9th International Anti-Corruption Conference, Durban, South Africa, 10-15 December, 1999

An Action Plan

Special Governance Zone: A Practical Entry-Point for a Winnable Anti-Corruption Program

Shang-Jin Wei

Advisor, The World Bank
Associate Professor, Harvard University
The New Century Chair Senior Fellow, The Brookings Institution

Summary Whereas the cost of corruption in a typical developing or transition economy is high for economic and social development, national leaders may be concerned with political risk, budgetary constraints, and local suitability associated with any comprehensive reform program that is needed to reduce corruption. This proposal aims to balance political economy considerations with those of economic efficiency. It advocates establishing a special governance zone (SGZ) within a country as an entry point for an eventual nation-wide anti-corruption program. A SGZ is an enclave within which comprehensive reforms can take place. It is geographically limited so that any unpredictable negative consequences can be contained. Reform measures can also be explored and fine-tuned to fit better the culture and history of the country in question. Once successful, its experience can serve as a model for the rest of the country. The World Bank (and other international institutions) can play an important role especially at the initial stage of the program.

Contact Information: Shang-Jin Wei, The World Bank, MC 2-615, 1818 H Street, NW, Washington, DC 20433, USA. Tel: 202/473-1381, fax: 202/522-1154, email address: shang-jin_wei@harvard.edu or swei@worldbank.org .

Acknowledgement: I thank Shanta Devarajan, Peter Eigen, David Ellerman, Helene Grandvoinnet, Dani Kaufmann, Pierre Landell-Mills, and Sara Sievers for very helpful discussion, and Hedy Sladovich for editorial assistance.

Introduction

We need not be as pessimistic as to conclude that all countries that are currently corrupt are hopelessly and irreversibly so. However, it is useful to realise that even in countries where the leaders see the threat of corruption, necessary reforms are often difficult to start or to sustain due to a number of constraints. These constraints result in political inaction.

There are three such constraints that are particularly important. The first constraint is political risk. Because corruption is a system-wide problem, only comprehensive reforms can be effective in reducing corruption. But a comprehensive reform package contains inherent unpredictability and risk for the leaders. [It is observed that within a year after a country has implemented price liberalisation, its prime minister or finance minister or both are often involuntarily removed from their jobs. Such observations must be important in political leaders' mind.]

The second constraint is budgetary affordability. A necessary component of an effective anti-corruption strategy is to raise the civil servants' salary to appropriate level (along with other reforms). But this can be expensive, particularly since countries with a severe corruption problem often also have problems in collecting taxes.

The third constraint is the limit of usefulness in importing a "blueprint" from the outside. Even if we know a "master list" of what are done in Singapore or Sweden to produce a low corruption there, which is a big if by itself, we still have a very imperfect knowledge of how to transplant the lessons to a country like Tanzania or Indonesia. Local culture, local institutions and local history do matter here.

We need a reform strategy that addresses these constraints. What I propose below is not a sure success, but might help to enhance the chance of a success.

What I advocate is to establish a **Special Governance Zone** (SGZ) as a practical entry point to an eventual nation-wide anti-corruption program. An SGZ is an enclave within a country. Within a SGZ, comprehensive reforms are implemented. A SGZ is analogous to a special economic zone such as those in China. In fact, the comparison with special economic zones is very useful. A special economic zone tends to focus only on special economic policies such as zero tariffs or tax holidays. A SGZ aims to establish a comprehensive set of new institutions and new policies. Within such a SGZ, a comprehensive civil service reform should be undertaken; the role of government in the economy should be redefined; and the rule of law and citizen's voice should be enhanced. The actual name could also be "special administrative zone," "clean administration area," and so on, depending the circumstances of the country. Like a (well-designed) special economic zone, a SGZ also involves drastically reducing regulatory burden and regulatory discretion. In this sense, it is a special economic zone plus. On the other hand, some of the policy measures that are typical in a special economic zone such as tax holidays, are not necessary in a SGZ.

Advantages of the SGZ Idea

Because SGZ is only an experiment within the country, it reduces the political risk for the leaders (and hence reduces the political opposition relative to a comprehensive nation-wide reform). Because SGZ is small, enough resources can be concentrated in the first stage to raise the civil servants' salary all the way to an appropriate level. Finally, because SGZ is an experiment, reform measures can be fine-tuned to fit local history and culture.

SGZ is good economics as reduced corruption brings a faster economic growth and an expanded tax base. SGZ is good politics as reduced corruption also brings increased citizen satisfaction.

SGZ also has the advantage of possessing a built-in forward momentum. Once a SGZ becomes successful, people in the rest of the country no longer can say that low corruption is not possible for a country with their history and their culture. So it removes one factor for political inertia and creates a momentum for other regions in the country to emulate. This advantage is not shared with some alternative reform strategies that focuses on reforming some government functions (e.g., tariff or tax collection). So it provides useful complements to other reforms.

How to Implement an SGZ in Practice?

In actual implementation, we can be flexible to some degree. There are a number of variants of the SGZ idea that can be considered depending on a country's conditions.

(1) Two-speed reform.

In some cases, the SGZ idea is just a two-speed or two-track reform strategy. If certain reforms can be implemented on a national scale, so should they be done. But it is often the case that many other reforms are politically too difficult to implement nationally. Rather than doing nothing, we advocate implementing these reforms in an SGZ first.

(2) Municipal Reform Plus

In some countries, municipal reforms are gaining momentum. An SGZ plan can be built on this momentum. Rather than spreading resources across all municipalities (which is too expansive), we advocate that the World Bank or the central government should concentrate the resources to build up one or two success stories first. Once the initial SGZ becomes successful and can payback the initial loans, the list of SGZ can be expanded.

As far as the choice of the first SGZ is concerned, one possibility is to have interested municipalities to nominate themselves as candidates. In exchange for a generous assistance package from the World Bank or the central government (which includes sufficient resources to raise the local civil servants' salaries), the local leaders pledge to adhere to stricter penalty rules if they are discovered to violate regulations or ethic standard, and to implement a broad set of reforms agreed upon with the World Bank or the central government.

(3) Special Economic Zone Plus

As discussed before, some policies in existing special economic zones are also helpful in improving public governance. But other policies in a special economic zone such as generous tax exemption are not necessary in a SGZ.

Special economic zones (under the name of export processing zones, free trade zones, etc.) exist in seventy or so countries, so they are relatively easy to be accepted politically. In many countries, special economic zones are not very successful in part because all the attention has been on offering special economic treatment but not enough attention has been given on building a good public governance in general. In many other countries (and I put China in this category), even though special economic zones have played very useful roles, their usefulness have more or less been exhausted as a place to experiment new economic policies.

For these countries, I advocate that they convert some of the existing special economic zones into SGZs.

(4) Other forms of SGZ

There are other ways to organise some sub-national units into SGZs.

Basic Principles

There are a few basic principles for successfully operating a SGZ. First, whenever possible, a fair market mechanism should be used to allocate resources, to produce and/or procure public goods, to cut red tape, and to reduce the need for permits and licenses. This would limit the opportunities for government officials to take bribes (and to be offered bribes). The reward for civil servants to deliver quality service and not to take bribes should be raised. At the same time, the penalty for civil servants for poor performance and for taking bribes should also be raised and fairly applied.

The World Bank (and/or international financial institution) can play an important role in providing financial and technical assistance, especially at the early stage of the reform. If multiple cities/regions in a country are interested to be a candidate for a SGZ, the World Bank and the National Government can have them bid on it.

Hong Kong, Singapore and other governments in the same geographic region with reputation of strong governance can be invited to participate in providing advice and technical assistance.

The Administrative Architecture of an SGZ

In concrete terms, there are several key aspects of a new administration in the SGZ:

1. The role of government should be redesigned. Many of its roles will be drastically simplified (such as multiple permit/license requirement, or discretionary granting of exemptions to regulations). Some of its other roles will be strengthened (such as maintaining law and order and enforcing rule of law). The principle is that market mechanism should be used to its full extent to allocate resources and to regulate private sector behaviour. All unnecessary permit/license requirements are reduced. All taxes, tariffs and fees are simplified (with the aim of having a low and uniform rate). All unnecessary discretion that may be invested in government officials in the rest of the country are eliminated.

2. Civil service. The top officials of a SGZ should be individuals with high calibre and integrity (chosen by the central government or through local election). Civil servants should be recruited and promoted based on merit.

3. Pay to the civil servants should be appropriately raised to be commensurate with their private sector alternatives (after taking into the account the premium associated with civil servants' job security and their other non-wage benefits). The SGZ administration should at the same time build and maintain a lean and efficient civil service force.

4. Once SGZ is established, auditing and investigation are performed on the efficiency and integrity of the civil servants. Violations of law (including taking bribes) will be prosecuted to the full extent of the law after a due process.

The Role of the World Bank (or other international institutions)

The role of the World Bank is crucial, particularly in the early stage of the reform. The first role is to provide needed technical advice and offer best practice from other countries as models.

Second, the bank can provide needed temporary financial support. Raising civil servants' salaries costs money. In the long run, the tax base in a SGZ should rise through reducing arbitrary tax exemptions by officials and through a rise in investment and output in the zone. The expanded tax base should generate more revenues than what is needed for the initial cost of raising public sector salaries. [Plus, much of the raise is in fact converting civil servants' current illegal and semi-legal income (what the Chinese call "grey income") to legal income.] But in the short run, public sector pay increase may present a problem to a cash-strapped government. Even though the future prospect is improved, the government may have trouble in borrowing from future. In this case, the fiscal help from the World Bank or other institutions is crucial for a successful start of a SGZ.

Comparison with Alternative Programs

There are several alternatives to establishing a Special Governance Zone.

(1) Do nothing. The cost of corruption is high for economic development. Recent earthquakes in Turkey and Taiwan show that corruption kills: Shoddy building were allowed to be built only to collapse when they shouldn't, resulting in massive and unnecessary loss of human lives. For a review of recent studies on the high costs of corruption for economic development, see Appendix 1.

(2) Other "island of integrity" ideas. There are other ideas of implementing anti-corruption reforms in a slice of economy/society. For example, one could envision building a dam, or a water supply line with minimum corruption if sufficient resources are devoted to picking the suppliers and monitoring the construction and service delivery. The problem is that poor governance is often a system-wide phenomenon. Delivery of water involves repeated interaction with police, regulators, tax inspectors, health inspectors and so on. The cost of maintaining a corruption-free water supply line in a generally corrupt environment may be very high. Even when such projects are successful, the benefits to the rest of the economy are limited.

The idea of a special governance zone takes explicit account of the fact that many dimensions of governance (police, regulators, tax policies, quality of public officials) are interrelated. It aims to create a particular kind of "island of integrity," on which multi-dimensional reforms complement each other. One objective of a SGZ is to demonstrate to the rest of the country that better governance can indeed be achieved in a place that shares a common history, institutions and culture with them, and to demonstrate to the leadership that a winnable strategy can take hold and become popular.

(3) Nation-wide Comprehensive Reform. The benefit of a nation-wide reform is obvious: the necessary change can be implemented on a wider scale, which is needed one way or the other in the end for the country to get out of the vicious high-corruption – poor governance cycle. The problem is that a reform as drastic as to change a country's governance structures and institutions is often accompanied with huge uncertainties. A nation-wide reform may look so daunting to national leaders that they often hesitant to start. Those who perceive themselves, correctly or incorrectly, as losers, would likely oppose such reform strongly. So the status quo might very well prevail if the leaders force themselves to contemplate only between nation-wide reform and status quo.

To summarise, if national (or regional) leaders are willing to implement certain reform measures on a nation-wide (or region-wide) scale, we certainly welcome it. In this cases, the main role of SGZs is to experiment with potentially bolder reforms that the leaders are temporarily hesitant to implement nation-wide. If the leaders are not ready to implement national reforms, but willing to try "islands of integrity." In this case, a SGZ supplements sector- or project-specific reforms in a unique way as it allows comprehensive reforms to be experimented within an enclave. If national (or regional) leaders are too risk-averse to start any major reform, a SGZ would be a good starting point.

Concluding Remarks

The SGZ idea reflects a fundamental belief that the quality of public governance in many developing and transition economies can be significantly improved and corruption can be drastically reduced. The actual execution of any reform program carries risks. Our proposal is designed to achieve several objectives: to start the reform program within an area small enough to contain unpredictable consequences, to experiment and fine-tune various components of the anti-corruption program in practice, and by the power of example, to build momentum to implement a nation-wide governance-improving program.

Appendix 1: High Costs of Poor Public Governance for Economic Development
Appendix 2: Causes of Poor Public Governance
Appendix 3: Examples of Special Economic Zones Around the World
Appendix 4: References to Related Literature

Appendix 1: High Costs of Poor Governance for Economic Development [1]

"Controlling corruption " was one of the major policy prescriptions made to nations recently in crisis. Yet there are also people who believe that corruption can work like “grease,” speeding up the wheels of commerce. What does a careful examination of facts and data tell us? This appendix reviews recent studies on the consequences of corruption on economic development.

1.1 Measuring Corruption

This appendix focuses on corruption in the economic sphere involving government officials. Corruption here is defined as government officials abusing their power to extract/accept bribes from the private sector for personal benefit. This is to be distinguished from political corruption (e.g., vote-buying in an election, legal or illegal campaign contributions by the wealthy and other special interest groups to influence laws and regulations), and bribes among private sector parties.

By the very nature of corruption (secrecy, illegality, variations across different economic activities), it is impossible to obtain precise information on the extent of corruption in a country, unlike, for instance, measuring inflation. This difficulty also precludes a precise grading of countries according to their relative degree of corruption. That said, one can still get useful information on the seriousness of corruption in a country by surveying experts or firms in that country. Like pornography, corruption is difficult to quantify, but you know it when you see it. There are several survey-based measures of “corruption perception” that are increasingly visible now. I will describe four of them, in part because they cover relatively wide sample of countries, and in part because they are used in the research studies that I will review below.

(A) <u>Business International (BI) Index</u> Business International Index is based on surveys of experts/consultants (typically one consultant per country) conducted during 1980-83 by Business International, now a subsidiary of the Economist Intelligence Unit. It ranks countries from one to ten, according to “the degree to which business transactions involve corruption or questionable payments.”

(B) <u>International Country Risk Guide (ICRG) Index</u>. Produced every year since 1982 by Political Risk Services, a private international investment risk service. The ICRG corruption index is apparently based on the opinion of experts and supposed to capture the extent to which “high government officials are likely to demand special payments” and to which “illegal payments are generally expected throughout lower levels of government” in the form of “bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans.”

[1] This appendix draws from Wei (1999) and Wei and Zeckhauser (1999).

(C) Global Competitiveness Report (GCR) Index Unlike the BI and ICRG indices, the GCR Index is based on a 1996 survey of firm managers, rather than experts or consultants. Sponsored by the World Economic Forum (WEF), a Europe-based consortium with a large membership of firms, and designed by the Harvard Institute for International Development(HIID), this survey asked the responding firms about various aspects of "competitiveness" in the host countries where they invest. 2381 firms in 58 countries answered the question on corruption which asked the respondent to rate the level of corruption on a one-to-seven scale according to the extent of "irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection or loan applications." The GCR corruption index for a particular country is the average of all respondents" ratings for that country.

(D) Transparency International (TI) Index Produced annually since 1995 by Transparency International, an international non-governmental organisation dedicated to fight corruption worldwide, the index is based on a weighted average of approximately ten surveys of varying coverage. It ranks countries on a one-to-ten scale.

As a survey of surveys, the TI index has its advantages and disadvantages. If the measurement errors in different surveys are independent and identically distributed (iid), the averaging process used to produce the TI index may reduce the measurement error. But iid assumption may not hold. Moreover, since different surveys cover different subsets of countries, the averaging process may introduce new measurement errors when cross-country rankings are produced. One should also note that, as the TI indexes in different years are derived from potentially different set of surveys, they should not be used to measure changes in corruption level over time for a particular country.

As examples of the corruption ratings according to these sources, I reproduce below the BI, TI and GCR indices for a subset of countries. In the original indices, large numbers refer to low corruption (e.g., the BI-index value for Singapore is 10). To avoid awkwardness in interpretation, I re-scale all the indices in Table 1 so that low values imply low corruption (e.g., the re-scaled BI index value for Singapore is 1). To facilitate comparisons, I have re-scaled the GCR ratings from the original 1-7 range to 1-10 range in the table.

Table 1: Corruption Ratings for Selected Countries

	BI (1-10 Scale	TI97 (1-10 scale)	GCR97 (1-10 scale)
Asian countries			
Singapore	1	2.34	1.84
Hong Kong	3	3.72	2.31
Japan	2.25	4.43	2.50
Taiwan	4.25	5.98	3.43
Malaysia	5	5.99	5.01
S. Korea	5.25	6.71	5.50
Thailand	9.5	7.94	6.13
Philippines	6.5	7.95	7.98
China	n.a.	8.12	6.73
India	5.75	8.25	7.32
Indonesia	9.5	8.28	8.40
Pakistan	7	8.47	n.a.
Bangladesh	7	9.20	n.a.
Non-Asian countries			
Canada	1	1.90	1.84
United Kingdom	1.75	2.72	1.71
Germany	1.5	2.77	1.92
United States	1	3.39	2.11
France	1	4.34	2.77
Mexico	7.75	8.34	5.83
Kenya	6.5	8.70	7.08
Colombia	6.5	8.77	6.81
Russia	n.a.	8.73	7.08
Nigeria	8	9.24	7.83

Notes:
(1) See the text immediately preceding the table for sources on BI, TI and GCR indices.
(2) In the original BI, TI and GCR indices, small numbers imply more corruption. All the indices in the table have been re-scaled so that large numbers imply more corruption. For BI and TI indices, the values in the table = 11-original scores; and for the GCR index, the values in the table = 8-original scores.
(3) The GCR ratings are rescaled and transformed. The values in the table = (7-original scores)*3/2+1.

It is worthwhile to emphasise again that these indices are people's perception, as opposed to objective measures of corruption. Perception can be different from reality. However, two things may be worth noting. First, for many questions such as how corruption affects foreign investment, perception -- and thus perhaps our measure -- is what actually matters. Second, despite the very different sources of the surveys, the pairwise correlations among the indices are very high. For example, according to Wei (1997b), the correlation between the BI and TI indices and that between BI and GCR indices are 0.88 and 0.77, respectively. These high correlations suggest that statistical inference on the consequences of corruption is not very sensitive to the choice of corruption index.

1.2 Measuring the Costs of Corruption

We now review some recent studies that systematically examine the consequences of corruption on the economic development.

On domestic investment

A recent story in China Youth Daily may be a representative case of how bureaucratic corruption and extortion can kill a small business[2]. Huang Shengxin, a 36 year old former soldier and recipient of a Class III military medal, was a private business owner in Guangxi Province's Fangchenggang City in Southwestern China. When he left the army in 1982, he thought he would go into the restaurant business. Through his and his family's long hours of hard work, his "Changxin Restaurant" had developed a good reputation and even won an official honourable designation from the county government. Huang himself was designated a National Outstanding Private-Sector Worker in recognition of his success in business.

This was when the trouble began. Bureaucrats and their relatives loved the restaurant. They paid countless visits over the years, sometimes in the name of work inspection. The problem is that they did not pay the bills. By Huang's account, by February 1997, the County Government of Tanying, where the restaurant was located, owed him 80,665 Chinese yuans in unpaid bills. On May 20, 1997, burdened by his inability to return the restaurant to its profitable past, Huang sadly folded "Changxin Restaurant."

Let us now turn to some statistical evidence based on the data on a large cross-section of countries. In a regression of total investment/GDP ratio, averaged over 1980-1985, on a constant and the corruption index, the point estimate of the slope is 0.012 (Table IV, in Mauro, 1995, p696). To illustrate the quantitative effect of corruption, let me do a sample calculation by taking literally the point estimate and the corruption ratings. If Philippines could reduce its corruption level to the Singapore level, other things being equal, it would have been able to raise its investment/GDP ratio by 6.6 percentage points (=(6.5-1)X0.012). This is quite a substantial increase in the investment.

[When Mauro used linguistic and ethnic fractionalisation as an instrumental variable for corruption in the above regression, he obtained an even larger point estimate on the effect of corruption on investment/GDP ratio, about twice as large.]

On foreign direct investment

In examining a data set of bilateral foreign direct investment in the early 1990s from fourteen major source countries to forty one host countries, Wei (1997) studies the effect of corruption on host countries' ability to attract foreign direct investment. He uses a modified Tobit framework which takes into account the fact that some host countries

[2] Reproduced in New World Times, (in English, circulated in the Greater Washington DC area) April 24, 1998, p18, which attributed it to Zhang Shuangwu, China Youth Daily without giving the original date of publication.

practically do not attract any foreign investment from some major source countries. He controls for the size, the level of development of the host country, the historical/linguistic linkage as well geographic proximity between the source and host countries, as well as general source country characteristics. He found clear evidence that corruption in host countries discourages foreign investment (the coefficients on corruption and host country tax rate are -0.09 and -1.92, respectively). Using the point estimates in the paper and the BI-corruption ratings in Table 1, let me provide a sample calculation as an illustration. If India could reduce its corruption level to the Singapore level, its effect on attracting foreign investment would be the same as reducing its tax rate by 22 percentage points [=(5.75-1)x0.09/(0.01x1.92)].

Many Asian countries offer substantial tax incentives to lure multinational firms to locate in their countries. For example, China offers all foreign invested firms an initial two years of tax holiday plus three subsequent years of half of the normal tax rate. This research suggests that these Asian countries would have attracted just as much or even more foreign investment without any tax incentive if they could get domestic corruption under control.

In fact, Wei(1995) documented that, contrary to a cursory reading of the news, China is an underachiever as a host of direct investment from five major source countries (the U.S., Japan, Germany, the United Kingdom, and France), once one takes into account its size, proximity to some major source countries and other factors. Wei(1998) suggests that high corruption in China may very well have contributed to this.

<u>On economic growth</u>

If corruption reduces domestic investment and reduces foreign investment, one would think that it would also reduce the economic growth rate. Mauro examined how the conditional growth rate (that is, the growth rate given the country's starting point and population size in a Solow-Barro style cross-country growth regression framework) is affected by corruption. He found that the data reveals just that relationship.

To illustrate the quantitative effect, let me take the point estimate in Column 6, Table VII of his paper. If Bangladesh were able to reduce its corruption to the Singapore level, its average annual per capita GDP growth rate over 1960-1985, would have been higher by 1.8 percentage points (=0.003x(7-1)). Assuming its actual average growth rate was 4% a year, its per capita income by 1985 could have been more than 50% higher[3].

Using an instrumental variable approach, such as in Column 8 in Table VII of Mauro's paper, one would get even larger effect of corruption on growth, though the result becomes borderline significant at the 15% level.

[3] $(1+ 0.018/1.04)^{25} - 1 = 0.54$. Lower assumption on its actual growth rate (say 3% a year) would result in even greater improvement in 1985 per capita income from reducing its corruption level.

<u>On the size and composition of government expenditure</u>

Tanzi and Davoodi (1997) carried out a systematic study on the effect of corruption on government's public finance. There are several important findings. (A) Corruption tends to increase the size of public investment (at the expense of private investment) because many items in public expenditure lend themselves to manipulations by high level officials to get bribes. [It should be noted that more public spending itself coupled with weak institutions could also leads to more corruption. Hence the direction of causality could run from spending to corruption as well as the reverse. More research is needed to separately quantity both effects.] (B) Corruption skews the composition of public expenditure away from needed operation and maintenance towards expenditure on new equipment (see also Klitgaard, 1990, for this point). (C) Corruption skews the composition of public expenditure away from needed health and education funds, because these expenditures, relative to other public projects, are less easy for officials to extract rents from.(D) Corruption reduces the productivity of public investment and of a country's infrastructure. (E) Corruption may reduce tax revenue because it compromises the government's ability to collect taxes and tariffs, though the net effect depends on how the nominal tax and other regulatory burdens were chosen by corruption-prone officials (see Kaufmann and Wei, 1998).

Similarly, Mauro (1997) systematically examined the relationship between corruption rating (according to ICRG) and various components of government spending. He found that corruption tends to skew public expenditure away from health and education, presumably because they are more difficult to manipulate for bribe purposes than are other projects.

Let me illustrate some of the Tanzi-Davoodi findings by looking at the effect of a change in corruption on a variety of indicators, averaged over 1980-95. An increase in corruption from the Singapore level to Pakistan level would increase the public expenditure/GDP ratio by 1.6 percentage points (Column 2 of Tanzi-Davoodi’s Table 1); and reduce government revenue/GDP ratio by 10 percentage points (Column 2 of Tanzi-Davoodi’s Table 2).

An increase in corruption reduces the quality of roads, and increases incidence of power outages, telecommunication faults, and water losses. Specifically, an increase in corruption from the Singapore level to the Pakistan level would be associated with an extra 15 percent increase of roads in bad condition, after controlling for a country's level of development and its public investment to GDP ratio (Column 2 in Table 5).

<u>On Domestic Financial System</u>

The financial sector is weak in many countries in the recent crisis. Might corruption be implicated? Corruption could obscure the meaning and reliability of publicly disclosed accounting numbers. Corruption can also skew the financial resources away from the most efficient resources towards less efficient, but politically better connected firms.

Using a clever data set that measures the strength of Indonesian firms' connection to Suharno and his family, Fisman (1998) showed that the stock market valuation of the politically well-connected firms tend to lose value sharply each time there was a rumour about the health problem of Suharno. This suggests that the market does not believe that the resources allocated to these firms are justified except for the abnormal returns associated with their political connection. Using the data from the 1997 GCR survey, Wei and Sievers (1999) reported a clear pattern: corrupt countries are more likely to have inadequate government supervision of the financial system, and are also more likely to have vulnerable banks.

On Turning Firms to the Underground Economy

So far, the evidence presented is related to reduction in measured foreign and domestic investment, and measured growth rate. By definition, these capture the behaviour of firms that stay in the formal economy, or "above the ground." But, in response to high corruption, economic activities could migrate from above-the-ground to underground. Utilising evidence from survey data, particularly those in Eastern Europe and former Soviet Union, Johnson, Kaufmann and Shleifer (1997) and Johnson, Kaufmann and Zoido-Lobaton (1998) show that unofficial economy in a corrupt environment is pervasive.

The unofficial economy grows at the expense of the official economy. Taking into account this effect has important implications. On the one hand, the effect of corruption on investment and growth may be not as large as if base all measures only on firms in the formal sector. On the other hand, a high and growing unofficial economy implies a low and shrinking tax base, and a poor and deteriorating public goods provision.

On urban bias, poverty and other consequences

The desire to extract bribes distorts the behaviour in a variety of ways. In particular, less 'manipulable' public projects often do not get budgeted, even if they have high social value. Large scale defence projects are often favoured by politicians and bureaucrats because their size and secrecy are often conducive to kickbacks[4].

Defence contracts are often budgeted at the expense of rural health clinics specialising in preventive care (Gray and Kaufmann, 1998). To the extent that rural residents tend to have lower incomes than their urban counterparts, this corruption-induced policy bias may worsen the income distribution, and at the same time, divert the needed resources away from the countryside.

The last example shows that poverty can be made worse and more persistent by corruption. In fact, one can expect that corruption would make poverty worse in cities as well as in rural areas, as poor people have less means to bribe officials and less political power in general. Rose-Ackerman (1997) listed several channels through which poor people are hurt by corruption. (A) The poor will received a lower level of social services.

[4] At the writing of this paper (April, 1998), a Taiwanese general in charge of procurement is under investigation for vastly overpaying for a French-made warship in exchange for huge bribes. Similarly, India=s arms purchase from Sweden gave birth to one of the most spectacular corruption scandals in both countries= national politics.

(B) Infrastructure investment will be biased against projects that aid the poor. (C) The poor may face higher tax or fewer services. (D) The poor are disadvantaged in selling their agricultural produce. And (E) their ability to escape poverty using indigenous, small scale enterprises is diminished.

Using cross-country regressions over the period 1980-97, Gupta, Davoodi, and Alonso-Terme (1998) show that high and rising corruption, as measured by the ICRG index, increases income inequality and poverty. Several channels have been identified in the paper through which corruption worsens the (relative and sometimes absolute) poverty: corruption lowers economic growth, biases the tax system to favor the rich and well-connected, reduces the effectiveness of targeting of social programs, biases government policies towards favouring inequality in asset ownership, lowers social spending, reduces access to education by the poor, and increases the risk of investment by the poor.

Does Corruption “Grease” the Wheels of Commerce?

While the previous evidence has clearly showed that domestic investment, foreign investment and economic growth are lower in more corrupt countries, one sometimes still hears a version of “virtuous bribery” story or “value-creating corruption” theory. In particular, some say that bribes often work as “grease” that can speed of wheels of commerce. In a country that is rife with bad and heavy regulations, the opportunity to offer bribes to circumvent bad government control is like deregulation, and hence can be good.

Kaufmann and Wei (1998) argues that this view is true only in a very narrow sense when the bad regulation and official harassment are taken as exogenous. Officials often have lots of leeway to customise the type and amount of harassment on individuals firms. Tax inspectors may have room to over-report taxable income (see Hindriks, Keen and Muthoo, 1998). Fire inspectors can decide how frequently they need to come back to check fire safety in a given year. Using data on a survey of nearly 2400 firms in 58 countries, Kaufmann and Wei show that, even within a country, managers of the firms that pay more bribes on average waste more, rather than less, time negotiating with government officials. It is likely that there was, on average, a disadvantage to those paying bribes as well as to the society in general. This evidence supports the idea of “tailored harassment” and “endogenous obstacles,” and thus rejects the hypothesis of beneficial grease. Hence, what might appear to be value-creating bribery in a partial equilibrium may very well be value-reducing in a general equilibrium.

Why is Corruption So Taxing?

Why is corruption so damaging to economic activities relative to a revenue-equivalent tax system? The answer lies in the nature of corruption. Unlike tax, it is inherently secretive and arbitrary. The implicit contract between the briber and bribee cannot be enforced by a reliable court system. Shleifer and Vishny (1993) theorised that countries with a more disorganised corruption would be particularly inhospitable to economic growth. Wei (1997b) shows that, after holding level of corruption constant, countries with a more arbitrary corruption structure receives significantly less foreign direct investment.

1.3 Culture: Is Asia Special?

Denis Osborne's (1997) paper documents clearly the possible differences in attitude towards corruption and bribery in different countries and times. Tanzi (1995) argued that firms in some countries are culturally less inclined to have arms-length economic relationships, which in turn may lead to more ingrained corruption.

While there is ample evidence that different people may have different views with respect to bribes versus gifts[5], or group loyalty versus self-interest, Osborne also observed that many of these differences may not be inherently cultural. For example, seemingly greater tolerance of bribes in some communities may be a result of the short horizons of the official due to uncertainty about future in a time of rapid change, or pitifully low salaries of civil servants that are regarded by the officials or ordinary citizens on the street as "unfair" (Osborne, 1997, P22). These should not be properly defined as "cultural." Furthermore, Osborne documented that throughout human history, from ancient Greece, William Shakespeare in the West, to Confucianism and Hinduism in the East, one can find repeated expressions of distaste by scholars and ordinary people for corruption and dishonesty.

We do not have enough good, detailed country studies on the interaction among culture, corruption and economic development. Pasuk Phongpaichi and Sungsidh Piriyarangsan's book, <u>Corruption and Democracy in Thailand</u>, bravely as well as brilliantly offers an in-depth study of corruption in Thailand. At the beginning of the book, the authors reviewed many early studies of the subject, many of which attribute Thai corruption to cultural heritage (see their description of the work by Lucien Hanks (1982), Fred Riggs (1966), Edward Van Roy(1970), Thinapan Nakata (1977), and Clard Neher (1977). With a large-scale survey, the Pasuk-Sungsidh book concludes that Thai people do have a higher limit on the amount of money officials may take from the private sector before it is considered corruption.

In the previous section, we cited evidence that foreign investors on average invest less in more corrupt countries. Some may suspect that East Asia must be an outlier since it seems such a popular destination for foreign investment. Let us note here that, yes, foreign investment in East Asia has been big, but East Asia is a large market and has been growing faster than the world average. Many East Asian countries also have low wages. On these factors alone, East Asia naturally attracts more foreign investment. To see whether foreign investors are less sensitive to corruption in Asian host countries, one needs to control for these factors. A section in Wei (1997) did exactly that. The evidence shows that there is no support for the Asian exceptionalism hypothesis. Rather, investors from the major source countries are just as averse to corruption in East Asia as elsewhere. Putting it differently, among East Asian host countries, foreign investors still prefer to go to less corrupt countries other things being equal. One should note that the paper does not compare whether domestic and foreign investors may have different degrees of sensitivity to corruption.

[5] See also Rose-Ackerman (1998a) for an illuminating discussion of bribes versus gifts.

Appendix 2: Causes of Poor Public Governance

Because corruption is a crime in most countries' penal codes, it is common to emphasise the role of law enforcement in the fight against corruption. While there is no question that law and law enforcement are important, we should note that it is at least as important to look into the root causes of corruption, the institutional environment and the incentive structure under which corruption thrives.

Several important theoretic works (e.g., Rose-Ackerman, 1978; Tanzi, 1998; etc) have pointed out factors that affect a country’s level of corruption. I will first review these factors from the theoretical viewpoints and summarise recent empirical attempts at testing and quantifying the roles of these factors.

A. Opportunities induced by Government’s Role in the Economy

While we want to recruit moral people to be government officials, economists are never tired of pointing out the importance of minimising the institutionalised opportunity for officials to take bribes. The more discretion government officials have over the operation of business or lives of citizenry, the more likely corruption would occur and flourish, other things being equal. Labyrinthine government regulations create fertile grounds for government officials to extract rents, whereas an economy where government’s role is minimal is less likely to breed corruption.

This point is almost elementary. If it requires obtaining a license and paying a tariff before a firm can import certain goods from abroad, then officials deciding who gets a license and granting tariff exemptions have the opportunity to extract bribe payments. If no license or tariff is needed, no firm would pay bribes before importing.

Tanzi’s excellent survey (1998) offers a number of concrete descriptions of where opportunity for corruption may arise as a result of government (over-)regulation. For example, in the taxation area, he pointed out that the more difficult it is to understand the laws, the more likely there is corruption; the more discretion given to tax administrators over the granting of tax incentives, determining tax liabilities, and selecting audits and litigations, the more likely there is corruption.

Similarly, the size of government spending and the procedure used in allocating the expenditure also significantly affects the opportunity for corruption. Also, if a government is involved in providing certain goods and services at subsidised prices, say foreign exchange, credit, public housing, educational opportunities, or water and electricity, then officials with the duty to decide also have the opportunity to pocket a fraction of the implicit subsidy (e.g. the difference between the market value of the goods or services and the price the government is asking), in the form of bribes extracted from the recipient of the subsidised goods or services.

In the papers both by Mauro (1995) and by Kaufmann and Wei (1998), it is shown that the corruption index and the index of government regulation is positively correlated.

Many countries in Asia have been pursuing an active industrial policies. Industrial policies by their very nature involve discretion on the part of government officials, in terms of which industry to support, which firms within a industry to support, how to allocate subsidised loans, grants, tariff rebates, and so on. Ades and Di Tella (1997) argue that, logically, industrial policies can promote corruption as well as investment. Using data on indices of corruption and industrial policy across a number of countries, they then show that corruption is indeed higher in countries with more active industrial policy. The negative effect of corruption induced by the industrial policy seems large (probably on the order of 56% to 84% of the direct beneficial effect), and therefore should not be neglected in any cost-benefit analysis of industrial policies.

Before leaving this subsection, it should be pointed out that, while less discretion by government officials reduces the scope for corruption, we are not advocating abolishing all the regulations. Many regulations and even bureaucratic discretion serve useful functions in the society. The point is that we should be mindful of the implications for corruption when designing government regulations.

B. Civil servant recruitment and promotion system

The moral character and quality of government officials are certainly another very important determinant of the extent of corruption in a country. The quality of the bureaucrats, in turn, is highly related to how they are recruited and promoted. In a country where nepotism and patronage are rampant, or government posts are sold explicitly or implicitly, bureaucrats will be less competent and less well-motivated because success depends on advantages gained by connection or bribing superiors rather than merit, and will be very vulnerable to corruption. The German sociologist Max Weber (1947) made this point amply clear.

Rauch and Evans (1997) composed indices of degree of meritocratic recruitment and promotion for civil servants in 35 countries (as well as their average wages relative to private sector alternatives). They then show that the cross-country ratings a la the International Country Risk Guide are statistically significantly related to the way civil servants are recruited and promoted. Meritocratic recruitment is most important for reducing corruption, followed by meritocratic promotion and security of employment.

B. Compensation for civil servants

It has been long recognised that it is naive to give people power, pay them a pitiful wage, and expect them not to use their power for personal gains. Because of this realisation, Singapore, starting in the 1960s under the leadership of then Prime Minister Lee Kuan Yew, and Hong Kong, starting in the late 1970s, began to pay their civil servants well, sometimes above their best alternative in the private sector. For example, it is often noted, fondly or not, that the Singapore's cabinet ministers' salaries are pegged to those of the CEOs in the largest multinational firms in the world. The Singapore Prime Minister's pay is several times that of the United States President. Many scholars (and the governments in Singapore and Hong Kong) contend that this wage policy is in an important way responsible for the very low corruption levels in these two economies. [Singapore is often rated as one of the least corrupt countries in many surveys.]

The view that high salaries to civil servants help to deter corruption is certainly not restricted to Asia. For example, according to Tanzi (1998), Assar Lindbeck (1998) attributes the low corruption in Sweden during the 1870-1970 period partly to the fact that high-level government administrators earned 12-15 times the salary of an average industrial worker.

Systematic and statistical examination of the evidence on the connection between corruption and public sector wage is a relatively recent undertaking. In a cross-country regression study cited above, Rauch and Evans (1997) did not find robust support for the role of high salaries. But the World Bank's World Development Report 1997 and the working paper by Van Rijckeghem and Weder (1997) do report evidence that countries with poorly paid public officials tend towards higher corruption.

What is important here is not the absolute level of civil servants' wages, but their values relative to the best private sector alternatives. In Van Rijckeghem and Weder's paper, given the constraint of data availability, they take the average civil servant pay relative to average manufacturing sector wage, as their measure of officials' incentive to resist corruption. Using a regression technique, they found a negative and statistically significant correlation between public sector's relative wages and the extent of corruption involving government officials. Based on their point estimates, they also calculated, for each country in their sample, the ratio of public to private sector wages that is needed in order to reduce the corruption to Singapore level, which has the lowest corruption grade. It maybe instructive to reproduce the part of their Table 6 below that reports the actual versus the warranted relative wages for the Asian and other selected countries in the sample. Like all other projections in this paper, the numbers below are meant to be illustrative and not to be taken literally.

Table 2: How Much Increase in Civil Servants' Legal Pay Is Needed if one takes Van Rijckeghem - Weder (1997) calculation literally?

Country	Public Sector relative to Manufacturing Sector Wage: Actual	Calibrated ratio to reduce corruption to Singapore level	
	(1)	(2)	(3) Needed increase in Public Sector's Legal Pay by taking Van Rijckeghem-Weder literally
Asian Countries			
Singapore	3.49	3.49	0%
Hong Kong	1.79	2.85	59%
India	1.09	5.40	395%
Korea	1.91	7.08	271%
Sri Lanka	0.85	5.07	496%
Non-Asian Developing Countries			
Mexico	0.50	5.04	908%
Turkey	0.92	5.38	498%
Colombia	0.64	4.87	660%
Kenya	0.90	5.36	496%
Ghana	0.63	6.77	975%

Source: The first two columns are from Table 6 in Van Rijckeghem and Weder (1997). Column (3) is author's calculation based on the first two columns.

A few things are particularly worth noting in the table. First, to really eradicate corruption (or to reduce it to the Singapore level), one needs to raise the public sector's pay by a substantial margin (sometimes by 500% or even 900%). Although government officials in Asia are comparatively better-paid than some of their African and Latin American counterpart and hence a smaller increase is needed, the 200% to 500% increase may be still fiscally infeasible for these countries. Second, we do not know for sure if the warranted salary increase should raise the pay to the government officials above their private sector alternatives[6]. If they do, there is a serious equity issue even if these

[6] One should note that the true private sector alternatives for senior government officials with comparable skills and responsibilities are likely paid a lot more than the average wage in the manufacturing sector. But the manufacturing sector wage is the only wage data available on a consistent cross-country basis. Hence there is potential measurement error on the denominator. On the numerator, one should note that only civil servants wage data were found by the authors. In many countries, fringe benefits of the civil servants (e.g., free housing, maids, and expense accounts) can be large relative to official salaries. So there can be measurement errors on the numerator as well. The assumption in the study is that, across countries, the manufacturing wage and the salaries of the private sector alternative of government officials are highly

governments have the money (or have the ability to transform most of the currently illegal bribes to the incremental taxes needed to raise the civil servants' legal pay). Third, if civil servants are paid a higher salary than their private sector alternatives, many people may pay a bribe to be chosen for these public jobs. So the high pay policy itself may create new type of corruption. Forth, extortion and bribe-taking practices could have become part of the bureaucrats' work culture and habit, so that increased legal pay may not do much to reduce corruption, at least initially.

To sum up, raising salary of public servants is important to fight corruption. But is has to be one component in a multi-component comprehensive package. We now turn to another important component below.

D. Legal system, "watch-dog" organisation, "hot-line," client surveys, free press and democracy.

In any fight against corruption, the ability for a country to detect acts of corruption and to prosecute those guilty of committing them is essential to deter corruption.

There are several channels through which detection and punishment capacity is realised. Let me mention seven of them here: (A) An independent and impartial judicial system, (B) an official anti-corruption agency such as Hong Kong's Independent Commission Against Corruption (ICAC)[7], (C) existence of grassroots "watchdog" organisations, (D) a telephone "hot line" as those in the United Kingdom and Mexico that allow citizens to complain directly to the government, (E) public opinion surveys such as those carried out by Public Affairs Centre in Bangalore, India or by the World Bank's Economic Development Institute in other countries that register the public's attitude, particularly those of the poor, towards corruption, (F) freedom of the press to bring to light any official corruption, and finally (G) democracy that serves the dual purpose of throwing corrupt officials out of power by the populace and protecting those individuals and organisations that dare to expose corrupt officials. All of these channels are potentially important. There are some case studies and much anecdotal evidence that demonstrate both effectiveness in specific countries and time periods, and suggestions on how to implement them[8]. It seems possible that the extra revenue collected by the government as a result of the actions of the various anti-corruption bodies can exceed the cost of these bodies.

While the intuition for the importance of these channels seems straightforward, so far there is very little systematic statistical analysis of their relative importance for a broad sample of countries. Such will be a very fruitful future research topic.

---

positively correlated. Furthermore, the fringe benefits plus official wages are highly correlated with the civil servants' official wages.

[7] See Quah (1989 and 1993) for a discussion of Hong Kong and Singapore=s anti-corruption measures along this and other lines.

[8] For example, see the cases presented at the Ninth International Anti-Corruption Conference in Lima, Peru, in September, 1997.

E. International Pressure

There are two kinds of international pressure that can be brought to bear on the corruption problem. First, international organisations such as the United Nations Development Program, the World Bank, the International Monetary Fund, the Asian Development Bank, and the like, can provide persistent moral persuasion as well as technical assistance[9] to induce or help countries in their fight against corruption. Various conferences on good governance and corruption organised by the UNDP, the World Bank and so on are useful. Cutting off loans or threatening to cut off loans by the IMF or World Bank on the ground of corruption in recipient countries may be even more effective on the margin in some cases.

The second channel is concerted international effort to criminalise the offering of bribes by multinational firms to host countries' officials. So far, the United States has been the only major source country of international direct investment that has an enforced law -- The Foreign Corrupt Practices Act (FCPA) of 1977 -- that prohibits its companies from bribing foreign officials. For most other major source countries in the OECD, not only it is not illegal to bribe foreign officials, it is, up until very recently, tax-deductible[10]. The U.S. law has not been very effective in reducing corruption in foreign countries, mainly because companies from other countries are too eager to pick up the business that the U.S. firms miss due to the law[11]. Corruption-prone foreign officials do not feel enough pressure to change their behaviour even if they are genuinely interested in attracting foreign investment into their countries. An international treaty that bans foreign corruption can strengthen the collective ability of all major multinational firms not to pay bribes. They are more likely resist demand of bribes if they can be confident that they will not lose business to their competitors as a result.

It should be pointed out that we should not have any romantic hope on the degree of effectiveness of international pressure. First, the mandates of almost all international governmental organisations place some limits on how much anti-corruption objective can be pursued in the organisations' activities. If the World Bank were to suspend lending to countries with severe corruption ratings according to the Transparency International, it would have to stop half or more of its loans. That is not realistic as it would contradict its other very important objectives and possibly the survival tendencies of the organisations.

Second, and more importantly, domestic efforts and domestic institutions ultimately determine the success of any anti-corruption program. If government officials do not intend to seriously reduce corruption, they would simply not request a loan if the international organisation requires corruption reduction as a prerequisite.

[9] Proper procurement guidelines are an example of this.

[10] Britain has a 1906 law that can be interpreted as prohibiting its firms from bribing foreign officials. But it is effectively unenforced.

[11] Hines (1995) found that the U.S. firms do invest less in more corrupt countries. Wei (1997a) found that U.S. firms are not very different from those from other OECD source countries in this regard, and hence U.S. firms' behavior may not be attributable to the FCPA. A Wall Street Journal article (September 29, 1995), "AGreasing Wheels: How U.S. Concerns Compete in Countries where Bribes Flourish?" suggests that some firms may indeed evade the requirement of the law.

So while the international pressure is useful and should be applied whenever and wherever possible, it should be regarded as supplemental to other domestically-based reforms.

Concluding Remarks

The fight against corruption has to be multi-fronted. While laws and law enforcement are indispensable, countries serious about fighting corruption should also pay attention to reforming the role of government in the economy, particularly those areas that give officials discretionary power which are hot beds for corruption. Recruiting and promoting civil servants on a merit basis, and paying them a salary competitive to private sector alternatives help to attract high quality, moral civil servants. International pressure on corrupt countries, including criminalising bribing foreign officials by multinational firms, is useful. But the success of any anti-corruption campaign ultimately depends on the reform of domestic institutions in currently corrupt countries.

Appendix 3: Examples of Special Economic Zones Around the World

Country	City	Type
Antiqua		FZ
Argentina	Comodoro Rivadavia	FTZ
	Zona Franca Santafesina	EPZ
Australia	Darwin	TDZ
Bahama	Grand Bahama	FTZ
Bangladesh	Dhaka	EPZ
Belize	Santa Elena	FTZ
Brazil	Rio de Janeiro	EPZ
Bulgaria	Bourgas	FZ
	Rousse	FZ
Chile	Iquique	FTZ
China	Tianjin	EDA
	Guangzhou	FTZ
	Shenzhen, Zhuhai, Shantou, and Xiamen	
	Shanghai Waigaoqiao	FTZ
Colombia	Bogota	
Costa Rica		FZ
Croatia	Zagreb	EFZ
	Rijeka	
Ciracap	Willemstad	
Dominican Republic	Parque Industrial Itabo	FTZ
Ecuador	Esmereldas	FZ
Egypt	Cairo	
Ghana		EPZ
Honduras	Indhelva	
Hong Kong		
Hungary	Budapest	SEZ
India	Cochin, Kerala	EPZ
	Madras, Tambaram Madras	EPZ
	Falta, West Bengal	EPZ
	Kandla, Gujarat	EPZ
	NOIDA, Distt. Ghaziabad	EPZ
	Bombay	EPZ
	Visakhapatnam	EPZ
Indonesia	Cakung	BZ
	Tanjung Prioka	BZ
	Jakarta	BZ
Iran	Tehran	FZ
Jamaica	Montego Bay	FZ
Japan	Tokyo	
	Okinawa	FTZ
Jordan	Amman	FZ
Kazakhstan	Lisakovsk	SEZ
	Kyzylorda	SEZ

Kenya	Nairobi	EPZ
Korea	Masan	FEZ
	Seoul	EPZ
Kyrgyz		FEZ
Latvia	Liepaja	SEZ
	Riga	
Lithuania	Klaipeda	FEZ
	Siauliai	FEZ
Malaysia	Kuala Lumpur	
	Pasir Gudang	
Mauritius		EPZ
Mexico	Juarez	
Morocco		FTZ
N. Cyprus	Famagusta	FZ
Nigeria	Garki	EPZ
Pakistan	Karachi	EPZ
Panama	Colon	FZ
Philippines	Manila	FEZ
Poland	Suwalki	SEZ
Portugal	Madeira	FTZ
Romania	Constantza	FZ
Kaliningrad	Kaliningrad	FEZ
Russia	Moscow	FZ
	Nakhodka	FEZ
Senegal		EPZ
Spain	Barcelona	
	Cadiz	FTZ
Sri Lanka		EPZ
Sudan	Khartoum	FZ
Taiwan	Kaohsiung	EPZ
Tanzania		FEZ
Turkey	Ankara	FZ
	Antalya	FZ
	Mersin	FZ
	Aegean	
	Istanbul Ataturk Airport	FZ
	Trabzon	FZ
	Instanbul - Leather	FZ
	Eastern Anatolia	FZ
	Mardin	FZ
	ISE Istanbul International Stock Exchange	FZ
	Izmir Menemen - Leather	FZ
	Rize	FZ
	Samsun	FZ
	Istanbul Thrace	FZ
	Kayseri	FZ
	Europa	FZ

	Gaziantep	FZ
	Adana Yumurtalik	FZ
UAE	Dubai	FZ
	Ras Al Khaimah	FTZ
	Fujairah	FZ
	Hamriyah	FTZ
Uganda		EPZ
Ukraine		SEZ
Uruguay	Montevideo	FTZ
USA	Rio Grande City	FTZ
Venezuela	Valencia	
Vietnam	Ho Chi Minh	FZ
Yugoslavia	Belgrade	FZ
Zimbabwe		EPZ

* This list is preliminary. Many of these locations (cities) and types are yet to be verified by checking a government official website, assuming that an official website exists.

SEZ: Special Economic Zone
EPZ: Export Processing Zone
FTZ: Free Trade Zone
FEZ: Free Economic Zone
FZ: Free Zone
TDZ: Trade Development Zone
EDA: Economic Development Area
BZ: Bonded Zone

Appendix 4: References to Relevant Literature

Ades, Alberto, and Rafael Di Tella, 1997, "National Champions and Corruption: Some Unpleasant Interventionist Arithmetic," The Economic Journal, Vol. 107 (443): 1023-42, July.

Andvig, Jens Christopher, 1991, "The Economics of Corruption: A Survey," Studi, Economici, 43: 57-94.

Bliss, Christopher, and Rafael Di Tella, 1997, "Does Competition Kill Corruption?" Journal of Political Economy, December, 5(105): 1001-1023, October.

Bardhan, Pranab, 1997, "Corruption and Development: A Review of Issues," Journal of Economic Literature, Vol. XXXV (September): 1320-1346.

Du, Julan, Daniel Kaufmann, and Shang-Jin Wei, 1999, “Public Malfeasance and Financial Market Development,” Harvard University and the World Bank.

Elliot, Kimberly Ann, ed., 1997, Corruption and the Global Economy, Washington, DC: Institute for International Economics.

Fisman, Raymond, 1998, "It's Not What You Know...Estimating the Value of Political Connections." World Bank.

Gray, Cheryl W., and Daniel Kaufmann, “Corruption and Development,” Finance and Development, March 1998, p7-10.

Gupta, Sanjeev, Hamid Davoodi, and Rosa Alonso-Terme, 1998, “Does Corruption Affect Income Inequality and Poverty?” forthcoming, IMF Working Paper, May.

Hanks, Lucien M., 1982, “Merit and Power in the Thai Social Order,” American Anthropologist, LXIV.

Hines, James Jr., 1995, "Forbidden Payment: Foreign Bribery and American Business After 1977," NBER Working Paper 5266, September.

Hindriks, Jean, Michael Keen and abhinay Muthoo, 1998, “Corruption, Extortion and Evasion,” Facultes Notre-Dames de la Paix, Belgium, University of Essex, England, and Institute for Fiscal Studies, London, unpublished. First vesion, July 1996.

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," Brookings Papers on Economic Activity, Fall, 2: 159-239.

Johnson, Simon, Daniel Kaufmann, and Pablo Zoido-Lobaton, 1998, "Regulatory Discretion and the Unofficial Economy," American Economic Review, May, 88(2): 387-392.

Kaufmann, Daniel, 1997a, "The Missing Pillar of a Growth Strategy for Ukraine: Institutional and Policy Reform for Private Sector Development," in Peter K. Cornelius and Patrick Lenain, eds., Ukraine: Accelerating the Transition to Market, Washington: International Monetary Fund, pp 234-275.

Kaufmann, Daniel, 1997b, "Corruption: Some Myths and Facts." An early version was published in Foreign Policy, Summer 1997, pp114-131.

Kaufmann, Daniel, and Shang-Jin Wei, 1998, Does Grease Payment Speed Up the Wheels of Commerce? World Bank and Harvard University, unpublished.

Klitgaard, Robert, 1990, Tropical Gangsters, BasicBooks.

Krueger, Anne O., 1974, "The Political Economy of Rent-seeking Society," American Economic Review, June, 64(3): 291-303.

Leff, Nathaniel H., 1964, "Economic Development Through Bureaucratic Corruption," The American Behavior Scientist, November, 8(2): 8-14.

Lindbeck, Assar, 1998, Swedish Lessons for Post-Socialist Countries, unpublished.

Lui, Francis, 1985, "An Equilibrium Queuing Model of Bribery," Journal of Political Economy, August, 93(4): 760-781.

Mauro, Paolo, 1995, "Corruption and Growth," Quarterly Journal of Economics, 110: 681-712.

Mauro, Paolo, 1997, "The Effects of Corruption on Growth, Investment, and Government Expenditure: A Cross-Country Analysis," in Elliott (1997).

Neher, Clark D., 1977, “Political Corruption in a Thai Province,” Journal of Developing Areas, 7:4.

Osborne, Denis, 1997?, “Corruption as Counter-Culture: Attitudes to Bribery in Local and Global Society,” in Barry Rider, ed., Corruption: The Enemy Within, Hague: Kluwer Law International, pp9-34.

Quah, Jon S.T., 1989, “Singapore’s Experience in Curbing Corruption,” in Arnold J. Heidenheimer, Michael Johnson, and Victor T. LeVine, eds., Political Corruption: A Handbook, New Brunswick, New Jersey: Transaction Publishers.

Quah, Jon S.T., 1993, “Controlling Corruption in City-States: A Comparative Study of Hong Kong and Singapore,” Paper presented at the conference, The East Asian Miracle: Economic Growth and Public Policy, Stanford University, October 25-26, Palo Alto, California.

Pasuk, Phongpaichit, and Sungsidh Piriyarangsan, 1994, Corruption and Democracy in Thailand, Chiang Mai; Silkworm Books, Thailand.

Rauch, James E., and Peter B. Evans, 1997, “Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries,” University of California-San Diego and University of California-Berkeley, unpublished.

Riggs, Fred W., 1966, Thailand: The Modernization of a Bureaucratic Polity, Honolulu, HI: East-West Center Press.

Rose-Ackerman, Susan, 1975, "The Economics of Corruption," Journal of Public Economics, 5617, June.

Rose-Ackerman, Susan, 1978, Corruption: A Study in Political Economy, New York: Academic Press.

Rose-Ackerman, Susan, 1998a, “Bribes and Gifts,” in Avner Ben-Ner and Louis Putterman, eds., Economics, Values, and Organization, Cambridge University Press.

Rose-Ackerman, Susan, 1998b. Corruption and Development, in Boris Pleskovi and Joseph Stiglitz, eds., Annual World Bank Conference on Development Economics-1997, Washington DC: The World Bank.

Shleifer, Andrei and Robert W. Vishny, 1993, "Corruption," Quarterly Journal of Economics, 108: 599-617.

Shleifer, Andrei and Robert W. Vishny, 1994, "Politicians and Firms," Quarterly Journal of Economics, November.

Tanzi, Vito, 1995, “Corruptiion, Arm’s Length Relationships, and Markets,” in The Economics of Organized Crimes, edited by Gianluca Fiorentini and Sam Peltzman, Cambridge: Cambridge University Press, pp 161-180.

Tanzi, Vito, 1998, “Corruption Around the World: Causes, Consequences, Scope and Cures,” IMF Staff Papers, Washington: International Monetary Fund.

Tanzi, Vito, and Hamid and Davoodi, 1997, "Corruption, Public Investment, and Growth," IMF Working Paper 97/139, Washington: International Monetary Fund.

Thinapan, Nakata, 1977, "Corruption in Thai Public Administration: A Survey of Opinion among the Public Servants and the People," (in Thai), Warasan Phatthana Borihan Sat (Journal of Public Administration) 17, July.

UNDP, 1997, "Corruption and Good Governance," United Nations Development Program Discussion Paper 3 (prepared by Susan Rose-Ackerman).

Van Rijckeghem, Caroline, and Beatrice Weder, 1997, "Corruption and Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption?" IMF Working Paper 97/73, International Monetary Fund, Washington, DC.

Van Roy, Edward, 1970, "On the Theory of Corruption," Economic Development and Cultural Change, 19:1.

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?" The National Bureau of Economic Research Working Paper 6030, May. Forthcoming, Review of Economics and Statistics.

Wei, Shang-Jin, 1997b, "Why is Corruption So Much More Taxing Than Tax? Arbitrariness Kills." The National Bureau of Economic Research Working Paper 6255, November.

Wei, Shang-Jin, 1998, "Why Does China Receive So Little Foreign Direct Investment," Paper prepared for the Ninth East Asian Seminars on Economics, organized by Takatoshi Ito and Anne O. Krueger, in Osaka, Japan, Juen 25-28.

Wei, Shang-Jin, 1999, "Corruption in Economic Development: Beneficial Grease, Minor Annoyance, or Major Obstacle?" The World Bank Development Economics Working Paper, …, March.

Wei, Shang-Jin, and Sara Sievers, 1999, "The Cost of Crony Capitalism," The Asian Competitiveness Report 1999, Geneva: World Economic Forum, pp50-55.

Wei, Shang-Jin, and Richard Zeckhauser, 1999, "Dark Deals and Dampened Destines: Corruption and Economic Performance," The Journal of Japan and World Economy.