

Working Paper

INTERNATIONAL MONETARY FUND

IMF Working Paper

© 1998 International Monetary Fund

This is a *Working Paper* and the author(s) would welcome any comments on the present text. Citations should refer to a *Working Paper of the International Monetary Fund*. The views expressed are those of the author(s) and do not necessarily represent those of the Fund.

WP/98/63

INTERNATIONAL MONETARY FUND

Fiscal Affairs Department

**Corruption Around the World:
Causes, Consequences, Scope, and Cures ***

Prepared by Vito Tanzi**

May 1998

Abstract

Corruption is attracting a lot of attention around the world. The paper surveys and discusses issues related to the causes, consequences, and scope of corruption and possible corrective actions. It emphasizes the costs of corruption in terms of economic growth. It also emphasizes that the fight against corruption may not be cheap and cannot be independent from the reform of the state. If certain reforms are not made, corruption is likely to continue to be a problem regardless of actions directly aimed at curtailing it.

JEL Classification Numbers: E62, H1, H3, K4, N4

Keywords: Corruption; role of state; regulations

Author's E-Mail Address: VTANZI@IMF.ORG

*An earlier draft of this paper was written while the author was spending a short sabbatical at Collegium Budapest, Institute for Advanced Study (Budapest). It was presented as the Fellow Lecture at the Institute on November 10, 1997 and at a conference on "Corruption: A Threat to Democracy" at the Headquarters of Interpol, Lyons (France) on December 7, 1997.

**The views expressed in this paper are strictly personal and do not necessarily reflect official views of the International Monetary Fund. I wish to thank Hamid Davoodi and Shing-Jin Wei for their comments.

Contents	Page
Summary	<u>3</u>
I. The Growth of Corruption	<u>4</u>
II. The Definition of Corruption	<u>8</u>
III. Factors that Promote Corruption: Direct Factors	<u>10</u>
IV. Factors that Promote Corruption: Indirect Factors	<u>16</u>
V. Measurement of Corruption	<u>20</u>
VI. Corruption and Growth	<u>22</u>
VII. The Fight Against Corruption and the Role of the State	<u>29</u>
VIII. Concluding Remarks	<u>33</u>
Bibliography	<u>35</u>
Table 1. Corruption Perception Index	<u>23</u>

Summary

Much evidence indicates that corruption has been around for thousands of years, but in recent years it has attracted increasing attention. Does the attention reflect an increasing awareness or an increasing scope of the problem? Probably, corruption has increased in recent decades.

The causes or factors that promote corruption are those that affect the *demand* (by the public) *for corrupt acts* and those that affect the *supply* (by public officials) *of acts of corruption*. Among the factors affecting the demand, the most important are (1) regulations and authorizations; (2) certain characteristics of the tax systems; (3) certain spending decisions; and (4) provision of goods and services at below-market prices. Among the factors affecting the supply of acts of corruption are (1) the bureaucratic tradition; (2) the level of public sector wages; (3) the penalty systems; (4) institutional controls; (5) the transparency of rules, laws, and processes; and (6) the examples set by the leadership.

It is not possible to measure corruption, but it is possible to measure perceptions of corruption. Various corruption indices have been developed by several institutions and have been used by various researchers. Theoretical arguments advanced by some economists have argued that corruption can be beneficial to the functioning of the economy. These arguments are rejected and various qualitative and quantitative reasons are given for why corruption has a negative impact on growth.

Actions can be taken to reduce corruption, but the fight against it cannot be seen independently from the need to reform the role of the state. The reason is that a certain role of the state almost inevitably creates a fertile ground for corruption.

I. THE GROWTH OF CORRUPTION

In recent years, and especially in the decade of the 1990s, a phenomenon broadly referred to as corruption has attracted a great deal of attention. In countries developed and developing, large or small, market-oriented or otherwise, because of accusations of corruption, governments have fallen, prominent politicians (including presidents of countries and prime ministers) have lost their official positions, and, in some cases, whole political classes have been replaced. See, for examples, Johnston (1997).

Corruption is not a new phenomenon. Two thousand years ago, Kautilya, the prime minister of an Indian king, had already written a book, *Arthashastra*, discussing it. Seven centuries ago, Dante placed bribers in the deepest parts of Hell, reflecting the medieval distaste for corrupt behavior. Shakespeare gave corruption a prominent role in some of his plays; and the American Constitution made bribery one of two explicitly-mentioned crimes which could lead to the impeachment of a U.S. president.¹ However, the degree of attention currently paid to corruption is unprecedented and nothing short of extraordinary. For example, in its end-of-year editorial on December 31, 1995, *The Financial Times* characterized 1995 as the year of corruption. The following two years could have earned the same title.

The degree of attention now paid to corruption leads naturally to the question of why. Why so much attention now? Is it because there is more corruption than in the past? Or is it because more attention is being paid to a phenomenon that had always existed but had been largely, though not completely, ignored? The answer is not obvious, and there are no reliable statistics that would make possible a definitive answer.

Several arguments can be advanced that suggest that corruption is simply attracting more attention now than in the past.

First, the end of the Cold War has stopped the political hypocrisy that had made the decision makers in some industrial countries ignore the political corruption that existed in particular countries, such as Zaire. As long as the latter were in the right political camp, there was a tendency to overlook obvious cases of high level corruption.

Second, perhaps because of lack of information, or reluctance to talk about it by those familiar with these countries, there was also a tendency not to focus on corruption in the

¹See Noonan, Jr., (1984) for a very interesting historical overview of corruption in different societies.

centrally-planned economy.² It is now widely known that centrally-planned economies, such as the Soviet Union, or those imitating them through highly regimented economic activities, such as Nicaragua and Tanzania, experienced a great deal of corrupt practices. However, these practices were either ignored or not widely reported at the time. Donor countries also tended to play down this problem in countries which they assisted financially, even in the face of misuse or misappropriation of foreign aid.

Third, the increase in recent years in the number of countries with democratic governments and free and active media has created an environment in which discussion of corruption is no longer a taboo. In some countries, such as Russia, the media has responded with a vengeance to this newly acquired freedom.³

Fourth, in all its ramifications, globalization has brought into frequent contacts individuals from countries with little corruption with those from countries where corruption is endemic. These contacts have increased the international attention paid to corruption.

Fifth, there has been a growing role played by nongovernmental organizations, such as Transparency International, in publicizing the problems of corruption and in trying to create anti-corruption movements in many countries. Recently the international financial institutions and other international organizations have also been playing a growing role in the anti-corruption movement. In addition, empirical studies of corruption have contributed to a greater awareness of this problem.

Sixth, the greater reliance on the market in economic decisions has created an environment in which the pursuit of efficiency has acquired greater importance and where distortions attributed to corruption attract more attention.

Finally, the role played by the United States, especially through its influence in some international institutions, has been important. American policymakers have argued that American exporters have lost out in foreign deals because they have not been allowed by law to pay bribes to foreign officials. For American companies, the payment of bribes to foreign

²However, much information was available on the corruption in centrally planned economies. See for example, Simis (1982), Galasi and Gertesi (1987), Grossman (1982), and Remnick (1994).

³An attempt by the author of this paper to create a corruption index on the basis of newspaper stories reported by the Internet, indicated that for some countries these Internet entries amount to tens of thousands.

officials is a criminal act and the bribes paid cannot be deducted as costs for tax purposes.⁴ This has not been the case in other OECD countries, although recently, under the sponsorship of the OECD, the situation has started to change.

A case can also be made that the increased attention now paid to corruption reflects the growth of that phenomenon in recent decades, a growth that culminated in a peak in corruption activities in the 1990s. Let me briefly consider a few arguments that support this hypothesis.

Recent studies have shown the extent to which the role of the government in the economy has grown in recent decades and especially since 1960.⁵ The environment that prevailed in these years brought about (1) a large increase in the level of taxation in many countries; (2) a large increase in the level of public spending; and (3) probably, though not statistically ascertainable, a large increase in regulations and controls on economic activities on the part of governments. In recent decades, in a significant number of countries, most economic operations have needed various kinds of permits or authorizations on the part of public offices.

I would hypothesize that the impact that high taxes, high level of spending, and new regulations have on acts of corruption is not immediate but, rather, it is a function of time and of established norms of behavior.⁶ In a country with traditionally well-functioning and honest bureaucracies, *the short-term impact* of a larger government role on public officials will be limited. For some time, public officials will not be asked to perform corrupt acts and will reject bribery attempts. In countries without such tradition, the more invasive role of government, played through higher taxes, higher public spending, and more widespread regulations, would have a more immediate impact on the behavior of civil servants and on corruption. This will be particularly so if fiscal policy suffers from lack of transparency in policy making, in fiscal reporting, and in the assignment of responsibilities to public institutions. See Kopits and Craig (1997).

However, with the passing of time, and with increasing frequency, some government officials would be approached by bribers and asked to bend rules or even to break laws to obtain a government benefit or to avoid a government-imposed cost. Some will respond and

⁴See, for example, the remarks by (then) Secretary of Commerce, Michael Kantor, to the Detroit Economic Club (July 25, 1996) in which he stated that since 1994 American companies had lost international contracts worth \$45 billion because of bribes paid by foreign contractors to the officials of foreign countries. See also Hines, Jr. (1995).

⁵See, for example, Tanzi and Schuknecht (1997).

⁶These norms of behavior may be different between countries and are likely to change only slowly over time.

will get compensation from the bribers for their actions. Others may start emulating them. The process is likely to be cumulative in time and resemble the spreading of a contagious disease. Acts of corruption that might have appeared shocking earlier will begin to look less shocking, and they may even begin to be tolerated. The government may respond to this situation not by punishing the officials who bend or break the rules, but by reducing wages on the assumption that officials are getting extra compensation.⁷ It is easy to see where this process could lead if not checked.

Two other factors may have had an impact on corruption in recent years: the growth of international trade and business and the economic changes that have taken place in many countries and especially in the economies in transition.

The growth of international trade and business has created many situations where the payment of bribes (often euphemistically called “commissions”) may be highly beneficial to the companies that pay them by giving them access to profitable contracts over competitors. Large bribes have been reported to have been paid to get foreign contracts or to get privileged access to markets or to particular benefits such as tax incentives. *Le Monde* of March 17, 1995 reported that the bribes paid abroad by French companies in 1994 had been estimated at FF10 billion in a confidential government report. *World Business* of March 4, 1996, reported that the bribes paid abroad by German companies had been estimated to exceed US\$3 billion per year.⁸ It is clear that these were not the only countries in which companies had paid bribes to foreign officials. Some experts have estimated that as much as 15 percent of the total money spent for weapons acquisition may be “commissions” which fill somebody’s pockets. Here, again, contagion is important. When the economic operators of some countries begin to pay bribes, they put pressure on those from other countries to do the same. The cost of not doing so is lost contracts, as Kantor argued.

Among the economic changes that have taken place in recent years, privatization is the one that has been more closely linked with corruption. There is no question that public or state enterprises have been a major source of corruption and especially of political corruption because, occasionally, they have been used to finance the activities of political parties and to provide jobs to the clientele of particular political groups. This was clearly the case in Italy, before tangentopoli,⁹ and in many Latin American countries. Privatization of non-natural monopolies is a necessary step to reduce this form of corruption because it eliminates an instrument often used especially in political corruption. Unfortunately, the process of

⁷This has actually happened in some countries in particular areas such as the customs administration.

⁸Reported in Galtung (1987).

⁹See Nordio (1997). Carlo Nordio was one of the leading judges in the Italian fight against political corruption.

privatizing public or state enterprises has itself created situations whereby some individuals (ministers, high political officials) have the discretion to make the basic decisions while others (managers and other insiders) have information not available to outsiders so that they can use the process to benefit themselves. These problems have been observed and reported in all regions of the world, but the abuses appear to have been particularly significant in the transition economies.¹⁰ In the latter, terms such as asset stripping and *nomenklatura* privatization have been used to describe the abuses associated with the transfer of state enterprises to private ownership. In these countries some individuals have become enormously rich because of these abuses. This, in turn, has made many citizens suspicious, or highly skeptical, about the virtues of a market economy.

Thus, several arguments lead to the conclusion that the current interest in corruption may reflect an increase in the scope of the phenomenon over the years and not just a greater awareness of an age old problem.

II. THE DEFINITION OF CORRUPTION

Corruption has been defined in many different ways, each lacking in some aspect. A few years ago, the question of definition absorbed a large proportion of the time spent on discussions of corruption at conferences and meetings. However, like an elephant, even though it may be difficult to describe, it is generally not difficult to recognize when observed. In most cases, though not all, different observers would agree on whether a particular behavior connotes corruption. Unfortunately, the behavior is often difficult to observe directly because, typically, acts of corruption do not take place in broad daylight.

The most popular and simplest definition of corruption is that it is *the abuse of public power for private benefit*. This is the definition used by the World Bank.¹¹ From this definition it should not be concluded that corruption cannot exist within private sector activities. Especially in large private enterprises, this phenomenon clearly exists, as for example in procurement or even in hiring. It also exists in private activities regulated by the government.¹² In several cases of corruption, the abuse of public power is not necessarily for one's private benefit but it can be for the benefit of one's party, class, tribe, friends, family,

¹⁰See Kaufmann and Siegelbaum (1996) and Goldman (1997). For a review of the Latin American experience, see Manzetti and Blake (1997).

¹¹A more neutral definition is that corruption is the intentional noncompliance with arm's length relationship aimed at deriving some advantage from this behavior for oneself or for related individuals. See Tanzi (1995a). For other definitions, see Theobald (1990).

¹²For example, when a taxi driver charges you more than the regulated price.

and so on. In fact, in many countries some of the proceeds of corruption go to finance the political parties.

Not all acts of corruption result in the payment of bribes. For example, a public employee who claims to be sick but goes on vacation is abusing his public position for personal use. Thus, he is engaging in an act of corruption even though no bribe is paid. Or the president of a country who has an airport built in his small hometown is also engaging in an act of corruption that does not involve the payment of a bribe.¹³

It is important to distinguish bribes from gifts. In many instances, bribes can be disguised as gifts. A bribe implies reciprocity while a gift should not.¹⁴ However,, even though the distinction is fundamental, it is at times difficult to make.¹⁵ At what point does a gift become a bribe? Does the distinction depend on the size of the gift? What about cultural differences that can explain different sizes of gifts? What if a large gift is not given to the person who provides the favor but to a relative of that person? Does the distinction depend on whether the gift is given in broad daylight, for everyone to see, or privately? In any case, this indicates that the identification of a bribe may not always be simple.

Acts of corruption can be classified in different categories. Some of these categories are mentioned below without specifically commenting on them or even defining them. Thus, corruption can be:

- (1) Bureaucratic (or “petty”) or political, i.e. corruption by the bureaucracy or by the political leadership.
- (2) Cost-reducing (to the briber) or benefit-enhancing.
- (3) Briber-initiated or bribee-initiated.
- (4) Coercive or collusive.
- (5) Centralized or decentralized.
- (6) Predictable or arbitrary.

¹³It becomes difficult to draw a distinction between some forms of rent seeking and corruption.

¹⁴In practice, those who give gifts may expect some form of payment for them. For example, we expect love or good behavior from our children when we give them gifts; but the recipients of the gifts do not have an obligation to reciprocate.

¹⁵For an elaboration of some of these points, see Tanzi (1995a) *op. cit.*

- (7) Involving cash payments or not.

Undoubtedly, other classifications could be added to this list.

III. FACTORS THAT PROMOTE CORRUPTION: DIRECT FACTORS

Corruption is generally connected with the activities of the state and especially with the monopoly and discretionary power of the state. Therefore, as Gary Becker, Nobel Laureate in economics, pointed out in one of his *Business Week* columns, if we abolish the state, we abolish corruption. But, of course, a civilized society cannot function without a state and in modern, advanced societies, the state must have many functions. The Becker argument collides with the reality that some of the least corrupt countries in the world, such as Canada, Denmark, Finland, the Netherlands, and Sweden, have some of the largest public sectors, measured as shares of tax revenue or public spending in gross domestic product. Thus, the solution to the problem of corruption may not be as simple as just reducing the size of the state. Rather, the way the state operates and carries out its functions is far more important than the size of public sector activity.¹⁶ Particular aspects of governmental activities create a fertile ground for corruption. Let us look at this issue in more detail.

Regulations and authorizations

In many countries and especially in developing countries, the role of the state is often carried out through the use of many rules or regulations. In these countries licenses, permits, and authorizations of various sorts are required to engage, or to continue to be engaged, in many activities. Opening a shop and keeping it open, borrowing money, investing, driving a car, owning a car, building a house, engaging in foreign trade, obtaining foreign exchange, getting a passport, going abroad and so on require specific documents or authorizations. Often several government offices must authorize the activity and several public servants must be contacted.

The existence of these regulations and authorizations gives a kind of monopoly power to the officials who must authorize or inspect the activities. These officials may refuse the authorizations or may simply sit on a decision for months. Thus, they can use their public power to extract bribes from those who need the authorizations or permits. In India, for example, the expression "licence raj" referred to the individual who sold permits to engage in many forms of economic activities. In some countries, some individuals become middlemen or facilitators for obtaining these permits. The fact that in some cases the regulations are nontransparent or are not even publicly available and that an authorization can be obtained

¹⁶The state can exercise its role through various instruments. Some of these lend themselves more easily to acts of corruption. See Tanzi (1995). For an empirical analysis that links market structure and rents to the level of corruption, see Ades and Di Tella (forthcoming).

only from a specific office or individual--that is, there is no competition in the granting of these authorizations--gives the bureaucrats a great amount of power and a good opportunity to extract bribes.¹⁷

The existence of these regulations requires frequent contacts between citizens and bureaucrats. They also require enormous amount of time spent by the citizens in acquiring permits and in dealing with public officials. Surveys from different countries and especially from developing and transition countries indicate that very large proportions of the time of the managers of enterprises, and especially of small enterprises, is spent dealing with bureaucracies. This time which is taken away from managing the enterprises can be reduced through the payment of bribes.

Taxation

Taxes based on clear laws and not requiring contacts between taxpayers and tax inspectors are much less likely to lead to acts of corruption. However, when:

- (1) the laws are difficult to understand and can be interpreted differently so that taxpayers need assistance in complying with them;
- (2) the payment of taxes requires frequent contacts between taxpayers and tax administrators;
- (3) the wages of the tax administrators are low;
- (4) acts of corruption on the part of the tax administrators are ignored, not easily discovered, or when discovered are penalized only mildly;
- (5) the administrative procedures (for example, the criteria for the selection of taxpayers for audits) lack transparency and are not closely monitored within the tax or customs administrations;
- (6) tax administrators have discretion over important decisions, such as those related to the provision of tax incentives, determination of tax liabilities, selection of audits, litigations, and so on; and

¹⁷Some economists have argued that this kind of corruption can be eliminated by setting up several offices all authorized to provide the authorizations or permits. This would remove the monopoly power from the bureaucrats. See Shleifer and Vishny (1993). Unfortunately, the setting up of several offices may be costly. In some cases, particular activities (say yearly inspections of cars) can be privatized.

(7) more broadly, when the controls from the state (the principal) on the agents charged with carrying out its functions are weak,¹⁸ then corruption is likely to be a major problem in tax and customs administrations.

In some countries, at one time, corruption became so endemic in the tax administration (Peru and Uganda) that the government decided to close down the existing administrations and to replace them by new ones. In several countries, customs administrations have been very corrupt leading to the jailing of the director of customs and in several cases leading to the replacement of the domestic customs with the services of foreign companies engaged in pre-shipment inspections.

Reports from several countries indicate that the number of applicants for poorly paid jobs in administering taxes or in customs has been unusually large pointing to the possibility that applicants know that these jobs create opportunities for extra incomes.¹⁹

Spending decisions

Corruption can also affect public expenditure. Corruption related to the provision by the government of goods at below market prices is discussed below; other aspects of public expenditure are discussed here.

Investment projects have lent themselves to frequent acts of high level corruption. Because of the discretion that some high level public officials have over decisions regarding public investment projects, this type of public spending can become much distorted, both in size and in composition, by corruption.²⁰ Public projects have, at times, been carried out specifically to provide opportunities to some individuals or some political groups to get "commissions" from those who are chosen to execute the projects. This has reduced the productivity of this expenditure and has resulted in projects which would not have been justified on objective criteria of investment selection such as cost-benefit analysis.

Procurement spending, i.e., the purchase of goods and services on the part of the government, is another area affected by corruption. To reduce corruption possibilities, some

¹⁸In cases of political corruption, those who represent the state (president, prime minister, ministers) or their close relatives may use the tax and customs administrations to pursue rent seeking and corrupt practices.

¹⁹There have even been reports that in some countries these jobs can be bought.

²⁰See Tanzi and Davoodi (1997).

countries have developed complex and costly procedures that may have reduced corruption at the cost of sharply increasing the prices at which some goods are purchased.²¹

Extra-budgetary accounts are common in many countries. Some of them have legitimacy and are set up for specific purposes (pension funds, road funds, etc.) Others are set up to reduce the political and administrative controls that are more likely to accompany spending that goes through the budget. In some countries, the money received from foreign aid or from the sale of natural resources such as oil, tin, etc. is channeled towards special accounts that tend to be less transparent and less controlled than the money channeled through the budget. Some of this money may go into illegitimate uses or pockets.²²

In all these areas, lack of transparency and of effective institutional controls are the main factors leading to corruption.

Provision for goods and services at below market prices

In most countries, the government engages in the provision of goods, services, and resources at below market prices. This may be related to (1) foreign exchange; (2) credit; (3) electricity; (4) water; (5) public housing; (6) some rationed goods; (7) access to educational and health facilities; (8) access to public land; and so on. Even access to some forms of pensions, such as those for disability, fall into this category because the individuals who get them have paid less in contributions to the pension funds over time than the pension they get once their disability status is approved. In some countries disability pensions have been a fertile ground for corruption. In particular countries, some individuals benefited enormously when they were able to get access to large amounts of credit or foreign exchange at below market prices.

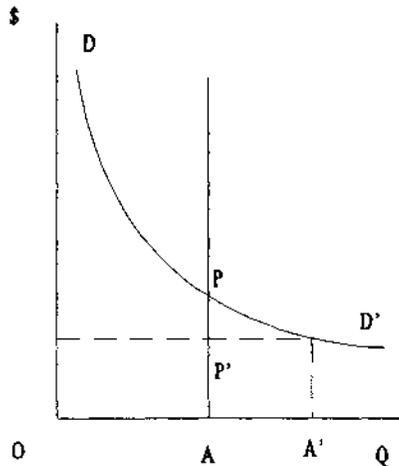
In some cases, because of limited supply, rationing or queuing becomes unavoidable. Excess demand is created and decisions have to be made to apportion the limited supply. These decisions are often made by public employees. Those who want these goods (the users) would be willing to pay a bribe to get access (or a higher access) to what the government is providing. It is thus not surprising that in all the areas mentioned above, cases of corruption have been reported.

²¹The notorious US\$600 hammers bought by the Pentagon could be explained in terms of the application of these procedures.

²²Because of the variation of the price of commodities even within a day, it may be difficult to ascertain at which price a transaction takes place. Some of the difference between the actual price and the declared price may be channeled into foreign accounts.

Figure 1 presents the general case. The price for the good or service as defined above is measured on the vertical axis. The demand is measured on the horizontal axis. OA represents the supply of the good or service available. DD' is the demand schedule.

Figure 1.



The equilibrium price would be AP at which the quantity demanded would be OA.

However, the price is set by the government at AP'. At that price there is an excess demand equal to AA', This excess demand brings rationing and offers of bribes by the users or demand for bribes by those who administer these programs.

Other discretionary decisions

Besides the areas mentioned above, in many countries some public officials find themselves in positions where they have discretion over important decisions. Especially in these situations corruption and often high-level or political corruption can play a major role. The most important of these areas are:

(1) provisions of tax incentives against income taxes, value added taxes, and foreign trade taxes which may be worth millions of dollars, in terms of the present value of reduced future liabilities, to those who benefit from them;²³

(2) decisions as to the particular use of private land (zoning laws) that determine whether the same piece of land can be used only for agriculture, and thus have low market value, or for high rise buildings, and thus be very expensive;

(3) decisions as to the use of government-owned land, as for example, for logging purposes, which may also be worth a lot to the recipients. Major cases of corruption related to permissions to cut trees from publicly-owned forests, or to exploit lands for their mineral wealth, have been reported in several countries;

²³ In some countries these incentive have been provided outside the normal legal process, by high level public officials, to favored individuals.

- (4) decisions that authorize major foreign investments, often undertaken in connection with domestic interests, often providing the privileged investors with some monopoly power;
- (5) decisions related to the sale of public sector assets, including the right to extract natural resources;
- (6) decisions on the privatization of state-owned enterprises and on the conditions attached to that process, such as the degree of regulation of the industry;
- (7) decisions providing monopoly power to particular export, import, or domestic activities.

Decisions such as those described above are often worth a lot to individuals or enterprises. It is natural that attempts will be made by some of them to get favorable decisions, in some cases by paying bribes, and, in other cases, by simply exploiting close personal relations with public officials. The bribes may be paid to public officials whose salaries may be very low and whose "temptation price" may be far less than the value of the potential benefit that a favorable decision will provide to those requesting them.

Financing of parties

Some time before *tangentopoli* exploded in Italy, Minister Martelli, an important member of the socialist party, in a speech in Bari, candidly admitted that the Italian political parties had on their payrolls a small army of employees. The salaries for these employees had to be paid. He implied that the needed money had to come from somewhere. Mr. Martelli had put his finger on a major problem for democracies, i.e. the need to finance the activities, including the electoral campaigns, of the political parties.²⁴ When public money is not available for the activities of the political parties, enormous pressures will build up to generate funds. The current controversy concerning political donations in the United States is an example of this problem. As Susan Rose-Ackerman (1997) has put it: "Democracy gives citizens a role in determining their political leaders. Corrupt elected officials can be voted out of office. But democracy is not necessarily a cure for corruption."

²⁴ One of the leading judges of *mani pulite* (clean hands), the investigation in the Italian corruption scandal, has recently described the arrangements among the parties to share the proceeds from corruption. See Nordio (1997). On the issue of political corruption, see also Cazzola (1988); Johnston (1997); and Ferrero and Brosio (1997).

IV. FACTORS THAT PROMOTE CORRUPTION: INDIRECT FACTORS

Besides the factors that promote corruption directly, discussed in the previous section, other factors can contribute to corruption indirectly. Some of these are discussed briefly in this section.

Quality of the bureaucracy

The quality of the bureaucracy varies greatly among countries. In some, public sector jobs give a lot of prestige and status. In others, much less so. Many factors contribute to that quality. Many years ago Max Weber (1947), the outstanding German sociologist, described what should be the characteristics of an *ideal* bureaucracy. He was aware that most bureaucracies are not ideal. Tradition and the effect that it has on the pride that individuals have in working for the government may explain why, *ceteris paribus*, some bureaucracies are much more efficient and much less vulnerable to corruption than others.²⁵ Rauch and Evans (1997) have gathered information on the degree to which civil servants' recruitment and promotions are merit-based for 35 developing countries. Their results indicate that the less are recruitment and promotion based on merit, the higher is the extent of corruption.

Absence of politically motivated hiring, patronage, and nepotism, and clear rules on promotions and hiring, in addition to some of the factors discussed separately below all contribute to the quality of a bureaucracy. The incentive structure plus tradition go a long way to explain why some bureaucracies are much less corrupt than others.²⁶

Level of public sector wages

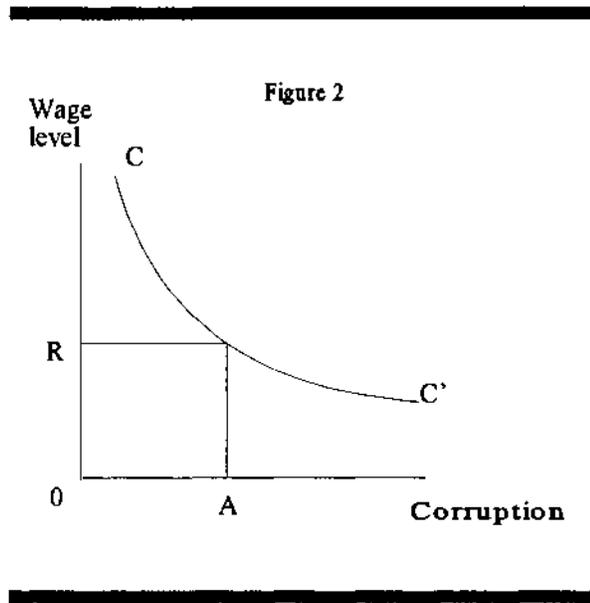
Over the years many observers have speculated that the wages paid to civil servants are important in determining the degree of corruption. For example, Assar Lindbeck (1998) attributes the low corruption in Sweden in this century partly to the fact that at the turn of the century, high-level administrators earned 12-15 times the salary of an average industrial worker. One can speculate that there may be corruption due to greed and corruption due to need. CC' represents the trade off between the level of corruption and the level of wages. The higher the wage level, the lower is corruption.

²⁵See von Klimo (1997). Von Klimo compares the public conception of an inefficient and corrupt public administration in 19th century Italy with the "myth of absolute efficiency and incorruptibility" enjoyed by the administration of the Prussian state.

²⁶In some countries, public sector hiring has had the main objective of reducing unemployment rather than improving the quality of the public administration.

Assume that OR represents a level of wage consistent with the minimum required by the family of a public employee for a decent living. It can be assumed that OA is corruption due to greed while corruption beyond OA would be due to need. The figure implies also that, regardless of the wage level, some public officials will be corrupt perhaps because of their own psychological or moral make-up. Or because some of the bribes offered may be too large to resist.

The relationship between wage level and corruption index has been tested empirically in a recent paper by Rijckeghem and Weder (1997). See also Ul Haque and Sahay (1996). Using cross-sectional data, they have supported the common intuition by finding a statistically significant relationship between corruption and wage levels, similar to that shown by the CC' curve in Figure 2. They have speculated that while an increase in the wage level would reduce corruption, a very large increase would be necessary to reduce it to minimal levels. In other words, the fight against corruption, pursued exclusively on the basis of wage increase, can be very costly to the budget of a country and can achieve only part of the objective.



In recent years, several countries have attempted to reduce corruption in particularly sensitive areas, such as customs and tax administrations, by increasing the level of salaries for the public employees in these areas (Argentina, Peru, etc).²⁷ These countries have also increased salary differentials to be able to retain and attract more able, productive, and honest individuals. Over the years, Singapore has pursued a wage policy aimed at reducing the

²⁷In Peru, the wage structure in the tax administration became similar to that of the Central Bank and thus somewhat higher than the wage structure of the civil service. Also, an incentive system was introduced which assigned to the tax administration (SUNAT) a share of the tax revenue. The average age of the employees of the tax administration was dramatically reduced.

temptation for public officials to engage in acts of corruption. Reportedly, the salaries of ministers and other high level officials in Singapore are among the highest in the world.²⁸

There has been some speculation in the theoretical economic literature that high wages may reduce the number of corrupt acts, while they may lead to demands for higher bribes on the part of those who continue to be corrupt. The reason is that high wages raise the opportunity cost of losing one's job while they do not eliminate the greed on the part of some officials. Thus, while the number of corrupt acts is reduced, the total amount of corruption money paid may not necessarily fall.

Penalty systems

Following Gary Becker's (1968) classical analysis of crime prevention, given the probability that the perpetrator of a crime would be caught, the penalty imposed plays an important role in determining the probability that criminal or illegal acts would take place.²⁹ In theory, *ceteris paribus*, corruption could be reduced by increasing the penalties on those who get caught. This analysis implies that the penalty structure existing in a country is an important factor in determining the extent of corruption in that country. But once gain, at least theoretically, higher penalties may reduce the *number* of acts of corruption, but they may lead to demands for higher bribes on the corrupt acts that still take place..

In the real world relatively few people are punished for acts of corruption, in spite of the extent of the phenomenon. Furthermore, with the exception of a few countries, there seems to be a wide gap between the penalties specified in the laws and regulations and the penalties that are effectively imposed.³⁰ Generally, effective penalties tend to be more lenient than the statutory ones. The administrative procedures followed before a public employee is punished for acts of corruption are slow and cumbersome. Often legal, political, or administrative impediments prevent the full or quick application of the penalties. Due process and the need to provide incontrovertible evidence are major hurdles. The potential accusers are often reluctant to come forward and to spend the time and effort to go through the full process required to punish someone. Also, when corruption is widespread, the costs to the

²⁸ A common belief is that in situations of low wages but high possibilities of corruption, less honest individuals will be attracted to the civil service.

²⁹ For an econometric application of Becker's theory to the Netherlands, see Frank van Tulden and Abraham van der Torre (1997).

³⁰ China has recently gone as far as applying the death penalty on some individuals accused of corruption. However, some acts of corruption may still go unpunished so that uncertainty prevails on the treatment of individuals accused of corruption. This may lead to the perception that penalties are applied selectively or arbitrarily.

accusers in terms of social capital, such as lost friends, can be high.³¹ Furthermore, the judges who will impose the penalties may themselves be accessible to corruption or may have political biases, so that they may be bought by the accused or may put obstacles to the proceedings. All these factors limit the role that penalties actually play in many countries, especially when corruption is partly politically motivated. This attitude brings a toleration for small acts of corruption that can in time encourage bigger acts.³²

Institutional controls

The other important ingredient in Gary Becker's analysis is the probability that those who commit crimes would be caught. This leads to the role of institutional controls. The existence of these controls reflects to a large extent the attitude of the political body toward this problem. Generally, the most effective controls are those that exist *inside institutions*. This is really the first line of defense. Honest and effective supervisors, good auditing offices, and clear rules on ethical behavior should be able to discourage or discover corrupt activities. Good and transparent procedures should make it easier for these offices to exercise their controls. Supervisors should be able to monitor the activities of their subordinates. These characteristics vary from country to country. In some these checks are almost non-existent so that corruption is mostly discovered by chance or through the reporting by outsiders, including the media.

Several countries, including Singapore, Hong Kong, Uganda, Argentina and others have created anti-corruption commissions or offices expressly charged with the responsibility of following reports on corruption.³³ To be effective these offices must have independence from the political establishment, ample resources, and personnel of the highest integrity. They must also have the power to enforce penalties, or, at least, have others including the judiciary enforce the penalties. Unfortunately, in some countries these offices are required to report confidentially to the president or the prime minister of the country rather than, say, to the legislative body. This goes a long way towards reducing their effectiveness and politicizing the process. In other countries, these commissions do not have the power to impose penalties and their reports may not have any following by other institutions.

³¹ Even in countries with relatively little corruption, so-called "whistle blowers" do not seem to have an easy time.

³² Reluctance to apply harsh penalties may also be due to concerns that the penalties might be applied selectively, to political opponents.

³³ For the experience of Uganda in the fight against corruption, see Ruzindana (1997); and Langseth and Stapenhurst (1997). As Table 1 below shows, Uganda is still perceived as a country with a high level of corruption.

Transparency of rules, laws and processes

In many countries, the lack of transparency in rules, laws, and processes creates a fertile ground for corruption. Rules are often confusing, the document specifying them are not publicly available, and at times, the rules are changed without properly publicized announcements. Laws or regulations are written in a way that only trained lawyers can understand and are often conceptually and not just linguistically opaque about important aspects thus leaving grounds for different interpretations. Processes or procedures on policy matters and other actions, as for example for competitions for public projects, are equally opaque so that, at times it is difficult to understand the process that was followed before a decision was reached.

Some countries, as for example New Zealand, have made great efforts in recent years in bringing more transparency in all the accounts and the actions of the government.

Examples by the leadership

A final contributing factor is the example provided by the leadership. When the top political leaders do not provide the right example, either because they engage in acts of corruption or, as is more often the case, because they condone such acts on the part of relatives, friends, or political associates, it cannot be expected that the employees in the public administration will behave differently. The same argument applies within particular institutions such as tax administration, customs, public enterprises, and so on. These institutions cannot be expected to be corruption-free if their heads do not provide the best examples of honesty.

In some countries, the leadership has been somewhat indifferent to this problem. In an African country, the President refused to fire ministers widely reputed to be corrupt. In an Asian country, a minister that was accused of corruption was simply moved to head another ministry. In a Latin American country, a President who was planning to create an anti-corruption commission proposed to appoint as head of this commission an individual widely reported to be corrupt. Examples such as these do not help create the climate that would lead to a corruption-free society.

V. MEASUREMENT OF CORRUPTION

If corruption could be measured, it could probably be eliminated. In fact, conceptually it is not even clear what one would want to measure.³⁴ Simply measuring bribes paid would ignore a whole range of corrupt acts which are not accompanied by the payment of bribes. If one attempted to measure acts of corruption rather than the amounts of bribes paid, he would count many relatively unimportant actions, he would have to identify each act, and, in any

³⁴One could measure acts of corruption on bribes paid.

case, he would not have the information. While there are no *direct* ways of measuring corruption, there are several indirect ways of getting information about its prevalence in a country or in an institution. Some useful information can be obtained from:

(1) Reports on corruption available from published sources including newspapers. The Internet is becoming a progressively more valuable source.³⁵ Newspapers such as *Le Monde*, *The Financial Times*, and *The New York Times*, and magazines such as *The Economist* and *The Far Eastern Economic Review* have been reporting many articles on corruption.

(2) Case studies of corrupt agencies such as tax administrations, customs, police or some other institutions. Unfortunately, while there are many such studies, often the reports are internal and are kept confidential;

(3) Questionnaire-based surveys. These can be related to a specific agency (i.e. Peru or Argentina for tax administrations); or to a whole country. These surveys *measure perceptions of corruption rather than corruption per se*. The World Bank has been making use of these surveys in its work in Tanzania, Uganda, India, Ukraine, and other places. It has used these surveys to improve the effectiveness of particular programs such as health care.

Countrywide surveys are available from:

- (1) Global Competitiveness Report (Geneva)
- (2) Political and Economic Risk Consultancy (Hong Kong)
- (3) Transparency International (Berlin)
- (4) Political Risk Services (Syracuse)

The Gallup poll has also conducted a major survey for 44 countries dealing with corruption in particular activities.

The results obtained from these surveys for many countries are now widely used by researchers and by business people. The Transparency International index, for example, assesses the perception of corruption on a scale of 0 to 10. Ten refers to a corruption-free country. Zero refers to a country where most transactions or relations are tainted by corruption. The variance of these indexes, which reflects how the views are spread among

³⁵For some countries, the Internet reports tens of thousands of entries to the subject of corruption.

respondents, is also very important and has been used by some researchers in their work.³⁶ People may tend to confuse these indexes with actual measurements of corruption. It is important to keep in mind that the indexes reflect perceptions and not objective and quantitative measures of actual corruption. One good feature is that the various indexes available are highly correlated among themselves.

Table 1 shows the indexes for 1995, 1996, and 1997 provided by Transparency International. The table indicates that countries normally hold their positions over the period. The largest positive swing in the three years available is shown by Italy. How closely changes in these indexes reflect real changes within given countries is an important, open question. A single but widely reported case of corruption may easily change perceptions in a given country and lead to an index that may not correctly assess corruption in that country.

VI. CORRUPTION AND GROWTH

The recent fairly broad consensus seems to be that corruption is unqualifiably bad, but in past years, the views on corruption had been more divergent and some economists had actually found some redeeming value in it.³⁷ Until the recent (1997) currency crisis, some countries from Southeast Asia seemed to provide support for the view that corruption might promote growth. Indonesia and Thailand were often mentioned as countries growing fast in spite of, or even because of, high levels of corruption associated with a low degree of uncertainty.³⁸ In the case of Indonesia, it was argued that institutionalized corruption made it less damaging than random corruption. One knew where to go and how much to pay. Some of the arguments in favor of the view that corruption may promote efficiency and even growth are summarized below.³⁹ This survey is not intended to be exhaustive but just to provide a feel for the relevant literature.

³⁶See for example Wei (1997a) and (1997b).

³⁷Even today a few economists still argue that, within well confined circumstances, corruption may promote faster growth. See, for example, Braguinsky (1996).

³⁸Since the fall of 1997, some journalistic accounts have blamed corruption for both the enormous fires that burned large areas of the Indonesian forests and for the currency crises caused by unproductive investments and high short-term borrowing.

³⁹For a review, see Bardhan, (1997); and Susan Rose-Ackerman (1997).

Table 1. Corruption Perception Index*

	1995	1996	1997
New Zealand	9.55	9.43	9.23
Denmark	9.32	9.33	9.94
Sweden	8.87	9.08	9.35
Finland	9.12	9.05	9.48
Canada	8.87	8.96	9.10
Norway	8.61	8.87	8.92
Singapore	9.26	8.80	8.66
Switzerland	8.76	8.76	8.61
Netherlands	8.69	8.71	9.03
Australia	8.80	8.60	8.86
Ireland	8.57	8.45	8.28
United Kingdom	8.57	8.45	8.28
Germany	8.14	8.27	8.23
Israel	n.a.	7.71	7.97
United States	7.79	7.66	7.61
Austria	7.13	7.59	7.61
Japan	6.72	7.09	6.57
Hong Kong	7.12	7.01	7.28
France	7.90	6.96	6.66
Belgium	6.85	6.84	5.25
Chile	7.94	6.80	6.05
Portugal	5.56	6.53	6.97
South Africa	5.62	5.68	4.95
Poland	n.a.	5.57	5.08
Czech Republic	n.a.	5.37	5.20
Malaysia	5.23	5.32	5.01
South Korea	4.29	5.02	4.29
Greece	4.04	5.01	5.35
Taiwan	5.08	4.98	5.02

Table 1 (concluded). Corruption Perception Index*

	1995	1996	1997
Jordan	n.a.	4.89	n.a.
Hungary	4.12	4.86	5.18
Spain	4.35	4.31	5.90
Turkey	4.10	3.54	3.21
Italy	2.99	3.42	5.03
Argentina	3.24	3.41	2.81
Bolivia	n.a.	3.40	2.05
Thailand	2.79	3.33	3.06
Mexico	3.18	3.30	2.66
Ecuador	n.a.	3.40	2.05
Brazil	2.70	2.96	3.56
Egypt	n.a.	2.84	1.94
Colombia	3.44	2.73	2.23
Uganda	n.a.	2.71	n.a.
Philippines	2.77	2.69	3.05
Indonesia	1.94	2.65	2.72
India	2.78	2.63	2.75
Russia	n.a.	2.58	2.27
Venezuela	2.66	2.50	2.77
Cameroon	n.a.	2.46	2.27
China	2.16	2.43	2.88
Bangladesh	n.a.	2.29	1.80
Kenya	n.a.	2.21	2.30
Pakistan	2.25	1.00	2.53
Nigeria	n.a.	0.69	1.76

Source: Transparency International.

*Level at which corruption is perceived by people in business, political analysts, and the general public.

- Leff (1964) and Huntington (1968) advanced the view that corruption can be efficiency-enhancing because it removes government-imposed rigidities which impede investment and interfere with other economic decisions favorable to growth. Thus, corruption “oils the mechanism” or “greases the process.” This reasoning has often been used to explain the high rates of growth in some countries of South East Asia which were characterized by much corruption.

- Beck and Maker (1986) and Lien (1986) have developed models that show that in bidding competitions, those who are most efficient can afford to offer the highest bribe. Therefore, bribes can promote efficiency by assigning projects to the most efficient firms.

- Lui (1985) has argued that time has different values for different individuals depending on their level of income and the opportunity cost of their time. Those for whom time is most valuable will offer bribes to public officials to be allowed to economize on time by jumping in front of the line, that is by getting decisions more quickly. Thus, corruption can be efficient because it saves time for those for whom time has the greatest value. In a more recent paper, Lui (1996) has argued that while corruption may improve the allocation of resources in some circumstances, it reduces growth because it provides some individuals the incentive to acquire the kind of human capital that can be used to improve corruption opportunities. This argument is related to those by Baumol and by Murphy and others, discussed below.

- Corruption can be a useful political glue by allowing politicians to get funds that can be used to hold a country together. The latter outcome is seen as a necessary condition for growth. See Graziano (1980).

- Bribes can supplement low wages. Thus, corruption can allow the government to maintain a lower tax burden which can favor growth. See Tullock (1996). See also Becker and Stigler (1974). The issue here is whether a lower tax burden is more favorable to growth than a lower degree of corruption.

The above pro-corruption, theoretical arguments can be countered in many ways:

- Rigidities and rules are not exogenous and unmovable features of a society. A society is not born with these rigidities. They are created, and, in fact, they may be intentionally created by public officials, to extract bribes. When rules can be used to extract bribes, more rules will be created. Furthermore, these rules are often kept intentionally opaque so that more power will remain on the side of those who enforce them. Knowledge gives power to those who have it.

- Those who can pay the highest bribes are not necessarily the most economically efficient but the most successful at rent seeking. If bribes are seen as investments, those who pay them must figure that they are investments with a high rate of return. Baumol (1990) and Murphy, Shleifer and Vishny (1991) have advanced related arguments that can be used

to argue that in traditional or corrupt societies, the most able individuals will be diverted, by existing incentives, from pursuing socially productive activities towards rent seeking activities. This diversion will impose a high cost for the growth of these countries. If the potentially most socially productive individuals are in scarce supply, as they are assumed to be, the diversion of their talent toward rent-seeking activities and corruption will be particularly damaging to society.

- Payment of speed money may be an inducement for the bureaucrats to reduce the speed at which most practices are being processed. See Myrdal (1968). Bribes may change the order in which public officials process the practices, say on providing permits, but they may slow down the average time for the whole process.

- Corruption and rent-seeking as political glue or as wage supplement may be helpful in the short run, but they may lead to major problems over the longer run as shown by Zaire under Mobutu.

A. Effects of Corruption on the Economy: Qualitative Effects

Corruption reduces public revenue and increases public spending. It, thus, contributes to larger fiscal deficits, making it more difficult for the government to run a sound fiscal policy. Corruption is likely to increase income inequality because it allows well positioned individuals to take advantage of the government activities at the cost of the rest of the population.⁴⁰ There are strong indications that the changes in income distribution that have occurred in recent years in previously centrally planned economies have been partly the result of corrupt actions such as nomenklatura privatization.

Corruption distorts markets and the allocation of resources because it:

(1) reduces the ability of the government to impose necessary regulatory controls and inspections to correct for market failures. When the government does not perform well its regulatory role on banks, hospitals, food distribution, transportation activities, financial markets and so on, it loses part of its basic *raison d'être*. On the contrary, when intervention is motivated by corruption, as for example when the government creates monopolies for private interests, it is likely to add to those shortcomings;

(2) distorts incentives. As already mentioned able individuals allocate their energies to rent seeking and to corrupt practices and not to productive activities. In some cases, the resulting activities have a negative value added;

⁴⁰For a quantitative analysis that establishes a connection between higher corruption on one hand and higher income inequality and poverty on the other hand, see Gupta, Davoodi, and Alonso-Terme (1998).

(3) acts as an arbitrary tax (with high welfare costs). Especially when corruption is not centralized, its random nature creates high excess burdens because, to the cost of negotiating and paying a bribe, must be added the cost of searching for the person or persons to whom the bribe must be paid. When corruption is not centralized the contractual obligations secured by the payment of a bribe are more likely not to be complied with;⁴¹

(4) reduces or distorts the fundamental role of the government (on enforcement of contracts, protection of property rights, etc.). When one can buy one's way out of a commitment or out of a contractual obligation, or when one is prevented from exercising one's property rights because of corruption, one of the fundamental roles of the government is distorted and growth may be negatively affected;

(5) reduces the legitimacy of the market economy and perhaps of democracy. In fact, the criticisms often voiced in many countries, and especially in transition economies, against democracy and the market economy, are highly influenced by the existence of corruption. Thus, corruption may slow down or even block the movement toward democracy and a market economy;

(6) is likely to increase poverty because it reduces the income earning potential of the poor.

For all the above reasons corruption is likely to reduce economic growth.

In many countries (Ukraine, Russia, Indonesia, etc.) enterprises, and especially small enterprises, are forced by public officials to make payments to make things happen or to keep bad things from happening. Often these payments must be made if the enterprise is to remain in business. In Indonesia, there is a term for these payments ("pungli") and, according to a recent report, these payments may raise the costs of doing business for small activities by as much as 20 percent of total operating costs (See Sjaifudian (1997)). This is equivalent to imposing very high sales taxes on these enterprises. Similar information has been reported for Russia (Shleifer 1996) and for Ukraine (Kaufmann, 1997). This problem, however, may be much more general.

Corruption of a cost-increasing kind is often coercive for small enterprises and especially for new, emerging enterprises. These enterprises are often bullied by bureaucrats and by tax inspectors into making substantial payments. Pressures on them often come from local governments' officials. These officials impose high pecuniary costs, which are partly legal and partly illegitimate payments, to obtain licenses, authorizations, or simply to

⁴¹Furthermore random corruption may also be accompanied by higher penalties if the act of corruption is discovered.

contribute to some alleged cause.⁴² They also impose high costs in terms of the time that the managers of these enterprises must spend to comply with the many requirements imposed on them. The burden of these costs is likely to fall on the enterprises because these small enterprises operate in a far more competitive market than the large ones so that they have greater difficulty in passing the costs on to their customers.

In most countries, small enterprises are the main engine of growth. When they do not grow, economies languish and unemployment grows. This is true in most countries but especially in developing countries and, ever more, in economies in transition. Obstacles to the creation of these enterprises can be particularly damaging.

Large enterprises can protect themselves more easily from these problems. Because: (a) they have specialized departments that can deal with aggressive bureaucrats; (b) they can use "facilitators," i.e., individuals skilled at going through the jungle of opaque regulations and tax laws; (c) their size makes them more immune from the extortion of petty bureaucrats; (d) they can use their political power to influence relevant individuals in the public administration or to pursue rent-seeking activities that give them benefits not available to others. For example, they may use bribes camouflaged as political donations or gifts to acquire market power through reduction in competition or to get tax incentives, subsidized credit or other benefits.

The reforms of recent years in many countries (such as trade liberalization) have removed obstacles to the growth of economies that had characterized earlier periods. However, these were obstacles imposed mostly by the national governments. These obstacles were probably more important for large enterprises because these enterprises were more likely to trade abroad and to operate in the whole national territory. These reforms have not done much to reduce the many regulations, controls, opaque taxes, and fees imposed by *local* governments, by unions, by professional groups and so on. These are probably the ones most important for the small enterprises.

B. Effects of Corruption on the Economy: Econometric Results

In the past couple years, several studies, using cross-section analysis and utilizing the available corruption indexes, have reported important quantitative results on the effects of corruption on economic variables. These results suggest that corruption has a negative impact on the rate of growth of countries. Some, but not all, of these studies are mentioned below.

It has been found that corruption:

⁴²These small, economic activities may be preyed upon by the police, health inspectors, tax inspectors, and by myriads of other individuals presumably representing the government.

(1) reduces investment and, as a consequence, it reduces the rate of growth. See Mauro (1995). Such reduction in investment is assumed to be caused by the higher costs and by the uncertainty that corruption creates. In this analysis, the reduction in the rate of growth is a direct consequence of the decline in the investment rate. In other words, the analysis is based on a production function that makes growth a function of investment;

(2) reduces expenditure for education and health because public expenditure for education and health does not lend itself easily to corrupt practices on the part of those who make budgetary decisions.⁴³ See Mauro (1997);

(3) increases public investment because public investment projects lend themselves easily to manipulations by high level officials to get bribes. See Tanzi and Davoodi (1997); it also distorts the effects of industrial policy on investment. See Ades and Di Tella (1997).

(4) reduces expenditure for operation and maintenance for reasons similar to those that reduce expenditure for education and health. See Tanzi and Davoodi (1997);

(5) reduces the productivity of public investment and of a country's infrastructure. See Tanzi and Davoodi (1997);

(6) reduces tax revenue mainly because of the impact that it has on the tax administration and on customs, thus reducing the ability of the government to carry out needed public expenditure. See Tanzi and Davoodi (1997);

(7) reduces foreign direct investment because corruption has the same effect as a tax, and in fact it operates as a tax. See Wei (1997a). Less predictable is the level of corruption (the higher is its variance), the greater is the impact on foreign direct investment. A higher variance makes corruption behave like an unpredictable and random tax. See Wei (1997b). Thus, increases in corruption and in its unpredictability are equivalent to increases in the tax rate on enterprises. Wei concludes that raising the index of corruption from the Singapore level to the Mexican level is equivalent to increasing the marginal tax rate on enterprises by 20 percentage points.

VII. THE FIGHT AGAINST CORRUPTION AND THE ROLE OF THE STATE

In the earlier sections of this paper, many factors that contribute to corruption were discussed. These factors tend to be more common in poorer countries, and in economies in

⁴³Of course, this does not mean that there is no corruption in the provision of these services. The provision of health is often distorted by bribes to doctors or other medical personnel to get better or faster service.

transition, than in rich countries. Thus, at some point in time, economic development reduces the level of corruption of a country. However, at similar levels of development, some countries are perceived to have more corruption than others.

Particular economies (Singapore, Hong Kong, Portugal) have managed to reduce significantly the incidence of corruption. Lindbeck (1998, p. 3) has pointed out that even in Sweden “corruption flourished... in the second half of the 18th century and in the early 19th century.” Thus, governments should not be fatalistic or passive about corruption. With well focussed and determined efforts, corruption can be reduced, though not to zero. Trying to bring corruption to zero would be too costly in terms of resources and in other ways. For example, it may require excessively high public sector wages; or major legal or organizational changes; or excessive limitations in civil rights; or very harsh effective penalties. An optimal *theoretical* level would be reached where the marginal social costs of reducing it further would be equal to the marginal social benefits from that reduction.⁴⁴ Thus it is realistic to think that the level will remain above zero in all countries. In fact no country is free of corruption and none scores a perfect ten in the perception index..

Corruption is a complex phenomenon that is almost never explained by a single cause. If it were caused by a single cause, the solution would be simple. Of the many factors that influence it, some can be changed more easily than others. Because of the complexity of the phenomenon, the fight against corruption must be pursued on many fronts. It is a fight that cannot be won in months or even in a few years. The greatest mistake that can be made is to rely on a strategy that depends excessively on actions in a single area, such as increasing the salaries of the public sector employees; or increasing penalties; or creating an anti-corruption office; and so on, and expect results quickly.

Any realistic strategy must start with an explicit recognition that *there are those who demand acts of corruption* on the part of public sector employees and *there are public employees willing for a price to perform these acts*. There is thus a demand for acts of corruption and a supply of such acts. And as is the case with all demands and supplies, the price plays a major role. Various incentives determine the elasticities of these supply and demand functions. In the basic case, the briber wants something (a reduction in a cost or an increase in a benefit) from the public official and is willing to pay a bribe for it. The official has something to sell (i.e. he has some power that he can sell) and wants to be compensated for the risk and the effort involved.⁴⁵ However, in the background there is the state in the totality of its actions carried out by the many agencies that constitute the public sector. To a large extent it is the state that through its many policies and actions creates the environment and the incentives that influence those who pay bribes and those who accept or demand

⁴⁴In practice, of course, these marginal costs and marginal benefits are impossible to measure.

⁴⁵Of course, we are ignoring the cases when corruption is coercive and reflects the pressures of public officials or individuals.

them. It is the state that influences the relationship between briber and bribee. See Klitgaard (1988).

In the ideal bureaucracies described by Max Weber, the public official (as the agent of the state) is the faithful executor of the mandate and of the instructions that he receives from the state (the principal). The public official is just a conduit, or a direct and legitimate channel for the relationship between the state and the citizen. He would not distort the state-citizen relationship. In this Weberian world, no principal-agent problems would develop. Unfortunately, in the real world, Weberian bureaucracies are rare⁴⁶ in part because the actions and the policies of the state are not always transparent and in part because of characteristics of the bureaucracies themselves. The citizens may question the legitimacy of some state actions attributing them to rent seeking by public officials and not to the pursuit of the public interest. The state may have de facto fractured into several power centers (ministries, public enterprises, independent institutions, sub-national governments and so one) each pursuing somewhat distinct interests. Sometimes the policies of these power centers are not consistent with one another and the instructions that emanate from these public centers are conflicting.⁴⁷

At times the instructions passed on to the agents who will carry out the execution of the policies are not clear because the top policymakers do not have clear ideas or, perhaps, may not wish to have total transparency in their actions. Total transparency in processes and in policies may imply less power for particular policymakers in the sense that their discretion in affecting the welfare of particular group is reduced. The basic point of this discussion is that the fight against corruption is not distinct and independent from the reform of the state. The reason is that some of the measures to reduce corruption are at the same time measures that change the character of the state. Let us consider a few examples.

It is generally believed that the level of relative wages in the public sector is an important variable in the degree of corruption in a country. Singapore, a country with a good index of corruption and where corruption was much reduced over the years, has some of the highest wages for public employees. Reportedly, its ministers receive the highest salaries in the world. The civil service of Singapore is small and enjoys a high status.

In countries where public sector wages are low with respect to those in the private sector, often they are low because of public policies that have inflated the number of people working for the government. In other words, the governments have traded wage levels

⁴⁶They may be approximated only in a few countries such as Denmark, Sweden, New Zealand, Canada and perhaps a few others.

⁴⁷This is particularly the case of tax officials in some countries with decentralized fiscal systems. In these situations, the officials may be subject to conflicting pressures from the national government and the local governments.

against the number of civil servants on their payrolls. The increase in the number of employees has meant lower real wages paid to them. In these situations, it is not realistic or wise to suggest that these countries simply increase real wages without reducing the size of the civil service. However, for many governments, reducing the number of public employees would go counter to the objectives of their government, or at least would be difficult politically. And there are many governments that believe that unemployment can be reduced through public sector hiring.

The same argument applies to wage differentials. It has been the objective of many governments to reduce the spread in the wages they pay to their employees. In some countries, the ratio between the highest salaries and the lowest salaries has been reduced to three. This is far less than in the private sector. The effect of this wage compression is that the most qualified and the most honest employees leave the public sector to join the private sector. For many governments changing this policy would be contrary to their goals and in many cases would be opposed by the labor unions.

It is generally believed that increasing the penalties for acts of corruption would reduce a country's corruption. However, the imposition of higher penalties could run into problems with employees' associations, with trade unions, with the judiciary system, and so on. Also, there is the danger that an unscrupulous government would use this weapon to go after political opponents. In other words, penalties could be used selectively or, worse, they could be used in connection with fabricated accusations. In democratic societies, penalties are imposed after what is often a lengthy and costly process. The immediate supervisors of the corrupt officials may be reluctant to carry the brunt of some of the procedural costs (in terms of time lost, damaged friendships, etc.). They may prefer to close their eyes to acts of corruption.

It is generally believed that many acts of corruption are stimulated by the existence of regulations. Some kinds of quasi-fiscal regulations at times substitute for taxing and spending actions. It is useful to point out that some of the countries perceived to be the least corrupt (Sweden, Denmark, Canada, etc.) have some of the highest tax burdens. On the other hand, some of the countries with the highest indexes of corruption (Nigeria, Pakistan, Bangladesh, China, Venezuela, etc.) have some of the lowest tax burdens. In the latter group of countries, quasi-fiscal regulations (i.e. regulations that substitute for taxing and spending) substitute taxes and public expenditures.⁴⁸ Thus, in order to reduce corruption, these countries would need to eliminate these quasi-fiscal regulations and, if necessary, replace them with taxing and spending policies. But quasi-fiscal regulations are predominant in these economies and they would have a difficult time to substantially raise the level of taxation. Once again we come to the conclusion that the fight against corruption and the reform of the state are two sides of the same coin.

⁴⁸For a discussion of quasi-fiscal regulations and their power to replace taxing and spending, see Tanzi (1995b).

Tax incentives, especially when they imply discretionary decisions on the part of public officials, create conditions in which corruption develops. A simple recommendation would be to eliminate tax incentives and replace them with tax systems with broad bases and lower rates. This is a recommendation often made by tax experts. Unfortunately, the roles that some governments want to play require the use of these incentives.⁴⁹ Therefore, once again, the fight against corruption requires a reform in the role of the state.

Corruption often accompanies the provision by the government of goods and services at below market prices. This often occurs with credit, foreign exchange, the prices of public utility services, public housing, higher education, health services, and so on. The low or zero prices create excess demand and the need to ration the good or service. Rationing always brings corruption. Thus, raising, whenever possible, these prices to equilibrium level would eliminate or reduce corruption. However, it would also change the role of the state in a way that many governments are not willing to do.

Many other examples could be provided. However, the ones provided are sufficient to make the point that in many cases the fight against corruption cannot proceed independently from the reform of the state. In many ways, it is the same fight. Thus corruption will be reduced only in those countries where governments were willing to substantially reduce some of their functions.

VIII. CONCLUDING REMARKS

In this paper I have discussed the phenomenon of corruption that affect many countries. I have shown the incidence of this phenomenon and the damage that it brings to economies and democracies. When corruption is widespread and especially when it contaminates the actions of the policymakers in democratic, market-oriented economies, it becomes more difficult to argue in favor of such economic and political arrangements.⁵⁰ The widespread disillusion among the population of some economies in transition and some developing countries with both market economies and democratic processes is very much provided by the widespread corruption that prevails in these countries and that is wrongly attributed to the market economy and the democratic process..

⁴⁹This has been a major issue in economies in transition where governments want to continue to directly influence the activities in some sectors. Thus the policymakers have found it hard to accept the approach associated with broad based taxes.

⁵⁰It should be remembered that many dictators or many potential dictators make the fight against corruption one of the reasons why they should be given the reigns of a country. Some associate democracy with lack of discipline.

I have also argued that corruption is closely linked with the way governments conduct their affairs in modern societies. Therefore, the growth of corruption is probably closely linked with the growth of some of the activities of the government in the economy. It is unlikely that corruption can be substantially reduced without modifying the way governments operate. The fight against corruption is, thus, intimately linked with the reform of the state.

In any case, any serious strategy to attempt to reduce corruption will need action on at least four fronts:

- (1) honest and visible commitment by the leadership to the fight against corruption. The leadership must show zero tolerance for it;
- (2) policy changes that reduce the demand for corruption by scaling down regulations and other policies such as tax incentives, and by making those that are retained as transparent and as non-discretionary as possible. Discretion must be kept to the minimum;
- (3) reducing the supply of corruption by increasing public sector wages, by increasing incentives toward honest behavior, and by instituting effective controls and penalties on the public servants; and
- (4) somehow solving the problem of the financing of political parties.

In conclusion, societies can do a lot to reduce the intensity of this problem but no single action will achieve more than a limited improvement and some of the required actions may require major changes in existing policies.

Bibliography

- Ades, Alberto and Rafael Di Tella, "Rents, Competition and Corruption," forthcoming in *The American Economic Review*.
- _____, 1997, "National Champions and Corruption: Some Unpleasant Interventionist Arithmetic," *The Economic Journal*, 107 (July) pp.1023-1042.
- Bardhan, Pranad, 1997, "Corruption and Development: A Review of Issues," *Journal of Economic Literature*, Vol. XXXV (September), pp. 1320-1346.
- Baumol, William J., 1990, "Entrepreneurship: Productive, Unproductive, and Destructive," *Journal of Political Economy*, Vol. 98 (October) pp. 893-921.
- Beck, Paul J. and Michael W. Maker, 1986, "A Comparison of Bribery and Bidding in Thin Markets," *Economic Letters*, Vol. 20, pp. 1-5.
- Becker, Gary S., 1968, "Crime and Punishment: An Economic Approach," *Journal of Political Economy*, 76(2) (March/April), pp. 169-217.
- Becker, Gary S. and George J. Stigler, 1974, "Law Enforcement, Malfeasance, and Compensation for Employees," *Journal of Legal Studies* (January) pp. 1-18.
- Braguinsky, Serguey, 1996, "Corruption and Schumpeterian Growth in Different Economic Environments," *Contemporary Economic Policy*, Vol. XIV (July) pp. 14-25.
- Cazzola, Franco, 1988, *Della Corruzione: Fisiologia e Patologia di un Sistema Politico* (Bologna: Il Mulino).
- Chand, Sheetal K. and Karl O. Moene, 1997, "Controlling Fiscal Corruption," IMF Working Paper 97/100 (Washington: International Monetary Fund).
- Elliot, Kimberly Ann, editor, 1997, *Corruption and the Global Economy*, (Washington: Institute for International Economics).
- Ferrero, Mario and Giorgio Brosio, 1997, "Nomenklatura Rule under Democracy: Solving the Italian Political Puzzle," *Journal of Theoretical Politics*, Volume 9, No. 4 (October).
- Galasi, P. and G. Gertesi, 1987, "The Spread of Bribery in a Centrally Planned Economy," in *Acta Aeconomica*, Vol. 34 (3-4), pp. 371-389.

- Galtung, Frederik, 1997, "Developing Agencies of Restraint in A Climate of Systemic Corruption: The National Integrity System at Work," paper presented at the Third Vienna Dialogue on Democracy, June 26-27, 1997 (Vienna).
- Goldman, Marshall, 1997, "The Pitfalls of Russian Privatization," *Challenge* (May-June) pp. 35-49.
- Graziano, Luigi, 1979, *Clientelismo e Sistema Politico. Il Caso dell'Italia* (Milano: F. Angeli).
- Grossman, Gregory, 1982, "The Second Economy in the USSR," in *The Underground Economy in the United States and Abroad*, edited by Vito Tanzi (Lexington: D.C. Heath and Company), pp. 245-270.
- Gupta, Sanjeev, Hamid Davoodi, Rosa Alonso-Terme, "Does Corruption Affect Income Inequality and Poverty?" IMF Working Paper, forthcoming (Washington: International Monetary Fund).
- Hines, James R., 1995, "Forbidden Payments: Foreign Bribery and American Business After 1977," Working Paper 5266, National Bureau of Economy Research, Inc. (September).
- Huntington, Samuel P., 1968, *Political Order in Changing Societies* (New Haven: Yale University Press)
- Johnson, Simon, Daniel Kaufmann, and Andrei Shleifer, 1997, "The Unofficial Economy in Transition," in *Brookings Papers on Economic Activity*, 2, pp. 159-239.
- Johnston, Michael, 1997, "Public Officials, Private Interests, and Sustainable Democracy: When Politics and Corruption Meet," in Kimberly Ann Elliot, editor, *Corruption and the Global Economy*, (Washington: Institute for International Economics) pp. 61-82.
- Kaufmann, Daniel, 1997, "The Missing Pillar of a Growth Strategy for Ukraine," in *Ukraine: Accelerating the Transition to Market*, edited by P. Cornelius and P. Lemain (Washington: International Monetary Fund).
- Kaufmann, Daniel and Paul Siegelbaum, 1996 "Privatization and Corruption in Transition Economies," *Journal of International Affairs*, Vol. 50, No. 2, (Winter) pp. 419-458.
- Klimo, Arpad von, 1997, "Fra Stato Centralistico e Periferia. Alti Funzionari Statali in Italia e nella Germania Prussiana dal 1870 al 1914," in Oliver Janz and Pierangelo Schiero, editors, *Centralismo e Federalismo nel XIX e XX Secolo, Un Confronto tra la Germania e Italia* (Bologna: Il Mulino)

- Klitgaard, Robert E., 1988, *Controlling Corruption* (Berkeley: University of California Press).
- Kopits, George and Jon Craig, 1998, "Transparency in Government Operations," IMF Occasional Paper, No. 158 (Washington: International Monetary Fund).
- Langseth, Peter and Rick Stapenhurst, 1997, "National Integrity System: Country Studies," Economic Development Institute of the World Bank, EDI Working Papers (Washington: The World Bank).
- Leff, Nathaniel, 1964, "Economic Development Through Bureaucratic Corruption," *American Behavioral Scientist*, pp. 8-14.
- Lien, Donald H.D., 1986, "A Note on Competitive Bribery Games," *Economic Letters* Vol. 22, pp. 337-41.
- Lindbeck, Assar, 1998, "Swedish Lessons for Post-Socialist Countries" (mimeo).
- Lui, Francis T., 1985, "An Equilibrium Queuing Model of Bribery," *Journal of Political Economy* (August) pp. 760-781.
- Manzetti, Luigi and Charles Blake, 1997, "Market Reforms and Corruption in Latin America: New Means for Old Ways," *Review of International Political Economy*.
- Mauro, Paolo, 1995, "Corruption and Growth," *The Quarterly Journal of Economics* (August) pp. 681-712.
- _____, 1997, "The Effects of Corruption on Growth, Investment, and Government Expenditure: A Cross-Country Analysis," in Kimberly Ann Elliott, editor, *Corruption in the Global Economy*, (Washington: Institute for International Economics).
- Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny, 1991, "The Allocation of Talent: Implication for Growth," *Quarterly Journal of Economics*, 106, (May) p. 503-30.
- Myrdal, G., 1968, *Asian Drama: An Inquiry into the Poverty of Nations*, (New York; Pantheon 1968).
- Nordio, Carlo, 1997, *Giustizia* (Milano: Angelo Guerini e Associati).
- Noonan, John T. Jr., 1984, *Bribes* (New York: MacMillan Publishing Company).
- Rauch and Evans, 1997, "Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries" (mimeo).

- Remnick, David, 1994, *Lenin's Tomb: The Last Days of the Soviet Empire* (New York: Vintage Books).
- Rose-Ackerman, Susan, 1997, "Corruption and Development," paper presented at the Annual Bank Conference on Development Economies.
- Ruzindana, Augustine, 1997, "The Importance of Leadership in Fighting Corruption in Uganda," in Kimberly Ann Elliott, editor, *Corruption in the Global Economy* (Washington: Institute for International Economics), pp. 133-146.
- Shleifer, Andrei, 1996, "Government in Transition," Discussion Paper No. 1783 (Harvard Institute for Economic Research).
- Shleifer, Andrei and Robert W. Vishny, 1993, "Corruption," *Quarterly Journal of Economics*, (August) 108(3), pp. 599-617.
- Simis, Constantine M., 1982, *USSR: The Corrupt Society. The Secret World of Soviet Communism* (New York: Simon and Schuster).
- Sjaifudian, Shetifah, 1997, "Graft and the Small Business," *Far Eastern Economic Review*, October 16, p. 32.
- Tanzi, Vito, 1995a, "Corruption, Arm's-Length Relationships, and Markets," in *The Economics of Organised Crime*, edited by Gianluca Fiorentini and Sam Peltzman (Cambridge: Cambridge University Press), pp. 161-180.
- _____, 1995b, "Government Role and the Efficiency of Policy Instruments," IMF Working Paper 95/100 (Washington: International Monetary Fund). Forthcoming in a book edited by Peter Sorensen, to be published by MacMillan Press.
- Tanzi, Vito and Hamid Davoodi, 1997, "Corruption, Public Investment, and Growth," IMF Working Paper 97/139 (Washington: International Monetary Fund).
- Tanzi, Vito and Ludger Schuknecht, 1997, "Reconsidering the Fiscal Role of Government: The International Perspective," *The American Economic Review*, Vol. 87, No. 2 (May) p.164-168.
- Theobald, Robin, 1990, *Corruption, Development and Underdevelopment* (Durham: Duke University Press).
- Tullock, Gordon, 1996, "Corruption Theory and Practice," *Contemporary Economic Policy*, Vol. XIV (July), p. 6-13.

- Ul Haque, Nadeem and Ratna Sahay, 1996, "Do Government Wages Cuts Close Budget Deficits? Costs of Corruption," *Staff Papers*, International Monetary Fund Vol. 43 (December) pp.754-778.
- van Tulden, Frank and Abraham van der Torre, 1997, "Crime and the Criminal Justice System: An Economic Approach." Paper presented at the 53rd Congress of the International Institute of Public Finance, August 1997, Kyoto, Japan.
- van Rijckeghem and Beatrice Weder, "Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption?" IMF Working Paper WP/97/73.
- Weber, Max, 1947, *The Theory of Social and Economic Organization* (London: The Free Press of Glencoe).
- Wei, Shang-Jin, 1997a, "How Taxing is Corruption on International Investors?" Working Paper 6030, NBER (May).
- _____ 1997b, "Why is Corruption So Much More Taxing than Tax?" (mimeo, June 16).