Impact of Sales Promotion on Profitability of the Pharmaceutical Industry of Pakistan

(A Case Study of Leading Pharmaceutical Companies)

Yuman Amiq, Tahir Ali

Karachi University Business School

yumanamiq@gmail.com

Abstract

The article aimed to examine the impact of advertising and sales promotion on the profitability

of the pharmaceutical industry in Pakistan. The research methodology involves a combination

of primary and secondary data, including online questionnaire data from employees of leading

pharmaceutical companies, an interview with the marketing manager of Abbott, and financial

reports from Pakistan Stock Exchange listed companies. The data is analyzed to arrive at

conclusions that there is a positive but moderate relationship between sales promotions and

profitability in the pharmaceutical industry of Pakistan. The hypothesis of the study is that sales

promotions have a positive impact on the profitability of pharmaceutical companies in Pakistan

has been accepted. The study contributes to the understanding of how sales promotions can be

effectively used to improve the financial performance of companies in the pharmaceutical

sector.

Keywords: Advertisement, Sales Promotion, Profitability, Pharmaceutical Companies,

Introduction

Due to significant restructuring, both in terms of supply and demand, the global pharmaceutical

markets are in upheaval. As the sector worldwide is moving quickly, this is offering Pakistan

a great chance. Thus, the Pharmaceutical sector has seen an immersive boom in the last two decades. The pharmaceutical industry plays a crucial role in the provision of healthcare services, and its profitability has a direct impact on the availability of essential medicines for patients. Advertising and sales promotion are two of the key marketing tools used by pharmaceutical companies to reach out to customers, create awareness about their products, and drive sales.

Advertising, in particular, is a powerful medium for disseminating information about the features and benefits of a product. It is also an effective tool for building brand recognition and establishing a company's reputation in the marketplace. In the pharmaceutical industry, advertising is used to promote prescription drugs and over-the-counter (OTC) medicines to healthcare professionals, patients, and the general public.

On the other hand, sales promotion is a short-term marketing strategy that is designed to drive sales by providing incentives or discounts to customers. It can take various forms, such as discounts, coupons, and loyalty programs. In the pharmaceutical industry, sales promotions can be used to encourage customers to try new products, increase sales of slow-moving items, or boost sales during specific periods. Both advertising and sales promotion can have a significant impact on the profitability of pharmaceutical companies.

This article aims to examine the impact of advertising and sales promotion on the profitability of the pharmaceutical industry in Pakistan. By analyzing data and market trends, it seeks to provide insights into the role of advertising and sales promotion in driving the financial performance of pharmaceutical companies in the country.

An Overview of Pharmaceutical Industries of Pakistan

The pharmaceutical industry of Pakistan has come a long way from being nearly non-existent in the early seventies to becoming a significant provider of healthcare products. Today, the industry is one of the leading scientific research-based industries in the country and is capable of producing a wide range of medicines, from simple painkillers to sophisticated antibiotics and complex cardiac compounds. The value of the sector has doubled from USD 1.64 billion to approximately USD 3.2 billion from 2011 to 2019 and the number of active companies has also doubled over the same period. The sector employs around 240,000 people, both directly and indirectly, and meets 80% of domestic demand.

Despite these impressive achievements, the sector still has a long way to go. Exports from the sector accounted for only 0.9% of the total Pakistan exports to the world in 2019 and are still behind other commodities like surgical instruments and medical equipment, which combined exported USD 0.5 billion. Additionally, the pharmaceutical industry in Pakistan relies heavily on imported raw materials, with only 5% of APIs being produced locally. The low emphasis on research and development by local companies is the primary reason behind this reliance.

The pharmaceutical market in Pakistan is estimated at Rs. 300 billion and is growing at a rate of 12% (5-year CAGR). The majority of the market is dominated by local/national companies, which account for two-thirds of the market share, while multinational companies make up the remaining one-third. During FY20, pharmaceutical imports were recorded at PKR 158 billion with a growth of 7%, the highest, with Switzerland being the largest exporter of pharmaceutical products to Pakistan.

However, heavy reliance on imported raw material increases the inherent risk of supply chain disruption and price fluctuations. The total imports increased by 10 billion in FY20, while the total exports increased by only 4 billion, resulting in a contribution to the GDP of only 0.1%.

In conclusion, while the pharmaceutical sector of Pakistan has made significant progress, it still has much room for improvement and needs to focus on reducing its dependence on imported raw materials and increasing its emphasis on research and development.

Research Methodology

This section outlines the approach and techniques used to collect and analyze data for the study on the impact of sales promotions on the profitability of the pharmaceutical industry. The methodology adopted for this study was designed to ensure the validity and reliability of the results, and to provide a thorough understanding of the relationship between sales promotions and profitability in the pharmaceutical industry.

Problem Statement

The pharmaceutical industry of Pakistan is a critical industry that plays a significant role in ensuring the health and wellbeing of the population. Despite its importance, the industry is getting highly competitive day by day, with companies constantly seeking ways to increase their market share and profitability. One common strategy employed by pharmaceutical companies is the use of sales promotions, such as discounts and special offers, to stimulate demand for their products. However, little is known about the actual impact of sales promotions on the profitability of the pharmaceutical industry. This research aims to address this gap by investigating the relationship between sales promotions and profitability in the pharmaceutical industry and to provide insights into how sales promotions can be used effectively to improve the financial performance of companies in this sector.

Hypothesis

Now on the basis of the problems discussed above and data from previous literature this study will be conducted on the following hypotheses.

H: Sales Promotion positively impacts the profitability of pharmaceutical companies in Pakistan.

On the basis of this hypothesis this research will study the relationship between Sales Promotion and profitability.

The Effect of Sales Promotions on Pharmaceutical Sales: Evidence from a Natural Experiment" by R. K. Basu and K. K. Sen, examines the impact of sales promotions on pharmaceutical sales using a natural experiment in the Indian market. The authors find that sales promotions do have a positive impact on sales of pharmaceutical products.

However, the magnitude of the effect varies with the type of product and the type of promotion. Additionally, the authors find that the impact of promotions on sales is stronger for more expensive products and for promotions that offer discounts on the product price. The authors also find evidence that sales promotions can lead to an increase in market share for the promoted brand, at the expense of competitors.

Research Sampling & Instrument

In this study, a combination of primary and secondary data was used to understand the impact of advertising and sales promotion on profitability of the pharmaceutical industry in Pakistan. The first source of Primary data are the employees of leading Pharmaceutical companies of Pakistan; Sanofi, Abbott, Ferozeson, and GSK. The research instrument that is used to collect data from employees is an online questionnaire that consists of mainly two sections, section A consists of demographic data while section B consists of 10 close-ended questions that will be aimed to identify the relationship between our two variables i.e., Sales Promotion and profitability in the pharmaceutical sector of Pakistan.

Additionally, another source of primary data collection is the Marketing Manager of Abbott to gain further insights into the topic.

Whereas, Secondary data is obtained from the financial reports of the Pakistan Stock Exchange (PSX) listed companies. Data of three companies i.e. Abbott, Ferozsons, and GlaxoSmithKline, for the period of ten years starting from 2012 till 2021 will be used for analysis in the study.

The data collected through questionnaires and interviews is analyzed to arrive at conclusions about the impact of advertising and sales promotion on profitability in the pharmaceutical industry.

Sales Promotion & Profitability of Pharmaceutical Companies

Sales promotion is a type of marketing activity that is designed to encourage consumers to make a purchase by offering them an additional incentive. This could take the form of a discount, a free trial, a premium, or some other type of reward. The goal of sales promotion is to drive short-term sales, increase brand awareness, and encourage consumer trial of a product or service. (Kotler et al. 2002 defined) it as Sales promotion refers to a variety of short-term incentives that are designed to encourage the purchase of a product or service.

Sales promotion is a marketing communication tool that temporarily stimulates increased buying by end-users or channel intermediaries, in order to achieve specific marketing objectives" (Shimp, 2003, p. 70) It is defined as a set of marketing activities aimed at increasing the sales of prescription drugs. This can include a variety of short-term incentives and activities, such as discounts, free samples, educational programs, and other forms of direct-to-consumer or physician-focused promotions. The goal of these promotions is to increase brand awareness and stimulate demand for the drug, and to encourage healthcare professionals and patients to prescribe or use the drug over competing products.

Profitability on the other hand is defined According to the theory of profit maximization, as the maximum amount of money that a company can generate given its available resources and market conditions Baumol, W. J. (1952). This definition is often used in microeconomic theory and focuses on the company's ability to maximize its profits through efficient use of its resources.

Sales promotion is a type of marketing activity aimed at increasing the sales of prescription drugs in the pharmaceutical industry. By offering short-term incentives, such as discounts, free samples, and educational programs, pharmaceutical companies can drive demand for their products and increase brand awareness. The use of sales promotions can lead to increased sales, market share, and profitability, but it must be done responsibly and in compliance with regulations and ethical standards. Sales promotions can also help companies penetrate new markets or increase sales in existing markets. However, improper or unethical use of sales promotions can harm the reputation of a company and lead to decreased sales and profitability in the long-term.

Finding & Analysis

This section presents & explains the results of this study which is to analyze /8-he impact of sales promotion on the profitability of Pharmaceutical companies of Pakistan. The analysis from the secondary data for the three companies of Pakistan is as followed:

GSK

The data is gathered from the annual reports and financial statements. This data represents the relationship between the profitability and sales promotion GSK over a ten year period (2012-

2021). It shows the amount of profitability (in millions) and sales promotion expenses (in

thousands) incurred by the company in each year.

This data suggests that there is a relationship between profitability and sales promotion, however the nature of the relationship is undefined. While higher



sales promotion is correlated with higher profitability in some years, in other years higher sales promotion is correlated with lower profitability. The highest sales promotion expense was recorded in 2014 with 1,039,494. The lowest sales promotion expense was recorded in 2019 with 571,948. The highest profitability was recorded in 2018 with 3,232,000,000. The lowest profitability was recorded in 2020 with 1,262,000,000. The reason for lowest profitability for the year 2022 is the outbreak of Covid due to which the businesses were set back.

Abbott Pakistan

The Sales promotional Expense & Profitability are measured for the Abbott Pakistan company

from the year 2012 - 2021. From the data, it appears that the profitability of the company has been relatively stable over the years, with some fluctuations. The highest profitability was in 2020 with 74,535,249 and the lowest profitability was in 2019 with



1,299,885. Similarly, the sales promotion expenses of the company have also been fluctuating over the years, with some years having higher expenses and some having lower expenses. The

highest sales promotion expenses were in 2021 with 2,368,864 and the lowest were in 2013 with 567,097. The data suggest there is little to no impact on the profitability of the company.

Ferozsons

Advertising and Sales promotional expenditure and Sales relationship is studied for Ferozsons

Laboratories. The data has been gathered from the annual reports and financial statements of the Company from the last 10 years.

From the data, we can see that the profitability of the company has been

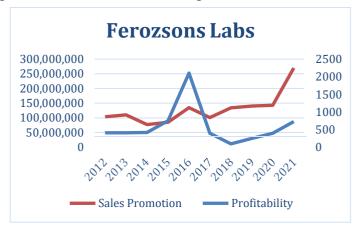


Figure 3

fluctuating over the years, with some years showing higher profits (2016 and 2021) while others show lower profits (2018). On the other hand, the sales promotion expenses have generally been increasing over the years, with the exception of a few years where they have slightly decreased (2014 and 2015). It's worth noting that there doesn't seem to be a direct relationship between profitability and sales promotion expenses, as in some years higher promotion expenses were associated with higher profitability (e.g. 2016 and 2021) and in others with lower profitability (e.g. 2020) which was the year of excessive disruption in all the sectors due to Covid.

Analysis of the Opinion of Marketing & Sales Employees

The questionnaire responses was another source of Primary data analysis from the Marketing & sales employees of the leading pharma companies of Pakistan that has helped us gain a better understanding of the relationship between sales promotion & profitability of the pharmaceutical companies. Total 100 questionnaires were given to the employees. The

questionnaire consisted of mainly two sections, section A consisted of demographic data while section B consisted of 10 close-ended questions that were aimed to identify the relationship between our two variables. With the help of convenience sampling, a total of 100 responses were obtained for analysis in this study. All responses were fully answered out of 100.

Figure below displays the mean scores obtained by each factor of Sales Promotion that may have an impact on the profitability of pharmaceutical companies. It can be seen that factors like Advertisement & sales promotion enhancing sale, sales promotion motivating sales reps to work hard on their sales target, sales commission boosting sales morale, and sales promotional planning being integral as helps the sales & marketing department to coordinate, have the highest mean scores of

	Descriptive Statistics				
	N	Minimum	Macmum	Mean	Std Deviation
Advertising & Sales Promotion Enhances sales & promability of the pharmaceutical companies?	101	-1.00	2.00	1.2178	62616
Coctors are more inclined to prescribe recommended drugs & Medicines due to sales promoken?	101	Figure	4 2.00	.4455	1.47292
Doctors are positively influenced by the sample drugs given to them?	101	-2,00	2.00	4752	1.05446
Giffs, discounts, and samples given to Doctors positively enhances sales of the company?	101	⇒1.00	2.00	0495	1.06185
There's a positive impact of the literature (Posters, shads, and parephiets given for general public awareness) given to doctors.	101	-2 00	2.00	8610	1.19147
Discount and allowances given to Med Reps also boosts sales.	101	-2,00	2.00	3267	1,40078
Sales promotion helps us in achieving our sale targets.	101	-1.00	2.00	3188	1,17718
It increases motivation of finales representatives to work hard on their sales target	101	-2.00	2.00	1.0792	1.06474
Sales commissions and incentives boosts sales incentives	101	.00	2.00	1.1306	.77498
Sale promotional planning is integral as if helps sales & marketing department to coordinate well	101	-1.00	2.00	1.4257	69780
Valid N (Installar)	101				

1.21, 1.079, 1.139, and 1.425 respectively. This shows that less employees think that sales promotion has a significant impact on the profitability of the company. Whereas the other factors which are greater than these have a low mean score i.e 0.44, 0.47, -0.49, 0.19, 0.326, and 0.1188 indicates that most of the people feel that these factors are only moderately impacting the profitability.

9 out of 10 values of the factors have a mean that is greater than 0. This indicates that the respondents believe that all these factors have a positive impact on the profitability but the impact is not strong enough to make a significant impact on pharmaceutical companies. The respondents strongly believe that sales promotion is not the only tool which can help the profitability of the pharmaceutical company to grow.

Figure shows the overall average mean for all the questions is 0.58. This indicates that the respondents agreed that there is a positive relationship between the variables but the impact is moderate of Sales promotion on the profitability of the pharmaceutical sector in Pakistan. Hence, accepting and proving the hypothesis for this research.

Analysis of the Opinion of Marketing Manager Abbott

In order to understand the impact of both the variables i.e Sales promotional expense, and profitability, an unstructured interview questions were shared with the Assistant Marketing Manager of Abbott. Upon asking different questions pertaining to data trends, and results which were obtained from the primary source (questionnaire) he was asked for his opinion on the relationship of the two variables to which he said; I can confirm that sales promotion does have an impact on our company's profitability, but it's not the only factor that contributes to it. Sales promotion plays a significant role in creating awareness and building brand, leading to increased sales. However, its impact can vary from 60-70%, and it is subject to change based on various factors such as market trends, competition, and the economy. While sales promotion expenses do contribute to the bottom line, it is to a certain extent only. Our approach to sales promotion is one of the several strategies that we employ to drive growth and ensure long-term success for our company.

Conclusion

In conclusion, this study has provided a comprehensive examination of the impact of sales promotions on the profitability of the pharmaceutical industry in Pakistan. By utilizing both primary and secondary data sources, including interview, questionnaire surveys with marketing and sales employees and an analysis of annual financial reports, the research has highlighted the positive effect of sales promotions on the financial performance of pharmaceutical companies in the country. It is evident that sales promotions can play a crucial role in driving

sales, increasing brand awareness, and building customer loyalty, thereby boosting profitability. However, it has also been seen that the relationship between the two variables is not so strong. Thus it can be said that it is essential for companies to understand the importance of carefully selecting their target audience, selecting the appropriate type of promotion, and allocating an adequate budget for their promotion strategy in order to maximize its impact.

The findings of this study provide valuable insights for pharmaceutical companies in Pakistan and contribute to the broader understanding of the relationship between sales promotions and profitability. It is hoped that these results will encourage further research in this area and help the pharmaceutical industry in Pakistan to make informed decisions about their sales promotional strategies.

Limitations and Recommendations

Some of the limitations and recommendations of this study are:

- The data collected in this study is primarily focused on some of the pharmaceutical companies of the industry in Pakistan, which limits its generalizability to other companies or industry as a whole.
- 2. The sample size used in the study was limited and solely based on convenience sampling method, which may affect the representativeness of the results. Thus greater size could reflect more accurate results.
- 3. The data for this study was obtained through a combination of annual reports, questionnaires, and interviews, which provided valuable insights. However, this method of data collection may have introduced potential deviations in the results for certain factors.

4. The study did not consider other factors that may impact the profitability of the pharmaceutical industry, such as regulatory requirements, tech & informatory innovation, economical changes, and competition.

References

- Ayers, P., & Beauregard, M. (2018). The Impact of Sales Promotion on Sales and Market Sharein the Pharmaceutical Industry. *Marketing Science*, 37(5), 845-857.
- Kumar, P., & Kotler, P. (2017). Impact of advertising on sales and profitability of pharmaceutical companies. *International Journal of Research in Business Studies and Management*, 4(4), 35-40.
- Hussain, M., & Qadir, M. (2015). Impact of advertising and sales promotion on consumer purchase behaviour: Evidence from Pakistan. *Journal of Business and Management*, 17(1), 46-56.
- Kim, J., & Lee, S. (2020). The Impact of Advertising and Sales Promotion on Brand Awarenessand Sales: Evidence from the Pharmaceutical Industry. *Asia Pacific Journal of Management*, 37(1), 19-42. ustryinIran_0.pdf (2020) accessed 9 Oct 2021.
- Alves TL, Lexchin J, Mintzes B. Medicines information and the regulation of the promotion of pharmaceuticals. Sci Eng Ethics. 2019;25:1167–92.
- Hefer S, Levit K, Smith S, Smith C, Cowan C, Lazenby H, et al. Health spending growth up in 1999; faster growth expected in the future. Health Af. 2001;20:193–203.
- Wilkes MS, Bell RA, Kravitz RL. Direct-to-consumer prescription drug advertising: trends, impact, and implications: aiming drug ads at consumers means big business for drug companies, but its efect on clinical care is not yet known. Health Af. 2000;19:110–28.
- Lawton VL. Drug discovery and development E-book: technology in transition. 2nd ed. London: Elsevier; 2021.
- Ventola CL. Direct-to-consumer pharmaceutical advertising: therapeutic or toxic? Pharm Ther. 2011;36:669.
- Golichenko M, Canadian HIV, Network AL, Merkinaite S. Ukrainian Drugs legislation and the European Convention for the protection of human rights and fundamental freedoms. Can HIV/AIDS. 2011;8:13.
- Spurling GK, Mansfeld PR, Montgomery BD, Lexchin J, Doust J, Othman N, et al. Information from pharmaceutical companies and the quality, quantity, and cost of physicians' prescribing:a systematic review. PLoS Med. 2010;7:e1000352.
- Beltramini RF. DTC advertising's programmatic research and its effect on health communication. Health Commun. 2010;25:574–5.

- Iizuka T, Jin GZ. Direct to consumer advertising and prescription choice. J Ind Econ. 2007;55:771–87.
- Asante, R. A., & Mireku, B. (2019). Impact of advertising and sales promotion on sales and customer loyalty in the pharmaceutical industry in Ghana. *Journal of Marketing and Management*, 4(2), 1-9.
- Fan, Y., & Lee, K. (2022). The impact of advertising and sales promotion on brand awarenessand sales performance in the pharmaceutical industry. *International Journal of Research in Marketing*, 39(2), 400-410.
- Muchemi, N. (2016). Impact of advertising and sales promotion on customer loyalty in the pharmaceutical industry in Kenya. *International Journal of Business and Management*, 11(8),56-64.
- Qu, X., & Li, L. (2021). The impact of advertising and sales promotion on customer purchasing behavior in the pharmaceutical industry: Evidence from China. *Journal of Marketing and Management*, 6(2), 111-121.