6. ANTICORRUPTION EFFECTIVENESS INDICATORS

The limited feasibility of direct measurements of corruption is a major challenge to anticorruption policy. Acts of corruption detected and punished show only the tip of the iceberg. Surveys try to capture personal experience, but personal involvement in tax-related bribery often implies rather grave offences and admitting that in a survey becomes a sensitive matter, especially in a face-to-face interview. As a result, measurements of corruption mostly rely on perception or opinion or hearsay, with all the inherent risk of hitting wide off the mark of reality.

Still, even *perceived* corruption is important for anticorruption policymaking. Economic behaviour is determined by expected rather than actual costs and benefits; and investors' decisions on how much and where to invest are indeed conditioned by their perceptions of corruption levels and the related risks and costs.⁶¹ The same, more or less, goes for the choice they make to give or not to give bribes. It is conditioned by taxpayers' expected cost and benefit of evasion, and their perceived probability of getting caught and punished, rather than by the administration's actual effectiveness or integrity, or the severity of the law. Therefore, close to reality or otherwise, taxpayers' opinions are important for understanding demand-side corruption drivers and making the appropriate policy decisions.

The indicator matrix presented here for the assessment of corruption levels and the strength of corruption drivers and factors derives from the analysis made in the preceding five chapters of the forms and mechanisms of corruption, and of the ways of fighting it. It is also based on leading theoretical work and practical experience in the monitoring and measurement of corruption in transition and developing countries, and on the corruption survey of the Bulgarian tax administration. Of course, the matrix makes no claim to being a perfect, or even exhaustive, diagnostic tool. Rather, it proposes an open framework to help focus diagnostic efforts on a more balanced costbenefit analysis from the perspective of either party to a corrupt transaction. Its advantages are threefold:

The conventional approach places the emphasis on the cost of corruption to business. But it can hardly explain the sustained high corruption levels in transition economies. Corruption in the tax administration can be made much better sense of if bribery forced on taxpayers is distinguished from bribery as the price of a corrupt service from which the briber's gain exceeds its price. In this latter case, bribery is a transactional bilateral relationship from which both parties stand to gain at the expense of any and

⁶¹ It is often argued that the results of corruption monitoring themselves create perceptions and work as a self-fulfilling prophecy. Doubtful as it is that observed behaviour generates more of the same, this argument effectively proposes that an economy would stand a greater chance of investment and growth were (foreign) investors kept in the dark about corruption levels in it. But, measured or otherwise, corruption can hardly remain hidden. Besides, the uncertainty created by no corruption monitoring can be a much stronger investment deterrent than the darkest picture revealed by monitoring.

all third parties, i.e., the other taxpayers and the Treasury. Thus, the winner-loser (or victim) paradigm, applicable to business's corruption costs, does not fit corruption predicated on tax fraud and other tax-related offences. Not infrequently, tax corruption is initiated by taxpayers in pursuit of some undue advantage. This is why, if the state of play in tax corruption is to be assessed properly, analytical efforts must cover the members of the tax administration, as well as the business community. The proposed matrix tries to capture both the demand-side and the supply-side costs and benefits related to corrupt services.

In addition, the matrix is an attempt to extend the diagnostic framework toward 'harder', other than opinion or experience-related, data derived from the administration's management information systems and other statistical sources. Indeed, personal experience is an indispensable element in the corruption monitoring system; most surveys include questions about bribes given or taken and their size, or else, phrased more euphemistically, about the respondent's experience of corruption pressure. However, the results that these yield should be approached with some qualifications, and especially so, where, instead of a criminal offender and a victim, there are two criminal offenders both of whom stand to gain from the act of corruption.⁶² If each of the two potential parties to corruption is asked about its experience of corruption pressure from the other, the sensitivity of the question about personal involvement might be overcome in the interest of a more objective assessment of the spread of corruption. The matrix proposed here includes both of these questions addressed to both of these parties. Still, these are 'soft' data, and the matrix does include also indicators based on data from the administration's management information system. Their retrieval and processing can be done by means of widely available IT resources. In the matrix, they are grouped together in a separate column by measurement and diagnosis parameter of corruption in the tax administration.

Last but not least, the proposed indicators make it possible to measure not only corruption levels but also, corruption drivers. To the choice of anticorruption policy measures, the latter are more relevant than corruption levels and much more indeed, than assessed discrepancies between perceived and actual corruption levels.

Corruption is usually quantified in two dimensions: (a) spread and incidence; and (b) average value of corrupt transactions. Of these, spread can be measured by the proportions of taxpayers and tax officers involved in corruption; and incidence basically means the rate at which bribes change hands or, more neutrally, the rate at which corruption pressure occurs.

As to the value of a corrupt transaction, i.e., the amount of money changing hands, it is a fundamental corruption-level indicator in the conventional approach, which regards bribes as a cost of doing business. It is measured either in absolute terms or as

⁶² In addition to perceived corruption levels, *Coalition 2000* corruption indices include data on corruption pressure experienced by the respondents and on their personal involvement in corrupt acts (see the survey methodology in *Coalition 2000* (1998)). As both the giving and the taking of bribes, and any action conducive to either, are punishable under the Bulgarian legislation, the data on bribes given and taken, and their size, obtained from face-to-face interviews, are rather an indication of time dynamics than an accurate measure of corruption levels. A number of international surveys try to get around the unease factor by formulating the question about personal involvement in terms of 'firms similar to yours' or 'your industry/sector', rather than asking directly about the respondent's own behaviour (e.g., the indices of Global Competitiveness Report or Transparency International).

a proportion of gross sales or profit.⁶³ Numbers can be put to this indicator based on either taxpayers' or tax officers' perceptions and personal experiences. However, using it to account for the level of corruption requires a number of qualifications which follow directly from the understanding of tax corruption as a transaction between two interested and willing parties. In the traditional understanding of bribery as a cost of doing business, rising bribe levels are interpreted as a sign of worsening. This interpretation ignores both the causes and the likely effects of such a development. As already noted here, higher bribe levels could be the reflection of a successful anticorruption policy. That corruption deterrents and anticorruption incentives have become more effective on the supply side means, among other things, higher probability of detection and higher contingent loss to the corrupt tax officer. Accordingly, this will have the effect of raising the lower bribe threshold under which such an officer would not take the risk of being caught. In a nutshell, higher average bribe levels could mean a rise in the risk premium which suppliers of corrupt services build into the price. On the other hand, it could mean bigger amounts involved in tax fraud or more severe punishments or more effective tax audits. Depending on demand and supply elasticities, as bribes keep rising, they might limit the spread of corruption by pushing it toward the higher income brackets or higher-value fraud, where-and this is the silver lining of such a scenario-corruption-risk management and control are as a rule more effective.

Also, as the cost of tax-related corruption rises (in terms of bribe levels and/or loss contingent on detection), corruption may altogether diminish in the field of taxation and target higher-yield sectors, such as public procurement. By raising bribe levels, tax corruption may price itself out of the market—as the bribe burden becomes comparable to that of penalties lawfully imposed for non-compliance and takes on a similar force of deterrent. Moreover, unlike lawful penalties, from which a corrupt auditor can expect no personal gain, comparable bribes may mean a stronger incentive to such an auditor to hunt down the very last penny of tax money lost to fraudsters, i.e., higher bribes may in fact result in higher detection of non-compliance. Of course, this paradox is not to be taken literally in the sense that, where they have failed by more severe penalties and better organised audits, the tax authorities should hope to succeed by relying on the corrupt motivation of some of their own. It is only meant as another argument in support of the view that, of themselves, bribe levels are not a good indicator of, either, taxpayers' corruption-related costs-if measured in isolation from their corruption-related benefits-or corruption levels, if the spread and incidence of corrupt practices are ignored. An indicator defined at a higher level of synthesis would be more useful, i.e., one measuring corruption costs in relation to corruption benefits, such as bribe to tax or penalty evaded.

In addition to measuring the overall level of corruption in the tax administration in terms of the number and value of corrupt transactions, the proposed diagnostic framework focuses on the structure of corruption by accounting for kinds of service received in exchange for a bribe, and also, the horizontal and vertical spread of corruption risk throughout the administration.

The matrix also includes indicators reflecting the causes of corruption among tax officers. In keeping with the conceptual framework outlined in Chapter One, it makes

⁶³ Coalition 2000 uses absolute terms, and the World Bank has opted for relative terms in its Business Environment and Enterprise Performance Surveys (BEEPS) of transition countries. See *Gray et al* (2004).

a distinction between corrupt behaviour driven by tax evasion motives and corrupt behaviour provoked by excessive bureaucratic costs or yielding to extortion pressure from members of the administration. The probability that a taxpayer may choose to evade taxes, and the related probability of such a choice leading to bribery, are conditioned by the extent of the tax burden and by taxpayers' perceived risk of detection and punishment. These factors are quantified based on effective tax rates and ceilings, estimates of the size of tax evasion, and respondents' perception of the tax burden and of the likely consequences of detection. The cost of tax evasion (to the taxpayer) is a function of the probability of detection and of the expected bribe amount contingent on detection (if the tax officer is not report it). On the other hand, the data on tax assessments successfully appealed provide a partial indication of the extent to which bribery results from legal deficiencies or corruption pressure from tax officers.

The intensity of the drivers behind the second large group of corrupt services, i.e., those related to voluntary tax compliance, is measured by various indicators of compliance cost and the effect of service level standards. Important in this regard is the transaction cost of corruption, i.e., how much it takes over and above the bribe itself to negotiate a corrupt deal. That, in turn, depends on the degree of institutionalisation of corruption, i.e., how easy it is for a taxpayer to target the right officer for the right service, how clear they are about what they are getting in return and how certain they are that the tax officer will deliver.

Corruption drivers and motives within the administration have been identified primarily on the basis of tax officers surveys. The emphasis has been on institutional drivers and on the effectiveness of anticorruption incentives and deterrents. Related to these is the respondents' perception of the fairness and effectiveness of human resource management, and in particular, the two components of tax officers' compensation: base salary and pay bonuses. So far as deterrents are concerned, their effectiveness has been assessed from the respondents' perceived cost of detection. That, in turn, is a function of the perceived probability of effective inquiry/investigation, the expected severity of punishment, other expected consequences short of effective punishment, and risk tolerance.

In response to the rising interest in ethical factors, they too have been included in the diagnostic framework. The relevant findings could be used by the administration in a training needs assessment.

A significant advantage of surveying tax officers' corrupt attitudes is that it yields first-hand information about the institutional weaknesses which encourage and make bribery possible—ranging from legal deficiencies to problems stemming from the working environment and work processes in the administration.

Table 14. Indicator Matrix of Anticorruption Effectiveness

Object of	zotooibal	Statistics & MIS	Surveys ("	Surveys ('Soft' Data)	Doforonco Dofo
Measurement	Mulcator	('Hard' Data)	Taxpayers' Perceptions/Personal Experiences Tax Officers' Perceptions/Personal Experiences	Tax Officers' Perceptions/Personal Experiences	neierence Data
A. Level & Structure	ture				
	% Involvement (Businesses)		 % businesses paying bribes^a to tax officers (on scale of 1–5^b) 	• # businesses paying bribes to tax officers (on scale of 1–5)	# taxpayers sanctioned ^c
	% Involvement (Tax Officers)		• % tax officers taking bribes (on scale of 1–5)	• % tax officers taking bribes (on scale of 1–5)	# tax officers sanctioned ^d
Level	Incidence of Bribery		 How often a firm like yours might offer bribes, gifts and other favours to tax offi- cers? (on scale of 1–5) 	 How often businesses offer bribes, gifts and other favours to tax officers? (on scale of 1–5) 	
	Bribe Size		\bullet What is the average size of bribes paid? (on scale of 1–5°)	• What is the average size of bribes paid? (on scale of 1–5°)	
	Personal Experience		How often last year did you have to offer some consideration to a tax official in con- nection with your duties as taxpayer in the form of bribe/gift/favour/entertainment? (on scale of 1–5 each)	How often last year were you offered some consideration in connection with your duties as tax officer in the form of bribe/gift/favour/entertainment? (on scale of 1–5 each)	
Level	Personal Experience		Did your bribe expenses change last year (from the previous one): (a) in absolute terms; (b) as a share of sales? — — Yes, went up; — Yes, went down; — No change on either basis	Has bribery changed from last year in terms of: (a) # businesses paying bribes; (b) incidence /size? — – Yes, went up; – Yes, went down; – No change on either basis	

^a Bribes includes cash and/or in-kind consideration, such as gifts, favours, 'free lunches', etc. ^b Scale of 1-5 approximates the following cases:

DK/NA		
2	Always	Almost all
4	Often	> 1/2
3	Sometimes	≈ 1/2
2	Rarely	< 1/5
1	Never	мәქ
Rate	How often?	How many?

^c Indicates both corruption level and detection rate, and being ambiguous, has been included for reference only.

^d Indicates both corruption level and detection rate, and being ambiguous, has been included for reference

^e For cross-country comparisons, the scale may be based on minimum wage or the average wage for the tax administration wage, e.g.: < 1/5; < 1/2, < 1; < 3; > 3.

Doforonce Data			
Surveys ('Soft' Data)	Taxpayers' Perceptions/Personal Experiences Tax Officers' Perceptions/Personal Experiences	What services do tax payers most often pay bribes for (rank them): evasion of non- compliance fines, etc. sanctions; speedier procedure (including VAT refund); undue tax relief (exemptions, allowances, tax credit); information about (action against) competitors?	Assess the degree of penetration of corruption by functional area in terms of: Employees involved; Bribe sizes; Assess the degree of penetration of corruption by administrative level in terms of: Employees involved; Bribe sizes; Frequency of bribes
Surveys (Faxpayers' Perceptions/Personal Experiences	What services are most often bribes paid for (rank them): evasion of non-compliance fines, etc. sanctions; speedier procedure (including VAT refund); undue tax relief (exemptions, allowances, tax credit); information about (action against) competitors?	Assess the degree of penetration of corruption by functional area in terms of: Employees involved; Bribe sizes; Frequency of bribes Assess the degree of penetration of corruption by administrative level in terms of: Employees involved Bribe sizes; Frequency of bribes
Statistics & MIS	('Hard' Data)		
zotooibal	mulcator		
Object of	Measurement	Structure	Horizontal & Vertical Patterns

Doforonco Dofo	neierence Data		Compliance Gap ^í		
Surveys ('Soft' Data)	Taxpayers' Perceptions/Personal Experiences Tax Officers' Perceptions/Personal Experiences		• What do you think of the rates of PIT, CIT, VAT, SS, excise duties, property and other local taxes? - Not a problem; - Some problem; - Severe problem • Which tax is most often evaded? - PIT; - CIT; - CIT; - VAT; - Excise; - Property; - Other	• In your opinion, are penalties an effective deterrent against tax evasion? (on scale of 1, Very effective, to 5, Not all; DK/NA)	What is the average bribe size as a proportion of non-compliance amount detected? Less than one-fifth; One-third; Half or more, as much as asked; DK/DN; Other
Surveys ('9	Taxpayers' Perceptions/Personal Experiences		• What do you think of the rates of PIT, CIT, VAT, SS, excise duties, property and other local taxes? - Not a problem; - Some problem; - Severe problem • How often last year did your firm have to pay a bribe to evade non-compliance sanctions on account of flawed regulations or to evade taxes? (on scale of 1–5) • Which tax is most often evaded? - PIT; - CIT; - VAT; - VAT; - Property; - Other	• In your opinion, are penalties an effective deterrent against tax evasion? (on scale of 1, Very effective, to 5, Not all; DK/NA)	• What is the average bribe size as a proportion of non-compliance amount detected? – Less than one-fifth; – One-third; – Half or more, as much as asked; – DK/DN; – Other
Statistics & MIS	('Hard' Data)	rents	Tax Burden Indicators: Marginal & Effective Tax rates	Schedule of Penalties	Bribe Sizes
-	IIIUICALUI	B. Demand-Side Drivers & Deterrents	Tax Burden		Evasion Cost
Object of	Measurement	B. Demand-Side	Corruption Related to Tax Fraud, etc. Tax Offences	,	

[†] May reflect both excessive tax burden or compliance costs, or taxpayers' income-maximising behaviour of taxpayers, and being ambiguous, has been included for reference only.

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	Reference Data					
	Surveys ('Soft' Data)	axpayers' Perceptions/Personal Experiences Tax Officers' Perceptions/Personal Experiences	 In your opinion, what percentage of tax- fraud is detected by tax officers? 	• Of those detected, what percentage is actually punished, i.e. penalties are not evaded by bribes?	• In your opinion, which companies evade more taxes (as a percentage of tax liability)?— Small; — Large, — Other; — DK/NA • Do you believe that the probability of detection depends on the size of the fraud?	
	Surveys (Taxpayers' Perceptions/Personal Experiences	 In your opinion, what percentage of tax- fraud cases is detected by tax officers? 	• Of those detected, what percentage is actually punished, i.e. penalties are not evaded by bribes?	 In your opinion, which companies evade more taxes (as a percentage of tax liability)? Small; Large, Other; DK/NA Do you believe that the probability of detection depends on the size of the fraud? Have you last year been audited or examined for non-compliance? Have you last year evaded noncompliance penalties by paying a bribe? 	 Have you last year appealed any correction assessment? If so, was your appeal successful? Yes; No; Still pending
	Statistics & MIS	('Hard' Data)	# Evasion Cases Detected	# Correction Assessments	Size of Correction Assessments	# Appeals before the Administration # Appeals Overruled by Administration # Court Appeals # Appeals Overruled by Courts
	Indicator				Detection Probability & Cost	Probability of Successful Appeal
	Object of	Measurement			Corruption Related to Tax Fraud, etc. Tax Offences	

	Reference Data		Time Tax' data from business environment surveys	
Surveys ('Soft' Data)	Taxpayers' Perceptions/Personal Experiences Tax Officers' Perceptions/Personal Experiences		 Has your Administration adopted Service Level Standards? If so, is compliance with the Standards monitored, assessed and reported publicly? How often last year did you encounter the following in taxpayers? (on scale of 1–5)—Dissatisfaction with service; - Ignorance of their rights and duties; - Excessive expectations; - A-bribe-can-buy-anything attitude 	
Surveys (*	Taxpayers' Perceptions/Personal Experiences	Do you have insurance on your home or other real estate? If you were given a choice between evasion and avoidance resulting in the same amount of tax savings, but in evasion you would face a 50:50 probability of detection and penalty, while in avoidance you would have to pay the tax consultant a fee equal to half the evasion penalty, which one would you choose? - Evasion; - Avoidance; - Neither;	 How often last year did your firm have to pay a bribe for faster service, tax rebates, etc.? (on scale of 1–5) Has the Administration adopted Service Level Standards? What do you think of the efficiency of the tax administration? (on scale of 1, Simple and stable regulations, and low compliance costs, to 5, Inefficient, high compliance costs) What average proportion of work time is spent by: (a) the firm's owner/manager; (b) the firm's accounting and other staff on ensuring compliance under: - PITA; - CITA; - VATA; - Sr regulations; - Excise duty regulations: - PTA: - Other? 	 Are there fixed rates of irregular payment for tax-compliance services and are they common knowledge in your industry? How reliable is a bribe? Do tax officers deliver on their part of the deal?
Statistics & MIS			Existing Service Level Standards Compliance with Standards Monitored & Reported	
:	Indicator	Risk Tolerance		Institutionalisation of Corruption Bribe
Object of	Measurement		Service-Related Corruption (faster service delivery, etc. compliance facilities)	

Indicator	Statistics & MIS	Surveys ('Soft' Data)		Reference Data
Icatol	('Hard' Data)	Taxpayers' Perceptions/Personal Experiences Tax Officers' Perceptions/Personal Experiences	ceptions/Personal Experiences	Neieleille Dala
Perceived Corruption Costs (Economic Cost of Corruption)		Rank the three most likely negative effects of corruption		
C. Supply-Side Drivers & Opportunities	tunities			
Pay-Bonus & Performance-Appraisal	Staff Turnover Rate	Assess the fairness and effectifollowing HRM components: Compensation;	Assess the fairness and effectiveness of the following HRM components: Compensation;	
as related to Career & Pay Development,	Educational Levels	– Bonuses; – Performance appraisal; – Performance appraisal i	 Bonuses; Performance appraisal; Performance appraisal impact on career 	
Selection & Training	Absenteeism	– Recruitment & Selection; – Training	& Selection;	
Detection Probability	# Corruption Complaint	• If you were cau would be the m	If you were caught taking bribes, what would be the most likely punishment?	
Detection Cost	Inquiries	If you lost your chances of empton?	 If you lost your job, what would be your chances of employment in the private sec- for? 	
Risk Tolerance	# Disciplinary Actions Taken	Do you have insu- other real estate?	Do you have insurance on your home or other real estate?	
Moral Inhibitions	Existing Code of Ethic	Rank the three corruption	Rank the three most likely negative effects of corruption	
		• What are your lems?	What are your administration's worst problems?	
		What are the main control your administration?	What are the main causes of corruption in your administration?	
		What measures would in your administration?	What measures would minimise corruption in your administration?	