Impact of Duties and Taxes on The Sales of Automobiles Industry in Pakistan

Uzair Nawaz

MBA Scholar, Karachi University Business School, Pakistan

uzair756@yahoo.com

Abstract

This study aims to identify and evaluate the elements that affect the sales of automobiles in Pakistan. The most important independent variable of the study is duties and taxes. This is combined into a study framework after a review of the literature, and the hypothesis of the role of duties and taxes on sales is examined. Individual automobile buyers in Karachi, Pakistan, were chosen at random to collect data with an adapted questionnaire, and 200 people made up the sample. Results were analyzed using various statistical analyses on SPSS. The statistical analyses are descriptive statistics, reliability, and correlation. The statistical results showed a weak negative relationship between the independent variable taxes and tariffs and the dependent variable sale of automobiles, thus concluding that duties and taxes do not have much impact on the sales. This study will be useful to both managers in the automobile industry and policymakers when they are developing strategies and auto policies regarding the future of the industry.

Keywords: Taxes, Duties, Sales, Automobile, Customers, Services.

Introduction

There has been remarkable growth and advancement in the number of passenger cars on the world's roadways in recent years. The introduction of automobiles has had a significant impact on a nation's economic growth as well as the lives of its citizens. The automotive industry has gotten involved in the technological and innovative race. Numerous studies have emphasized time and time again how important the automobile industry is to the expansion of the GDP in industrialized countries. The Pakistan Automotive Manufacturers Association reports that 156,936 passenger cars were produced in total, while 155,781 were sold. If we look at the passenger car production statistic from the previous year, it shows a value of 160,944 and a sales figure of 161,145 cars (PAMA, 2022). Other automobile categories, such as agricultural tractors, lorries, buses, vans, and jeeps (4 by 4), have also shown a decrease in production and sales figures. Thus, it is clear that automobile production and sales have decreased in the recent past.

The automotive industry is crucial to the economy of any nation. Considering Pakistan because its vehicle sector is not particularly well-known worldwide, but it has been steadily growing in Pakistan for a long time. According to (Agyemang, 2019), if customers are "happy customers," they are more likely to repeat their purchases, which will increase the company's market share and overall revenues. This demonstrates that a business can be prosperous if it can satisfy customers. When consumers' needs and wishes are met, they are satisfied, and they are more likely to make additional purchases. Customers when they have consumed the items or when they are happy with the experience of the purchasing process. Whereas, it has been seen that in the recent past, the customers of the automobile industry in Pakistan have become dissatisfied with the companies producing the automobiles. The reason for such a change in the customers of automobiles in

Pakistan is the rising prices of the vehicles mainly due to the increased duties and taxes (Haque, Rashid, & Ahmed, 2021).

It has been estimated that the automobile industry in Pakistan is heavily taxed such as the almost double amount of the original. The reason given by the government of Pakistan for such high taxes on the automobile industry is to protect the domestic industry and let it grow and expand, but it has been seen that such higher duties and taxes are making it impossible for the customers from the middle-class segment to buy the vehicle for themselves and their families. Thus, the study is being conducted to know about the impact of duties and taxes on the automobile industry sales in Pakistan (Raza, et al., 2016).

Research Problem

The main problem for which the study is being conducted is to prove whether duties and taxes have an impact on the sales of automobiles in Pakistan or not. Therefore, the research problem is to find out the level of impact duties and taxes have on the sales of automobiles in Pakistan.

Research Objective

The main objective of the study on the automobile industry is to find how much impact duties and taxes have on the sales of automobiles in Pakistan. Thus, the research will help automobile companies to counter duties and taxes accordingly to increase their sales and profitability.

Research Question

The research on the impact of duties and taxes on sales of the automobile industry in Pakistan has one question to resolve the research problem and attain the research objective:

Q 1: How much do duties and taxes have an impact on the sales of automobiles in Pakistan?

Literature Review

In recent years, several studies have been overseen in both developed and emerging nations to examine and investigate the influence of taxes and charges on automotive customers (Ahmed & Batool, 2017). The need for raw materials, maintenance, and distribution that the vehicle industry creates has a significant ripple effect on the economy. Additionally, it is crucial to evaluate how taxes and tariffs affect consumers because doing so will inform the auto industry about the value of their products and how customers interact with them. Managers and decision-makers in the automotive industry will also profit. The managers would have a better understanding of consumer purchasing intents when describing factors that affect consumer behavior and also the auto sector in Pakistan's policymakers would gain (Kumar & Kaur, 2016).

The idea of planned behavior has been evaluated, and the variables that were looked at included subjective norms, perceived behavioral control, perceived environmental consciousness, perceived environmental ethics, and perceived environmental beliefs (Amir & Asad, 2017). By incorporating all the many independent factors and examining their overall impact on the intentions and conduct of the customers, this study seeks to extend the behavior and intentions model, or theory of planned behavior (Imran & Abbas, 2020). Because it is clear that car sales are at an all-time high in Pakistan, this conduct of Pakistani customers toward cars is also understandable. It was evaluated how price, brand, and store information affected consumer perceptions of the product's quality and readiness to purchase (Danish, et al., 2020).

Various researchers have researched the topic of duties and taxes concerning their impact on sales of automobiles and found that the higher duties and taxes created a dissonance in the mind of the customers and thus it causes them to avoid purchasing the vehicle mainly due to the perception

that the product is being overpriced due to the government regulations and they are paying more than the actual price of the product (Agrawal, Wankhede, Kumar, & Luthra, 2021). Thus, the potential customer avoids purchasing the automobile even though they are in the need of the automobile (Yu, Khan, & Umar, 2022).

H1: Duties and taxes have an impact on the sales of automobiles in Pakistan.

Research Methodology

The research on the impact of duties and taxes on the sales of automobiles in Pakistan mainly has two variables one is duties and taxes, whereas the other one is sales of automobiles. In the research, taxes, and duties will be the independent variable whereas the sales of automobiles will be the dependent variable. The research on the impact of duties and taxes on the sales of automobiles in Pakistan is quantitative the data for the study will be collected from the customers to know about the impact of the duties and taxes on sales. An adapted questionnaire from a similar study is used for the data collection. The reason for using the adapted questionnaire to collect data is to have reliability and validity. The questionnaire for the study has fourteen questions, each variable has seven questions to measure the impact of duties and taxes on sales. Five-point Likert scale is being used with the options varying from strongly disagree to strongly agree. For the data collection, the questionnaire is given to the customers of the automobiles by hand to measure the responses. The collected data through questionnaires will be punched and sorted in Microsoft Excel before statistical analysis on the SPSS (Cresswell & Clark, 2017).
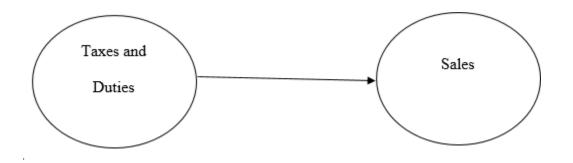
Theoretical Framework

The theoretical framework of the study is based on the theory of taxation, which states that when governments increase the taxes on products and services more than the market dynamics. The

impending result will be a decrease in the sales of the products and services. Thus, the study's theoretical framework is based on the taxation theory that the increase in the duties and taxes on automobiles will decrease the sales of automobiles in Pakistan (Horodnic, 2018).

Conceptual Framework

The conceptual framework of the study on the impact of duties and taxes has two variables. In the framework, duties and taxes is the independent variable and the sales of automobiles in Pakistan is the dependent variable.

Independent Variable: Duties and taxes

Duties and taxes in the research are the independent variables, it consists of the various duties and taxes implemented by the government on the sales of automobiles in the market of Pakistan. The change in the sales of automobiles in Pakistan is mainly due to the change in government duties and taxes.

Dependent Variable: Sales

The sale of automobiles is the dependent variable in the research, sales consist of the volume of automobiles sold in the year by the companies in Pakistan. The automobile sales volume is hugely dependent upon the duties and taxes mainly due to its impact on customer purchase intention.

Data Analysis

Data analysis for the research is conducted by collecting data from customers in the automobile industry and using the statistical software SPSS for data analysis. Data analysis for the study consists of three steps, the first step is descriptive statistics, the second step is reliability statistics, and the third step is correlation. The interpretation of the three steps will better help in understating the analysis and testing the hypothesis of the study.

Descriptive Statistics

Statistics

		TD1	TD2	TD3	TD4	TD5	TD6	TD7	S1	S2	S3	S4	S5	S6	S7
N	Valid	200	200	200	200	200	200	200	200	200	200	200	200	200	200
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		4.2950	4.2900	4.1000	2.3500	2.4750	2.0800	1.5600	2.2600	3.8650	2.6350	1.6200	1.2300	1.7600	1.3800
Std. Deviation		.45719	.55447	.30075	1.85600	1.54964	1.22520	.59003	1.55062	1.51600	1.61705	.68406	.58206	1.04780	.60617
Skewness		.906	-.003	2.687	.668	.743	.757	.506	.865	-1.132	.406	.747	3.013	1.553	1.497
Std. Error of Skewness		.172	.172	.172	.172	.172	.172	.172	.172	.172	.172	.172	.172	.172	.172
Kurtosis		-1.191	-.534	5.272	-1.534	-.992	-.461	-.649	-.792	-.301	-1.375	-.189	10.867	2.161	1.813
Std. Error of Kurtosis		.342	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342	.342

Interpretation: The descriptive statistics for the study on the impact of duties and taxes on sales of automobiles in Pakistan were conducted on the items of the questionnaire which shows mean, standard deviation, skewness, and kurtosis analysis. In statistical analysis, the mean is fluctuating and varies from four to one, which shows that the responses from the audience vary a lot. In the statistical analysis standard deviation also shows fluctuation varying hugely. In the statistical analysis, skewness also fluctuates greatly but the graph is positively skewed. Whereas, in the statistical analysis kurtosis is negatively tailed mainly due to the huge impact of data on the negative side (Cresswell & Clark, 2017).

Reliability Statistics

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	200	100.0
	Excluded[a]	0	.0
	Total	200	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.766	14

Interpretation: The statistical analysis of the reliability of data on the impact of duties and taxes on sales of automobiles in Pakistan shows that the questionnaire in the study has fourteen items on two variables and two hundred questionnaires were collected from the customers of automobiles. The questionnaire items of the study have 0.766 Cronbach alpha and which shows that the items of the study have reliability, and data analysis of the study is used for further analysis(Tavakol & Dennick, 2011).

Correlation Statistics

Correlations

		ATD	AS
ATD	Pearson Correlation	1	-.189**
	Sig. (2-tailed)		.007
	N	200	200
AS	Pearson Correlation	-.189**	1
	Sig. (2-tailed)	.007	
	N	200	200

**. Correlation is significant at the 0.01 level (2-tailed).

Interpretation: The correlation analysis of the variables in the research shows that the variables of a negative relationship. The Pearson Correlation of the variables shows a value of -.189, which means that the relationship among the variables is a negative one, but the minimum value shows that the relationship is not much existent due to the value being close to zero. Thus, it can be said that the tax and duties have a weak negative relationship with sales in the automobile industry of Pakistan (Schober, Boer, & Schwarte, 2018).

Conclusion

The world is progressing rapidly and automobile makers are trying their best to improve their technology to attract customers. Whereas, it has been seen that the increase in the duties and taxes of the automobile has an impact on sales around the world. Whereas, in Pakistan, this trend is the opposite and sales of the automobile is not affected by the increase in duties and taxes. Thus, to study what causes the failure of worldwide trends and the change in the attitude of the customers towards not giving an ear to the increase in duties and taxes this research is conducted. The study collected data from the customers of the automobile in Karachi, Pakistan to know about their

purchase intention and behavior regarding changes in taxes, duties, and price. Through statical analysis of the data, it was found that the duties and taxes do not have much impact on the sales of automobiles in Pakistan and the correlation analysis of the data shows that the variables have a weak negative relationship. Thus, it can be attributed that the customers in Pakistan are affluent and they do not care much about the increase in the prices of automobiles due to increases in duties and taxes.

Recommendation

The statistical analysis of the study shows that duties and taxes do not have much impact on the sales of automobiles in Pakistan. The reason for such statistical results is that the customer of automobiles in Pakistan belongs to the affluent class who can afford automobiles even at higher prices. Thus, the change in the duties and taxes does not have an impact on the purchase intention and decision of the customers. Thus, the automobile makers in Pakistan should focus on improving services for the customers to increase their sales instead of focusing on the changes in duties and taxes.

References

Agrawal, R., Wankhede, V. A., Kumar, A., & Luthra, S. (2021). Analysing the roadblocks of circular economy adoption in the automobile sector: Reducing waste and environmental perspectives. *Business Strategy and the Environment*, 1051-1066.

Agyemang, M. K.-S.-S. (2019). Drivers and barriers to circular economy implementation: An explorative study in Pakistan's automobile industry. *Management Decision*.

Ahmed, V., & Batool, S. (2017). India–Pakistan trade: perspectives from the automobile sector in Pakistan. *India-Pakistan Trade Normalisation: The Unfinished Economic Agenda*, 129-161.

Amir, A., & Asad, M. (2017). Consumer's Purchase Intentions towards automobiles in Pakistan. *Open Journal of Business and Management*, 202-213.

Cresswell, & Clark. (2017). *Mixed Methods Research.* New York: Sage.

Danish, D. R., Khan, D. M., Ghafoor, D. M., Ahmad, D. I., Humayon, D. A., & Aslam, S. (2020). Impact of brand loyalty in assessing purchase intentions of a customer: A study of automobile industry in South Asian perspective. *South Asian Studies*.

Haque, I. U., Rashid, A., & Ahmed, S. Z. (2021). The role of automobile sector in global business case of Pakistan. *Pakistan Journal of International Affairs*.

Horodnic, I. A. (2018). Tax morale and institutional theory: a systematic review. *International journal of sociology and social policy*, 868-886.

Imran, M., & Abbas, J. (2020). The role of strategic orientation in export performance of China automobile industry. *Handbook of research on managerial practices and disruptive innovation in Asia*, 249-263.

Kumar, N., & Kaur, K. (2016). Firm size and profitability in Indian automobile industry: An analysis. *Pacific Business Review International*, 69-78.

PAMA. (2022). *Historical Data*. Retrieved from PAMA: https://www.pama.org.pk/wp-content/uploads/2022/09/Historical-Data-1995-2022.pdf

Raza, R., Akram, N., Javed, M. S., Rafique, A., Ullah, K., Ali, A., & Ahmed, R. (2016). Fuel cell technology for sustainable development in Pakistan–An over-view. *Renewable and Sustainable Energy Reviews*, 450-461.

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. *Anesthesia & Analgesia*, 1763-1768.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*.

Yu, Z., Khan, S. A., & Umar, M. (2022). Circular economy practices and industry 4.0 technologies: A strategic move of automobile industry. *Business Strategy and the Environment*, 796-809.

Appendix 01

Questionnaire

(Taxes & Duties)	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
In purchasing a car, I will purchase a locally assembled car due to taxes.					
In purchasing a car, I will purchase an imported car.					
I will purchase imported cars when the locally assembled car is not available.					
I will purchase locally assembled cars even with higher taxes.					
I recommend a locally assembled car to my friends.					
I would consider purchasing a locally assembled car due to taxes.					
There is a good probability, I would consider buying a locally assembled car.					
(Sales of Automobiles)					
The price of locally assembled cars is high.					
The price of a locally assembled car is low.					
Locally assembled cars are expensive.					
Locally assembled cars are inexpensive.					
Locally assembled save a lot of taxes.					
Locally assembled cars are worth for money.					
Buying locally assembled will save money on taxes.					