

Economic Consequences of Corruption

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Abstract

Transparency International, a non-governmental organization dedicated to fighting corruption, created the Corruption Perception Index (CPI) to measure the degree of corruption for almost every country since 1995. From CPI score data by country, we find that the group of countries with high CPIs (low corruption) comprises those that are well developed and advanced. In contrast, countries with low CPIs (high corruption) are those with low income levels and are less developed. This paper explains how corruption can have a negative impact on the standard of living of people and economic development of a country. Our analysis focuses on market failure caused by corruption. The market failure may be in the form of monopoly, externalities, public goods and imperfect information. These market failures result in a welfare loss or efficiency loss to society, implying that the economic system is unable to perform to its potential. We claim that, through the channel of market failure, corruption can significantly hinder a country's economic development. Furthermore, it is claimed in this paper that the loss of economic efficiency caused by corruption through the channel of market failure is enormous, and the scale of the damage is much larger than the loss of public money that is generally the focus of existing literature.

Keywords: corruption, Corruption Perception Index (CPI), market failure.

1. Introduction

Transparency International, a non-governmental organization dedicated to fighting corruption, defines corruption as “the abuse of entrusted power for private gain”. The abuse of power may be in the form of the government officials neglecting the enforcement of laws, awarding projects to unqualified bidders, enacting laws that benefit a certain group of people, and so on. In return, these government officials will receive bribes in the form of monetary “kick backs”, physical gifts, and other gratuities such as all-expense-paid holidays.

The general view among lay people is that corruption results in a loss of government resources due to the cost of government projects being inflated by bribes. Those who gain from corruption are government officials receiving bribes, while the losers comprise every taxpayer. In addition, society as a whole will receive low-quality state infrastructure due to a contractor using substandard construction materials to cut costs in order to compensate for the payment of bribes.

However, from an economic viewpoint, the consequences of corruption are more complicated than the general view mentioned above. In particular, economists look at the loss from corruption in terms of slow economic development due to reduced government spending and a welfare loss resulting from the distortion of resource allocation caused by corruption.

In this paper, we will probe further to find the channels in which the effect of corruption will pass through to the economy's real output, as measured by Gross Domestic Product or simply GDP. At the outset, it is postulated that corruption has a negative impact on real output via the channel of market failure. This view will be discussed in detail in later sections.

2. Literature Reviews

Lambsdorff (1999) reviews a large variety of studies on the consequences and causes of corruption. Studies on corruption's impact examine investment, GDP, institutional quality, government expenditure, poverty and international flows of capital, goods and aid. Research on its causes focus on the absence of competition, policy distortions, political systems and public salaries, as well as an examination of colonialism, gender and other cultural dimensions.

Hodge et al. (2009) explicitly model the transmission channels through which corruption indirectly affects growth. Results suggest that corruption hinders growth through its adverse effects on investment in physical capital, human capital and political instability. Concurrently, corruption is found to foster growth by reducing government consumption and increasing trade openness. Overall, a total negative effect of corruption on growth is estimated from these channels.

Mo (2001) introduces a new perspective on corruption's role in economic growth and provides quantitative estimates of its impact on growth and the importance of its transmission channels. He uses least squares estimations to find that a 1% increase in the corruption level reduces the growth rate by about 0.72%. The most important channel through which corruption affects economic growth is political instability, which accounts for about 53% of the total effect. He also finds that corruption reduces the level of human capital and the share of private investment.

Mauro (1997) has analyzed a number of causes and consequences of public corruption. The paper presents evidence that corruption may have considerable adverse effects on economic growth, largely by reducing private investment, and perhaps by worsening the composition of public expenditure. Mauro also presents evidence of a negative and significant relationship between corruption and government expenditure on education, which is an important determinant of economic growth.

Most of reviewed literature attempts to find a link between corruption and economic growth and development and to analyze the channels through which the corruption transmits its negative effects to a country's economic performance. Under the existing framework, the channels under investigation include private investment, government spending, human capital and political stability.

In this paper, the author ventures to take a different approach by postulating that market failures are significant channels through which the corruption transmits its harm. The reason behind this is that, according to well-established microeconomic theory, market failure is a major factor that causes an economic system to perform at a sub-optimal level.

3. Corruption Perception Index (CPI)

This section examines the 2013 Corruption Perception Index (CPI) from Transparency International. A high CPI score indicates low corruption, while a low CPI score represents high corruption.

Table 1 Top 20 countries with high CPI scores (i.e., low corruption)

Country	CPI* Score	GDP per capita** (US\$ per year)	GDP growth** (%)
1. Denmark	91	56,364	0.4
1. New Zealand	91	36,900	3.2
3. Finland	89	46,490	-0.8
3. Sweden	89	56,120	0.9
5. Norway	86	98,790	2.9
5. Singapore	86	47,210	1.3
7. Switzerland	85	80,970	1.0
8. Netherland	83	48,000	-1.2
9. Australia	81	59,260	3.4
9. Canada	81	51,570	1.7
11. Luxembourg	80	71,640	-0.2
12. Germany	78	45,070	0.7
12. Iceland	78	38,270	1.4
14. United Kingdom	76	38,500	0.3
15. Barbados	75	15,080	0.0
15. Belgium	75	44,720	-0.1
15. Hong Kong	75	36,560	1.5
18. Japan	74	47,870	2.0
19. United States	73	52,340	2.8
19. Uruguay	73	13,580	3.9

*Source: Transparency International 2013; **Source: World Bank 2013

Table 2 Bottom 20 countries with low CPI scores (i.e., high corruption)

Country	CPI* score	GDP per capita** (US\$ per year)	GDP growth** (%)
1. Kyrgyzstan	24	990	-0.9
2. Guinea	24	440	3.9
3. Paraguay	24	3,400	-1.2
4. Angola	23	4,580	6.8
5. Congo Republic	22	2,550	3.8
6. Tajikistan	22	880	7.5
7. Burundi	21	240	4.0
8. Zimbabwe	21	650	4.4
9. Cambodia	20	880	7.3
10. Eritrea	20	450	7.0
11. Venezuela	20	12,460	5.6
12. Chad	19	770	8.9
13. Guinea-Bissau	19	510	-6.7
14. Haiti	19	760	2.8
15. Yemen	18	1,270	0.1
16. Turkmenistan	17	5,410	11.1
17. Iraq	16	6,130	9.3
18. Libya	15	12,930	2.1
19. Sudan	11	1,500	-10.1
20. Afghanistan	8	680	14.4

*Source: Transparency International 2013; **Source: World Bank 2013

Tabulating the CPI scores of countries with their GDP per capita and GDP growth reveals that countries with high CPI scores (i.e., low corruption) are associated with high GDP per capita. The opposite applies for countries with low CPI scores (i.e., high corruption). Tables 1 and 2 illustrate these facts.

As for GDP growth rate, its association with CPI scores is inconclusive. Some countries with low CPI scores exhibit very high GDP growth. This may be due to the very low starting level of their base-year GDP data, thus yielding high growth rates.

It can be seen also that some countries with high CPI scores are associated with relatively low GDP growth rates. Most of these countries are in European Union (EU) and well developed economically. There is no doubt that some of them have been adversely affected by the public debt crisis that has spread throughout the EU since the beginning of this decade. Consequently, in recent years many of these high-CPI countries have encountered slow or even minus GDP growth as shown in Table 1.

Another way to explain why advanced countries have relatively slow economic growth is to apply microeconomic theory. Production theory states that marginal product will decline as factor inputs increase because, by nature and by assumption, the production function is increasing at a decreasing rate (i.e., a concave production function). Thus it can be deduced that advanced countries operating at a near fully utilized range of production will normally have low GDP growth rates compared with those of less-developed nations.

Table 3 Comparison among ASEAN countries

Rank	Country	CPI* score	GDP per capita** (current US\$)	GDP growth** (%)
5	Singapore	86	47,210	1.3
38	Brunei	60	31,590	2.2
53	Malaysia	50	9,820	5.6
94	Philippines	36	2,500	6.8
102	Thailand	35	5,210	6.5
114	Indonesia	32	3,420	6.2
116	Vietnam	31	1,550	5.2
140	Laos	26	1,270	8.2
157	Myanmar	21	NA	NA
160	Cambodia	20	880	7.3

*Source: Transparency International 2013; **Source: World Bank 2013

Table 3 lists all ASEAN countries. The data confirm a positive relation between CPI scores and per capita GDP. As can be seen, countries with high CPI scores such as Singapore, Brunei and Malaysia are associated with high GDP per capita, while the opposite applies for countries with low CPI scores.

This paper will attempt to explain the positive relation between CPI scores and GDP per capita by claiming that corruption causes an economy to perform at a sub-optimal or inefficient level of resource allocation. A further claim will assert that corruption will transmit its adverse impact to real output via the channel of market failures. In other words, corruption significantly hinders economic development because it aggravates the condition of market failures that, in turn, result in an economy operating below its optimally efficient level.

Note at this point that the question of causality between corruption and GDP per capita will not be addressed; to do so would require lengthy time series data for detailed analysis. Unfortunately, Transparency International's CPI Index dates back only to 1995.

4. Corruption and Market Failures

Market failure is defined as the condition under which a market cannot function to its full potential. In extreme cases, a market may fail completely. The case of a market unable to efficiently produce public goods illustrates this point.

When a market failure occurs, real output shrinks. A welfare loss will result and the economy as a whole cannot attain efficient resource allocation. Examples of market failure are monopolies, externalities, public goods and incomplete or asymmetric information. When one of these market failures occurs, the market outcome will be inefficient, and government intervention may be required as a corrective.

The following section will discuss each type of market failure in detail and analyze how corruption can aggravate the failure that consequently leads an economy to perform at a sub-efficient level.

It is worth noting that the welfare loss that occurs when a market performs inefficiently due to market failure stemming from corruption is much more severe than a loss of state revenue. The simple example of monopoly is adequate to clarify this point.

In a monopoly, a single producer or seller has complete control of a market. Consequently, the monopolist will tend to increase a product's price and lower the quantity and quality of the output to maximize profit. This will result in consumers paying higher prices and consuming lower quantities of the product. Most of all, though, they will lose freedom of choice because there exists no free competition in a monopoly, and no doubt that the society as a whole will lose. It is not hard to imagine that the damage to society caused by some forms of market failure is much more severe than mere state-revenue loss caused by corruption.

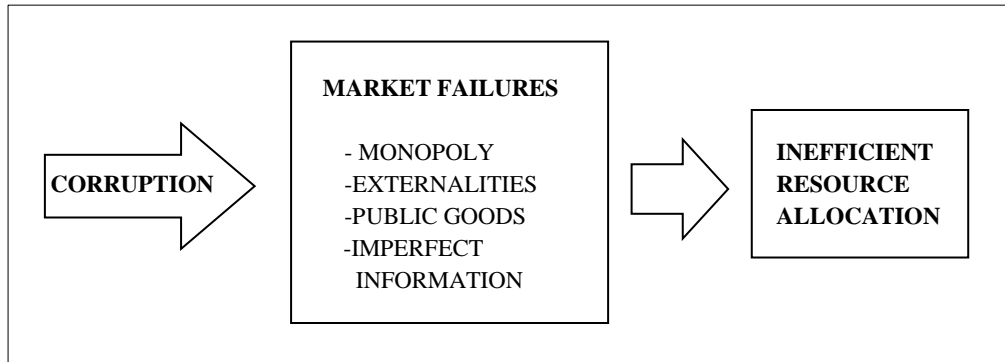


Figure 1 Conceptual Framework; Effects of Corruption on Resource Allocation

4.1 Monopoly

Monopoly is the situation under which there is only one producer or seller. In economic theory, a monopoly is undesirable because consumers lose freedom of choice. Moreover, the single producer (the monopolist) will likely cut production and increase product price to maximize profit. (Recalling microeconomic theory, the perfect competitive producer maximizes profit when product price equals marginal cost, while the monopolist maximizes profit when marginal revenue equals marginal cost, which will yield lower output and higher product price compared with what occurs in perfect competitive situation). Therefore, when a monopoly occurs, a welfare loss to society results because total output will be reduced and product prices will rise.

The question is this: how can corruption be linked to monopoly? The simple answer: the easiest way for a business operator to get rich quick is to set himself up as a monopolist whereby he can control the market without competitors. And the easiest way to become a monopolist is to bribe government officials so as to receive protection from the state in the form of a concession, regulations or laws that prevent competitors from entering the market.

It is quite obvious that corruption can be a primary stimulus for monopolies to develop. When a monopoly rules the market, society as a whole will lose by having less output and higher prices compared with the output and prices in a perfect competitive market.

4.2 Externalities

Externalities in economics refers to the effects of private actions that spill over unintentionally to society as a whole. This section focuses on negative externalities such as the emission of pollution into the atmosphere by factories and the deforestation that causes flash floods, landslides, global warming and other natural disasters.

It is obvious that the perpetrators who emit pollution and fell trees will tend to bribe government officials to avoid punishment. It is safe to conclude that corruption will aggravate the negative externalities that lead an economy to suffer from environmental problems and, hence, to perform at a sub-optimal level.

4.3 Public Goods

Public goods are those goods and services that cannot be provided efficiently by the market due to the free-rider problem. Examples of public goods are national defense, public highways, radio frequencies, national parks and other public infrastructure. Once produced, these public goods can be consumed by everyone without payment. Therefore, the private sector has no incentive to produce these goods. Hence, the government has the legitimacy to become the provider of these public goods.

Generally, the contractors who bribe government officials and politicians to win construction contracts are unqualified in terms of skills and knowledge. From the author's experience in developing countries, the government infrastructure projects that are found to be of bad quality are mostly involved with corruption scandal. Therefore, with corruption, society will have public goods of lower quality and less quantity than it would in a world without corruption. Consequently, an economy tends to perform inefficiently with public goods of low quality and quantity.

4.4 Imperfect Information

Economic theory states that an economic system will perform at its best in a perfect competitive environment. Perfect competition means that every market participant has equal opportunity in terms of entry and exit, equal access to public services and legal protection, and open access to information.

Certainly, business operators who bribe government officials tend to obtain more information more quickly (generally called “insider information”) than those who do not offer bribes. As it turns out, those who give bribes are generally the ones who love cheating and are not good at doing things deemed useful to society. This will result in a situation called “Imperfect Information” that reduces the degree of competition and yields a sub-optimal outcome for an economy.

5. Conclusion

According to existing economic literature, corruption is considered a negative factor that causes lost government revenue, reduced investment and low-quality public infrastructure projects, though some researchers take a positive view of corruption as being a stimulus to economic growth.

In this paper, corruption is treated a factor that aggravates or worsens the situation of market failures that ultimately reduce an economy to perform sub-optimally. At this sub-optimal level, an economic system will experience social welfare loss and lose its ability to reach its full potential.

Examples of market failures are monopolies, externalities, public goods and imperfect information. Corruption increases the severity of these failures and hinder economic development.

In summary, corruption, working through the channel of market failures, results in an economy that performs inefficiently and unable to develop to its full potentiality. Certainly, the damage caused by corruption from the loss of economic efficiency is much greater and more severe than from the loss of state revenue. From the author’s viewpoint, the loss of economic efficiency, as indicated by poor economic development, is much greater and more severe than the loss of state revenue, which accounts for only a small fraction of total national income.

Recommendation for future research is in order. In this paper, it is shown that countries with high corruption will be associated with a poor standard of living (i.e., low income per capita). It still remains to be shown or tested empirically that these poor countries also have a high degree of market failures due to high corruption. To achieve this goal, it is necessary that certain types of indices be constructed for each country to measure of the degree of monopoly, environment destruction, imperfect use of information, etc., in order to perform statistical analysis to determine the relationship between corruption and market failures.

6. References

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