

Effect of Fuel Prices on Automobile Sales in Pakistan

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Abstract

The main reason to select the topic effect of Fuel Prices on automobile sales in Pakistan is that due to the continuous increase in inflation in Pakistan which leads to less purchasing power no matter of what sector it is. With this topic, we have checked how much the Petrol prices affect the sales of the automobile industry in Pakistan. Automobile sales are the variable that has been selected here for the research. Since a long time, the industry of automotive has been a growing and active field in Pakistan. However, it is not very established that an obvious list of top automotive industries can be figured out regardless of production volumes, localization of vehicle components, as well as technology's transfer, remains low. Majority of cars used in the country consist of both fuel options that are CNG as well as petrol. CNG have high affordability rate and is also less expensive than petrol which is considered as dependent variable. However, the cost of fuel is independent variable, i.e. 1,300 cc cars and 1,000 cc cars variable. The data of the monthly time series (secondary data) used from the period 2014 to 2018. To analyse the data, the regression technique has been applied. The conclusion of the analysis is that no automobile affects the production of automobiles due to the prices of gasoline. The cars are stable and even grow in a few years. This study is useful for the automotive industry to see the impact.

Keywords: Fuel Prices, automobile sales, Pakistan fuel prices

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Introduction

Tinkering with motor powered vehicles was started by European engineers since the combustion, steam and electrical motors of the 1700s were all tried by 1800's mid. It was not sure by 1900s even that what engine type shall power the automobile. Initially, the most accepted was the electrical car but then, no battery was invented which would permit the car to be driven over a long distance or with high speed. Although electric cars set up a few speed records earlier, since 20th century, they are not active in the manufacturing process. In 1920, steam driven cars were lasted. Although, the cost of steam-driven engines are incomparable to the gas powered engines. Price was one of the main issues. The other issue which prevented steam-driven engines to be popular was that it has a risk of boiler explosion. Due to above mentioned reasons, combustion engine became popular. The combustion engines were manufactured by the American automobile pioneers. The pioneers identified more benefits in combustion engines as compared to the steam driven engines. In 1890, France initiated vehicle manufacturing on a commercial sale in the market.

In early 1900's, the United States initiated its commercial manufacturing and came on same level as Europe. During 1900's, as there were only few independent automobile firms, the automobile industry of Europe manufactured small number of vehicles by handicraft skills and engineering. During the start of era, the vehicles were introduced in the market of transportation. These were easy to buy for people who were rich. After sometime, the local public was able to buy it as it provided them benefit of travelling to any place at any time. Due to this reason, there was reduction in the cost of automobiles in Europe and North America. Now, the automobiles were also in reach of middle-class people. Henry Ford made it available for general public. The first thing he did was reducing the cost of cars as much as possible. Secondly, the workers manufacturing the cars were given enough salary so that they could buy one. There was depression in people due to no employment. It increased the sales of automobiles as well as provided job opportunities to the people. There was a transmission during Second World War, as there were less vehicles and employment rate was high. There was lack of tyres, motors and fuel of automobiles at the time war. The people supported the automobiles as there was rapid increment in manufacturing of vehicles after the war.

People are freed from being bound to live near stations or railway lines due to automobile convenience. Any place could be chosen by them to live if there are roads that connect them to other regions. The government moved aside the fame of the car that grew after the First World War and suddenly fell into great depression when unemployment was at its peak. During the Second World War, there was a sharp increase in public transport because employment

was high and cars were smaller. The rapid growth of car owners after World War II showed people's favour on cars. During the war there was a shortage of cars, fuel and tires. As soon as the war ended, the demand increased as well as huge production capacity as the war machine was turned off by the factories. Many people had high money savings because they only bought necessities during the war years.

Transportation was greatly relied upon by the workers in war years. Workers also wanted an automobile's flexibility and freedom. It is stated that Henry Ford made it possible for people to travel from one location to the other. There was a huge influence of automobiles on the social customs and living habits of people. Also, it made people mobile the practical limit for traveling using wagon was 10 to 15 miles during the horse-drawn transportation phase. This meant that any place is 15 miles distant from a waterway; railroad or city was isolated from the rest of social and economic life. The gap between urban and rural life was fulfilled through paved roads and motor vehicles. The institutions such as local hospitals, schools and colleges were now in reach of people. They can travel to school or hospital by car or by bus. Similarly, automobiles made life easier for farmers too. Now, they can transport in easy and cheaper way and can also travel to town by themselves. Automobiles also influenced in the urban areas. It changes in the life of city as it increases the travelling of population in to the countryside.

The fact that the movement of business and industry to cheap land which is accessible easily by truck and car as compared to richly populated cities is supported by highway transportation focuses on the suburban trend. Due to increased demand of automobiles, the improvement in construction of roads was carried out to travel more easily. Before the introduction of automobile, it was not easy for people to travel from city to farms. Thus, automobile provided them the opportunity to live nearby the city and travel to their workplace.

As the world's population is growing, more work is allowed due to new jobs brought about by high-way/city construction, auto shops, fast food, auto repair shops, state police, gas stations, convenience stores, etc. For a long time, one of the most active and growing fields in Pakistan is the Automotive Industry yet not very established that it can be figured out in top automotive industries' prominent list. Localization of vehicle components, as well as transfer of technology, remains low. Almost all cars used in the country consist of both fuel options that are CNG as well as petrol. CNG have high affordability rate and is also less expensive than petrol. In Pakistan, the automobiles were introduced in 1953. Since then the automobile industry of Pakistan has grown on much higher level.

Automobile Industry in Pakistan

Ministry of Industries exposed that in 1952, 115 vehicles were produced by Pakistan at National Motors Limited. It was founded in Karachi for the assembling of Bedford Trucks followed by the assembling of cars and buses light trucks too. At the start of 1990's, the industry was under control. But right after de-regulation, automobile industry was captured by Japanese companies which created the competition. After the de-regulation, the vehicle assemblers of Suzuki, Toyota and Honda in 1984, 1993 and 1994 respectively were entered. In some recent years, there is introduction of brands of light commercial vehicles such as cars of Daihatsu and Hyundai in 1999 and mini-trucks. After 11th September 2001 incident, flow of market increased due to increase in home payments and the investing schemes seem to be insignificant so people initiated to manufacture vehicles.

Buying new cars becomes easy with the help of banks that provide car loans. In order to fulfil rising demand, the automobile industry has increased 115 production capacity. There was an observation regarding the technology of domestic car engines that it was decelerated behind world markets and that people were not permitted to take advantage of the new hybrid technology. Normal fuel vehicles are cheaper as compared to hybrid ones. The vehicles are commonly bought by government companies to avail tax benefit. At this time, there is sale of 102,000 units to many countries like Japan, USA and some areas of Europe. Manufacturers in Pakistan are not very concerned about environmental friendly engines, fuel conservation apparatus, bettered brake system, over dash drive in special models, noise reduction, safety steel bar in doors and fitting collapsible steering wheels. Different brands offer different features such as Honda Civic has anti-lock brake system. Whereas, Toyota Corolla consist of 4 wheel disc brakes as well as the stabilizer bars. Majority of vehicles have safety bars from Cuore to Corolla.

In addition, the Corolla offers an airbag for added security, as well as security windows, while overdrive has always been available in Corolla A / Ts. In conjunction with fuel conservation, the Honda V-Tec offers the engine, while the Corolla is equipped with the latest Twin-Cam engine with fuel consumption with ECT. EFL machines with designs are designed to save fuel. The Toyota Corolla and Honda Civic have NVH cushioning material in the car that controls noise and vibration and ensures comfortable handling. There is also a requirement that car manufacturers provide no information on car performance or offer any cost-effective warranty on mileage,

timeframe and after-sales service. Because of India's price, Indian rupee has different US dollar rates and tariffs vary. In addition, the production volume in India is high compared to that in Pakistan. Therefore, prices in India and Pakistan should be compared after changing exchange rates and rights. The automotive industry has shown great progress since 2001-2007 and Pakistan's government set targets for more than half a million units for 2011-2012, which now seem impossible. In 2006-2007, the industry could not reach the goal of producing 226,620 and instead producing 195,688 cars.

The manufacturing was not accomplished at the end of year. In between 2007 to 2008, 266,543 cars should have been produced but unfortunately only 187,643 cars were produced. The estimated for the year was 313,486 units which is most probably will reduce to 150,107 units. As there is reduction in trend, the automobile industry will be providing revenues decreased by 25% despite the extra charges of 5% excise duty. The Government has imposed charges on automobiles. Thus, the automobile sector provided Rupees 63 billion of collective tax to the government.

According to economic survey 2017-2018, automobile assembler sector comprises of 12 companies with a total paid-in capital of Rupees 7,694.03 million and a market capitalization of Rupees 451,501.7 million. The after-tax profit for this sector is 36,497.54 Rupees.

Problem Statement

Effect of Fuel Prices on Automobiles Sale in Pakistan

Hypothesis

H: Fuel Prices has an impact on Automobile Sales in Pakistan

Impact on the Economy

In the car industry, there is direct employment of 5,500 to 6,000 people. In 2010-2011, production of motorcycles hit the record of 1.5 million units having assisted by General Pervaiz Musharraf where he decided to lower the opened bike market to Chinese bikes. There are around 192,000 people directly employed in the auto sector now followed by 1.2 million indirectly employed. There is a total investment of 98 billion rupees where 63 billion are contributed as indirect tax in national exchequer. Petroleum sectors rank the first indirect tax payer while the auto sector remains the second.

About Pakistan, 10 out of 1,000 people own a car which reports as one of the lowest in emerging economies. In some coming years, the rise in per capita income along with fluctuating demographic distribution and an expected inflow of around 40 million youngsters in an economically active workforce will provide a stimulus to the industry for its growth and expansion. Two major initiatives; AIDP (Auto Industry Development Program) and NTCIP (National Trade Corridor Improvement Program) were undertaken by Pakistan's government to develop an automotive industry in Pakistan. AIDP is being actively implemented by EDB (Engineering Development Board) to boost the capacity of car production to 500,000 units, for enhancing the GDP contribution to automotive sector to 5.6% and also to attract a USD 3 billion investment. Moreover, also for reaching an export target of 650 million USD.

Manufacturing is done by automotive engineering which provide state economy US\$ 3.6 billion. It has also given people the chances of employment. Thus, around 192,000 people are involved in direct employment. Approximately \$ 0.96 billion per year is the production of automobile parts. There is increased demand of automobile parts. The highest demand is in motorcycle sector that is 60%. Second highest demand in car sector that is 22% and the other 18% is used by bus, truck, wagon and tractors. Such high demands by car and motorcycle industry is fulfilled by the import of automobile parts. The import rate is 22%. Whereas, the remaining demand of 78% is fulfilled by the local manufacturers.

As the demand for the sophisticated industry is being increased, duty-free import of components, sub-components, and raw-materials for assemblers and manufacturers has been allowed by the government. In 2007-2008, the altogether import bill of machinery accounted for 2.195 billion USD which is reported to be 12.77% higher than it was in the year before. There is a direct relationship in the growth of the automotive industry and the growth of the automation sector and machine tools. The automotive industry has become one of the most rapidly progressing industries of Pakistan and provides 3.9 billion USD yearly to Pakistan's GDP.

At the same time, there was immense expansion in the aftermarket for spares where an important role was played by the imported parts to meet local demand. Further impetus is being given to the market of spare parts by around

5.4 million populations of all vehicles. Pakistan ranks as second all over the world having the highest CNG powered vehicles. More than 1.55 million buses and cars in Pakistan run on CNG which contributes to 24% of total vehicles.

The automotive sector continued its momentum of growth in the current fiscal year from July to February 2018, reflecting impressive growth in all sectors except buses. This is due to the strong demand of new vehicle models, which keep pace with growth. This remained in the position of automotive sector among the main sectors of large scale production. The jeeps registered notable increases in 1430.7%, tractors in 44.7%, trucks in 24.4%, and LCVs vehicles in 19.7%, two-three wheelers in 17.3% and passenger cars in 16.8%.

The automotive sector remains one of the most powerful sectors in the manufacturing sector. The reason for this outstanding and sustained growth is the low level of interference and the clear orientation of government policy.

Contribution to the GDP

At present, approximately Rupees 30 billion yearly are provided by automobile sector to Pakistan's GDP. This industry plays an essential role in the growth of economy of Pakistan as it also pays taxes of around Rupees 8 billion annually. While working in double shifts, the automobile sector has the capability to manufacture 120,000 vehicles yearly. There has been a considerable contribution towards employment generation by car manufacturers in Pakistan over the last 10 years. Vendors and car manufacturers employ around 150,000 to 200,000 people indirectly as well as directly. There is also the contribution of Original Equipment Manufacturers in change of technology and manpower training.

As a result of car manufacturing in Pakistan, parts are not only supplied to local OEMs like Nissan, Toyota, Suzuki, Honda, etc., by the vibrant auto vendor industry but also internationally. There is an approximate export of 20 million USD auto parts per year. After the introduction of policy of deletion, the vehicles produced by original equipment manufacturers have 50 to 70% automobile parts according to the model. Even when the investment environment of the country was not good, automobile manufacturing industry was one the very few industry in which the foreigners as well as locals were interested to invest. In the development of industry, local car producing industry is a significant sector. It is stated that importing the second hand cars as compared to fully disassembled cars would influence the foreign exchange of Pakistan by a major drop. In result, there will be a decrease in the growth of Pakistan's engineering industry.

In the country's export, a significant role is being played by the auto manufacturers. 27 million USD was received against the export of auto parts in a period of 9 months that is, from July 2001 to March 2002. The process of deletion is continuous. Many local produced cars parts are merged each year. There should be increase in the quantity of local manufactured car parts according to policy of deletion. There should be increase until and unless the target is achieved. At present, the level of deletion in small and large cars is approximately 75% and 60% respectively. Deletion process is altered if there is any modification in the shape of the car.

As there is low demand of change in Pakistan, the modification in cars is not beneficial as it requires investment of Rupees 4 to 5 billion. Pakistan is an emerging market where immense investment and business opportunities are offered. There was 2.8% total contribution of the auto industry to GDP in 2007 which had a possibility of rising to 5.6% in a span of 5 years. In 2007, the overall sale of automobile in Pakistan was \$ 2.67 billion. In Pakistan, there are around 500 automobile parts producers. There are at least 82 trucks, tractors, vehicles and buses. There is a new policy to make investment of \$ 4.09 billion in order to achieve half of 500,000 cars per year.

The automotive sector covers 16% of the auto sector now which has a possibility of raising 25% in the coming 7 years being compared to 6.7% in 2001-2002. Around 192,000 people are directly employed in the vehicle manufacturing sector having 1.5 billion USD total investments. Currently, there are at least 82 trucks, tractors, vehicles and buses. There is a new policy to make investment of \$ 4.09 billion in order to achieve half of 500,000 cars per year.

According to the 2018 data, Pakistan's automobile industry is one of the fastest growing industries in the country, contributing about 4% of Pakistan's GDP and with more than 1,800,000 employees. There are currently 3,200 car production plants in the country, with an investment of Rupees 92 billion (\$ 870 million) annually, which produces 1.8 million motorcycles and 200,000 vehicles. Automobile industry contribution to the treasury is almost Rupees 50 billion (\$ 470 million). The entire sector provides employment for 3.5 million people and plays a crucial role in promoting growth in the vendor industry.

Automobile Industry and the Allied industries

Many other associated industries are supported by the automobile industry. This sector has provided the people of country with huge employment opportunities. The most significant associated industries are mentioned below:

1. Tyre shops
2. CNG stations
3. Automobile parts shops
4. Workshops

Literature Review

Fuel is any material that stores thought at first associated independently to those materials sparing vigour in the type of compound energy that could be released through burning. yet the thought has since been additionally associated with diverse wellsprings of hotness vigour for instance nuclear vigour (through nuclear separating or nuclear blend) and releases of substance vigour released through non-blazing oxidation for instance in unit science or in vigour units (Ohta & Griliches. 1986). A worth that will purchase a restricted measure, weight, or another measure of an incredible or utility. As the thought given as an exchange for the trade of proprietorship, cost shapes the key backing of business transactions. It may be changed by an agreement, left to be never going to budge by an agreed upon mathematical statement at a destiny date, or ran crosswise over or masterminded all around the course of dealings between the get-togethers incorporated. Back, the cost is put through what the buyer is willing to pay, the distributor is willing to acknowledge and the competition allows you to pay. With the article, the ad and the place where the mix is shown, it is one of the business variables that the conglomerates can pursue in a certain control. It is punishable to control costs (see change in value) in conspiracy with different vendors and to demonstrate misleading value, for example, charging for items you want to include in a published, recorded or cited cost (Greenlees, 1980).

The automobile involves a unique place in the heap of products and aids Americans buy. It is not just a method of transportation yet it IS moreover a status image and a conveyer of the picture numerous wish publicly accepted norms to hold of them. For the aforementioned and different explanations, Americans up until later years have displayed an in number inclination for the imposing or full measured vehicles. Nonetheless. In the previous three years numerous forecast have expected the close of this inclination because of the sharp ascent in gas costs (Falvey, Frank. Fried & Babunovic, 1986). The mileage of the vehicle is the relative productivity of fuel between the distance and the fuel consumption measured by the vehicle. Fuel utilization can be disseminated for travel separation or the separation travelled for each volume of fuel.

As the use of vehicle fuel is an exceptional factor in air pollution, and since fuel consumption imports can be an important part of the country's foreign exchange market, many nations need to meet efficiency requirements (Crandall & Graham 1989). A sale is a demonstration of advertising an item or fix as a reasonable exchange for cash or other compensation. It is a demonstration of the culmination of business action. The dealer or selling specialist the supplier of the items or helps completes an arrangement as per a securing or to an appointment reference needed] or to a claim. There takes after the demise of the title (property or ownership) in the thing, and the order and unpaid settlement of esteem, the dedication for which rises as a result of the merchant's need to pass proprietorship. Possibly, a trader agrees upon a cost at which he energetically parts with obligation regarding any case upon the thing. The purchaser, however a gathering to the bargain, does not execute the deal, just the vendor does that. To be exact the bargain finishes preceding the instalment and gives ascent to the commitment of instalment (Li, Timmins. & Haefen, 2009).

The worldwide emergency in petroleum has expedited the danger of genuine outcomes to the auto mobile driver in need of gas and, thusly, has accelerated respectable civil argument on the most prudent approaches to accompany. The establishment of import portions, infringement of expenses of conceivable varieties, regulations of vehicles generation and unwinding of contamination control norms for autos are yet a couple of the possibilities. Slinking as an Inescapable elective is the utilization of the value instrument to control fuel utilization (Kilian 2008) Specialist with any prescribed expand in fuel costs is the suspicion that consumption will decrease in some relationship to the measure of value build. Not with standing, the issue of the flexibility of fuel costs is a long way from clear.

Likewise, since the thought of flexibility is fleeting thought numerous different elements identified with utilization must be recognized for major strategy choices. The subject of value and its relationship to interest is to a great degree complex (Willenborg & Pitts, 1977) A couple of thoughts of records that vary in the medication of the normal present quality of gas cost for driving an auto on its cost over its remaining life are recognized. There are a few works about the hedonic cost records of US, autos soon after 1970, however, there does not appear to be a

far teaching investigation of them. This note will present evaluated yearly rate changes in the hedonic value lists of U.S. utilized household traveller autos for 1970-1983. This is reliable with my finding of purchaser desire customers did not anticipate the gas cost to expand at a higher rate than the CPI in the first stun, yet they finished so in the second stun. Discoveries (b) and (c) infer that the presumptions about purchaser desire influence the evaluated N lists of durables significantly in the stun periods (Ohta, 1987).

Contentions might be propelled in the backing of optional salary as the pertinent wage measure to a vehicles request model. Roos and von Szeliski utilized this idea in their pioneering pre-war study, and expanded illustrative abilities to a salary variable which permits for a steady subjectively chose subsistence level of \$1,500 for every family unit. The present study advances such a measure also contrasts it and the effects based upon a genuine disposable-wage idea. In addition wage, times of sharp change in the accessibility of new-auto credit terms can, in conjunction with different variables, impact the change in new-auto deals. The references to the credit figure in the literary works are various at the same time next to no has been carried out in quantifying its impact (Dyckman, 1965) This instability, joined together with limited item blend adaptability on the supply side, has brought about incessant periods in which the auto producers' generation blend has not reflected current shopper request.

Given that viewpoint furthermore the utilization of a disaggregated model, an experimental model was tried utilizing a three-stage minimum squares technique as opposed to customary slightest squares. The value versatility of interest for every submarket was altogether more stupendous than one. Fuel value changes influenced net request just in the standard market, and after that just in the quarter of the cost change. For modest autos, interest was exceptionally responsive to market size, inferring the imperativeness of demographic changes. These discoveries infer that modest auto bargains will press on to develop with respect to vast auto bargains as being what has indicated demographic changes proceed (Wetzel & Hoffer, 1982). The common decrease in genuine gas costs over the 1990s may halfway illustrate why engine vehicle fatalities for every capita have not diminished even with the selection of additional stringent state arrangements.

The Centres for Disease Control and Prevention has hailed the diminishment in engine vehicle fatalities as one of the 10 extraordinary open health accomplishments of the twentieth century. This paper has demonstrated that activity wellbeing authorities should think extensively in regards to the elucidation of total engine vehicle casualty patterns (Grabowski & Morrissey, 2004) The discoveries of the present study affirm various comes about the impact of socio-financial variables on driving style reported in prior studies (impact of sort of utilization) while repudiating others (no impact of salary). Then again, it ought to be kept in mind that the greater part of the prior studies alluded to speed decision on a given way section, while there is no monotonies relationship between Speed and fuel use for every kilometre (Rouwendal, 1996) The result is, by and large, the interest for every kind of auto had a generally high fleeting flexibility with appreciation to its cost, and in a few cases additionally reasonably high cross-flexibilities with appreciation to the costs of different sorts of autos. The halfway versatility of interest for new autos regarding the cost of fuel was discovered to be moderately little; in any case, the interest for more seasoned autos was discovered to have a considerable versatility regarding the cost of gas, and this, coupled with the high cross-cost versatility of new auto request as for the cost of more seasoned autos, demonstrates an essential backhanded impact on the interest for new autos of progressions in the gas value, the majority of it influencing expansive new autos (Blomqvist & Haessel, 1978).

The model is characterized as far as four primitives and a Nash balance supposition in costs. The primitives are the utility surface that allows values to distinctive conceivable consolidations of item aspects as a capacity of purchaser attributes, cost capacity which figures out the generation cost connected with diverse syntheses of item qualities, circulation of customer attributes, and an appropriation of item attributes. Restrictive on these primitives the model can settle for the conveyance of costs, amounts, variable benefits, and shopper welfare (Berry, Levinsohn & Pakes, 1995) Our models of mileage catch customer movements by means of buys of higher or more level new-auto efficiency. The mileage of new autos was discovered to be conversely joined to petrol cost and livelihoods and reacts to the Voluntary Agreement on Co2 outflows for every kilometre in the long run for the joined together efficiency case. For petrol powers, our model of efficiency shows that there is a long haul relationship between mileages, true fuel costs, genuine particular disposable pay, and the vicinity of the efficiency standard. In the long run, petrol and diesel comparisons show wide distinctions in pay flexibility values for efficiency. Transient reactions, for petrol and diesel, indicate that at higher salaries, shoppers will select higher fuel force as they purchase bigger vehicles.

Essentially, in the short-term, there is latency between past mileage and current efficiency for both energizes. An unwavering finding is that interest for mileage is cost and pay inelastic for both petrol and diesel autos. Interestingly, the fleeting conduct of efficiency shows the progressions in the profile of auto-buys regarding higher

or more level mileage. The long haul conduct catches the mechanical change in vehicle motors mostly determined by cost and pay impacts since such changes require numerous years to rise. (Bonilla & Foxon, 2009). A study on Automobile Manufacturers and the Price of Oil, study finding revealed that the sensitivity of the oil price of the largest car manufacturers in the world. After controlling the systematic effects, we identify a negative sensitivity to the price of oil that matches a demand effect of fuel costs (Dirk G. Baur & Neda Todorova, 2018)

Research Methodology

The data of the monthly time series (secondary data) were compiled on the PSO and PAMA website to determine the prices of fuel and automobiles in the last five years (2014-2018).

Sources of Information

- PSO (Pakistan State Oil)
- PAMA (Pakistan Automotive Manufacturers Association)

Sample Size

300 observations of Fuel Prices and Automobile Sales have been taken from the website of PSO and PAMA.

Variables to be studied

The variables that we will be studying for this paper

1. Fuel Prices
2. Automobile Sales

Statistics to be used

We have used the regression analysis with the help of SPSS software. We have analysed my data by keeping automobile sales as the **dependent variable** and fuel prices as an **independent variable**. We have Run Liner Regression with variables Fuel Price and Automobile sales i.e. 1300 cc cars and above 1000 cc variables.

Results

According to the data file linear regression has been applied. This is because this research includes only two variables one is dependent and other is the independent variable. The results are as follows.

Table 1
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change	Durbin-Watson
1	.102 ^a	.010	.007	1540.746	.077	2.952

a. Predictors: (Constant), Petroleum prices

b. Dependent Variable: Automobiles sales

R is the association and measures how two variables move in connection to one another. R-square is the extent of variability in the dependent variable that is demonstrated by the free variable, the balanced r-square in additional dependable detail since it considers our specimen size, the standard lapse measure variability. In the model outline, the esteem of R shows that there is a correspondence between watched and anticipated values of the subordinate variable. Here the value of R square is 0.010 it means 10% association exist between variables. According to rule of thumb, Durbin Watson statistics is near 2 which means there is no autocorrelation in this model.

Table 2
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7471864.267	1	7471864.267	3.148	.077 ^a
	Residual	7.074E8	298	2373898.224		
	Total	7.149E8	299			

a. Predictors: (Constant), Fuel Prices

b. Dependent Variable: Automobiles Sales

Dissection of change of or ANOVA shows the significant value 0.077 which shows that our model is the better indicator of the conclusion. The Anova table shows how critical the model is, the figure 7.149E8 of the aggregate segment shows that variable is clarified by the free variables and the remaining figure 7.074E8 shows that the variable is not demonstrated by an autonomous variable. Here the sig esteem is more stupendous then 0.05 its shows that the general model is irrelevant.

Table 3
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2890.047	490.927		5.887	.000
	Fuel Prices	-10.454	5.892	-.102	-1.774	.077

a. Dependent Variable: Automobiles Sales

It means when fuel prices increase by 1 unit, Automobile sales increased by -10.45 units. Here the sig-value is 0.077 that is greater than 0.05 it shows that the general model is insignificant.

Hypothesis Assessment Summary

Hypothesis	Assume value	Sig. Value	Empirical Conclusion
H: Fuel Prices has an impact on Automobile Sales in Pakistan	0.05	0.077	Rejected

Conclusion

With this research, it can be concluded that there is no impact on automobile sales with the increase petrol prices in Pakistan. The sales of automobiles are up to its own level that is constant or on an increasing trend. It can be also being concluded that inflation does not affect the sales of the automobile industry or the increase in petrol prices does not harm the automobile industry. Fuel prices have always been the major factor for the automobile industry. This study suggests the impact of fuel prices on automobile sales. All the data needed to be was available on the website of PSO and PAMA for fuel pieces and automobile sales. The data used over here is secondary data. The results of this study have an impact on policymakers and future products and plans. By this research, we find that in Pakistan fuel prices has no significant effect on automobile sales.

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