The Lagged Effect of Advertising Expenditures on the Financial Measures of Brand Equity in the Egyptian Context

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ABSTRACT: This research intends to fill the gap in the literature by studying the impact of lagged real advertising expenditures on different perspectives of brand equity in the Egyptian context, which are: Firm-based and Market-based brand equity. The research follows the quantitative research-based approach, with the descriptive explanatory method. Secondary data was collected from firms’ financial reports of sixteen sectors for the period 2013 - 2020 to consider the effect of real advertising expenditures on firm-based and market-based brand equity models. Data was collected from 168 listed companies in the Egyptian stock exchange market, after deleting the financial institutions. The unit of analysis was the corporate brands and data collected was panel data analyzed using Eviews program – version 10, using GLS regression. Results showed that market risk significantly moderates the relationship between advertising expenditures and Firm-based and Market-based brand equity.

KEYWORDS: Advertising Expenditures, Firm-Based Brand Equity, ROA, ROE, Market-Based Brand Equity, Tobin’s Q.

INTRODUCTION
Brand equity is one of the important intangible assets that can contribute significantly to the performance of the company, as brand equity is positively correlated with profits and return on investment, and brand equity is linked to financial benefits and investor risks. Brand equity generates loyalty and creates barriers to entry with a positive impact on sales growth. Brand value has been studied as a concept that includes brand awareness, brand experience, brand quality, brand value and brand loyalty. Brand equity can be viewed as an important mechanism for creating value for both market and firm. Therefore, a distinction must be made between market value creation – market-based brand equity (MBBE) - and Firm value creation - Firm based brand equity (FBBE) (Felício et al., 2014).

The main role of the FBBE is to determine the financial value provided by the ownership of a company’s brand. The firm based of equity is determined by defining it as “the additional cash flow that accrues to branded products in addition to the cash inflows that would result from the sale of unbranded products”. FBBE is defined as “the net cash flow attributable to the brand after paying the cost of capital invested to produce and manage the business and the cost of marketing” (Nguyen et al., 2013). Everything the organization encompasses (from infrastructure to core values) and the management it communicates serves to reinforce and explain its heritage and current practices. All the elements, such as the brand name, logo, slogan, etc., developed by the organization, and brought to market in order to form a favorable brand image, generate FBBE (Williams et al., 2014).

On the other hand, MBBE is based on an information from the economics perspective. The imperfect and unequal nature of the market introduces uncertainty in the minds of consumers. Here, brand value is an ideal way to reduce this uncertainty and information asymmetry (Nguyen et al., 2013). In this perspective, the measures focused on stock prices or brand substitution. From a market perspective, it is possible to give a monetary value to the brand which can be useful to managers in the event of a merger, acquisition or divestiture. Estimating the market value of a brand is certainly useful but it does not help marketers understand the process of building brand equity (Farjam and Hongyi, 2015).

Advertising involves paying for a large amount of information, the ultimate purpose of which is to convey information, develop markets and induce behaviors. Therefore, advertising can improve the company's environmental innovation vision. Advertising expenditure has always played an important role in strategic management and consumer behavior theory. Advertising expenditures also mitigate information asymmetries among investors, creditors, and insiders. Advertising expenditures can improve the efficiency of resource allocation in the capital market and reduce information asymmetry between the company and external stakeholders, especially investment groups. Advertising expenditures reduce the information risks faced by investors (Liao, Z., 2020).

Therefore, this research is designed to fill the gap by examining the lagged effect of real advertising expenditures on firm-based brand equity and market-based brand equity. This paper is presented in five sections, as follows: section (1) investigates the theoretical
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background of brand equity. Section (2) introduces the literature review, which discusses the relationship between advertising expenditures (AE) and different perspectives of brand equity: firm-based brand equity (FBBE), and market-based brand equity (MBBE). Section (3) discusses the research methodology and data collection technique. Section (4) introduces data analysis and findings. Section (5) includes a discussion, implications, recommendations, research limitations and conclusion.

THEORETICAL BACKGROUND

Brand equity is the value of the branded product, compared to the product itself without the brand name. The brand has an appeal to its customers, this is what is called brand value. This attractiveness goes beyond the perceived brand attributes and its marketing variables. In other words, it is the attractiveness of a high-equity brand rather than a lower-share brand, with everything else remaining constant (Datta et al., 2019). In recent research, the brand equity concept was extended to include other perspectives, which are firm and market-based brand equity (Hsu, 2018; Veloutsou et al., 2020). The two perspectives of brand equity are described in detail in the following subsections, the first sub section introduces the firm-based brand equity (FBBE), and the second sub section describes the market-based brand equity (MBBE).

Firm-based brand equity (FBBE) is linked with the financial value of the brand. Of these, Kapareliotis and Panopoulos, (2010) used the financial value of the company to assess brand equity. Isberg and Pitta (2013) acknowledged that financial analysis can provide different methods for brand managers to measure brand equity. For example, return on equity or “ROE” and return on assets “ROA” can be used by companies to obtain information on brand equity returns. Measures of financial performance were determined by Davcik et al. (2015) as directed generally short-term and non-exhaustive of brand intangible assets, as measured by brand equity, and for organizations to use only this type of brand performance evaluation may jeopardize long-term business performance. Investors are more interested in the financial implications of the concept of brand equity while manufacturers view it from the point of view of its strategic value and its applicability in pursuit of marketing goals and targeted financial goals, and retailers are mostly interested in the marketing implications of the concept of brand equity. Tobin's (1969, 1978) aims to create a (Q) measure of the relationship between investment and brand. Q has been defined as the ratio of a firm's market value to the cost of replacing its tangible assets. According to Tobin's argument, if the value of Q is greater than one, companies will invest in them as the value of the capital investment exceeds its cost, which means companies with a Q greater than one have intangible assets (Kapareliotis and Panopoulos, 2010).

Advertising is any paid form of the impersonal display and promotion of ideas, goods, and services (Keller and Kotler, 2012), Cobb-Walgreen et al. (1995) that the effect of advertising expenditure on brand equity consists of individual effects on each dimension of branding. Aaker and Jacobson (1994), Yoo et al. (2000) found that the more a brand’s advertising expenditure, the more customers have high quality and brand loyalty. This is because customers perceive the level of confidence that marketing managers have in the advertised product through their perception of the advertising expenditure of the products (Kirmani and Wright, 1989). Intense advertising expenditure sends the message that the company is investing in the brand or product and forming the perception of high quality in the mind of the customer (Aaker and Jacobson, 1994). Investing in advertising expenditures also creates brand loyalty, both directly and indirectly (Ha et al., 2011; Hameed, 2013).

Market risks are that risks resulting from adverse movements in the market value of an asset, which may be a commodity, currency, or investment instrument. These risks are sufficient if they are not properly dealt with by threatening economic institutions that seek to achieve appropriate returns that cover costs and achieve net profits. It can be said that it is a double-edged sword, for which the corporation may achieve high profits or huge losses. The degree of this risk is higher in institutions whose sales or profits are affected by the level of economic activity, especially institutions that produce industrial goods or whose business is characterized by seasonality such as airlines (Suksaroensin, 2013). Firms’ systemic risk reflects how responsive the return on their shares is to the average return on all equity movement in the market. Jindal and McAlister (2015) stated that the higher the companies’ advertisements, the fewer their systematic risks. This hypothesis is correct on the basis that advertising and equity increase the differentiation of the company's products. A company's brand equity may reduce its systemic risk by acting as a capital market information channel for the company's shareholders.

A market concentration is an endogenous response to the growth of efficient firms with a larger market share. Firms that possess superior performance such as technological or managerial skills are relatively more efficient than other firms. Being more efficient, these firms may have higher profits by maximizing returns (Ab-Rahim, 2016). The need for growth in market share and the desire to invest excess capital propels potential acquirers while lacking management succession, inability to keep pace with change, regulatory pressures, and perceived opportunity to cash out at a high price could lead potential sellers to sell (Okafor et al., 2017). Therefore, the formation of an effective market structure has a strong effect to attract and retain existing and new customers, and the market structure is a marketing tool whose effectiveness increases by expanding different ranges to reach the market and improving the quality of services in it (Richards et al., 2008). In addition, Jindal and McAlister (2015) examined the impact of advertising of the firm and its research and development
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on the systematic market risk. Firms’ advertising and research and development expenditure create intangible assets which lower their risk. In other words, the higher the firms advertising, the lower is the risk.

Based on the previous studies that were illustrated, the first hypothesis could be developed as follows:

H3: Market Risk significantly moderates the relationship between Advertising expenditures and Brand Equity.

METHODOLOGY

This paper adopts the quantitative method to identify and analyze the current gap in distinguishing between drivers and barriers to brand ownership in the Egyptian context at different levels of firm-based, and market-based brand equity. Secondary data was collected from companies listed on the Egyptian Stock Exchange for sixteen sectors (after excluding the financial sectors) for the period from 2013 to 2020. The reason for choosing this sample within the specified period is to investigate the implications of the revolutions in Egypt on the companies’ Brand Equity. The total number of listed companies in the Egyptian Stock Exchange is shown in Table 1 (Source: The Egyptian Exchange).

Table 1: Number of listed companies in the Egyptian Stock Market

| Year | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|------|------|------|------|------|
| Number of companies | 213  | 212  | 214  | 221  | 222  | 224  | 222  | 219  |

Source: Monthly Bulletin of Egyptian Exchange (www.copmas.gov.eg)

This sample is classified into 18 sectors, as shown in Table 2. The sectors shown include the financial and non-financial institutions in the bulletin of the Egyptian stock market.

Table 2: Sample Sector Classification

| No. | Sector                                           | No. of companies in the Sector | %    |
|-----|-------------------------------------------------|--------------------------------|------|
| 1   | Basic Resources                                 | 16                             | 7.31%|
| 2   | Banks                                           | 14                             | 6.39%|
| 3   | Contracting & Construction Engineering          | 11                             | 5.02%|
| 4   | Food, Beverages, and Tobacco                    | 28                             | 12.79%|
| 5   | Textile & Durables                              | 9                              | 4.11%|
| 6   | Non-bank financial services                     | 32                             | 14.61%|
| 7   | Shipping & Transportation Services              | 4                              | 1.83%|
| 8   | Health Care & Pharmaceuticals                   | 17                             | 7.76%|
| 9   | Real Estate                                     | 32                             | 14.61%|
| 10  | Building Materials                              | 13                             | 5.94%|
| 11  | Travel & Leisure                                | 16                             | 7.31%|
| 12  | Education Services                              | 3                              | 1.37%|
| 13  | IT, Media & Communication Services              | 5                              | 2.28%|
| 14  | Paper & Packaging                               | 5                              | 2.28%|
| 15  | Industrial Goods, Services and Automobiles      | 6                              | 2.74%|
| 16  | Trade & Distributors                            | 4                              | 1.83%|
| 17  | Utilities                                       | 1                              | 0.46%|
| 18  | Energy and Support Services                     | 3                              | 1.37%|
| Total|                                                | 219                            | 100.00%|

Source: Monthly Bulletin of Egyptian Exchange (https://www.egx.com.eg/en/listedstocks.aspx)
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Financial firms were excluded from the data analyzed for the current research, as they had differences in regulatory tax requirements. In addition, financial companies have reports that differ from non-financial companies (Alsaeed, 2006). Mehran et al. (2011) emphasized a significant difference between the financial and non-financial sectors, which is that the implementation of official regulations puts redemption on the financial sectors in general and the banking sector in particular (Wilson et al., 2010).

After excluding the financial companies, a research sample of 173 Egyptian companies were considered (obtained by subtracting a number of 14 banks and 32 non-bank financial services from the whole number of 219 listed Egyptian companies). The data for the listed number of 168 non-financial companies were considered for the analysis of lagged effects of real advertising expenditures on real firm-based and market-based brand equity perspectives. This number is considered after excluding companies which were not present in the Egyptian stock market for the whole period.

In this stage, data is collected through the firm’s financial reports. Firm-based brand equity is measured using return on assets (ROA) and return on equity (ROE). ROA is computed as the net income after taxes divided by total assets, while ROE is computed as the net income divided by total equity (Isberg and Pitta, 2013). Market-based brand equity is measured using Tobin's Q, which is calculated as the total market value of outstanding stocks and total liabilities divided by total assets (Bartlett and Partnoy, 2020). In addition, real advertising expenditures were obtained using the values assigned for advertising and mentioned by the companies in their financial reports. Moreover, the real market risk is computed using the coefficient (β) of the Capital Asset Pricing Model (CAPM) (Hong, 2021).

Table 3: Measurements of Research Variables

| Variable                  | Measurement | Equation | Reference                        |
|---------------------------|-------------|----------|----------------------------------|
| Firm-Based Brand Equity   | ROA         | \( \text{ROA} = \frac{NI}{TA} \) | Isberg and Pitta (2013)          |
|                           | ROE         | \( \text{ROE} = \frac{NI}{TE} \) | Isberg and Pitta (2013)          |
| Market-Based Brand Equity | Tobin’s Q   | \( \text{Tobin’s Q} = \frac{MVE + PS + DEBT}{TA} \) | Bartlett and Partnoy (2020)     |
|                           | CAPM Coefficient (β) | \( \beta_{\text{CAPM}} = \frac{\text{COV}(R_i, R_m)}{\text{VAR}(R_m)} \) | Hong (2021)                     |

RESULTS AND FINDINGS
This section introduces the empirical study with the main findings and results after running the data analysis.

Firm-based Brand Equity (FBBE) Model
In this section, the Firm-based Brand Equity (FBBE) Model is tested using secondary data for each corporate indexed in the Egyptian Stock Market for the period 2013 - 2020. Accordingly, moderation role of Market Risk between Advertising Expenditures and FBBE is investigated. Table 4 shows the result of the GLS simple regression for the first hypothesis which shows that there is a significant effect of the interaction variable between Advertising Expenditures and Market Risk on ROA, as the corresponding P-value is less than 0.05 (P-value = 0.0000).

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Table 4: GLS Pooled Regression for the Moderation role of Market Risk between Advertising Expenditures and ROA

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 0.108851    | 0.032331   | 3.366783    | 0.0008|
| LOGAE    | 0.175764    | 0.058199   | 3.366783    | 0.0002|
| AE*MR    | 0.218865    | 0.049044   | 4.384657    | 0.0000|

R-squared 0.001296
F-statistic 4.857855
Prob(F-statistic) 0.024307

The above result means that the first hypothesis is supported, which means that the alternative hypothesis is accepted revealing that there is a significant moderation role of market risk between Advertising Expenditures and ROA.

Table 5: GLS Pooled Regression for the Moderation role of Market Risk between Advertising Expenditures and ROE

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 0.255100    | 0.140101   | 1.820821    | 0.0689|
| LOGAE    | 0.331399    | 0.252198   | 2.124503    | 0.0409|
| AE*MR    | 0.340868    | 0.212526   | 2.133362    | 0.0403|

R-squared 0.101267
F-statistic 4.838743
Prob(F-statistic) 0.032484

The above result means that the hypothesis is supported, which means that the alternative hypothesis is accepted revealing that there is a significant moderation role of market risk between Advertising Expenditures and ROE. Based on the previous result, the first hypothesis “H1: Real Market Risk moderates the relationship between Real lagged Advertising Expenditures and lagged Firm-Based Brand Equity” is fully supported.

Market-based Brand Equity Model

In this section, the Market-based Brand Equity (MBBE) Model is tested using secondary data for each corporate indexed in the Egyptian Stock Market for the period 2013 - 2020. Table 6 shows the result of the GLS simple regression for the second hypothesis, where there is a significant effect of the interaction variable between Advertising Expenditures and Market Risk on Tobin’s Q, as the corresponding P-value is less than 0.05 (P-value = 0.0482).

Table 6: GLS Pooled Regression for the Moderation role of Market Risk between Advertising Expenditures and Tobin’s Q

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|-------|
| C        | 3.225212    | 0.934117   | 3.452687    | 0.0006|
| LOGAE    | 2.808624    | 1.693325   | 3.068091    | 0.0257|
| AE*MR    | 2.085722    | 1.430984   | 3.758725    | 0.0482|

R-squared 0.202101
F-statistic 3.410831
Prob(F-statistic) 0.044303

Based on the previous result, the hypothesis “Real lagged Market Risk moderates the relationship between Real lagged Advertising Expenditures and lagged Market-Based Brand Equity (MBBE)” is supported.

DISCUSSION AND CONCLUSION

This research aims at investigating the moderation role of market risk in the relationship between Advertising Expenditures and Brand Equity, it was found that there is a significant effect of the interaction variable between Market Risk and Advertising Expenditures on ROA, ROE and Tobin’s Q. Based on the previous results the third hypothesis is supported. Considering the fourth hypothesis measuring
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the moderation role of Sector in the relationship between Advertising Expenditures and Brand Equity, the Kruskal-Wallis test shows that there is a significant difference in Advertising Expenditures, Market Risk, ROA, ROE, Tobin’s Q within different sectors. The results obtained are consistent with previous studies despite the fact that most of the studies did not study the relationship assigned in a direct way, as previous studies examined the effect of real advertising expenditures on brand equity in one sector rather than others. The results provided some recommendations to the managers in the companies, these recommendations were that companies are advised to establish a strong customer relationship system in the organization to receive customer suggestions regarding the perceived quality. It is recommended that the company uses positive and attractive concepts and categories of associations so that they do not interfere with other associations and are easily associated. Managers are recommended to take appropriate practices to increase customer awareness of their brand to increase customer loyalty. Brand managers and marketing experts are suggested not to use long-term financial promotion methods in order to create a bond in the minds of consumers and to use them only at times and with the aim of creating diversity and a close positive relationship between brand buyers and their companies. The necessity of increasing the advertising spend because the primary goal of advertising is to build a positive brand image in the minds of the public. It has been recommended that strong brands focus on short-term sales to increase consumer exposure, thus restoring trust in the brand. The paper also limited its research on Egypt only as a developing country. Therefore, the researcher suggested that future research must measure the variables of the study in other developing countries. The researcher also recommends making a comparison between developed and developing countries. Finally, the researcher suggested that for future research, it is important to include more variables that may affect the brand equity and test other variables as market risk that may moderate the relation between the advertising expenditure and brand equity.

REFERENCES

1) Aaker, D.A. and Jacobson, R., 1994. The financial information content of perceived quality. *Journal of marketing research*, 31(2), pp.191-201.
2) Ab-Rahim, R. and Chiang, S.N., 2016. Market structure and performance of Malaysian banking industry. *Journal of Financial Reporting and Accounting*.
3) Buil, I., De Chernatony, L. and Martínez, E., 2013. Examining the role of advertising and sales promotions in brand equity creation. Journal of business research, 66(1), pp.115-122.
4) Cobb-Walgren, C.J., Ruble, C.A. and Donthu, N., 1995. Brand equity, brand preference, and purchase intent. *Journal of advertising*, 24(3), pp.25-40.
5) Datta, H., van Heerde, H.J., Dekimpe, M.G. and Steenkamp, J.B.E., 2019. Universality or Differences in Marketing Elasticities in Emerging versus Developed Markets? The Moderating Role of Brand Equity.
6) Davcik, N.S., Vinhas da Silva, R. and Hair, J.F., 2015. Towards a unified theory of brand equity: conceptualizations, taxonomy and avenues for future research. Journal of Product & Brand Management, 24(1), pp.3-17.
7) Farjam, S. and Hongyi, X., 2015. Reviewing the concept of brand equity and evaluating consumer-based brand equity (CBBE) models. *International Journal of Management Science and Business Administration*, 18(8), pp.14-29.
8) Felicio, J.A., Duarte, M., Caldeirinha, V. and Rodrigues, R., 2014. Franchisee-based brand equity and performance. *The Service Industries Journal*, 34(9-10), pp.757-771.
9) Gil, R.B., Andres, E.F. and Salinas, E.M., 2007. Family as a source of consumer-based brand equity. Journal of product & brand management.
10) Gutart, I.A., Gonzalez, J. and Stremersch, S., 2018. Advertising non-premium products as if they were premium: The impact of advertising up on advertising elasticity and brand equity. *International journal of research in marketing*, 35(3), pp.471-489.
11) Ha, H.Y., John, J., Janda, S. and Muthaly, S., 2011. The effects of advertising spending on brand loyalty in services. European journal of marketing, 45(4), pp.673-691.
12) Hameed, F., 2013. The effect of advertising spending on brand loyalty mediated by store image, perceived quality and customer satisfaction: A case of hypermarkets. *Asian Journal of Business Management*, 5(1), pp.181-192.
13) Hanaysha, J., 2016. The importance of social media advertisements in enhancing brand equity: A study on fast food restaurant industry in Malaysia. *International Journal of Innovation, Management and Technology*, 7(2), p.46.
14) Honka, E., Hortacșu, A. and Vitorino, M.A., 2017. Advertising, consumer awareness, and choice: Evidence from the US banking industry. *The RAND Journal of Economics*, 48(3), pp.611-646.
15) Hsu, C.L. and Chen, M.C., 2018. How gamification marketing activities motivate desirable consumer behaviors: Focusing on the role of brand love. *Computers in Human Behavior*, 88, pp.121-133.
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16) Isberg, S. and Pitta, D., 2013. Using financial analysis to assess brand equity. Journal of Product & Brand Management, 22(1), pp.65-78.
17) Jindal, N. and McAlister, L., 2015. The impacts of advertising assets and R&D assets on reducing bankruptcy risk. *Marketing Science*, 34(4), pp.555-572.
18) Kapareliotis, I. and Panopoulos, A., 2010. The determinants of brand equity: The case of Greek quoted firms. Managerial Finance, 36(3), pp.225-233.
19) Keller, K.L. and Kotler, P., 2012. Branding in B2B firms. In Handbook of business-to-business marketing. Edward Elgar Publishing.
20) Kim, Y. and Joo, J., 2013. The moderating effect of product market competition in the relationship between advertising expenditures and sales. *Journal of Applied Business Research (JABR)*, 29(4), pp.1061-1076.
21) Kirmani, A. and Wright, P., 1989. Money talks: Perceived advertising expense and expected product quality. *Journal of consumer research*, 16(3), pp.344-353.
22) Liao, Z., 2020. Is environmental innovation conducive to corporate financing? The moderating role of advertising expenditures. *Business Strategy and the Environment*, 29(3), pp.954-961.
23) Loureiro, S.M.C. and Kaufmann, H.R., 2017. Advertising and country-of-origin images as sources of brand equity and the moderating role of brand typicality. *Baltic Journal of Management*.
24) Meyer, H.M. and Ujah, N.U., 2017. Managed earnings: The negative impact of marketer’s discretionary advertising expenditures on firm performance. *Marketing Intelligence & Planning*.
25) Nguyen, T., Dadzie, C. and Davari, A., 2013. Does brand equity mean brand equity? An empirical study of consumer based brand equity and financial based brand equity. *AMA Summer Educators*, pp.344-346.
26) Okafor, K.C., Ononwah, G.C., Precious, U. and Godis, A.C., 2017. Development of arduino based iot metering system for on-demand energy monitoring. *International Journal of Mechatronics, Electrical and Computer Technology*, 7, pp.3208-3224.
27) Park, K. and Jang, S.S., 2012. Duration of advertising effect: Considering franchising in the restaurant industry. *International journal of Hospitality management*, 31(1), pp.257-265.
28) Park, K. and Jang, S.S., 2015. The cyclical effect of advertising: Is reducing restaurant advertising appropriate in periods of economic contraction?. *International Journal of Contemporary Hospitality Management*.
29) Qi, R., Cárdenas, D.A., Mou, X. and Hudson, S., 2018. The strategic value of advertising expenditures in the tourism and hospitality industry. *Tourism Economics*, 24(7), pp.872-888.
30) Richards, T.J., Acharya, R.N. and Kagan, A., 2008. Spatial competition and market power in banking. *Journal of Economics and Business*, 60(5), pp.436-454.
31) Rubera, G. and Droge, C., 2013. Technology versus design innovation's effects on sales and Tobin's Q: The moderating role of branding strategy. *Journal of Product Innovation Management*, 30(3), pp.448-464.
32) Setyawati, S.M. and Ramadhanti, W., 2019. Testing marketing expenses role on the relation between leverage and performance. *Jurnal Keuangan dan Perbankan*, 23(3), pp.469-478.
33) Sukcharoenisn, P., 2013. Time-varying market, interest rate and exchange rate risks of Thai commercial banks. *Asian academy of management Journal of Accounting and Finance*, 9(1), pp.25-45.
34) Veloutsou, C., Chatzipanagiotou, K. and Christodoulides, G., 2020. The consumer-based brand equity deconstruction and restoration process: Lessons from unlike brands. *Journal of Business Research*, 111, pp.41-51.
35) Vitorino, M.A., 2014. Understanding the effect of advertising on stock returns and firm value: Theory and evidence from a structural model. *Management Science*, 60(1), pp.227-245.
36) Wang, F. and Vaughan, L., 2014. Firm web visibility and its business value. *Internet Research*.
37) Williams Jr, R.L. and Omar, M., 2014. How branding process activities impact brand equity within Higher Education Institutions.
38) Yoo, B., Donthu, N. and Lee, S., 2000. An examination of selected marketing mix elements and brand equity. *Journal of the academy of marketing science*, 28(2), pp.195-211.