The Effect of Advertising Expenses on the Financial Performance of Indian Listed BSE Sensex Companies

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Abstract
This has been a long debate among academicians and experts whether advertising expenses(including marketing, promotion, and brand building expenses) have direct relationship with financial performance of the firm or not. Many experts who believe in the positive relation among these, have opinion that advertising and promotional expenses should belong to long term expenses as they tend to influence company's financial performance. This paper primarily investigates the relationship between advertising expense (advertising and promotional expenses) and financial performance of large listed companies at Bombay Stock Exchange (BSE). For this a sample of Sensex 30 companies was collected for a period of 3 years (2018-20) and analysed with the help of regression model. The collected samples belong to diversified sector and most of these are market leaders of their respective sectors, Thus, we can also say that this paper successfully captures the relationship of market leading firms as well. On the basis of the findings of the regression models, The Research indicates a strong and positive relationship between advertising expenses and revenues of BSE Sensex 30 companies. Income of the companies was also found to be significantly correlated to advertising expenses.

Introduction

India has a population of 289 million Urban areas and 182 million in Rural areas which is a large user base. It provides an enormous potential for companies to advertise themselves by various media. Industries such as FMCG, Durable, E-Comm., Automobiles, Banking, Telecom, and many others spend heavily on adverting and promotions. Media agencies Group-M and Zenith reported in 2019 that "India would be among the top advertising markets in the world in next couple of years. It projected a 12-13 per cent growth rate for the local advertising market in 2020, in line with 2019, taking its overall size to nearly Rs 95,000 crore."

According to Quartz India's report, in the year 2018, HUL had the highest budget of Rs. 3100+ for advertising, followed by Reckitt Benckiser, P&G and Amazon with 700 to 850 crore rupees. The following table indicate that large companies normally carry a significant budget for advertising and promotions.

Figure 1: Estimated India advertising market 2020
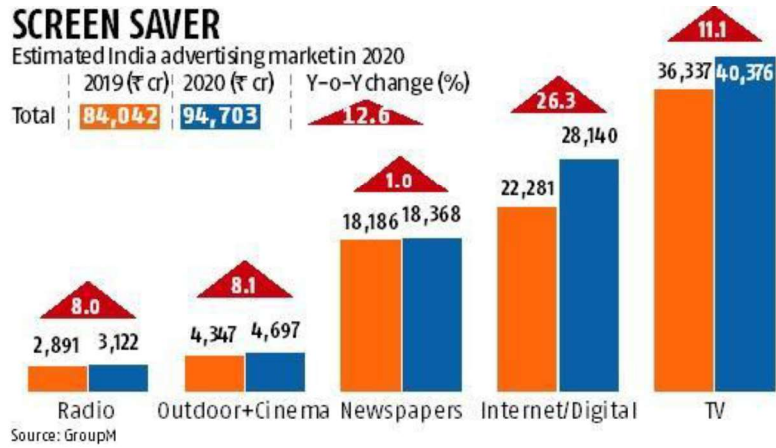
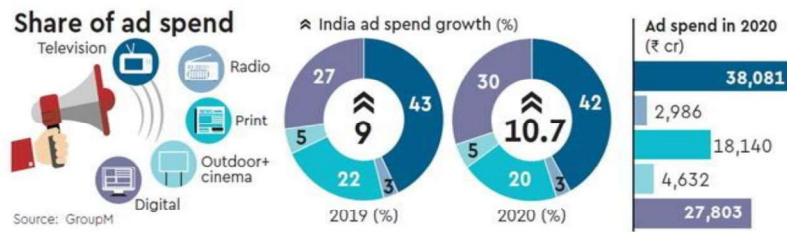
Source: GroupM (www.groupm.com)

Figure 2: Indian Companies' Advertising Budgets 2018
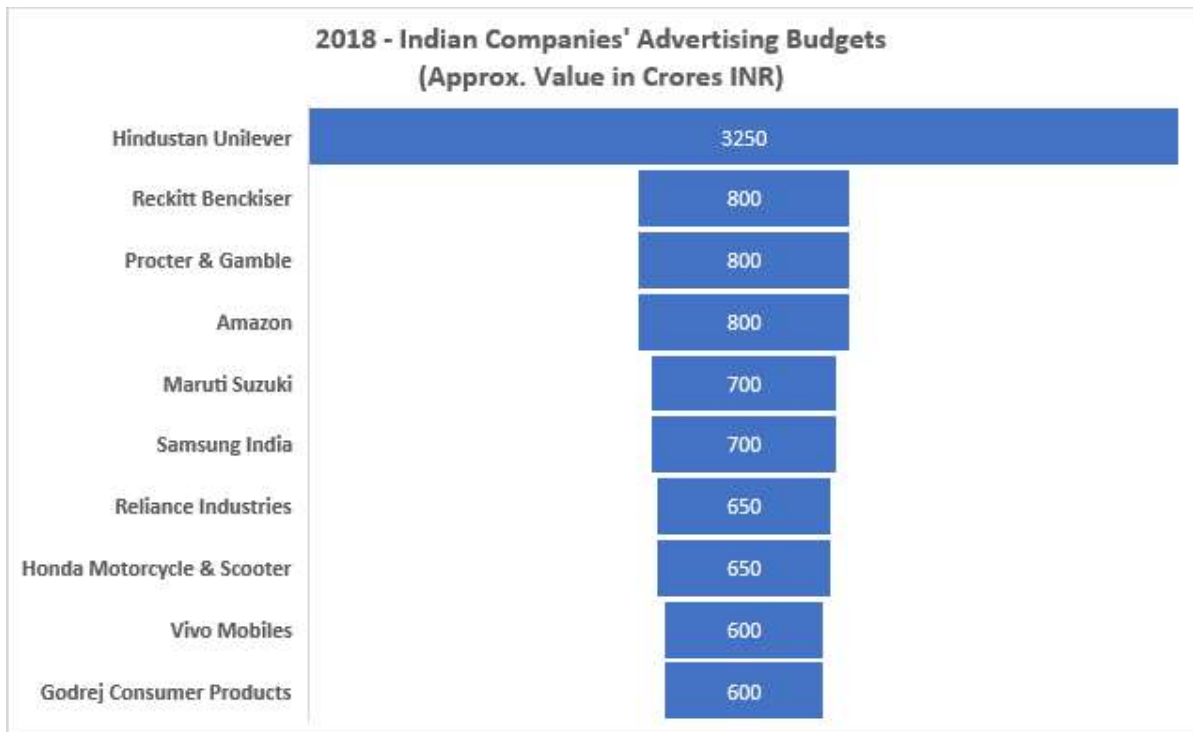
Source: Quartz India – www.qz.com

Television, Radio, Print, Outdoor and Digital (online) are some of the most popular forms of advertising. With revolution of smartphones and internet, the digital media is rapidly increasing in the country.

Figure 3: Share of advertising spend 2020

Source: GroupM (www.groupm.com)

It is important to notice that the contribution of digital media has increased significantly in last couple of years. As per a report by DAN and exchange4media, "Digital ad spends currently stand at ₹13,683 crore and are expected to grow at 27% to touch ₹17,377 crore in 2020. The majority of these spends will go on social media platforms, followed by paid search, online video and display media."

Literature Review

As per available literature, the relationship among advertising, promotions and company's financial performance has attracted significant consideration of researchers through years since marketing experts advised the companies to create value through advertising and promotions. A series of publications indicate that companies strongly believe that advertising and revenues of companies are interconnected, and it also leads to value creation for investors. Advertisers mainly focus on creating product or services awareness through advertising and it leads to increased sales (Abbott, 1997 and Doyle, 2000).

Some of the other studies such as Abdel-Khalik, 1975; Andras & Srinivasan, 2003; Graham & Franken berger, 2000; Hirschey & Weygandt, 1985; Palda, 1965; Paton & Williams, 1999; suggest similar relationship with varied research models based on revenues, return on stocks and profits. The study by Shah et al. (2009) also concluded that the advertising has a substantial impact on sales and companies can achieve higher sales with high expenditure on advertising. He conducted his study of listed companies from Karachi Stock Exchange of Pakistan and argued that it leads to creation of firm's value. On the other hand, there are several studies which also argue the opposite relationship. These studies indicate that companies tend to increase advertising expenses when there is increase in sales (Blattberg & Jeuland, 1981; Lilien & Little, 1976; Tsai & Wang, 2005). Many firms follow "percentage of sales" rule.

Since 1980s, several studies examined the relationship between advertising and market value of the companies (Andras & Srinivasan, 2003; Han & Manry, 2004; Hirschey & Weygandt, 1985; Graham & Franken berger, 2000; Srinivasan et al., 2011; Grullon et al., 2004). The outcomes of the mentioned researches suggest: the companies achieve higher brand visibility and awareness in the market, investors see these companies as a safer investment and hence the share price and value of firms increase.

Singh et al., 2005, also studied the effect of advertising on the cost of capital. It suggests that superior advertising increases awareness among investors and consumers. This leads to higher demand of company shares in stock market and as a result the cost of equity decreases. Studies of Mann et al. (1967); Lapp (1976); Ors (2006); Scott, 1978 also indicate similar positive relationship between advertising and financial performance. While some (Edwards, 1973; Kohers & Simpson, 1981) have reported a negative or insignificant (Edwards, 1976; Wolken & Derrick, 1986) relationship.

Research Methodology

The main objective of current study is to examine the relationship between advertising & promotion expenses with financial performance of BSE listed 30 large companies which form the BSE Sensex index. As currently, the world is going through Covid-19 pandemic, which is an exclusive event, mostly data to establish relationship belong to 2017-2019. As per the literature available, to establish the relation, researchers have chosen three key variables for the selected sample companies.

1. Advertising Expenses (Y): This is the total expenditure of the companies spent on various types of advertising and promotion activities.

2. Total Revenues (x1): This represent the total sales of the companies during a financial year.

3. Total Income (x2): This refers to after tax net profit of the company.

4. Earnings Per Share (x3): As the sampled companies are listed, we included earnings per share as one of the benchmarks which is Total Net Profit to equity shareholders divided by number of shares outstanding.

$$Y = b0 + b1\ x1 + b0 + b1\ x2 + b0 + b1\ x3 \qquad\qquad (1)$$

Multiple bivariate regressions were run through SPSS to study the relationship among the selected variables. The data on financial permanence and various advertising expenses was sourced from perspective companies' annual reports, Bombay Stock Exchange and SEBI Websites.

Results and Discussion

The data suggests a considerable variance inters of expenses and revenues. Although, Sensex 30 companies are blue chips, but their advertising expenses vary from as low as 23 crores and as high as 2223 crores on an average. The mean advertising expenses for the selected period was 262.94 crores. It was observed that FMCG, Automobile and Banking Companies are heavily spending on advertising and promotions. Whereas IT companies rely least on promotions.

Table 1: Descriptive Statics

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Advertising Expenses	90	23	2223	262.94	360.327
Revenues	90	78	596554	78822.25	106924.280
Income	90	-321	39588	8404.16	10410.771
EPS	90	-63	256	56.38	65.416
Valid N (listwise)	90				

Source: Author calculation

Relationship between Advertising Expenses and Revenues of the companies:

Experts believe that advertising expenses has direct relationship with revenue generation abilities of the companies. More number of advertisements on popular medium can ensure higher consumer awareness and hence can lead to more purchase from consumers. When researcher tested the same with Sensex-30 companies, the model for establishing relationship between Advertising Expenses and Revenues has the Adjusted R Square value of .667 which means that 66.7% percent of variations can be explained by the model. This range of variation explanation can be considered as a good percentage to accept the model for explanting the relationship.

Table 2: Model Summary - Relationship between Advertising Expenses and Revenues of the companies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.819ᵃ	.671	.667	61661.569

a. Predictors: (Constant), ADEX

Source: Author calculation

On the other hand, Analysis of Variance (ANOVA) suggests that the overall model explaining the relationship between adverting expenses and revenues of the companies is fit as the significance value is less than the P value of 0.05%.

Table 3: Analysis of Variance - Relationship between Advertising Expenses and Revenues of the companies

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	682930235725.059	1	682930235725.059	179.617	.000ᵇ
	Residual	334589118182.970	88	3802149070.261		
	Total	1017519353908.030	89			

a. Dependent Variable: REV
b. Predictors: (Constant), ADEX

Source: Author calculation

Table 4: Coefficients - Relationship between Advertising Expenses and Revenues of the companies

Coefficients ᵃ

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14899.178	8061.973		1.848	.068
	ADEX	243.106	18.139	.819	13.402	.000

a. Dependent Variable: REV

Source: Author calculation

The coefficient significance value for Revenues as dependent variable and Advertising expenses as independent variable found significant with positive relationship. Hence, we can

say that Advertising Expenses and Revenues are positively correlated with each other. Higher advertising expenses can lead towards higher revenues of the companies.

Relationship between Advertising Expenses and Income of the companies:

The literature has some difference of opinion on the relationship between advertising expenses and Income of the companies. Some experts believe that a moderate adverting budget can have positive impact on companies' income whereas a very high advertising budget may have higher revenues but may have adverse impact on the net income of the companies. Therefore, it was necessary to test this relationship.

Model for establishing relationship between Advertising Expenses and Income suggests the Adjusted R Square value of .324 which means that 32.4% percent of variations can be explained by the model which is a fair to low percentage to accept the model. Therefore, the findings of this relationship model cannot be easily generalised with higher level of confidence. This actually indicate and confirm the difference of opinion among experts.

Table 5: Model Summary - Relationship between Advertising Expenses and Income of the companies

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.575ᵃ	.331	.324	8562.259

a. Predictors: (Constant), ADEX

Source: Author calculation

The overall model explaining the relationship between adverting expenses and income of the companies is fit as the significance value is less than the P value of 0.05%. This means that overall model is significant.

Table 6: Analysis of Variance - Relationship between Advertising Expenses and Income of the companies

ANOVAᵃ

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3194708057.231	1	3194708057.231	43.577	.000ᵇ
	Residual	6451481197.653	88	73312286.337		
	Total	9646189254.884	89			

a. Dependent Variable: INC
b. Predictors: (Constant), ADEX

Source: Author calculation

Table 7: Coefficients - Relationship between Advertising Expenses and Income of the companies

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4032.106	1119.477		3.602	.001
	ADEX	16.627	2.519	.575	6.601	.000

a. Dependent Variable: INC

Source: Author calculation

Thus the overall finding of this model suggest that there is significant with positive relationship between advertising expenses and income of the companies but due to lower Adjusted R Square value of 0.324, we can conclude with high level of confidence that Advertising Expenses and Income will always be positively correlated with each other.

Relationship between Advertising Expenses and Earnings per Share (EPS) of the companies:

Another measure of financial performance is earning per share or EPS. Researchers believe that advertising finally should be rewarding for investors who invest their precious money in companies. This relation was tested with the Model for establishing relationship between Advertising Expenses and EPS. It suggests the Adjusted R Square value of .010 which means that 1.0% percent of variations can be explained by the model which is not significant to accept the model.

Table 8: Model Summary - Relationship between Advertising Expenses and Earnings per Share (EPS)

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.031[a]	.001	.010	65.754

a. Predictors: (Constant), ADEX

Source: Author calculation

The overall model explaining the relationship between adverting expenses and EPS of the companies is not fit as the significance value is more than the P value of 0.05%.

Table 9: Analysis of Variance - Relationship between Advertising Expenses and Earnings per Share (EPS)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	377.361	1	377.361	.087	.768[b]
	Residual	380477.484	88	4323.608		
	Total	380854.846	89			

a. Dependent Variable: EPS
b. Predictors: (Constant), ADEX

Source: Author calculation

Similarly, coefficient significance value for Advertising expenses as independent variable and EPS as dependent variable, are found not to be significant with very insignificant positive relationship. Thus, the results conclude: Advertising Expenses has no significant relationship with EPS of the companies.

Table 10: Coefficients - Relationship between Advertising Expenses and Earnings per Share (EPS)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	54.878	8.597		6.383	.000
	ADEX	.006	.019	.031	.295	.768

a. Dependent Variable: EPS

Source: Author calculation

Conclusion

On the basis of the findings of the regression models, it can be concluded that there exists a strong and positive relationship between Advertising Expenses and Revenues of BSE Sensex 30 companies. Many companies spend heavily on advertising to influence consumer choices. High competition can also be one of the reasons for the same. It was also observed that adverting expenses are very low in the industries where B2B sales are more significant such as IT sector.

On the other hand, Income of the companies may have little less significant positive correlation with advertising expenses. It may be due to amount of operating expenses which differ company to company largely. Goods manufacturer and service providers are also significantly different in this regard. Therefore, we cannot suggest with highest level of confidence that Income and Advertising expenses share strong relationship, although results suggest they are positively correlated.

The study so far could not identify and prove the relationship between EPS and Advertising expenses by the companies. It may be due to the no. of share outstanding which vary company to company very significantly.

Direction for Future Researches

The current study selected a time span of three years and 30 companies to establish the relationship between adverting & promotion expenses and financial performance of the companies. However, a large sample of companies over a longer period of time should be used by future researches to confirm the same with higher confidence level. Researchers can also devise the studies which can compare among the companies from different industries with large no. of variables and attributes.

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