

**SAND OR OIL IN THE MACHINE?: A COMMENT ON CORRUPTION  
AND ENTREPRENEURSHIP**

*by*

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*... economists are now doing their political economy analysis explicitly, rather than implicitly as used to be the case. Most economists have now come to the realization that good economic advice requires an understanding of the political economy of the situation*

Rodrik (1996: p. 38)

## **I. INTRODUCTION**

Taslim (1994) argues that corruption in the form of bribe-taking is like sand in a machine rather than oil because it drives out firms with lower entrepreneurial skills from the market. Obviously, developing countries where entrepreneurial skills are in particular very scarce are adversely affected because there will be even fewer *active* entrepreneurs who can seek out “profitable opportunities... and directly add to the wealth of the nation in addition to enriching themselves” (Taslim 1994: p. 123).

We agree and sympathise with the conclusions drawn by Taslim but disagree with his methodology which, as we will argue and demonstrate, is inappropriate for the nature of the problem addressed. Taslim's model is simple and elegant as good models should be. We are not concerned with particular simplifications he makes but with broader political economy assumptions in which the model is embedded.

We make two points. First, Taslim's argument is critically based on his assumption of a particular benchmark against which the post-corruption situation is compared. The benchmark implicitly chosen is the neoclassical perfectly competitive market with well-defined property rights and no transaction costs. The justification for using this as a

benchmark - and not just in developing countries alone - has been extensively questioned in the literature (Eggertsson 1990; North 1990; 1994; 1995; Samuels and Mercurio 1984)

Taslim's case for rejecting the arguments of those who view corruption as oil in a machine (Baily 1966, Leff 1964, and Rashid 1981) is based on contesting their assumption of an already distorted and / or rent-seeking context as the benchmark. In Section II we show the importance of choosing the right benchmark. By identifying a distorted situation as the relevant benchmark, it is easy to modify Taslim's framework to show that corruption can increase entrepreneurship. This result is not a paradox of limited theoretical interest. It simply reestablishes the point made by Leff (1964) and more recently by Bhagwati (1982) among others that when initial situations are distorted, corruption (and more generally, rent-seeking) *may* be cost-reducing for the entrepreneurs engaging in it. The growing literature on the political economy of development (Amsden 1989, Wade 1990) suggests that the relevant benchmark for both successful and unsuccessful countries is that of a pre-existing situation which involves both distortion and rent-seeking. This brings us to our second point. If we have to abandon the neoclassical benchmark, is it possible to analyse the apparently differentiated effects of corruption across countries? This point is very briefly touched on in Section III and the reader is referred to the growing literature on the political economy of corruption.<sup>1</sup> We draw on this literature to argue that the differential effects of corruption have to be explained not in terms of whether corruption is cost-reducing or cost-increasing for the individual entrepreneur but on the systemic effects of corruption in particular political and institutional contexts.

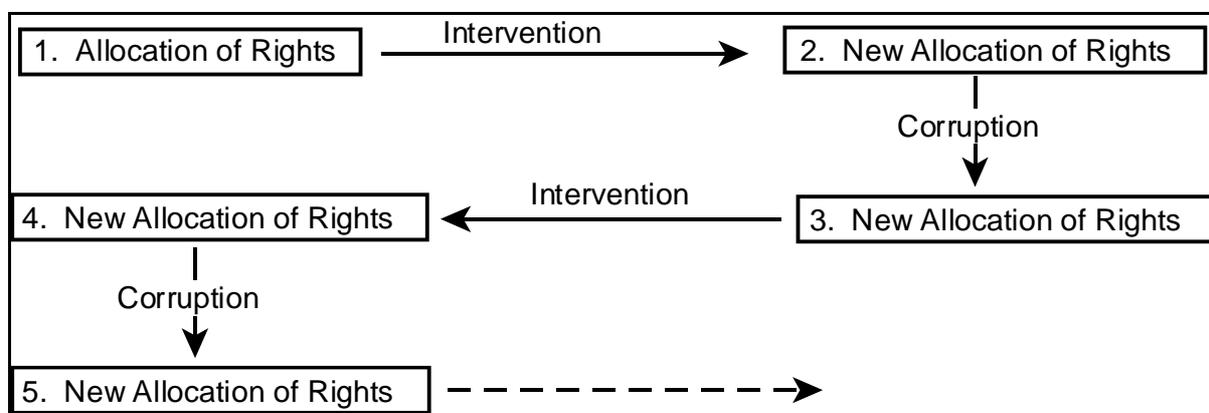
It is not the case, as Taslim (1994: p. 119) suggests, that corruption has a universally negative effect which is not noticed in high growth economies but which is arithmetically debilitating in low growth economies. Rather theory and evidence are both beginning to recognise that in situations of pervasive distortion and rent-seeking, some forms of corruption (and rent seeking) can be efficiency-enhancing or at least neutral while others are starkly

<sup>1</sup> See Khan (1996b) and other articles published in the Special Issue on Corruption in the IDS Bulletin, Vol. 27, No. 2, April, 1996.

efficiency-reducing. The theoretical challenge is to be able to discriminate between different types of corruption and identify the causes of these differences (Khan 1996a ; 1996b).

## II. ALTERNATIVE BENCHMARKS AND THE POSSIBILITY OF POSITIVE EFFECTS OF CORRUPTION

In this section we will discuss the problem of choosing a benchmark for determining the efficiency or entrepreneurial implications of corrupt transactions and to show why the benchmark of a perfectly competitive market may not be always appropriate.



**Figure 1 The Benchmark Problem**

The first box in figure 1 represents an allocation of rights in a perfectly competitive market.<sup>2</sup> Government intervention (say by creating a new right like a tariff) brings about a new allocation of rights represented in box 2. At this stage, the associated corruption involved with rent-seeking may lead to yet another set of rights shown in box 3 and the process may go on.<sup>3</sup> The move from box 2 to box 3 can be efficiency enhancing if rent-seeking expenditures shift the society from a less efficient position to a more efficient position by undoing some of the misallocations characterised by the set of rights in box 2 by re-channelling some or all of the misallocated resources to higher valued uses. Thus the welfare loss associated with box 3 may be lower than the welfare loss associated with box 2 but higher than box 1. The problem

<sup>2</sup> See Khan (1996b) for a detailed discussion of the benchmark problem in determining the efficiency implications of corruption.

<sup>3</sup> Note that *all* rent-seeking activities are not necessarily corrupt. For example, where they exist, hiring a professional lobbying firm for rent-seeking purposes is perfectly legitimate.

is, if we start with any given allocation of rights, say from Box 5, what should be our benchmark for welfare or efficiency comparisons? Box 1? Box 2? Box 3 or Box 4? Neoclassical analysis evades this problem by considering box 1 as the benchmark for comparison and Taslim (1994) follows suit. We would argue that using such a benchmark may not be useful in analysing corrupt transactions, particularly in developing countries.

New institutional economics has established the obvious point that well-defined property rights do not exist in a pristine form and all real-world contexts involve transaction costs, rent-seeking and political contests (Hariss et al. 1995; North 1990). In addition policy changes are generally political in nature or infected with inadequately processed information or determined by distributional conflicts and power asymmetries. Since a zero transaction cost world does not exist, the comparison of a real world corruption-induced distribution of rights with the distribution of rights in the zero transaction cost world is irrelevant. The relevant form of institutional analysis is a process analysis where the allocative and entrepreneurial effects of corruption are compared with a model of the actually pre-existing situation with positive transaction costs (Eggertsson 1990).

To show the importance of the benchmark, we use Taslim's own model but alter the benchmark transaction cost assumptions. The initial situation is assumed to be distorted in the sense that there are positive transaction costs. This does not require us to assume, as Taslim (1994: p. 120) suggests, that human beings are innately corrupt. We do not need to make any normative assumptions about human nature. We only need to make a descriptive statement that the initial situation is distorted because of transaction costs.

Consider a specific credit market transaction. Assume that there are lenders who are willing to lend at a nominal rate of interest  $r$  and that the supply of loanable funds is perfectly elastic at this interest rate. A horizontal supply curve of loanable funds can be assumed without loss of generality and serves to simplify our argument. In a world without transaction costs borrowers would pay the interest rate of  $r$  and the quantity demanded would be determined by the (downward-sloping) demand for loanable funds. Now assume that the

demand and supply for funds is matched through a set of savings-and-loan institutions. As is common in the institutional literature, we will assume that the costs of running this institution are borne by the transactors, namely borrowers and lenders. If we have a zero transaction cost world, the cost of the institutional transaction is zero and nothing changes by introducing the institution. Borrowers and lenders transact at the same interest rate  $r$ . If instead we have a positive transaction cost world, the outcome depends quite critically on the type of institution which is feasible.

Suppose that in a positive transaction cost world the institution requires additional administrative and monitoring costs which amount to  $r_m$  for transferring each unit of funds from lenders to borrowers. This has the effect of raising the supply price of funds by  $r_m$  everywhere. The administrative and monitoring component  $r_m$  is a transaction cost which can be of different magnitude given differences in the institutional and political context as well as with different policy imperatives of the government. For instance,  $r_m$  may be positive if borrowers have to wait a long time before applications for loans are processed, or if they have to make legal but costly contributions to political parties or election campaign funds, or if the policy of the government is to encourage lending to particular sectors which in turn requires large monitoring costs by the institution which are passed on to the borrowers. Our assumption of a perfectly elastic supply of funds allows us to simplify the story because in this case the borrower simply faces a higher borrowing rate equal to  $r+r_m$ <sup>4</sup>. With reasonable assumptions about the institutional, political and policy imperatives of developing countries,  $r_m$  could be very large.

<sup>4</sup> In the case where the supply curve of loanable funds is upward sloping, our argument does not substantially change since the *gap* between the actual supply price of loanable funds and the notional supply price in a zero transaction cost world is always equal to  $r_m$ . This is sufficient for our argument but complicates the exposition. A referee pointed out that some of the administrative and monitoring costs could be passed on to the rest of society through the tax system and need not be borne by the transactors. This is a perceptive point which goes to the heart of our dispute with Taslim. If the institution was such that an entrepreneur could not lower the private cost of funds by bribing then of course bribing would not take place except by coercion by the state. We are only asserting that in many realistic scenarios bribing can reduce the private cost of funds. On the other hand we are perfectly aware that efficient institutions do exist in many parts of the world where such incentives do not exist. Under those conditions the extraction of bribes will increase rather than decrease the private cost of funds to the borrower who then has an incentive to cooperate with the authorities to fight corruption. This is of course Taslim's scenario and we are essentially arguing that this is not the general case. It is a particular case which is as special as the alternative possibility we are suggesting.

In the absence of far-reaching political and institutional changes, the entrepreneur's response to this may be to by-pass some of these transaction costs by offering a bribe to key institutional agents within the financial institution. This too implies a cost for the entrepreneur, in the form of a bribe and the cost of organising the bribe. Suppose that this route increases the unit cost of funds by  $r_b$  implying that the supply curve of loanable funds is everywhere raised by this amount. In the simple case with a perfectly elastic supply of funds, the entrepreneur now has access to funds at the rate  $r+r_b$ . If  $r_b < r_m$  borrowers are clearly better off by bribing<sup>5</sup>. The institutional literature to which we have referred suggests that second-best institutional arrangements can frequently be devised which are less costly for the participants to a transaction (in this case borrowers and lenders) in a positive transaction cost context.

The key point is whether the relevant institutional benchmark for comparing the effects of corruption is the zero transaction cost one of neoclassical theory or the positive transaction cost one which we find in the real world. If it is the latter, we can clearly see the implications in figure 2 adapted from Taslim (1994: p. 130). The idealised neoclassical position is the one where the interest rate is  $r$  and there are no transaction costs. This corresponds to the equilibrium at point A in the diagram where entrepreneurs with skills equal to or higher than  $e_0$  survive in the market. The real world situation with positive transaction costs results in real costs of borrowing to the amount of  $r + r_m$ . Equilibrium in this situation is shown by point B. Given this level of real cost of borrowing, only entrepreneurs with skills equal to or higher than  $e(r + r_m)$  can participate in the market. The alternative case of corruption is shown by the situation where the post-bribe effective interest rate is  $r + r_b$ . With this effective rate of interest, equilibrium is at point C and only those entrepreneurs having entrepreneurial skills equal to or higher than  $e(r + r_b)$  can remain in the market.

<sup>5</sup> Even if the supply curve of funds is upward sloping borrowers will always be able to lower their cost of borrowing by bribing as long as  $r_b < r_m$  which is sufficient for our argument but in this case the cost of funds for borrowers in each situation will depend on the elasticities of supply and demand of funds.

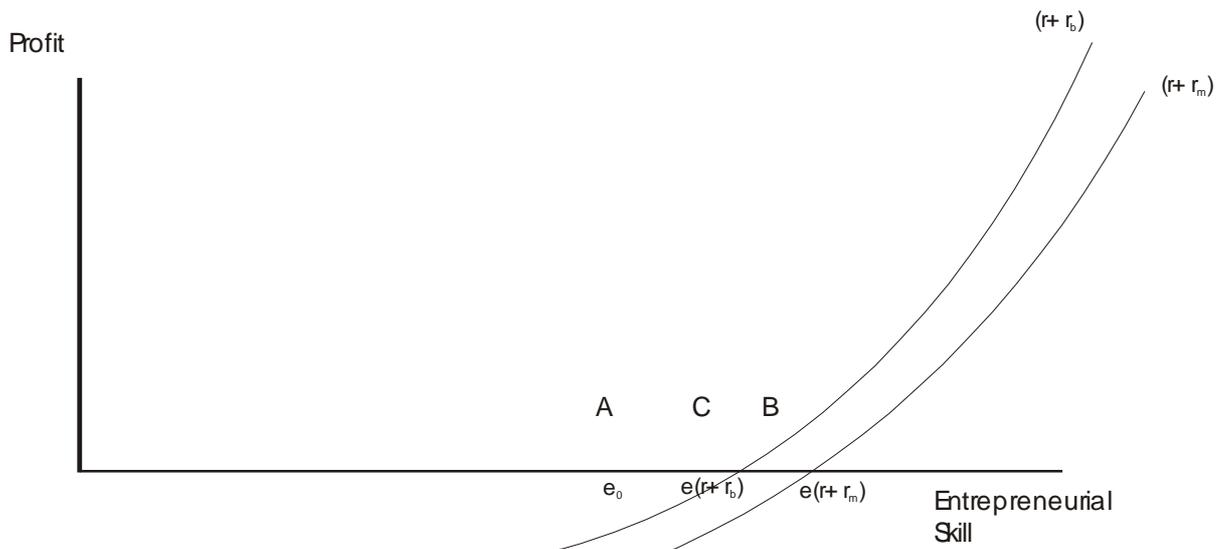
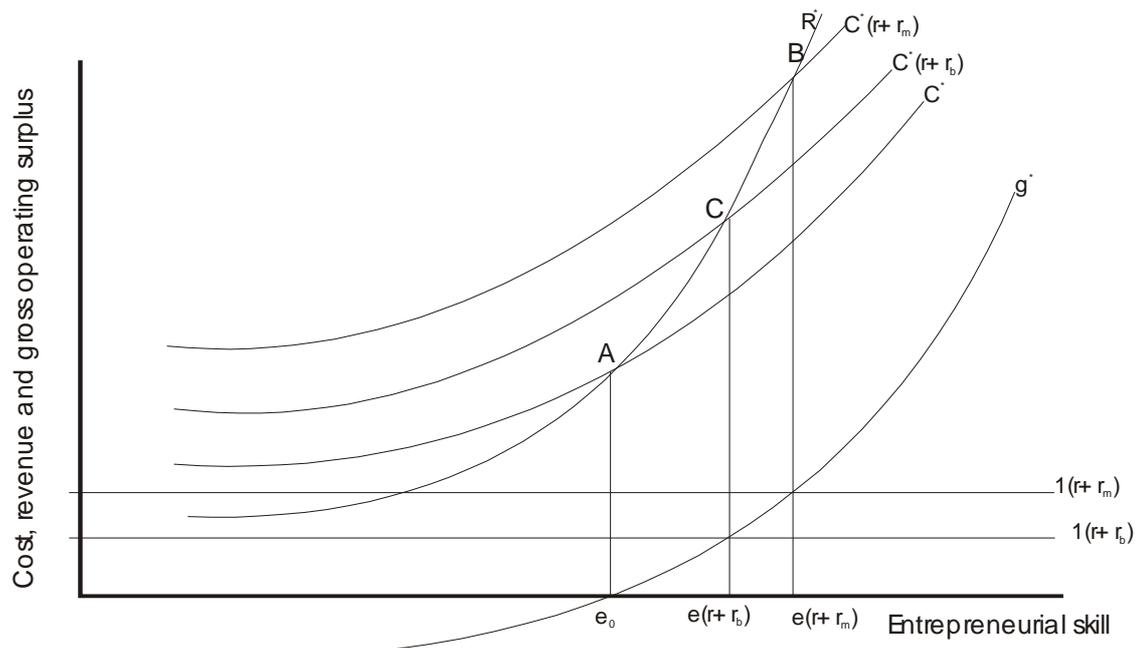


Figure 2 A case of positive relationship between corruption and entrepreneurship

As long as the loan demand function is downward sloping with respect to the effective cost of borrowing, we have

$$e(r + r_m) > e(r + r_b) > e_0 \text{ as long as } (r+r_m) > (r+r_b) > r.$$

Thus the entrepreneurial skill required to remain in the market in the post-bribe situation,  $e(r + r_b)$ , is higher if the benchmark is the zero transaction cost benchmark,  $e_0$ , but lower if the benchmark is the actually existing world with positive transaction cost,  $e(r + r_m)$  for a range of realistic institutional cases where  $r_m > r_b > 0$ .

### III. THE DIFFERENTIAL EFFECTS OF CORRUPTION

To suggest that the effects of corruption can depend on the prevailing political and institutional framework does not mean that the effects of corruption are always beneficial (Ades and Tella 1996; Harriss-White and White 1996; Kong 1996; Mauro 1995). There is now a considerable body of research which has tried to identify why the effects of corruption may vary across countries. Some of this literature is reviewed in Khan (1996a; 1996b). In the opinion of the authors and Harriss-White and White (1996), greater analytical precision in the analysis of the effects of corruption depends on locating corruption in the precise political and institutional context in which it appears. In fact we agree with Taslim that corruption is associated with damaging economic effects in Bangladesh. However, this is probably not because of the mechanism he suggests which ignores transaction costs and the benchmark problem. Corruption has a negative effect in Bangladesh which is much more marked than in countries such as South Korea or Indonesia despite the fact that in all these countries corruption is individually rational for entrepreneurs given existing institutions. The systemic differences are in the institutional and political context which makes corruption growth-retarding in countries like Bangladesh but not in South Korea. One of the authors has elsewhere argued that the answer may have to do with the balance of power between the state and its clients which leads to corrupt transactions in weak states having systemic efficiency-reducing effects (Khan 1996b). Clearly our understanding of the efficiency and

entrepreneurial effects of corruption has a long way to go but fruitful research requires that we locate economic analysis in the context of stylised political and institutional models.

#### **IV. CONCLUSION**

The purpose of our comment has been to argue that zero transaction cost models which abstract from pre-existing politics and institutions have a limited explanatory scope rather than to show that corruption is beneficial for any country. We have argued that the problem of choosing a benchmark for welfare and entrepreneurial comparisons is an important one. By introducing positive transaction costs in Taslim's model we have shown that corruption can be privately beneficial in some institutional contexts. In the framework suggested by Taslim, corruption can aid entrepreneurship in such contexts. In contrast the systemic effects of corruption can depend on other factors including the political and institutional context. These observations have policy relevance. If corruption and its harmful effects have to be targeted, policy has to distinguish between the institutional features which make corruption individually rational in developing countries and the institutional and political features which determine whether its effects are beneficial, benign or malignant in that particular context. Developing countries have not really been substantially different in terms of the incentives created for privately profitable corruption whether we look at South Korea or Bangladesh. In all these cases, the perspective suggested by Taslim could lead us to conclude that corruption actually increased entrepreneurship since entrepreneurs have often sought out corrupt transactions as cost-reducing strategies. However, developing countries have differed quite substantially in their broader institutional and political frameworks which can explain the differential economic effects of their corruption. We would look there for explanations of differential performance.

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