THE ECONOMICS OF THE VEHICLES

For the majority of us, vehicles are a necessity now. We spend a significant proportion of our income on vehicles for their purchase and maintenance. In this chapter, I am going to consider various financial issues of the vehicles concerned with purchasing, running or tax-planning. A good knowledge of these financial aspects helps us in taking correct decisions. The opinion given below is purely personal. Before following it please analyze the facts in your context and if necessary, consult your financial advisers. This discussion is applicable to both two and four-wheelers. However, here I have used four-wheelers as an example.

What is the actual running or driving cost of a vehicle?

The money that we spend on a vehicle can be divided into three parts:

1. The initial cost inclusive of registration.
2. Daily fuel consumption.
3. Vehicle maintenance, e.g. service, repair, yearly insurance, etc.

Most of us consider daily fuel consumption to be the running cost of vehicles. However, the actual daily running cost of the vehicle is quite different. To understand the actual daily running cost, in addition to daily fuel consumption, we have to take into account the daily depreciation and the daily maintenance cost as well.

The daily depreciation: The concept of daily depreciation is a very important fact that we usually do not take seriously. Suppose, your new car costs you Rs 6 lakhs. Now you keep the vehicle with you for some period, say three years and then you decide to change the car. Suppose, you get Rs 2.5 lakhs as a resale value of your car. So the depreciation or loss in the value of the car is the difference of initial and resale cost i.e. Rs 3.5 lakhs [6 lakhs – 2.5 lakhs]. That means about Rs 3.5 lakhs you had spent for keeping the vehicle with you for a period of three years. If we talk in terms of days, the daily depreciation comes to Rs 320 a day [Rs 3,50,000/365X3] Thus, you can say that you paid Rs 320 every day like a rent to the company for your vehicle. This amount is just to keep the vehicle with you. Since you pay all this money on the first day while purchasing the vehicle, you do not realize this fact of daily depreciation of the vehicle.

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The daily fuel cost: Suppose, you are living in an average Indian city where on an average you travel about 12 km/day. If we consider that your car is giving an average of 12 km/litre, then you would be paying for one litre of petrol daily i.e. Rs 50.

The daily maintenance cost: This includes the money for vehicle’s insurance, its repair and time-bound services. Suppose if you are paying Rs 20,000 for these heads every year, then the daily maintenance cost of the vehicle would be Rs 55[Rs 20,000/365].

The actual running or driving cost: Thus after purchasing the car if you drive it daily then the actual daily running cost of your vehicle would be the sum of the daily depreciation [Rs 320], the daily fuel cost [Rs 50] and the daily maintenance cost [Rs 55] i.e. Rs 425. If we consider a situation in which you purchase a car but do not drive, but still you have to spend Rs 375 per day. Now you can also easily realize, out of the actual daily driving cost [i.e. Rs 425] only 12% is shared by petrol.

So, purchase a vehicle only when you really need it and once you have got it then run it and don’t keep in the garage. This is especially true of the luxury cars where the daily depreciation is more as compared to the small segment cars. If you drive less, the only advantage you get is that you get a little better resale value. Instead of Rs 2.5 lakhs you may get Rs 3 lakhs, say Rs 50,000 more, but still it would not affect much to recover your depreciation. Nowadays there is a tough competition among the car companies so the resale value is reducing with time. Otherwise also, while purchasing a bigger segment car, to consider the resale value of that vehicle is not an important point for decision-making. Considering the same fact, it can be suggested to those employees who have already having the facility of vehicle from the company or the government, but still wish to have a personal car for occasional driving; it is advisable to go for a smaller segment car.

These facts and statistics are mainly for an average case. There may be variations according to the initial cost of the vehicle or mileage covered in a day.

[II] Diesel vs petrol vehicles:

We frequently get attracted by the diesel vehicles mainly for the reason that it consumes cheaper fuel. However, before purchasing it, you have to weigh extra charges and maintenance cost on diesel vehicle against the benefit you get out of it. Suppose, you give an extra amount of Rs 1 lakh to get a diesel vehicle in order to save money. If this vehicle has an average of 15 km/litre and you drive 30 km/day, you would spend rupees Rs 70 as cost for 2 litres of diesel [@ Rs 35/litre]. Had this been a petrol vehicle, you would have required to spend Rs 100 as cost.
for 2 litres of petrol [@ Rs 50/litre]. Thus you would be saving Rs 30 a day by driving a diesel vehicle. Thus in the above-mentioned situation, to recover Rs 1 lakh that you have paid as an extra cost for the diesel version of vehicle, you would require nine years. Whether you are willing or not you have to keep this vehicle with you for full nine years if you really want to recover this extra cost. In case, you want to keep the vehicle for three years then instead of 30 km/day, you have to drive for at least 90 km/day to recover this extra Rs 1 lakh. Thus we see that, as far as fuel economy is concerned, the diesel version is useful only for those who do significant travelling every day like taxis or people living in metros. Besides, diesel vehicles require bigger maintenance cost. Its engine has more weight that affects the life of tyres, suspensions, brakes, etc. Last but not the least important point is that the majority of diesel vehicles in present time are not eco-friendly.

[III] When to change your vehicle

There are no fixed guidelines. You yourself only can realize the need for changing the vehicle. However, there are some points that need to be considered before doing so.

1) If it really gives trouble: When your car frequently undergoes repair or gives you trouble, then probably you need to change it. Please make sure that the problem is major one and really concerned or related to safe driving. Many times there may be minor faults, but they occur repeatedly as workshop mechanics fail to locate it or the trouble occurs at odd times [scorching summer] and in odd situations [in front of some guest] and you feel embarrassed and frustrated. You declare immediately 'enough is enough now it had to be changed'. Such impulsive decisions may not always be right.

2) If you move for a higher segment car: If you feel that you deserve or need a bigger car, go ahead and get it. The only thing you need to decide is whether or not to keep out the smaller vehicle that you possess. It is justified to hold a small car in cases when there are other persons [wife or children] who also need a car. Since the depreciation and running cost for a small car is less, so you can afford it easily. But here we assume that you buy the bigger car with an intention that you would make full use of it for the reason just mentioned above in section A. It has been frequently seen that even after having an additional bigger car; people still use the small car more frequently. The bigger one is used on weekend and in parties, etc thinking that by doing so they are having a significant saving. There could be other reasons for doing so. If better average and savings are the main reason for preferring
the small to the bigger car, then they have to think again. Let us see how much you save by driving a small car. Suppose, the average of small car is 18 km/litre and you are driving about 18 km/day [i.e. requiring 1 litre petrol/day] and you keep the car for three years, then the total cost of the petrol consumed in three years would be $365 \times 3 \times 50$ [cost of petrol consumed per day] = Rs 54,750. Now we take up the case of bigger car that gives an average of 12 km/litre while other conditions remain the same [i.e. you drive for about 18 km/day and you keep the car for three years]. The total cost of petrol consumed in three years by the bigger car would be $365 \times 3 \times 75$ [cost of petrol consumed per day] = Rs 82,125. Thus in case of driving a small car only, you save Rs 365 X 3 X 75 [cost of petrol consumed per day] = Rs 82,125. Thus in case of driving a small car only, you save Rs 27,375 [82,125 - 54,750]. If the initial cost of the small car is Rs 3 lakh and for the bigger one is Rs 6 lakh, you would find that you had paid Rs 3 lakh extra for the bigger one. If you compare the money that you have saved by NOT driving the bigger car [Rs 27,375 ] with that of the extra cost given for the bigger car [Rs 3,00,000], you would realize that there is no real saving instead you have lost a significant amount of money by not driving the big car [Rs 3,00,000 - 2,7375 = Rs 2,72,625]. Not only you lost the money but also sacrificed a nice comfortable drive and good air-conditioning of the big car for this duration.

(3) If you frequently go for long distance travelling: Vehicles should be very reliable when you frequently go on highways. If some fault occurs and you are alone, you may be in trouble as it is not possible to leave the vehicle to go for some mechanic. Safety is also an important factor in case women are with you and at night.

(4) Time-bound change: It is true that the performance of vehicles goes down with time. It is frequently suggested that we should change our vehicles after a certain period, say 3 or 4 years. Yes, this is true to some extent, but this should not be the rule. If you have maintained your vehicle well, your driving is limited only to a few km/day and vehicle is single-handedly driven and more importantly not causing any trouble to you, then it is quite justified to keep it for a longer period. Remember keeping the vehicle with you for a longer period would reduce the daily depreciation of the vehicle. If we consider the same example mentioned above in section A, where the daily depreciation is Rs 320 for keeping it for 3 years, we find that if we keep the same vehicle for one more year, then it would come down to Rs 240/day and so on.

(5) For women it is better to have a perfect vehicle: This is mainly for safety reasons, considering the fact that they are not very familiar with the engine parts, so they find it is difficult to manage even
small faults. They are more conscious of their appearance and make-up, so even for changing the flat tyre, they expect someone to help. My wife knows only one solution for every problem, i.e. just to inform me on mobile and wait [hopefully] or leave the car there to get a taxi. I feel today’s woman can do everything except change tyres.

(6) Some more tips:

1. Sometimes you feel a need for an extra bigger car or SUV for the purpose of going for long-distance family trips as it better suits such travelling. But before doing so, you analyze as to how frequently you do it. If you are going occasionally on such trips, it is much better to have such a vehicle as a taxi whenever required. That would be much more economical to you. Besides, you also get a driver making your drive more comfortable and you need not to take care of safety, security, more importantly parking of the vehicle.

2. Sometimes just out of love and affection, you yield to or cannot resist the pressure of your children, lovely wife and you go for a vehicle. I don’t know how to deal with such a situation. But before going for a vehicle, decide whether among all the various recent pending needs for your family, is this the top priority? Recently received money in your pocket or fat pocket along with such emotional demand is a dangerous combination with a very high strike rate.

3. Do not go by what vehicles the other people in your neighborhood or in your office have. There is no reason to compare their needs with yours and always use your brains.

4. Think seriously before getting attracted by offers like 100% financing with a 0% interest. Now with the aggressive salesmanship it is very hard to resist them. In general it is a very tough job for a middle-class person to escape all these distractions and take his earnings to the bank for savings. It is true not only of vehicles but also of many other home appliances.

[IV] Vehicle and Tax Planning:

If you use your vehicle for a professional purpose, you are entitled to get tax benefit from its cost. The total cost of the vehicle is deducted in parts every year as depreciation from your taxable income. If as a professional you are going to have a car for the first time with the aim that after having the car you expect a better income, you must get the car. There should be no confusion about it. However, there comes another situation when you already possess a car and the question comes whether you need to change the car just for tax-saving.

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It is a common situation for professionals whose income or business is growing with time, so that at the end of financial year they have an additional income as compared to the previous one. This additional income increases his tax liability. Now to save this extra tax burden, they may be suggested to go for investment in some equipment or machinery of professional use. Since a car qualifies for this kind of investment, they are frequently advised to change their cars by tax advisers and chartered accountants. Yes, it does help in reducing the extra tax burden as by doing so they start getting the benefit of depreciation. However, I would suggest what apparently looks beneficial in this investment may not always be so. Before taking any decision, let us consider what actually may happen in these situations.

Suppose this year you have an additional income of Rs 4 lakhs. Let us see what will happen to your tax structure and net saving in the two different situations viz: [A] when you do not change the car merely on the ground of saving the tax [B] when you change the car just for tax-saving.

**Condition A. You do not change your car:** In this situation the amount of Rs 4 lakhs will be counted in your taxable income and you pay Rs 1.2 lakhs as tax [considering you fall in 30% tax bracket]. In other words, this year your net savings will be increased by Rs 2.8 lakhs.

**Condition B. You change your car:** Suppose, the initial cost of your old car was Rs 5 lakhs and you sell it for Rs 2 lakhs. Now you purchase a new car for Rs 6 lakhs. For paying Rs 6 lakhs for the new car you need to add Rs 4 lakhs [you earned in the current year] in to the money that you got by selling the old car [Rs 2 lakhs]. Thus the advantage that you get now, this Rs 4 lakhs that you paid from the current income will not be considered in your taxable income, so you save Rs 1.2 lakhs i.e. equal to the tax according to your tax bracket of 30%. Though this saving does not occur in the same year, you recover it completely through depreciations over the years. Thereby as a professional this car costs you cheaper by Rs 1.2 lakhs as compared to a non-professional.

**Interpretation:** In condition A when you refuse to change car merely on the ground of tax-saving, you see that out of the Rs 4 lakhs, even after paying the tax you do a significant savings [Rs 2.8 lakhs]. While in case of changing the car [B] out of Rs 4 lakhs, you are able to save only Rs 1.2 lakhs. Thus, by not changing the vehicle you save an extra Rs 1.6 lakhs [Rs 2.8 lakhs - 1.2 lakhs]. Money saved means money earned. I believe if you really need to change a car due to some genuine reasons mentioned earlier in section C [e.g. it is really giving trouble,
you want to go for a bigger one or you think a change would benefit your professional income), it is fully justified to change your car. What I am trying to emphasize here is, just for saving tax, if you change a car that is already running in a good condition or well maintained and get another similar new one, you do not get any advantage as far as driving comfort or professional income is concerned. Instead by doing so, you lose your savings by a significant amount. You see that though there are tax benefits on purchasing a car, it does affect your ultimate savings if you analyze it carefully. Then guess who gets the benefit most of the times when you change your vehicle unnecessarily on tax ground; you, the tax department or the tax adviser? Obviously, none of these, it is the automobile companies.

I try to explain this with another example. Suppose, I purchase a medical equipment of worth Rs 1 lakh, then according to my tax bracket of 30%, I would save Rs 30,000. In other words still Rs 70,000 will go from my pocket. Unless I recover Rs 70,000 by making a good use of this equipment, I would remain in loss. My profit will start only when I make an additional income out of this equipment above Rs 70,000. Similarly, in case of purchasing a car as in case [B] even after saving Rs 1.2 lakhs, still your Rs 2.8 lakh are at stake. So, unless you generate an additional income of Rs 2.8 lakhs that is totally attributable to this new car, your decision for purchasing the car cannot be called wise at least from the tax point of view.

Here I just want to make a point that in spite of the fact that we get tax benefits as professionals, we should buy any professional materials like cars only when we really need them. Many of us may be having a false impression that this money which is paid for such items of professional use gets totally deducted from the actual tax. It is not so, the only relaxation that we get is that this money is not counted in our taxable income, thus allowing us to save only a part of this money that is equivalent to tax rate of that particular bracket in which our return falls [In above example it is 30%]. Remember, the lower you are in terms of tax bracket, the lesser would be the benefit that you get on professional items. In the present time when the Finance Ministry is increasing the liberty for the taxable income, more and more middle-class people are either getting exempted or shifting to lower tax bracket. Thus it becomes more important for professionals falling in the lower bracket. Had it been the government policy that the cost of the car would be deducted directly from the actual tax [like that used to be with LIC investment a few years ago], instead of from taxable income, then you are liberal to get any professional materials without much considerations. I don't think the
government would allow this. Moreover, if you get a tax relief in current year, then for the every coming year again you would have a compulsion to purchase some more such things whether or not you need them.

It is true that proper tax planning is very necessary and useful for all of us, so that we can take the best advantages of government policies that are in our favour. It is also right that in proper tax planning we should target for maximum tax saving. However, its proper definition would be complete only when we achieve this maximum tax saving simultaneously with good capital or savings on our side also. Bringing tax liability to merely a zero without any significant actual money in your hand cannot be called a proper tax planning.

[V] When to purchase your first vehicle:

For any desired new vehicle you are the best person to decide its real need and affordability. Here I assume that you have just started your professional career and going to purchase it out of your own income. The only two things that I would consider in my own case are:

(1) I will prefer that major share of the cost is paid from my pocket. I am not against car loans. However, even if I go for a major loan, I would ensure that there is enough money or capital in my savings. The reason is that if some mishap occurs to me or suddenly I lose my job, then there should be enough savings not only to meet my daily needs for at least 5-6 months but also for the loan instalments. There might be a question that when you already have money, is it necessary to go for the loans. Yes, this is correct for some cases like [a] professionals who in addition to depreciation also get benefit on the interest of loan in their income tax and [b] if the interest that you gain on your personal savings is more than the interest you pay for the car loan. Please keep at the back of your mind that loan is a loan that has to be paid in future. There is a contrast change in the smile, attitude and behaviour of bank people when you avail the loan and afterwards. Imposing additional or hidden charges or blackmailing by imposing false cases, taking a forceful possession of the vehicle from you, making a nuisance at your house by their goons, all these are well known facts.

(2) I would honestly try to find out the reason whether the need for vehicle is a 'genuine' priority among the other needs in my family. I consider a situation when I have just started my career and my savings have just started taking a shape. The question comes where my initial savings should go first i.e. for capital making [FDs, lands or flat where value increases with time] or to the items like car [that depreciate with time]. Anyway, this is not an easy thing to decide. The old philosophy
was that the initial savings should go for land or house construction. My father preferred almost all of his initial savings for house construction and for best possible education for us. He got a moped [auto cycle] for himself only one year before his retirement while rest of his life he used a bicycle to go to office that was 6 km from the house. Today the property earned with his hard work which he had left for us is not easy for me to get with my own earnings.

On the other hand, the new generation couples feel it right that we should enjoy life right from the beginning. They believe more in tours and trips with their family. So, nothing is wrong with getting a car at an early stage of a career. The enjoyment that is meant for the 30s gives more pleasure if availed at right time rather than at the age of the 60s. They feel it is no fun if you travel to the countryside or mountains with a stick. That might probably be labelled as pilgrimage tour, but certainly cannot be called a fun-making trip. In fact it is a debatable issue. I feel that both should go simultaneously and you have to make a balance between savings and other expenses made towards luxury or enjoyment in the life. The only precaution that we should take is that we should not try to live beyond our means. Considering the very volatile present economy of India and the world this becomes even more important.

I hope that this present economic recession must have given a lesson to us that there is no one on earth who can predict and warn us against a sudden severe economic crisis. It is only the constant feeling of some social and economic insecurity among us that ultimately motivates us to save or to do something to make our future secure. Despite the fact that Indians are able to save 20-30% of their earning as compared to people of the developed world [who are able to save only 5-6% of their earnings], it is the people of the developing countries like India who suffer the most in such an economic recession. The reason is simple. In developed countries, much of the social and financial securities are provided by the government while in India there is nothing like this.

The life in general is not confined to use or misuse of vehicles. The spectrum of life is wide and it is explored as time passes. The economics of the vehicles should be linked to the economics of the entire gamut of life. We should not think of one item in isolation from so many items.