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Why People Pay Taxes: The Case of the Development Levy in Tanzania

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Summary. — This paper examines factors determining tax compliance behavior in local authorities in Tanzania. The case study is the poll tax—locally named "development levy." The study finds support for the hypothesis that tax compliance is positively related to factors such as ability to pay, the (perceived) probability of being prosecuted, and the number of tax evaders known personally by the respondent. Oppressive tax enforcement, harassment of taxpayers, and discontent with public service delivery seem to increase tax resistance and may explain widespread tax evasion. © 2001 Elsevier Science Ltd. All rights reserved.

Key words — taxation, tax evasion, tax collection, compliance, local government, Tanzania

1. INTRODUCTION

Studies from different developing countries indicate that it is not uncommon for half or more of the potential tax revenues to remain uncollected (Bird, 1992, 1989; Krugman, Alm, Collins, & Remolina, 1992; Richupan, 1984). This tax base erosion has had a variety of fiscal effects and there are at least four reasons for concern. First, revenue losses from noncompliance are particularly critical in the context of substantial budget deficit (Tanzi, 1991). Second, both horizontal and vertical equity suffer since the effective tax rates faced by individuals differ because of different opportunities for tax evasion (Alm, Bahl, & Murray, 1991; Cowell, 1992; Slemrod & Bakija, 1998). Third, the expanding underground economic activities, which are often the other face of tax evasion, may affect implementation and outcomes of economic policies (Cowell, 1990; Tanzi, 2000). Finally, evasion and citizens' disrespect for the tax laws may go together with disrespect for other laws, and, thus contribute to undermine the legitimacy of government (Graetz, Reinganum, & Wilde, 1986).

Dealing with the policy problem of tax evasion requires some understanding of the factors underlying the individual's decision whether to pay or evade taxes. Little is known, however, about tax compliance behavior in developing countries (Andreoni, Erard, & Feinstein, 1998). This study attempts to shed light on some of the factors underlying tax compliance in local authorities in Tanzania using the experience with the poll tax as the case. The poll tax, commonly referred to as "development levy," has been in place at the local government level since 1983–84, and is the single largest source of tax revenue for district councils in Tanzania. In 1997, revenues from the development levy contributed on average

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about 30% of total own revenues in rural councils and 19% in urban councils (Price Waterhouse, 1998). ¹ The poll tax is, in principle, levied on every person above the age of 18 years and ordinarily resident in the area (URT, 1991, p. 284). Women are exempted in many councils. ² In most areas, the tax is levied on a flat basis, but in some urban areas graduated rates based on incomes are applied. There is widespread unwillingness among the public to pay the levy, and noncompliance is a serious problem. This has led some councils to abandon the tax in recent years.

Different arguments are used to explain the extensive noncompliance. Bukurura (1991, p. 91) argues that the evasion of the development levy is primarily due to taxpayers' inability to pay and to a lack of clarity with respect to obligations and reasons for paying. This argument is supported by the Tax Commission (URT, 1991, p. 287) claiming that "[a]s with other taxes, understanding of the need for local revenues will improve compliance." Implicitly these studies assume that an understanding of the relationship between taxes and the provision of public goods and services is a critical factor for tax compliance, hence the need for education and political mobilization. Other studies show that unwillingness to pay is the result of a combination of political protest to the degradation of local public services, perceptions of unfairness of the charges which do not take ability to pay into consideration as well as corruption and other administrative failings by the councils (Tripp, 1997; URT, 1996). Consequently, the prescription is to improve the administrative capacity and efficiency of local authorities.

While the above studies focus on identifying possible causes for people not paying taxes, it is equally relevant to ask who pays and why. This paper aims first to answer the question of who pays the head-tax in local authorities in Tanzania, and second, to explore why people pay, i.e., to identify which parameters are determining their compliance behavior. Accordingly, this approach may facilitate an explanation of the observed differences between and within local authorities with respect to tax compliance. The paper is organized as follows: Section 2 presents the theoretical framework for analyzing tax compliance. The methodological approach and organization of the empirical study are addressed in Section 3. Section 4 presents the results, and Section 5 summarizes and concludes the paper.

2. THEORETICAL FRAMEWORK

The relationship between a taxpayer and the local government includes at least three elements (Levi, 1988; Spicer & Lundstedt, 1976). First is an element of coercion, as represented by the enforcement activities of tax collectors and the penalties imposed on noncompliance. Second is an element of fiscal exchange, whereby taxation and the provision of public goods and services are interpreted as a contractual relationship between taxpayers and the (local) government. Third is the impact of social influences on the taxpayer's compliance behavior. For example, an individual's perception of the probability of his tax evasion being detected, in combination with his opportunities, may determine the decision regarding tax payment.

(a) Coercion

The coercive element of the taxpayer–government relationship is the focus of the classical tax evasion model (Allingham & Sandmo, 1972), which assumes that the taxpayer's behavior is influenced by factors such as the tax rate determining the benefits of evasion, and the probability of detection and penalties for fraud which determine the costs. The problem is thus one of rational decision making under uncertainty whereby tax evasion either pays off in lower taxes or subjects one to sanctions. This implies that if detection is likely and penalties are severe few people will evade taxes. ³

The conceptual framework needed to study the development levy is to some extent different from the standard model of tax evasion which typically focuses on the declaration of taxable income with possibilities of detection. Nonpayment of development levy has more to do with disobedience than cheating (see Besley, Preston, & Ridge, 1993). In principle, the local tax authorities can observe the fraction of evaders. Thus, taxpayers cannot hide their liability except by hiding their existence or migrating to councils where the tax is not imposed or is at a lower rate. In so far as sanctions are probabilistic, this reflects the effectiveness of the local authority in enforcing the tax. It is therefore reasonable to suppose that taxpayers' perceptions concerning the likelihood of being prosecuted and the severity of penalties affect their choice to pay or not.

(b) Fiscal exchange

The presence of government expenditures may motivate compliance (Alm, Jackson, & McKee, 1992; Andreoni et al., 1998; Cowell & Gordon, 1988). Individuals may pay taxes because they value the goods provided by the government, recognizing that their payments are necessary both to help finance the goods and services and to get others to contribute. A taxpayer may therefore be seen as exchanging purchasing power in the market in return for government services (Levi, 1988). Positive benefits may increase the probability that taxpayers will comply voluntarily, without direct coercion. 4 Without a material benefit, compliance becomes less assured. Although most taxpayers cannot assess the exact value of what they receive from the government in return for taxes paid, it can be argued that they general impressions and attitudes concerning their own and others' terms of trade with the government (Richupan, 1987). ⁵ It is then reasonable to assume that a taxpayer's behavior is affected by his satisfaction or lack of satisfaction with his terms of trade with the government. Thus, if the system of taxes is perceived to be unjust, tax evasion may, at least partly, be considered as an attempt by the taxpayer to adjust his terms of trade with the government.

(c) Social influences

The importance of social interactions in forming tastes and actions has been stressed by sociologists and social psychologists (Hessing, Elfers, & Weigel, 1988). It is reasonable to assume that human behavior in the area of taxation is influenced by social interactions much in the same way as other forms of behavior (Snavely, 1990). Compliance behavior and attitudes toward the tax system may therefore be affected by the behavior of an individual's reference group such as relatives, neighbors and friends. Thus, if a taxpayer knows many people in groups important to him who evade taxes, his commitment to comply will be weaker. On the other hand, social relationships may also help deter individuals from engaging in evasion for fear of the social sanctions imposed once discovered and revealed publicly (Grasmick & Green, 1980; Grasmick & Scott, 1982). Theoretical research on herd behavior in economic situations (Banerjee, 1992; Sah, 1991) also indicates that social influences may affect compliance, in particular by affecting the perceived probability of detection. Thus, evidence suggests that perceptions about the honesty of others may affect compliance behavior. ⁶

(d) Hypotheses

The theoretical approaches suggest a number of predictions. First is the expectation to observe the highest compliance rates among persons whose opportunity to evade is low and whose probability of being prosecuted is highest. ⁷ Second is the expectation that willingness to pay is correlated with what taxpayers perceive they get in return from the (local) government. Third is that the perceived honesty of peer groups (i.e., family, neighbors and friends) with respect to taxation might affect the decision whether to pay or not. Fourth is the expectation that ability to pay also matters.

From this initial framework, five hypotheses have been derived and explored using survey data from Tanzania:

H1. Compliance is more likely the higher income a taxpayer has.

H2. Compliance is more likely when the probability of prosecution is perceived to be high.

H3. Compliance is more likely when sanctions against tax evasion are perceived to be severe

H4. A taxpayer is more likely to comply when he perceives his terms of trade with the government as fair.

H5. The fewer evaders a taxpayer knows, the more likely he himself will comply.

3. METHODOLOGY AND ORGANIZATION OF THE STUDY

The study was carried out in Kibaha District Council, Coastal Region, and in Kilosa District Council, Morogoro Region, in the late 1996 and 1997.

(a) Selection of sample and administration of the survey

The predominant religion in the study areas is Islam, and the majority of people are agriculturists. According to World Bank (1993, p. 29) the poverty profiles in Coastal Region (Kibaha, DC) and Morogoro Region (Kilosa DC) are fairly similar. This observation is

based on a comparison of farming environments in different regions, since agriculture is the main economic activity in rural areas. Due to its proximity to Dar es Salaam and the abundance of productive land, many people have migrated to Kibaha from other regions. In Kilosa, the abundance of land and job opportunities in the plantations, mainly in the sugar industry, have attracted many migrants. Both councils apply flat development levy rates. In Kibaha DC, the rate for 1995 was TSh 500 and TSh 1,000 for 1996. In Kilosa DC, the rate for both years was TSh 1,000. A penalty of 50% is added if the levy is paid later than October 1.

(i) The survey in Kibaha

In Kibaha, the sample included three rural villages; *Pangani*, *Misugusugu* and *Disunyara*; and one combined rural–urban village, i.e., *Mwendapole* (see Table 1). The villages were selected from four different wards on the basis of a balanced representation of rural and township respondents, and accessibility.

The respondents were randomly selected from the Tax Register Books of the Village Executive Officers (VEOs) in two of the villages (Pangani and Misugusugu), and from the Tax Register Books of the Ward Executive Officers (Mwendapole and Disunyara). The designated respondent was the head of the household, who was the person registered in the Tax Register Book and the one who most likely managed or played a major role in managing tax matters on behalf of the household. The interviews were carried out in Swahili.

In total, 146 taxpayers were selected for the survey in Kibaha (Table 1). Not all the selected

respondents were available when we looked for them: some had gone to their "shamba" to farm, others came back late because they worked as employees or did other businesses. In those instances where the executive officers knew that the persons selected were not available, they were replaced in the sample by the person next to the selected one in the Tax Register Book, or, if this person was not available, by the person listed before the selected one. This technique was also used when the selected person lived in a remote or difficult accessible area, and was excluded from the sample on that basis. The final sample included 128 respondents, corresponding to a response rate of 0.88.

(ii) The survey in Kilosa

Three villages in three different wards were selected on the basis of the same criteria as in Kibaha. The sample included the rural villages of *Chanzuru* in Chanzuru ward and *Mamoyo* in Mabwerebwere ward, and the rural-urban village of *Dumila* in Dumila ward. In contrast to Kibaha, tax collection at the village level in Kilosa was carried out by the ward office and organized by the Ward Executive Officer (WEO). The village executive officers were to a large extent excluded from the collection process.

Tax Register Books were unavailable in both Chanzuru and Dumila wards. According to the Ward Executive Officers, they had either been stolen or had just disappeared. Lists of names of development levy payers were provided on hand-written sheets of paper by the WEOs. For Mamoyo village the sample was selected on the

Table 1.	The survey	sites in Kibaha	and Kilosa,	and compliance	rates in the surveye	d villages
	Villages	Number of	Numbe	er of Numb	per of 1995	

Wards	Villages	Number of registered taxpayers in the villages (1996) ^a	Number of taxpayers selected for the survey	Number of respondents (response rates in brackets)	1995 Compliance rate (%)	1996 Compliance rate (%)
Tumbi	Pangani	138	35	33 (0.94)	76	55
Visiga	Misugusugu	348	36	31 (0.86)	68	39
Kibaha	Mwendapole	566	35	27 (0.77)	74	48
Mlandizi	Disunyara	257	40	37 (0.92)	51	35
Total, Kibaha			146	128 (0.88)	66	44
Chanzuru	Chanzuru	n.a.	25	19 (0.76)	95	89
Dumila	Dumila	n.a.	25	8 (0.32)	88	88
Mabwerebwere	Mamoyo	n.a.	25	17 (0.68)	59	76
Total, Kilosa		n.a.	75	44 (0.58)	80	84

^a Compiled from the Tax Register Books of the Village Executive Officers and Ward Executive Officers.

basis of the Tax Register Book that had just been compiled by the newly appointed Ward Executive Officer. In each village, 25 respondents were randomly selected on the basis of these lists. The final sample in Kilosa included 44 people, equivalent to a response rate of 0.58 (Table 1). In Chanzuru, 19 taxpayers were interviewed, and 17 in Mamoyo. In Dumila village, however, the final sample only included eight respondents. The low response rate in Dumila was partly due to people refusing to participate, linking the exercise with tax collection, and partly because it was the harvesting season.

There is some question as to how representative the Kilosa sample is both in terms of size and how it was selected. Only two of the respondents were traders (both from Chanzuru village), and one was a wage employee in the private sector (from Mamoyo). The remaining individuals were peasants. But this probably reflects fairly well the occupational distribution in the research area. The average household size of the sample is seven persons, which is identical with Kibaha, and also corresponds with the average rural household size in Tanzania of 6.37 persons (Tinios, Sarris, Amani, Maro, & Zografakis, 1993).

(b) The questionnaire

The objective of the study was to explore the decision-making behavior of individual taxpayers in the study area. To reduce errors of recall, compliance behavior for the two previous years only, i.e., 1995 and 1996, was considered. Questions that focused directly on the respondents' income were eliminated and only questions that provided indirect indicators of wealth were included. The questions were organized around five main headings.

(i) Background information on the respondent

Key data collected were on the main occupation of adult members of the household and the principal source of income as these variables are assumed to affect both the opportunity to evade and the ability to pay taxes. Based on previous survey studies in Tanzania (Semboja & Therkildsen, 1989; Tinios *et al.*, 1993), a specific set of assets were chosen as indicators of wealth: Bicycle, house (own or rent), type of house (mud wall, bloc wall, iron sheeted roof, cement floor), radio and wristwatch. Questions on religion (Christian, Muslim, other) and place of origin (born in the

area or migrant from other regions of the country) were also included, since these variables may have an impact on the respondent's social network (i.e., peer groups) in the local communities. Marital status and age were controlled because research from Western countries indicate that these variables may be related to compliance behavior, for instance, via perceptions on the severity of sanctions (Kinsey, 1992, p. 266; Hessing, Elfers, Robben, & Webley, 1992, p. 292).

(ii) Admitted (non)compliance

The respondents were asked if they had paid development levy in each of the two recent years. Respondents giving an affirmative answer were then asked about the tax rate paid. The answers were compared with the correct rates to establish the credibility of the answers given.

(iii) Tax enforcement

A series of questions were asked on tax collection procedures, including which part of the council was involved and how payment was made. Moreover, the respondents were asked if they knew someone in the neighborhood not paying and the types of legal sanctions applied to noncompliers. These questions aimed to examine how contact with tax enforcers and procedures of collection might affect taxpayer behavior. Questions were also asked about their view of tax collectors and local politicians with respect to integrity, and whom they considered were most to blame for the problems of collecting the development levy.

(iv) Perceptions of others' behavior

Respondents were asked about their perceptions of other taxpayers' behavior regarding compliance. One question focused on their perception of why some people paid, while another asked about their perception of whether taxpayers would comply if the probability of being detected was low.

(v) Perceptions of the terms of trade with the government

To measure perceptions of the terms of trade with the government, a series of questions were asked about the quality of public services and the value received in return for tax payment. Emphasis was put on the perceived relationship between tax compliance and the provision of public services.

(c) Data analysis and problems

The limitations of survey methods are acknowledged, yet more rigorous methods were found unsuitable in this particular research effort. Although the case studies do not cover the whole range of possible choices by taxpayers, they probably represent many of the most important choices and decisions. Thus, if the findings are consistent with the theoretical models, the case studies may provide means to consider the plausibility of the hypotheses generated by the models outlined above. ⁹

In surveys of tax evasion in Western countries (e.g., Kinsey, 1992) it is argued that because tax evasion is considered socially undesirable, responses to a questionnaire will be adversely biased. This might also be the case in Tanzania, although anecdotes suggest that tax evasion is *not* associated with the type of social stigma referred to in the West. In contrast, some observers describe nonpayment of the development levy as a form of popular opposition toward state policies (Tripp, 1997, p. 154). If this description is correct, we would expect an "inverse adverse bias" compared to surveys from developed countries, i.e., a larger share of the respondents claims not to have paid relative to the actual compliance rate. Data in the study did not, however, show any indications of such an inverse relationship.

The share of compliers in the sample (Table 1) is far higher than the figures of aggregate compliance rates compiled from the Tax Register Books in Kibaha and the accounts of the revenue department in Kilosa. At least three factors may explain this seemingly "overrepresentation" of compliers.

First, due to time and budget constraints, taxpayers living in more remote areas of the selected villages were excluded from the sample. It can be assumed that remote areas have fewer compliant people compared to more accessible places, because of less strict tax enforcement. Thus, a certain overrepresentation of compliers in the sample seems reasonable. The reduced participation level in Kilosa may have also led to an overrepresentation of compliers. Second is strategic answering. The answers on how much respondents paid in development levy in each of the two years were checked against the actual development levy rate. The assumption was that noncompliers claiming to have paid the levy would be unable to provide correct answers on the rates. The responses indicate a higher degree of strategic bias in Kilosa compared to Kibaha. Controlling background variables such as age and migration showed that the age group below 30 years in Kilosa is overrepresented among those claiming to have paid but providing wrong response on the rates. The third factor has to do with embezzlement. Evidence of prevalent embezzlement of tax revenues by collectors is found in many local authorities in Tanzania (CIET International, 1996; Fjeldstad & Semboja, 2000). Thus, tax revenues reported in the accounts of local authorities may be significantly lower than what is actually collected. Aggregate compliance, therefore, is likely to be higher than indicated by the district council's revenue files.

The statistical analysis consisted of a step-bystep process, starting with frequencies, crosstabulations combining bi- and multivariables, and, finally, an exploratory analysis of the two cases. Clearly, no findings of statistical significance can be generated by these case studies except generating suggested explanations to the tax compliance behavior observed. Thus, although the analysis developed in the following sections is limited by the cases upon which it is based, it has a more general interest and application.

4. RESULTS

This section first provides a descriptive presentation of the characteristics of those who pay development levy (i.e., compliers), and then proceed to analyzing why (some) people pay.

(a) Who pays

The aggregate compliance rate of the sample in Kibaha is 66% in 1995 and 44% in 1996 (Table 1). ¹⁰ The corresponding figures for Kilosa are 80% and 84%. The sharp decline in aggregate compliance in Kibaha during 1995–96 may be related to the doubling of the development levy rate from TSh 500 to TSh 1,000. Important background variables characterizing compliers are place of residence (i.e., village), migration, religion, occupation, wealth and age.

(i) Place of residence and compliance

Compliance rates vary between the selected villages (Table 1). In Kibaha, compliance is highest in Pangani in both years (76% and 55%, respectively). The compliance rate is also relatively high in Mwendapole. Tax resistance is

highest in Disunyara (51% complied in 1995 and 35% in 1996). The *relative* compliance rates between the surveyed villages in Kibaha are consistent with figures from the accounts of the ward executive officers. The figures from Kilosa also indicate differences in compliance rates between the villages, although we should be cautious to draw general conclusions from the small sample, in particular for Dumila village.

(ii) Migration and compliance

Migrants from other regions constitute 53% of the sample in Kibaha and 30% in Kilosa. The difference between the two councils reflects fairly well the real situation. Due to its proximity to the city of Dar es Salaam a larger share of the population in Kibaha is expected to be migrants. Migrants appear to be more compliant than people born in the study areas. This is the case for both Kibaha and Kilosa, although the difference in compliance rates between migrants and nonmigrants in Kilosa in 1996 is insignificant (Table 2). Since the share of migrants among the taxpayers in the villages varies, this may contribute to explain the differences in compliance rates between villages.

(iii) Religion and compliance

The majority of the respondents are Muslims, i.e., 75% of the sample in Kibaha and 73% in Kilosa. In Kibaha, the majority of Christian and 39% of the Muslim respondents have migrated to the area from other regions of Tanzania. In the Kilosa sample, 75% of the Christians are migrants, while only 13% of the Muslims are not born in the area. Christian respondents in Kibaha appear to be more compliant than Muslims. In Kilosa, we find only minor differences between Muslims and Christians in this respect.

The observed differences between Muslims and Christians in Kibaha may indicate that cultural differences, including religion, matter in tax compliance. Compliance rates of Muslim and Christian migrants differ less, however,

than the compliance rates of Muslims and Christians as aggregated groups. The data indicate that migrants, in general, independently of religion, are more compliant than nonmigrants. We do not find noteworthy differences between Muslims and Christians with respect to other variables.

(iv) Occupation and compliance

We find only small differences between the three rural villages in Kibaha with respect to principal income. In the rural—urban village of Mwendapole, however, self-employment is more important as source of income than in the other villages where agriculture is predominant. In Kilosa, the majority of the respondents in all villages are agriculturists.

The highest compliance rate is found in households with wage employees in the public sector in both districts. The compliance rate for self-employed in trade and commerce is also relatively high. Furthermore, households with more than one income earner are more compliant than households with only one income earner. Thus, income (ability to pay) seems to be an important background variable in explaining compliance.

(v) Wealth and compliance

Three of the selected wealth indicators seem to have explanatory power in Kibaha: Radio and wristwatch ownership and house with iron sheeted roof. ¹¹ The compliance rate of respondents who live in houses with corrugated iron- sheeted roofs is found to be higher than average. Out of the total sample, 63% of those living in houses with iron-sheeted roofs are migrants. Furthermore, a larger share of the migrants (64%) own wristwatches compared to nonmigrants (22%).

In Kilosa, respondents owning bicycles are more compliant than those not owning this asset. Moreover, a larger share of migrants (85%) compared to nonmigrants (67%) owns bicycles, ¹² possesses wristwatches and lives in

Table 2. Compliance rates among migrants and people born in the area (in percentage)

	Kib	oaha	Kilosa $(N_{\text{Migr}} = 13 \text{ and } N_{\text{Nonmigr}} = 31)$		
	$(N_{\rm Migr}=68~{ m and}$	$N_{\text{Nonmigr}} = 60$			
	Compliance rate in 1995	Compliance rate in 1996	Compliance rate in 1995	Compliance rate in 1996	
Migrants Nonmigrants	72 60	54 32	92 74	85 84	

houses with iron-sheeted roofs. In general, the survey data indicate that migrants are wealthier than nonmigrants.

(vi) Age and compliance

The data on the relationship between age and compliance show that compliance is lowest for the youngest age group (i.e., 18–29 years of age). The age groups between 30 and 59 years appear to be the most compliant ones. In Kilosa, however, respondents above the age of 60 were the most compliant in 1995. ¹³ The small number of respondents in the age groups below 30 and above 50 in Kilosa makes generalizations on the basis of age questionable.

(b) Why people pay

Three of the five hypotheses are supported by this explorative analysis. Tax compliance seems to be positively related to ability to pay, the (perceived) probability of being prosecuted (including opportunities for evasion), and the number of tax evaders known personally by the respondent. Positive relationships were not found between tax compliance and the perceived severity of sanctions against defaulters. In contrast, severe sanctions and discontent with the terms of trade with the government seem to increase tax resistance, and, thus, contribute to explain the widespread tax evasion observed.

(i) Ability to pay

A general observation from the surveys is that the relatively better-off respondents seem to be most compliant, as seen from households with more than one income earner compared to households with only one income earner. In addition, better-off migrants seem to be more compliant than nonmigrants. Furthermore, the relationship between age and compliance may be related to ability to pay with the youngest age group being less wealthy in durable assets.

The poor compliance of the oldest age group in the Kibaha sample negates the view that elderly people are generally more compliant than younger ones for fear of being embarrassed in court. It diverges also from surveys carried out in Western countries which find that increasing age appears to be related to lower tax resistance (e.g., Spicer & Lundstedt, 1976). Our result either suggest poor measurement or a failure to include other important variables. It does, however, support the result that income

and wealth are important background variables when explaining compliance. Elderly people often have low ability to pay, representing small and less affluent households. Thus, the marginal utility of evading one shilling is higher for these people compared to better-off people, and their opportunity costs of hiding from tax collectors are less. Given the traditional respect for elders in African societies, we may also expect that tax enforcement is less strict on elderly people.

The increased number of admitted noncompliance in Kibaha (1995–96) and in Kilosa (1996–97) indicates that higher taxes may have led to larger compliance problems. 14 The respondents' views on the tax rate also provide an indication of the importance of ability to pay. Eighty-nine percent of the respondents in Kilosa consider the development levy rate to be too high, while only 11% consider it to be reasonable. The corresponding figures for Kibaha are 51% and 44%. The development levy rate in Kilosa was twice as high as in Kibaha when the study was carried out. These responses indicate that ability to pay is an important background variable in explaining compliance. But, establishing a link between ability to pay and compliance does not show which way causation flows. For example, it does not show whether tax resistance is lower among the better-off migrants, or whether tax enforcers directly target these people.

(ii) Probability of being prosecuted

The differences in compliance between occupations are partly based on different opportunities to evade and partly on the probabilities of being prosecuted. The highest compliance rate (100%) is found among wage earners in the public sector because development levy is withheld from their salaries. The relatively low compliance rates of agriculturists and self-employed (i.e., carpenters, charcoal makers, etc.) in Kibaha are consistent with findings from Western countries, which reveal that admitted tax evasion is relatively high among the selfemployed (e.g., Mason & Lowrey, 1981). 15 Thus, the relatively high compliance rate of self-employed in trade and commerce may seem surprising. Several factors, however, may contribute to explain this observation.

Tax campaigns are organized by the Ward Executive Officers accompanied by the local militia (Fjeldstad, 2001). During these campaigns many taxpayers literally run away and "hide in the bush." In principle, tax

campaigns are instigated when the deadline for payment has expired, usually after October 1. Before this date, and according to tax by-laws, payment is considered to be "voluntary," although, tax campaigns seem to be an ongoing affair throughout the year. It is reasonable to assume that the opportunity costs of hiding from tax enforcers are relatively higher for the more wealthy people compared to poorer households. The relatively better-off persons thus put less effort into hiding and are more easily targeted by tax enforcers. Furthermore, the marginal utility of a shilling saved by evading taxes is higher for the poorer households than for the better-off, which induces poorer households to hide during campaigns.

Given limited administrative resources, tax collectors maximize yields by concentrating on the most accessible and better-off taxpayers. Thus, ability to pay and accessibility become key variables when enforcement priorities are made. Such mechanisms, in addition to factors related to opportunity for evasion, explain the relatively high compliance rate of self-employed in trade and commerce. Shopowners, for example, need a development levy card (a receipt) to get a business license. Their opportunities to evade are thereby reduced. In addition, even if they had the opportunity, their opportunity costs of hiding from tax enforcers are relatively high compared to people in other occupations, say agriculture.

The same factors may also explain differences in the compliance rates of villages (Table 1). According to the wealth indicators, respondents in Mwendapole village are relatively better-off than people in the other villages. This is due to its location by the main road and being a rural-urban village. More trading and easier access to markets may arguably contribute to greater wealth. For instance, a larger share of the respondents in Mwendapole (93%) own radios compared to other villages. A similar pattern is found with respect to the other wealth indicators (wristwatches and ironsheeted roofs). Wealth, reflecting ability to pay, may therefore be an important background variable in explaining compliance in this village. Mwendapole is also more easily accessible than the other villages for tax collection and enforcement. Thus, the probability of being prosecuted is likely to be higher in Mwendapole than in other villages.

In Pangani, the most compliant village in Kibaha DC, two different factors from those

observed in Mwendapole support the assumpthat coercion influences compliance behavior. First, there is more efficient enforcement compared to the situation in the other villages. Since recruitment of a new Village Executive Officer (VEO) in Pangani in August 1995, revenue collection increased significantly. Moreover, the relatively small size of this village makes it easier to target noncompliers. Second, more respondents in Pangani are migrants who, in general, are better-off and more compliant than nonmigrants. migrants are also less integrated and have looser relations to local authorities, including tax collectors, than people born in the area, making them easier targets of tax enforcers. This indicates that the actual probability of being prosecuted is higher for migrants compared to nonmigrants. In Kibaha, this proposition is supported by the finding that a larger share of the migrants (25%) compared to nonmigrants (8%) considers lack of opportunities for evasion to be the main reason why people pay the levy.

Direct targeting by collectors requires that the collectors know the taxpayers and their ability to pay. This is the case in Kibaha where tax collection is carried out by the Village Executive Officer (VEO), who lives in the village and is nominated by the Village Government. But, in Kilosa where tax collection is carried out by the ward-level personnel there is less knowledge of the villagers and their ability to pay. The ward officials are nominated by the district level officers and are not villagers per se. Thus, there is probably less direct targeting in Kilosa. Some forms of targeting may, however, still be of importance. For instance, respondents owning bicycles in Kilosa are found to be more compliant than others. This is most likely due to the use of roadblocks as tools of tax enforcement. At these roadblocks people are required to show their tax receipts or to pay the levy. Since bicycles are frequently used to transport goods to and from markets it is inconvenient for the users to find alternative routes through the bush to avoid payment of taxes, including the development levy and bicycle tax. ¹⁶ Therefore, according to more than 30% of the respondents in Kilosa, people pay taxes "to avoid disturbances."

Another factor which induces migrants to comply is their relations with (and obligations toward) the family at their home-place. In a study from Kenya, Smoke (1994, p. 39) reports that "[f]amilies of migrants remain in their

'home' area of origin, and the migrants visit 'home' frequently, fully intending to return there to settle down after accumulating some desired level of resources." This probably describes fairly well the situation in Tanzania, too. It could thus be assumed that migrants travel more compared to nonmigrants. Anecdotal evidence shows that the police often control travelers, in particular bus passengers, at road checkpoints, and request people to present their development levy receipts (Bukurura, 1991; Tripp, 1997). Therefore, to avoid police harassment and inconvenience migrants may decide to "voluntarily" pay the levy. This argument is also consistent with the observation that the self-employed in trade and commerce are more compliant than other occupations in the private sector.

(iii) Perceptions on the severity of sanctions

Anticipated positive relationships between compliance and the perceived severity of sanctions against defaulters are not supported by the data. Personal experience with and observation of other peoples' experiences with tax enforcement at the village and ward levels are indicators of the severity of sanctions.

A noteworthy observation in Kibaha is the different experiences of migrants and nonmigrants. Thirty-four percent of the migrants answered that they (or someone they knew personally) had *never* been contacted by the tax collector to pay tax with penalty, while only 13% of the respondents born in the area gave this answer. In Kilosa, only minor differences between migrants and nonmigrants were found on this issue. On the question whether the respondents knew someone who had been convicted for not paying, 68% of the migrants in Kibaha answered negatively, compared to 47% of the nonmigrants. The corresponding figures for Kilosa were 77% and 68%. On the reaction of the council or ward to tax evaders, 57% of the migrants said they "have to pay tax plus penalty," while 75% of the nonmigrants gave this answer.

From the standard theory it would be expected that the more severe the sanctions perceived by taxpayers, the higher the compliance. The survey results seem to point in the opposite direction: The more severe the sanctions observed, the more widespread the tax resistance. The reason for this "perverse" relationship may be due to reciprocity considerations. ¹⁷ The reciprocity argument leads to the proposition that tax authorities' unresponsive,

disrespectful and unfair treatment of taxpayers fosters disrespect for and resistance against tax authorities and tax laws—also a kind of reciprocation in kind (Smith, 1992, p. 227).

The strength of the possible reciprocity effects on compliance behavior probably depends on the taxpayers' experiences with the tax authorities. Those who have been brought to court by the militia may have resentment and develop a generalized normative response. Those who have had no experience with tax authorities rely on experiences of others and from their more general perceptions of the tax system and of how government officials treat citizens. Since these perceptions are typically less specific than are personal experiences, their effects on compliance are likely to be primarily indirect through generalized normative commitments.

If the proposition on reciprocity is correct, it may contribute to explain the widespread noncompliance observed in the survey area. Oppressive enforcement of the development levy and harassment by collectors may induce tax evasion which may in turn be interpreted as a strategy of public resistance and opposition against the authorities. Strict tax enforcement is considered to be a problem in many councils, not least by politicians (Fjeldstad, 2001). During election campaigns both local and central government politicians usually deliver the message that tax collectors should relax on tax enforcement and not harass taxpayers.

Tax resistance may sometimes also take more violent forms. In Kilosa tax collectors are reported to have been attacked by the public. One collector, for example, had been seriously wounded after being hit on the head with a panga (a large chopping knife used by peasants) when he approached an assumed tax defaulter. In 1996 the ward office in Chanzuru was destroyed during night and the Tax Register Books burnt. Some villages in Kilosa are either avoided by collectors or only visited by collectors in company of local militia. Similar cases are also reported from other councils. For example, the *Daily News* (November 28, 1997, p. 5) reported an attack on over 20 Moshi Municipal Council workers who were on a special operation to net development levy defaulters. Some of the officials were seriously injured by the mob.

(iv) Terms of trade with the government (fiscal exchange)

A major problem perceived by taxpayers is that they see few tangible benefits in return for the taxes paid. ¹⁸ The respondents' perceptions of the quality of public services are fairly similar in Kilosa and Kibaha (Table 3). But, dissatisfaction seems to be highest in Kilosa where 75% of the respondents consider the quality to be bad compared to 66% in Kibaha. None of the respondents in Kilosa perceive the public services to be good. ¹⁹ The majority of the respondents in both councils say the current quality of services is worse than three years ago. ²⁰

More than 80% of the respondents in both councils ascertain that the development levy is "only partly" or "not at all" used to provide public services. On the issue of major problems with tax collection (Table 4), there are minor differences between compliers and noncompliers. In Kibaha, the major problem mentioned is that taxes are not spent on public services (55% of the respondents), while in Kilosa high tax rates (doubled in 1997 from the previous year) are considered to be the major problem (46% of the sample), followed by nonprovision of public services.

Two observations seem evident. First, there is a widespread discontent among people regarding their terms of trade with the government. More than 60% of the respondents in Kilosa indicated that all taxpayers would cheat if they could get away with it mainly because of poor public services. The corresponding figure for Kibaha is 55%. Other studies support this assertion. Bukurura (1991, p. 91), for example, cites investigations from 1987 by the *Tanzania News Agency* in Kigoma Town Council, which reported that "many

Table 3. Perceptions on the quality of public services (in percentage of total number of respondents)

Perception	Kibaha $(N = 128)$	Kilosa $(N = 44)$
Good	6	0
Average	26	25
Bad	66	75
Do not know	2	0

people were defaulting apparently because the council was not doing its best to serve the residents." Tripp (1997, p. 233) refers to an article in Daily News (June 9, 1985) where a Dar es Salaam resident confirmed that: "When it comes to Development Levy we have... seen nothing as a result of the levy we pay... the city is very dirty and the situation is deteriorating day in and out... What we want to see is how such taxes are being spent." Second, migrants seem to be more dissatisfied than nonmigrants possibly because of greater expectations for improved living conditions, and particularly so because migrants are generally more compliant. When the expected improvements are not fulfilled their disappointment and frustration may possibly be reflected in their perceptions of the authorities, including their views of the quality of public services.

On the question "do you agree with people saying that they will not pay taxes until they get better services in return from the Council," many respondents disagreed (68% in Kibaha and 43% in Kilosa). Although this response may seem contradictory to the findings discussed above, it indicates that many people do in fact understand the relationship between taxes and public services. One respondent used the metaphor that "one cannot build a house without first buying concrete." Furthermore, a majority of the respondents (more than 90%) indicated willingness to pay more taxes if services were improved although some expressed reservation that it depended on their ability to pay. ²¹ These results therefore deviate from other studies, including URT (1991) and Bukurura (1991) which claim that people in Tanzania lack a basic understanding of their duty to pay taxes.

(v) Social influences

The survey data support the hypothesis concerning the influence of social pressure on taxpayer's compliance. Knowledge of tax evasion may have an impact on the behavior of

Table 4. The most important problems with respect to tax collection, Kibaha and Kilosa (in percentage—Kilosa in brackets)

Problem	Aggregate $N = 128 \ (N = 39)$	Nonmigrants $N = 60 \ (N = 29)$	Migrants N = 68 (N = 10)
Too high rates	12 (46)	18 (48)	6 (40)
Taxpayers are unwilling to pay	17 (13)	17 (10)	18 (20)
Taxes are not spent on public services	55 (23)	47 (21)	62 (30)
Other	16 (18)	18 (20)	14 (10)

a taxpayer by influencing his perceived probability of being detected. Most compliers in Kilosa say they do not know anyone not paying. In Kibaha, there are only minor differences between compliers and noncompliers on this issue. Most migrants in both councils also claim that they do not know anyone not paying which may signify that they are less integrated in the village society, and thus have less knowledge of the behavior of others. The larger the fraction of the local population that is observed not paying, the lesser the perceived risk of being prosecuted. Since migrants seem to know fewer tax evaders than nonmigrants, this may imply that—on average—a migrant's perceived probability of being prosecuted is higher than that perceived by a nonmigrant which partially explains why migrants are more compliant than nonmigrants.

5. SUMMARY AND CONCLUSIONS

While acknowledging some obvious weaknesses of an essentially exploratory study, the survey data suggest that the following factors contribute to explain compliance behavior.

Opportunities: Differences in opportunities for evasion matter, for example, employees paying their head-tax through a tax withholding system have fewer opportunities to evade than the self-employed.

Ability to pay: Some of the relatively better-off respondents, in particular migrants and traders, are more compliant due to: (a) higher opportunity costs connected with evasion, and (b) because they are easily targeted by tax collectors. The opportunity costs of hiding from tax collectors are higher for the better-off, since hiding "puts one out of business." Thus, relatively better-off persons put less effort into hiding, and, therefore, are more accessible to tax enforcers. This result further implies that the development levy is a less regressive tax than what is usually claimed (URT, 1991).

Probability of prosecution: Given the limited administrative resources, it is rational for collectors to concentrate on the more accessible and better-off taxpayers. In this case the ability to pay and accessibility are key variables. Since migrants are less integrated and have looser relations to local authorities than nonmigrants, it is easier and probably more convenient for the tax enforcer at the village level to target migrants rather than

people from the area who might be their relatives, friends or who have closer links to local politicians and authorities. This indicates a lack of integrity in the tax enforcers' relationship with taxpayers, and implies that the probability of being prosecuted is most likely higher for migrants. Moreover, taxpayers who travel regularly are more compliant than others because of control mechanisms such as roadblocks where travelers are requested to present their tax receipts.

Social influences: Knowledge of the compliance behavior of others seems to influence the taxpayer's perceived probability of being prosecuted. The larger the fraction of the local population that is observed not paying the lower the perceived risk of being prosecuted.

Severity of sanctions: The way the law is enforced and the severity of sanctions appear to have fuelled tax resistance. This contradicts the standard theory which tells us that the more severe the sanctions perceived by taxpayers, the higher the compliance expected. The survey results point in the opposite direction: The more severe the sanctions, the more widespread the tax resistance. The reason for this "perverse" relationship is not entirely clear, however, it may be due to reciprocity considerations. The coercive behavior of tax authorities fosters resistance and disrespect for tax laws. Accordingly, oppressive enforcement and harassment by collectors also induce tax evasion. Tax evasion may, therefore, to some extent be interpreted as a strategy of public resistance and opposition against the authorities.

Fiscal exchange: Generally, the development levy is perceived to be unfair. Perceptions of exploitation due to unfair terms of trade with the government promote noncompliance. Thus, peoples' tax resistance seems to be correlated to the decline or absence of public service provision.

We have not explored the relative strength of the various factors in explaining the observed patterns of tax compliance. The results suggest, however, that the standard economic influences of tax size and detection probability are at work, although other determinants also are essential in understanding taxpayers' behavior. In particular, the relationship between taxation and service provision and how the tax law is enforced seem to be important. If our analysis of the factors determining compliance behavior is correct, it also contributes to explaining observed differences in tax compliance between local authorities and between areas within individual councils. Thus, the experience with the development levy may enrich our understanding of tax compliance behavior in Tanzania. Furthermore, citizens' experience with the development levy has contributed to undermine tax morale and the legitimacy of the state, which may have long-term consequences for the performance of local governments in the country.

The study provides us with some directions for future research. For an improved understanding of tax compliance behavior in poor countries, there is a need for a more thorough examination of the concept of fairness in fiscal exchange, i.e., the contractual relationship between taxpayers and the government. In this context it is also relevant to analyze if—and

when—user charges are to be preferred instead of general taxes to finance public services. Critical factors in this respect are citizens' perceptions about the role of the state, how the tax law is administrated, perceptions about enforcement, and government trustworthiness. Furthermore, there is a need for research focusing on taxpayers' rights in situations where the government—and donors—are pressing for increased domestic tax effort. Can. and under what conditions, compliance be established in poor countries without an extensive and costly enforcement apparatus? This question is important because it is likely that governments, seeking power on the basis of popular consent, face restrictions in their use of coercion in tax collection. Thus, the challenge for taxation in poor countries is to raise domestic revenues from consenting citizens.

NOTES

- 1. Revenues from the development levy have fallen in recent years. In 1984–85, the levy contributed with over 60% of total own revenues in rural councils and about 50% in urban councils (URT, 1991). These aggregate figures do, however, hide major differences between individual councils. In 1995, for instance, the development levy as a percentage of total own revenues in district councils varied from 3.3% in Kilwa District Council (DC) to 63.5% in Singida DC (Fjeldstad & Semboja, 2000).
- 2. The issue of women paying the levy has been controversial (Tripp, 1997, p. 157). Supporters of the levy on women argue that women are equal to men according to the law, and thus have the same rights and obligations as men. Opponents argue that women in rural areas are economically dependent on men and therefore should be exempted. In particular, the development levy has revealed a conflict between upper- and lower-income women
- 3. Nearly all economic approaches to tax evasion are based on this economics-of-crime framework. Cowell (1990) provides a review of this literature.
- 4. The potential for free-riding is obvious when the government offers collective goods in return for taxes (Axelrod, 1984). According to the Folk theorem, however, voluntary provision may not always play as a "prisoner's dilemma" game, in which each individual has an incentive to free-ride on the provision of others.

- Instead, individuals may in many cases voluntarily contribute to a public good, implying that they will pay taxes. In theory, this occurs when service provision is both repeated and interdependent. See Gibbons (1992) for an introduction to the literature.
- 5. Survey research from Western countries also suggests that taxpayers make judgements about the fairness of particular taxes (e.g., Smith, 1992).
- 6. One of the most consistent findings in survey research in Western countries about taxpayer attitudes and behavior is that those who report compliance believe that their peers and friends (and taxpayers in general) comply, whereas those who report cheating believe that others cheat (Yankelovich, Skelly, & White, 1984).
- 7. We distinguish between (a) *perceived probability* which is the taxpayer's own perception of the probability of being detected, and (b) *actual probability* which is determined by the resources put into tax enforcement by the tax collecting agency.
- 8. As illustrated in Table 1, the response rate varied between the villages. The lowest one (0.77) was experienced in Mwendapole village, while Disunyara and Pangani had response rates above 0.90.
- 9. Levi (1997) discusses the strengths and weaknesses of this methodological approach.

- 10. Compliance rate is here defined as the share of respondents who claims to have paid the levy.
- 11. According to World Bank (1993, p. 41) radios and watches are the two durables whose ownership is most closely connected with poverty in households in Tanzania.
- 12. The greater importance of bicycles as an indicator of wealth in Kilosa compared to Kibaha is consistent with our observations during the field studies. But, the national 1991 survey on households' consumption and poverty found no positive correlation between the ownership of bicycles and income (World Bank, 1993, p. 41).
- 13. Regarding the background variable "age," there is a bias in our sample. In Mwendapole village only one respondent is below the age of 30. Since this age group seems to be the less compliant, this may contribute to explain the higher compliance rate found in this village.
- 14. In Kilosa, the compliance rate for 1997 was found to be only 18%. This low rate may partly be due to the doubling of the development levy rate from TSh 1,000 in 1996 to TSh 2,000 in 1997. But, since the deadline for voluntary payment had not expired when the survey was carried out a relatively low compliance rate is expected. Therefore, the results for 1997 are not included in this study.
- 15. The number of self-employed and wage employees in the samples is very small. These results should therefore only be considered as indicative.
- 16. The bicycle tax is paid annually. In Kilosa it was TSh 1,000 in 1997. The estimated number of bicycles in the council was 13,718. When the bicycle tax is paid a receipt in the form of a sticker to be attached to the bike is provided. This system is similar to the "car sticker" used as a receipt for various car-related taxes in many Western countries.
- 17. Sugden (1984) refers to the response of reciprocating behavior as a "cross-societal norm of reciprocity: a norm both in the sense of a universal regularity and a

- moral responsibility." The reciprocity norm evokes an obligation for individuals to make a concession to someone who has made a concession to them. The reciprocity argument may also be linked to the argument on "tax morale." Thus, Frey (1997, p. 49) argues that the more extensive citizens' direct political participation possibilities are, the higher is intrinsic motivation in the form of tax morale and *ceteris paribus* tax compliance.
- 18. Local authorities are responsible for running a range of public services of which the key sectors are primary education, health care, rural roads and water supply. In principle, priorities may differ by councils. In practice, however, the four key sectors have received most attention. A recent survey on "grassroots' views," covering the whole country, showed that in particular education and health were perceived as priority concerns in many rural areas (URT, 2000).
- 19. The response from people in Kilosa is interesting considering the long-term involvement of international development aid agencies in the area, in contrast to Kibaha which has experienced limited donor support. For instance, the main roads in Kilosa have a fairly good standard due to donor funding. Furthermore, donors are involved in the education and health sectors. But, people do seem to be well aware about who is responsible for the different services. Thus, the main roads are referred to as "Irish roads" and the almost nonpassable feeder roads are named "council roads."
- 20. These results are consistent with the findings of a study of local government health services in Tanzania (Cooksey & Mmuya, 1997). Sixty-five percent of the respondents in this study considered the poor quality of these services to be a major problem. Furthermore, 69% of the respondents said they disagreed with the statement that the quality of public health services had improved in recent times.
- 21. This response is consistent with studies from other countries which show that even poor people are willing to pay something for services they value, for example, education (Bird, 1990, p. 407). Bird adds that people also value more those things for which they have to pay.

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