\text{Total adjustment point of company} = ((\text{total points} \times 1) + (1 + \text{EPS coverage percentage} \times \text{EPS coverage coefficient}) + (\text{EPS deviation mean} \times \text{EPS deviation coefficient})) \times 100 \quad (3)$$

$$(1 + \text{EPS coverage coefficient} + \text{EPS deviation coefficient})$$

Financial Leverage Ratio (Lev_{i,t})

High financial leverage ratio indicates the increased ratio of debt to accumulated funds and is likely to cause financial bankruptcy of the company. It indicates the reduction in cash funds consequent upon debt increase. Companies with high cash holdings can cover these assets with cash funds and reduce the debts. We measured financial leverage ratio (Lev_{i,t}) using the following formula:

$$Lev_{i,t} = \text{book value of total debts} - \text{book value of total assets} \quad (4)$$

Cash Holdings (CashHoldings_{i,t})

Cash holdings are cash funds plus negotiable papers. The volume of cash holdings is measured by the following formula:

$$\text{Cash/Assets}_{i,t} = \text{Negotiable papers} + \text{Cash funds} - \text{Book value of total assets} \quad (5)$$

Control variables are as follows:

Sales Logarithm (Log (sales)_{i,t})

$$\text{Log}(\text{sales})_{i,t} = \frac{S_{i,t} - S_{i,t-1}}{S_{i,t-1}} \quad (6)$$

Where:

SG_{i,t} = Sale growth of company *i* in year *t*;

S_{i,t} = Net sales of company *i* in year *t*;

S_{i,t-1} = Net sales of company *i* in year *t-1*.

Finally, we measured sales growth rate logarithm for final computations:

Growth Opportunities (M/B_{i,t}): growth opportunities are the ratio of market value to book value of equities.

$$\text{Annual Profitability (EBITDA}_{i,t}): \text{EBITDA}_{i,t} = \text{Sales}_{i,t} + \text{ROA}_{i,t} + \text{ROE}_{i,t} / 3 \quad (7)$$

Where:

Sales ratio: Sales_{i,t} = company sales – Book value of total assets;

Return on assets ratio: ROA_{i,t} = net profit of current year – book value of total assets;

Return on equity ratio: ROE_{i,t} = net profit of current year – book value of equities.

General and Administrative Expenses Ratio (Adv/Sales_{i,t})

$$\text{Adv/Sales}_{i,t} = \text{general and administrative expenses} - \text{cost price of sold goods} \quad (8)$$

Research and Development Expenses Ratio (R&D/Sales_{i,t}):

$$\text{R\&D/Sales}_{i,t} = \text{Research and development expenses} - \text{sales amount} \quad (9)$$

Given the research variables, the research model is codified as follows:

$$\text{Braper}_{i,t} = \alpha_0 + \beta_1 \text{CFS}_{i,t} + \beta_2 \text{CreRat}_{i,t} + \beta_3 \text{Lev}_{i,t} + \beta_4 \text{CashHoldings}_{i,t} + \beta_5 \text{Log (Sales)}_{i,t} + \beta_6 \text{M/B}_{i,t} + \beta_7 \text{EBITDA}_{i,t} + \beta_8 \text{Adv/Sales}_{i,t} + \beta_9 \text{R\&D/Sales}_{i,t} + \epsilon_{i,t} \quad (10)$$

2.2. Research Hypotheses

As mentioned in theoretical fundamental of the research, cash flow stability and financial policies affects brand. Here, we present the hypotheses based on theoretical fundamentals and research objectives:

2.2.1. Main Hypotheses:

1. There is a significant relationship between cash flow stability and brand;
2. There is a significant relationship between financial policy and brand;

2.2.2. Secondary Hypotheses:

3. There is a significant relationship between credit rating and brand;
4. There is a significant relationship between financial leverage and brand;
5. There is a significant relationship between cash holdings and brand.

3. Results

Descriptive Statistics of the Research:

Table 1. Descriptive Statistics of the Research

	Mean	Maximum	Minimum	Standard Deviation	Jark-bera Statistic	Jark-bera Statistic probability
Brand	0.50	1	0	123.39	2548.24	0.00
Cash flow stability	1.3	2.4	-0.67	0.24	1265.50	0.00
Credit rating	0.50	1	0	0.00	6408.35	0.00
Financial leverage ratio	0.642	2.72	0.0405	0.258	5214.02	0.00
Cash assets ratio	0.19	0.28	0.09	25.24	27.23	0.00
Company sales logarithm	5.714	7.91	3.241	0.187	438.32	0.00
Growth opportunities	12.25	19.25	2.34	12.57	4340.6	0.00
Annual profitability	0.69	0.78	0.24	1.05	52.30	0.00
General and administrative expenses ratio	0.24	0.31	0.16	0.55	7862.07	0.00
Research & Development expenses ratio	0.14	0.18	0.06	0.65	83.16	0.00

The number of observations for each column is 744 (obtained from multiplying 124 companies by 6 fiscal years).

F-Limer test for selection of intercept is variable or constant.

The hypotheses of F-Limer test:

H₀: the intercepts of the model are equal – combined data model (Pool)

H₁: the intercepts of the model vary from case to case – constant effects model

Statistic F probability in F-Limer test is less than 5% for all hypotheses, so H₀ is rejected and H₁ is confirmed. Constant effects model is confirmed for all five hypotheses. To compare constant effect model with random effect model, we carried out Hausman test. Table 2 contains the results:

Table 2. Hausman test for selection of constant and random effects model

Research hypotheses	Examination type	Statistic value	Degree of freedom	Statistical probability
Main hypothesis 1	Chi-Square Test	0.150160	6	0.9277
Main hypothesis 2	Chi-Square Test	0.695986	8	0.7061
Secondary hypothesis 1	Chi-Square Test	1.057238	6	0.3575
Secondary hypothesis 2	Chi-Square Test	1.03954	6	0.3264
Secondary hypothesis 3	Chi-Square Test	0.7931	6	0.7241

Hausman Statistic probability value for both hypotheses is more than significance level of 5%, so we had sufficient proof to reject the constant effects model. Therefore, we used random effects model to test related hypotheses.

Research hypotheses test results

First main hypothesis: *There is a significant relationship between cash flow stability and brand.*

Table 3. First main hypothesis test results

$Braper_{i,t} = \alpha_0 + \beta_1 CFS_{i,t} + \beta_5 \text{Log}(\text{Sales})_{i,t} + \beta_6 M/B_{i,t} + \beta_7 \text{EBITDA}_{i,t} + \beta_8 \text{Adv}/\text{Sales}_{i,t} + \beta_9 \text{R\&D}/\text{Sales}_{i,t} + \epsilon_{i,t}$			
Variable	Coefficients	Statistic t	Sig.
Constant number	25.247	3.0214	0.029
Cash flow stability	0.24	4.148	0.021
Sales logarithm	0.19	3.019	0.033
Growth opportunities	0.099	3.0373	0.047
Annual profitability	0.17	4.21	0.031
General and administrative expenses ratio	0.0028	0.59	0.91
Research & development expenses ratio	0.0014	1.024	0.64
Coefficient of determination	0.37	Statistic F	41.024
Adjusted coefficient of determination	0.29	Probability F	0.000
Durbin-Watson Statistic			1.69

Durbin-Watson Statistic is 1.69 (between 1.5 and 2.5) which indicates the lack of autocorrelation. Therefore, there is no obstacle to regression use. Statistic F probability in the above table indicates that there is a significant linear relationship between research variables, because statistic F probability is less than 5%. Statistic t for independent variable indicates that there is a significant linear relationship between independent variable (cash flow stability) and dependent variable (brand). This relationship is direct in error level of 5% (0.24). This coefficient indicates that the more cash flow stability, the stronger the brand. By contrast, the less cash flow stability, the weaker the brand. In other words, there is a significant positive relationship between these two variables. This relationship is also significant for control variables of the research, except for general and administrative expenses ratio and research and development expenses ratio which are not significantly associated with brand. The adjusted coefficient of determination is 0.29, which indicates the strength of model in explanation of associated variable changes. Independent and control variables have explained 29% of brand changes.

Second main hypothesis test:

Financial policy has three indexes of credit rating, financial leverage ratio and cash assets ratio, so we provided one secondary hypothesis for each index to investigate the impact of each index on the brand independently:

Secondary hypothesis 1 derived from the main hypothesis 2: *There is a significant relationship between credit rating and brand.*

Table 4. Test results of secondary hypothesis 1 derived from main hypothesis 2

$Braper_{i,t} = \alpha_0 + \beta_2 \text{CreRat}_{i,t} + \beta_5 \text{Log}(\text{Sales})_{i,t} + \beta_6 M/B_{i,t} + \beta_7 \text{EBITDA}_{i,t} + \beta_8 \text{Adv}/\text{Sales}_{i,t} + \beta_9 \text{R\&D}/\text{Sales}_{i,t} + \epsilon_{i,t}$			
Variable	Coefficients	Statistic t	Sig.
Constant number	31.17	3.38	0.011
Credit rating	0.19	3.181	0.031
Sales logarithm	0.21	3.112	0.037
Growth opportunities	0.10	.0313	0.049
Annual profitability	0.13	4.011	0.28
General and administrative expenses ratio	0.002	0.901	0.68
Research & development expenses ratio	0.0037	0.912	0.84
Coefficient of determination	0.317	Statistic F	51.54
Adjusted coefficient of determination	0.231	Probability F	0.000
Durbin-Watson Statistic			1.80

Durbin-Watson Statistic is 1.80 (between 1.5 and 2.5) which indicates the lack of autocorrelation. Therefore, there is no obstacle to regression use. Statistic F probability in the above table indicates that there is a significant linear relationship between research variables, because statistic F probability is less than 5%. Statistic t for independent variable indicates that there is a significant linear relationship between independent variable (credit rating) and dependent variable (brand). In other words, in the companies listed on Tehran Stock Exchange, the more credit rating is close to 1 (the rating close to 1 is a good point and the credit rating close to 0 is a bad point for the company), the company is more likely to have a powerful and reputable brand. The adjusted coefficient of determination is 0.23, which indicates the strength of model in explanation of associated variable changes. Independent and control variables have explained 23% of brand changes.

Secondary hypothesis 2 derived from main hypothesis 2: *There is a significant relationship between financial leverage and brand.*

Table 5. Test results of secondary hypothesis 2 derived from main hypothesis 2

$Braper_{i,t} = \alpha_0 + \beta_5 \text{Log}(\text{Sales})_{i,t} + \beta_6 M/B_{i,t} + \beta_7 \text{EBITDA}_{i,t} + \beta_8 \text{Adv}/\text{Sales}_{i,t} + \beta_9 \text{R\&D}/\text{Sales}_{i,t} + \epsilon_{i,t}$			
Variable	Coefficients	Statistic t	Sig.
Constant number	21.11	3.022	0.012
Financial leverage	21-0.	33.5.	0240
Sales logarithm	0.27	3.41	0.031
Growth opportunities	0.13	9.23	0.041
Annual profitability	0.08	2.054	0.049
General and administrative expenses ratio	0.0014	0.81	0.21
Research & development expenses ratio	0.0017	0.73	0.37
Coefficient of determination	0.331	Statistic F	31.24
Adjusted coefficient of determination	0.251	Probability F	0.000
Durbin-Watson Statistic			1.638

As you can see in the table above, Durbin-Watson Statistic is 1.638 (between 1.5 and 2.5) which indicates the lack of autocorrelation. Therefore, there is no obstacle to regression use. Statistic F probability in the above table indicates that there is a significant linear relationship between research variables. Statistic t for independent variable indicates that there is an inverse linear relationship between independent variable (financial leverage ratio) and dependent variable (brand). In other words, the less financial leverage ratio, the stronger the brand. Also, there is a significant direct relationship between control variables and brand in error level of 5%, except for general and administrative expenses ratio and research and development expenses ratio. The adjusted coefficient of determination indicates that variables of hypothesis 3 have explained 25% of financial performance changes.

Secondary hypothesis 3 derived from main hypothesis 2: *There is a significant relationship between cash assets and brand.*

Table 6. Test results of secondary hypothesis 3 derived from main hypothesis 2

$Braper_{i,t} = \alpha_0 + \beta_4 \text{CashHoldings}_{i,t} + \beta_5 \text{Log}(\text{Sales})_{i,t} + \beta_6 M/B_{i,t} + \beta_7 \text{EBITDA}_{i,t} + \beta_8 \text{Adv}/\text{Sales}_{i,t} + \beta_9 \text{R\&D}/\text{Sales}_{i,t} + \epsilon_{i,t}$			
Variable	Coefficients	Statistic t	Sig.
Constant number	11.19	3.82	0.022
Cash assets	0.016	210.8	1080.
Sales logarithm	0.21	312.5	0.032
Growth opportunities	0.15	911.4	0.044
Annual profitability	0.11	3.871	0.038
General and administrative expenses ratio	0.0021	0.891	0.16
Research & development expenses ratio	0.0017	0.471	0.29
Coefficient of determination	0.331	F Statistic	31.24
Adjusted coefficient of determination	0.251	F Probability	0.000
Durbin-Watson Statistic			2.24

As you can see in the table above, Durbin-Watson Statistic is 2.24, which indicates the lack of autocorrelation. Therefore, there is no obstacle to regression use. Statistic F probability in the above table indicates that there is a significant linear relationship between research variables. Statistic t for independent variable indicates that there is no significant relationship between cash assets and brand. Also, there is a significant direct relationship between control variables and brand in error level of 5% (except for general and administrative expenses ratio and research and development expenses ratio). The adjusted coefficient of determination indicates that variables of hypothesis 3 have explained 25% of financial performance changes.

Main hypothesis 2 test: *There is a significant relationship between financial policy and brand.*

Table 7. Main hypothesis 2 test results

$\text{Braper}_{i,t} = \alpha_0 + \beta_2 \text{CreRat}_{i,t} + \beta_3 \text{Lev}_{i,t} + \beta_4 \text{CashHoldings}_{i,t} + \beta_5 \text{Log (Sales)}_{i,t} + \beta_6 \text{M/B}_{i,t} + \beta_7 \text{EBITDA}_{i,t} + \beta_8 \text{Adv/Sales}_{i,t} + \beta_9 \text{R\&D/Sales}_{i,t} + \epsilon_{i,t}$			
Variable	Coefficients	Statistic t	Sig.
Constant number	2.057	2.822	0.031
Credit rating	0.19	3.181	0.031
Financial leverage ratio	21-0.	33-5.	0240
Cash assets ratio	0.017	210.9	170.0
Sales logarithm	-0.227	2.512	0.02
Growth opportunities	-0.118	8-5.01	0.041
Annual profitability	110	231.5	0.001
General and administrative expenses ratio	0.00019	0.247	0.81
Research and development expenses ratio	0.00027	0.341	0.70
Coefficient of determination	0.381	F Statistic	51.34
Adjusted coefficient of determination	0.291	F Probability	0.000
Durbin-Watson Statistic			2.027

Durbin-Watson Statistic is 2.027, which indicates the lack of autocorrelation. Therefore, there is no obstacle to regression use. Statistic F probability is less than 5%, which indicates that there is a significant linear relationship between research variables because, Statistic t for independent variable indicates that there is a linear relationship between independent variables (except cash assets ratio) and dependent variable (brand). In other words, statistic t in error level of 5% indicates that there is a significant inverse relationship between credit rating variables and financial leverage. This correlation indicates that the companies with lower debt and higher power to repay debts (credit rating close to 1) have more powerful brand. This relationship is also significant for control variables. There is a significant relationship between control variables and brand in error level of 5% (except for general expenses ratio and research expenses ratio). The adjusted coefficient of determination is 0.29, which indicates that the independent and control variables have explained 29% of brand changes.

Table 8. A Summary of Research Hypotheses Test

Hypothesis	Description of Hypothesis	Result
Main Hypothesis 1	There is a significant relationship between cash flow stability and brand.	Confirmed - Direct
Secondary Hypothesis 1	There is a significant relationship between credit rating and brand.	Confirmed – Direct
Secondary Hypothesis 2	There is a significant relationship between financial leverage and brand.	Confirmed – Inverse
Secondary Hypothesis 3	There is a significant relationship between cash assets ratio and brand.	Rejected
Main Hypothesis 2	There is a significant relationship between financial policy and brand.	Confirmed

4. Conclusion and Recommendations

The results indicated that cash flow stability and financial policy significantly affected brand. The companies listed on the Tehran Stock Exchange should pay a special attention to cash flow stability as it has the highest impact on brand. To improve brand, it is recommended that managers establish a supportive investment fund to stabilize cash flows. Also, companies should adopt financial policies more accurately because there is a significant relationship between financial policy, especially the indexes of financial leverage ratio and credit rating, and brand. Debt control may improve brand reputation, so the managers should reduce debt ratio and increase their ability to repay debts by adopting appropriate decisions for obtaining operation incomes, which would enhance the reputation of company among customers and other people concerned. Companies should fix a ceiling for financial leverage ratio so that the increased debt does not increase financial leverage ratio. Keeping financial leverage ratio in an optimal level improves brand. Also, credit rating is directly associated with brand, so it is recommended that managers provide appropriate guarantee and after sale services and improve the quality of products and services in order to enhance their financial, executive and technical abilities. The increased credit rating would increase the ability to pay debts, increase the satisfaction of contracting parties, enhance the ability to receive financial facilities, and make brand more powerful.

Resources

1. Allahyari, Ashkan (2009). Study on the Relationship between Imagination of Semantic Elements of Brand and Recognition of Brand, Based on Customer Based Brand Special Value (case study: Mellat Bank). M.Sc. thesis, University of Tehran, pp.50-56.
2. Baghban, Ali and Mousavi, Seyed Abbas (2004). Trade Name Value. *Tadbir*, issue 149, pp.44-48.
3. Tork, Mohammad (2011). Study on the Relationship between Different Earnings and Cash Flows and Stock Return in the Companies listed on Tehran Stock Exchange. M.Sc. Thesis, Islamic Azad University, Arak Branch, pp.19-26.
4. Hanafizadeh, Payam and Masoud, Fazelinia (2012). Bank Brand Valuation Based on Brand Valuation Models Using Topsis Multivariable Decision Making Model (case study: Mellat, Pasargad and Parsian Banks), 3rd year, issue 11, pp.81-102.
5. Khoshparvar, Zohreh (2006). Determination of Effective Factors in Personnel Behavior in Line with Implementation of Services Branding Strategy for Creating Competitive Distinction (case study: Mellat Bank). M.Sc. Thesis, University of Tehran, pp.17-32.
6. Rahimian, Nezamedin (2001). Finance in Economic Enterprises. *Hesabdard*, issue 146, pp.28-33.
7. Sadrinia, Mohammad; Mirasadi, Samaneh, and Varvani, Mohsen (2009). Various Financing Methods in Small-to-Medium Enterprises in Different Steps. *Technology Growth Specialized Quarterly*, issue 19, pp.13-21.
8. Sanayeie, Ali (2011). Electronic brand with managerial attitude. 1st ed., Shiraz, Takht Jamshid Pub.
9. Azizi, Shahriar; Darvishi, Zahra and Namamian Farshid (2011). Investigation of Determining Factors of Brand Value with Financial Approach in Companies Listed on Tehran Stock Exchange, business management perspective, issue 6, pp.9-32.
10. Fahimi, Amirhossein (2006). Investigation of Effective Factors in Customer Loyalty in Banking Industry (case study: depositors of Mellat Bank). M.Sc. Thesis, University of Tehran, pp.45-59.
11. Aaker, David A, & Jacobson, Robert. (2001). The Value Relevance of Brand Attitude in High-Technology Markets, *Journal of Marketing Research* Vol 38, No 4, pp. 485-493.
12. Ambler, T. (1997), Do Brands Benefit Consumers?, *International Journal of Advertising*, August.
13. Bronnenberg, B.J., Dhar, S.K., Dube, J.-P., (2007). Consumer packaged goods in the United States: National brands, local branding. *Journal of Marketing Research* 44, 4–13.
14. Chemmanur, T., Yan, A., (2010a). Product market advertising, IPO valuation, and long-run stock returns. Unpublished working paper. Boston College and Fordham University.
15. Degado-Ballester, Elena; Munuera-Alemán, Jose Luis; Yagüe-Guillén, Maria Jesus. (2003), Development and validation of a brand trust scale; *International Journal of Market Research*, 45(1), 35–53.

16. Elena Delgado-Ballester, José Luis Munuera-Alemán. (2005). Does brand trust matter to brand equity?, *Journal of Product & Brand Management*, Vol. 14(3), pp.187 – 196.
17. Kamakura, W.A., and Russell, G.J., (1993). “Measuring Brand Value with Scanner Data”, *International Journal of Research in Marketing*, Vol 10 March, 1993, pp. 9-22.
18. Pablo Fernandez (2001). Valuation of Brands and, Intellectual capital University of Navarra - IESE Business School, December.
19. Rudanko, L., (2011). Customer capital. Unpublished working paper. Boston University.