

Entry #1123

Undergraduate

2199 Words

Corruption: Winner Takes All

Part A: Understanding Corruption

Introduction

Assessing the strength of an economy largely concerns its ability, given a finite set of resources, to maximise the cumulative welfare of its society. The mechanisms by which economies maximise welfare are formed through institutional policy. Institutions determine, amongst other things: the cost of economic transactions, the degree to which cooperation is conducive, and most pertinently, the extent to which the law is enforced (Ferrini, 2012). Hence, it is of great concern to policy makers and economic participants as to what extent institutions in the economy are corruptible. Corruption is understood to be the abuse of vested power for personal gain. Vested power describes power conferred upon an agent by a wider interest group. Institutional operatives possess varying degrees of vested power by virtue of election, appointment or otherwise. Van Duyne (2001: 2) offers more precisely that corruption occurs where a decision maker has the power to illegally deviate from the rules which regulate their decisions, in exchange for some gain. At this stage it becomes apparent that corruption exhibits features resembling those of a typical principal-agent conflict. Where corruption is possible, there exists a potential asymmetry between the actions of power-bearers and the resultant outcomes for their constituents.

In this paper an analysis of corruption will be conducted. This analysis will commence by exploring existing literature on corruption, so as to justify corruption as a point of contention. Thereafter, a model will be developed from which the mechanics of corruption can be understood. Through this model, the fiscal and economic consequences of corruption will be examined.

Types of Corruption

Contemporary works tend to focus on two major types of corruption. Grand and bureaucratic (Jain, 2001: 3-5). Grand corruption describes the manipulation of power by political elites so as to exploit public resources for their own interests. Where it is most pervasive, grand corruption leads to the normalisation of resource allocation in favour of areas where the gains from corruption are highest. Bureaucratic corruption concerns appointed officials and their dealings with the public. Often referred to as ‘petty’ corruption, these incidents are usually of minimal societal consequence (Jain, 2001: 4). In these situations participants are either attempting to expedite bureaucratic processes or gain preferential access to services of which they are already entitled.

Public and Private Sector Corruption

While these designations all focus on holders of public office, by no means does that imply a mutual exclusivity between corruption and the private sector. Rather, in investigating the societal effects of corruption, it falls beyond the scope of this analysis to consider the private sector. Justification lies within 2 distinctions. The first concerns the fact that most private enterprises possess measures which discourage against largescale corruption, such as financial reporting standards along with comparatively finite resources. While a corrupted firm can run the risk of bankruptcy, incidents of public corruption seldom threaten the longevity of a government. The second aspect for consideration is that the public sector is financed by the collective contributions of society. As a firm has a duty towards the prudent allocation of shareholders’ capital, so too does a government have a duty to ensure the responsible deployment of society’s resources. Moreover, while a firm’s resources are typically predestined towards ends with purely financial gains, government expenditure is generally directed towards public goods intended to yield a societal benefit. From here it becomes sufficient that the focus on government arises out of a recognition of greater vulnerability to the damaging aspects of corruption.

Motivations Underlying Corruption

Continuing this investigation, it may also prove useful to consider reasons why institutional operatives engage in corruption. Cases of grand corruption usually feature an agent who possesses a monopoly over decision making power. This arrangement generally arises from situations where the agent is an ally – political or otherwise – of their theoretical supervisor (Jain 2001: 36). Aided by opaque measures of accountability, the monopolistic agent adopts

the role of sole enabler of progress. This power allows the agent to bargain for rents while competing interest groups lobby for progress. Jain (2001: 36) uses an example of the politically appointed head of the Lesotho Highlands Water Project, who manipulates their monopoly power to extract bribes from competing construction firms. When looking at bureaucratic corruption, the analysis of enabling factors requires an alternative approach. Nagano (2009) suggests that if it is true that economic agents are rational decision makers, then one might understand the logic underpinning acts of petty corruption. Most policies directed at altering behaviour carry some compliance benefit for both society and the individual (e.g. road safety and smoking legislation). This does not seem to be the case with anti-corruption measures, where there appears to be almost no individual benefit for compliance. Many cases of petty corruption, whilst allowing both parties the potential to gain, often present no obvious cost for the rest of society. This approach, by virtue of the imperfect information available to the corrupt parties, is particularly susceptible to societal externalities. In this situation one might also draw parallels to that of a prisoners' dilemma. A corrupt bureaucratic official possesses a dominant strategy, which is personally inexpensive to enact, whilst simultaneously offering potential for reward. However, if every bureaucratic officer chose to pursue their dominant strategy, society would surely be worse-off.

Part B: Corruption – A Model

Challenges in Measurement

In an attempt to establish a model, it is worth noting that the illicit and secretive nature of corruption presents a considerable challenge to its empirical measurement. Without robust methods for measuring corruption, magnitudes cannot be quantified, theories cannot be tested and remedial policy cannot be assessed (Banerjee, Hanna and Mullainathan, 2012: 41). Where there is grand corruption, political players have the ability to manipulate their constituents by framing rent extractive policies as beneficial. These situations prove especially ambiguous when some in society genuinely do stand to benefit (Jain, 2001: 4). With petty corruption, most instances remain disguised due to the resource cost of investigation outweighing the value of the corruption. In attempting to measure corruption a common proxy usually manifests in the form of perception surveys. However, as Banerjee, Hanna and Mullainathan (2012: 44) note, the explanatory value of these rankings are at a loss when explaining the nature of the corruption affecting a particular country. The authors use

an example of the 2008 Transparency International Corruption Perceptions Index where Burkina Faso, Morocco and Thailand all score the same ranking.

Buidling The Model

The model supporting this analysis will hypothesise a corrupt individual's decision function and from there consider its bearing on the aggregate economy. The individual's gain function when contemplating corruption is a concept presented by Rose-Ackerman (1974: 3-4) where:

$$G(X) = X - J(X, p) - R(X)$$

Where:

G = Net gains from corruption

X = Gross gains from corruption (+; increases J and R)

J = Penalty, if caught (-)

p = Probability of detection (increases J)

R = Moral cost of being corrupt (-)

Where G is positive, the individual will choose to be corrupt. At this point it is appropriate to develop an additional tool which describes the marginal propensity for corruption (μ):

$$\mu_i = G_i / Y_i \quad \mu_i \geq 0$$

Where for the individual (i):

Y = Income without corruption

This effectively demonstrates how many times more lucrative corruption is for the individual. Note that the marginal propensity for corruption is only relevant where $G(X)$ is positive. From here, society's marginal propensity for corruption can be derived as:

$$\mu_s = \Sigma(\mu_i) / n \quad \mu_s \geq 0$$

Where n denotes the size of the corruptible population. With this knowledge, attention can be turned towards to general economy. The basic Keynesian model of a closed economy will be applied:

$$Y = C(Y, T) + I + G \quad (\text{Here } G \text{ is government})$$

From here the fiscal and economic effects of corruption can be assessed. At each stage of analysis, the model will be adjusted with the ultimate intention of motivating an economy represented by:

$$Y = C(Y, T, \mu) + I(\mu) + G(\mu)$$

Fiscal Consequences

Fiscal outcomes can be decomposed into the effects on government spending and taxation. Government expenditure provides a plausible conduit for assessing the effects of grand corruption. These cases often occur by way of intermittent special purpose projects such as infrastructure contracts or the sale of public assets. Given the inherent lack of precedence, the one-of-a-kind nature of these projects lends itself to an ambiguous price determination process (Rose-Ackerman and Truex, 2012: 24–25). As such, conventional anti-corruption frameworks prove insufficient when addressing the elements of these transactions which allow for the dispensation of rents (e.g. inflated costing). Banerjee, Hanna and Mullainathan (2012: 48–49) support this idea by highlighting the discrepancy between the reported expenditures on government projects in Uganda and China against the value of services beneficiaries claim to have received. In some cases, up to a 25% of the expenditure had gone missing. Dzhumashev (2013: 13) goes as far as to conclude that, by similar reasoning where corruption is ubiquitous, an increase in government spending generally leads to a decrease in GDP growth. Given these findings the model can be amended to reflect:

$$Y = C(Y, T) + I + G(\mu)$$

$$Y = C(Y, T) + I + G_0 + G_c/\mu$$

Where:

G_0 = *Autonomous government expenditure*

G_c = *Corruptible government expenditure*

With respect to taxation, the underlying assumption is that economic participants comply with the belief that their payment represents their contribution towards society. However, when perceptions of public resource wastage increase, consumers' willingness to pay taxes has been shown to decrease (Hadjipaschalis, 2014). Furthermore, Fitzsimons (2007: 7) shows that where corruption is prevalent, businesses take measures to withdraw their affairs from the formal economy in an effort to avoid the jurisdiction of rent seeking policies. It is

therefore apparent that corruption has a corrosive effect on the tax base. This is significant because in the face of a revenue shortfall government sacrifices future revenues by accruing higher debt levels (Ivanya, Moumouras and Rangazas, 2015: 30). The model now adopts the form:

$$Y = C(Y, T, \mu) + I + G(\mu)$$

$$Y = C_0 + c(Y - T/\mu) + I + G(\mu)$$

Economic Consequences

Economically, focus will be placed on investment. Corruption generally increases the cost of doing business whether it be through bribery or the distortion of regular processes. As such, it is plausible to accept that countries with high levels of corruption exhibit disproportionately lower levels of both foreign and domestic private investment (Wickberg, 2013: 2). Moreover, when engaging in corruption is necessary for firms to operate, the perception of a stagnant competitive environment also causes private investment to decrease (KPMG, 2016: 9). KPMG (2016: 9) further conclude that on average every one point increase in a country's corruption perceptions index corresponds to an 11% decrease in foreign direct investment. Therefore, adjusting the model yields:

$$Y = C(Y, T, \mu) + I(\mu) + G(\mu)$$

$$Y = C(Y, T, \mu) + I_0 + I_c/\mu + G(\mu)$$

Where:

I_0 = Autonomous investment expenditure

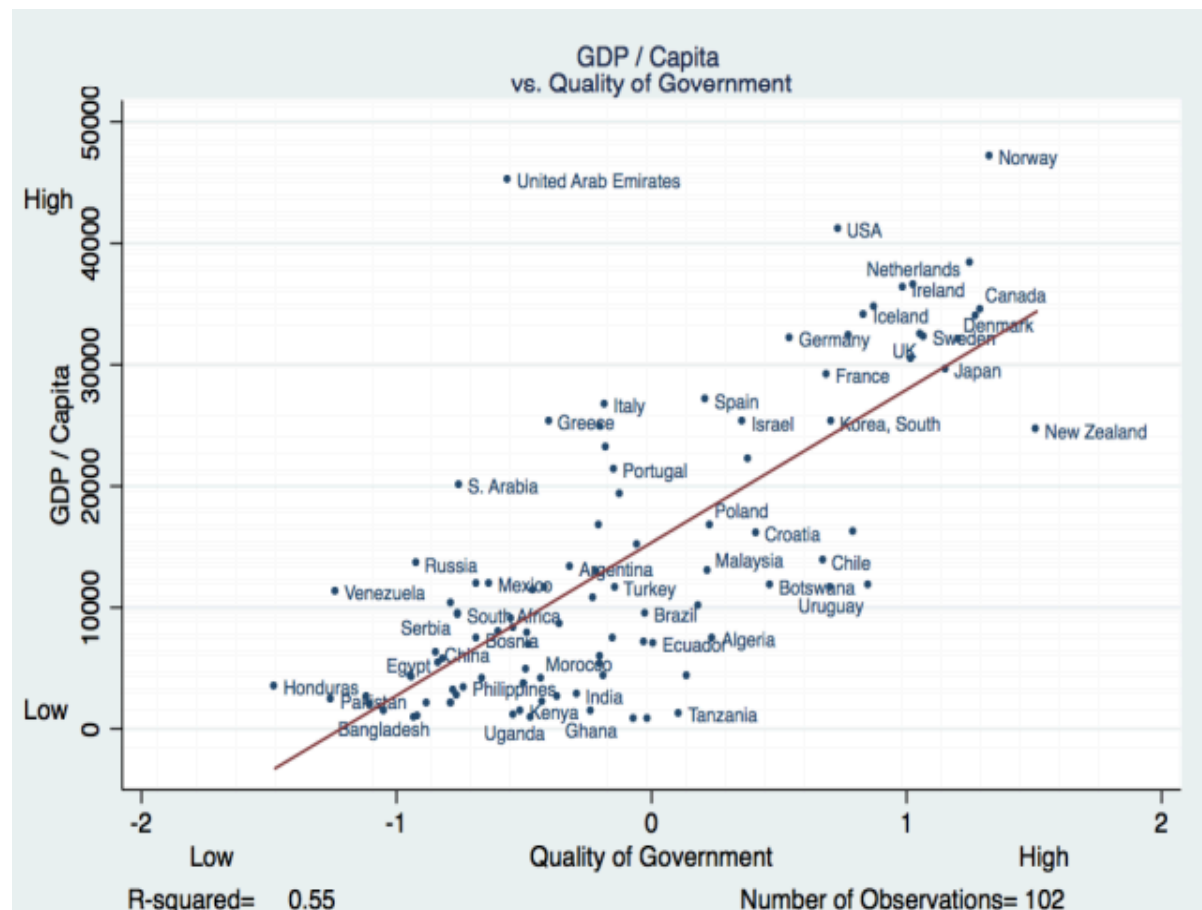
I_c = Corruptible investment expenditure

Assessing The Model

Although increased corruption visibly decreases the overall welfare of society, it is evident more so that corruption disproportionately disadvantages the poor. This is given by the poor's relatively higher dependence on the effective employment of public resources (Wickberg, 2013: 3). In addition, corruption has been shown to inflate the prices of government services such as public healthcare (Gupta, Davoodi and Tiongson, 2000: 3). Rose-Ackerman and Truex (2012: 3) confirm this idea of declining welfare by examining the strongly negative relationship between a country's perceived level of corruption and its Human Development Index. Reverting focus back to the model, the mechanisms underlying the development of the

prototype seem to hold true when compared to the work of Rothstein and Holmberg (2014). This conclusion is illustrated in Figure 1 which asserts a resilient positive relationship between the quality of government (a proxy for corruption) and GDP per capita.

Figure 1: Relationship between GDP per capita and Quality of Government



Source: (Rothstein and Holmberg, 2014: 6)

Conclusions

Public sector corruption is necessary to study given the evidence that society's welfare depends on the strength of its institutions. The personalised subversion of institutional resources so characteristic of corruption, results in the decay of institutional strength. Where institutions are weak, policies, no matter how well-crafted, are generally predisposed towards failure (Rose-Ackerman and Truex, 2012: 2). Notwithstanding the institutional effects, the impetus in this analysis gained further urgency when the power asymmetry between institutional operatives and society was highlighted. The corrupt dealings of one agent can result in disproportionate and unintended welfare outcomes for their constituents. Corruption however continues to remain clandestine in its nature and quantification. It is clear that in the

absence of credible institutions, corruption is certain to remain opaque and similarly, where corruption is ubiquitous, institutions are bound to remain weak. There was also a relationship established between corruption and the strength of an economy. The model established showed that the magnitude of corruption has negative effects on government spending, taxation revenues and private investment. Hence, it can be concluded that where a government seeks a robust economy, it is of paramount importance that corruption is curtailed at every level. For where there is no corruption, there seems to be no impediment to the maximisation of societal welfare.

References

Banerjee, A., Hanna, R. & Mullainathan, S. (2012) *Corruption*, s.l.: Massachusetts Institute of Technology.

Dzhumashev, R. (2013) The Two-Way Relationship Between Government Spending and Corruption and its Effect on Economic Growth. *Contemporary Economic Policy*, 32(2), p. 403–419.

Ferrini, L. (2012) *The Importance of Institutions to Economic Development*. [Online] Available at: <http://www.e-ir.info/2012/09/19/the-importance-of-institutions-to-economic-development/> [2017, 29 April].

Fitzsimons, V. (2007) Economic models of corruption. In: Palgrave, ed. *Corruption and Development: the anti-corruption campaigns*. London: Palgrave.

Gupta, S., Davoodi, H. & Tiongson, E. (2000) *Corruption and The Provision of Health Care and Education Services*, London: International Monetary Fund.

Hadjipaschalis, R. (2014) *KPMG*. [Online] Available at: <https://www.sablog.kpmg.co.za/2014/02/effect-corruption-tax-morality/> [2017, 3 May].

Ivanya, M., Moumouras, A. & Peter, R. (2015) *Corruption, Public Debt, and Economic Growth*. [Online] Available at: https://msu.edu/~ivanynam/research/corr_debt/Ivanyina_Mourmouras_Rangazas_Corruption_Public_Debt_2015.pdf [Accessed 3 May 2017].

Jain, A. (2001) Corruption: A Review. *Journal of Economic Surveys*, 15(1), pp. 71-117.

KPMG (2016) *The impact of corruption*. [Online] Available at: <https://assets.kpmg.com/content/dam/kpmg/za/pdf/2017/03/Corruption-TL.pdf> [2017, 9 May].

Nagano, F. (2009) *Corruption, Game Theory, and Rational Irrationality*. [Online] Available at: <https://blogs.worldbank.org/publicsphere/corruption-game-theory-and-rational-irrationality> [2017, 2 May].

Rose-Ackerman, S. (1974) The Economics of Corruption. *Journal of Public Economics*, July, Volume 4, pp. 187-203.

Rose-Ackerman, S. & Truex, R. (2012) *Corruption and Policy Reform*, New Haven: Yale Law School.

Rothstein, B. & Holmberg, S. (2014) *Correlates of Quality Government*. [Online] Available at: http://qog.pol.gu.se/digitalAssets/1510/1510680_correlates-of-quality-of-government.pdf

[2017, 3 May].

van Duyne, P. (2001) Will Caligula go transparent (sic.)? Corruption in acts & attitudes. *Forum on Crime and Society*, 1(2), pp. 73-98.

Wickberg, S. (2013) *Literature review on costs of corruption for the poor*, s.l.: Transparency International.