MPRA

Munich Personal RePEc Archive

Understanding Tax Corruption in Transition Economies: Evidence from Bulgaria

Pashev, Konstantin

2006

Understanding Tax Corruption in Transition Economies: Evidence from Bulgaria

Konstantin V. Pashev [1]

Abstract:

Measures of corruption are based on the concept of bribes as extra business costs. Drawing evidence from corruption surveys of business and tax service in Bulgaria, this paper looks at the bribe as a price paid by the taxpayer in exchange for income-maximizing services supplied by corrupt tax officials. It distinguishes between corruption for tax evasion and corruption related to excessive voluntary compliance costs. The latter is closer to the concept of bribes as costs imposed on business, but is limited in scale relative to the former. It is in this framework that the study analyses the drivers of the demand and supply of corruption "services" and proposes an indicator framework for "sizing up" the problem, evaluating the strength of the underlying factors and formulating anti-corruption policies whose effect can be monitored and evaluated using that framework.

Introduction

The difficulties of measuring economic phenomena which have value only as far as they remain hidden, such as tax corruption, are obvious. The measures rely largely on opinion surveys that reflect perceptions and assessments of taxpayers. They provide mixed evidence about transition countries. According to the Global Corruption Barometer of Transparency International (2004), in most new market economies, the tax administration is not among the five most corrupt institutions (Annex 1.1). Conversely, in a recent World Bank study on corruption in transition economies, tax corruption is ranked second among other types of corruption in terms of

number of companies involved (after bribes for licenses and permits). It also finds that tax corruption is increasing despite the fact that companies are net losers from tax bribery (i.e., the average cost of tax corruption in all countries exceeds or equals benefits) (Gray et al., 2004).

The situation in individual countries is hard to capture, as well. Bulgaria is a case in point. According to the tax corruption ranking of the Global Competitiveness Report, Bulgaria is among the world's top performers, scoring higher in 2002 than any other transition country in Europe except for Lithuania and Slovenia (Annex 1.2). In contrast, according to the World Bank ranking, in 2002 Bulgaria performed worse than any other European transition country. (Gray et al., 2004). Such discrepancies show that measuring tax corruption is not an easy task. [2] The difficulties largely reflect some conceptual ambiguities about the underlying drivers, central to which is the concept of the business cost of corruption. Actually, few attempts to measure corruption target tax corruption per se. Most available measures and estimates are obtained in the context of measuring overall corruption levels regardless of the type of corruption or the administration concerned. Measures of overall corruption, however, are largely guided by the concept that bribes are extra costs imposed on business. Consequently, the level of corruption is derived from perceptions and assessments of entrepreneurs and investment risk experts. Accordingly, one of the basic measures of corruption is the "bribe

---

[1] The author is a Senior Fellow in the Economic Program of the Center for the Study of Democracy, Sofia, Bulgaria. This paper was prepared during a Fulbright senior scholarship research exchange hosted by the Andrew Young School of Policy Studies, Georgia State University, Atlanta, GA.

[2] They may be attributed to differences in methodology, but the point is that they can hardly provide a reliable guide to policy makers. Perhaps the only benefit for policy makers would be that at the time they would be able to refer to the GCR scores when externally promoting Bulgaria as an attractive place for FDI, and to the World Bank scores when internally promoting the necessity of the Bank's revenue administration reform loan.

tax," i.e., the direct financial cost of bribes to the company.[3]

While there is no doubt that corruption implies considerable cost to the business sector, there are some important qualifications that may help better understand the behavior of bribers. Above all, it may help to distinguish the economic costs of corruption in terms of unfair competition, market malfunction and misallocation of resources from the direct business cost of the bribe for the briber. The business cost concept has more validity with regard to corruption in the field of licenses and permits or public services, including services to tax payers. However, it is less clear why bribes paid by companies to evade taxes or import duties, to win public contracts or to influence court decisions should be interpreted and measured through indicators such as the "bribe tax," implying that these costs are imposed on the companies.[4] In the aforementioned corruption types, it is the income-maximizing choice for companies rather than pressure by the public administration that drives demand for these types of corruption services. In this sense, revenue corruption related to fraud, as well as corruption in the public arena or judiciary, needs to be distinguished conceptually from corruption related to public services such as licensing, tax services, healthcare, etc.[5]

The importance of having more objective measures of tax corruption is straightforward.

1. The Spread of Corruption in the Tax Administration (% of responses)
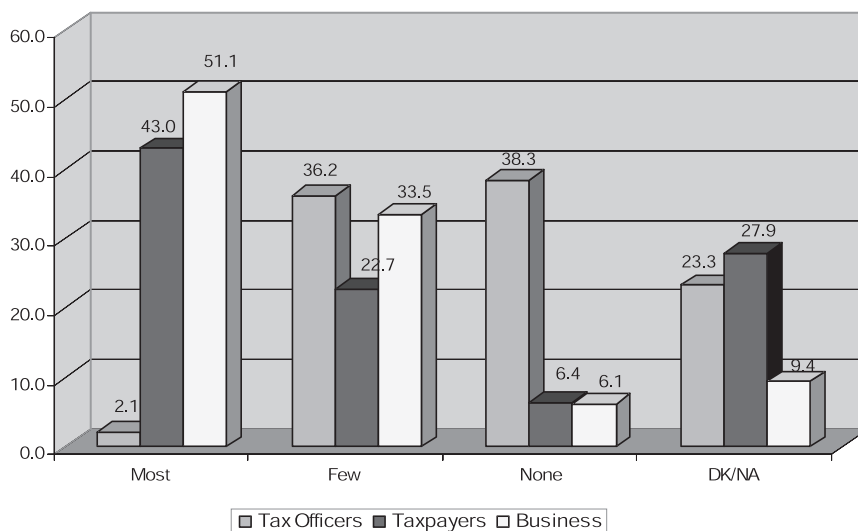
* Members of the general public and of the business community responded regarding the administration as a whole, while tax officials were asked about their respective departments. The general public and business community data were sourced from the relevant surveys of Vitosha Research, *Coalition 2000 Corruption Monitoring*, for April-May 2004.

No doubt, this still remains a major challenge of transition. The TI Global Corruption Barometer's average regional score of tax corruption is 3.4 (Annex 1.1). The Corruption Monitoring Indices of Coalition 2000 in Bulgaria, for instance, show that more than half of the surveyed companies in the last four years think that all or most tax officials are involved in corruption. About 20 percent of the respondents have experienced corruption pressure by tax officials. On the other hand, a survey of Bulgarian tax officials[6] discovered that they admit that there is corruption among them, but on a fairly limited scale. According to these tax officials, the public's perception of wide spread of corruption in tax administration are largely exaggerated (1)[7].

---

[3] See, for instance, Gray et al., 2004 p. 21

[4] The only plausible argument may go that they are imposed on the company by the business environment, i.e., a company's choice to make a bribe for the aforementioned benefits is a response to corruption practiced by competitors. This argument may have some "ethical" value for companies as a justification of their involvement in bribery, but it has little practical value for policy-making. Primary drivers of tax corruption are more important for the latter than the secondary drivers attributed to a corrupt environment.

[5] This, however, does not imply that corruption related to public services is always imposed by the supplier of these services. It may also be a result of an income-maximizing choice by companies. However, from the policy perspective, there is a substantial difference between whether a company makes a bribe to evade taxes or to avoid excessive compliance costs.

[6] The survey was carried out in Bulgaria in March 2004 by Vitosha Research through face-to-face interviews with a sample of 699 tax officials from the local tax directorates in Bulgaria. Part of the findings are available at http://www.vitosha-research.com/focus_bg.htm If not otherwise indicated, data and evidence referring to tax administration are derived from that survey.

[7] The numbers in brackets in the text indicate the figure number referred to.

This poses important policy questions. Is the business community unjust to the tax administration? If so, this is not only, and not mainly, just a problem for tax authorities. Bad scores might deter investment regardless of the actual level of corruption. Furthermore, incorrect perceptions of corruption levels may materialize as companies choose whether or not to evade taxes and offer bribes according to their perceptions about what competitors are doing. In this context, it is not just the tax administration, but the economy and business that may be the victim of too much or incorrect assessment of corruption. How much does the public notion depart from the actual level? What are the economic costs of the departure, and what are the implications for formulating and monitoring policy?

This paper does not provide complete answers to the above questions. It rather tries to contribute to the understanding of the factors, on both the supply and demand sides, of tax corruption in transition economies. It proposes indicators that might help in "sizing up" the problem and in monitoring and evaluating anticorruption policies. It draws from the vast body of theoretical and empirical research on the topic but departs from other studies in several important ways. First, it attaches primary importance to measuring the strength of the drivers of corruption in parallel with its level and intensity. This may be more useful in terms of policy formulation and monitoring. Consequently, it focuses on one type of corruption, as the underlying drivers vary across corruption types. Second, it looks at tax corruption as a result of transactions between two beneficiaries. This departs from the prevailing "business cost" concept. In this setting, the taxpayer receives some undue favor by the tax official in return for a bribe as the price for this corruption "service". Third, it uses evidence from both business and the tax administration to identify the drivers on the demand and supply side and their relative weight in corruption. Fourth, it distinguishes between bribes for tax evasion and bribes for avoiding excessive compliance costs. Important in this regard is the distinction as well between economic and business costs of corruption. Even though business suffers from the economic costs of corruption, it is the im-

mediate business benefits that drive bribery. Finally, these are drivers on the demand side. This study argues that the most important factor for corruption deals are the drivers and deterrents on the supply side; therefore, the viewpoint of the tax officials is important.

The paper is organized in five sections. Section l locates the place of revenue corruption among the other corrupt practices for the purpose of putting together a definition that is helpful for evaluating its level and drivers. Section 2 and 3 use the transaction framework to study the drivers and deterrents on the demand and the supply side respectively. Section 4 derives tools and measures for diagnosing the level of corruption and its drivers. Section 5 is the conclusion.
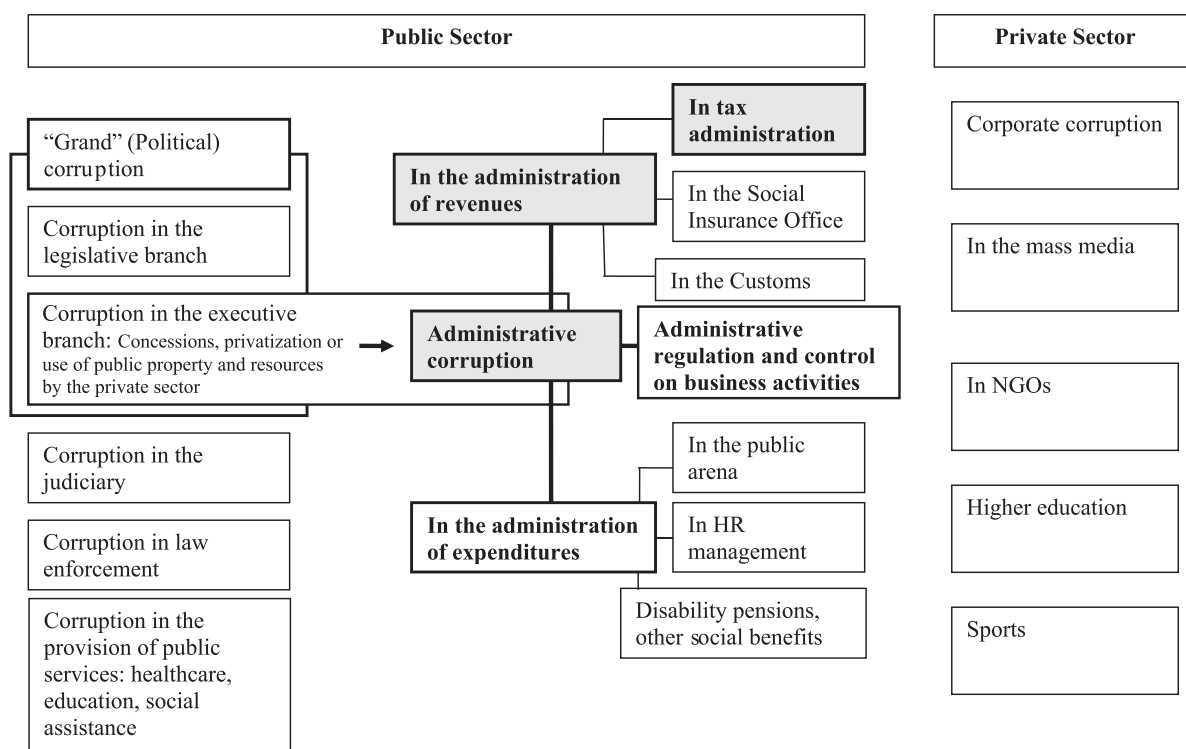
1. Definition and typology

The most straightforward definition of corruption is abuse of power for private gains. Figure 2 illustrates various types of corruption practices. This typology is far from complete. It is based on the type of power or professional responsibilities that are subject to abuse. The aim is to roughly locate corruption related to tax collection among corruption practices in general for the sole purpose of defining the object of measurement.

The conventional narrow definition of corruption boils down to abuse of public power. When the abuse of power takes place at the level of public administration, it is defined as administrative or bureaucratic corruption. It is largely a part of the so called "petty corruption" which encompasses corruption practices at the low public service levels.[8] Petty corruption also includes bribes related to the delivery of public services and out-of-court fines and enforcement of regulations (e.g., road police, etc.). This constitutes the most widely spread corruption in transition countries in terms of number of corruption "deals" and people involved on both sides. When the abuse is of legislative or executive power, it is defined as grand or political corruption. Furthermore, according to the type of power that is subject to abuse, corruption may take place in the judiciary and other institutions of law enforcement, as well as in relation to the

---

[8] In fraud related corruption, however, the term connotes a hierarchical level rather than the size of the bribes.

2. Tax corruption in the tree of corruption practices

Public Sector		Private Sector

"Grand" (Political) corruption

Corruption in the legislative branch

Corruption in the executive branch: Concessions, privatization or use of public property and resources by the private sector

Corruption in the judiciary

Corruption in law enforcement

Corruption in the provision of public services: healthcare, education, social assistance

In the administration of revenues

Administrative corruption

In the administration of expenditures

In tax administration

In the Social Insurance Office

In the Customs

Administrative regulation and control on business activities

In the public arena

In HR management

Disability pensions, other social benefits

Corporate corruption

In the mass media

In NGOs

Higher education

Sports

delivery of various public services such as education, health, social benefits, etc.

In addition to the distinction according to the type of abused power, the typology of corruption can be extended according to the nature of the gains. Thus, a distinction can be made between the misuse of power by the agent at the expense of the principal for the agent's direct benefit (e.g., direct embezzlement) and misuse of power for the benefit of a third party in return for a bribe. In the latter case, private gains include not only cash (bribes), but gains in kind as well (gifts, services, including "barter" corruption services, use of influence, etc.), which may benefit the person who provides the service, friends and relatives or even political parties. These non-bribe benefits imply that not all corruption practices are easy to capture and measure. Corruption for financing of political parties is actually a leading concern in all transition countries (Annex 1.2). Furthermore, according to the level of government, political and bureaucratic corruption may have central, regional or municipal dimensions. Of course, these divisions are far from absolute. Corruption related to privatization, concessions, renting out state or municipal property

or land can involve grand or petty corruption at the local or central level according to the object of the deal –this can range from parking lots in the city center to extraction of national resources to the use of radio and telecommunication frequencies. The common feature of all these deals is that they involve the sale or renting out of limited public resources at prices lower than the market price, or supplies from the private sector at prices higher than those on the market. Applying non-market prices in the transactions between the public and the private sector implies that public managers may have the power to perform their functions in someone's private interest against benefits.

Corruption, however, is neither an exclusive territory of the public sector, nor of the developing and transition countries. In the recent years, time and again the world has been witness to grand scandals in the corporate world, sports, media, NGOs, including trade unions, and international organizations. These scandals constitute a serious challenge to the basic caveat of public economics and regulatory economics, namely that the level of corruption is largely determined by the size of the government; i.e., no efforts in

curbing corruption can yield lasting results if the of weight government in the economy is not reduced.[9] While this is true with regard to the misuse of public power, it is hardly true for the overall level of corruption, and this includes the private sector. The latter is important not only because of spillover effects on bureaucratic and political corruption but because it may incur larger costs to investors compared to public sector corruption.[10]

Administrative corruption, to which corruption related to revenue collection belongs, can be divided into three broad categories: corruption in revenue administration, corruption related to public expenditure management, and corruption related to administrative regulation and control. The first category contains three subcategories according to the agency where it takes place: corruption in tax administration, corruption at the customs office and corruption in the collection of social insurance contributions.

In this context, tax corruption is defined here as misuse of administrative power related to the enforcement of tax regulations (i.e., taxpayer services, tax collection, inspections and audits) for private gains. This allows one to distinguish tax corruption from political corruption related to taxes. The aim of the latter is to influence the establishment of the rules of the game, rather than their enforcement (see section 2.3). Second, this definition distinguishes it from corruption practices in

the tax administration that relate to public expenditure management: corruption in public procurement, nepotism, direct embezzlement, etc. Even though these two groups are not directly related to enforcement of tax regulations, the scale and consequences in a transition economy should not be underestimated. They may exceed conventional tax corruption in the value of benefits and bribes and in resultant institutional and market distortions. More importantly, they generate it at all levels of revenue administration and law enforcement.[11]

Bribery related to tax collection is the result of a deal between two beneficiaries, with the bribe or the benefit being the price for the service supplied by the administration. Our survey of tax administration in Bulgaria found that the initiative for this deal most often comes from the taxpayer (3). One in four tax officials reports direct pressure from bribers and one third have experienced indirect offers. Therefore, this analysis starts with demand-side factors.

3. Sources of corruption pressure

Which party initiates the bribe? (%)

Taxpayers	52.1
Tax officers	1.9
Both parties equally	23.9
Other	0.9
DK/NA	21.3

How often during the last year have you been offered a bribe? (% of responses)

	Directly	Indirectly
In all or most occasions	1.0	2.9
Rarely	24.2	31.0
Never	67.1	58.1
I had no such contact	5.4	5.6
Don't know/No answer	2.3	2.4

2. Demand side drivers and deterrents

Tax corruption can be defined in terms of the services which are subject to bribery

---

[9] There is some preliminary evidence that with the withdrawal of the state from college education in Bulgaria, corruption there increased (see Coalition 2000 Corruption indices at www.anticorruption.bg;).

[10] The border between bribery and marketing promotion in private business practice is often elusive. For instance, if an air carrier gives away free tickets to frequent flyers, this falls under the definition of marketing. If it gives a free ticket to the person in charge of purchasing air tickets for a private company, it falls in the twilight zone between marketing and bribing a corporate client employee, but if this person works for a state agency, then it falls under the definition of bribery. In all three cases, it may be entered in the books as a marketing expense. From a marketing standpoint, the companies are not expected to differentiate between private and public sector clients in fighting for a larger market share: what is good for the corporate client should be good for the public sector client as well. On the other hand, in the context of investment risk and cost assessment, a corrupt public official is not necessarily a higher risk and cost than corrupt managers, employees, clients, trade unions, or business organizations. The quality of the private sector management, operations and associations may be a larger source of uncertainty and risk than the quality of the public sector in investment decisions.

[11] The reason for leaving them out of the scope of this paper is that they require other policy interventions that may fall outside the domain of the tax administration (as in the case of political corruption) or tax regulations and enforcement (as in the case of expenditure-related corruption), and require a different dataset and methodology which are not agency-specific.

agreements between taxpayers and the administration. Taxpayers make bribes for two groups of corruption services: those related to non-compliance and those related to preferential services (speeding up procedures, tax refunds, etc). According to the Bulgarian tax officials surveyed, taxpayers make bribes mostly to conceal non-compliance and evade penalties [12]: 65.5 percent of the respondents identify this as the major cause of bribery. Better services remain a leading cause for bribes according to 23 percent of the respondents (Figures 4 and 5).

These two categories are related to the enforcement of the established rules of the game. As already mentioned, some business groups may make bribes or provide other favors to change the rules of the game. This is usually defined as political or legislative corruption even though the administration has a role to play in it as well. These three types are examined in more detail below.

2.1. Corruption related to evasion

The first category is related to the enforcement functions of control and auditing. This, however, has as a prerequisite a taxpayer's choice to evade taxes which is determined by

4. Purpose of bribes (% of responses)
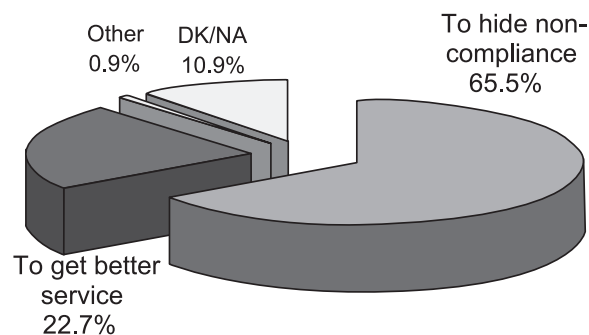
the taxpayer's estimate of expected benefits and costs. The benefits grow with the tax rate while the expected costs grow with the penalty rate and the probability of detection. Thus, the net benefits are changed significantly by the chances of the tax evader to work out a deal with the tax inspector in case the evasion is detected.

After an initial excessive reliance on stringent controls in transition countries [13] recently, there have been excessive expectations that tax cuts can reduce evasion. Theoretical models and empirical tests, however, provide mixed evidence on the relation between tax rates and evasion levels. The classical model of Allingham and Sandmo (1972) assumes that

5. What are the five most common "services" provided for taxpayers who make bribes? (% of responses)

---
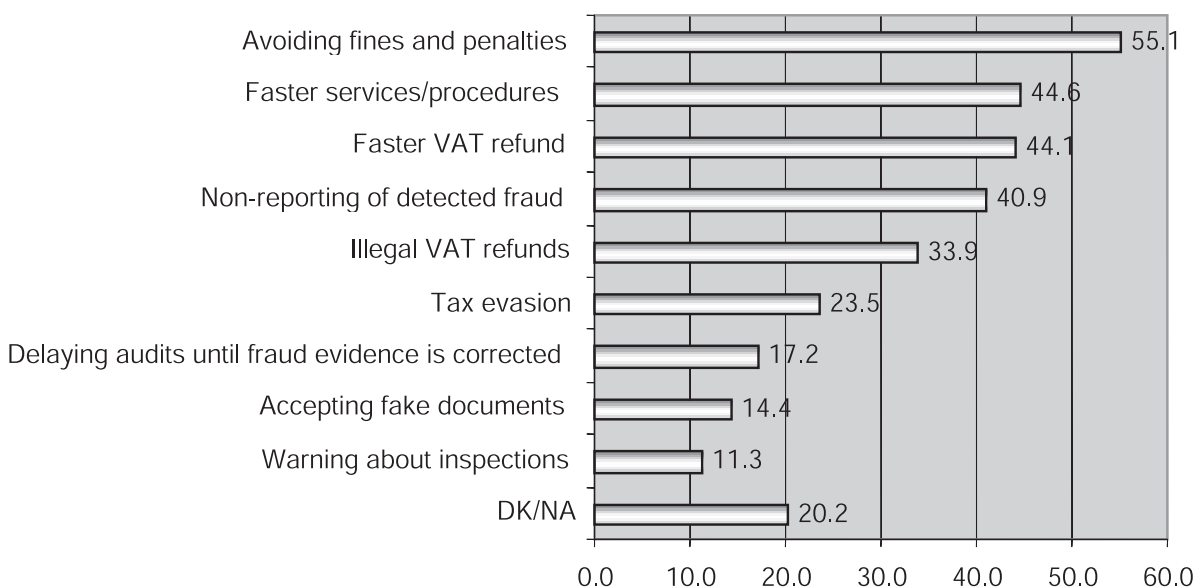
[12] It is important, however, to distinguish between non-compliance driven by an income-maximizing choice of the taxpayer (tax evasion), and non-compliance driven by unclear and excessive regulations, or discretionary enforcement of the law which is done in the next two sections.

[13] See Martinez-Vazquez and McNab (2000) for a comprehensive assessment of tax reforms in transition economies.

taxpayers are risk-averse. Consequently, the propensity to evade taxes is positively related to income. The richer the taxpayer, the more likely they are to take the risk of being caught, as the relative weight of the penalty as a percentage of their income or wealth is smaller. And, vice versa, the relative cost of the penalty for the low-income evaders is higher. This leads to two opposite effects of the higher tax rate. On the one hand, the higher the rate, the higher the return on each unit of concealed income (which is known as the substitution effect). On the other hand, the higher the rate, the lower the taxpayer's after-tax income, and the weaker their motivation to take the risk of evasion (the so-called income effect). Yitzhaki (1974), however, notes that if the penalty is based on the evaded tax rather than on the concealed income, then the net benefit, (i.e., the tax evaded minus the penalty) does not change with the tax rate. There is only income effect; i.e., contrary to common intuition, evasion should go down with the increase in tax rates. Conversely, if the taxpayer is risk-neutral, there would only be the substitution effect. Despite the numerous extensions of the initial models of tax evasion and extensive empirical tests [14], the question of the relation between the rate and the level of evasion is not yet successfully resolved. The policy implications are that the effect of reduced tax rates on taxpayer propensity to evade taxes is ambiguous, depending on attitudes to risk and the penalty structure. The implications for a tax administration, however, are much more straightforward. According to Becker's (1968) classic theory of crime prevention, tax evasion can be successfully deterred either through optimizing the penalty structure, or through raising the probability of detection. The latter is more expensive, especially if the probability of detection is mainly raised through increasing the frequency and coverage of control, rather than introducing more efficient risk management techniques. Excessive reliance on penalty structure is not likely to yield results either. Penalties need to be enforceable.

Moreover, the opportunity to avoid penalty through a bribery deal with the tax

inspector changes substantially the evader's estimates of the risks and costs of detection. On the one hand, the opportunity of a bribery agreement reduces the cost, as normally the bribe is lower than the penalty; otherwise, there is no incentive for the briber to make the bribe. On the other hand, the opportunity of a bribe increases the probability of detection as a corrupt inspector would benefit from the bribe only if s/he detects and proves the evasion.

There has been speculation in the literature that an increase in penalties can lead to increase in the bribes. The only supplier of this kind of service is the tax auditor. S/he competes only with the law: as long as the bribe is lower than the fine, the evader has the incentive to pay it. [15] In the context of the cost of evasion, the increase of the bribe will increase the motivation of the corrupt inspector to detect the crime, and thus the cost for the taxpayer (probability of detection times the bribe due). This may crowd out evasion and corruption towards the higher income levels, as increased costs would require larger-scale evasion to balance it. In balance, average evasion and bribe levels may increase, but this will further raise the probability of detection, while at the same time low-scale evasion and corruption will be reduced. [16] Such a scenario, however, hinges on the assumption that corrupt inspectors will take advantage of the increased penalties and increase the bribes. In practice, bribes often seem to be too low relative to the benefit for the briber. This implies that auditors' perceptions of the cost of detection of the bribery (probability times penalty) must be very low. I will return to these supply side drivers in section three. Here we are looking at the size of the bribe as a component of taxpayer costs. In this sense, to interpret the bribe as costs imposed on business is equivalent to interpreting the penalties for tax evasion in the same way.

Finally, the cost of evasion through bribery depends as well on the probability that the briber will be punished not only for the

---

[14] For a review of the literature, see Sandmo (2004), Cowell (2004), Slemrod and Yitzhaki (2002).

[15] There have also been opposing propositions that competition among bureaucrats may reduce bribes (see Gray et al., 2004: 16), but these have not been substantiated.

[16] This conclusion has important implications for measuring corruption levels, as often they are derived from the average size of bribes, a subject to which I will return later.

6. Which tax is most often subject to evasion? (%, single choice)

	All	TRSᵃ	Audits	Inspections	Collection	Accounting	Appeals	Other
VAT	81.1	75.3%	92.2%	85.1%	81.5%	65.9%	100%	61.8%
CIT	3.0	4.2%	1.3%	0.0%	3.7%	4.5%	0%	8.8%
PIT	1.6	2.8%	0.9%	0.0%	0.0%	0.0%	0%	2.9%
Excise	3.1	3.8%	0.9%	7.5%	3.7%	2.3%	0%	5.9%
Property	0.9	1.7%	0.0%	0.0%	3.7%	0.0%	0%	0.0%
DK/NA	10.3	12.2%	4.7%	7.5%	7.4%	27.3%	0%	20.6%
Base	699	288	232	67	27	44	7	34

ᵃTRS: Taxpayers registration and services

evasion, but also for the bribery, and on the size of the penalty.

The bottom-line is that fighting corruption in tax administration means, above all, fighting tax evasion. The major demand-side determinants of corruption as well as its major economic consequences are related to tax evasion. In this context, the major indicators for the strength of the drivers of corruption related to evasion include the perceptions of the taxpayers about the tax rates, the penalty structure for evasion, the probability of detection, the probability of working out a deal with the inspector, the size of the bribes, the rate of institutionalization of corruption, the probability that the briber will be punished and the size of this penalty. All of these are important determinants of the demand for tax corruption services related to evasion and are indispensable in evaluating the institutional setting in terms of corruption risk.

The Bulgarian tax administration survey provides some insight into this theoretical framework. It found that the list of most demanded corruption services is headed by VAT frauds. The overwhelming majority – 81 percent of all tax officials and 92 percent of the auditors – identify VAT as the most critical area of tax fraud (6). Evasion of income taxes is low, and so is its relative weight on the demand-side drivers of tax corruption. Accordingly, tax officials identify VAT companies and large taxpayers as more likely to violate tax regulations than small taxpayers.

2.2 Corruption driven by compliance costs

Apart from the direct costs of taxation, taxpayers incur the cost of complying with the tax regulations.[17] While the type of corruption in tax administration, examined in the previ-

7. The Top Three Corruption – Related Tax Offences (% of respondents)
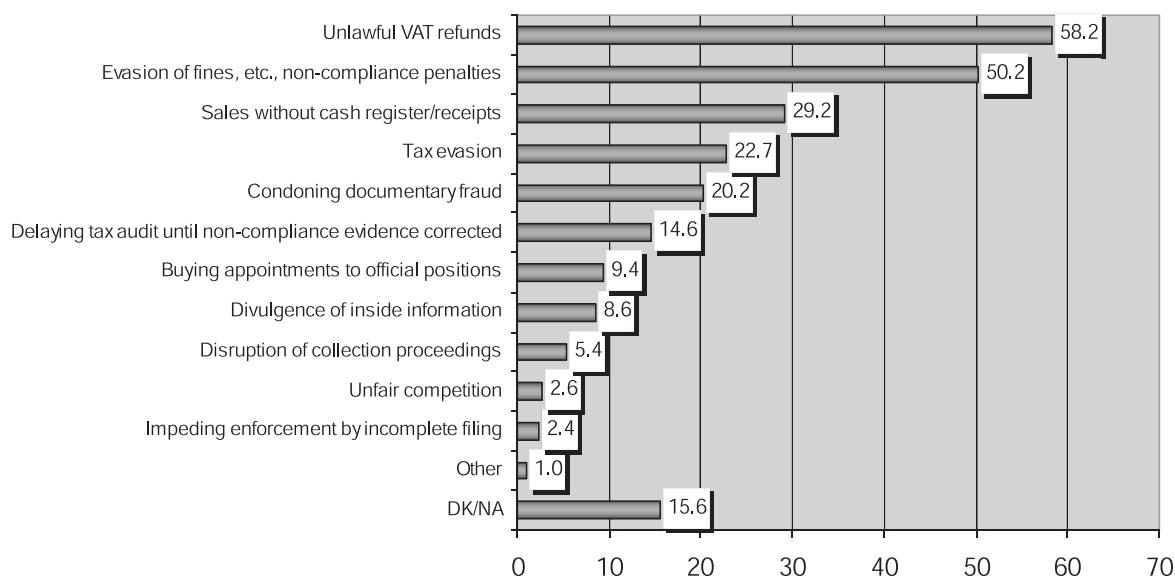
17 For a definition of compliance and administrative costs, see Sanford et al., (1989: Ch 1, pp3-23).

ous paragraph, reflects a taxpayer's choice to evade taxes, this one is driven by excessive compliance costs. Administrative deficiencies and legislative inconsistencies make these costs a strong driver of corruption in transition countries. On the one hand, they increase the time and money spent by taxpayers for understanding and fulfilling their obligations. On the other hand, inequitable law enforcement places them at a disadvantage relative to non-compliant competitors. If entrepreneurs choose not to accept these costs, they may consider either disregarding the regulations, relying in the worst case scenario on making a bribe instead of paying a penalty or making a bribe in order to have procedures speeded up. A taxpayer's net benefit from bribery is measured by the amount of time and money saved by ignoring or speeding up procedures minus the bribe. Net benefits may be larger than the benefits of tax evasion especially in the case of VAT refunds. Timely refunds are more important for the liquidity of many companies than savings from evaded taxes.

There are usually two groups of institutional factors that generate demand for this type of corruption services. The first is related to the long tax code terms for the various administrative procedures and services. Standards of services and e-services are also rare or underdeveloped in transition countries. The second stems from flaws and imperfec-
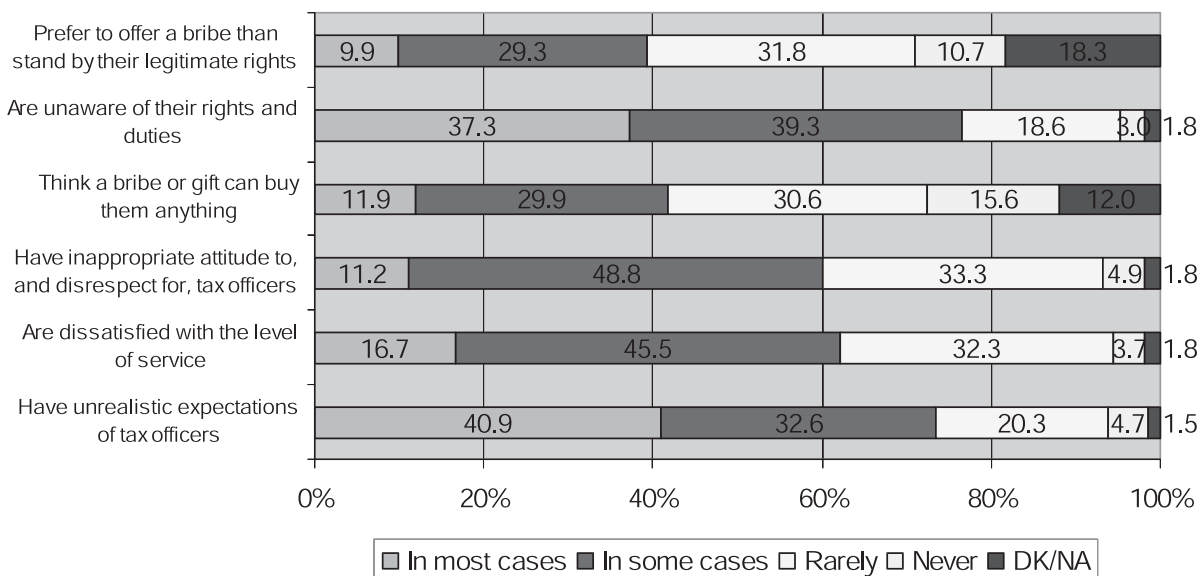
tions in tax and accounting regulations which allow a large degree of administrative discretion in the enforcement of the law.

Both bribes to avoid penalties for non-fraudulent violation of tax regulations, and bribes for better services, are driven by excessive compliance costs. However, they differ substantially. Similar to corruption related to tax evasion, bribes for avoiding penalties imply a taxpayer's rational choice to ignore regulations. The tax official can only take advantage of the detected violation. In the framework of supply and demand of corruption services, this is corruption related to non-compliance and is largely demand driven. In contrast, corruption for better and faster services involves compliant taxpayers and is largely a supply-side phenomenon. Delays in procedures may be caused by corrupt officials aiming at a bribe or because they are busy working for those who have already made bribes. Thus, they are in a position to create a demand for this type of service. Nominally the taxpayer pays for the benefit of unfair advantages over competitors. But in a highly corrupt environment, taxpayers may need to make bribes to "keep their turn in line" rather than to "jump ahead."

The Bulgarian tax administration survey indicates that the relative weight of these two types of corruption is considerable. Avoiding fines and penalties is ranked at the top of the

8. Contacts with Taxpayers Assessed
("How often during the past one year have you encountered the following taxpayer behavior?")

	In most cases	In some cases	Rarely	Never	DK/NA
Prefer to offer a bribe than stand by their legitimate rights	9.9	29.3	31.8	10.7	18.3
Are unaware of their rights and duties	37.3	39.3	18.6	3.0	1.8
Think a bribe or gift can buy them anything	11.9	29.9	30.6	15.6	12.0
Have inappropriate attitude to, and disrespect for, tax officers	11.2	48.8	33.3	4.9	1.8
Are dissatisfied with the level of service	16.7	45.5	32.3	3.7	1.8
Have unrealistic expectations of tax officers	40.9	32.6	20.3	4.7	1.5

list of corruption services identified by tax employees. (see Figure 5 above). These are non-fraudulent violations. VAT frauds and tax evasion are ranked separately. Faster services and tax refunds are ranked second and third on this list. As already shown in Figure 4, 23 percent of officials surveyed indicated that the leading motive for taxpayers to offer bribes is to get better services. A tax official's assessment of his/her relation to clients indicates that there is a lot of space for these types of corruption services. Interaction between the two parties seems uneasy with a large gap in the understanding of each party's rights and obligations (8).

2.3 Corruption for regulatory tax privileges and benefits

As already mentioned, except for administrative corruption related to enforcement of regulations, the biggest issue of corruption is related to changing the rules of the game. As the objective of the latter is to influence policy making and legislation, it is usually distinguished from administrative corruption and referred to as political corruption. But can the rules be written without the participation of those who are responsible for enforcement? Legislators and finance ministers are responsible for policy and law making, but the revenue administration also has an important role to play in setting the rules of the game. Normally, the tax administration participates in the drafting stage,[18] and more importantly, it creates the secondary implementation legislation. Moreover, regulatory flaws and inconsistencies often require decisions by the central tax directorates whose job it is to interpret regulations. Therefore, corruption for regulatory benefits is not only in the sphere of politics and legislation. In this context, the distinction between state capture and administrative corruption[19] has grounds only in the sense that usually granting regulatory preferences

to a business group or lobby requires political support. But even in this case, policy makers need the support of the administration's experts and executives to put their ideas into practice. The latter may not share directly in the benefits granted by business to their superiors, but surely their loyalty would not go unrewarded.

Moreover, as central administration creates secondary and tertiary legislation (ordinances, instructions, circular letters on the enforcement of the regulations), in transition countries where political and citizen control on administration may be weaker, high-ranking officials may play active role in changing the rules of the game to serve vested business interests independently of the political elite. Unlike the case where the administration changes the rules of the game to meet demands of the overseeing political establishment, in the second case it does this to meet a direct business demand.[20]

Summing up the analysis of the demand-side drivers of tax corruption, taxpayer benefit is the leading driver of bribery related to evasion. Bad regulations and administrative deficiencies also create a substantial part of the demand for corruption services, which either seek to avoid penalties for non-compliance (other than fraud), or to speed up procedures and services. In the latter, business has less choice than in the case of the corruption, related to evasion, while, conversely, the administration is in a position to navigate the interaction with the client towards bribery outcome. As corruption is mainly related to tax delinquency, it is reasonable to accept the prevailing opinion of the tax officials that the initiative for most corruption deals comes from business. It is noteworthy, however, that again, according to the overall assessment of Bulgarian tax officials, pressure from the clients is not among the leading causes of tax corruption. In their ranking of the leading bribery

---

[18] One of the flaws in the tax reforms of transition was that significant changes in tax legislation were passed without consultation with the tax administration about enforcement feasibility or allowing them time to prepare taxpayers for the change. (Martinez and McNab, 2000).

[19] See, for instance, World Bank (2000) and Hellman, Jones and Kaufman (2000). These studies introduced the term "state capture" to denote bribes for changing the rules of the game. As "political clientelism," it denotes patronage by the state of vested business interests, the political clientele.

[20] This type of corruption, when the administration changes the rules in a direct deal with business, is not well studied in transition economies. Institutional and oversight deficiencies in many countries, however, suggest that it may take place. Owners of some patent micro-businesses in Bulgaria, such as taxi drivers, video rental shops and real estate agents attribute upward adjustments of the patent tax mainly to payments by monopoly or oligopoly lobbies aiming to crowd them out of the market or to buy them. The initiative for these adjustments, however, rarely comes from legislators.

drivers, the pressure from taxpayers is ranked 7th (Figure 9). Other drivers, which determine the supply of bribery services, come higher among the major causes of corruption.

3. Supply-side drivers, restraints and opportunities

If we temporarily ignore ethical tax brakes, the choice of a tax official to take a bribe is determined by his assessment of the expected benefits and costs. The benefits are usually defined as an increase in his utility. Other things being equal, the lower the tax official's income and the higher the bribe, the bigger the increase in his utility will be and the larger the incentive to engage in corruption. The costs, in terms of Becker's (1968) classical theory of crime prevention, are determined by the bribee's assessment of the probability of detection of the bribery and the cost of the punishment. The lower the probability of detection

9. a) What are the major drivers of corruption in tax administration? (%, up to three responses)

Tax officers' low salaries	52.2
The ethics of the tax officials	35.2
Legislation allowing discretionary enforcement	30.9
Mixing administrative duties and personal interests	21.5
The pursuit of a quick increase in income	19.3
Widespread corruption in society	17.7
Pressure from taxpayers and insufficient protection and safety of tax officials	17.6
Complex and lengthy bureaucratic procedures	16.9
Demoralizing impact of grand corruption	10.3
Old facilities and equipment and poor work conditions	10.2
Frequent changes in legislation	9.2
Insufficient number of tax officials	6.3
Inefficient internal control and sanctions mechanisms	4.9
High taxes, fees and fines	3.1
Flaws in enforcement and work processes	2.9
Pressure from colleagues and superiors	1.9
Inefficient service provision (slow procedures)	1.7
Inefficient risk management and selection of audits	1.4
Other (please specify)	0.9
Don't know/No answer	3.7

9. b) Problems faced by the tax administration (% of employees who defined the problems as serious, i.e., highest on a 3-grade scale).

Problems	Total	TRS[a]	Audits	Inspections	Collect.	Account.	Appeals	Other	NA
Low remuneration	75.5%	72.2%	77.2%	89.6%	77.8%	68.2%	42.9%	70.8%	100.0%
Old facilities & equipment	61.4%	60.1%	69.0%	56.7%	70.4%	45.5%	71.4%	29.2%	70.0%
Red tape and slow procedures	58.7%	53.8%	65.5%	58.2%	66.7%	54.5%	42.9%	45.8%	80.0%
Frequent changes in tax regulations	58.1%	51.4%	69.4%	52.2%	66.7%	40.9%	57.1%	58.3%	80.0%
Loopholes in legislation	52.5%	39.9%	67.2%	59.7%	59.3%	38.6%	57.1%	58.3%	50.0%
Low level of taxpayer culture and awareness of obligations	51.9%	60.1%	45.7%	46.3%	51.9%	45.5%	42.9%	41.7%	60.0%
Refusal by taxpayers to cooperate	40.5%	35.8%	43.5%	58.2%	40.7%	38.6%	28.6%	25.0%	40.0%
Ineffective enforcement (detection and sanctions against frauds)	35.6%	31.9%	40.1%	37.3%	48.1%	29.5%	14.3%	33.3%	40.0%
Frequent staff replacement	27.8%	29.2%	27.6%	28.4%	29.6%	18.2%	28.6%	25.0%	30.0%
Ineffective HR management	26.9%	23.6%	29.7%	23.9%	29.6%	27.3%	28.6%	29.2%	60.0%
High tax rates	26.2%	26.7%	23.7%	28.4%	33.3%	25.0%	14.3%	25.0%	50.0%
Corruption pressure by taxpayers	22.0%	23.6%	19.0%	23.9%	29.6%	25.0%	28.6%	8.3%	30.0%
Abuse by tax officials of their administrative power	20.9%	20.5%	20.3%	22.4%	33.3%	18.2%	14.3%	20.8%	20.0%
Shortage of professionals	16.9%	13.5%	21.6%	14.9%	14.8%	15.9%	42.9%	8.3%	30.0%
Ineffective voluntary compliance management	16.6%	16.0%	16.8%	19.4%	18.5%	13.6%		25.0%	10.0%
Lack of professional ethics and integrity among tax officials	12.4%	10.8%	11.2%	16.4%	25.9%	18.2%		8.3%	20.0%
Poor services provided to taxpayers	11.2%	11.1%	11.2%	13.4%	11.1%	11.4%	14.3%	4.2%	10.0%
Base	699	288	232	67	27	44	7	24	10

[a]TRS: Taxpayers registration and services

10. Which of the following countermeasures can reduce corruption? (% of responses)

	Yes	No	Already done	DK/NA
Increasing tax administration remuneration	95.6	0.7	1.6	2.1
Clear legislation with reduced opportunities for administrative discretion	90.7	3.0	3.4	2.9
Optimizing the information to taxpayers on changes of legislation	81.0	4.6	12.4	2.0
E-services for taxpayers	78.5	4.6	11.9	5.0
Incentives for tax officials to report corruption pressure on them	69.7	11.4	13.7	5.2
Efficient professional training system	68.5	8.4	19.9	3.1
Access of tax officials to a unified tax register	63.8	8.2	18.6	9.4
Simplifying appeal procedures	59.8	12.7	15.2	12.3
Higher standards of reporting, control and sanctions	48.4	10.7	34.8	6.2
Rotation of auditors and inspectors	47.1	18.2	24.2	10.6
Optimizing work processes	44.2	5.2	47.4	3.3
Higher recruitment standards	43.9	13.0	37.9	5.2
Code of ethics	26.8	10.2	59.5	3.6
Other (please specify)	0.9	16.9	0.6	81.7

and the cost of the penalty, the more inclined the tax official would be to take a bribe.[21]

Furthermore, as already mentioned, the tax official is not necessarily a passive taker of the bribe. In the case of strong incentives and weak brakes he may go beyond the normal call of duty to detect a fraud, take advantage of ambiguities in regulations, threaten with high fines or take too long to provide a service or process an application. Moreover, the tax official has a much stronger position in the price setting process. As already noted, the taxpayer cannot get the "bribery" service from anyone else. His choice is basically between the cost of the bribe and the cost of the penalty or the cost of the delay. This puts him in a position of a price taker. It is the supplier who is more in a position of a price setter. The value of the bribe is likely to be set by the tax official in the range starting from the assessment of his costs up to the cost of statutory penalty. His price-setting power is especially high when the legislation leaves the fixing of the fine largely in the hands of the administration.[22]

The Bulgarian tax administration survey provides a useful illustration of supply-side drivers and deterrents. Tax officers identify the following as the major causes for corruption in tax administration: low wages, bad ethics, mixing personal benefits and administrative responsibilities, greed for a quick increase in income and flaws in regulations (8). Thus, the survey defines tax corruption as a result, above all, of low remuneration, low ethical standards and high compliance costs. External factors such as widespread corruption in society and the demoralizing impact of corruption at the higher levels of power are also important. Surprisingly, however, tax officials attach relatively low weight to elements of organizational efficiency pertaining to deterrents such as staff and expertise shortages, inefficiencies in the control and penalty systems, flaws in audits or enforcement, etc.

Accordingly, the countermeasures identified by tax officials are mainly an increase in remuneration for tax officials, reducing opportunities for administrative discretion in law enforcement and e-services (10).

3.1. Incentives

Perhaps not surprisingly, Bulgarian tax officials identify low wages as the prime reason for corruption. Low wages constitute the number one problem in all functional units, but "Inspections," "Collection" and "Audits" seem to be most sensitive to it. (9b) Accordingly, there is an absolute consensus (96 percent of the respondents) on the primary importance of increased remuneration for curbing corruption. (10)

---

[21] Of course, an effective penalty depends on proving the bribery act; therefore, detection implies proof. One can speculate, however, that even if an investigation of a bribery act ends without proof and punishment, it still entails a cost for the bribee in terms of loss of reputation and image and is a deterrent in terms of the investigated official's future involvement in corruption.

[22] Bulgaria is a case in point. Concerning tax evasion, Bulgarian legislation does not regulate the penalty as a proportion of concealed income or evaded tax, but sets the ceilings for fines at BGL 1000 (EUR1= BGL 1.956) for income taxes and BGL10000 (EUR5000) in the case of VAT frauds. This structure leaves much room for discretionary setting of fines, and thus, for corruption pressure. On the other hand, it may be argued that in terms of the cost of evasion, the bribe should have the same deterrent power as the fine, i.e., the higher the expected bribe, the lower the motives of the taxpayer to evade taxes.

The negative relationship between wages and administrative corruption has been well established in the literature. Nevertheless, the capacity of wage adjustments for minimizing corruption is not straightforward. As Figure 9 shows, Bulgarian tax officials identify low wages and low ethical standards as the leading motives for corruption. In the words of Tanzi (1998), corruption is partly due to need and partly due to greed. Figure 11 illustrates the negative relationship between corruption and the level of remuneration. The curve CC indicates that the higher the wage level, the lower the corruption levels. High wages, however, do not eliminate corruption, as not all corruption is due only to need. Thus, corruption levels may indeed be reduced to point A through increasing the wage level to R. Between point A and O, progress in limiting corruption slows down as corruption due to greed prevails. Thus, even though the level of corruption is negatively related to the level of remuneration, above a certain level of wages, they are not effective tools for reducing corruption. Such a relationship is well documented by empirical tests as well.[23]

The policy implications of this conjuncture are that, depending on the starting level of remuneration, the costs of wage adjust-

11. Corruption and wages
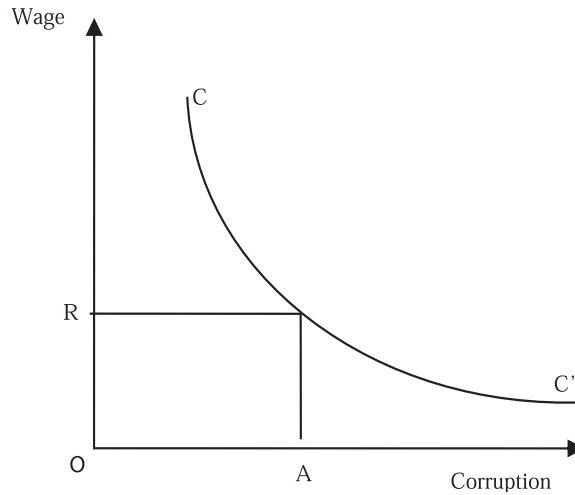
ment may substantially exceed the benefits of reducing corruption. Targeting the optimal level of wages, where the marginal costs of wage adjustment equals the marginal benefit of reduction in corruption, is a tough task. Trying to evaluate the cost and feasibility of minimizing corruption through wage adjustments, we used the tax administration survey in Bulgaria to obtain employee estimates of the wage levels that would minimize their vulnerability to bribery pressures. The responses (Table 12) indicate that there is a large divergence in

12. The Gap Between Perceived Anti-corruption Minimum Pay Levels and Actual Income Levels

Min pay level (BGL)	What is the remuneration level* (including bonuses) that would reduce the drivers of corruption to a minimum?									Total
	300	400	450	500	550	650	800	1 000	DK/NA	
Respondents %	3.6%	5.7%	3.4%	14.0%	7.2%	12.4%	16.7%	25.8%	11.2%	100.0%
Per capita household income										
<149	4.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.9%	1.1%	1.3%	0.9%
150-199	8.0%	0.0%	0.0%	2.0%	2.0%	1.1%	3.4%	2.2%	0.0%	2.0%
200-299	12.0%	15.0%	25.0%	10.2%	10.0%	6.9%	6.8%	6.1%	11.5%	9.2%
300-399	20.0%	27.5%	12.5%	18.4%	22.0%	20.7%	15.4%	14.4%	11.5%	17.0%
400-499	28.0%	17.5%	33.3%	21.4%	16.0%	24.1%	16.2%	11.7%	12.8%	17.5%
500-599	12.0%	15.0%	16.7%	20.4%	18.0%	10.3%	15.4%	11.1%	16.7%	14.6%
600-699	12.0%	15.0%	4.2%	9.2%	14.0%	13.8%	13.7%	15.0%	9.0%	12.6%
700-799	0.0%	0.0%	0.0%	7.1%	10.0%	5.7%	10.3%	12.8%	7.7%	8.3%
800-899	4.0%	5.0%	0.0%	1.0%	2.0%	5.7%	4.3%	10.0%	3.8%	5.2%
900-999	0.0%	2.5%	0.0%	4.1%	2.0%	4.6%	5.1%	5.6%	9.0%	4.7%
>1 000	0.0%	2.5%	0.0%	1.0%	2.0%	4.6%	4.3%	6.7%	6.4%	4.1%
NA	0.0%	0.0%	8.3%	5.1%	2.0%	1.1%	4.3%	3.3%	10.3%	4.0%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

*Monthly wages in BGL. The lev is fixed to the euro in the rate EUR1 = BGL 1.956. For reference, the statutory minimum wage in 2004 is BGL120. The highlighted percentages show what share of those that indicated the respective anti-corruption minimum actually enjoys this level of income.

---

23 See Van Rijckeghem and Weder (1997); Haque and Sahay (1996)

employee perceptions about the anticorruption wage levels. Second, it shows a sizeable gap between their current household incomes and the self-assessed corruption-proof wage level: 42.5 percent assess this minimum at levels which are 2-2.5 times the average tax official wage in 2003. Very few have indicated that they currently have such income. The "scissors" between the actual income levels of the tax officials and their perceptions about the anti-corruption level of remuneration show that a very small portion of the tax administration is not vulnerable to corruption pressures. Second, it shows that the cost of curbing corruption through wage increases might be too high.

Furthermore, the wage-related drivers of corruption can hardly be neutralized only through increasing pay levels. Tax official satisfaction with wages would also depend on their perception of the fairness of the wage and career system, i.e., how objectively they reflect individual performances. This goes beyond the perceptions of own necessities and pertains to the efficiency and fairness of the human resource management, including recruitment, performance evaluation and training, and position and wage development. Rauch and Evans (2000) study recruitment and promotion practices in the public service of 35 developing countries and find a strong positive relationship between merit-based recruitment and internal promotion on one hand, and the efficiency of the bureaucracy on the other (including the level of corruption as well). Actually, their work failed to establish such a relationship between merit-based wages and bureaucratic efficiency (corruption).

The uncertain anti-corruption effect of adjusting base wages has made tax authorities rely on the non-fixed (targeted award) part of the remuneration. If they are well targeted and linked with the individual contribution to fighting evasion and reducing voluntary compliance costs, bonuses are more flexible and a more efficient anti-corruption tool than overall wage adjustments. They are superior incentives to wages for at least three reasons. They entail less fiscal cost, they do not require setting the optimal anti-corruption level of wages, and are a better targeted way to reward individual achievements. Moreover, they allow channeling limited resources to the most important func-

tions and units, such as "Audits," "Inspections" and "Collection." The reward system, however, depends very much on efficiency and accountability in these units. It would not yield much effect if the selection, assignment, monitoring and evaluation of audit and control procedures is not modernized and optimized, thus leaving opportunities for benefiting selected employees or customers. Furthermore, if the reward system is not to encourage only enforcement, but also voluntary compliance, it may as well need methodology to measure compliance rates and the respective contribution of the departments.[24]

This paragraph studied the supply-side drivers towards taking a bribe. Why a tax official may want or need a bribe, however, is only one side of the coin. Equally important is why he can afford to take a bribe without being punished. This pertains to institutional restraints and opportunities.

3.2. Restraints

Restraints can be roughly divided into two groups: penalties and ethical brakes. As already mentioned, the decision of the tax official to take a bribe depends on his estimates of the probability that the bribery will be punished and the cost of the punishment. In line with these main implications of the crime prevention theory, anti-corruption policies in Bulgaria have prioritized so far stringent control based on the codification of abuses of power for personal gain and the respective strict penalties. Several amendments to the related sections of the penal code since 2002 aligned legislation with European standards. Specific clauses on tax-related corruption are included in the Tax Code, while tax fraud provisions are included in the respective tax laws. Administrative control was also strengthened: external and internal public sector audit agencies were reformed and strengthened, the tax administration internal control unit ("Inspectorate") was reinforced and given more powers, foreign consultants were hired to chase delinquent importers beyond customs clearance, and plans to establish tax police rose to the top of the tax reform agenda. In April, 2004, the tax adminis-

---

[24] The bonus system in Bulgaria, for instance, rewards only tax fraud detection, doing little to encourage better services and voluntary compliance management, which might be a much more feasible anti-corruption strategy in the short run. For more detailed assessment see Pashev (2005).

tration introduced a Code of Ethics. Despite all these control and deterrent mechanisms, the effective penalties for tax fraud and even more so for tax-related corruption are rare.[25]

Our tax administration survey tries to measure the strength of administrative restraints by asking respondents about their estimates of the cost of bribery. It is high. (13) Nevertheless, only 5 percent of the respondents place fear of punishment as the leading motive to reject a bribe (14). The majority refers to ethical brakes (67 percent) or concern for their image (22 percent). Given the perceptions about the expected penalties, this result implies either extremely strong ethical brakes, or low probability of detection and punishment.[26]

The former seems to be a convincing explanation if one considers the reported intolerance to corruption. (15). But on the other hand, if ethical brakes are so strong, would tax officials need such large wage adjustments to neutralize their motivation to take bribes as shown in the previous paragraph? Moreover, responses related to the difference between bribery and gratitude indicate that the ethical borderline between professional integrity and abuse of power may be fairly elusive for a large part of the administration (16). This may explain the relative tolerance for free lunches and small gifts. This finding weakens the case for ethical brakes. It tips the scale towards the conclusion that the responses in Table 12 reflect a rather weak probability of detection for 67 percent of the respondents, or weak probability of proof and punishment for 22 percent of them.

The Bulgarian survey also checked employee perceptions of the role of age and years of service on individual inclination to take bribes.[27] About 2/3 of all respondents

14. If a taxpayer asks you for a favor in return for money or some other form of benefit, you would: (% single choice)

Accept it as an act of gratitude	2.4
Accept it because the wages of the tax officials are low	2.7
Reject it because of fear of penalty	5.0
Reject it because it is against your ethical standards	66.9
Reject it because it may ruin your reputation	21.6
Other (please specify).	1.3

13. (a) What are the most probable consequences for a tax official who has accepted a bribe? (multiple choice)

The tax official will be fired	60.9
The tax official will depend on the briber in the future	38.1
The official will get some penalty (demoted, transferred to another department, be fined)	32.5
The detected bribery will be used for pressure against him/her.	17.9
The money/gift will be taken	5.2
There will not be any negative consequences	4.6
Other (please specify)…	0.4
Don't know/No answer	7.3

(b) Who should have a higher punishment? (%; single choice)

Both parties equally	60.7
Tax officials	25.0
Tax payers	8.0
DK/NA	6.3

deny any relationship whatsoever between the age and the length of service with the propensity to extract bribes, or to yield to corruption pressures from taxpayers. There seems to be a wide consensus on this regardless of age and length-of-service of the respondents. This result may reflect the effect of opposite factors related to age and length of service. On the incentive side, income gaps might be felt more acutely with age and length of service, while bribery technology, "connections" and the

15. How would you assess the following acts by tax officials? (%)

	Acceptable	Rather acceptable	Rather unacceptable	Unacceptable	DK/NA
To accept a free lunch/dinner from a taxpayer	4.6	8.4	20.0	65.4	1.6
To accept money to solve a taxpayer's problem	0.4	1.7	15.2	81.7	1.0
To provide inside information to taxpayers	0.3	0.3	5.0	93.4	1.0
To receive commissions or consultancy remunerations for taxpayer services	1.0	3.1	8.6	85.8	1.4

---

[25] See Coalition 2000 annual reports for account of the detected and penalized corruption acts in Bulgaria at www.anticorruption.bg

[26] The survey does not ask directly about employees' assessment of the probability of detection and their attitude to risk. The majority of the respondents, however, define bribery as a direct personal interaction between the briber and the bribee without any intermediaries and third parties involved. This implies that detection is difficult, and even more so is proving and punishing of bribery.

[27] Torgler and Valev (2004) find that the higher the age, the less likely the individuals are to justify corruption.

16. a) How do you differentiate between a bribe and gratitude?

A bribe implies advance agreement	8.7
If the benefit is not requested, it is an act of gratitude.	8.3
Depends on the size of the gift: small gifts are not bribes	49.8
If given for overcoming bureaucratic obstacles it is gratitude.	12.4
No, there is no difference	16.9
Don't know/No answer	3.9
A bribe implies advance agreement	8.7
If the benefit is not requested, it is rather an act of gratitude.	8.3

(b) Should the maximum level of gratitude gifts be regulated, and, if so, at what level?

Yes, up to BGL 10	9.3%
Yes, up to BGL 20	4.0%
Yes, up to BGL 50	5.9%
Yes, other level	0.9%
Yes, level n.a.	1.0%
Not necessary	71.0%
DK/NA	8.0%

ability to survive may improve. Conversely, on the deterrent side, the cost of detection grows with approaching retirement, as finding alternative employment might be much more difficult.

Another argument related to the efficiency of the ethical brakes asserts that codes of ethics can have limited impact if tax officials are exposed to corruption outside their work environment. Bulgarian tax officials place the spread of corruption in society among the leading causes of corruption in tax administration (see Figure 9a above). Accounts of personal experience indicate that tax officials are widely exposed to corruption outside their workplace: 35 percent needed to make a bribe or other benefit to doctors, and 12.3 percent bribed traffic police. In their assessment of the current challenges to society, they rank corruption 4th, i.e., above such problems as poverty, the inefficient health system and the judiciary. According to the tax administration, the public offices most affected by corruption are customs, the judiciary, the public health system, the police and the license and permit authorities.

Important in the context of the ethical restraints is also the opinion of the employees about the social damages and costs of corruption. They seem to be primarily concerned with the loss of public credibility and trust rather than with economic costs (16).

17. In your opinion, what are the three most harmful consequences of tax-related corruption?

Erodes public trust in the tax administration	77.3
Discourages compliance	47.9
Leads to fiscal losses	46.4
Creates a shadow economy	37.2
Creates a bad image of the country abroad	16.7
Discourages foreign investors	12.6
Erodes public ethics	12.3
Impedes reforms and development	9.4
Impedes fair competition	4.6
Impedes private entrepreneurship	3.6
DK/NA	1.7
Other	0.4

3.3 Institutional opportunities

The institutional opportunities for corruption stem mainly from flaws in tax and accounting legislation, and from inefficiencies in the organization of work processes. The related anticorruption measures pertain to tax policy reform. They include, above all, the simplification of the tax code through reducing the various tax exemptions, which is a preferred instrument in many transition countries for regulating economic activity. Ambiguities and inconsistencies in the accounting standards also provide a lot of leeway for discretion and corruption pressures during audits.

Furthermore, bribery can be discouraged through streamlining the selection, assignment and reporting of audits and inspections, as well as through the monitoring and evaluation of their efficiency. It was noted above that even though tax officials place flaws in regulations high among the determinants of corruption, they are less demanding with regard to organizational inefficiencies such as poor work conditions, shortage of staff, inefficient internal controls, flaws in enforcement and audit procedures. This finding departs from other assessments and should be treated with caution.[28]

4. "Sizing up" the problem and evaluating the policies

Delineating tax corruption from other corruption practices and studying its underlying drivers and mechanisms would have little practical value could it not be used

---

[28] See, for instance, World Bank (2003).

for appraisal of appropriate anti-corruption measures and even more importantly for monitoring and evaluating their effect. Therefore, evaluating and measuring corruption is central in the context of two interrelated policy issues. The first one is the issue of the economic and fiscal costs of tax corruption in the broader context of ex-ante weighting of the costs and benefits of anticorruption reforms and measures. This is examined below in terms of losses of efficiency, equity and revenues. The second one is the issue of ex-post monitoring and evaluation of anti-corruption measures. A set of indicators are suggested for the purpose of diagnosing the problem and monitoring the efficiency and effectiveness of the assigned policy.

4.1. The economic and business cost of tax corruption

The fiscal costs of tax corruption are obvious. As far as it encourages non-compliance, it erodes revenues and the capacity of the government to perform its regulatory functions and to provide public goods and services.[29] Most of these services are crucial for investment and growth: business services, infrastructure, education and health, etc. In transition countries, the perception about this causality is usually reversed. Entrepreneurs think that because the government does not deliver its part of the social contract embodied in the budget, they are free not to comply with their part of this contract. One way or another, the fiscal cost of tax corruption is evaluated through the rate of tax evasion and fraud. Even if not directly related to bribes, evasion is largely motivated by the perceived opportunity for bribery deals in case of detection.

The efficiency costs are not that straightforward. There has been some speculation in the literature as to the efficiency-enhancing benefits of administrative corruption.[30] Some researchers argue that it can decrease the bureaucratic and regulatory obstacles to investment and growth, so to say to "grease

the wheels" of growth. Reference has been made to some of the economies in Southeast Asia which achieved high growth rates despite relatively high corruption levels. Applied to tax administration, the arguments about corruption as a lubricant for the bureaucratic machine might hold in the case of bribes related to better taxpayer services. If the latter is well institutionalized, it decreases the elements of uncertainty. Investors know where and how much to pay and exactly how much the service will cost in terms of time and money. Furthermore, the arguments go, those that are most efficient can perhaps offer the highest bribes (Beck and Maher 1986; Lien 1986). Those that offer bribes to speed up administrative procedures value their time more than the rest. Therefore, corruption provides benefits in terms of saved time to those for which the opportunity cost of time is highest (Lui 1985). Even with regard to corruption related to tax evasion, it may be speculated that as far as it helps reduce effective taxation, it reduces tax-driven excess burden, allowing a larger share of income to remain within the private sector and be used more efficiently for investment and growth than if it were channeled to public expenditures. The more so, as those that can afford to offer bribes are likely to be the most profitable companies, i.e., the most efficient ones. Therefore, tax corruption may enhance efficiency as it reduces progress in the tax system and the related disincentives to investment and growth. There have even been arguments about the benefits of using bribes for financing of political parties as far as it enhances political stability and the capacity of the ruling party to pursue its growth policies.[31]

---

[29] There have also been arguments, however, that bribes save money for public wages, thus allowing a lower tax burden which is conducive to growth (Tullock 1996).

[30] These arguments were more frequent in the 1960s and 1970s, but have gradually declined since the 1990s. For a comprehensive discussion see Martinez-Vazquez, Azre and Boex (2004) Bardhan (1997).

[31] Anecdotal evidence from importers and customs officers in Bulgaria indicates that in the early years of transition, new political elites might not have had a strong enough political clientele yet to offer financial support, and might have had to rely on institutionalized customs corruption for party financing, taking advantage of high import duties and, at the time, high sales margins of imports. This may reflect inertia from the past as well, when the party used foreign trade and state revenues for political financing or the lack of strong relationships between the new political elite with the business elite (which largely emerged from the old political elite), or the limited number of companies that could afford to make political investment with dubious returns. It may partly explain the perpetual pattern of high customs corruption in Bulgaria and other countries in the region. With import duties declining, the relative share of VAT fraud is growing, which also partly explains the patterns of tax evasion in Bulgaria.

It is not difficult to see the flaws of most of these arguments. Corruption can help the investor to overcome various bureaucratic hurdles, but these hurdles may be the result of bribing opportunities. Lacking adequate checks and balances, bureaucrats may use their power to extort bribes by slowing down procedures. Or procedures for non-bribers may not be delayed intentionally, but as a result of preferential treatment of bribers, who jump ahead of the line, often with incomplete documents. One way or another, efficiency is deteriorated because of corruption opportunities and practices, while the administration has an incentive to push regulations and procedures towards more complexity and administrative discretion. There might be gains for those paying bribes relative to non-bribing competitors, but not relative to what their cost would be in a corruption-free environment.

The arguments about the capacity of corruption for the purpose of evasion or avoidance to reduce direct and dead-weight tax burden incurred by the private sector touch on one of the core issues in public finance, i.e., the optimal size of the government. However, in a functioning democracy, the choice of what proportion of national income to redistribute and the corresponding level and structure of revenues is made by the public through parliamentary mechanisms. Furthermore, a "small government" does not just mean a small share of revenues in GDP, but an equitable distribution of the benefits of the low tax burden to all taxpayers. In most transition countries, revenues make up a smaller share of the GDP than in the EU, but the benefits go primarily to the non-compliant entrepreneurs who are most likely to be bribers as well. The idea that the latter may be more efficient than non-bribers because they can afford to pay more lacks a solid ground, as well. Competing through bribery diverts resources to rent-seeking, i.e., those that can afford to pay bribes are not necessarily the most efficient in terms of productivity. On the contrary, tax corruption leads to unfair competition and a distortion of incentives. Competitive and price advantages extracted through bribes can hardly channel resources to the most productive use and to most competitive companies. Accordingly, resources are diverted not towards increased productivity and efficiency, but towards rent-seeking because this is the market test that companies need to pass in order to compete.[32] Needless to say, price signals driving the efficient allocation of resources do not work. In sum, corruption results in a market failure to allocate resources efficiently.

Finally, while financing through corruption might improve political stability and efficiency under very special circumstances, it is more likely to drive society away from the checks and balances of democracy.

These are economic costs; i.e., they affect economic efficiency at the aggregate level through driving the market away from optimal allocation of resources. Tax corruption incurs, however, extra **business costs** at the company level, thus discouraging investment. This, however, is mainly true in the case of bribes for tax services.

Both economic and business costs discourage investment. Bribes for services or to overcome excessive compliance costs are a direct cost to the company, and are correctly referred to as a bribe tax. But economic costs may be a stronger disincentive to investment, when entrepreneurs can not follow the rules of competition through bribes in a corrupt environment. This is especially important when foreign or domestic investors have the choice to invest in a less corrupt economy. For these reasons, tax corruption makes the investment and competitiveness policies of transition countries highly inefficient. Most incentives, oriented towards promoting FDI or SME growth, or strategic industrial sectors for upgrading competitive advantages, are weakened either by rent-seeking opportunities for bribers, or by the investment risks they imply for non-bribers.

There are also the costs of corruption in terms of **equity losses**. As already mentioned, this affects vertical equity through helping tax evasion and thus reducing the progress of taxation. It also affects horizontal equity by allowing bribers to pay less tax than non-bribers. These losses are much more important in an emerging market economy where, during the first years of transition, the economic policy agenda was dominated by redistribu-

---

[32] See Baumol 1990; and Murphy, Shleifer, and Vishny 1991.

tion of accumulated national wealth to the private sector rather than creating it. The post communist societies were sensitive to well-positioned individuals benefiting from what has been perceived as national assets through corrupt privatization or siphoning out the state enterprises at the expense of the public at large. These equity consequences of corruption eroded the trust and the support of transition, and in Bulgaria, for instance, led to delays and backsliding in reforms. Furthermore, through its fiscal cost, corruption undermines the redistributive capacity of the government and thus may lead to more poverty.

The cost of corruption is likely to fall more heavily on small taxpayers than on large taxpayers. First, small companies face heavier compliance costs as a percentage of their income, and are far more susceptible to corruption pressures from tax officials. Large companies have the necessary human, financial and organizational resources and political connections to deal with corrupt tax officials. Furthermore, most of them are serviced and audited by central large taxpayer units, where internal control and corruption prevention are superior relative to the periphery of tax administration. Last but not least, small companies operate in a far more competitive market than large companies and have greater difficulties in passing the cost of tax corruption on to their customers or back to their suppliers (Tanzi 1998). This is true especially in the cases of subcontracting and outsourcing when their clients are large companies.

Last but not least, there are substantial indirect economic and business costs of tax corruption. Above all, tax corruption is an important prerequisite for any other corruption in two ways. On the one hand, bribes channeled to other administrations seldom come from personal balances. They are company costs and often come from unregistered retained company income. The opportunity and the size of such "bribery" funds is largely a function of the level of tax corruption. Moreover, on the "revenue" side, it is again the tax administration that has the strongest anti-corruption resources at its disposal. It is in a position to check the discrepancy between public wages and personal wealth and lifestyle of corrupt administrative officials, politicians

and/or legislators. Therefore, the clues to limiting corruption in society as a whole are very much in the efficiency (i.e., low rate of corruption) of tax administration. The greater the amount of tax corruption, the larger the opportunities for giving and benefiting from bribes in all other spheres of the public and the private sector will be. In this sense, the cost of tax corruption should also be assessed by its spill-over effects on other types of corruption - public procurement, licenses and permits, public services – and the related costs to the economy and business. [33]

4.2. Indicators

A direct measurement of corruption is hardly reliable. Detected and penalized corrupt activity are only the tip of the iceberg. Surveys try to capture personal experience, but personal involvement in bribery, which, in the case of taxes often implies more serious violations, is quite a sensitive issue to be disclosed in a face-to-face interview. Therefore, most measures of corruption are derived from perceptions and assessments of taxpayers with all related risk of possible departures from the real situation.

Nonetheless, perceptions are important for anti-corruption policies. Economic behavior is determined by expected rather than actual costs. Thus, investor perceptions of corruption levels and related investment risks and costs are what matters for the efficient allocation of resources. [34] Similarly, it is the taxpayers' evaluation of the net cost of tax evasion and bribery and of the cost of compliance that drives corruption rather than the actual capacity of the administration to detect and punish evasion, or to process applications. Perceptions, however, might be much more instrumental for policy making if they are used to diagnose the drivers of corruption on the demand and supply side rather than the actual level of corruption.

---

[33] See Martinez-Vazquez, Azre and Boex (2004) for a discussion of corruption costs in general.

[34] On the other hand, it may be argued that the results of the monitoring of corruption also create perceptions, with the ensuing economic costs, and are thus self fulfilling. This is not to be interpreted, however, that an inefficient anti-corruption strategy may be substituted by an efficient PR strategy with a similar effect on risk assessment and investment.

Annex 2 presents a matrix of indicators for evaluating corruption levels and the strength of its underlying factors, based on the conceptual framework developed in the previous three sections. It builds on the extensive literature and practical experience of measuring and monitoring corruption in transition and developing countries as well as on experience with the corruption survey of tax administration in Bulgaria. It does not offer a completed framework but rather an open framework that can guide diagnostics towards a more balanced approach to benefits and costs. The "business cost" approach tends to overestimate the costs on the demand side and may fail to explain the persistent patterns of high corruption in transition economies. Distinguishing between bribes that are imposed on business from bribes that are the price of a service demanded by business helps in better understanding tax corruption. In the latter case, bribery is a transaction between two beneficiaries at the expense of compliant taxpayers. This implies that not all tax corruption fits well into the beneficiary-victim framework of business cost surveys. More often the initiative comes from delinquent taxpayers aiming at certain benefits. It also follows that, parallel to business surveys, tax administration surveys are an indispensable part of the diagnostics. The suggested indicator matrix attempts to incorporate demand and supply side incentives and costs into the diagnostics framework.

Second, the proposed evaluation framework tries to incorporate hard data. In addition, like other surveys, it includes reference to personal experience as well. Most surveys either ask respondents about given or received bribes and their size or pose the more neutral question of experienced corruption pressure. The sensitivity of this issue, stemming from the fact that the taxpayer is more often a beneficiary rather than a victim makes these results open to questions.[35] Drawing on evidence from both sides provides the opportunity to overcome the sensitivity of asking information on personal involvement in wrongdoing by instead asking each party about bribery pressure from the other party (in addition to the opinion questions of which party initiates most deals and why).

Third, the proposed framework tries to go beyond the immediate objective of measuring corruption per se, but to also assess the intensity of its underlying factors. From a policy standpoint, this may have a higher value than speculation as to how close the perceived level of corruption is to the actual level.

Perceptions about the level of corruption are usually examined two dimensionally: first, in terms of spread and intensity of corrupt activity and second, in terms of the average value of the corruption deals. The penetration rate can be measured through assessment of the share of taxpayers and tax officials involved in corrupt acts. The intensity is measured through the frequency of bribes, or, alternatively, through the more neutral measure of the frequency of cases of pressure towards bribes.

The size of bribes is a central indicator in the "business cost" approach to corruption. It is measured either in absolute terms or as a share of business gross receipts or profits.[36] These measures can be derived both from taxpayers and tax officials' assessments or personal experience. The use of the size of bribe as an indicator of corruption levels, however, requires certain qualifications in the context of the "transaction" approach to corruption. In the conventional interpretation of the bribe as a business cost, the increase of bribes is interpreted as a measure of an aggravated corruption problem. Such an interpretation ignores both the causes and likely consequences of the increase of the size of bribes. As already mentioned, the growth in bribes may reflect the success of anti-cor-

---

[35] The corruption indices of Coalition 2000 in Bulgaria incorporate perceptions as well as evidence about experienced corruption pressure and personal involvement in corruption acts (see the methodology in Nonchev 2004). As effective Bulgarian legislation, however, incriminates both giving and accepting of bribes and any actions aimed at a bribery deal, the evidence about given/offered bribes and their size obtained in a face-to-face interview can be indicative of changes over time rather than the actual level of corruption at a given point in time. International indices try to overcome this sensitivity by avoiding questions about personal experience, but rather referring to a "typical company like yours," or to "your branch/ sector" (see, for instance, the measures of Global Competitiveness Report and Transparency International).

[36] The absolute measure of the bribe sizes is used by Coalition 2000, while the second measure is used by the World Bank in its Business Environment and Enterprise Performance Surveys (BEEPS) in transition countries. See Gray et al., (2004).

ruption policies. If incentives and brakes on the supply side are effective, they increase the cost of detection and thus the size of the benefit below which the tax official would not take the risk of bribery. In brief, the growth in the size of bribes may reflect growing risk premiums set by the supplier of the bribery services. Alternatively, as already mentioned, growing bribes may reflect increased penalties for evasion, or increased evasion and detection of evasion by the auditors. Depending on demand and supply elasticities, in the best case scenario, growing bribes may reduce the spread of corruption, crowding it out to the high levels of income and evasion (which might facilitate control and detection), or to other types of bribery with higher returns (e.g., public procurement, etc.) In this sense higher bribes for evasion may be more instrumental than higher penalties in deterring it, as the corrupt auditor will have more incentives to detect the full amount of evasion. This is not to imply that if the administration cannot minimize evasion bribery through penalties, it should rely on the bribe costs incurred by business. It rather means that the size of the bribes alone is not telling much about the cost of corruption, if it is measured separately from the benefits, nor about changes in the level, if it is taken separately from the changes in the spread of corruption. A more synthetic measure of bribes, not as a business cost but as a ratio of the received benefit, might provide more useful information on the value of the deal rather than on the value of the bribe alone.

In addition to the overall level of tax corruption measured through the number and value of corruption deals, the diagnostic framework proposed here underlines the importance of the structure of corruption in terms of type of bribery services obtained as well as in terms of horizontal and vertical patterns of concentration of corruption risks in the administration.

In addition to indicators about the intensity and value of deals, the indicator matrix proposes indicators of the underlying drivers of tax corruption. In line with the conceptual framework presented in section two, a distinction is made between demand side drivers of evasion on one hand, and excessive

compliance costs on the other. The propensity to evade taxes and, hence, the likelihood of related corrupt activity, are assessed in terms of indicators of the tax burden and the cost of evasion. They are derived both from hard data about marginal and effective tax rates and compliance gaps, and from involved parties' assessment of the tax burden and the cost of evasion, including the attitude of respondents to risk. The cost of evasion is perceived to incorporate the probability of detection and the expected size of the bribe needed to conceal it from authorities. Data and feedback on the percentage of successfully appealed audits can be indicative about the relative weight of regulatory flaws and tax inspector pressures in corruption related to non-compliance. Therefore, respective indicators and assessment are also included in the diagnostic framework. The strength of the drivers underpinning the second group of corruption services, those related to voluntary compliance, is diagnosed through various measures of the costs of tax compliance, as well as the policies of observing standards of services and the monitoring, evaluation and reporting thereof. Important in this regard are the bargaining costs of the bribery deals. It depends on the degree of institutionalization of corruption, i.e., whether entrepreneurs know who to pay and for what and whether they know what exactly they get for what they pay and how probable it is that the other party will default.

The incentives and opportunities on the supply side should be evaluated through the tax administration assessment of incentives. These pertain mainly to the perceptions of the fairness and efficiency of the HR system, the core of which is the level of remuneration, including the base wage and bonuses. On the side of brakes, similar to the demand side, what matters most is the evaluation of the tax officials on the cost of detection of bribery. This is determined by the probability of proving the act, the expected consequences in both the case of proved accusation as well as of withdrawn accusation, and the attitude to risk. In line with the growing evidence in the literature on the importance of ethical brakes, they are also included in the diagnostics framework. The findings can provide guidance

on the needs for specialized anti-corruption training of tax administrators.

Most importantly, the value of asking tax officials about corruption is largely in having first hand evidence on the institutional flaws that lead to increased opportunities for bribes, including those pertaining to flaws in legislation as well as in the work environment and processes.

Conclusion

Tax corruption is traditionally evaluated in terms of business cost. While this concept is valid in the case of bribes paid by compliant tax-payers, or bribes paid by taxpayers whose non-compliance is due to flaws in tax and accounting regulations, most corruption in tax administration seems to be related to tax evasion. Drawing evidence from corruption surveys of business and tax administration in Bulgaria, the study tries to look at tax corruption from a slightly different perspective. It examines the problem and its underlying drivers from the viewpoint of transaction rather than extra imposed cost on business. In the case of detected evasion, the bribe is the price paid by business for concealing the detected fraud. Other corruption services, like those related to speeding up procedures and tax returns, may be much more imposed by the supplier than demanded by the taxpayer. In this sense, the proposed indicator framework identifies the drivers and deterrents, the incentives and the institutional opportunities that determine the demand and supply of corruption services related to compliance and enforcement of tax regulations. The proposed framework is intended to be a flexible and far from comprehensive diagnostic framework for evaluating the costs of tax corruption as well as formulating and appraising corresponding remedies. Moreover, the indicators can be used for monitoring and evaluating the impact of anti-corruption measures in terms of their effect on the level and spread of corruption, and more importantly on the underlying drivers. They might be useful as well in comparing tax corruption across transition countries, which will provide deeper insight into causes and remedies.

In a wider context, the policy framework developed here might be relevant in better distinguishing between business cost and benefits when evaluating the institutional opportunities for supply or demand of other corruption "services." Interpreting the bribe as a net cost for the briber primarily holds for corruption related to public services and compliance costs (e.g., bribery for speeding up permit and licensing procedures). Most corrupt activity implies benefits for the briber, which are usually ignored when asking the bribers about the cost of corruption. These include bribes for evasion of taxes, import duties and social insurance contributions, but also bribes to win public contracts, court trials or obtain undue social benefits (as disability pensions) where the briber is a net beneficiary. This may help to better understand the persistence of corruption patterns in transition economies. Furthermore, the analysis of the demand side drivers in these transactions may help in the understanding of the changes in corruption patterns as driven by differing rates of return.

References

Allingham, Michael and Agnar Sandmo, (1972), "Income Tax Evasion: A Theoretical Analysis," Journal of Public Economics, 1 No 4, November 1972: 323-338

Bardhan, P. (1997), "Corruption and Development: A Review of Issues," Journal of Economic Literature, Vol. 35: 1320–46.

Baumol, William J., (1990), "Entrepreneurship: Productive, Unproductive, and Destructive," Journal of Political Economy, Vol. 98: 893–921.

Beck, Paul J., and Michael W. Maher, (1986), "A Comparison of Bribery and Bidding in Thin Markets," Economic Letters, Vol. 20, # 1: 1–5.

Becker, Gary S. "Crime and Punishment: An Economic Approach, The Journal of Political Economy, Vol. 76, No 2 (Mar-Apr. 1968): 169-217

Cowell, Frank, (2004), "Carrots and Sticks in Enforcement," in Aaron, H and J. Slemrod (editors) The Crisis in Tax Administration, The Brookings Institution, 2004

Gray, Ch., J. Hellman and R. Ryterman, (2004), Anticorruption in Transition 2: Corruption in Enterprise-State Interactions in Europe and Central Asia 1999 – 2002, The World Bank 2004

Haque, N. and Ratna Sahay, (1996), "Do Government Wages Cuts Close Budget Deficits? Costs of Corruption," Staff Papers, International Monetary Fund, Vol. 43 (December), pp. 754–78.

Hellman, J. Geraint Jones, and Daniel Kaufmann, (2000), "Seize the State, Seize the Day: State Capture, Corruption, and Influence in Transition Economies," World Bank Policy Research Working Paper No. 2444

Lien, Da Hsiang Donald, (1986), "A Note on Competitive Bribery Games," Economic Letters, Vol. 22, #4: 337–41.

Lui, Francis T., (1985), "An Equilibrium Queuing Model of Bribery," Journal of Political Economy, Vol. 93: 760–81.

Martinez-Vazquez, J. and R. McNab, (2000), "The Tax Reform Experiment in Transition Countries," National Tax Journal, Vol. LIII, #2, pp273-298

Martinez-Vazquez, Jorge, F-Javier Arze and Jameson Boex, (2004), "Corruption, Fiscal Policy and Fiscal Management," USAID, October 2004

Murphy, Kevin M., Andrei Shleifer, and Robert W. Vishny, (1991), "The Allocation of Talent: Implication for Growth," Quarterly Journal of Economics, Vol. 106: 503–30.

Nonchev, A., (2004), Андрей Нончев, "Корупцията като обществен феномен" в Корупционни практики и превенция на корупцията, Център за изследване на демокрацията, София 2004 ("Corruption as a social phenomenon" in Corruption Practices and Prevention of Corruption, Center for the Study of Democracy, Sofia, in Bulgarian language)

Pashev, K., (2005), "Данъчната корупция: стимули и спирачки" Център за изследване на демокрацията, Икономическа програма ("Tax Corruption: incentives and brakes" Center for the Study of Democracy, Economic Program, in Bulgarian language)

Rauch, James E., and Peter B. Evans, (2000), "Bureaucratic Structure and Bureaucratic Performance in Less Developed Countries" Journal of Public Economics, Vol. 75, No. 1, January 2000

Sandford, C. T., Godwin, M. and Hardwick P., (1989), Administrative and Compliance Costs of Taxation, Bath: Fiscal Publications

Sandmo, Agnar, (2004), "The Theory of Tax Evasion: A Retrospective View," Norwegian School of Economics and Business Administration, September 2004

Slemrod, J. and S. Yitzhaki, (2002), "Tax avoidance, evasion and administration," in A. J. Auerbach and M. Feldstein (eds.), Handbook of Public Economics, Volume 3. Amsterdam: Elsevier Science.

Tanzi, Vito, (1998), "Corruption Around the World: Causes, Consequences, scope and Cure," IMF Staff Paper, Vol. 45, No. 4, Dec 1998, pp.559-594

Torgler, Beno and Neven Valev, (2004), "Corruption and Age," mimeo

Transparency International, (2004), "Report on the Transparency International Global Corruption Barometer 2004" 9 December, Berlin

Tullock, Gordon, (1996), "Corruption Theory and Practice," Contemporary Economic Policy, Vol. 14: 6–13.

Van Rijckeghem, Carolina and Beatrice Weder (1997), "Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption," IMF Working Paper 97/73, 1997

World Bank, (2000), Anticorruption in Transition: A Contribution to the Policy Debate, September 2000

World Bank, (2003), Project appraisal document on a proposed loan in the amount of EUR 31.9 million to the Republic of Bulgaria for a Revenue Administration Reform Project, Report No: 25010-BUL, May 9

Yitzhaki, Schlomo, (1974), "A note on 'Income Tax Evasion: A Theoretical Analysis'," Journal of Public Economics, 3, 201-202

Annex 1: Tax corruption from a regional perspective

1.1 Transparency International: Corruption in selected transition countries by sector 2004
To what extent do you perceive the following sector in this country/territory to be affected by corruption? (1: not at all corrupt; 5 extremely corrupt)

Sector	Bosnia & Herzegovina	Bulgaria	Croatia	Czech Rep.	Estonia	Georgia	Kosovo	Latvia	Lithuania	Macedonia	Moldova	Poland	Romania	Russia	Ukraine
Political parties	**4.3**	4.3	3.6	**3.9**	**3.5**	3.5	3.0	**4.2**	4.2	4.2	4.1	**4.2**	**4.2**	3.8	**4.3**
Legislature	4.1	4.2	3.6	3.5	3.1	3.4	2.4	4.0	4.2	4.1	4.1	4.1	4.0	3.7	**4.3**
Judiciary	4.0	4.3	**3.8**	3.5	3.1	3.8	2.9	4.1	4.2	**4.3**	4.1	4.0	4.1	3.7	4.2
Police	3.9	3.8	3.3	3.8	2.9	**4.2**	1.9	4.0	4.1	3.8	**4.3**	3.9	3.8	**4.0**	**4.3**
Private Sector	3.8	3.7	3.5	3.1	3.1	3.3	3.1	3.7	3.5	3.8	3.7	3.8	3.7	3.6	4.0
Tax revenue	3.3	3.5	3.5	2.9	2.5	3.9	2.7	3.5	3.5	3.6	3.8	3.5	2.9	3.4	4.2
Customs	4.0	**4.5**	3.3	3.4	3.0	3.9	**3.5**	4.1	**4.3**	4.2	**4.3**	3.1	**4.2**	3.5	**4.3**
Media	3.1	3.0	3.1	2.9	2.8	2.7	2.3	3.1	3.2	3.3	3.0	3.4	2.6	3.4	3.4
Medical Services	3.8	3.8	3.6	3.0	2.7	3.6	**3.5**	3.6	3.8	4.2	3.9	4.1	3.9	3.4	4.1
Education	3.5	3.3	3.0	2.6	2.4	3.3	2.6	3.0	3.0	3.8	3.6	3.5	3.3	3.5	3.9
Registry and Permits	3.1	3.6	3.5	2.3	2.9	3.4	2.8	3.1	2.9	3.1	3.8	3.7	3.4	3.2	3.4
Utilities	2.7	2.8	3.1	2.1	2.4	3.0	3.1	2.3	2.7	3.0	2.8	3.1	2.5	2.7	3.0
Military	2.3	2.7	2.7	2.8	2.0	2.9	1.4	2.5	2.4	2.7	2.9	3.1	2.4	3.4	3.1
NGOs	2.5	2.9	2.4	2.6	2.8	2.7	2.3	2.4	2.8	3.0	2.8	3.3	2.7	2.7	3.0
Religious Bodies	2.5	2.6	2.6	2.2	1.7	2.0	1.5	2.0	2.3	3.0	2.1	3.1	2.2	2.1	2.0

Source: Transparency International Global Corruption Barometer 2004. The shaded parts indicate the 5 most affected institutions and sectors in each country, the number is in bold.

1.2 Global Competitiveness Report: Tax corruption in selected transition countries.
In your industry, how common would you estimate that companies make undocumented payments or bribes connected with annual tax payments? (1 = common, 7= never occurs)

	2003 (102)*			2002 (80)*	
	Rank	**Score**	**SD**	**Rank**	**Score**
Hungary	22	6.0	1.3	32	5.5
Estonia	26	5.9	1.1	25	5.9
Slovenia	29	5.8	1.4	19	6.0
Bulgaria	31	5.8	1.7	21	6.0
Lithuania	36	5.6	1.5	11	6.3
Slovak Rep.	38	5.5	1.6	47	4.8
Czech Rep.	45	5.0	1.7	58	4.2
Poland	49	4.9	1.6	62	4.1
Latvia	50	4.8	1.4	54	4.5
Croatia	54	4.7	1.8	45	4.8
Russia	59	4.4	1.9	53	4.6
Serbia	63	4.3	1.6	na	
Romania	70	3.9	2.2	59	4.2
Macedonia	74	3.8	2.3	na	
Ukraine	89	3.4	1.5	72	3.5

*Global Competitiveness Report (2004, 2003). *80 countries were ranked in the 2002 – 2003 report and 102 in the 2003 – 2004 report*

Annex 2: Tax corruption level and drivers: Indicator matrix

Object of measurement	Indicator	Hard Data (templates)	Taxpayer survey evaluation/personal experience	Soft Data — Tax collector's survey evaluation/personal experience	Reference data
Level of tax corruption	Share of companies involved		• Share of companies paying bribes[1] to tax administration (on a scale of 1-5[4])	• The number of companies paying bribes to tax administration (on a scale of 1-5)	Number of sanctioned taxpayers[3]
	Share of tax officials involved		• Share of tax officials taking bribes: on a scale of 1-5	• Share of tax officials taking bribes (on a scale of 1-5)	Number of penalized officials
	Frequency of bribes		• How often might a company like yours offer bribes, gifts and other favors to tax officials? on a scale of 1-5	• How often do taxpayers offer bribes, gifts and other favors to tax officials? (on a scale of 1-5)	
	Size of bribes		• What is the average level of bribes paid? (on a scale of 1-5)[3]	• What is the average level of bribes? (on a scale of 1-5)34	
	Personal experience		• How often in the last year did you have to offer some benefit to a tax official in relation to your taxpayer obligations through bribes/gifts/favors/entertainment? (on a scale of 1-5 each)	• How often in the last year you were offered a benefit in relation to your obligations? bribes/gifts/favors/ entertainment (on a scale of 1-5 each)	
			• Did your bribe expenses increase in the last year (versus the previous year): a) in absolute terms; b) as a share of company income? increased/decreased/stay the same each one	• Is this increase or decrease versus previous year in terms of : a) number of companies, frequency of briberies/size of bribes offered increased/decreased/stay the same each one	
Structure			• What are the services most often paid for? (rank them): avoiding fines and sanctions for non-compliance; speeding up procedures (including VAT refund); receiving undue tax benefits (exemptions, deduction credit refunds); information about (actions against) competitors	• What do taxpayers most often make bribes for? (rank them): avoiding fines and sanctions for non-compliance; speeding up procedures (including VAT refund); receiving undue tax benefits (exemptions, deduction credit refunds); information about (actions against) competitors	
Horizontal and vertical patterns			Evaluate the degree of penetration of corruption across administrative functions in terms of: • officials involved • size of bribes • frequency of bribes Evaluate the degree of penetration of corruption across administrative levels in terms of: • officers involved • size of bribes • frequency of bribes	Evaluate the degree of penetration of corruption across administrative functions in terms: • of officials involved • size of bribes • frequency of bribes Evaluate the degree of penetration of corruption across administrative levels in terms of • officers involved • size of bribes • frequency of bribes	

[1] Bribes including benefits in cash or in kind such as gifts, favors, free lunches, etc.

[2] This is ambiguous: it indicates the rate of corruption, but the rate of detection as well; therefore, this is only used as reference item.

[3] For cross country comparisons, the scale might be based on the minimum wage, or the average tax administration wage, e.g.: < 1/5; < ½, <1; <3; >3

[4] A scale of 5 is an approximation of the following values

Rate	1	2	3	4	5	DK/NA
How often	never	rare	sometimes	often	always	
How many	few	<1/2	about 1/2	>1/2	Almost all	

Demand side drivers and deterrents

Object of measuring	Indicator	Hard Data (templates)	Soft Data		Reference data
			Taxpayer survey evaluation/personal experience	Tax collector's survey evaluation/personal experience	
	Cost of evasion	Penalty schedule Size of bribes	• In your opinion, is the penalty structure efficient in deterring tax evasion? 1 = very efficient, 5 = not efficient at all. • What is the average level of bribe as a percentage of detected tax liability? Less than a fifth/ a third/ up to a half more than a half, determined by the auditor /dn-na/ other • In your opinion, what percentage of the tax fraud is detected by tax officials?	• In your opinion, is the penalty structure efficient in deterring tax evasion? 1 = very efficient, 5 = not efficient at all. • What is the average level of bribe as a percentage of detected tax liability? Less than a fifth/ a third/ up to a half more than a half, determined by the auditor /dk-na/ other • In your opinion, what percentage of the tax fraud is detected by tax officials?	
	Probability of detection	Detected cases of evasion Number of audit acts Value of audit acts Number of audit acts appealed to the administration	• Of those detected, what percentage is actually punished, i.e., penalties are not avoided by bribes? • In your opinion, which companies evade more taxes (as a percentage of taxes due)? Small, large, other, dk/na • Do you think that the probability of detection depends on the size of the fraud? • Have you in the last year had an audit or inspection for non-compliance? • Have you in the last year avoided sanctions using bribery? • Have you in the last year gone through an appeal procedure? Was it successful (yes/no/not completed)?	• Of those detected what percentage is actually punished, i.e., penalties are not avoided by bribes? • In your opinion, which companies evade more taxes (as a percentage of taxes due)? Small, large, other, dk/na; • Do you think that the probability of detection depends on the size of the fraud?	
	Probability of successful appeal	Number of appeals overturned fully Number of court appeals Number of appeals rejected fully in court procedures			
	Attitude to risk		• Do you have your accommodation or other immovable property insured? • All things being equal, you may choose tax evasion or avoidance, which leads to the same benefit, but the first implies a 50:50 probability of detection and penalty, while the second implies a cost paid to the tax consultant, equal to half the penalty. You choose: evasion/ avoidance/ none/ dk/na		
Corruption for preferential services (time gains and other benefits related to voluntary compliance)		• Are there standards of services? • Is the rate of compliance with these standards monitored and published?	• In the last year how often did your company need to pay bribes to speed up procedure services or tax rebates? On a scale of 1-5 • Are there standards of services? • Is the rate of compliance with these standards monitored, evaluated and reported (published)? • How do you evaluate the efficiency of the tax administration? On a scale of 1-5, 1 for simple and stable regulations, low compliance costs up to 5 for inefficient high compliance cost and impediment to business. • What is the average percentage of work time spent by: a) the senior management with tax officials, or for compliance with tax regulations; b) accounting and other office staff for dealing with tax requirements and officers on CIT/PIT/VAT/SIC?	• Are there standards of services? • Is the rate of compliance with these standards monitored evaluated and reported (published)? • In the last year, how often have you encountered the following attitude from taxpayers? (1-5) Not satisfied with the services/do not know their rights and obligations/have excessive expectations/think that can achieve anything by bribes	The value of overall "time tax" from business environment surveys
		• Rate of institutionalization of corruption • Effectiveness of bribes	• Are the rates of payments for various services established and known in your branch? • How reliable is a bribe? Do tax officials deliver according to the agreement?		
		• Perceptions about the costs of corruption	• Rank the three most probable negative effects of corruption.		

Supply side drivers and opportunities

Object of measurement	Indicator	Hard Data (templates)	Soft Data		Reference data
			Taxpayers' survey evaluation/personal experience	Tax collector's survey evaluation/personal experience	
HR management efficiency and fairness	System of awards performance evaluation, relation to career and wage development Recruitment Training	• Turnover rate • Education level • Absenteeism		Evaluate the fairness and efficiency of the following components of the HR management system: • Remuneration • Bonuses • Overall performance evaluation • How it is related to career and wage development • Recruitment • Professional training	
Brakes	Cost of detection of bribery Attitude to risk Ethics	Number of checked signals Number of penalties Is there a code of ethics?	.	• If you are caught accepting a bribe, what is the most likely consequence? • If you lose your job, what your prospects to be employed by the private sector? • Do you have your accommodation or other immovable property insured? • Rank the three most probable negative effects of corruption	
The institutional setting: Non-compliance bribes				• What are the major problems of tax administration? • What are the major causes for corruption in tax administration? • What are the measures leading towards minimizing corruption in tax administration?	