Set of economics problems

Corruption: Introduction: Corruption is considered one of the greatest obstacles to social development and economic growth of a country. Basically, it undermines the overall development of a country by breaking and distorting the rule of law. Corruption further plagues the whole society and weakens the institutions of the country. It is important to note and understand that the economic growth of any country all depends on its strong institutions at various levels. Furthermore, the harmful effects of corruption are more severe on poor as compared to rich people.

In this paper I am going to explain how does corruption find its roots within the society and spread at various levels? This phenomenon is explained with the help of a model. First of all Assume an economy composed of n citizens, with one of them serving the role of a self interested public official. This official is considering whether to implement a project. Here we take a situation where there is only one citizen i who derives positive utility from the project $U_i > 0$. All other citizens in the economy including the public official derive utility $U_{-i} \leq 0$.

The public official may corrupt citizen i by proposing a bribe, which the citizen may accept or reject. For each unit of bribe b, we also assume citizen i suffers a cost $(1+\acute{\alpha})$, with $\acute{\alpha} \geq 0$. We assume $U_i \div 1 + \acute{\alpha} > U_{-i}$ and complete information.

Sub-game Nash Equilibrium is used in dynamic games. More informally, we can say that it means if the players used to play any smaller game that consisted of one part of the larger game then their behavior symbolizes Nash equilibrium of the smaller game. In any finite game like one mentioned above, we implement a common method of backward induction in which one considers the last actions and outcomes of the game first and determines

which actions would be required to maximize utility in possible circumstances. For example the public official is proposing bribe and corrupt the citizen i keeping in mind his own benefits. However, the citizen may accept or reject the bribe. In case if the citizen accepts the bribe then it will include in corruption on the part of the public official as well as the citizen to maximize their own benefits. Furthermore, this corruption results in social inefficiency and harming the overall economic growth of the country.

Now, suppose the project is a driving license for citizen i and citizen i is a dangerous driver. In such a case there would be negative externalities of the project for all other citizens. However, these negative externalities are small. Here it is important to mention that people start formulating their own policies and start innovation to get profits on their part. These rent seeking parameters and innovation on the part of people over their direct competitors may relate to inefficiency of corruption.

Actually continuous adoption of innovation is carried out which is considered key to development and growth. Innovation and rent seeking is a way in which private interest may lead to increased social welfare when properly channeled. However, private interest people who are innovators are monopolist and this is the point where the interests of an individual and public as a whole clash and break down. Finally, the social welfare is badly harmed by the presence of monopolistic structure within the society. So, in the above model the public official will monopolized his duties and finally his interest break down when come in contact with public time to time. In that way it relates to inefficiency of corruption.

Now select and suppose there is a benevolent planner who wants to prevent corruption from happening. So, in the above mentioned model, the planner

first set and determines the wage of the public official to minimize his tilt or inclination towards bribe. However, it is evident that at each period while performing duties and working for the state, the public official faces the above mentioned game of bribery. He may propose bribe to other citizens or get a bribe from any citizen. So, what should the planner do to tackle the situation? Regular auditing at company as well as individual level is very essential. Moreover, if corruption exists while auditing then the official should be dismissed at once. It is very important to remember that wages are very important in tackling over all corruption in any society. Basically, most of the people do corruption because of insufficient wages and imbalance between their earnings and expenditures.

Now consider the situation where the planner may set the number of public officials who are offering to implement the same project and facing the same corruptible citizen. How would the above game change for two public officials playing simultaneously?

For that purpose we now assume a slightly different game. Take a bribery game between one public official and two citizens (h and l) who derive positive utility from being allocated a project (e. g. a scholarship). We now assume the public official will surely ' implement the project'. However, his decision is now who should be its recipient. We assume citizen h derives utility Uh and citizen l derives utility Ul, with Uh > Ul.

So, in such a case Uh will get the project. Assume citizens are constrained to pay an amount as a bribe. Uh has greater utility so he can pay more amount as a bribe or according to public officials he has to pay greater amount because of more utility. This is the reason why Uh will get the project. So, this result finally indicates that corruption is present at all levels and

greatest obstacle to social and economic growth. People can achieve results with the help of bribes and heavy amounts. So, those rich in the society are strong whereas corruption has severe effects on poor people and the poor remains poor just because of inequality and corruption.