

# The Effects of Advertising Expenditure on Sales in Fashion Companies

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**Abstract** *The objective of this study is to investigate the effects of advertising expenses of fashion companies on sales from a financial viewpoint. To do so, the advertising expenses and the sales of 194 manufacturing and distribution companies in the fashion industry, as per the income statements posted by the individual companies, were analyzed. The results are as follows. First, there was a statistically significant correlation between advertising expenses and sales. The higher the advertising expenses, the higher the sales. Second, there was no statistically significant differences between companies with different sizes of sales. Third, the effects of advertising expenses on sales of fashion companies were statistically significant. The higher the increase of the ratio of advertising expenses, the higher the increase of the ratio of sales, and vice versa. This study differs from others in that it uses financial data, which has been neglected in previous studies regarding the fashion industry, to analyze the relationship between advertisement and sales. It will lend help to fashion companies seeking to rationally manage advertising expenses and come up with effective advertising policies.*

**Key words** *Advertising Expenditure, Sales, Fashion Company*

## Introduction

Businesses spend a great deal on advertising to increase sales, market share, and brand awareness. In 2016, the size of the domestic advertising industry was 10,883 billion won, a growth of 1.5% from the previous year when the industry size was 10,727 billion won. In 2017, it is expected to be 11,165 billion won in 2017, up 2.6% from 2016 ("The Sum," 2017). In general, companies spend on advertising indirectly to raise corporate value by increasing sales and profits, and directly to increase corporate value through the positive effects that the advertisements may have on customers and investors (J. H. Koo, Song, & Paik, 2016). As a result, in the short term, advertising expenses are costs to increase sales, but in the long term, advertising expenses are investments to secure and retain customers (J. H. Koo et al., 2016). In particular, one long-term effect of advertising may be an increase in how positively the brand is viewed, and the formation of brand value as an intangible asset, thus leading to an increase in the

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company's market value (D. H. Kim & Park, 2002; Y. Kim, Lee, & Ryu, 2013; E. J. Lee, Paik, Shin, Jeon, & Cha, 2016).

Management would prefer to know just how effective advertisements are, in a clear and practical manner, when they seek to increase sales or market share via advertising. Therefore, many previous studies have examined the effect of advertising expenses on increases in sales or profit, and how effectively the advertising budget is executed (M. O. Kwon & Lee, 2013). In general, the impact of advertising on business performance is positive across the business spectrum (Bublitz & Ettredge, 1989; Chauvin & Hirshey, 1993; S. Y. Kwon & Lee, 1999; Yook, 2003). In particular, advertising expenses and sales have been found to have a meaningful positive correlation in many previous studies (Kellaris & Cox, 1989; Y. Kim et al., 2013; J. H. Koo, Paik, & Song, 2013; O. P. Kwon & Koh, 2009). Therefore, it is customary for many companies to allocate a certain percentage of sales towards advertising expenses, when fixing the advertising budget (Y. Kim et al., 2013; D. R. Jang & Han, 2006).

In the light of previous studies that showed that advertising expenditure has a significant effect on business performance, this study examine the current status and characteristics of advertising expenditure in companies that manufacture and sell fashion products, and the effect of advertising on business performance in fashion companies. Many previous studies have found that the effect that advertising expenses have on corporate value is different in manufacturing and non-manufacturing sectors (Doyle & Green, 1994; Ho, Keh, & Ong, 2005), and different across industries (J. H. Kim, 1997; Mo, 2013). Therefore, an analysis of the relationship between advertising expenses and business performance in fashion industry would prove useful in identifying the characteristics of fashion companies.

This study equates advertising expense with advertising and public relations expense (hereafter referred to as advertising expense) in income statements, a type of financial statement. It also equates business performance with sales, which has been used as an indicator of performance in many previous studies. Advertising and public relations expense is an item included in the sales and management expenses of the income statement, and refers to expenses of a company that is expended to gain advertisement effects towards an unspecified number of people in order to promote sales of goods, products and services, or to increase supply. Specifically, this includes advertising fees for newspaper and magazine advertisements, radio and television broadcasting fees, billboards and subway ads, samples and prototypes and exhibits, and consumables for presentation (Y. W. Lee & Choi, 2013). This study's analysis of the present condition of advertising expenditure in fashion companies and its impact on business performance, as based on the financial data, can be used in the future as baseline data for fashion companies when fixing advertising budgets that conform to their needs and executing them in a manner that contributes to increases in sales and profit.

### ***Theoretical Background***

The majority of previous studies on advertising expenditure in the accounting and finance sector have been studies that verified the effect of advertising expenditure on business performance (Chauvin &

Hirshey, 1993; M. O. Kwon & Lee, 2013; O. P. Kwon & Koh, 2009; S. Y. Kwon & Lee, 1999; E. J. Lee et al., 2016; K. L. Park, 2006; Sidhanta & Charkrabarty, 2010; Yook, 2003), or studies on the determinants of advertising expenditure (Chong & Koo, 2011; K. S. Kim & Song, 2003; J. H. Koo et al., 2016; O. P. Kwon & Koh, 2009).

Since 1970s, there have been many studies that analyzed the extent to which advertising contributed to sales growth and corporate profits, and how effectively it was executed (M. O. Kwon & Lee, 2013). In the studies that analyzed the relationship between advertising and business performance, advertising expenses were commonly measured as the level of advertising expenses or the rate of change in advertising expenses in the current period. Business performance was measured by financial performance such as sales, operating profit, net profit, market share, or brand recognition (J. H. Koo et al., 2016). A sizeable portion of these studies have focused on the relationship between advertising and sales. Though advertising expenditure and sales were found to have a meaningful positive correlation in most studies (J. H. Koo et al., 2016; O. P. Kwon & Koh, 2009; K. L. Park, 1998), some studies have shown different results depending on industry, economic condition, stage of the life cycle of the company, and company size (E. J. Lee et al., 2016).

An example of this would be J. H. Kim's (1997) analysis of 38 companies, in the 1993~1995 period, where the coefficient of determination of advertising expenditure were found to be higher in the pharmaceutical industry, in comparison to the food and beverage industry. According to Ha and Lee's (2011) analysis of 49 domestic companies that spent more than 10 billion won in advertising expenses in 2009, there was no meaningful difference in the effectiveness of advertising expenditure on sales between manufacturing and non-manufacturing industries. Mo's (2013) analysis of 14 industries, from 2005 to 2010, found that advertising expenditure did not lead to sales growth in the domestic, light, and low technology industries, and industries related to daily life. However, in the case of high technology, heavy, basic materials, and information communication service industries, sales increased by a steeper percentage than the advertising expenses, and in particular, the information communication service industry benefitted greatly from advertising. C. W. Park's (2016) analysis by industry group from 2003 to 2012 found that in general, advertising expenses were positively related to business performance and corporate value in consumer-related industries in areas such as food manufacturing, apparel manufacturing, pharmaceutical, sports and leisure, and information services, while the effects were not significant or negative (-) in the construction industry, non-metal mineral product manufacturing industry, and electrical equipment manufacturing industry.

In D. M. Kim, Lee, Lee and Ha's (2016) study on 142 companies, from 2006 to 2014, which analyzed the relationship between advertising expenses and sales according to economic conditions, advertising expenses did not lead to an increase in sales after 2009~2010, after the beginning of the financial crisis. In addition, in a study by S. R. Lee (2016) on 2,617 companies from 1993 to 2013, which analyzed the relationship between advertising expenses and business performance according to the life cycle stage of the company, the impact that advertising expenses had on financial performance (total operating profit margin, the ratio of operating profit to the net sales) were greater during the initial stages of the

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company's life cycle, the startup phase. Y. Kim et al. (2013), in an analysis of 217 manufacturing companies from 2000 to 2011, found no statistically meaningful difference according to company size, but in J. H. Lee and Chun (2011), the proportion of advertising expenditure to sales was found to be significantly higher for companies with large assets. J. H. Koo et al. (2016) also found that advertising expenditure as a percentage of sales was higher in larger companies, and in companies with higher growth potential. Cho and Ryu's (2006) study of 515 companies from 1996 to 2002, which analyzed the impact of advertising expenses on corporate profit depending on whether the company brand was established, found that in companies with established brands, advertising expenditure had a positive (+) correlation to corporate profit (ordinary income), while in companies without established brands, it had a negative (-) correlation.

While many studies on advertising expenditure focus on analyzing the effects of advertising expenditure, relatively few studies have analyzed the determinants of advertising expenditure (J. H. Koo et al., 2016), and these studies looked at various different factors. One related study is K. S. Kim and Song's (2003) analysis of 7 industry sectors from 1981 to 2000, which found that current period's advertising expenses were largely influenced by the previous period's advertising expenses. J. H. Koo et al.'s (2016) analysis of 4,158 companies from 1999 to 2010 also found that current period's advertising expenses were most influenced by last period's advertising expenses, among a variety of financial factors such as the last period's advertising expenses, the company size, the capital structure of the company, etc. In addition, depending on the continuity of the sales increase, if the sales increased continuously, advertising expenditure was found to be influenced by the previous period's advertising expenses and company size, but if the sales decreased continuously, advertising expenses had a positive (+) correlation with last period's advertising expenses. According to an analysis by Chong and Koo (2011) on 16 service industry companies from 2005 to 2008, the ratio of advertising expenses to sales in the current period had a meaningful positive correlation to the ratio of advertising expenses to sales in the previous period, thus confirming that companies take into consideration the advertising expenses of the previous period when determining the advertising-to-sales ratio. O. P. Kwon and Koh's (2009) analysis of 8 major companies from 1980 to 2006 found that, in determining advertising expenditure, sales had a greater coefficient of determination than operating profit, and the economic condition of the country had a greater effect on changes in advertising expenses than sales did.

### ***Research Methods***

#### **Research questions**

This study set up the following research problems to investigate the characteristics of advertisement expenditure and the effect that advertising expenditure has on sales in fashion companies.

Research question 1. Examine the current status of the advertising expenditure and the characteristics of advertising-to-sales ratio in fashion companies

Research question 2. Examine the impact of advertising expenditure on sales in fashion companies

### Data collection and analysis

To investigate the effect of advertising expenditure on sales in fashion companies, in this study we made use of advertising and public relations expenses and sales figures from income statements posted in Repository of Korea's Corporate Filings operated by Financial Supervisory Service (<http://dart.fss.or.kr>). We chose 194 fashion companies (142 clothing companies, 31 fashion accessory companies, and 21 fashion retailing companies), classified as clothing, accessory, and fur-goods manufacturing and retailing companies in the aforementioned system. Sales, advertising expenses, and the advertising-to-sales ratio (ASR), the values being an average taken of 2014 and 2015 data, were presented down to the third decimal point. Table 1 shows a distribution of the sales amount in the fashion industry, with 52.6% of companies recording sale below 50 billion won, 19.1% between 50 to 100 billion won, 17.5% between 100 to 200 billion won, and 9.8% above 200 billion won. For statistical analyses between sales and advertising expenses, ANOVA analysis, correlation analyses, T-test,  $\chi^2$  analysis and regression analyses were performed using SPSS for Windows 20.0. Effect of advertising expenditures on sales was investigated via a regression analysis, employing ratio of change of advertising expenditure between 2014 and 2015 ( $[(2015 \text{ advertising expenses} - 2014 \text{ advertising expenses}) / (2014 \text{ advertising expenses}) * 100]$ ) as an independent variable, and the sales change ratio ( $[(2015 \text{ sales} - 2014 \text{ sales}) / (2014 \text{ sales}) * 100]$ ) as a dependent variable, based on previous studies of Y. Kim et al. (2016), Mo (2013), and K. L. Park (2006).

**Table 1.**  
Sales of subjected fashion companies

Sales (Korean Won)	n	%
Under 10 billion	10	5.2
10 ~ less than 50 billion	94	48.4
50 ~ less than 100 billion	37	19.1
100 ~ less than 200 billion	34	17.5
200 ~ less than 500 billion	12	6.2
Over 500 billion	7	3.6
Total	194	100.0

### Results and Discussion

#### The current status of the advertising expenditure and the characteristics of advertising-to-sales ratio in fashion companies

In order to identify the relationship between advertising expenditure and sales of fashion companies, we looked at the annual advertising expenditure of fashion companies. Annual advertising expenditure of fashion companies ranged from below 50 million won to above 10 billion won, as shown in Table 2.

The advertising expenditure range for the highest number of companies was the 1~5 billion won range, accounting for 29.4% of companies, followed by 100~500 million won range, accounting for 21.1% of companies, and below 100 million won range, accounting for 21.1% of companies. Table 3 shows a  $\chi^2$  analysis result, indicating that there is a statistically significant dependence of advertisement expenditures on sales amount. Additional analysis of the correlation between sales and advertisement expenditures, whose results are shown in Table 4, yields the correlation coefficient 0.803 (O. P. Kwon & Koh, 2009). This significant correlation is also consistent with previous studies J. H. Koo et al. (2013) and Y. Kim et al. (2013).

**Table 2.**  
Advertising expenditure distribution of fashion companies

Advertising expenditure (Korean Won)	n	%
Under 50 million	25	12.9
50~less than 100 million	16	8.2
100~less than 500 million	55	28.4
500 million~less than 1 billion	25	12.9
1~less than 5 billion	57	29.4
5~less than 10 billion	11	5.7
Over 10 billion	5	2.6
Total	194	100.0

**Table 3.**  
 $\chi^2$  analysis result of sales and advertising expenditure in fashion companies

Sales \ Advertising expenditure	Under 100 million		100~less than 500 million		500 million~less than 1 billion		1~less than 5 billion		Over 5 billion		Total		$\chi^2$
	n	%	n	%	n	%	n	%	n	%	n	%	
Under 50 billion	33 <sup>a</sup> (22.0 <sup>b</sup> )	31.7 80.5	45 (29.5)	43.3 81.8	14 (13.4)	13.5 56.0	12 (30.6)	11.5 21.1	0 (8.6)	-	104	100.0	134.386 ***
50~less than 100 billion	5 (7.8)	13.5 12.2	8 (10.5)	21.6 14.5	10 (4.8)	27.1 40.0	14 (10.9)	37.8 24.6	0 (3.1)	-	37	100.0	
100~less than 200 billion	2 (7.2)	5.9 4.9	2 (9.6)	5.9 3.7	1 (4.4)	2.9 4.0	23 (10.0)	67.6 40.4	6 (2.8)	17.6 37.5	34	100.0	
Over 200 billion	1 (4.0)	5.3 2.4	0 (5.4)	-	0 (2.4)	-	8 (5.6)	42.1 14.0	10 (1.6)	52.6 62.5	19	100.0	
Total	41	100.0	55	100.0	25	100.0	57	100.0	16	100.0			

<sup>a</sup>: Observed frequency, <sup>b</sup>: Expected frequency

\*\*\* $p < .001$

**Table 4.**  
Correlation between sales and advertising expenditure in fashion companies

Detail		Sales	Advertising expenditure
Sales	Pearson's correlation coefficient	1	.803***
	Probability of significance (two-tailed)		.000
	n	194	194

\*\*\* $p < .001$

Table 5 shows the ASR data, where the average ASR is shown to be 1.673%. This value is higher than the value reported in previous studies: 0.8 ~ 1.02% from K. L. Park (1998) on manufacturing industry from 1986 to 1987 (0.8 ~ 1.02%), 0.9% from a study on 6,517 companies from 1998 to 2009 by Jung, Ahn, & Choi (2012), 0.94% from another study on 583 companies from 2001 to 2012 by J. G. Jang (2014), and 0.9~1.3% from J. H. Koo et al. (2016) on all industries from 1999 to 2010. Our result is similar to the values from O. P. Kwon and Koh (2009), whose analysis of 8 major domestic companies yielded an ASR of 1.5%~1.8%. This comparison indicates that the ASR of fashion companies is higher than the average ASR of all industries including manufacturing industries.

A closer look at the ASR data shows that, 85% of fashion companies spend less than 3% of their sales on advertising. The ASR of 40.2% of fashion companies was in the 1~3% range, 19.6% in the 0.1~0.5% range, 17.0% in the 0.5~1.0% range, and 8.2% less than 0.1%. In Table 5, a cross analysis between sales and ASR indicates that there was no statistically significant dependence between ASR and sales. The ASR of fashion companies with sales below 5 billion won was 1.505%, very similar to the ASR of fashion companies with sales in the 5 billion to 10 billion won range, which was 1.503%. However, the average ASR of companies that exceeded 10 billion won in sales was 2.124%, higher than the ASR of smaller companies.

**Table 5.**  
Ratio of advertising expenditure to sales (ASR) in fashion companies

Ratio of advertising expenditure to sales (%)			Ratio of advertising expenditure to sales according to sales		
Classification	n	%	Sales (Korean Won)	Ratio of advertising expenditure to sales (%)	F-value
under 0.1%	16	8.2	Under 50 billion	1.505	2.247
0.1 ~ less than 0.5%	38	19.6			
0.5 ~ less than 1.0%	33	17.0	50 ~ less than 100 billion	1.503	
1.0 ~ less than 3.0%	78	40.2			
3.0 ~ less than 5.0%	17	8.8	Over 100 billion	2.124	
Over 5.0%	12	6.2			
Total	194	100.0	Total	1.673	

### Effect of advertising expenditure on sales

Here we discuss the effect of advertising expenditure on sales. Results of a regression analysis tabulated in Table 6 shows that there is a significant dependence of sales on ASR; increase in ASR results in sales increase, and vice versa. This result supports the findings of Lou and Donthu (2001), that significant shifts in sales in conjunction with ASR shifts indicated the effectiveness of advertising expenditure on increasing sales. In addition, our result is also similar to the result of K. L. Park (1998) on manufacturing industries, where 0.115 of regression coefficient and 9.1% of coefficient of determination ( $R^2$ ) were obtained for fiber/clothing/fur industries. K. L. Park (1998) noted that the study included many manufacturing industries that refined raw materials such as fiber and leather, and speculated that the effectiveness of advertising expenditure would be greater when considering only companies that dealt in distribution and sales of clothing. This prediction is consistent with our result, where 0.661 of regression coefficient and 43.7% of  $R^2$  value were obtained. From this observation it can be deduced that advertising expenditure yields a greater effect in fashion manufacturing and distribution industries in comparison to other manufacturing industries.

**Table 6.**  
Effects of advertising expenditure on sales

Independent variable	$\beta$	t-value	F-value	$R^2$	Adjusted $R^2$
Advertising expenditure	0.661	12.218***	149.272***	0.437	0.434

\*\*\* $p < .001$

Table 7 indicates that there was no significant correlation between sales growth and growth rate of advertising expenditure. This differs from the results obtained by K. L. Park (1998), where 125 companies in four industries (food & beverages, fiber/clothing/fur, pharmaceutical/chemistry/petroleum/coal/latex, and machinery/assembly/equipment/metal) were studied, finding a positive correlation between sales growth and growth rate of advertising expenditure.

**Table 7.**  
Sales according to the growth rate of advertising expenditure

Growth rate of advertising expenditure		Average growth rate of advertising expenditure(%)	Average sales (Korean Won)	F-value
In case of advertising expenditure increase (n=81)	Group 1(under 20%)	9.1	119,568,009,409	0.515
	Group 2(20~less than 50%)	33.3	112,191,664,675	
	Group 3(over 50%)	85.7	69,228,620,855	
In case of advertising expenditure decrease (n=113)	Group 4((under -20%)	-10.9	115,655,020,445	1.816
	Group 5(-20~less than -50%)	-34.8	85,128,945,531	
	Group 6(over -50%)	-67.3	55,533,167,003	



An analysis on two groups of companies, one group composed of 57 companies that saw an increase in advertising expenses and sales, and the other composed of 67 companies that saw a decrease in advertising expenses and sales, shows that their ASR was statistically significantly different. Table 8 shows the result, where the averaged ASR for the companies that saw an increase in advertising expenses and sales was 2.057%, while the averaged ASR for the companies that saw a decrease in advertising expenses and sales was 1.587%, the former showing a higher ASR than the latter.

**Table 8.** ASR of companies that shows the effect of advertising expenditure on sales

Companies that saw an increase in advertising expenses and sales	Companies that saw a decrease in advertising expenses and sales	t-value
2.057	1.587	1.439***

(%)

\*\*\* $p < .001$

### Conclusions

Advertising promotes consumer buying, not only by directly promoting products, but also by increasing brand awareness and improving customer attitude towards the brand. Because of this effect, fashion companies establish and execute a high advertising budget every year in order to increase sales and cultivate a positive awareness and image of the brand. The purpose of this study is to identify the characteristics of advertising expenditure in fashion companies, with the aim of identifying the effect of advertising expenditure on sales from a financial perspective, which has hitherto been neglected in studies of fashion companies. To this end, we analyzed 194 companies that manufactured and distributed fashion products, using advertising and public relations expense data and sales data in the income statement disclosed by companies. The results are as follows.

First, the annual advertising expenditure of fashion companies varied greatly, ranging from below 50 million won to over 10 billion won, with 49.5% of companies spending less than five hundred million won, 12.9% five hundred million to one billion won, 29.4% one billion to five billion won, and 8.3% more than five billion won. Second, there was a statistically significant correlation between advertising expenses and sales. The higher the advertising expenses, the higher the sales. Third, advertising expenses took up on average 1.673% of the sales, higher than the ratio indicated by previous studies that investigated all industries including manufacturing industries, and there was no statistically significant differences between companies with different sizes of sales. Fourth, the effects of advertising expenses on sales of fashion companies were statistically significant. The higher the increase of the ratio of advertising expenses, the higher the increase of the ratio of sales, and vice versa. Fifth, sales were not correlated with increasing or decreasing rate of advertising expenses, and the ratio of advertising expenses of companies whose sales increased as a result of increased advertising expenses were found to be higher

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than the ratio of advertising expenses of companies whose decrease in advertising expenses led to decrease in sales.

Based on these results, we discuss the characteristics of advertising expenditure of fashion companies as follows. First, as indicated by this study, advertising expenditure has an obvious effect on sales revenue, which in turn represents business performance, in fashion companies. This effect were found to be particularly greater in fashion companies, as compared to the effect on all industries including manufacturing industries, as analyzed by previous studies. This backs up O. P. Kwon and Koh's (2009) claim that advertising expenditure in fashion industry strongly had the characteristic of upfront investment, because in the case of fashion products that were manufactured and distributed by fashion industries, advertising expenditure had a direct influence on consumer buying. Second, advertising expenditure of fashion companies took up 1.673% of sales, which was higher than the 1% of all industries including manufacturing industries, and the percentage was slightly higher in companies whose sales exceeded 100 billion won in comparison to smaller companies. However, considering that there was no significant difference in advertisement-to-sales ratio according to sales revenue, a company that pursues sales growth or finds indicators of future sales growth may need to increase its annual advertising budget to reflect the effect of advertisement on sales. In addition, as there is a static correlation between advertising expenditure and sales, fashion companies may need to analyze their previous data on sales and advertising expenditure, and review how appropriately their advertising budget had been executed, and seek to spend advertising expenses in such a way as to contribute to future sales growth.

Advertising expenditure is an item that could be adjusted at the discretion of the management, in response to various conditions such as the financial condition of the company, intensity of the competition in the industry, growth target, the current economic condition of the society, etc. Management should control the extent of advertising expenditure so as not to decrease profitability by having a higher advertising expenditure than the increase in sales that it engenders, and in cases where growth potential is high, it is necessary to actively advertise in order to raise brand and product awareness and secure the market (Sidhanta & Charkrabarty, 2010). Therefore, further research is needed on determinants of advertising expenditure that the management of fashion companies should consider when fixing the advertising budget. Although research on the determinants of advertising expenditure have been carried out in various previous studies, it is necessary to identify the determinants of advertising expenditure that is specific to the fashion industry, so that they can be applied to advertisements by fashion companies.

The majority of previous studies that involved advertising in the fashion industry were focused on the effect of advertisements on consumers (brand rating, attitude, intention of purchase, etc.), the expression style and semantic analysis of advertisements that have been proposed by companies, advertising strategies for companies, et cetera. Seeing as many companies, including fashion companies, are usually reluctant to publicly disclose their advertising expenditure, this study is meaningful in that it supplements the research that have been conducted so far on advertisements in the fashion sector by analyzing the relationship between advertising expenditure and sales as indicated in corporate disclosure data.

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