

Tax Evasion in Transition: Outcome of an Institutional Clash?

- Testing Feige's Conjecture in Albania -¹

by

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Abstract

A field survey of households was conducted in Tirana, Albania in 2000. A response rate of 89.3% yielded 1.340 valid questionnaires, allowing me to test Feige's (1997) conjecture that more tax evasion will be observed, when formal and informal institutions clash. Respondents' attitudes towards formal and informal institutions were obtained by applying factor analysis to their responses to a series of attitudinal questions. The theoretical importance of the interaction between formal and informal institutions in determining tax evasion finds empirical support in the data.

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1. Introduction

Studies in developed and developing countries have shown that the underground economy has a significant impact on the economy as a whole (Loyaza, 1996; Bhattacharyya, 1999; Giles, 1999a; Tanzi, 1999; Schneider and Enste, 2003). Nevertheless, this phenomenon was neglected in previously socialist countries, in the first years of transition. There has been some discussion about whether this neglect was due to a perceived unimportance of the underground economy or it was conveniently disregarded by governments due to its tremendous effect as an absorber of poverty and social chaos (Kesner-Skreb, 1997). However this may be, a recent rise in the interest of researchers and policy makers is noticeable.

This paper represents a demonstration of this growing interest. Its main goal is to provide an institutional analysis of tax evasion in transition countries. Based on a unique data set collected in Albania, the paper tests Feige's conjecture, that a clash between formal and informal institutions is a major cause for the rise and persistence of underground economies (Feige, 1997). The results support this hypothesis.

Three choices underlie this goal and the empirical test chosen. In the following, I will briefly motivate these choices by discussing: (1) why the focus is on tax evasion; (2) why transition countries in general and Albania in particular are interesting for this study; and (3) how institutional economics can increase our understanding of the underground economy.

The underground economy has many aspects, including tax evasion, unregistered labor, and illegal activities, for example. This makes it impossible to analyze all aspects in one study. This paper focuses on tax evasion for obvious macro-economic reasons: there is a direct link between tax compliance on the one hand and budget deficits and investments in public goods on the other. In other words, effective tax collection is a precondition for collective good provision and economic growth¹, which may be especially important in transition countries. Moreover, a study of tax evasion allows one to study the decision-making process with respect to underground activities at the individual level. It also gives an indirect indication of individuals' involvement in the unregistered labor market. Finally, "the study of non-compliance

in transition economies is likely to yield the most revealing view of the effective prevailing incentive structure, of the critical strategic behavior induced by that structure, and thus of the outcomes of policy changes” (Feige, 1997: 25).

As reported in Schneider and Enste (2003), the magnitude of the underground economy in transition countries is significantly larger than in developed countries (on average 20% and 12% respectively). This is one reason why I focus on a transition economy. Another is related to the scarcity of empirical research on underground activities in transition countries compared to developed countries (Gërxhani, 2003). Although this literature has been growing in the last decade, it is mainly based on macro-economic data. Using electric consumption methods, for example, Kaufmann and Kaliberda (1996); Lacko (1996) and Eilat and Zinnes (2002) estimate the underground economy in transition countries. Even though these studies have increased our knowledge of the level of underground activities in transition countries, one should recognize the importance of (empirical) micro-economic research for an understanding of the reasons why these activities are undertaken. “...surveys can provide detailed information about the structure of the shadow economy” (Schneider and Enste, 2003: 15). This paper recognizes this gap in the existing literature and provides such a micro-economic study.

A specific country in transition is chosen for this study, to wit, Albania. Albania is an interesting country to study in this respect. It is the last country in Eastern Europe that opened itself up to democratic changes in the beginning of the 90s. While other Eastern European countries had in one way or another introduced slight changes with respect to private property as well as some moderate openness to international exchange of interests (already from the mid 50s), Albania, up to the beginning of transition, was in all aspects a completely isolated country². As a result, when Albania entered the process of transition, it was struck not only by a deep crisis, but also by an institutional shock. Former institutions, established during four decades of communism, vanished before fundamental new institutions had time to develop and be accepted. The gap between the two was filled by the emergence and rapid increase of the underground economy, which initially started as an emergency exit from the

¹ I am indebted to an anonymous referee for this comment.

numerous problems of the formal sector, but later became an inevitable part of society. Until recently, numbers on tax evasion in Albania were mainly based on anecdotal evidence and small-scale sample surveys³. In a recent macro-economic study, Feige (2002) estimates the average size of the Albanian ‘unobserved economy’ at 65.4% or 48% of the total economy for the period 1989-2000, based on the electric consumption approach (ECM) or the currency ratio model (CDM), respectively. This paper provides a micro-economic underpinning for these large numbers.

If one wants to study the underground economy in transition countries, one needs to take account of institutional aspects in a systematic way. “Since institutional change is the defining feature of transition economies, any inquiry into the causes and ultimate consequences of the transition must include an analysis of the incentives and sanctions governing various types of underground economic activities.” (Feige, 1997: 24). My empirical analysis recognizes not only the importance of formal institutions, but also of informal institutions, and the interaction of the two when studying the underground economy. “If social and political actors respond to a mix of ‘formal and informal constraints,’ then good institutional analysis requires that scholars examine both sets of rules” (Helmke and Levitsky, 2003:4). In spite of theoretical contributions in this area (North, 1997; Feige, 1997; Pejovich, 1999; Helmke and Levitsky, 2003), empirical micro research is lacking. Based on a unique database for Albania, which measures tax attitudes towards formal and informal institutions, this paper also fills this gap in the existing literature.

In summary, the contribution of this paper is threefold:

- (1) it fills a gap in the existing literature by providing a micro-economic study of tax evasion in a transition country;

² There is no quantitative evidence on the existence of tax evasion in Albania during communism. Nevertheless, as everywhere, there was an underground economy. Taxes could be evaded, for example, by not working in official employment or by selling privately grown agricultural products.

³ For example, the 1996 EBRD Transition Report claims that 70% of the households in Albania do not pay their utility bills (tax bills included). In addition, a study of the Albanian Center for Economic Research (ACER, 1999) reports that 73% of the surveyed enterprises (the sample unit) do not declare all of their profits. On average, this underreporting constitutes 20% of their profits. According to UNDP (2000), the underground economy accounts for an estimated 50% of GDP.

- (2) it provides an empirical study of the so-far theoretical importance of formal and informal institutions in determining tax evasion in transition; it does so, by testing the specific conjecture formulated by Feige (1997);
- (3) it presents a unique database for Albania measuring tax attitudes towards formal and informal institutions.

The following section briefly presents the institutional theory of tax evasion used, focusing on Feige's conjecture. Section 3 introduces the survey database, describes and analyzes the main tax evasion variables, and provides an analysis of the attitudinal statements used to test the conjecture. Section 4 provides a direct and indirect test of Feige's conjecture. Section 5 concludes.

2. An institutional theory of tax evasion: Feige's conjecture

New institutional economics defines institutions as the necessary framework for human interaction, or as the 'rules of the game'. These man-made constraints determine incentives and shape human interactions (North, 1990). This discipline distinguishes two types of institutions: formal and informal. Formal institutions include laws, tax regimes, and rules, while informal institutions comprise norms of behavior and established conventions. A combination of formal rules, informal norms, and enforcement characteristics shapes economic performance. While the rules may be changed overnight, informal norms usually change only gradually. "Since it is the norms that provide 'legitimacy' to a set of rules, revolutionary change is never as revolutionary as its supporters desire, and performance will be different than anticipated" (North, 1994: 366).

This is especially relevant in the case of former communist countries. Due to the radical political and economic changes they have gone through in transition, many formal communist institutions (i.e., laws and regulations) have been destroyed. On the other hand, experience has shown that informal institutions (i.e., norms, relationships, rules of behavior) established during communism continue to shape behavior, attitudes and incentives in transition (Nelson et al., 1997; Pejovich, 1999). This creates a paradox in these countries, given that many efforts are made –and often successfully so- to introduce new formal institutions. Although North was the first to mention this paradox -"the outcomes of revolutionary changes will depend on the

ongoing tension between informal constraints and the new formal rules” (North, 1990: 91)- it was Feige who elaborated on it.

”When formal and informal institutions clash, non-compliant behaviors proliferate, forming various underground economies” (Feige, 1997:22)⁴. Due to essential contradictions between formal and informal institutions in former communist countries, he argues that “transition process had to deal with a legacy of noncompliant behaviors⁵ involving protective and predatory activities”. Feige adds that formal institutions have indeed changed radically in the transition economies, but informal institutions much less so. This is to be expected because norms of behavior, conventions and self-imposed codes of conduct change very slowly according to North.

The ideas underlying Feige’s conjecture can be observed more often in the literature. Pejovich (1999) refers to the ‘interaction thesis’, which implies that the interaction between formal and informal rules affects economic performance. “When new formal rules conflict with the prevailing informal rules, the interaction of their incentives will tend to raise transaction costs and reduce the production of wealth in the community” (Pejovich, 1999: 171). Drawing on the work of Hans-Joaquim Lauth (2000), Helmke and Levitsky (2003) argue that formal and informal institutions may interact in four distinct ways: complementary, accommodating, competing, and substitutive. They assert that competing informal institutions, that structure actors’ incentives in ways that are incompatible with formal rules, are more likely found in developing and post-communist countries. More generally, Centeno and Portes (2003) argue that the character of informality is dependent on the relationship between the state and civil society. The latter is closely related to informal institutions as they are defined here⁶.

⁴ As an anonymous referee pointed out, it may not be the clash between formal and informal institutions that generates evasion. Instead, tax evasion could occur due to the collapse of formal institutions, when either no third-party authority exists to enforce tax collection or it is not rational for taxpayers to trust the government (for the latter, see Frey and Schneider, 2000). This may be true, but note that this argument too, reflects a conflict between formal and informal institutions. Public expectations and existing social and moral norms (informal institutions) affect the behavior of agents entrusted with the formulation, implementation, and enforcement of a new set of rules (Raiser, 1997).

⁵ When talking about noncompliant behavior, Feige refers to evasion, avoidance, circumvention, abuse, and/or corruption of institutional rules, which in other words comprise the underground economy.

⁶ The civil society is also closely related to the concept of social capital (Putnam, 1993), one important element of which is trust (see Dasgupta, 2000). It is beyond the scope of this paper to elaborate on the relationship between social capital and informal institutions. For more information see Coleman (1988), Deth et al. (1999) and Whiteley (2000).

To sum up, all these authors, representing a variety of (sub)disciplines, to some extent support or extend the conjecture by Feige, that I test empirically in this paper. The remainder of this paper deals with this test. There are various ways to undertake such a test. What is needed is a sufficient number of cases where one has information on tax evasion, and formal and informal institutions. A first approach is to use observable characteristics of formal institutions (e.g., the number of tax auditors, the average tax rate, etc.) and some proxy for informal institutions and to base the test on a cross-section of countries. A second approach uses proxies for aspects of institutional quality (e.g., corruption)⁷ in a cross-section analysis. Thirdly, one could use experts' evaluations on various institutional aspects of a country and combine these evaluations from different countries. These three methods need information from a sufficiently large number of transition countries to allow for statistical testing. Given the difficult kind of data needed and the problems commonly encountered when collecting any kind of data in these countries, there are large risks involved with these cross-section approaches. By focusing on one country in this paper, there is no cross-sectional variation in formal institutions, however. This is solved by considering individual attitudes towards formal institutions. The way the formal and informal institutions are operationalized in the data is discussed below.

3. The survey data

3.1. Method and structure

The analyses presented here are based on data collected from a field survey conducted by the author in the urban area of Tirana (the capital of Albania) in 2000. The method applied was the 'self-administered questionnaire' (a.k.a. 'drop-off survey')⁸. The survey sample consisted of 1,500 households living in Tirana. Their selection was random and based on a geographical framework. The main income earner of the household was asked to respond to the questions. The response rate of 89.3% gave 1,340 valid questionnaires returned. Gërzhani (2002) provides arguments for the method used and gives a detailed description of the survey and the data's representativeness, showing that the research method used is valid and reliable.

⁷ See Doig and Theobald (2000).

⁸ The complete questionnaire can be found at http://www.uva-aias.net/files/aias/data_analysis_paper-EER.pdf

The data contain information about the individuals' attributes and individuals' attitudes towards a series of statements presented to them, as well as sufficient information about income and taxes to derive estimates (where applicable) of the extent of personal income tax evasion, small business income tax evasion, and social and health insurance tax evasion.

In order to test Feige's conjecture, I show that the attitudes measured are to a large extent related to formal and informal institutions. The predictors used to explain evasion include these individual attitudes towards formal and informal institutions as well as personal attributes. The attitudes will give an indication of the importance of the institutional setting in Albania in determining tax evasion behavior.

3.2. Tax evasion variables

The data contain information related to the respondents' tax evasion. However, no direct question about tax evasion is asked in the questionnaire because of the sensitivity of this topic. Instead, various indirect questions are used as a basis for gathering information about tax evasion. For example, if the response to the question 'Does your employer (state or private) deduct your personal income tax from your monthly salary' is 'No', then this is one indication of tax evasion; or if the response to the question 'Please indicate who pays your tax on personal income or your tax on small business' is 'Nobody', then this is another indication of tax evasion.

The Albanian tax laws are similar to those in most western countries: individuals employed in the public or private sector are subject to tax on personal income; self-employed individuals with a small business are subject to tax on small business income; and all working individuals (including the self-employed), are subject to social and health insurance tax. Based on this tax liability, I distinguish three (overlapping) groups of respondents in the data set: (1) individuals employed in the public or private sector; (2) self-employed individuals with a small business; and (3) all working individuals (including the self-employed). For each of these groups (tax types), the survey gives four or five indications of evasion of the tax concerned. These are aggregated to obtain three main variables on tax evasion: 'the extent of personal income tax evasion' (PITE), 'the extent of small business income tax evasion'

(BITE), and ‘the extent of social and health insurance tax evasion’ (ITE)⁹. These variables are used to describe a respondent’s evasion with respect to these three types of tax evasion. Table 1 summarizes the information obtained with respect to evasion variables.

TABLE 1 HERE

Table 1 shows that 38.6%, 56.5%, and 30.7% of the respondents concerned have at least one indication of personal income tax evasion, small business income tax evasion, and social and health insurance tax evasion, respectively.

Stressing that many individuals are liable to more than one type of tax, I can use the data for a first comparison of evasion of different taxes. Consider the respondents who (should) pay both personal income tax and insurance tax and those who (should) pay small business tax as well as insurance tax. For the former group, paired samples t-tests show that less evasion is observed for insurance tax (26.7% has at least one indication) than for personal income tax (38.5%) ($t=8.33$, $p<0.01$, $N=824$). For the latter group, less evasion is observed for insurance tax (44.4%) than for small business income tax (54.8%) ($t=3.32$, $p<0.01$, $N=239$). Comparing individuals who are supposed to pay (only) personal income tax with those liable to (only) small business income tax, independent samples t-tests reveal that the respondents employed in their own business evade more (54.2%) than the other respondents (38.5%). This result is significant at the 1% level ($t= - 4.39$).

Together, these results indicate that the evasion is highest for small business income tax and lowest for social and health insurance tax, with evasion of personal income tax in between these two.

3.3. Attitudes towards formal and informal institutions

In order to capture individuals’ norms and ‘rules of behavior’ (i.e., informal institutions) towards tax evasion and their perception of laws and regulations (i.e., formal institutions), I included attitudinal statements in the questionnaire. For a

⁹ For a detailed description of the construction of these tax evasion variables from the questionnaire, see Appendix B.

detailed description of these statements and a frequency distribution of the responses to each statement, see question D.7 of the questionnaire in Appendix A.

Using factor analysis (*principal-component analysis*), I summarized the attitudes expressed in the responses to 13 (out of 19) statements in a limited number of underlying factors¹⁰. Three factors explain 44.4% of the variance. When selecting these three factors, the final component matrix appears as in table 2, which gives the correlation coefficients between the 13 statements used and the three factors. The results show a clear distribution of statements across factors, with one possible exception, statement 6 ‘High corruption in Albania’.

TABLE 2 HERE

The result of factor analysis is a reduction of the 13 attitudinal variables into three main groupings. For each of these groupings, I calculate standardized factor scores for every individual in the sample. The variables summarize the respondent’s answers to the statements in each factor/grouping. By carefully considering the statements combined in each factor and recalling that a high (low) score on an attitudinal question reflects (dis)agreement, one can try to interpret the underlying common attitude. This exercise yields the following grouping¹¹ and interpretation:

I. Pessimism about formal institutions

1. The tax system in Albania is quite applicable to the economic situation in the country
3. Taxes are low in Albania
4. The Albanian government deserves to be supported
6. Corruption in Albania is high
9. Our country is characterized by political stability

¹⁰ The statements: ‘I would pay taxes if my income were higher’, ‘I do not feel like paying taxes as long as the government cannot be trusted’, and ‘I would pay taxes if other people would pay taxes too’ are not included in the analysis due to their conditional character. The statements ‘I pay the taxes I am supposed to pay’ and ‘The average income of the majority of Albanians is low’ are not included because they measure more than one theoretical dimension. The statement ‘The moral attitude of Albanians towards taxes is low’ was dropped because of its minimal input to the analysis.

¹¹ The grouping was subjected to a reliability analysis. The estimated Cronbach’s alfa coefficient was 0.625, 0.495, 0.437, respectively, indicating a good level of reliability.

13. Audit rules on tax compliance are efficiently and equally enforced by the relevant state institutions
19. The Albanian public is continuously informed about tax legislation and any problems are quickly clarified

Factor I: when the score value increases, individuals have a more *pessimistic view about formal institutions* in Albania. For example, they will disagree that ‘The tax system in Albania is quite applicable to the economic situation in the country’ or agree that ‘Corruption in Albania is high’. The expected effect on the extent of tax evasion is positive: pessimism about formal institutions might make people evade more. Some hypotheses can be found in the literature about the relationship between the extent of tax evasion and some of the statements underlying this factor. For example, Friedman et al (2000) report a positive relationship between the share of the unofficial economy and the ineffectiveness of institutions (including corruption). Schneider and Enste (2000) attribute higher tax evasion to a long-term decline of civic virtue and loyalty towards public institutions. Both imply a positive correlation between this factor and evasion.

II. Tax immorality

14. People should pay taxes because if they do, they will benefit from them (e.g. better roads, more parks, more schools, etc.)
15. Not paying social and health insurance today, would cause serious financial problems for me in the future (e.g. no pension benefits)
18. I think everyone is morally obliged to pay taxes

Factor II: when the score value increases, individuals demonstrate higher *tax immorality*. For example, they will disagree that ‘People should pay taxes because if they do, they will benefit from them (e.g. better roads, more parks, more schools, etc.), or that ‘I think everyone is morally obliged to pay taxes’. This means that if a high tax immorality is reported, more evasion is expected. Schneider and Enste (2000) attribute higher tax evasion to the decline of tax morale.

III. Positive tax experience

7. I (We) haven’t paid taxes in the past, so I do not find any reason for paying now

10. Anyone is allowed to evade taxes in order to maximize his/her profit
16. The majority of people in Albania do not pay taxes

Factor III: when the score value increases, individuals demonstrate a more *positive tax experience*. For example, they will disagree that ‘The majority of people in Albania do not pay taxes’ or that ‘I (We) haven’t paid taxes in the past, so I do not find any reason for paying now’. This is expected to be negatively correlated to tax evasion. Kesner-Skreb (1997) claims that spreading tax evasion is to a large extent determined by the number of people that already evade. In addition, Feige (1997) argues that the choice to comply or not is often conditioned by the institutional structure that prevailed in the pre-transition period.

Based on the underlying attitudes, I consider factor I, *Pessimism about formal institutions*, as a good representation of individuals’ perception of formal institutions. Factors II and III, *Tax immorality* and *Positive tax experience*, are much more related to norms, culture and customs, and hence are seen as representing informal institutions.

4. Results

Now that I have data on tax evasion and attitudes towards formal and informal institutions in Albania, I can empirically test Feige’s conjecture. I do so in two ways. First, I construct a variable that captures the clash directly and test the effect of this variable on tax evasion. Second, I consider the three cornerstones underlying the conjecture: the relationships between (1) personal attributes and attitudes, (2) attitudes and evasion, and (3) evasion and personal attributes.

4.1. A direct test of Feige’s conjecture

In order to test Feige’s conjecture directly, a variable that captures the clash between formal and informal institutions is needed. I construct such a variable using the factors derived in the previous section. Consider a variable ‘noclash’, defined as the product of the score on factor I and the score on factor II¹². An individual with a high score on

¹² For the construction of this variable, I prefer to use factor II (tax immorality) to represent the attitudes towards informal institutions (as opposed to factor III), because its reliability, as measured by Cronbach’s alfa (see footnote 11), is higher.

the variable ‘noclash’ combines either pessimism about formal institutions with tax immorality or optimism with morality. A negative score is an indication of a clash between attitudes towards formal institutions (factor I) and informal institutions (factor II).

For the direct test of Feige’s conjecture, I will use the variable $\text{clash} \equiv - \text{noclash}$, because of the intuitive interpretation that a higher value for this variable is an indication of a stronger clash between both types of institutions. Feige’s conjecture is now testable, because it implies that this variable will have a positive impact on tax evasion.

The choice variables I want to explain are: the extent of personal income tax evasion (*PITE*), the extent of small business income tax evasion (*BITE*) and the extent of insurance tax evasion (*ITE*). Given the ordinal nature of the dependent variables, I use ordered probit for all regressions testing the effect of independent variables on tax evasion¹³. Table 3 presents the results. For each type of tax, two regressions were run: one including the factors I and II as independent variables and one without these first order effects. Both regressions include a dummy variable ‘missing’ that indicates missing data on the at least one factor score. This variable is included in order to test for a possible selection effect in the responses to the attitudinal questions.

TABLE 3 HERE

The results show support for Feige’s conjecture. The coefficient for ‘clash’ is positive in all cases and statistically significant for PITE and BITE. As far as I know, this is the first empirical support for this conjecture.

4.2. An indirect test of Feige’s conjecture

The conjecture is based on three building blocks:

- (1) Individuals’ attitudes towards formal and informal institutions; and the determinants thereof.
- (2) Individual tax evasion, as determined by their attitudes towards institutions.
- (3) Individual tax evasion and the determinants thereof.

¹³ As a robustness check, I defined binary variables distinguishing between ‘no indication of tax evasion’ and ‘at least one indication of tax evasion’. Replacing PITE, BITE and ITE by these variables

(3) might be considered to be the result of (1) and (2), but there may also be determinants of tax evasion not related to institutions. This is summarized in the following diagram, which is denoted by ‘Feige’s conjectural triangle’.

FIGURE 1 HERE

In Gërxhani (2002), I provide detailed regression results that estimate the three legs of this triangle. These results enable me to draw indirect conclusions on the conjecture itself.

- Gender affects attitudes: males are more optimistic about formal institutions, but they are characterized by more negative scores with respect to informal institutions than females. This clash between the two types of institutions (relative to females) is expected to yield more evasion by males, which is indeed observed.
- Highly educated people think more positively about formal institutions than uneducated people; in addition, highly educated people are characterized by more positive scores towards informal institutions than less educated people. The two institutions are compatible, therefore, according to Feige’s conjecture, highly educated people are expected to evade less. This is supported by the data.
- Main income earners of large families have more negative attitudes towards formal institutions and are also characterized (on balance) by negative scores with respect to informal institutions. The two institutions are compatible, hence less evasion is expected from the respondents of large households, as the data show.
- People of rural origin think positively about formal institutions, but negatively about informal institutions. This clash makes us expect more evasion by respondents with a rural origin, which is supported by the data.

All in all, I also find some indirect empirical support for Feige’s assertion. Using experimental data, Gërxhani and Schram (2001) find more evidence along this line.

and using logit regression, I redid the tests described in this paper. No important differences in

They conclude that different levels of tax evasion in Albania and the Netherlands are not attributable to different tax norms and attitudes, but to different formal institutions and their ‘informal use’ by individuals.

5. Conclusion

This paper analyzes a unique data set from a household survey in Tirana. The core is an empirical test of Feige’s conjecture that when formal and informal institutions are in conflict, more tax evasion is observed. The data allow me to undertake this test at the micro-level. Using regression analysis, I was able to test this conjecture directly and indirectly. I use responses to attitudinal questions, summarized through factor analysis, to find instruments describing individuals’ attitudes towards both types of institutions. The direct test uses a proxy for the clash discussed by Feige. The indirect test is based on regression results provided elsewhere, which estimate the three legs of Feige’s conjectural triangle.

The empirical evidence provided in this paper supports Feige’s conjecture. The proxy capturing the clash directly has the expected sign and is statistically significant in two out of three cases. In addition, evidence that gender, education, family size and migration influence the respondents’ attitudes towards formal and informal institutions, and consequently their decision to evade taxes, is consistent with the model of thought underlying the conjecture.

To date, empirical studies of tax evasion have neglected the role of formal and informal institutions. This is in stark contrast with a considerable part of the theoretical literature, which stresses the link between the two types of institutions and evasion. The extensive survey used in this paper closes this gap. The theoretical importance of the interaction between formal and informal institutions in determining tax evasion finds empirical support in the data. When the two types of institutions are studied separately, the results can be ambiguous. Hence, for the study of noncompliant activities, one should consider both types of institutions simultaneously for a further comprehension of these phenomena. Since “the necessary institutional restructuring –both economic and political- has been a major obstacle to development and still is the major obstacle for transition economies” (North, 1997: 17), this

conclusions were reached.

research is important for a better understanding of the incentives driving predatory activities (e.g., tax evasion) in these countries.

This paper is only concerned with Albania. One should be careful in generalizing the results, since institutions (and their interaction) vary across countries (especially when comparing developed and less developed countries). Nevertheless, the empirical support for Feige's conjecture does lead to the conclusion that institutional economics deserves to be considered in any analysis of tax evasion.

Appendix A: Attitudinal questions as in the written questionnaire used in the field survey

(For a complete description of all of the questions, see http://www.uva-aias.net/files/aias/data_analysis_paper-EER.pdf)

D.7. To what extent do you agree or disagree with the following statements of different people? *(Please put a cross in only one box for each statement)*
 {NB. Numbers reflect the distribution of responses and the number of cases (last column)}

	Strongly Agree	Mildly Agree	Neither Agree nor Disagree	Mildly Disagree	Strongly Disagree	<i>Total cases</i>
1. The tax system in Albania is quite applicable to the economic situation in the country	6.4	26.1	20.1	20.4	27.0	1288
2. I pay the taxes I am supposed to	53.8	24.5	10.7	6.0	5.0	1273
3. Taxes are low in Albania	10.2	14.3	19.1	20.3	36.1	1269
4. The Albanian government deserves to be supported	30.9	21.0	18.2	7.9	22.0	1268
5. The moral attitude of Albanians towards taxes is low	37.2	22.8	19.7	10.7	9.6	1253
6. Corruption in Albania is high	67.0	11.3	13.3	4.2	4.1	1278
7. I (We) haven't paid taxes in the past, so I do not find any reason for paying now	14.3	15.2	18.2	19.5	32.8	1233
8. I would pay taxes if my income were higher	60.4	14.0	6.8	8.7	10.1	1257
9. Our country is characterized by political stability	15.5	18.3	14.6	14.7	36.9	1269
10. Anyone is allowed to evade taxes in order to maximize his/her profit	22.2	18.2	14.2	14.8	30.6	1256
11. I do not feel like paying taxes as long as the government cannot be trusted	27.2	19.0	14.6	15.9	23.4	1254
12. I would pay taxes if other people would pay taxes too	42.4	16.0	10.1	11.2	20.3	1254
13. Audit rules on tax compliance are efficiently and equally enforced by the relevant state institutions	15.2	15.2	26.4	20.6	22.6	1260
14. People should pay taxes because if they do, they will benefit from them (e.g. better roads, more parks, more schools, etc.)	68.6	17.3	8.0	2.7	3.4	1282
15. Not paying social and health insurance today, would cause serious financial problems for me in the future (e.g. no pension benefits)	80.9	10.9	3.8	1.4	3.0	1284
16. The majority of people in Albania do not pay taxes	37.6	29.9	20.6	7.8	4.0	1279
17. The average income of the majority of Albanians is low	72.6	13.4	8.5	3.3	2.3	1288
18. I think that everyone is morally obliged to pay taxes	73.5	15.7	6.0	2.3	2.6	1282
19. The Albanian public is continuously informed about tax legislation and any problems are quickly clarified	18.9	24.3	18.7	16.4	21.7	1278

Appendix B: Construction of the main tax evasion variables from the questionnaire.

Table 1: Construction of the tax evasion variables

	Question(s)*	Indication of evasion	Applicable to		
			PITE	BITE	ITE
Deducted tax on personal income	C.1.	C.1. = 2	+		
Gross minus net personal income	C.2., C.3.	C.2. – C.3. = 0	+	+	+
Household monthly expenses on: <ul style="list-style-type: none"> • personal income tax • small business income tax • social & health insurance tax 	C.6.	C.6. = a	+	+	+
Payment of personal income tax	D.2.2.	D.2.2. = 0	+		
Payment of small business income tax	D.2.4.	D.2.4. = 0		+	
Payment of social and health insurance tax	D.2.5.	D.2.5. = 0			+
Who pays the: <ul style="list-style-type: none"> • personal income tax • small business income tax 	D.3.4.	D.3.4. = 1	+	+	
Who pays the personal income tax of employees	D.4.4.	D.4.4. = 1		+	
Who pays the social and health insurance tax	D.5.4.	D.5.4. = 1			+

* for a detailed description of the questions, see http://www.uva-aias.net/files/aias/data_analysis_paper-EER.pdf

Table 1 shows that given that a respondent is obliged to pay the personal income tax and/or the small business income tax and/or the social and health insurance tax:

- (1) C.1. = 2 indicates evasion because if those respondents whose personal income tax is supposed to be deducted by their employers say that it is not, this means that they are working on an unofficial basis. In case of an ‘official’ employment, the employer is obliged by law to deduct personal income tax from the monthly salary. Consequently, if it is not, the tax on personal income is evaded;
- (2) C.2. – C.3. = 0 indicates non-compliance because if the reported gross and net incomes are equal, one potential explanation is the evasion of personal income tax and/or small business income tax and/or social and health insurance tax;
- (3) C.6. = a indicates evasion because the selected respondents report that they do not spend any money on personal income tax, small business income tax or social and health insurance tax. Although the question asks for the household’s monthly expenses, I believe this to be an indication of PITE, BITE and ITE due to the fact that the respondent is the main income earner of the household;
- (4) D.2.2. = 0 indicates evasion because the selected respondents report that they do not pay their personal income tax;
- (5) D.2.4. = 0 indicates evasion because the selected respondents report that they do not pay their small business income tax;
- (6) D.2.5. = 0 indicates evasion because the selected respondents report that they do not pay their social and health insurance tax;
- (7) D.3.4. = 1 indicates evasion when the payment of personal income tax or small business income tax is expected and the answer is that nobody pays it;
- (8) D.4.4. = 1 indicates evasion of the small business income tax (albeit indirect) because the information obtained from this question shows the extent to which small businesses fail (are not willing) to deduct the personal income tax from their employees’ salaries;
- (9) D.5.4. = 1 indicates evasion when the payment of the social and health insurance is expected and the answer is that nobody pays it.

There are four to five indications of personal income tax evasion, small business income tax evasion and social and health insurance tax evasion. The observed responses indicating evasion varied from 11.5% to 31.4% with respect to PITE, from 9.7% to 47.3% with respect to BITE, and from 10.8% to 21.7% with respect to ITE. An important reason for this discrepancy is that respondents are reluctant to admit that they evade. Moreover, some respondents might not know the answer to some questions. As a consequence, it is not possible to obtain precise information. I adopt the simple, but intuitively sensible assumption that more indications of tax evasion make it more likely that a respondent is evading taxes. Hence, I simply count the number of times (out of four or five) that a respondent fulfilled the criteria listed above.

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Table 1: The extent of personal income, business income and insurance tax evasion

	PITE (personal)		BITE (business)		ITE (insurance)	
	<i># cases</i>	<i>%</i>	<i># cases</i>	<i>%</i>	<i># cases</i>	<i>%</i>
No tax evasion at all	544	61.4	131	43.5	780	69.3
One indication of evasion	146	16.5	82	27.2	169	15.0
Two indications	76	8.6	46	15.3	105	9.3
Three indications	68	7.7	30	10.0	55	4.9
Four indications	43	4.9	12	4.0	16	1.4
Five indications	9	1.0	0	0	-	-
<i>Total</i>	<i>886</i>	<i>100</i>	<i>301</i>	<i>100</i>	<i>1125</i>	<i>100</i>
At least one indication	342	38.6	170	56.5	345	30.7

Table 2: Component matrix of the three orthogonal rotated factors

	Factors		
	I	II	III
1. Appropriate tax system for Albania	.725		
3. Low taxes in Albania	.644		
4. Supported Albanian government	.652		
6. High corruption in Albania	-.417		.286
7. Tax mentality		-.220	.681
9. Political stability in Albania	.697		
10. Allowance to evade tax to max profit			.752
13. Efficient audit rules	.571		
14. Payment: more public goods		.752	
15. Non-payment of insurance: financially serious		.559	
16. Majority of Albanians no tax		.275	.558
18. Morally obliged to pay taxes		.712	
19. Albanians are continuously informed about taxes and any problems are quickly clarified	.599		

Note: The complete statements used are presented in D.7, in Appendix A.

The displayed selection is made for loadings > .2 or < -.2.

Table 3: A direct test of Feige's conjecture

Dependent Independent	<i>PITE</i>		<i>BITE</i>		<i>ITE</i>	
	Pessimism about formal institutions		.02 (.71)		-.18 (.01)*	
Tax immorality		.22 (.00)*		.09 (.22)		.18 (.00)*
Clash	.10 (.02)*	.10 (.02)*	.15 (.04)*	.13 (.08)**	.05 (.24)	.05 (.22)
Missing	.16 (.13)	.17 (.11)	.03 (.83)	.03 (.86)	.10 (.29)	.11 (.25)
# observations	886		301		1125	

(*) indicates statistical significance at the 5% level; (**) indicates statistical significance at the 10% level.

Note: Numbers represent the regression coefficient; p-values in parentheses.

The Ordered Probit regression was run in the statistical program STATA.

Figure 1: Feige's conjectural triangle

