

Interplay Between Corruption and Economic Freedom



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Abstract

This paper seeks to examine the nature of the interplay between corruption and economic freedom. Both corruption and economic freedom are in themselves loaded, complex terms. But the relation between them has recently come into sharp focus. The relation may, intuitively, appear obviously negative. But empirical research has shown that the relation is anything but linear. The nonlinearity can be ascribed to the process by which a country frees itself economically and to the conditions in which this process takes place.

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Introduction

I start this paper with a brief discussion on the definition of corruption. This paper and all the research papers reviewed for this paper, uniformly understand corruption as the abuse of public office for private gains. I have sought to understand how corruption works and how it comes about at all. My reading helped me come up with three pre-conditions for corruption. I have included an alternate Marxist definition of corruption to put things in perspective. I have later described measures for corruption, which use the same definition of corruption as has been specified above. This list is by no means complete, as I have only written about indices that are commonly used in empirical research and analyses. In the next sub-section, I have sought to define economic freedom. I have employed Berlin's positive and negative freedoms as the framework of analysis. I have thus distinguished between classical liberal and neoliberal. This is followed by a brief discussion on the indices for measuring economic freedom. There are mainly two such indices, and both of these are based on classical liberal or negative definitions of economic freedom. The next section is a summary of all the empirical research pertaining to the relation between economic freedom and corruption. I have discussed the findings and given the numbers for each result that has been discussed. The next section is the thread that connects all the preceding sections. Here I have attempted to analyse all the empirical results and numbers in the light of the definitions and framework of analysis specified in the first two sections, the theoretical research papers I have read. I have also tried to broach some topics of interest. This is essentially the concluding analysis to the literature review.

Motivation

The chief motivation for this paper is rooted in current affairs, from which has sprung great awareness. But this awareness in turn has prompted several questions. The flurry of activism undertaken by civil societies in India to battle corruption has taken centre-stage in the news and print medium. Today, scams involving Commonwealth Games, 2G spectrum allocation and rotting buffer grains are part of daily conversations in every household. It is especially interesting to note that even the judiciary has blamed India's neoliberal reforms for having begotten corruption. My curiosity has been piqued enough to think about the deeper issues. Corruption is not just an oft-committed crime anymore; it is a malaise, a condition plaguing the system. I wish to understand the very foundations of this crime, the reason behind the pockets and loopholes within the system that have perpetuated it.

Another major issue the government is battling with, and which has come to be closely related to the issue of political corruption is that of economic freedom. The government has dutifully given some of its sectors to the private players after the structural adjustment plan (liberalisation, privatisation and globalisation) of 1991. But still one hears terms/ phrases rooted in ideology like "crony capitalism" bandied in this era of ostensible neoliberalisation. This paper is an attempt, thus, to prise out terms and processes couched in ideology.

While trying to analyse the relation and interplay between corruption and economic freedom, I realised that a comprehensive literature review was missing. This prompted me to dig deeper and compile my findings in one place.

Definitions and Measures

1. Corruption

1.1. Definition

The definition of corruption that has been made use of in this paper is the one supplied by Transparency International, i.e. “the abuse of entrusted power for private gain”¹. This broad definition is accepted by most researchers with perhaps a change in wording without affecting the meaning. Mauro (1995) defines corruption as “the abuse of public office for private gain”. Mironov (2005) contends that this definition of corruption does not tell us categorically that corruption is bad for the overall welfare of the country. For instance, Leff (1964) defines corruption as an extralegal institution used by individuals or groups to gain influence over the actions of the bureaucracy. He goes on to theorise that corruption may even “grease the wheels” of the economy and that “corruption may introduce an element of corruption in what is otherwise a comfortably monopolistic industry”. Leff also suggests that the general attitude of condemnation and contempt for corruption stem from special view-points and interests. For example, entrepreneurs are against corruption because they have to pay bribes in order to get licenses, permits etc. Leff also points out that corruption creates an outlet for investments in an otherwise highly-regulated system. In poorly-developed countries, highly-regulated countries, the risks and uncertainties at the time of investment are very high (Aubrey, 1999, as quoted by Leff, 1964). Corruption, in the form of bribery, might help entrepreneurs circumvent some of these risks and uncertainties. John Nef (as quoted by Leff, 1964) once remarked that an honest, corruption-free government had actually proved to be a straightjacket on France’s economic development in the eighteenth century (by plugging any leeway/ outlets, like bureaucratic corruption, for the entrepreneurs). But on the other hand, “the laxity of the British government” left enough loopholes to allow some amount of economic activity and entrepreneurship “to flourish”. But I would like to point out something important here, that corruption is more like a substitute for economic freedom in the examples Leff points out, and an inferior substitute at that. Also, Lui (1985) shows that bribery can be efficient in a queuing model if agents with higher values of time can use bribes to obtain a better place in line (as quoted by Mironov, 2005). But in the cases mentioned by Leff and Lui, there is a potential loophole. Borrowing Mironov’s (2005) conclusion, “corruption might improve efficiency only in the case when the private costs associated with regulation outweigh the social benefits”. Mironov arrives at this by stating that “corruption often leads to negative social costs”. He cites the examples of how a criminal can bribe the authority into issuing her/him a passport and how one can obtain a driver’s license without knowing how to drive by paying a bribe. Kaufman (1997) also argues that corruption harms “social aims”.

At this point, an interesting question could be, is corruption also the lack of competition?

There are several types of corruption, like. political corruption, corporate corruption, systemic corruption and so on. It would be too simplistic to say that corruption is a feature of a particular type of governance. Corruption is an act that is necessitated by demand and supply for the same. Supply refers to the “discretionary power” allowed by extant rules and regulations to the supplier. Also, another precondition for corruption is an opportunity for rent. Corruption is defined within a legal framework. It is an illegal act, which implies that there is a law in place which condemns it. Often, in some cultures the act of gifting in return for a favour may not be considered criminal. But if the law

1 “TI further differentiates between “according to rule” corruption and “against the rule” corruption. Facilitation payments, where a bribe is paid to receive preferential treatment for something that the bribe receiver is required to do by law, constitute the former. The latter, on the other hand, is a bribe paid to obtain services the bribe receiver is prohibited from providing.” - *Transparency International* (www.transparency.org)

condemns it, then by law, it does become criminal. And perhaps this is when a law becomes unreasonable in that particular culture; when it condemns something that is customary to that people. Returning to the focal point of the discussion, we must identify where the opportunity for corruption arises. It arises where there is a coincidence of a law and an opportunity for rent. In fact this opportunity for rent could be seen as a result of that law/ regulation being there. Also there has to be a demand, i.e. agencies who wish to circumvent the law; and an agency that can facilitate this circumvention, or the supplier. Who the supplier is depends upon who the provider (legitimate authority) of the legal framework is. If it is a monarch, then the suppliers will perhaps be the nobles. If it is a state, then the suppliers will be the bureaucrats.

Another way to examine corruption is by understanding the classification of goods. The problem of corruption arises in case of goods that are not privately owned but still required. The cases of public and common (especially) goods are important. These goods need a legitimate authority to monitor the provision/ distribution of these goods. Corruption can arise when buyers try to gain privileged access to the goods; or also when there is a lengthy process/ rigmarole in place before one can utilise the good. To speed up the process or to side-step certain processes, the buyer may try to bribe the provider or her/his representative. Prabhat Patnaik (2011), a Marxist economist/ thinker, postulates that there are two types of corruption; one where the buyer pays an amount in excess of a price already stipulated. The other is where one pays an amount for a service that should be, by law, provided for free. He says that there are two spheres of service-provision, that of free commodity exchange and otherwise. Corruption arises when a price is charged for a good/service in the sphere of not-free commodity exchange, as if it were part of the sphere of free commodity exchange. And thus, "the elimination of "corruption" simply means that the boundary between these two spheres must remain intact, must not be transgressed". Patnaik goes on to say that one of Marx's greatest insights was that capitalism is a perverse force that constantly diminishes the boundary between the spheres of not-free commodity exchange and free commodity exchange by commodification of almost all goods and services, thereby furthering corruption. But to make this argument, Prabhat Patnaik assumes that some goods/ services ought not to be charged for. Only goods that are non-excludable can fall under this category. We go back to the point made earlier, that such goods will require a legitimate authority to distribute/ provide. And such an authority, history has taught us, has been susceptible to corruption.

It will be useful to make a distinction between petty and grand corruption here (Jain, 2001). Petty corruption refers to bureaucratic levels of corruption. For example, a bureaucrat taking a bribe to give one of the licenses required for starting a business. Grand corruption refers to corruption at the level of politicians and ruling elite, who gain private profit through the influence they can exert on public policy and allocation of resources. For example, the 2G spectrum allocation scams.

Now that corruption has been defined, the next step would be describing a metric to measure and identify corruption.

1.2. Measures and Indices

I have listed the indices that have been used in empirical research. Oldest amongst these is the one given by Business International Corporation. This index is a set of ratings for various countries based on the data received from a network of correspondents and analysts. It was first published for the period 1981-83 (Jain, 2001).

Transparency International publishes the most commonly used index for corruption. It is called Corruption Perception Index. It combines the results of ten different surveys, which include samples of transnational businesspersons and consultants, as well as chambers of commerce and local

populations. It is a cross-national comparison and is based on the definition, the misuse of public power for private gain (Sandholtz and Koetzle, 2000).

The KKM (Kaufman, Kraay and Mastruzzi) index used by the World Bank “presents estimates of six dimensions of governance covering 199 countries and territories for four time periods: 1996, 1998, 2000, and 2002. These indicators are based on several hundred individual variables measuring perceptions of governance, drawn from 25 separate data sources constructed by 18 different organizations. They assign these individual measures of governance to categories capturing key dimensions of governance, and use an unobserved components model to construct six aggregate governance indicators in each of the four periods. They then present the point estimates of the dimensions of governance as well as the margins of error for each country for the four periods”.

In India, Centre for Media Studies has carried out surveys to build a useful corruption index. It does not rely on just the interviews and corruption perceptions, but also tries to include other factors. It is based on a PEE model, where P stands for perception, E for experience (of corruption) and the last E stand for estimation (of bribes paid). They have surveyed four public sectors, that of Public Distribution System, education (upto XII), water supply and health services. The survey has been administered on a rural sample. The key findings of CMS PEE are that between 2005 and 2010, the factors listed below might have helped in containing corruption:

1. Opening up of the services for private participation breaking monopolies
2. Competition and increased concern for market and the users
3. Use of new communication technologies like computerisation including for better public interface
4. Use of research in developing responsive systems
5. Concern for redressal mechanisms
6. **Dynamic news media.” (Studies 2011)**

2. Economic Freedom

2.1. Definition

Economic Freedom can be broadly defined as the freedom to engage in the economic activity of one’s choice. The specific definition of the same depends on one’s ideological bent. I choose to use Isaiah Berlin’s (1967) distinction of positive and negative liberty as a framework of analysis. From the classical liberal and libertarian point of view, economic freedom falls within the ambit of negative freedom. Negative freedom essentially refers to interferences from outside of oneself in one’s activity, like a legal framework or the state or even other individuals. This makes intuitive sense. For libertarians, thus, economic freedom is the freedom to own any means of production or private property and to extract utility from it, without any constraints, theft etc. Gwartney and Lawson (2004) have listed “personal choice, voluntary exchange coordinated by markets, freedom to enter and compete in markets and protection of persons and their property from aggression by others” as the “key ingredients” of economic freedom. Hayek (1944) asserts that economic control constrains all our activities, political et al, and that “economic control is not merely control of a sector of human life which can be separated from the rest”.

But Amartya Sen (1993) sees economic freedom differently. He breaks it into two parts, one of process aspect and the other of opportunity aspect. He says that the process aspect of economic

freedom includes the ideas of autonomy of decisions and immunity from encroachments; and that, in this sense, can be seen as negative freedom. The opportunity aspect has to do with the capability of the individual. It is intrinsic to the individual, and in this sense, can be seen as a positive freedom. But there is a danger in looking at freedom in this sense. Historically, it has been seen that many atrocities have been committed in the name of positive freedom. Rousseau (1762) argues that a sovereign that runs on the principle of a social compact must ensure that every member is “forced to be free”; this alone “secures him against all personal dependence”. History, with such examples as Stalin, Pol Pot and Mao Zedong, has shown how this argument has been misused to erect regimes of great injustice. They tried to have the whole nation believe that they knew what was best for everyone, that it was their duty to bring about equality and emancipate and enlighten the poor (in terms of relative power within the society). This belief in their own spiritual and/or intellectual superiority meant that decision-making was entirely in their hands and this led to undesirable and harmful totalitarian regimes. Berlin (1967) also makes a historical, empirical critique of positive freedom.

Bronfenbrenner (1955) also studied the two concepts of economic freedom. In his study, he distinguishes between “traditional liberal” and the “neoliberal” positions. Although he doesn’t call it that, the framework is essentially the same as that of negative and positive economic freedom (as discussed above). He says that for the traditional liberal, there exists a “fundamental dichotomy between individualism and statism. But for the neoliberal, state becomes an instrument through which “freedoms are secured and guaranteed”. He also goes on to assert that the difference actually lies in the definition of the obstacles to freedom from these two distinct points of view. For the traditional liberals, obstacles are “juristic”, in that they come from a defined legal framework or the state. For the neoliberals, obstacles are “economic”, in that they arise from a basic economic and social inequality.

2.2. Measures and Indices

There are two indices that use cross-national survey data. These are used most often by researchers. One is the Economic Freedom of the World index produced by Gwartney and Lawson in association with Fraser Institute. It uses third-party information from major international sources such as IMF, World Bank and World Economic Forum amongst others. It tests economic freedom along five parameters, which are:

1. Size of Government: Expenditures, Taxes, and Enterprises
2. Legal Structure and Security of Property Rights
3. Access to Sound Money
4. Freedom to Trade Internationally
5. Regulation of Credit, Labor, and Business (Gwartney and Lawson, 2006)

The other index commonly used by peer-reviewed journals is the Index of Economic Freedom produced by the Heritage Foundation and the Wall Street Journal. It tests the economic freedom of a country along ten parameters, or the ten basic “economic freedoms” listed below:

- 1) Business Freedom
- 2) Trade Freedom
- 3) Fiscal Freedom
- 4) Government Spending
- 5) Monetary Freedom
- 6) Investment Freedom
- 7) Financial Freedom
- 8) Property Rights
- 9) Freedom from Corruption
- 10) Labour Freedom

However, it is important to note that these scales are typically *laissez-faire*, i.e. they embody the idea of economic freedom as a negative freedom. Institutions such as rule of law, property rights and freedom to trade are the foundations of these indices. The studies conducted by Fraser Institute and Heritage Foundation try to prove that economic freedom brings with it greater prosperity. Due to this, a country like China sticks out like an anomaly. Besides, correlating prosperity with economic freedom has been noted as dubitable by Keynesian economist James K. Galbraith in his book *The Predator State* (2008).

In India, Swaminathan S. Anklesaria Aiyer, Bibek Debroy and Laveesh Bhandari have created an Economic Freedom of the States of India index. This index is based on the Economic Freedom of the World index published by Cato Journal. The Indian Index is based on the three parameters size of the government, legal structure and security of property rights, and regulation of business and labour. The Indian Index ranks 20 states of India for which data is available.

2.3. Relation between economic freedom and corruption –findings in empirical research

Most empirical research papers focus on the causal and/or relational effects between economic growth and corruption. Economic freedom is considered as an important constituent of economic growth.

Ali and Isse (2003) have established a strong negative correlation between economic freedom and corruption. The correlation coefficient, R for the correlation between corruption in the 80s and economic freedom was found to be -0.83 . R , for the correlation between corruption in the 90s and economic freedom was found to be -0.79 . This, according to Ali and Isse, proves that most of the nations that were corrupt in the 80s had continued to remain so even in the 90s, or “corruption breeds corruption”. In the multivariate analysis, the second highest coefficient (in absolute terms) is seen in economic freedom, at a considerably high -0.269 . Other variables included political freedom, governance, government aid, type of state etc. Ali and Isse arrive at the conclusion that economic freedom is one the main ingredients of corruption control, and thereby economic growth. They used datasets from Transparency International and Economic Freedom of the World index.

In research conducted by Sandholtz and Koetzle (2000), corruption was estimated with the help of such variables as GDP, Economic Freedom, Democracy, Democratic Years, Trade and percentage of Protestant Christians in the country and dummy variables like whether or not the country examined is a British colony or not. They obtained data from Transparency International and Index of Economic Freedom, which is published by the Heritage Foundation and Wall Street Journal. In their final model they have found that economic freedom is the most powerful predictor at -0.26 , quite similar to Ali and Isse.

In contrast to the two researches mentioned above, Carden and Verdon (2010) decided to test Leff’s theory on corruption. They have tested the corruption as a substitute for economic freedom. They have used data from Transparency International and Economic Freedom of the World index to estimate economic growth with estimators like corruption, economic freedom and standard control variables. In their study, they have found that in a highly regulated state, one standard deviation increase in corruption led to 1.3228 standard deviation of increase in GDP (a proxy for growth). But they also estimated a 3.3588 standard deviation of increase in GDP as a result of one standard deviation increase in economic freedom. On increasing both corruption and economic freedom, they found that these two factors work against each other. While they have clearly stated “high economic freedom and low corruption” as the “first best” option, their studies clearly suggest that corruption may also act as an imperfect substitute for economic freedom while assessing growth. These results are very interesting and merit more discussion. Leff, as discussed earlier, had also argued that corruption may in fact “grease the wheels of commerce” in a highly regulated system. The outlet/opportunity that economic freedom provides to entrepreneurs to realise a profit-opportunity recognised by them is given by the “supplier” (i.e. a bureaucrat or politician) in an economically regulated state. Carden and Verdon, in this paper, statistically prove that some amount of corruption may actually add to growth. Their paper also reveals that economic freedom could control corruption. A negative correlation was found. A unit increase in economic freedom led to a decrease by 3.7288 standard deviation, in corruption. Also, Carden and Verdon divided the sample along the median economically free sample. It was found that in countries below the median, a unit increase of standard deviation in business corruption led to an increase by 0.2437 standard deviation in economic growth. But in countries above the median, the same led to a decrease by 0.2363. It can be seen in the results that only military corruption seems to have a negative impact on growth throughout the sample. This is explained by the fact that military corruption implies “real threat of physical violence to confiscate or destroy wealth”. It could also be that uncertainty in regimes might lead to military corruption and that the military could overthrow the governing body. The authors

suggest that corruptions that lead to positive growth in countries lying below the median could be acting as proxies for weak institutions. This point has been discussed in the conclusion.

Gerring and Thacker (2005) used the KKM index (Kauffman, Kraay and Mastruzzi) to estimate corruption. They analysed explanatory variables such as legal origin (English or Socialist), per capita GDP, years spent as democracy and more. Although their study was focussed on the impact of neoliberal policies on corruption, some of the correlations and results are of interest vis-à-vis this paper. They have found that heavy regulation and political corruption are linked. The multivariate analysis revealed correlation coefficients to the degree of 0.166, 0.092 and 0.103 for the variables regulation, financial regulation and price regulation respectively. This is another way of saying that economic freedom and corruption are negatively related.

In a study conducted by Shen and Williamson (2005), control of corruption was estimated using variables like economic freedom, political rights, civil liberties, ethno linguistic fractionalization and so forth. The relevant indices used are from Transparency International, KKM and Economic Freedom of the World. A very strong correlation between economic freedom and corruption control was found, that of about 0.75. Also, in the Structural Equation Model, economic freedom had the second highest coefficient value of 0.10. This study is also interesting in that it analyses the role of economic freedom in controlling corruption. It suggests that economic freedom could indeed be a remedy for corruption.

The Heritage Foundation published an article by Eiras in 2003. It is based on the Index of Economic Freedom and studies conducted by Friedrich Schneider (2002). It tests the relation between average size of the informal economy and economic freedom. This study uses bar graphs for a more graphic impact. The sample has been divided into four categories which are Free, Mostly Free, Mostly Unfree and Repressed. It is found that in the Mostly Unfree set, the average size of the informal economy is up to 45.14% of GDP. In the Repressed countries, the same is about 40.25% of GDP. In the Mostly Free countries, it's 24.25% of GDP. Interestingly, it is the Mostly Free countries that have the smallest informal economy, at around 16.37% of GDP. This is again an interesting study, as the informal economy is what the funds from formal economy are often drained into. While this may not capture the whole picture, it certainly contributes to one's understanding.

Swaleheen and Stansel (2007) conducted a study that statistically showed results that may seem counter-intuitive and contrary to earlier research work. They estimated economic growth using variables such as economic freedom, corruption, per capita GDP, political stability, government size, education and investment rate. They used datasets from standard sources such as Transparency International and Economic Freedom of the World index. But they found that "corruption lowers growth when the economic agents have very few choices (i.e., when economic freedom is low); but, if people face many choices (i.e., if economic freedom is high), corruption helps growth by providing a way around government controls". They arrived at this result by using a formula for partial effect of change in Corruption Perception Index.

$$\frac{\partial \log \text{real per capita GDP}}{\partial \text{CPI}} = 7.30 - 0.14\text{EFI}$$

Using this, they state that in countries where the EFI is 52.15, a reduction in corruption (meaning an *increase* in the CPI) has no effect on the rate of growth (because the second term in equation 4 exactly offsets the first term). For countries where the EFI is less than 52.15, a reduction in corruption will increase economic growth. And For the other 22 countries with higher economic freedom (i.e., $\text{EFI} > 52.15$), decreasing corruption will reduce economic growth. Although they have proven this result statistically, the theory behind the same is found to be wanting.

Graeff and Mehlkop (2003) used data from standard sources to capture the “impact of economic freedom on corruption”. The specialty of this research is that they sought to study this impact for rich and poor countries and compare the results. An overall correlation coefficient of -0.692 was found between economic freedom and corruption. But they feel it is more appropriate to calculate the correlation area-wise. For this purpose, economic freedom has been divided into seven major areas. Freedom of choice, freedom to supply any kind of goods and resources, fair competition in markets are given by Area I and II in the index, the availability of reliable money by Area III and IV, secure property rights by Area V, and freedom to trade with others by Area VI and the allocation of capital by the market is given by Area VII. Their research found that the patterns of the impact of economic freedom on corruption differed for rich and poor countries. Statistics reveal that only Areas VI and VII are significant contributors to have an effect on corruption in poor countries with coefficient values of 0.206 and 0.280 respectively. But for the rich, Areas I, V and VII turned out to significantly affect corruption at coefficient values of 0.518, 0.661 and 0.514 respectively. The Area common to both is that of allocation of capital by the market. It goes to show that in poor countries, policy should follow the line of removing trade barriers and setting up markets for resources firstly to combat corruption. In rich countries, policy should look to broaden freedom of choice, property rights and allocation of capital. The robustness of these results is tested using Extreme Bound Analysis. This study too suggests the nonlinearity of the relation.

Goel and Nelson (2004) estimated corruption using estimators such as economic freedom, per capita GNP, education and democracy. They sourced their data from Transparency International and Index of Economic Freedom. The study was carried out to test which one of economic freedom and political freedom had more influence on Corruption. The results they obtained showed that a unit increase in the Index of Economic Freedom (on a scale of 0 to 5, with 0 being most free and 5 being most unfree) would lead to an increase in corruption by 2.68 standard deviation. Also it was found that the “coefficient on Economic Freedom implies that a change in a country’s ratings from five (least economically free) to one (most free) will improve the corruption index from 2.2 to 6.8. In contrast, under a similar set of assumptions the coefficient on the democracy variable indicates that a change in a country’s ratings from 14 (least democratic) 10 to two (most democratic) will yield a more modest improvement of the corruption index, the value would increase from 4.1 to 5.2”. The results clearly show that economic freedom is the best predictor (with a coefficient of -0.525).

Another statistically oriented study was carried out by Pieroni and d’Augustino (2011). The dependent variable is corruption, and the explanatory variables include economic freedom, private investment regulation, financial regulation, information constraints and so forth. Datasets used are from Transparency International and Economic Freedom of the World. Their research reveals that the “largest and most significant effect on corruption is exerted by the legal system to protect property rights and contracts (-0.218)”. Market competition (0.148), price regulation (0.113), employment regulation (0.131) and financial regulation (0.122) are also the other significant components. This study too captures the nonlinearity of the relation between corruption and economic freedom by carrying out stratified analyses for African nations and transition economies. It is interesting to note that in the African countries, financial constraint (financial sector being able to finance private players) and private investment regulation have the most significant effects on corruption at -0.426 and -0.289. But in transition economies such as India, employment regulation and sales regulation are the largest contributors at -0.223 each.

Finally, I would like to discuss a piece of research that is very pertinent to the topic at hand. Saha, Gounder and Su (2009) studied the interaction effect of economic freedom and democracy on corruption. They used data from Transparency International, Index of Economic Freedom and Freedom House. They estimated corruption using estimators like economic freedom, corruption and other control variables. The correlation coefficient between economic freedom and corruption was

found to be -0.721, fairly consistent with all other research. The results show that “democracy increases corruption when the level of economic freedom is very low”; but once past a certain threshold point (i.e. between 4 and 5 levels of economic freedom, with 0 being least free and 10 being most free on the scale), corruption decreases as the economy becomes more democratic. Also, “the effect of democracy is significant only when the degree of economic freedom is either very low (2 or less) or very high (7 or higher) but in opposite directions”. This suggests that battling corruption with democracy is not nearly enough, the state or a legitimate authority must ensure the “right environment” too.

In the next section, I have culled out the important features of the interplay between corruption and economic freedom from the empirical researches stated above.

Analysis and Conclusion

It is interesting to note the results that have come out from various empirical research. The most important piece of analysis, I believe, is that of specifying that economics per se can never create opportunities for corruption. It is the process of bringing about economic freedom that may create opportunities for corruption. For corruption to happen, as I specified before, there has to be a law to circumvent, and a law that condemns this circumvention. Economic freedom is the process of removing many of the unnecessary regulations and laws that restrict trade, setting up of businesses and allowing for more government intervention. In the process of removing such regulations, the legitimate authority is actually removing the pockets for rent-seeking and, thereby, for corruption. As such, the relation between economic freedom and corruption can only be negative. Yet, one finds that this relation is often nonlinear. The only explanation for this nonlinearity lies in the process of economically freeing a country and the extant conditions in which it is taking place. It is this process that creates opportunities for rents, for payment other than taxes. These regulations necessitate the demand for corruption. And in a country like India, where there are bureaucrats at every level and not strict enough mechanism to punish their acts of corruption if any, this demand is easily met by suppliers. Let us analyse the process of freeing an economy and the flaw in it. The flaw, from theory and from what is seen, lies in the discretionary powers granted to the politicians and bureaucrats at the time of the process of economic freedom. There is a need to clearly define the conditions and monitor the process.

The relation, as observed in the research work, merits much discussion. On the face of it, also intuitively, the relation between corruption and economic freedom is negative (Ali and Isse, 2003; Sandholtz and Koetzle, 2000; Shen and Williamson, 2005). But if we go by research that dealt in more detail with the interplay between corruption and economic freedom, we find that the result is one of nonlinearity. Saha, Gounder and Su (2009) found that low economic freedom and democratic institutions led to corruption (Lenin 1916). But they also found a threshold point of economic freedom, beyond which democratic institutions only reduce corruption. This result is of great importance. This means that economic freedom and corruption will necessarily interact negatively only in a fully mature democracy. In a democracy that has weak institutions, economic freedom and corruption may yet coexist without one hampering the other majorly. This was shown in the results obtained by Carden and Verdon (2010). Their studies showed that in countries that are highly regulated, business corruption and police corruption may in fact act as “substitutes for economic freedom in countries where there are weak institutions”. The very fact that Carden and Verdon chose to divide their sample on the basis of economic freedom around a median country implies that their studies revealed nonlinearity in the interplay between corruption and economic freedom (it must be noted, however, that they were essentially analysing these two factors as determinants of economic growth). Graeff and Mehlkop (2003) also saw it necessary to examine the effects of economic freedom on corruption within a certain economic divide on the basis of data from OECD. Economic freedom has different effects on corruption in rich and poor countries. Pieron and d’Agostino (2011) have done extensive statistical study on the effect of economic freedom on corruption in African countries and transition economy countries. These can again be understood in terms of the level of democracy. Also it has been noted that countries with very high income inequality tend to create room for corruption.

The interplay between corruption and freedom is hence unidimensionally negative by itself, and does not lend richness to research. It needs to be studied with several other factors that are found in real life and affect this relation. The type of government is an important factor, as is economic growth.

Also, economic freedom does not necessarily imply economic equality. It may lead to prosperity, as it has in most cases like the Scandinavian nations. While economic freedom, as understood widely

and used in this paper, does imply lack of restrictions, it certainly has little to do with size of the government vis-à-vis governmental expenditure (Gerring and Thacker, 2005). A fine example of this is the set of aforesaid Scandinavian nations like Denmark and Finland. They have state-run welfare schemes and high governmental spending (Andersen et al, 2007), but still have the highest mean scores on the Corruption Perception Index (on a scale of 0 to 10, 0 being most corrupt and 10 being least corrupt). They are also highly placed on the economic freedom indices, i.e. high degree of economic freedom. This shows that welfare providing states may yet have high degrees of economic freedom and, perhaps, thus be less corrupt too.

In all but one of these analyses, China emerges as the only anomaly. While China fits the model specified by Swaheleen and Stansel (2007) perfectly, the model fails to address the majority nations. China is characterised by low economic freedom, high corruption and high growth. The reasons for China's phenomenal performance are beyond the scope of this paper. But perhaps it has to do with certain cultural factors too.

An interesting question that can be asked at this juncture could be how a totalitarian/ authoritarian form of government with high degree of economic freedom would perform on the corruption index. But here too, most of the resources are state-owned, and although the ruling elite may be small, discretionary power still rests with them. Hence, there is scope for corruption. Historically, high degrees of economic freedom are contradictory to authoritarian regimes. So such a question is indeed hypothetical and perhaps theoretically incompatible because social freedom and economic freedom are also closely linked. China, though, has seen great prosperity, not necessarily equality, with an authoritarian regime and some economic freedom; albeit it is by no means a high degree of economic freedom.

Another interesting dimension is that of competition, which is said to reduce corruption (Pieroni and Agostino 2011; McCuddy, 2010), leading to corruption when individual players try to seek privileged access to markets (Graef and Mehlkop, 2002). This was also reported in the French magazine *Le Monde* in a study conducted in 1995 using 1994 datasets for French trade. This seems to follow Marx's (as quoted by Lenin, 1916) argument that competition ultimately leads to the end of competition, i.e. fewer and fewer come to control more and more vast resources. In fact, Microsoft can be seen as an example of this. The only way of avoiding this is by monitoring and introducing checks.

From the study of corruption, one finds that sometimes there is a knowledge problem in the system which is being misused. Especially in the case of grand corruption, the politician would know the true value of an asset. But he or she refuses to let this knowledge flow into the market. Therefore, the whole market does not know the value of the asset, and there is a knowledge asymmetry. The discretion lies entirely with the politician. So he can fully gain from the knowledge problem and extract as much surplus as is possible. Economic freedom, if instated properly, might help overcome this knowledge problem by introducing competition and reducing the discretionary power of anyone over any resource.

An important idea that had made itself prominent through research is that of economic freedom being a remedy for corruption (Shen and Williamson, 2005). This needs to be explored. Surely, there are certain types of corruption that cannot be remedied by merely economic freedom. Political freedom and civil liberties are also important. People should be aware of the line between the public sphere and the private sphere. An active public sphere consisting of civil society and transnational nongovernmental movements is a good check on the government. For such a system to work, political rights, civil liberty and press freedom are also equally important. At the same time, economic freedom does help in removing some of the redundant, corruption-causing regulations like licenses.

Defining economic freedom entails defining laws within the ambit of which one's liberty to trade, not be charged additional transaction costs and property rights are respected. "Thus, in an economically free society, the fundamental functions of government are the protection of private property and the enforcement of contracts, and the provision of a few collective goods (like national defence) that cannot be allocated by a private market. Anything less could violate the economic freedom of individuals. The expansion of government's size beyond these core activities will have a negative impact on a country's economy because of the excess burden of higher taxes and/or additional borrowing, for instance" (Graeff and Mehlkop, 2003).

An observation that strikes me on reading Eiras (2003) is that the set of Mostly Unfree countries fare worse than the Repressed countries². A possible explanation for this could be that in heavily regulated or repressed countries, the level of devolution of power is little and the ruling elite is small. In such a case, detecting abnormal rent-seeking by a particular bureaucrat is easy. The rents all fill one pocket finally. For example in Soviet Russia, bribes were channelled through local party offices. Any deviation or abnormality in the collection of bribes was punished by the party bureaucracy. In Mostly Unfree countries, like India and Sri Lanka, there are too many politicians and bureaucrats at various levels. They all work independently and try to maximise their individual revenue. In this attempt, they lose track of the complementarity of some of the permits and end up harming each other by lowering output and thereby lowering aggregate bribe costs (Schleifer and Vishny, 1993).

Corruption thus is a sign of a weak government. It trumps equality and welfare schemes by a government, if any. Bribery often directs resources to pockets where opportunity for rent is maximum, and not to productive areas (Tanzi, 1998). For example, if the opportunity for rent is more in military corruption, then resources might get allocated there even if education sector is in need. Also, Sachs and Warner (1995), as quoted by Svensson (2005), have found that the most corrupt countries are often relatively closed economies, with the exception of Indonesia. Therefore economic freedom, while ensuring the loosening of state control of certain areas, also helps to bring about more state strength by augmenting the democratic institutions. But it must be ensured that the process of bringing about economic freedom does not itself create pockets for corruption and/or crony capitalism. The only way of doing this is by stipulating the rules of disinvestment, auction, sale etc. clearly, such that very little discretion is left at the hands of politicians or bureaucrats.

Another way of reducing the "human element" or reducing the discretionary power could be the introduction of Information and Communication Technologies, or ICTs. For example, introduction of ICTs in Kalyan-Dombivili Municipal Corporation for the issuance of birth certificates and payment of bills has greatly reduced scope for errors, long queues and bribes. Also, nowadays, airline tickets can be bought online through auctions where there is no discretionary power; everything is managed by technology programmed to award the highest bidder only.

In conclusion, I would like to say that the relation or the interplay between corruption and economic freedom is useful in terms of policy-making or research only if it is studied by interacting it with

² As an appendix to this paper, I have attached a table comparing the ten most economically free countries and the ten least corrupt countries. Similarly, I have attached a table of the ten least economically free countries and the ten most corrupt countries. The source for data on corruption is the Corruption Perception Index 2011 released by Transparency International. And the data for economic freedom have been obtained from Index of Economic Freedom 2011 released by the Heritage Foundation and the Wall Street Journal. This is just for comparison at a glance, and is not meant to substantiate any theory.

other crucial factors that influence the relation, such as economic growth, economic status, type of government etc. It is also very important to note that this relation is nonlinear and that this nonlinearity can be explained by the process by which economic freedom has taken place and the extant conditions of the economy and governance.

Bibliography

- Abdiweli M. Ali, Hodan Said Isse. *Determinants of Economic Corruption: A Cross-Country Comparison*. Cato Journal, Vol. 22 No. 3, Winter 2003.
- Andersen, Holstrom, Honkapohja, Korkman, Soderstrom, Vartiainen. *The Nordic Model*. Helsinki: Taloustieto Oy, 2007.
- Andrei Schleifer, Robert W. Vishny. *Corruption*. NBER Working Paper, 1993: 3-24.
- Art Carden, Lisa Verdon. *When is Corruption a Substitute for Economic Freedom?* The Law and Development Review, 2010: 41-64.
- Berlin, Isaiah. *Two Concepts of Liberty*. Political Philosophy, 1967: 141-152.
- Bronfenbrenner, Martin. *Two Concepts of Economic Freedom*. Ethics, 1955: 157-170.
- Ce Shen, John B. Williamson. *Corruption, Democracy, Economic Freedom and State Strength: A Cross-National Analysis*. International Journal of Comparative Sociology, 2005: 2-27.
- Eiras, Ana Isabel. *Ethics, Corruption and Economic Freedom*. The Heritage Foundation, 2003.
- Jain, Arvind K. *Corruption: A Review*. Journal of Economic Surveys, 2001.
- James Gwartney, Robert Lawson. *Economic Freedom of the World Report 2006*. Vancouver: The Fraser Institute, 2006.
- John Gerring, Strom C. Thacker. *Do Neoliberal Policies Deter Political Corruption?* International Organization, 2005: 233-254.
- Lambsdorff, Dr. Johann Graf. *Corruption in Empirical Research: A review*. Transparency International Working Paper, 1999.
- Leff, NH. *Economic Development Through Bureaucratic Corruption*. American Behavioural Scientist, 1964: 8-14.
- Lenin, Vladimir. *Imperialism: The Highest Stage of Capitalism*. In Selected Works Vol. 1, by Vladimir Lenin, 667-766. International Publishers, 1916.
- Luca Pieroni, Giorgio d'Agostino. *Corruption and the Effects of Economic Freedom*. Working Paper No. 133, 2011.
- Mauro, Paolo. *Corruption: Causes, Consequences and Agenda for Further Research*. Finance and Development, March 1998: 11-14.
- McCuddy, Michael K. *Economic Freedoms and Public Corruption: A Global Analysis*. Proceedings of ASBBS. Las Vegas, 2010. 404-418.
- Mironov, Max. *Bad Corruption, Good Corruption and Growth*. 2005.
- P. Graeff, G. Mehlkop. *The Impact of Economic Freedom on Corruption: Different Patterns for Rich and Poor Countries*. European Journal of Political Economy, 2002: 605-620.
- Rajeev K. Goel, Michael A. Nelson. *Economic Freedom versus Political Freedom: Cross-Country Influences on Corruption*. 2004.

- Rousseau, Jean Jacques. *The Social Contract of Principles of Political Right*. Translated by G. D. H. Cole. www.marxist.org, 1762.
- Sen, Amartya. *Markets and Freedoms: Achievements and Limitations of Market Mechanism in Promoting Individual Freedoms*. "Oxford Economic Papers, 1993: 519-541.
- Shrabani Saha, Rukmani Gounder, Jen-Je Su. *The Interaction Effect of Economic Freedom and Democracy on Corruption: A Panel Cross-Country Analysis*. Economic Letters, 2009: 173-176.
- Centre for Media Studies. *India Corruption Study 2010. Is the Scenario Changing?* New Delhi: CMS, 2011.
- Svensson, Jakob. *Eight Questions about Corruption*. The Journal of Economic Perspectives, 2005: 19-42.
- Swaminathan S. Anklesaria Aiyer, Bibek Debroy, Laveesh Bhandari. *Economic Freedom of the States of India 2011*. New Delhi: Academic Foundation, Cato Institute, 2011.
- Tanzi, Vito. *Corruption Around the World: Causes, Consequences, Scope and Cures*. Palgrave Macmillan Journals, 1998: 559-594.
- Wayne Sandholtz, William Koetzle. *Accounting for Corruption: Economic Structure, Democracy and Trade*. International Studies Quarterly, 2000: 31-50.

Appendix 1

Name	Author	Year	Source	Variable	Estimator	Relevant Findings
Determinants of Economic Corruption	Ali and Isse	2003	EDA, Political Risk Services, Transparency International, EFW	Growth	Population, GDP, Education, Economic Freedom, Investment, Type of State, Ethnolinguistic Fractionalization, Index of Judicial Efficiency,	The correlation coefficient, R between Corruption: 80s and Economic Freedom was found to be -0.83 AND between Corruption: 90s and Economic Freedom was -0.79
Accounting for Corruption	Sandholtz and Koetzle	2000	TI, Index of Economic Freedom, World Bank, Encyclopaedia Britannica	Corruption	GDP, Economic Freedom, Democracy, Democratic Years, Trade, British Colony, Percent Protestant	Economic Freedom and Trade the most powerful predictors (-0.26 for both)
When is Corruption a Substitute for Economic Freedom	Carden and Verdon	2010	TI, EFW	Growth	Economic Freedom, Corruption, control variables	Economic Freedom(3.3588) and Business Corruption(1.3228) independently increase GDP. But together, work against each other(-2.6269). First best: high economic freedom and low corruption(-3.7288). Regulated countries, business corruption greases wheels(0.2437);
Do Neoliberal Policies Deter Political Corruption	Gerring and Thacker	2005	KKM,	Corruption	Percentage of Protestants in a Country, English Legal Origin, Socialist Legal Origin (current or former), Energy Imports (net), Per Capita Gross Domestic Product (GDP, natural log), Democratic Years and control variables	Heavy govt. regulation and political corruption are linked (Regulation: 0.166, Financial Regulation: 0.092, Price Regulation: 0.103). Public sector size has no apparent relation. Openness to trade and political corruption are negatively related (Imports/GDP: -0.006, FDI/GDP: -0.045).
Corruption, Democracy, Economic Freedom and State Strength: A Cross-National Analysis	Shen and Williamson	2005	TI, KKM, EFW, World Bank, World Development Indicators, Freedom House	Control of Corruption	Energy Consumption, Ethnolinguistic Fractionalization, Economic Freedom, Political Rights and Civil Liberties, Press	Economic Freedom has the 2nd highest coefficient value (0.10) in the SEM. Economic Freedom and Corruption Control are strongly correlated (~0.75)

Ethics, Corruption and Economic Freedom	Eiras	2003	EFI, Friedrich Schneider (2002)	Average Size of Informal Economy	Economic Freedom	Mostly Unfree: Informal market size is upto 45.14% of GDP, Repressed: 40.25%, Mostly Free: 24.25%, Free: 16.37%
Economic Freedom, Corruption and Growth	Swaleheen and Stansel	2007	TI, EFW, Polity IV, World Development Indicators	Economic Growth	Economic Freedom, Corruption, Per Capita GDP, Political Stability, Government Size, Education, Investment Rate	corruption lowers growth when the economic agents have very few choices (i.e., when economic freedom is low); but, if people face many choices (i.e., if economic freedom is high), corruption helps growth by providing a way around government
The interaction effect of economic freedom and democracy on corruption: A panel cross-country analysis	Saha, Gounder and Su	2009	TI, EFI, Freedom House	Corruption	Economic Freedom, Democracy, control variables	The results show that democracy increases corruption when the level of economic freedom is very low; yet once past the threshold point (i.e. between 4 and 5), corruption is substantially lower as the economy becomes more democratic. The
The impact of economic freedom on corruption: different patterns for rich and poor countries	Graeff and Mehlkop	2003	TI, EFW	Corruption	per capita GDP, Economic Freedom	R=0.692 for the correlation between Economic freedom and CPI (i.e. negative relation between corruption and economic freedom. Freedom to supply any kinds of goods and service (freedom of choice) (0.518), secure property rights (0.661), freedom to trade with others (0.206) and the allocation of capital by the market (0.280 for poor and 0.514 rich countries) are the determinants of corruption. Only the last two matter in studying poor countries. The first, second and last are important for corruption studies in rich countries.
Economic Freedom versus Political Freedom: Cross-Country Influences on Corruption	Goel and Nelson	2004	TI, EFI	Corruption	Economic Freedom, Per Capita GNP, Democracy, Education	the coefficient on EF implies that a change in a country's ratings from five (least economically free) to one (most free) will improve the corruption index from 2.2 to 6.8. In contrast, under a similar set of assumptions the coefficient on the democracy variable indicates that a change in a country's ratings from 14 (least democratic) to two (most democratic) will yield a more modest improvement of the corruption index, the value would increase from 4.1 to 5.2. (SD=2.68)
Corruption and the Effects of Economic Freedom	Pieroni and d'Agostino	2011	TI, EFW	Corruption	Economic Freedom, Financial Regulation, Private Investment Regulation, Information Constraint etc.	Private property seems to be the most significant component to affect corruption in the full sample (-0.218). Market competition (0.148), price regulation (0.113), employment regulation (0.131) and financial regulation (0.122) are also the other significant components.

Appendix 2

Ten Most Economically Free Countries	Ten Least Corrupt Countries
Hong Kong	Denmark
Singapore	New Zealand
Australia	Singapore
New Zealand	Finland
Switzerland	Sweden
Canada	Canada
Ireland	Netherlands
Denmark	Australia
United States	Switzerland
Bahrain	Norway
Ten Least Economically Free Countries	Ten Most Corrupt Countries
Timor-Leste	Equatorial Guinea
Iran	Burundi
Democratic Republic of Congo	Chad
Libya	Sudan
Burma	Turkmenistan
Venezuela	Uzbekistan
Eritrea	Iraq
Cuba	Afghanistan
Zimbabwe	Myanmar
North Korea	Somalia

Data source: CPI 2011 and EFI 2011