
AN INVESTIGATION ON THE EFFECT OF AD EXPENSES ON BRAND VALUE IN THE BANKING SECTOR THROUGH PANEL DATA ANALYSIS¹

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ABSTRACT

This paper aims to investigate the effect of ad expenses on brand value in the banking sector. The study was conducted based on the marketing investment approach, one of Keller and Lehmann's (2003) brand value chain model stages. In the study, banks that published their financial reports on the Public Disclosure Platform (PDP) between 2012-2021 and were in the top 100 in the Brand Finance Turkey-100 brand value ranking report in the same period were included. In this direction, data on the firms' ad expenses were obtained from the PDP, and brand values were collected from Brand Finance Turkey-100 reports. Panel Data Analysis was used to reveal the effect between ad expenses and brand value. Findings showed that ad expenses have a significant and strong positive effect on brand value.

Keywords: Banking, Ad expenses, brand value, panel data analysis.

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BANKACILIK SEKTÖRÜNDE REKLAM HARCAMALARININ MARKA DEĞERİNE ETKİSİNİN PANEL VERİ ANALİZİ ARACILIĞIYLA İNCELENMESİ

ÖZ

Bu çalışmanın amacı bankacılık sektöründe reklam harcamalarının marka değerine etkisini arařtırmaktır. Çalışma, Keller ve Lehmann'ın (2003) marka değer zinciri modeli aşamalarından biri olan pazarlama yatırımı yaklaşımı temel alınarak yapılmıştır. Çalışmaya 2012-2021 yılları arasında KAP'ta finansal raporlarını yayınlayan ve aynı dönemde Brand Finance Türkiye-100 marka değeri sıralamasında ilk 100'de yer alan bankalar dahil edilmiştir. Bu doğrultuda reklam harcamalarına ait veriler bankaların Kamuyu Aydınlatma Platformunda yer alan finansal raporlarından, marka değerlerine ait veriler ise söz konusu yıllarda yayınlanan Brand Finance Turkey-100 raporlarından elde edilmiştir. Reklam harcamaları ile marka değeri arasındaki etkiyi ortaya çıkarmak için Panel Veri Analizi kullanılmıştır. Bulgular, reklam harcamalarının marka değeri üzerinde anlamlı ve güçlü bir pozitif etkiye sahip olduğunu göstermektedir.

Anahtar kelimeler: Bankacılık, reklam harcamaları, marka değeri, panel veri analizi.

1. Introduction

Brand is a firm's most valuable asset, and firms use different tools to make their brands more valuable than their competitors (Aaker, 1991). R&D expenses (Peterson and Jeong, 2010), sales promotion (Chu and Keh, 2006), public relations efforts (Tosun, 2007) are some of these tools. Apart from these, ads are among the most frequently used tools firms use to increase their brand value (Herremans et al., 2000).

Firms use this tool to increase their brand value and spend a significant amount on ads each year. Some published reports (statista, 2023a) emphasize that ad expenses of firms are increasing year by year at the global level. The report stated that increasing ad expenses between 2000 and 2010 were over 10%. Since 2011, ad expenses growth, on average, is roughly five percent. Moreover, though there has been a decrease in ad expenses during the COVID pandemic (statista, 2023a), global ad expenses in 2022 increased by 59 billion dollars and approximately 6.5% compared to the previous year (statista, 2023b).

On the other hand, ad expenses in Turkey, as of 2021 are more than seven times compared to 2010. It is seen that the size of the sector, which was less than 10 billion TL before 2020, increased to 13 billion TL in 2020 and over 27 billion TL in 2021, an increase of approximately two times compared to the previous year (statista, 2022).

The size of the ad expenses has also attracted the attention of researchers, and studies have been carried out on the effect of ads on brand value in both international and national literature.

Herremans et al. (2000) revealed that the effect of ad expenses on some global brands' values in the Financial World list. Chaudri (2002) examined the indirect effect of ad expenses on brand value in his study. Chu and Keh (2006) investigated the effect of ad expenses on global brands' value based on Interbrand's list. Simon and Sullivan (1993) evaluated the effect of ad expenses on brand value for firms that meet certain criteria among firms listed on the stock exchange in the USA. Wang et al. (2009) discussed the effect of ad expenses on brand value in their study involving firms in a database in the USA.

In a limited number of studies conducted in Turkey, authors (Apan, 2020; Cici and Şekeroğlu, 2021; Kahraman and Gacar, 2019; Kendirli and Kakaç, 2018; Önder, 2019) mostly focused on the relationship between brand value and financial performance. As for in studies other than these, Can (2016) investigated the effect of ad expenses on brand value elements with the data obtained from consumers in the fast food sector, Poyraz and Mirgen (2020) examined the brands in the Brand Finance Turkey 100 report in general, and Tosun (2007) dealt with the topic at a conceptual level. In limited studies examining the Turkish banking sector, Divanoğlu et al. (2019) determined the financial brand values of banks operating in

Turkey and compared their results with Brand Finance reports. Also, Divanođlu and Bađcı (2022) was tackled Turkish banks' brand values on a consumer perspectives, Gnay (2021) investigated the factors affecting the brand values of the banks in the Brand Finance Turkey 100 List, and Iřık and Ay (2022) examined the effect of service quality on the brand value of banks. However, according to Brand Finance Turkey 100 reports prepared in recent years (2017; 2018; 2019; 2020; 2021) are the sector in which the banking sector has the highest brand value proportionally among the top 100 brands in Turkey. Therefore, further investigation of the sector is worth examining in terms of filling the gap in the literature.

In this context, the current study has been prepared to contribute to the literature by considering the effect of banks' ad expenses on brand values in Turkey with a longitudinal evaluation. The current study proposes to test the effect of ad expenses on brand values in the banking sector. At the end of this paper, the reader will find the answer to the following question.

RQ: Do ad investments of firms contribute to their brand values?

The paper is organized as follows: The reader will get to the theoretical background of the study in the next chapter. Then, a literature review on the study subject will be presented. Then, the data collection process steps of the study and the analysis methods used will be explained in detail, and then the findings will be presented. The study will be completed with discussion, conclusions and recommendations.

2. Theoretical background

The resource-based approach is based on the competitive advantage of a firm's valuable, rare and inimitable assets and providing above-normal returns (Barney, 1991). If the firm has an asset that is difficult to imitate relative to its competitors, it is more likely to gain an advantage over its competitors (Hunt and Morgan, 1995).

This situation is presented in the literature as the Comparative Advantage Theory of Competitive (CAToC), developed by Hunt and Morgan (1995). Criticizing the neoclassical theory of perfect competition, the theory emphasizes that marketing researchers and practitioners should avoid neoclassical discourses and practices in changing market conditions, such as the homogeneity of demand, the relatively low cost of obtaining information from consumers, and balanced competition (Hunt and Morgan, 1995).

In this context, from a marketing perspective, assets belonging to the business lead to important outputs (Morgan, 2012). Assets that are not easy to imitate, such as brands, are important tools for businesses to gain a competitive advantage (Hunt, 1999). Such tools help businesses offer their products to consumers at a lower cost and create a superior value perception by market segments (Hunt, 1999). Moreover, with such tools, businesses can achieve significant gains, such

as competitive advantage and increased financial performance in the market (Roberts and Dowling, 2002).

Hunt and Morgan (1995) stated that firms could gain a competitive advantage in the market only when the resource cost is low, and the produced value is high. Srivastava et al. (1998) stated that high brand value could help businesses at this point. As stated by Madhavaram and Hunt (2008), the intangible assets of firms, such as brand, are the heart of competitive advantage and performance in the market. Moreover, these assets act as leverage for firms to gain a competitive advantage and form the basis of differentiation (Fang et al., 2008). In the context of the theory explained above, in the next section, the relationship between brand value and ads will be mentioned.

3. Literature review

Brands are the most important assets for firms because having a valued brand ensures firms an advantage over their competitors in the market by providing higher and continuous sales. However, firms struggle to produce a positive image for their brands (Aaker, 1991). A valued brand is important for firms because the firm's identity can be transferred to the target audience more easily with the effect of the value to be created through communication with the target audience (Tosun, 2007).

Moreover, a valuable brand contributes to the improvement of the financial performance of a firm, supports the firm in competitiveness and helps the firm to focus more on marketing activities. Apan (2020) in his study, which deals with the data of Turkish deposit banks covering the years 2012-2018, reached findings showing that the brand values effect banks' financial performance. Similarly, Cici and Şekercioğlu (2021), in their study in which they examined the brand values and financial performances of the companies listed as the most valuable brands in Turkey between 2013 and 2018, found that the brand value affects the changes in financial factors such as sales and profitability. Also, the findings of the studies of Kendirli and Kakaç (2018) covering the Turkish banking sector reveal that as the brand value of the companies increases, their financial performance also increases.

Similar findings were also revealed in studies conducted outside of Turkey. For instance, Karimi et al. (2022) found that brand value positively affects the financial performance of the firms in their study, using the 21-year data of 27 companies operating in the Iran food industry. Likewise, Wang et al (2015) found that the brand values of firms strongly positively effect their financial performance in a study using data from high-tech firms in Taiwan between 2010 and 2013.

Gupta et al. (2020), in their study on retailers in the fashion industry, claimed that companies with high brand value are more competitive in the market than those with low brand value. Moreover, the findings of the study reveal that brand value has a strong positive effect on the marketing orientation of companies.

These benefits of having a valuable brand have canalized companies to seek ways to make their brands more valuable. There are several instruments that companies can utilize make their brands more valuable. At this point, ads are one of the tool firms commonly use to have a positive brand image (Ailawadi et al., 2003; Keller, 1998). Ads help firms increase their brand awareness, have positive associations for their brands, and make a relatively higher quality brand perception and brand loyalty (Frazen, 2002).

First, firms target to increase the awareness of their brands through attention-getting ads that will enable their brands to be recognized and remembered. Moreover, firms attempt to construct an identity by including brand elements in ads. Thus, the target audience can distinguish the firms' brands from the others in the market. Also, firms try to attract the attention of their target audience to their own brands through ads (Chu and Keh, 2006). In addition, firms aim to make an identity and attract the attention of the target audience, as well as associate their brands with positive features. At this point, firms can try to conceive a bond between the target audience and the brand by including emotional elements in ads. Except, firms can promise a certain level of quality for the brand by conveying the benefits of the brand to the target audience with ads. Thus, firms expect an advantage over their competitors (Frazen, 2002). With the formation of brand elements mentioned above, ads help firms to acquire loyal customers (Uță and Popescu, 2013). A mass audience is formed who are willing to pay higher prices for brands that can differentiate themselves in the market under the influence of ads. This situation also means an entry barrier for the firm's competitors considering entering the market. This helps the brand to maintain its position in the market (Mizik and Jacobson, 2003).

3.1. Relationship between ad expenses and brand value

Ad expenses are one of the items with the highest ratio among a firm's marketing expenses. As a result, firms considerably increase the budget they allocate for ad expenses to differentiate from their competitors and thus gain superiority in the market (Delgado-Ballester et al., 2012). However, previous studies on the effect of ads on brand value reveal different findings.

For example, Can (2016), in his study of fast food brands, which included 444 participants, revealed findings that ad expenses do not significantly affect the perceived quality and brand loyalty. Chu and Keh (2006) evaluated the top 100 brands between 1999 and 2005 in the Interbrand Business Week magazine. They found that though ad expenses affect brand value more than other marketing expenses and R&D expenses, it has a statistically significant negative effect. Also, Rajavi et al. (2022) found that especially informative ads have a weak effect on the brand value of firms.

On the other hand, the findings of many studies show that ad expenses have positively affected brand value. Cho et al. (2020), which included 271 participants

in South Korea, revealed that ad expenses positively affect consumers' perceptions of brand value. As a result of the study, the authors emphasized the importance of using ad activities to consumers through different channels to increase the brand values of firms. In their study, Clark et al. (2009) found that ads had a partially positive effect on consumers' perceptions of brand value. The findings of Du et al.'s (2016) study showed that ads strongly affect consumers' perceptions of brand value in a positive way. Eng and Keh (2007) reached findings showing the existence of a positive relationship between ad expenses and brand value in their study based on the Financial World's ranking. Grullon et al. (2004) exposed findings showing the existence of a positive relationship, albeit indirectly, between ad expenses and brand value. Herremans et al. (2000), in their longitudinal study using data on ad expenses and brand values of 10 global brands, divulged the existence of a high level of positive relationship between ad expenses and brand value. Moreover, the findings also showed that in some categories, the increase in brand value is proportionally higher than the ad expenses compared to the previous year. Kirmani (1990) found that the perceived cost of ads significantly affects consumers' brand value evaluations. Similarly, the findings of Kirmani and Wright (1989) showed that consumers' perceptions of ad expenses have a positive effect on their perception of brand value. The findings of Nkomo et al.'s (2017) study conducted with 300 participants in South Africa unveiled that ad expenses have a positive effect on consumers' perceptions of brand value, albeit indirectly. Peterson and Jeung (2010) took the Financial World and Interbrand Group's ranking as a basis in their study covering 1991-2007. The findings of the study (2010) showed that ad expenses positively affect brand value. Poyraz and Mirgen (2020) found that ad expenses have a significant positive effect on brand value in their study, which included 9 years (2010 – 2018) and 24 of the 100 brands in the Brand Finance Turkey report. Similarly, Tsai and Honka (2021) found that increasing ad expenses have a significant positive effect on consumers' perception of brand value. Also, Wang et al. (2009), in their study, in which they evaluated the 11-years (1996 - 2006) data of 367 firms and found that ad expenses positively affected the brand value of the firms.

Based on the findings of previous studies presented in detail above, the hypothesis of the study is expressed as follows:

H₁: Ad expenses positively affect the brand values of firms.

In the next section, the process carried out in testing the hypothesis of the study will be explained.

4. Methodology

This study focuses on the effect of ad expenses on brand value in the banking sector in Turkey. The study is based on the marketing investment approach, which Keller and Lehmann (2003) refer to as the first stage of the brand value chain and

aims to investigate the effect of ad expenses on brand value (Wang et al., 2009). In this context, in the reports prepared by Brand Finance (2017; 2018; 2019; 2020; 2021), the banks with the highest ratio in the total value of the 100 most valuable brands in Turkey in recent years are evaluated. The study sample consists of banks that publish their financial statements on the Public Disclosure Platform (PDP) and are included in the list of Turkey's most valuable brands announced in the Brand Finance reports.

In this direction, first of all, banks whose financial reports are included in the PDP were identified. During the first search, it was determined that the financial reports of 12 banks are presented on the PDP. As the reports in question are presented in quarterly periods, and the reports prepared by Brand Finance are annual, ad expenses were obtained from financial reports that provide annual data. Afterward, Turkey's Most Valuable and Powerful Brands reports prepared by Brand Finance over the years were examined to determine the brand values of the banks whose financial reports can be accessed. The earliest report available from the reports was based on 2012, and the brand values of 12 banks whose financial reports could be accessed were examined from these reports. At this point, since brand value data for all years were needed for analysis, 9 banks whose brand value was presented in all reports were included, and three banks were excluded from the sample. As a result, ten years of data belonging to 9 banks could be reached, which is the highest amount of data possible.

In the study, ads and notice expenses were evaluated as the most suitable item to be the independent variable of the study, since ad expenses were not directly included in the banks' reports. The ad expenses in the banks' financial reports were calculated in Turkish Lira and the brand values were calculated in USD. Therefore, the ad expenses were transformed into the dollar rate to standardize the data based on the Central Bank's year-end exchange rates, and then the analysis part commenced.

Panel Data Analysis (PDA) was used to achieve the aim of the study. PDA is a method that allows the use of both time series and cross sections together. In other words, PDA makes it possible to analyse the data of different time sections of different units in detail. In this context, considering the hypothesis of the study, the equation regarding the effect of ad expenses on brand value in line with the PDA is presented as follows:

$$BV = \beta_0 + \beta_1 AE_i + \varepsilon_i \quad (\text{Equation 1})$$

Where: BV symbolizes brand value, and AE symbolizes ad expenses.

Due to the nature of the PDA, some assumptions must be tested before the analysis. These tests include correlation analysis between variables, cross-section dependency test, panel unit root test, Hausman test, autocorrelation, and varying variance tests. Torres-Reyna (2007) and Baltagi (2008) emphasized that some

tests are not necessary for data covering less than 20 years. Therefore, the data of the current study were subjected to PDA after being analysed using descriptive statistics, correlation analysis between variables, a Breusch-Pagan cross-section dependency test, Pesaran's CADF test, a Hausman test, and a modified Wald variability test respectively. In the next section, after the descriptive analysis of the data, the findings of the above-mentioned analyses will be presented.

5. Findings

Ad expenses and brand values of banks by years are presented in Table 1, which shows the bank with the highest ad expense in the years covered by the study was the bank with 5 codes, followed by bank 4. The bank with the lowest ad expense is the bank with code 7. Looking at the brand values, the bank with the highest brand value over the years is the bank with code 1, followed by banks 3 and 5, respectively. Looking at the sum of brand values by years, the bank with the lowest brand value is the bank with code 7, followed by 2 and 6, respectively and with very few differences.

Table 1. Ad Expenses and Brand Values of the Banks by Years*

Banks / Years		1	2	3	4	5	6	7	8	9
2012	AE	57,359	4,019	59,562	54,710	100,492	9,635	0,772	43,836	47,333
	BV	1,582	84	1,434	859	1,569	84	44	737	1,138
2013	AE	56,767	2,414	53,782	70,206	92,533	9,887	0,690	46,046	53,517
	BV	2,121	88	1,579	1,063	2,061	109	67	829	1,117
2014	AE	46,539	3,509	47,966	62,711	94,365	8,400	0,450	32,781	58,518
	BV	1,983	102	1,364	761	1,893	111	71	842	1,099
2015	AE	49,875	4,216	62,352	58,186	98,969	6,071	0,579	34,030	53,532
	BV	2,516	139	1,953	978	2,445	126	59	725	1,393
2016	AE	36,322	5,190	50,772	47,108	61,962	2,709	0,388	26,927	32,413
	BV	1,589	71	1,529	958	1,297	107	48	739	980
2017	AE	36,013	6,158	50,765	58,324	73,482	5,068	0,523	34,215	37,725
	BV	1,579	133	1,555	806	1,252	110	68	594	951

2018	AE	22,894	4,583	39,426	36,943	44,568	4,695	0,275	34,496	25,249
	BV	1,649	103	1,584	757	1,334	136	66	622	937
2019	AE	24,135	2,334	27,737	34,962	42,380	0,837	0,247	33,174	21,083
	BV	934	60	1,344	428	1,135	41	47	396	642
2020	AE	20,247	0,871	21,487	36,338	33,603	0,642	0,144	23,635	20,439
	BV	998	83	1,538	408	951	48	54	458	876
2021	AE	16,372	0,737	18,634	37,601	27,229	1,079	0,070	21,867	13,798
	BV	917	80	1,190	421	1,193	41	34	509	836

* Ad expenses express as \$1,000, Brand Values as \$1,000,000.

Table 2 shows descriptive statistics based on the data of the study.

Table 2. Descriptive Statistics of the Study's Data

	n	Min	Max	\bar{x}	SD
AE	90	70	100,492	30,527.59	25,660.27
BV	90	34	2,516	803.79	658.04

Correlation analysis findings reveal a moderately significant relationship between independent and dependent variables ($r: .5532; p < .001$). In the study, the Breusch-Pagan LM test was used for the analysis of cross-sectional dependency. Table 3 presents Breusch-Pagan LM test results in detail. The Breusch-Pagan LM test results show that is out of question cross-sectional dependency of the study model ($\chi^2: 89,194; p < .001$).

Table 3. Breusch-Pagan's Correlation Matrix of Residuals Test Results

	1	2	3	4	5	6	7	8	9
1	1.000								
2	.4855	1.000							
3	.5018	.6925	1.000						
4	.3576	.2514	.2934	1.000					
5	.8976	.2958	.3578	.3890	1.000				
6	.7963	.6781	.4366	.3338	.5363	1.000			
7	.5918	.5825	.2946	-.0720	.3436	.7233	1.000		
8	.1777	-.0860	-.1800	.7221	.2962	.2768	-.0904	1.000	
9	.8736	.4349	.4997	.4292	.8487	.5989	.3405	.2235	1.000

After the analysis of the findings above, Pesaran’s CADF was performed to stationarity test. The analysis findings reveal the rejection of the H1 hypothesis for both variables ($p > .05$). Pesaran’s CADF results are shown in Table 4.

Table 4: Pesaran’s CADF Test Results

	CADFtest	Critical Values		
		1%	5%	10%
AE	-2.642	-3.510	-3.100	-2.870
BV	-1.746	-2.850	-2.470	-2.280

The Hausman test was carried out to determine which estimator is more suitable for the model of study. As a result of the Hausman test, which is used in PDA to determine the advanced analysis method, the H0 hypothesis was rejected, and the Random Effects Test was found to be consistent. The findings of the test are presented in Table 5.

Table 5. Hausman Test Results

Variable	Fixed Effects Model	Random Effects Model
AE	-0.021706	-0.0013761
Chi-Square		-18.84
p value		<.001
Chosen Model		Random Effects Model

Another test that should be applied before moving on to model estimations in studies on PDA is a variable variance test. It is stated in the literature that variance testing can be done with different methods. In this study, the Modified Wald Variable Variance Test was applied. Table 6 shows the results of the Modified Wald Variable Variance test.

Table 6. Modified Wald Variance Test

	Observation	Group	Time period	χ^2	p
Equality	90	9	10	255.95	<.001

Finally, the findings of the Pesaran CADF test results indicating that the data were not stationarity required a robust estimator test (Stock and Watson, 2008). Robust estimator test aims to reduce the effect of outliers by finding reliable results when the observations in the data set are not homogeneously distributed in the panel data analysis. As seen in Table 7, the findings of robust test show that ad expenses have a statistically significant positive effect on the brand values of banks. Moreover, the estimation model used in the study reveals that ad expenses alone explain the brand value of banks at a rate of .0034. In other words, 1 unit of ad expense by banks causes an increase on brand values of .0034.

Tablo 7. Robust PDA Results

Dependent Variable	Brand Value					
Period	2012-2021					
Number of Observation	90					
Number of Groups	9					
R ² :	.3061					
		Coefficients	Std. Error	z	p> z	%95 Confidence Interval
Ad Expenses		0.0034212***	0.0002138	16.00	<.001	0.0030021 0.0038404
Constant		369.4771	5.850605	63.15	<.001	358.0101 380.9441

*** p<.001

6. Discussion and Implications

This study focused the effect of ad expenses on brand value. 9 banks were included to scope of the study which are published their financial reports on the PDP and in the top 100 in the Brand Finance Turkey's brand ranking. Ad expenses data were procured from banks' financial reports while the brand values gathered from the Brand Finance Turkey. In accordance with the purpose of the study, PDA was used in the analysis of the data. The findings of the study reveal crucial implications for both theoretical and managerial.

Firstly, the findings of study expand the scope of the CAToC, which was developed by Hunt and Morgan (1995) and evaluated in different sectors and countries (Eckhart et al., 2019; Li et al., 2021; Varadarajan, 2020), through revealing that it also works in the Turkish banking sector.

Also, the findings of current study complement the studies conducted both in Turkey and in other countries and contribute to the findings of these studies. In Turkey, several studies on brand value in the banking sector focused on brand performance (Apan, 2020; Önder, 2019; Kendirli and Kakaç, 2018), while some others aimed to identify the factors affecting brand value. In this direction, for instance Günay (2021) elicited that economic added value and market added value affect the brand value of banks. Işık and Ay (2022) found that service quality has strongly positive effect on banks' brand values. Also, Kahraman and Gacar (2019), stated that the financial performance is another determinant that can use determining brand values in the banking sector.

Moreover, there are some studies in both national and international literature on the effect of ad expenses on brand value in different countries and sectors. Though there is no consensus on the relationship between these variables in the findings of previous studies, the findings of this study indicated the existence of a strong relationship between the variables. Hence, the findings concluded that the effect of ad expenses on brand value is validated empirically, at least in the banking

sector. These findings contrast with those of Can (2016) and Rajavi et al (2022), which were carried out with data obtained from consumers, which may be one of the important reasons for this difference. The fact that the findings of this study overlap with the findings of many studies conducted with data obtained from companies both in different countries (Eng and Keh, 2007; Herremans et al., 2000; Karimi et al., 2022; Peterson and Jeung, 2010; Wang et al., 2009) and in Turkey (Poyraz and Mirgen, 2020) indicates this.

The findings of both the current study and the previous studies (Cho et al., 2020; Du et al., 2016; Nkomo et al., 2017; Poyraz and Mirgen, 2020; Tsai and Honka, 2021) given above clearly show that the effect of ad expenses on brand value is independent from the sector and geographical area. Besides, based on the findings of the present study, considering the effect of advertising on brand value, it can be said that advertising is a powerful tool for managers who aim to have a valuable brand for their firms. This necessitates sector managers to show the necessary sensitivity to the issue. Managers can determine a roadmap for how they should act, taking into account the findings on the effect of ad expenses on brand value, which are clearly revealed in the study. However, as a recommendation to the managers, it is worth noting that the resources of the companies are limited (Popescu et al., 2022), and the return on ad expenses decreases after a point. Therefore, determining the optimal ad expenses is the most critical decision for managers.

As a final word, to return to the research question presented to the reader in the introduction part of the study, in sum, the advertising investments made by the firms are an important tool that contributes to the increase of brand values.

The current study focused on the causal relationship between ad expenses and brand value. Moreover, the study focused on the banking sector. Therefore, in further research, researchers can contribute to the literature by using data from different sectors in future studies. Also, due to the design of the study, evaluating the data on ad expenses as a single item, destroyed the chance of revealing which advertising channel(s) was more effective. Therefore, future studies can make a significant contribution to the literature by focusing on the ad expenses made in different channels and revealing which channel has the most impact on brand value. Moreover further research can contribute to the literature by examining the other factors affecting the brand value of companies and comparing their findings with the findings of current study.

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