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CORRUPTION: THE ISSUES

by

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RÉSUMÉ

Ce document présente un cadre d'analyse du problème de la corruption valable pour tous les pays. Il ne cherche pas à montrer l'ampleur de la corruption de manière générale, ni à proposer une politique économique ou des programmes institutionnels spécifiques destinés à réduire l'impact de ce phénomène sur le développement. L'objectif est plutôt d'éclairer deux axes distincts de recherche. Premièrement, cette étude s'intéresse aux déterminants de la corruption, mettant l'accent sur l'environnement dans lequel elle se développe — qu'il s'agisse de facteurs internationaux, nationaux ou institutionnels —, ainsi que sur la manière dont les différents protagonistes interagissent et s'organisent autour ces activités.

En second lieu, ce document traite des effets de la corruption sur le développement économique en considérant ses différentes formes et leurs caractéristiques les plus importantes pour l'activité économique. Il identifie les distorsions générées ainsi que la façon dont elles entraînent l'économie dans des directions non optimales. De plus, la nature de l'incertitude liée à ces différentes formes de corruption et, notamment leur caractère plus ou moins structuré, sont examinés : la forme "anarchique" reflète un système caractérisé par une grande incertitude, ce qui est moins le cas de la forme "organisée" (l'incertitude est parfois minimale) du fait de l'existence de relations stables et prévisibles.

Ce document passe en revue les travaux empiriques réalisés jusqu'à présent dans ce domaine de la corruption, dont le nombre apparaît singulièrement limité. Cela vaut particulièrement pour les recherches concernant l'Afrique et les études au niveau national. Le but est d'identifier comment une étude de cas détaillée portant sur quelques pays — et bien entendu sur les institutions ou des secteurs spécifiques au sein de ces pays — pourrait compléter les analyses existantes et fournir un cadre pour ceux qui cherchent à définir une politique appropriée à un contexte donné.

SUMMARY

This paper sets out a framework within which the problem of corruption may be analysed in any specific country. It does not seek to establish the importance of such activity in a general sense, or seek to propose particular economic policy or institutional programmes that should be pursued in order to reduce the impact on the development process. Rather, the objective is to provide a structure for two distinct areas of analysis. Firstly, it considers the investigation of the determinants of corruption, emphasising the environment in which corruption evolves — whether shaped by international, national or specific institutional factors — and the manner in which the different parties to corruption interact and organise themselves in conducting these activities.

Secondly, the paper focuses on the importance of corruption for economic development by considering the different forms of corruption and the characteristics of these forms that are most critical for economic activity. Here, the distortions that are introduced into ongoing economic activity are identified, together with the manner in which these distortions redirect activity in sub-optimal directions. In addition, the nature of the uncertainty attached to these differing forms of corruption is considered, and especially the degree to which a form may be considered anarchic or structured in character: the former reflecting a system of intense uncertainty, and the latter one of less uncertainty — perhaps, only minimal uncertainty — as a predictable and stable set of relationships between parties is established.

Finally, the paper reviews the empirical work that has been undertaken to date in this field. It is striking how little such study has currently been pursued, and this is especially true of the African context and at the country specific level.

This paper, therefore, seeks to identify how detailed case-study analysis, focused on individual countries — and, indeed, on specific institutions or sectors within those countries — could valuably complement these existing studies, and provide a framework for those seeking to design policy that is appropriate to any individual circumstance.

PREFACE

Social and political factors have played a major role in the retarding of growth and development in many African economies. In recent years, significant progress has nevertheless been made in several countries in some areas of political and social development. Concrete steps have been taken towards the establishment of more pluralist societies that are more tolerant of diversity there have also been moves towards multi-party democratic institutions, fragile though they may be at this early stage.

Unfortunately, other elements of political and social development have not experienced the same degree of progress and continue to constrain and distort the development process. In this research programme on “Political Economy and Development in Africa”, the authors are focusing on one of these elements that appears to be both of widespread relevance throughout much of Africa and to have fundamental repercussions for national development: corruption.

The impact of corruption on economic development has often been absent from economic analysis, but today it is a subject that is receiving increasing attention. This project sets out to contribute to our understanding in this field. Specifically, the present paper is directed at establishing a framework for analysing the complex issues surrounding corruption. Such a framework would provide a basis for country specific applied studies to be undertaken at a later date. Stress is placed on the importance of the underlying determinants of corruption: this is fundamental to any analysis that seeks to find solutions to the problem. Equally, there is an important emphasis on the adverse repercussions of corrupt activity, and especially on explanations for the apparent difference in impact across countries. The degree and nature of the uncertainty attached to particular forms of corruption is rightly highlighted, since it is this characteristic of corruption that appears to bear most heavily on the development process. The proposed analytical framework should provide useful insights into the problems of corruption and assist in designing appropriate policies.

Jean Bonvin
President
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January 1997

I. INTRODUCTION

The establishment of good governance is now widely accepted as a critical element in securing stable economic development. In this context, the control of rent-seeking and corruption are of central importance, as has been noted by the World Bank (1995): "good governance — that is, the practice by political leadership of accountability, transparency, openness, predictability, and the rule of law — .... has been shown to be a virtual pre-requisite of the enabling environment for market-led economic growth".

Within the OECD, the problems surrounding rent-seeking and corrupt practices have been accorded more importance over recent years, especially in the context of the relationships between OECD economies and the developing countries. The OECD Recommendations of the Council on Bribery in International Business Transactions (adopted May 1994) set out several key elements for OECD Member states to address in the immediate future. The concern of the Recommendations is focused on the legal sanctions that might be imposed in order to deter corruption and on the transparency of organisational systems through enhanced accounting and recording procedures and through improved taxation structures. It is less immediately concerned with the fundamental incentives and motivations that stimulate corrupt activities and with the broader questions of what types of economic policies and state institutions are likely to foster corruption. Similarly, the OECD Recommendation with respect to Anti-Corruption Proposals for Bilateral Aid Procurement (endorsed by OECD's Development Assistance Committee (DAC) in May 1996) focuses on the provision of anti-corruption clauses in procurement contracts. On the other hand, the DAC publication *Orientation on Participatory Development and Good Governance* (1994) goes much further in identifying many of the primary causal factors that underlie and contribute to the basic problem. Indeed, it stresses the importance of addressing these underlying determinants in addition to the efforts to regulate the conduct of business transactions.[1]

The Rationale and Objectives of Analysis.

In order to complement ongoing efforts within the OECD and elsewhere, this paper focuses on four basic research questions on corruption. Firstly, what are the main causes of corruption and what explains the observed international diversity in forms of corruption, and how might economic policy and the design of state institutions be altered so as to reduce the opportunities and incentives to engage in corruption? Secondly, how does corruption affect economic development and what types of corruption are likely to be the most damaging to economic growth? In view of the wide range and severity of the obstacles to growth identified in the poorest countries, it is appropriate to consider the relative importance of corrupt activities in influencing their economic development. Despite the widespread assumption that corruption can hinder economic growth, there have been relatively few attempts by economists to undertake empirical studies of this phenomenon in developing countries (Chapter 6 below). A third question is how might donor assistance be better deployed so as to reduce the risk of corruption? This, of course, has direct relevance for the aid programmes of OECD Member countries. A fourth and final question is how might corruption tend to lead to political turmoil and instability?

Definitional Considerations

There have been a number of different attempts at defining corruption. Some seek to provide a formal comprehensive definition, while others are not strictly designed to define corrupt activity *per* se but are deployed to isolate those activities that are the subject of the author's concern. A further complication is that corruption is most commonly referred to as a public sector phenomenon, but it is also an important fact of life in the private sectors of both developed and developing countries.

One possible definition of public sector corruption is that proposed by Bardhan (1997) "the use of public office for private gains". The problem here is how to differentiate corruption from mere patronage politics or favouritism for electoral reasons, since the basic assumption underlying political economy work, in general, is that officials use their office not to maximise social welfare, but to serve their individual interests. Most observers would, for example, agree that when a customs official demands a bribe for letting a product enter the country duty free, this is corruption, but what about when a politician decides whether or not to devalue based on whether it will suit his political supporters?

One approach to addressing this problem is to suggest that there are two different types of corruption: firstly, administrative or bureaucratic corruption which involves the use of public office for pecuniary gain and, secondly, political corruption involving the use of public office by politicians both for pecuniary gain and for purposes of remaining in office (Tanzi, 1994; Rose-Ackerman, 1978). This distinction, however, does not separate out standard interest group or patronage politics from corruption. An alternative definition which does help separate these two phenomena is that proposed by Shleifer and Vishny (1993), "the sale by government officials of government property for personal gain", where personal gain is restricted to the direct financial benefit accruing to government officials or politicians. This definition might be extended to include the purchase of government goods from the private sector. Cases where government goods are distributed so as to maximise political support, or where policy choices are made so as to maximise political support, would not be seen as corruption according to this definition. Shleifer and Vishny distinguish further between "corruption without theft" and "corruption with theft". The former occurs when an official demands a bribe but passes on the regular payment to the government. This could happen if an official charged a bribe in addition to an import license fee, but then passed the license fee on to the state treasury. Corruption with theft involves instances where the regular payment is not made to the government. An example here would be when customs officials let goods enter the country without paying a duty in exchange for a bribe.

For the purposes of this paper, corruption is broadly defined as the use of public office for private gains, but with the following limitations. First, the definition is confined to public sector corruption: that is, where the receiver of the corrupt payment is a government official.[2] Secondly, activities that may be perceived as corrupt in the sense that they lead to a personal benefit, but which are conducted by a single party without involving a process of negotiation with any other external parties, are excluded. Thus, crime — and particularly theft — that is conducted unilaterally is excluded. In addition, policy decisions taken by an official on his/her initiative alone are not considered, even though they may be corrupt in the sense of being motivated for personal gain rather than strictly being the implementation of government policy. The third limitation is with respect to the nature of the gain accruing to the government official. This might be considered to be, first, pecuniary or in kind; secondly, to be for personal benefit or for the benefit of personal friends, family, social or political grouping; or, thirdly, direct (as where the benefit takes on a negotiated and precise valuation) or indirect (as where the benefit may not be agreed precisely at the time of the negotiation, but accrues at a later time). In principle, each of these instances is important, although, for empirical study, analysis would be expected to focus on the more direct forms of personal gain.

The plan of this paper is as follows: in Chapter 2, a framework for the analysis of the determinants of corruption is presented, based on principal-agent theory. In Chapter 3, alternative conceptions of the determinants of corruption are considered. Chapter 4 looks at the organisation of corruption, while Chapter 5 analyses the implications of different structures of corruption for the economic environment and economic growth. Chapter 6 takes a more detailed look at the empirical work that has been undertaken to date.

II. THE DETERMINANTS OF CORRUPTION FROM A PRINCIPAL-AGENT PERSPECTIVE

Ultimately, corrupt practices must be analysed from the perspective of the two parties that negotiate such agreements within a specific institutional framework as a condition for the fulfilment of a particular transaction. However, each corrupt act is necessarily set within a national and an international context in which broader characteristics play a critical determining and constraining role. For this reason, the approach followed in this chapter is first to present several basic elements of a theory about the causes of corruption, followed by a look at how these elements present themselves at the international level, the national level and at the level of individual state institutions. Moreover, it is instructive to draw a distinction between those elements which may be seen to provide opportunities for corrupt acts to be perpetrated and those which create an incentive for such opportunities actually to be exploited.

The Basic Theory

Economic analysis of the determinants of corruption has typically drawn upon principal-agent theory. The principal is defined to be the top level of government and the agent is a government official designated to carry out a specific task. In the case of high-level corruption — perpetrated at the centre by the elite of the political or administrative structures — one might consider the citizens who elect a politician as the principals and the politician as the agent. The work of Rose-Ackerman (1978,1994) and of Klitgaard (1988,1989,1995a,1995b), drawing heavily on this framework, is especially pertinent here. Klitgaard stresses three dimensions of institutional structure that he considers most critical in bearing on the opportunities for corruption:

* the monopoly power of officials;
* the degree of discretion that officials are permitted to exercise
* the degree to which there are systems of accountability and transparency in an institution

Monopoly Power

The question of whether officials have monopoly power over provision of a government good is crucial for explaining the incidence of corruption without theft. Monopoly power could exist for the legal reason that a certain official is the only person charged with performing a certain task. Conversely, for some types of corruption the presence of competition reduces opportunities for corruption on the part of public officials. When more than one government agent can issue the same license, competition among different officials will drive the bribe price down to zero.[3] One remedy to the problem of monopoly power that is suggested by Rose-Ackerman is the creation of overlapping jurisdictions for official duties.

The above argument about the benefit derived from introducing competition between government officials in the provision of a good applies for corruption without theft, as in the case where an official demands a bribe for provision of a government license but then passes on the regular fee to the government. It does not apply in the case of corruption with theft, as when an official accepts a bribe in exchange for non-payment of an import duty. In this case, corruption reduces overall costs for businesses in addition to lining the pockets of government officials, so businesses have an incentive to seek out corrupt state agents. It is also important to note that competition *among businesses* in this case will lead to the spread of corruption, since businesses which do not reduce costs through bribery will be at a disadvantage. Competition among government officials to be posted to a certain position may also increase the prevalence of corruption in this case, since an honest official will not be able to obtain a transfer, if doing so requires a cash payment.(Shleifer and Vishny 1993).

Discretionary Power

Whether an official will be in a favourable position to extract bribes from clients depends not only on whether they have a monopoly over their particular activity, but also upon the rules and regulations regarding the distribution (or purchase) of government goods. The greater the amount of discretion which is given to an agent, the more opportunities there will be for agents to give “favourable” interpretations of government rules and regulations to businesses in exchange for illegal payments. Strict rules and regulations that spell out all the details of a particular question would seem an appropriate antidote to the problem of excess discretion, but this assumes that formal rules will actually be followed. Moreover, in many cases, rules can often be made too rigid or too unrealistic, inciting non-compliance, and a large amount of *de facto* discretion for officials (Tanzi, 1994). A more useful solution is to simplify rules and regulations whenever possible.

Monitoring and Accountability

Asymmetries of information present principals with a challenge in that they often find it difficult to monitor the actions of agents effectively and hold them accountable for their actions when they fall to carry out an assigned task. (Rose-Ackerman, 1978; Laffont, 1997). The extent of imperfections in monitoring and accountability will depend upon the effectiveness of the institutional structures that are designed to deal with the problem, but it is not exactly clear which institutional structures are best suited for this goal. Reinforcing hierarchical control through state institutions is one way in which governments can address this problem, but those who are paid to monitor the actions of lower-level officials can themselves be bribed not to blow the whistle, leading to a redistributionary chain within the bureaucracy that simply transfers corruption to the next level of responsibility. Increasing hierarchical control can also exacerbate the problem of informational asymmetries if officials far removed from the actual activities taking place are called upon to make judgements which depend upon having accurate information (Gould & Amaro Reyes, 1983, Rose-Ackerman, 1978). An alternative to increasing hierarchical control is to privatise certain government functions, but this presumes that adequate institutions exist for corporate governance in the private sector, without which privatisation will simply mean trading the problem of public sector corruption for inefficiencies elsewhere.

Perhaps because there is no general rule about broad questions, such as whether increasing hierarchical control will reduce corruption, much of the literature on monitoring and accountability focuses on more specific technical measures that have proven themselves effective, within individual institutions (Klitgaard, 1988). Failure to use outside auditors and lack of consultation of clients of a particular bureaucratic agency are two among the numerous more technical aspects mentioned as increasing opportunities for corruption. Another issue concerns the appropriate level of penalty to apply to officials who are caught.

Summary

These three aspects provide a succinct way of evaluating the extent to which there are opportunities for officials to engage in corruption. One might add to this the question of what incentives are offered for staying “clean”. Chief among these is does public sector employment pay well, relative to pay available for similar duties in the private sector? It is also important to consider whether there are provisions for internal promotion based on merit so that officials have some indication that obeying the rules today will lead to greater rewards in the future.(Evans & Rauch 1995)

The International Context for Corruption

One critical dimension of corruption in African economies is the role of transactions with multinational enterprises. Observers like Transparency International have argued that it is the competitiveness of international markets, in general, and in the provision of capital projects, in particular, that is one of the key elements in the promotion of corruption in developing countries. This follows what Shleifer and Vishny (1993) suggest for competition among businesses as a source of corruption. For the competing enterprise from a developed country, the cost of bribing government officials or ministers must be seen in the context of exploiting market opportunities. In the face of competitors themselves engaging in bribery, competitive bribery may be considered unavoidable, and, possibly, even a more cost-effective strategy than competing through lower costs or profit margins. The securing of a contract may often not be a function of the competitiveness of the product, but a function of the competitiveness of the bribe. Certainly, there may be bounds to the product competitiveness that must be observed, if for no other reason that typically third parties will be involved, but, within limits, this may not be the decisive factor.

Enterprises from developed economies that engage public officials in corrupt activities have many incentives to resist reform in this area. To the extent that established relationships with key public officials may have been cultivated over many years and their preferential treatment vis-à-vis their competitors may be firmly established, there would necessarily be considerable resistance to any measure that might jeopardise this investment of time and energy. Any programme to eliminate corrupt payments and restore genuine international competitive processes to procurement would imply the establishment of uncertain market forces and the potential loss of the market. It might be anticipated that an enterprise which bribes to secure a contract, while already having a product competitiveness advantage, would welcome a move to eliminate corruption, since it would be expected to retain the contract in a freely competitive environment. This, however, overlooks the risk that this strategy entails, particularly within a dynamic product market. In reality, securing a long-term hold on a country's market through bribery may be significantly more cost-effective.

Underlying all the discussion of the international corrupter's attitude to the outlawing of corrupt practices is the fundamental and predominant fear that other competitors will not adhere to such a regime even if formally agreed to at the inter-governmental level. The gains to any free-rider may be considerable if such a break from an accord facilitates the establishment of a long-term relationship with a ministry or official.

One further issue that has an important international dimension — but which need not solely be seen in this context — concerns the wealth of the country and, particularly, its access to a rich resource such as oil or diamonds, and its role in fostering corruption. The examples of Nigeria and Angola support the view that such wealth has the potential to stimulate high-level corruption on a massive scale, facilitated, if not encouraged, by the participation of multinational companies in the exploitation of the resource in collaboration with the government. On other hand, the case of Botswana, with its massive diamond exploitation since the end of the 1960s, suggests that, with more democratic political structures and a more participative civil society, corruption need not overwhelm such economies.

The National Context for Corruption

The national context is necessarily instrumental in the evolution of corruption. First, the national context may constrain the evolution of opportunities for corruption at the institutional level and the ability of individuals to exploit such opportunities. Secondly, given that one of the major objectives of this work is to understand the international diversity of corruption, national factors would be anticipated to play a major role in explaining observed differences in patterns of corruption between different African countries and between African countries and non-African developing countries.

In most African societies, as elsewhere, political structure is a critical element in the evolution of corruption. Indeed, it is not merely the degree of political centralisation and the extent of democratic accountability that characterise the governing regime which are important, but also the manner in which the regime interacts with, and exercises political control or influence through, the institutional structures. Political structures where representative processes to enforce governmental accountability are weak or absent would be expected to provide the greatest opportunities for corruption in view of the absence of the political mechanisms through which governments that tolerate, condone or participate in rent-seeking and corrupt practices might be dismissed. The lack of this ultimate power would imply that the popular rejection of corruption would typically lack an appropriate means of expression and, therefore, fail to compel the implementation of necessary legislative and organisational steps by government. Four key elements may be identified and these are considered in detail below: three concern the structure of the society — namely, the relationship of the government with the civil service, the judicial structures, and with civil society — while the fourth concerns the basic economic development strategy of the government.

The Government - Civil Service Relationship

The relationship that is established between the political leaders and the civil service administration is important in considering why corruption might emerge both on the part of civil servants abusing their posts for private gain and on the part of politicians abusing their office for private gain, pecuniary gain.

For civil servants, the reward structure within the state administration has traditionally been seen as one of the key determinants in the evolution of corruption. In most developing countries, the form of these rewards is resolved centrally and not left to the discretion of decentralised units. Thus, from the perspective of this analysis, their structure may be seen as being determined externally to the local institutions within the civil service structure. If officials are paid wages comparable to those available for similar duties in the private sector, and are compensated according to performance, the potential gains from engaging in corruption may not be large enough in relative terms to make it worth the risk. If, instead, officials in the public sector are paid wages well below those for similar duties in the private sector, then the opportunities for corruption may become the principal reason for choosing a public sector post.[4] Klitgaard (1995b) notes that government accountants in the Gambia are paid only one-third to one-sixth of what private sector accountants are paid. For lower-level officials if, in absolute terms, a public sector wage is too low for an official to support himself and his dependants above the poverty level, then the incentives for corruption will be considerably greater. Many authors have suggested that the erosion of real wages in the public sector in African countries since the early 1980s has been responsible for increased corruption. It is the fact that governments undertaking stabilisation programs have preferred to reduce total wage expenditures in real terms, rather than reducing the number of personnel, which has created the incentive problem.

From the solely economic perspective, individuals would be expected to assess the net potential gains from engaging in corrupt practices by comparing the anticipated gross benefits of such behaviour (as given by the expected monetary value of the bribe received from the initial act, and the anticipated future flow of payments from the establishment of a long-term arrangement with the payer) with the potential costs of so doing (as given by the expected costs of exposure). This economic calculation would be expected to assume a very different complexion, depending on the nature of the corrupt activity under consideration. For example, in the case of major international corruption, involving high-level, low-incidence corrupt acts, it is likely that the magnitude of the potential economic benefit from the acceptance of a bribe may dwarf the apparent economic costs. In many African contexts, where this situation certainly prevails, the structure of the civil service administration, together with the package of salaries and conditions, may appear of little relevance. This argument does not, of course, imply that other non-monetary determinants will not dominate and outweigh these (potentially massive) monetary net gains.

In contrast to these situations of high-value corruption possibilities, the balance of the economic arguments may be considerably more delicate at the lower levels of bureaucracies, with the potential net economic benefits being far from clear cut. Here, the internal salary structures and benefit systems may be highly significant, as equally may be the opportunities from additional part-time employment in the unofficial sectors.

Viewing this relationship from the perspective of the politician, an ability to manipulate the actions of the civil service can provide a major opportunity to intervene in individual decisions in exchange for illegal payments. As a consequence, instead of leaving politicians a large amount of discretion in their decision when to intervene in civil service affairs, it is important to establish clear rules that will make bureaucratic agencies independent from excess political interference. Independence of the civil service is important in three specific regards: first, in the appointment and dismissal of officials at all levels; secondly, in the internal structuring and organisation of the service; and, thirdly, in the implementation of specific legislation. Inevitably, the ongoing relationship between politicians and official creates opportunities for political influence to be exerted in all three of these areas in any state, and —especially in the third of these areas — political influence would often be seen as legitimate in many respects. To the extent that political influence evolves into political management of the service, however, the independence of the civil service is rapidly eroded, and the risk of corruption is increased.

The opportunities for collusion between politician and administrator are typically smaller within meritocratic structures where the officials are appointed through internal procedures and where the number of political appointments is very small. On the other hand, where appointments at the highest level do reflect the political outlook of the ruling party, issues of civil service independence re-emerge, albeit in a less severe form than under less representative systems. Generally, the risk of exposure will increase as the degree of separation of powers increases and where the motivation of senior civil servants does not encompass political considerations. In less meritocratic environments, the potential for political interference in the civil service is considerably greater. Political appointments to the civil service and the designation of key officials by political leaders are characteristic of highly politicised civil services in which collusion between political and administrative decision makers may become explicit, and even open, rendering the mechanics of implementing acts of corruption considerably easier.

While these issues of civil service independence would be expected to bear on the nature of high-level corruption in both the civil service and in the higher political echelons, it is less clear that the separation of powers influences lower-level opportunities for corruption to the same degree. The impact that derives from the observed integrity of top civil servants and politicians may be a key factor, but, otherwise, the political influence in low-level corruption is likely to be restricted and important only insofar as political power plays a significant role in establishing the structure and internal organisation of the civil service.

The Government - Judiciary Relationship

The judicial system can play an important role in limiting corruption both at the highest and lowest levels of government by monitoring both civil servants and politicians and by holding them accountable in the event of wrong doing. Three characteristics of the established judicial structures may be isolated as playing a key role in this context: first, the degree of separation of power between judiciary and government; secondly, the effectiveness of the security and law enforcement officials in the implementation of the law; and, thirdly, the integrity and management of the security and law enforcement officers themselves.

While these three elements necessarily vary between economies, several generalisations would appear *a priori* to be reasonable. For instance, political leaders who maintain very tight controls over the judiciary and law-enforcement sector will typically have the capacity to undertake corrupt acts with impunity. Even if the risk of detection at the highest levels is significant, and, at the extreme, corrupt acts are openly acknowledged, the costs of that exposure will typically be small, both in terms of any legal sanction and in terms of the repercussions for political responsibility. Similarly, if this control is accompanied by the maintaining of highly effective enforcement operations, then the capacity to deter decentralised corruption will be considerable: here, the fear of exposure is likely to dominate the potential gains from corruption, particularly if the costs of exposure are high. On the other hand, societies characterised by the same lack of separation of powers between the ruling regime and the judiciary, but with a relatively lax security and law enforcement system may additionally see the evolution of decentralised corruption.

In addition, the integrity of the security and law enforcement officers will also be a major factor insofar as the officials engaged in these operations may themselves be major players in the perpetration of corrupt acts. To the extent that these officers do engage in such practices, their tolerance of corruption in general throughout the economy might be expected to be high, thereby facilitating wider-scale corruption. On the other hand, a combination of corrupt security and law-enforcement officers, implementing controls on civil society with excessive force and violence, is by no means unknown.

In contrast to these expectations of autocratic societies, it could be anticipated that more representative governments would be substantively constrained in each of these regards. Opportunities for collusion between government and judiciary would typically be greatly reduced, while, with the ruling government being deemed responsible for both the conduct and effectiveness of the security and law-enforcement sector, the scope for major abuses of power and the failure to implement policy is smaller, though certainly non-negligible. As is considered later, the opportunities may remain substantial but the cost of exposure will undoubtedly have escalated.

The Government - Civil Society Relationship

The importance of the government-civil society relationship for influencing corruption is perhaps best illustrated through considering the role and power of the non-governmental organisations, and particularly the crucial impact that the media may have. While the media have the opportunity to expose corruption in democratic societies — although, for different reasons, it may not always choose to exercise this opportunity — the conduct of the media in autocratic political structures will be heavily dependent on the precise form of these structures. In this context, there would be an expectation of a close relationship between the role of the media and the nature of the judicial and security services that the government maintains: a tight and hard-line security stance generally being associated with a tight control of all forms of media, and vice versa.

At lower levels of government, where corrupt acts tend to be low-value and high-incidence, media interest and concern would be anticipated to be weak, thereby exercising little deterrent effect. This discussion presupposes, of course, that, irrespective of the nature of the ruling government, civil society would be able to play an effective monitoring role. In practice, many African countries lack such a coherent civil society with the capacity to fulfil the functions envisaged in this section. It may be, however, that in the face of the vested interests of the political and judicial establishment, the various bodies within civil society are the only practical channels through which corruption might be reduced.

The Basic Development Strategy of The Government

The economic environment contributes to the evolution of corruption to the extent that established economic strategies and policy instruments, together with institutions for the implementation of economic policy, provide different opportunities for the pursuit of corrupt practices. Moreover, beyond this somewhat static framework — and of immediate relevance to many African states — the process of economic reform provides significant new opportunities for corruption.

The common judgement is that more liberal economic systems, founded upon market-orientated behaviour and a smaller role for the state, generate fewer opportunities than do economies where the administrative allocation of resources and the central direction of economic activity dominate. Greater bureaucratic control over the economy will, all other things being equal, increase problems with monitoring and accountability, because a greater share of economic planning decisions will be dependent on bureaucrats who do not receive information from functioning markets (Olson 1995). This assumes that effective institutions exist for corporate governance in the private sector. However, reducing the scope of government intervention in the economy is clearly not a sufficient condition for the control of corruption, because there are many activities which are left to government administration in even the most market-based economic systems. Revenue-raising objectives, as in the customs service and in the domestic tax collecting agencies, necessarily continue to be integral to government policy, and, they remain major areas prone to corruption. Similarly, the provision of public goods or the favouring of policies to meet other indisputable instances of market failure are commonly pursued for economic efficiency purposes and/or to meet social objectives. There is, it would seem, an unavoidable trade-off in some policy decisions between satisfying efficiency and equity objectives, on the one hand, and reducing the risk of public sector corruption on the other.

The transitional period in which economic reform is being implemented is one of considerable interest in the analysis of corruption. From one perspective, there may be an incentive to preserve pre-reform structures if they facilitate the undertaking of corrupt activities that are of direct or indirect value to the ruling party. Conversely, there is an important question of what in practice stimulates the government of the day to initiate reforms in an area of policy in which the benefits to the leadership *per se* will be substantively reduced, even if the benefits to the economic development of the country as a whole are more readily identifiable. Equally, if the reforms are clearly counter to the vested interests of those outside government, but on whose support the government depends, the mechanisms by which reform are initiated are again of considerable interest. In general, an understanding of the factors that provoke a change in policy is crucial.

The nature of the opportunities for corruption to develop is necessarily heavily contingent on the specific areas of economic activity at issue. It is, therefore, instructive to define the primary categories of activity in the public sector from the perspective of the broadly similar opportunities that they provide for corrupt practices to be undertaken (see annex). All the activities share a common characteristic in that they entail a significant degree of administrative responsibility and decision-making power on the part of a public sector official or politician in the authorisation of economic transactions.

One of the clearest examples of the evolution of corruption in response to economic reform is in the domain of enterprise ownership and control. While reform in this area has become a major element of most adjustment programmes, principally for reasons of fiscal adjustment and economic efficiency, it has important implications for the conduct of corrupt activities, themselves, and for the fundamental attitude of the government towards corruption. The process and mechanism by which privatisation has been undertaken in many economies has been severely criticised for the opportunities it afforded for inequitable resource allocations to be made and for the manipulation of the asset valuations and asset payments. Moreover, with many of the state monopolies being transformed into private monopolies, the scope for rent-seeking has, in many instances, remained unchecked, and, with the new owners and managers being initially determined by the government, the scope for abuse has persisted. Few developing-country governments have the capacity to establish the essential regulatory bodies to monitor and control the activities of newly created private monopolies, leaving few remaining controls to prevent the exploitation of these powers, albeit without need to resort to corrupt practices *per se*.

What can one conclude from this discussion? Reform programmes to move away from state-led development will generally reduce opportunities for corruption, but, to see to what extent this is true, one needs to take a close look at the reform process and at privatisation, in particular.

Determinants of Corruption in Individual Institutions

Irrespective of the role played by national-level considerations in shaping the broad structure and management of the civil service administration, it is also necessary to consider the manner in which individual institutions and agencies are organised, because there is ample reason to believe that corruption is more of a problem in certain agencies within the same country than others. As at the national level, the causes of corruption here can be considered in terms of the degree of monopoly and discretionary power awarded to officials and the opportunities for monitoring officials and holding them accountable for their actions. Three specific areas of government activity are considered, because of their relevance to African countries and their likely impact on economic growth.

Key Determinants of Corruption in Customs

The question of the extent of monopoly power does not have a major bearing on the level of corruption in customs, to the extent that corruption in customs is of the form of corruption with theft, that reduces costs for private sector operators who pay bribes.[5] As a result, they have no incentive to seek out honest officials. What is likely to make more of a difference for corruption in customs is whether there are effective systems of monitoring and accountability and whether substantial discretion is afforded to customs officials.

In terms of monitoring, many developing countries today face a dilemma between attempting to make their own customs services more effective through internal reforms, or by instead contracting the services of a Pre-Shipment Inspection (PSI) company. PSI companies can offer several different levels of service, the most basic of which involves inspecting shipments in the exporting country to verify their value, quality, quantity, and tariff classification. This can help customs officials in the importing country crack down on importers who make false declarations but who do not seek to bribe a customs official to do so. It does less to reduce the incidence of importers paying bribes to customs agents in exchange for lower duties, because customs officials can often simply ignore the information supplied by the PSI firm. The next level of involvement for a PSI firm involves an ex-post reconciliation to examine, shipment by shipment, whether the PSI firm's recommendations were followed by customs officials or not. This further improves monitoring, but problems remain of both a technical and political nature. For one, in some systems customs officials can enter the number from the pre-shipment inspection certificate incorrectly into the customs computer system, making it more difficult to know on which shipments fraud occurred. In addition, political authorities in the importer country may fail to act on the information provided to them through the reconciliation process. The third level of involvement for a pre-shipment inspection service is actually to require that the PSI company official is shown that the duty has been paid, an option first chosen by Indonesia in the 1980s and more recently chosen by African countries like Cameroon. This makes it yet more difficult to engage in corruption in customs, but still far from impossible. The bottom line with PSI is that it costs a significant amount of money, and it needs to be carefully considered at what point countries might do better to use scarce resources to improve their own internal systems of monitoring and accountability.

In terms of the level of discretion, when a customs agent is allowed to apply one of several tariff rates to a product, or when a tax inspector is given substantial leeway to decide whether companies are given deductions or not, there will be an incentive to demand a bribe in exchange for offering favourable treatment. The best strategy for minimising these problems seems to be to move towards a simplified tax and tariff structure which will leave less room for discretion on the part of customs officials. Efforts also need to be made to minimise possibilities for *ad hoc* exemptions to be granted for certain categories of goods, and the case of exemptions which are maintained because they serve an important purpose, efforts should be made to see that they are not easy to abuse. For example, in Mozambique personal belongings repatriated by Mozambican miners working in South Africa have enjoyed an exemption from paying duties but customs officials were for a long time given wide latitude in determining exactly what constituted miners belongings. In other cases, even when formal rules and regulations are altered so as to restrict potential abuse of exemptions, top politicians have been known to intervene and declare that certain import shipments should be exempted from duties, and they have presumably done this in exchange for illegal payments. It would seem that this sort of abuse would be resistant to virtually any formal institutional change.

Key Determinants of Corruption in Business Regulation

Both foreign and domestic businesses in many developing countries have to deal with a large number of regulations that concern both the initial investment in a business and subsequent operations. In many African countries, such regulatory frameworks are a legacy both of the colonial state and of efforts towards central planning of economies during the 1960s and 1970s. Opportunities for corruption in the area of government regulation occur when a single individual (or single agency) has monopoly power over provision over a certain good (like an operating license) and when there is substantial discretion in how the good is provided.

Some aspects of regulatory reform are likely to prove particularly difficult in African economies because they require an increase in the capacity of the state administration in order to be effective. On the other hand, there are some reforms which could reduce corruption in the area of business regulation and actually free up state capacity. This would involve simplifying useful regulations and doing away with unnecessary regulations in order to reduce opportunities for corruption. For African countries, like Mozambique, which have a huge number of regulations on business activity and yet which lack trained personnel to administer these regulations effectively, simplification seems to be the most logical near-term route for reform.

Key Determinants of Corruption in Foreign Aid Projects

The determinants of corruption in the administration of public aid can be examined from the same framework as with other areas of government activity. As is true with customs, arrangements for improved monitoring of foreign aid projects can follow two basic routes. On one hand, efforts can be made to strengthen those agencies within the developing-country government (like an auditing department) so as to improve monitoring and accountability internally. On the other hand, given the virtual absence of auditing and control procedures for public expenditure in many African countries, donors have often opted for improving monitoring and accountability externally, by relying exclusively on their own auditing and control procedures. The problem with this, as is true with customs reform that involves contracting a pre-shipment inspection company, is that it threatens to mitigate against the possibility that the auditing and control departments in the developing country administration might become allies of the donors in the effort to improve aid effectiveness.

III. FURTHER CONCEPTIONS OF THE DETERMINANTS OF CORRUPTION

Multiple Equilibria, or "Contagion", Models of Corruption

In the framework for the emergence of corruption outlined above, for a given set of opportunities and incentives, there should be only one equilibrium level of corruption. A number of recent papers provide an alternative vision of the persistence of corruption and its transformation from one degree of intensity to another. Common to all of these models is the idea that, once a high-level corruption equilibrium is reached as a result of a temporary change in the nature of opportunities and incentives, widespread corruption may be very hard to eradicate even if the situation with regard to opportunities and incentives subsequently returns to normal.

Some of these models (discussed by Bardhan, 1996) have frequency dependent equilibria where, as the percentage of officials engaging in corruption increases, the potential costs for any new officials to begin engaging in corruption (loss of reputation, chances of being caught) decrease. The result is that a temporary shock may permanently raise the level of corruption. (Andvig, 1991; Andvig & Moene, 1991). Collier (1995) presents a similar model, based on the idea that corrupt practices spread through a social learning process that are likely to follow a contagion S-curve. Murphy, Shleifer, and Vishny (1991) present a model where individuals divide their time between rent-seeking, cash crop production (which brings a high return but is more subject to rent-seeking), and subsistence agricultural production (which brings a low return but is more immune to rent-seeking). The model has two stable equilibria, the outcome of which depends upon the quality of property rights protection: one where all individuals are engaged in cash-crop production and there is no rent-seeking and another where activities are split between rent-seeking, cash-crop production, and subsistence agriculture. As in the frequency-dependent models, once a low-level equilibrium is reached, even if only because of a temporary erosion in the quality of property rights protection, it takes a major effort to get out of it. Overall, these ideas present the most rigorous treatment yet of the popular adage that "corruption feeds on itself", but they may remain most useful as a heuristic, because it is unclear exactly how one would conduct a thorough empirical test of their validity. One way of evaluating these explanations in a preliminary sense might be to see if there are cases of countries or bureaucracies where the level of corruption has changed dramatically but without a permanent change in terms of monopoly, discretion, levels of pay, or risk of detection and punishment.

Social Norms as Explanations for Corruption

While the factors highlighted in Chapter 2 from both the national and institutional perspectives contribute to an explanation of the role played by formal rules and institutions, they do not address the possibility that informal institutions or social norms may have a major influence on government behaviour. To a large extent, the answer to this question lies beyond purely economic considerations and in determinants that others have analysed concerning cultural and social norms and acceptable and unacceptable standards of behaviour.

There is, therefore, ample reason to believe that informal societal institutions or social norms can also promote or deter corruption.[6] Social norms might emphasise an individual's allegiance to ethnic, religious, or other collectivities over his responsibility to act as a rational bureaucrat in the Weberian mould (Gould and Amaro-Reyes, 1983; Ekpo 1979; and Tanzi, 1994). Gould and Amaro-Reyes talk about "norms of the collectivity rather than the individual". Tanzi (1994) suggests that, in many developing countries where family ties retain a greater importance than they do in Europe or North America, officials in public office will be less able to escape demands that they extend special favours to family and friends. Other authors have looked at the manner in which traditional practices of gift-exchange can fuel corruption, as government officials become drawn into such networks. From a similar perspective, Ekpo (1979) considers how the language involved in such varieties of gift exchange has facilitated the development of corruption in the modern state apparatus. Common to all these arguments is that social norms do not serve an economic function, and they represent holdovers from a traditional past.

There are several significant problems with this sort of argument as an explanation for the emergence of corruption. First, social norms encouraging corruption are sometimes seen as being universal in African countries, but vocal opposition to corruption and anti-corruption campaigns have existed even in many traditional societies, like 19th century Nigeria, as noted by Smith (1979) and by Obasanjo (1994). Secondly, norm-based arguments tend to invite tautology. Without clear specifications of exactly what norms are or without any means of demonstrating (rather than just positing) their existence, one risks arguing that because a country had high corruption, it's social norms must have been such that they favoured corruption (Bardhan 1996). A final problem with the argument about social norms is that it does not consider how ethnic, religious, or other ties among individuals can serve important economic functions, and that they even might help reduce corruption. Putnam (1993) suggests that the same "norms and networks" of civic association which others have seen as promoting corruption are actually highly correlated with lower levels of corruption in local government in Italy. Speculating about how Putnam's argument might be applied to the developing countries (although not specifically for explaining corruption outcomes), Bardhan (1994) suggests that norms and networks of civic association in East Asian states may have been stronger than in countries like India.

What seems clear from all this is that the debate on the importance of social norms remains open, and the old argument that social norms necessarily favour the development of corruption is too simplistic. No one disputes the importance played by informal norms and institutions in influencing individual behaviour (rather than just formal institutions), but until methods are developed actually to measure the existence of norms independent of the consequences which they are portrayed as having, it will be difficult to assess how important they have been in either promoting or deterring corruption. In the future, it may be useful in asking how norms may promote or reduce corruption, to establish clear distinctions between the “norms of civic association” to which Putnam refers and “norms of kinship” which may be more likely to promote corruption.

Income Distribution and Trends in Standards of Living

Several additional factors of a broader economic-policy relevance may be identified as potentially providing incentives for the pursuit of corrupt practices.[7] These factors would include, first, the prevailing nature and extent of poverty in the economy and the national distribution of income and wealth, in general, as well as the recent trends in these distributions. Second, the recent aggregate performance of the economy and the trends in real incomes — perhaps, consequent upon the implementation of economic stabilisation or structural adjustment programmes, or upon a significant exogenous shock to the system — would be *prima facie* important if they reveal substantive disparities amongst different social groupings. Indeed, the presence of major absolute deprivation alone may be significant.

To the extent that expectations in either an absolute or relative regard are frustrated, specific social groupings, and individuals within these groupings, could be motivated by the prospect of improving their status to undertake corrupt practices. This argument is, however, only relevant to those individuals or groupings which have the opportunity to exploit possible openings for corruption. Clearly, the poorest groupings, for whom the incentive may be greatest in this context, will typically have almost no opportunities. Rather, questions of absolute or, more likely, relative deprivation in a society will be of relevance to those in, for example, lowly government positions, where the remuneration is exceptionally poor, but where the work provides possibilities for corrupt activities.

The Nature of the Political Leadership

The role of the political leadership — and especially of the most senior leaders — is arguably one of the most critical elements in determining the evolution of corruption in any single country. Their tacit sanctioning of higher-level corruption will greatly facilitate the contagion at lower levels. One chain of contagion might be from the incidence of high-value corrupt acts, perpetrated at the highest levels of the political regime and the civil service, typically deriving from contact with multinational enterprises in the negotiation of major capital investment projects, to lower level officials. The latter will typically be aware of these specific acts and this may provide a sufficient incentive for bribes to be demanded by these officials in their own areas of power and responsibility. As long as corruption is limited to high-level acts involving international parties, the impetus for corruption to spread domestically *may* be more limited: the lower-level officials may be envious — and this may indeed be a sufficient condition to motivate contagion effects — but will not bear a direct cost. However, as soon as corruption spreads to acts involving purely domestic transactions, the impetus for contagion effects will rise sharply: domestic individuals come increasingly to bear the costs of corruption in a very direct sense and this provides the incentive to pass on the "tax".

While this line of reasoning would suggest that corruption would tend in all economies to evolve towards a generalised systemic form, the existence of many economies in which a reasonably stable form of corruption, that is relatively predictable and certain in its impact, suggests that other determining factors must indeed play a highly significant role and counteract this form of contagion effect. For example, such demonstration effects may be contained or eliminated by other deterrents, as where the internal security forces are particularly effective in exposing and punishing acts of corruption or where highly developed networks prevail to manage corruption.

IV. THE ORGANISATION OF CORRUPTION

In addition to the range of potential determinants of corruption identified above, it is important to consider the mechanisms by which these factors combine to establish particular structures of corruption, each with a specific impact on the economy. In this respect, there are two dimensions of organisation that are important insofar as that they shape both the form and impact of corruption:

* the degree to which, in the absence of property rights to guarantee the enforcement of bribery contracts, there is an alternative means of enforcement between government officials/politicians and the other parties to the corruption;

* the degree to which individuals in the civil administration act independently in demanding bribes, or as part of centralised arrangements, or according to certain "rules of the game".

In general, when corruption is well-ordered, centralised, and predictable, it will likely have a less damaging effect on the economy than when corruption is anarchic. However, even centralised and predictable forms of corruption will still have a number of negative effects on the economy.

The Absence of Property Rights for Corruption Contracts

Unlike regular commercial contracts, corruption contracts are not subject to formal property rights (Shleifer 1994). In the absence of corrupt practices, entrepreneurs would ideally know which state agency has the authority to sanction specific functions, what charges would be levied by the agency, and, once payment is made, there would be certainty that the good would be delivered. In the presence of corruption, once an entrepreneur has paid a bribe for a certain service the official who has accepted the bribe may be unable to guarantee delivery of the good if other officials can then intervene and demand a bribe for provision of the same good. There is also no guarantee that the official will not accept the bribe and renege on the contract. In both cases, there is no formal enforcement mechanism for the entrepreneur.

Depending upon how corruption networks are organised, there may be informal mechanisms through which contracts can be enforced. Borner, Brunetti, and Weder (1995) suggest that it is inevitably more effective to have an impartial third-party (the state) enforce contracts rather than having the two contracting parties attempt to find an enforcement arrangement by themselves. The principal argument they make is that the effectiveness of the state in playing this role will depend not so much on the precision of its legal arrangements but on having a history of institutional stability and on several mechanisms through which governments can reduce problems of time-inconsistency in policy making. In the case of corruption, this third-party enforcement is not possible because of the need for secrecy, but even when third-party enforcement does not exist to regulate commercial exchanges, there are numerous forms of two-party enforcement that can substitute, albeit less effectively. One of the most successful of these arrangements is engaging in commerce with familial relations. Another option is to create clubs where members meet frequently and exchange with each other. In both of these cases the high number of face to face interactions between individuals will increasing the costs of breaching a contract, because with better exchange of information other members are more likely to find out and those who breach the contract will be more certain of losing their reputation.

It is possible that corruption networks could operate in a similar manner. If there were mechanisms through which business leaders and government officials demanding bribes associated frequently, this might improve flows of information about bribery practices and lead to the establishment of reputations for officials who demanded reasonable bribes and did not renege on contracts. The positive effect would be to reduce the uncertainties inherent in corrupt transactions. A potential negative effect might be to create a clique of "insider" firms that co-operate closely with government officials while the "outsiders" are at a disadvantage. Small and medium-size enterprises would likely be excluded from such organisational forms and, hence, from the same benefits. Thus, even in the presence of a well organised and predictable form of corruption, an important section of the economy would be subjected to high degrees of uncertainty on account of corrupt practices.

One example of this phenomenon from Indonesia is what the World Bank's *East Asian Miracle* study calls "informal networks linking senior officials with major enterprises". The report continues, "Little is known about these networks, but they appear to have produced a high degree of co-operation in the economy. In contrast to the deliberation councils, where rules are more transparent, these networks are more susceptible to capture by participants and corruption". Presumably, increased possibilities for corruption derive from the secretive nature of these networks, and as argued above, the formation of secretive corruption cartels may exclude new firms that provide important innovations.

To help account for differences in growth between African and East Asian countries, this explanation would depend on showing not only that such associations existed between domestic businessmen and government officials, but that there also exist mechanisms through which foreign businesses associate with government officials. One likely possibility is that foreign businesses will associate themselves with domestic entrepreneurs that have an established relationship with the government. This then raises the question of how contracts between foreign businesses and these local intermediaries are enforced. Overall, one would expect these mechanisms to be more successful in reducing uncertainty when associative groups were small in number, because smaller size would lead to improved flows of information. Fewer ethnic, linguistic, or other social barriers between government officials and businesses should also improve chances for success.

A Collective Dilemma Facing Officials Engaged in Corruption

While, the previous section focused on how corruption is organised between government officials and the entrepreneurs who pay bribes, there is also a second and related issue that involves a collective dilemma for government officials collecting bribes. Shleifer and Vishny (1993) work from the presumption discussed in the principal agent models above that corruption involves individual government officials having monopoly and discretionary power over distribution of a good or service. They then propose a model for how the organisation of corruption will influence economic growth outcomes when entrepreneurs need several complementary government goods or services to conduct business. The basic conclusion is that when officials are able to collude and set bribes at a certain price they will maximise total bribe revenue and at a lower bribe price than if they acted as independent monopolists. When acting as an independent monopolist each official will ignore the externality that as he raises the bribe price for the good he provides, the demand for other complementary government goods will decline and total bribe revenue will decline. The way out of this problem is by collusion, in which case officials co-operate to set all bribes at the price which will maximise total bribe revenue. This will also benefit businesses via a lower bribe price. From this model one derives the implication that corruption organised in this manner will have a less harmful effect on economic growth than in countries where bureaucratic agencies or politicians conduct their corruption separately. The basic logic of this argument is similar to Mancur Olson's discussion of "narrow" vs. "encompassing" interests (Olson 1982, 1995).

Collusion between bureaucratic agencies or politicians will be easier to enforce when deviations from the agreed bribe level are easily detectable. Shleifer and Vishny suggest that this would be the case when the corruption network has an effective "policing machine" to detect offenders and to punish those who deviate from the agreed price, when the ruling elite of a country is small, and when society is homogeneous. Finally, collusion will have a greater effect to the extent that it is centralised. In fact, these conditions are quite close to those which should favour the functioning of networks between businesses and government officials.

For their empirical example of collusion in bribe-taking, Shleifer and Vishny refer to corruption in Soviet Russia, where different bureaucracies co-operated in setting bribe levels and in sharing the proceeds, while the KGB was used to monitor attempts to deviate. Another potential example of collusion in bribe-taking has been revealed by the recent scandal in Korea, where major companies reportedly made contributions to a central slush fund that was then distributed between different politicians. This kind of system would address both the uncertainty effect of corruption referred to above and the dilemma encountered by independent monopolists engaged in corruption.

A related consideration in this context is the definition of the motivation of the official receiving the corrupt payment. Much theoretical analysis assumes explicitly the presence of profit-maximising officials, and analyses both individual decision-making and decision-making in the presence of collusion within this framework. It is, however, far from evident that this is a generally valid assumption in view of one of the fundamental distinctions between the market for corrupt acts and the standard form of market in economic analysis: namely, the critical importance of secrecy and the fear of exposure. These characteristics suggest that, once established, an understanding between an official and an external party to corruption may be stabilised through minimal further negotiation. Moreover, without information on similar forms of corrupt practice, convergence on a maximising solution may be absent. In these circumstances, the government official's behaviour may be more appropriately equated with that of the satisficing enterprise in theories of the firm in which objectives — other than that of purely profit — are maximised.

V. THE EFFECTS OF CORRUPTION

The effects of corruption on the economy can be thought of in terms of the distortionary effects on the allocation of resources — that is, the extent to which ongoing economic activity is redirected and rendered less efficient — and the disincentive effects — that is, the degree to which risk and uncertainty are introduced into the economic environment and thereby deter prospective economic activities and, especially, investment.

The Distortionary Effect of Corruption

The undertaking of a corrupt act may entail the redirection of economic activity from one transaction to another, or it may permit the conclusion of the transaction that would have occurred in the absence of any such act but on different terms. The implication of these two outcomes for economic efficiency and economic development in a broader sense will vary significantly. Indeed, these repercussions may be looked at from three different perspectives: the economic transaction; the broader economic impact; and the corrupt payment *per se*. Before considering these three aspects, however, it is interesting to begin with an old debate over whether, under certain circumstances, corruption might actually improve allocative efficiency. We ultimately conclude that such improvements are, in practice, highly unlikely to accrue.

Corruption as a Facilitator Of Growth?

Nathaniel Leff's 1964 article "Economic Development Through Corruption" is the most frequently cited source for the argument that corruption in the form of bribery can be an important arm in the hands of entrepreneurs seeking to do business with a hostile or indifferent government and may, indeed, stimulate the development process.[8] Leff's general perception was that many developing-country governments have imposed excessive bureaucratic control and regulation on their economies, and that many of these regulations create serious uncertainty for entrepreneurs. Corruption in the form of bribery allows bureaucrats to get around excessive regulations and to minimise uncertainty over enforcement. For Leff and other authors, the other main potential advantage of corruption comes in cases like that where several entrepreneurs are vying for a single government license or permit. Rather than award the license based on *ad hoc* criteria, corruption can set up an auction mechanism whereby the most efficient firm will be able to pay the highest bribe and will be awarded the license or permit. The fact that the bribe payment goes directly to a bureaucrat instead of to the government will have negative economic implications, but allocative efficiency will actually be improved, since the lowest-cost firm wins out when it might not have otherwise. Finally, some authors have argued that corruption can help speed up the pace of bureaucratic activities when some sort of waiting period or queue occurs.

The idea that corruption can set up an efficient auction mechanism has not gone unchallenged. Potential problems cited with this idea are that entrepreneurs considering giving bribes may not have full information about other potential bribers, and furthermore, bribes may represent a sunk cost that cannot be reclaimed if surpassed by other offers. However, as Bardhan (1996) notes, others have provided game-theoretic models showing that, even under these conditions, the most efficient firm will win out. Bardhan (1996) and Andvig (1991) also review several of the considerations of corruption's effect on speeding up queues, and they both conclude that current models have so far failed to capture effectively the dynamics of bribery.

In part, this debate continues due to the apparent success of many economies despite the presence of extensive corruption. Commentators have looked to the impressive performance of the East Asia economies over the past two decades, reportedly achieved in an environment characterised by widespread corruption, and raised the question of whether corrupt activities were, in fact, a positive contributory factor in this success. Several issues are raised by this argument. Firstly, a simple comparison of the growth performance of African and East Asian economies is necessarily unsatisfactory: higher growth in East Asia arguably results from an array of factors and the prevalence of corruption does not imply anything about its value to growth.

The crucial issue in any determination of whether corruption has the potential to accelerate development through one or other mechanisms is how efficient the economic system is at the outset. It can be argued that, if the initial condition is one of extreme inefficiency, then corrupt practices may stimulate more efficient behaviour that is beneficial to growth. On the other hand, if the starting point is relatively efficient, then corruption may indeed be detrimental and distortionary. Even if the former environment prevails, two questions arise: first, it is questionable whether the introduction of another distortion — that is, corruption — has the capacity to counter the first distortion or whether it merely exacerbates it through the introduction of another distortion or the substitution of one distortion for another; and, secondly, even when corruption can potentially counter the initial distortion, whether it is the appropriate instrument to ameliorate the existing environment if alternative instruments are available. Here, it could be argued that, even if the latter were true, it is the fact that the government fails to undertake these alternatives that renders corruption as a private initiative to be the appropriate response. That is, it is a second-best solution given that the first best (government policy improvements) is unavailable.

Moreover, the analysis of any single act of corruption is too partial to be meaningful in this context, and it is necessary to take account of the wider impact, and specifically the contagion implications of corruption. While it might be apparent that one specific corrupt activity is itself beneficial, it remains doubtful that this act may be isolated and that contagion effects can be averted. More probably, the act will contribute to the entrenchment of a more systemic and comprehensive form of corruption. For example, as noted above, the use of corrupt payments to accelerate the paper work of officials may prove highly effective for one transaction, but, if — as is arguably inevitable — the practice spreads to encompass all transactions, the net impact on efficiency is probably zero: the productivity of the official remains unchanged and efficiency may not be enhanced through any re-ordering of the queue.

The Immediate Economic Impact

The corrupt acts at issue here are those that relate to specific economic transactions, such as the purchase or sale of an asset or service, the licensing of an economic activity or the allocation of a scarce economic resource. While attempts to model the bribery process to gauge its effects on efficiency have led to inconclusive results, there are several major reasons why it is unlikely that corruption will have a positive effect on allocative efficiency:

(i) the risk of exposure prevents bribery from being conducted as a truly market auction. If corruption contracts necessarily must remain secret, then officials demanding bribes will deliberately restrict the sort of information which would be necessary to set up an efficient auction, and they may well choose those giving bribes based on confidence that the arrangement will be kept secret as much as by ability to pay. The need for secrecy with corrupt activities may mean that governments collude with a coterie of established firms and are unwilling to bring innovators into the circle. (Alam 1990)

(ii) the risk of exposure will encourage corrupt officials to bias their activities towards those which minimise the risk of detection but which might actually increase overall costs for the economy. Shleifer and Vishny (1993) cite the example of countries tendencies to import high-cost machinery when a more generic machine might do. The more expensive machine is less likely to have a commonly known price, improving possibilities for overinvoicing and kickbacks that leave the government with inappropriate technology;

(iii) irrespective of the risk of exposure, if economic transactions are conditioned on the reaching of agreement on corrupt payments, then this additional cost may lead to the preference of alternative transactions rather than that which would have occurred in the absence of corruption.[9] On the assumption that the original use was preferable on efficiency grounds — and this is, of course, a relatively strong assumption — the distortion introduced would reduce efficiency overall;

(iv) there is, moreover, a further potential efficiency loss in that the same transaction may occur but with a different party. For example, an operating license may be issued for the same activity, but, on account of the corrupt act, it may be issued to a different individual or enterprise than otherwise. Here, there is the potential for the economic activity to which the corrupt act gives authority to be conducted less efficiently by the corrupt licensee. The quality loss in contract licensing for building projects, attributable to corruption, was dramatically illustrated recently Korea;

(v) innovation may be deterred, because new firms which provide most innovation are more in need of government-supplied goods (licenses, permits, etc.) than are established firms.

The Broader Economic Impact

The broader distortionary implications that arise from corruption may be summarised as follows:

(i) *Multiplier Effects*. Any redirection of economic activity carries multiplier implications for the economy as a whole, and these will be directly related to the factors identified in the preceding section. Their identification will be particularly problematic, but, in the case of major capital investment projects, for example, they may be substantive. The loss of a road linkage to one region of a country — attributable to an act of corruption — in favour of an irrigation project in a different region would entail measurable and substantial multiplier opportunity costs;

(ii) *Competitiveness Effects*. If the nature of the corruption constitutes a bias against one group of enterprises, then there will be competitive bias that distorts the structure of economic development. For instance, in the situation where international trade tax is evaded through corruption, domestic producers may well face a more costly overall tax regime vis-à-vis importers;

(iii) *Fiscal Effects*. Some forms of corruption will impact on fiscal objectives, in part through direct mechanisms whereby the government loses income directly from a corrupt act, but also indirectly through the tendency of corruption to drive economic activity into the black economy and out with the administration of the tax authorities. Adverse effects may be substantial, both in terms of a loss of aggregate fiscal discipline, and in a reduction of the effectiveness with which different public expenditures are prioritised;

(iv) *Debt Effects*. Some corrupt acts will add to national indebtedness as costs are unnecessarily incurred in international transactions. The servicing of this excess debt burden presents a long-term burden; and

(v) *Growth and investment.* While the impact of the efficiency issues, raised above, may only be qualitatively rather than quantitatively definable, the ramifications for the volume and quality of investment and for growth may, nonetheless, be cumulatively highly significant.

Corrupt Payments

Corrupt payments may be considered as implicit transfer payments between individuals or enterprises, with an opportunity cost that results from the modified income distribution and, in consequence, the modified pattern of consumption, saving and investment that it generates. Any single transaction is likely, in a macroeconomic sense, to be marginal in its impact, but, cumulatively, transactions may generate significant distributional effects.

Several alternative patterns of transfer may be envisaged. A transfer from one multinational enterprise to a government official may be seen from one perspective as an external capital inflow and as equivalent to a private sector transfer payment: thus, it might be seen as adding to the real disposable income of government officials and thereby boosting domestic consumption and domestic savings potential. However, this apparent stimulus to growth would most probably be negated on two counts: firstly, to the extent that the external bribing of a government official is effectively financed from donor external assistance, as is often the *de facto* case[10], the opportunity cost will be the foregoing of another externally-financed project.[11] Secondly, it is highly probable — at least in the instance of corruption at the highest levels — that the payment in foreign currency may never enter the domestic economy, thereby being of no benefit to the local economy and, insofar as it diverts scarce resources, clearly leaving the economy worse off.

In the case of corrupt practices involving only internal parties, the effects of the purely domestic transfers would depend on how the pre-corruption income distribution is modified. As in some of the early papers on growth models[12], different personal sector social groupings with differentiated savings ratios may be identified. In this framework, transfers to higher saving ratio groupings would, for example, enhance domestic savings and investment and reduce the real incomes and consumption of lower saving ratio groupings. On the other hand, if transfers effectively flow from domestic enterprises to officials, then the reduction in corporate profits might be expected to curtail investment in the absence of access — or highly restricted access — to other sources of corporate finance.

In each of these forms of transfers — which would be expected to incorporate most of such flows — the task of identifying the primary flows is necessarily highly problematic, not to mention the assessment of their magnitude relative to other non-corrupt flows. However, in principle, it is the evaluation of these corrupt flows that determines the allocative implications, and thus the growth implications, of corrupt payments.

The Disincentive Effect of Corruption

In addition to the distortionary impact that reduces the efficiency of present economic activity, the prevalence of corruption arguably acts on the economic environment in a far more insidious manner through the creation of significantly higher levels of risk and uncertainty in economic transactions, particularly when corruption is not organised in any of ways described in section four. This, in turn, acts to deter economic activity, in general, and capital investment in productive assets, in particular. Uncertainty is present both in the context of individual economic transactions and in terms of heightened fears about future developments in the broader economic environment in question.

The idea about the link between uncertainty and investment has been reinforced by recent work which emphasises the irreversibility of many types of investments. When this is the case, the net present value idea that one should invest when the value of a unit of capital is at least as large as the purchase and installation cost of the unit is no longer applicable. The new formulation suggests that the value must exceed the purchase and installation cost by an amount equal to the value of keeping the firm's option open to invest these resources elsewhere, which might be substantial if new information was expected (in an uncertain environment) (Pindyck, 1991). As a result, both foreign and domestic investors will have a greater propensity to keep their money invested in developed-country financial markets unless they have credible assurances about the return that they will receive on investing in developing countries. The net effect will be lower accumulation of capital.[13]

A Single Transaction

The risk and uncertainty that attaches to a single transaction may be characterised by several parameters, including:

(i) the lack of information *ex ante* regarding the number of corrupt acts that must be negotiated with different parties to complete the transaction as a whole. This may be illustrated by a customs department where the number of officials having the opportunity to engage in corrupt acts — and choosing to exercise that power — may be unknown and highly volatile. Alternatively, it may be illustrated by the unknown number of road blocks that obstruct the free passage of trade. The more anarchic the structure, the greater the uncertainty;

(ii) the effective rate of corruption, having consolidated all the costs resulting from the corrupt act(s) that are involved in the single economic transaction. From this cost perspective, the overall effective rate is more important than how many times a corrupt act occurs, although an administrative 'overhead' cost no doubt accrues with each negotiation.[14] The rate may vary from, at one extreme, a system of *ad hoc* rates dependent on the whim of the official, to, at the other extreme, an highly structured pattern of rates that has been established over time and which is rigorously and consistently observed by all parties. In this latter instance, there may, indeed, be effective sanctions within the structure for those attempting to deviate from the established system;

(iii) the probability of attaining the desired outcome by completing the transaction as a whole;

(iv) the risk of exposure of the corrupt acts;

(v) the likelihood of legal sanctions being imposed and the costs of that sanction. In addition, the other costs of exposure — for example, those resulting from the loss of employment or political office — will be relevant;

(vi) the delay that is incurred in negotiating with corrupt parties in completing the transaction as a whole;

It is the combined impact of the above factors that generates an economic environment in which uncertainty can deter entrepreneurship and thereby restrain development. At one extreme, corruption poses a relatively mild degree of uncertainty if all the key parameters are known *ex ante.* In contrast, if these parameters are *ex ante* unknown, any transactions are entered into on the basis of extreme risk, not only in terms of cost, but also in terms of the probability of attaining the desired outcome.

Decision Making and Investment

The uncertainty, as analysed in the foregoing section, that surrounds any *single* transaction that an enterprise would undertake in the course of its business activities, is only one aspect of economic uncertainty. More critical for the development process of any economy will be the impact of the prevailing structure of corruption on the uncertainty that characterises the economic environment in a more fundamental and more generalised sense. Such uncertainty will be a key determinant in long-term corporate planning, and especially in investment decisions. Here, we may isolate four crucial factors that will have profound importance in establishing uncertainty:

(i) the cumulative impact of the distortionary and disincentive effects generated by many individual transactions, as noted above;

(ii) *the risk of the evolution of more severe forms of corruption.* To the extent that the prevailing structure of corruption is perceived as unstable or as fragile in the face of anticipated future shocks to the system, there will be a considerable risk of corruption's escalating and perhaps evolving into more uncertain and costly forms;

(iii) *discriminatory behaviour in the treatment of competitors*. This aspect relates to the structure of corruption that a particular enterprise perceives to be relevant to its competitors, for it is far from certain that all competitors in the same product market will face the same structure. Relatively random changes in the degree of uncertainty faced by an enterprise as between different transactions may, of course, occur: for instance, the effective rates may vary arbitrarily or some corrupt payments may be erratically demanded. More problematic for an enterprise, however, is the situation where it perceives discrimination by officials systematically to bias competitiveness against itself. With all structures of corruption having the capacity to differentiate between competitors, an added uncertainty derives from the possibility that any established pattern of corruption — if such there is — will move to the detriment of the enterprise concerned. This may apply to both domestic and international transactions: indeed, one important example is that in which corruption within the customs service evolves to facilitate the avoidance of import taxes in return for corrupt payments to officials, and thereby undermines the competitiveness of domestic producers. In economies in which import taxes are a very substantial proportion of total costs, this is a major consideration;

(iv) *political and economic risk*. Where corruption is perceived as having the potential to undermine the political stability of the state, through the provocation of social unrest or, more seriously, through the instigation of *coup d'états* and civil war (see below for an elaboration of this point), this enhanced degree of political risk may significantly deter business activity. Equally, where corrupt activities are perceived to be instrumental in disrupting macroeconomic policy to a substantive extent, the danger of macro destabilisation — or, in the context of an ongoing stabilisation programme, the threat that macroeconomic stabilisation may not be attainable — may once again create increased uncertainty in the business environment.

It is important to set these sources of uncertainty in the context of more traditional sources of uncertainty, as are commonly associated with the economic and political risk that enterprises have always faced in their operations in LDCs. There has always been a significant probability of political destabilisation, with the potential threat of asset destruction or asset expropriation on terms highly disadvantageous to the previous owners. In traditionally politically unstable economies, corruption may not greatly augment the existing risks, but in those economies that have been more politically sound, the impact on the prospects for development is likely to be more significant.

The Impact of Corruption on the Political Climate

Earlier discussion focused on the manner in which political structures contribute to the evolution of a particular form of corruption, but the reverse causality should also be considered. Low-value, high-incidence corruption alone is less likely to feed through into political instability in a substantive manner, but the prevalence of major opportunities for access to high-value, low-incidence rent-seeking acts may provide a powerful incentive for the securing of political power and influence. This form of instability might be anticipated in autocratic structures. It may also, however, be expected in weak democratic structures, in which the overthrow of an existing regime through undemocratic means may be feasible. In view of the fragility of democracy in many African states that have sought to introduce more representative government, this threat may be a reality.

Many examples from around the world illustrate that the potential gains from corrupt practices at this highest level are sufficiently vast to motivate both existing ruling parties and opposition groupings in many countries. Not only does this prospect motivate opposition *coup d'états* or other more protracted and more violent attempts at overthrowing both democratically-elected and autocratic regimes, but it impacts on the existing policy of ruling governments. This latter situation can be observed in a variety of policy decisions. On the political side, it motivates efforts to resist moves to greater representative government or to delay that process — as is apparent now in Nigeria — or to manipulate the democratic processes in order to sustain the ruling government. This is seen in governmentinspired efforts, such as the rigging of elections or the blocking of the participation of opposition leaders in elections. Equally, it is observed in the manipulation of economic policy in order to favour specific factions or social groupings, or, indeed, through the corruption and bribery of key figures in society. In the former case, such manipulation does not refer to the standard attempts by all governments to synchronise the economic cycle with the political cycle, or the efforts to attract political support through specific, relatively marginal policy measures, such as targeted tax cuts and the like. Rather it refers to major redirections of policy with a blatant political objective and, typically, of a type that would not find support within a representative constitutional body.[15] More obviously, it motivates repressive policy that seeks to eliminate any threat to the ruling party. Here, the entire political and social policy of the government focuses on control by the security forces and the total subjugation of the judiciary and other organs of civil society. This, as we have seen itself impacts on the form of corruption that evolves.

The establishment of a ruling government that is motivated by the wish to retain the privileges that facilitate corruption also leads to the favouring of specific economic policies that facilitate that corruption. Thus, policies that favour opportunities for corruption are accorded a greater priority, irrespective of whether those choices accord with the national interest and the articulated economic development strategy — if such exists — of the government. One instance of this would be the favouring of external capital assistance. Certainly, such a policy stance may be consistent with the optimal policy stance in the absence of corruption, but such flows are typically regarded as major contributors to the facilitation of corrupt practices. The exploitation of domestic mineral resources by multinational enterprises through direct foreign investment, or the negotiation of contracts for other major capital investment programmes are the classic examples that are usually provided. In the former instance, it is clear that, not only does the external assistance provide the technology and skills to exploit the national resources, but also provides the mechanisms through which foreign exchange can be generated for personal benefit. However, for economies with no obvious natural resource to attract such foreign investment, a policy of maximising external donor aid plays a similar role. Thus, just as earlier it was concluded that donor flows form a major determinant of the structure of corruption, so it is clear that corruption — and the wish to create further opportunities for its pursuit — can drive a policy of aid dependence.

VI. EXISTING EMPIRICAL STUDIES

The first thing to note about the empirical literature on corruption is that it is not nearly as extensive as the theoretical literature. Many writings are mostly theoretical with a small section on empirical examples, and little effort has been made to conduct systematic tests of the various hypotheses. That empirical material which does exist could be divided into three categories *(i)* case studies which are used to propose a theory about corruption *(ii)* case studies that are essentially descriptive in nature *(iii)* papers which attempt to construct systematic tests for hypotheses about corruption and growth. The papers in this third group generally use cross-country regressions based on indices of corruption formulated by country risk services.

Case Studies That Propose A Theory

Some of the most interesting empirical work on corruption appears in papers whose primary purpose is to use a single case as an illustration to propose a theory about corruption. As a result, these papers do not provide ideas about how corruption hypotheses might be tested in a systematic manner, but they do provide material which can be used to ask whether the theories proposed above seem relevant.

Perhaps the most interesting of these examples is Robert Wade's 1985 article on the market for public offices in the irrigation agency of an unnamed Indian state. After presenting a description of an agency plagued by problems of corruption where officials demand bribes from villages in exchange for irrigation services, Wade focuses on how corruption is organised hierarchically. Officials demand bribes from villages, but in order to be posted to a position where they can demand bribes they themselves need to make payoffs to a superior, and so on, in a chain of corruption that reaches to the level of local politicians who can influence bureaucratic postings and who need bribe money for campaign finance.

According to Wade, the basic causes of corruption in this system are similar to those outlined in Chapter 2 of this paper: excess bureaucratic control and declining real salaries in the public sector. Wade also adds a third causal factor, in that even honest officials may need to become corrupt to get sufficient money for transfer to a higher post. In terms of effects on growth, there are substantial negative effects on the Indian economy and environment, Wade argues, primarily because officials under pressure to raise money create new opportunities for bribe collection by managing the irrigation network so as to maximise opportunities for bribes. This includes using capital intensive techniques that improve opportunities for graft, which supports the theoretical argument made above about corruption biasing the activity of bureaucrats. Wade also cites numerous examples of how the quality of service provided by the irrigation department, was eroded by prevalent corruption.

The one important aspect of corruption where Wade does not come to a firm conclusion is with the issue of organisation. At the outset of the paper he refers to corruption in this case as “a smoothly functioning market kept in place by a strongly centralised hierarchy of authority.” Later on he acknowledges that there is actually a substantial amount of uncertainty in the system. What seems clear from his description is that this system is organised in the sense that bureaucrats have to pay to be transferred to a post where they can extract bribes from the populace, but once in their positions, officials operate as independent monopolists, which should have a negative effect on the economy. There is also no apparent form of association between officials and village representatives which might reduce uncertainty.

Apart from Wade’s contribution, there are several other articles which have used a single case to illustrate an interesting theory. Olson (1995) refers to the former Soviet Union to present an argument about the emergence of corruption and its effects on economic growth. Corruption in the USSR emerged from excess bureaucratic control and an absence of private property. To function efficiently, the Soviet planned economy required an immense amount of information to be transmitted from the level of the shop floor to party bureaucrats. There were inevitably problems of monitoring in this system, as top officials could not know whether production targets set by lower-level bureaucrats were realistic or whether they were kept artificially low by bureaucrats who would then skim off a percentage of the good produced to sell on the black market. The fact that top officials might receive information from several different lower-level bureaucrats who produced the same good provided opportunities for checking up, but Olson argues that over time lower-level bureaucrats were able to collude to defraud the centre.

For Shleifer and Vishny (1993) the Soviet Union (and, since 1990, the countries of the former Soviet Union) is also a paradigmatic case upon which to draw in formulating theories about corruption. They are in accord with Olson in stressing the importance of excess bureaucratic control as a cause of corruption during the Soviet period, but they differ fundamentally in suggesting that corruption will have a more or less significant effect on economic growth depending upon how it is organised. Olson paints a picture of a decentralised form of corruption in Soviet Russia that undermined the party hierarchy, while Shleifer and Vishny emphasise the critical role played by the Communist Party and the KGB in running a centralised system of corruption. Olson does not suggest that the organisation of corruption in post-Soviet Russia has changed dramatically from Soviet days, while the central argument of Shleifer and Vishny is that corruption today is much less organised than in the Soviet period and as a consequence more detrimental to economic growth. The argument made by Shleifer and Vishny seems more convincing in the sense that they have a ready explanation to account for the apparent transformation in corruption following the breakdown of Communist rule, but Olson’s argument poses problems for their account of the Soviet period. If the origins of corruption in Soviet Russia lay in the failures in monitoring inherent to a planned economy under bureaucratic control, then why did the system of well organised corruption that Shleifer and Vishny describe not succumb to the same problems?

Descriptive Case Studies

Many of the case studies on corruption which use a more descriptive and qualitative type of analysis seem to have been written in the 1970s and early 1980s. While contributing partial insights, these studies do not present much of an idea about how a study on corruption that seeks to test hypotheses systematically might be organised. Two of the more interesting contributions from this group include Szeftel (1982) on Zambia, and Gould (1980) on Zaire. Szeftel presents a number of examples to demonstrate that corruption in Zambia is present, but that it is perhaps not as endemic as in other African countries. It has been fostered by an expansion of the central state administration and parastatal sector. The main consequence of corruption has been the creation of an "indigenous owing class" which has accumulated wealth through that state rather than through private enterprise. Gould (1980) presents evidence from Zaire of massive corruption in a bureaucracy that no longer functions even remotely like what it is supposed to.

Systematic Tests of Corruption Hypotheses

Three recent studies investigate the *causes* of corruption in a systematic manner across regions or across countries. There are also several studies which investigate the *effects* of corruption on investment and economic growth as part of a broader effort to investigate the relationship between institutions and growth.

Studies which Investigate The Causes of Corruption

Of the three available studies which look at the causes of corruption in a systematic manner, Putnam (1993) treats the issue of corruption indirectly. Evans and Rauch (1995) investigate the effect of bureaucratic rules and procedures on the emergence of corruption. Their basic argument is that when bureaucracies have "Weberian" criteria of meritocratic recruitment and internal promotion, they will suffer from less corruption. Using survey questionnaire responses from 26 developing countries, Evans and Rauch find that more "Weberian" bureaucracies are significantly correlated with lower levels of corruption (as indicated in indices produced by risk assessment agencies). Their measures of bureaucratic rules and procedures are, however, not significantly correlated with common measures of economic performance like private investment or per capita GDP growth. Ades and Di Tella (1995) in another unpublished paper look at the relationship between certain structural variables in the economy and the extent of corruption. They find that the size of monopoly rents in an economy, attributable either to policy factors or distance from trading partners, is significantly correlated with the level of corruption as measured in indices provided by risk assessment agencies.

Studies which Investigate the Effects of Corruption on Growth

The four studies which perform cross-country regressions to examine the effect of institutional efficiency and corruption on growth use two types of data: *(i)* indices of corruption from private firms that analyse country risk for investors, *(ii)* indices based on survey questionnaires which the authors prepared. While this conclusion is not unanimous, the overall evidence from these papers provides some support for the proposition made above that similar levels of corruption may have different effects on economic growth, depending upon how corruption is organised.

Keefer and Knack (1993) ask whether inadequate legal, political, and regulatory institutions can be an obstacle to economic convergence in poorer countries. The primary effect of inadequate institutions that they emphasise is via the problem of insecure property rights which will discourage investment and growth. For data on institutional effectiveness, Keefer and Knack use indices compiled by two country risk services (the ICRG covering 97 countries and BERI covering 47 countries). Indices for risk of expropriation, repudiation of contracts by governments, contract enforceability, and risk of nationalisation cover the issue of property rights directly. When placed in regressions with other variables commonly used in endogenous growth regressions, these institutional variables remain statistically significant as explanations of economic growth over the period 1960-89. Keefer and Knack use a separate regression to assess the importance of indices for bureaucratic quality, bureaucratic delays, and corruption in government. With the exception of the corruption indicator, each of these three indicators turns out to have statistically significant effects on growth within the same regression framework. The indicator for corruption is significant, but an interaction term designed to measure the interaction between corruption and the initial income gap was not statistically significant.

Keefer and Knack (1994) uses the same data from ICRG and BERI but makes the advance of directly investigating the effect of institutions on investment as well as on economic growth. The results are statistically significant and the values of the coefficients indicate an effect of the same magnitude as that of education on growth for some of the variables. This effect is also present even when investment is controlled for, which the authors interpret as suggesting that the quality of institutions affects growth both through the channel of accumulation of capital as well as through allocative efficiency.

A third contribution, Mauro (1995) focuses more directly on the effect of corruption on growth. He uses data from Business International for 68 countries for the period 1980-83 including nine separate indices measuring institutional efficiency and political stability.[16] While the methodology with which the BERI and ICRG indices are compiled remains somewhat opaque, the system for constructing the Business International indices is clearer, depending on subjective reports from individual country experts that are asked the same specific set of questions. From the nine basic indicators Mauro constructs one index for bureaucratic efficiency (legal system, red tape, corruption) and a second index for political stability (using the remaining six indicators).

Placing countries in order according to these two indices and then looking at their economic growth performance 1960-85 shows some interesting exceptions to what one might expect. Thailand was reported as the most corrupt country in the BI data set between 1980 and 1983, yet it enjoyed enviable growth performance. Another feature Mauro highlights is that the indices for political stability and bureaucratic efficiency are highly correlated, although again there are some interesting exceptions. Indonesia was rated as a very stable country but as having a "corrupt, cumbersome bureaucracy".

In the regressions relevant to corruption, Mauro finds that both the individual corruption variable and the bureaucratic efficiency index are statistically significant determinants of the average level of investment over the period 1960-85, even when controlling for other determinants of investment. A one standard deviation improvement in the bureaucratic efficiency index is association with a 4.1 per cent of GDP increase investment, or 3.3 per cent GDP for the same change in the corruption index. While the bureaucratic efficiency and corruption indices are both significantly correlated with economic growth, when further tests are conducted, the relationship with the bureaucratic efficiency index is shown to be robust while that with the corruption variable is not. As a final step, Mauro tests the influence of his variables on allocative efficiency by including the level of investment on the right-hand side of the growth repression. The result is that the bureaucratic efficiency index remains statistically significant but the value of its coefficient is reduced by a third. The corruption variable loses its statistical significance. It should also be noted that Brunetti (1995) uses Business International data to test the importance of the same political variables as Mauro (1993) using the same indices but different specifications for the regression and per capita growth 1980-1990 (instead of 1960-85). In this specification, none of the variables are statistically significant.

Brunetti (1995) follows an approach different from Keefer & Knack and Mauro by using data from a questionnaire distributed to entrepreneurs in different developing countries that was created for Borner, Brunetti, and Weder (1995a). The 12 questions in the questionnaire were designed to measure the degree of uncertainty which entrepreneurs perceived as a result of institutional instability and of corruption. Separate indicators for each of the twelve questions were constructed based on six possible step-wise answers. Data were retained from 28 different countries where there were at least three respondents to the questionnaire. Two problems with this method are *(i)* the fact that ideally one would have responses from entrepreneurs from the beginning of whatever period of growth was considered *(ii)* the fact that the questionnaires were answered anonymously by mail rather than being administered. All four indicators designed to measure aspects of corruption failed to prove statistically significant as determinants of either growth, investment or allocative efficiency over the period 1960-85 (as did a composite indicator that was the average of the four). In contrast, indicators designed to measure the degree of uncertainty in institutions and policies were statistically significant, and retained this significance in the growth regression under several tests for the robustness of the results. Duplicating the result obtained by Mauro, this analysis also finds that Thailand and Indonesia were very corrupt, but without an apparent negative effect on economic growth. In Thailand in particular it was noted that bribery was endemic, but payment of a bribe to a government official virtually guarantees the right to get what one paid for. Brunetti interprets this as meaning that both countries had very low levels of uncertainty in their institutional framework, and that this supports the prediction that corruption will not have as negative an economic growth when it occurs in an organised and regular manner.

VII. CONCLUSIONS

This paper has attempted to propose a general framework for analysing the causes of corruption, derived from principal-agent theory. The framework puts a strong emphasis on concrete aspects of developing-country economies that might be observed by future empirical analysts in order to test corruption hypotheses. We conclude that it will be useful to consider separately the causes of corruption at the international level, at the national level, and within individual institutions. At the international level, the extent to which the competitiveness of international markets gives multinational companies an incentive to offer bribes to gain an advantage on their competitors needs to be considered. This factor may be most important in resource-rich economies like Nigeria or Angola. At the national level, we suggest that analysts consider how the basic development strategy of the government affects opportunities and incentives for corruption and how three relationships do the same: the relationship between government and civil service, between government and judiciary, and between government and civil society. Finally, we offer three specific areas of government activity as possibilities for considering the sources of corruption at the level of individual institutions: the customs administration, business regulation, and management of foreign aid.

In addition to proposing our own framework for analysing corruption, the paper's second objective has been to consider several further explanations of corruption, based on models with multiple equilibria, socials norms, income distribution, and the importance of political leadership. We find that, for the moment, these explanations are less promising for those intent on conducting empirical research. There is every reason to believe that each of these further explanations provides substantial insight into understanding why corruption exists in some environments and not in others, but given that the empirical study of corruption is at such an early stage, it may be most useful in the near term for empirical studies to focus on the basic hypotheses which can be derived from principal-agent theory.

The paper's third objective has been to propose a framework for considering the effects of corruption on the economy. We find little support for the argument that corruption can actually facilitate economic growth, and there are in fact a number of reasons to believe that it can have a strong distortionary and disincentive effect on economic activity. These two effects will be most pronounced in cases where corruption is anarchic in form, as seems to be the case in many African countries.

Finally, our review of some of the existing the existing empirical literature on corruption reveals that there have been a number of descriptive studies on corruption and a number of more recent studies which analyse corruption with the aid of cross country regression and indices for corruption published by organisations that evaluate risk. The next logical step for empirical research on corruption is to conduct case studies which will offer more detail of how corruption actually functions than does the cross-country work but which are designed in a rigorous fashion to test specific corruption hypotheses. This could be done either by considering corruption in a country as a whole, or, more plausibly, by investigating corruption within an individual institution in a given country, like the customs administration. As far as the choice of countries is concerned, existing work suggests that it would be particularly interesting to compare one or more African cases with one or more East Asian ones, since corruption seems to have been equally prevalent in both these groups but the impact of corruption on the economy has varied considerably. This is a common proposition in both the policy and academic community. It would be useful to subject it to a rigorous test.

NOTES

1. Another indication of the growing concern to address the problem of corruption was provided in the establishment of the internationally-supported NGO Transparency International in 1993. See, for example, Eigen (1995) and Transparency International (1995).

2. Although it is apparent that, with economic policy reform leading many economies to move, albeit somewhat slowly in Africa, towards a rebalancing of economic activity away from the state, the importance of private sector "corruption" is arguably becoming of increasing relevance.

3. If one allows for the fact that even a few officials in a large population will not engage in bribery for moral reasons, this will be a further factor reducing the level of corruption (Rose-Ackerman, 1978).

4. While acknowledging the link between levels of remuneration and incentives to engage in corruption, Besley and Maclaren (1993) offer a somewhat different argument. They suggest that for a government which has few resources with which to monitor its civil servants, it may be cost-effective to pay civil servants a very low wage, with the tacit expectation that they will supplement their income by engaging in corrupt activities.

5. Although it might be the case in some ports that corruption results in blackmail that, in fact, raises the costs involved.

6. We consider cases here where norms are exogenous. Collier (1994) presents a model where social norms are important short-run determinants of the level of corruption but which are themselves in the long-run endogenous to other variables.

7. This issue has not been extensively analysed with respect to corruption, but the link between income distribution and growth has been studied, as for example in Alesina and Rodrik (1992).

8. See also Nye (1967)

9. Such issues are discussed in, for example, Krueger (1974).

10. The payment to the official from the multinational would appear as an inflated costing in seeking donor assistance.

11. This assumes — as is typically the case for most bilateral and multilateral donors — that there is a fixed annual ceiling on the allocations to any single economy.

12. As, for example, in the early work of Kaldor (1960).

13. There will also be an important effect on efficiency of allocation as investment is biased towards short-term, high-return activities, like trading.

14. Equally, there may be economies of scale from corrupt acts: for example if the payment has a flat-rate element rather than being purely pro rata.

15. The border between marginal electioneering and political manipulation of budgetary policy may, at times, seem indistinct and is certainly highly subjective, but, in practice, extreme abuses of economic policy — and especially public expenditure policy — to this end are easily recognisable.

16. They include: political change, political stability, probability of opposition group take-over, stability of labour, relationship with neighbour countries, terrorism, legal system "efficiency and integrity of the legal environment as it affects business, particularly that of foreign firms", bureaucracy and red tape, "the regulatory environment foreign firms must face when seeking approvals or permits. The degree to which it represents and obstacle to business." corruption "the degree to which business transactions involve corruption or questionable payments".

ANNEX

Table 1. **Typology of Public sector Corrupt Practices**

	Primary Activities of Public sector	Elements of Activity open to Corrupt Practices	Elements of Economic Development most affected
A	The implementation of established public expenditure strategies: including the manner in which expenditure allocations are determined across sectors and regions, and the manner in which humanitarian aid is managed.	Regional and sectoral allocation of real, financial and administrative resources, Prioritisation of expenditures and of programme implementation. Determination of expenditure quality Diversion of goods for personal use.	Adherence to, and compatibility with, the macroeconomic and sectoral objectives of the Government economic development strategy. Cohesion and consistency of sectoral strategy. Compatibility with economic incentive strategy.
B	The purchase of assets or services: this includes the procurement both of current goods and services and of capital assets within the fiscal expenditure programme. The purchases may be made in the context of self-financed projects or externally financed under donor assistance programmes.	Negotiation with domestic and multinational operators. Selection of suppliers, contractors and operators. Pricing of procurement.	Adherence to government economic strategy (see A. above). Cost effectiveness of expenditures. Opportunity cost of external capital assistance.
C	The licensing of entities to undertake specific economic activities: this may incorporate licenses authorising the right to trade in certain products or in certain regions of the country, or to import and export particular products, to produce specified products, or to exploit particular natural resources.	Selection of entities (especially if rationing). Determination of supply level. Pricing of licenses.	Efficiency of allocation process. Quality of capital asset accumulation. Supply impacts on competitiveness of markets (according to market size). Disincentive to new starts and expansion.
D	The allocation of resources through centrally administered structures: this form of activity ranges from the allocation of foreign exchange to financial credit under systems of non-market administered control	Selection of recipient. Determination of values of allocation. Pricing of allocation. Management of default situations.	Efficiency of allocation process.
E	The sale of public assets to private sector interests under programmes of privatisation	Determination of asset valuation. Determination of terms and conditions of sale. Selection criteria of buyer.	Efficiency of allocation process. Return on sale for alternative use.
F	The regulation and management of private sector economic activities.	Determination of pricing. Controls on scale and location of operation. Environmental controls.	Consumer purchasing power Efficiency of pricing policy and sub-optimal production levels Environmental degradation
G	The administration of the tax revenue system (for both internal and international transactions).	Determination of liabilities and their collection.	Fiscal policy objectives: * macroeconomic compatibility; * expenditure policy objectives; * incentive structure compatibility * equity/distributional objectives Competitive impact of tax avoidance.
H	The operations of the public enterprise sector: including the purchase and sale of goods and services, and their pricing.	Invoicing of imports and exports	Access to domestic savings if capital flight.

REFERENCES

ADES, A. AND R. DI TELLA (1995a), "Competition and Corruption", unpublished, Oxford University.

ADES, A. AND R. DI TELLA (1995b), "The New Economics of Corruption: a Survey and Some New Results", unpublished, Oxford University.

ALAM, M.S. (1990), "Some Economic Costs of Corruption in LDC's", *Journal of Development Studies*, Vol. 27, No. 1, October.

ALESINA, A. AND D. RODRIK (1994), "Distributive Politics and Economic Growth", *Quarterly Journal of Economics*, Vol.109.

ANDVIG, J-C (1991), "The Economics of Corruption: a Survey", *Studi Economici*, Vol.46, No.43.

ANDVIG, J.C. AND K. OVE MOENE (1990), "How Corruption may Corrupt", *Journal of Economic Behavior and Organisation,* Vol.13.

Bardhan, P. (1994), Comment on Contribution by O. Williamson in, *Proceedings of the annual World Bank Conference on Development Economics.*

BARDHAN, P. (1997), "The Role of Governance in Economic Development: A Political Economy Approach", OECD Development Centre, Paris.

BORNER, S., A. BRUNETTI, AND B. WEDER (1995), *Political Credibility and Economic Development,* Macmillan, London.

BRUNETTI, A. (1995), "Political Variables in Cross-Country Growth Analysis", unpublished, Department of Economics, Harvard University.

BESLEY, T. AND J. MCLAREN (1993), "Taxes and Bribery: the Role of Wage Incentives", *The Economic Journal*, Vol.103, January.

COLLIER, P. (1995), "The Domain of African Government", paper prepared for the *SAREC International Colloquium on New Directions in Development Economics - Growth, Equity, and Sustainable Development,* June.

EIGEN, P. (1995), "Coalition Building for Islands of Integrity", paper presented to the *OECD Symposium on Corruption and Good Governance*, Paris.

EVANS, P.B. AND J. RAUCH (1995) "Bureaucratic Structures and Economic Performance in Less Developed Countries", *IRIS Working Paper* No.175, August.

EKPO, M. (1979), "Gift-Giving and Bureaucratic Corruption in Nigeria", in Ekpo, Monday ed., *Bureaucratic Corruption in Sub-Saharan Africa, Causes Consequences, and Controls*, University Press of America, Washington DC.

GOULD, D. AND J. AMARO-REYES (1983), “The Effects of Corruption on Administrative Performance: Illustration from Developing Countries”, *World Bank Staff Working Papers,* No.580, October.

HEIDENHEIMER, A.J (1970), *Political Corruption: Readings in Comparative Analysis*, Holt, Rinehart and Winston, New York.

KEEFER, P. AND S. KNACK (1993), “Why Don’t Poor Countries Catch Up?: a Cross-National Test of an Institutional Explanation”, *IRIS Working Paper,* No.60.

KEEFER, P. AND S. KNACK (1994), “Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures”, unpublished, IRIS and World Bank.

KLITGAARD, R. (1995a), “National and International Strategies for Reducing Corruption”, paper presented to the *OECD Symposium on Corruption and Good Governance*, Paris.

KLITGAARD, R. (1995b), “Institutional Adjustment and Adjusting to Institutions”, *World Bank Discussion Paper,* No.303, September.

KLITGAARD, R. (1988), *Controlling Corruption,* University of California Press, Berkeley.

KRUEGER, A. (1974), “The Political Economy of the Rent-Seeking Society, *American Economic Review,* June.

LAFFONT, J-J. (1997), “Contrôle des Prix et Économie des Institutions en Chine”, OECD Development Centre, Paris.

LEFF, N. (1979), “Economic Development through Bureaucratic Corruption”, in Ekpo M. (ed) *op. cit.*

MAURO, P. (1995), “Corruption and Growth”, *Quarterly Journal of Economics*, Vol.109, August.

MURPHY, K., A. SHLEIFER, AND R. VISHNY (1991), “Why is Rent-Seeking so Costly to Growth?”, *American Economic Review*, Vol. 81, May.

MURPHY, K., A. SHLEIFER, AND R. VISHNY (1991), “The Allocation of Talent: Implications for Growth”, *Quarterly Journal of Economics*, Vol.106, May.

NYE, J.S. (1979), “Corruption and Political Development: a Cost Benefit Analysis”, in Ekpo M. (ed.), *op. Cit.*

OBASANJO, O. (1994), Letter to the *Financial Times*, 14 October.

OECD (1994), Recommendations of the Council on Bribery in International Business Transactions, May.

OECD (1994), DAC Orientation on Participatory Development and Good Governance.

OLSON, M. (1982) *The Rise and Decline of Nations*, Yale University Press, New Haven.

OLSON, M. (1995), "Why Poor Economic Policies Must Promote Corruption: Lessons from the East for All Countries", paper presented at the *Conference on Institutions and Economic Organisation in the Advanced Economies: the Governance Perspective*", Rome.

PINDYCK, R. (1991), "Irreversibility, Uncertainty, and Investment", *Journal of Economic Literature,* Vol.29.

PUTNAM, R. (1993), *Making Democracy Work*, Princeton University Press, Princeton NJ.

ROSE-ACKERMAN, S. (1994) "Reducing Bribery in the Public-sector", in Duc V Trange (eds). *Corruption and Democracy: Political Institutions, Processes and Corruption in Transition States in East-Central Europe and in the former Soviet Union,* Institute for Constitutional and Legislative Policy, Budapest.

ROSE-ACKERMAN, S. (1995) "Proposal for Research on the Level and Impact of Corruption in International Business", unpublished, Transparency International, Berlin.

ROSE-ACKERMAN, S. (1978), *Corruption: a Study in Political Economy,* Academic Press, New York.

SHLEIFER, A. AND R. VISHNY (1993), "Corruption", *Quarterly Journal of Economics*, Vol.108, No.3, August.

SHLEIFER, A. (1994) "Establishing Property Rights", in *Proceedings of the World Bank Annual Conference on Development Economics 1994.*

SMITH, M. (1979), "Historical and Cultural Conditions of Political Corruption among the Hausa of Nigeria", in Ekpo M. (ed), *op. cit*.

SZEFTEL, M. (1982), "Political Graft and the Spoils System in Zambia: the State as a Resource in Itself", *Review of African Political Economy,* Vol.24, May-August.

TANZI, V. (1994), "Corruption, Governmental Activities, and Markets, *IMF Working Paper* No.94/99, August.

TRANSPARENCY INTERNATIONAL, (1995), *Building a Global Coalition Against Corruption*, Berlin.

WADE, R. (1985) “The Market for Public Office: Why the Indian State is not Better at Development”, *World Development*, Vol.13 No.4, April.

WORLD BANK (1995), *A Continent in Transition: Sub-Saharan Africa in the Mid-1990s*, Oxford University Press.

WORLD BANK (1993), *The East Asian Miracle,* Oxford University Press.