The informal sector in transition: Tax evasion in an institutional vacuum

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Summary and Conclusion

"It seems as if every study carried out contradicts the conclusions reached by the previous one and is questioned in turn by the ones that follow!"

- PORTES et al. (1989:298)

This chapter presents a summary of the research goals, approaches applied, main results obtained and conclusions derived from the chapters comprising this thesis.

The thesis is launched by setting out the main goals, motivations and empirical methods in chapter 1. A literature review of the informal sector in developed, developing and transition countries follows in chapter 2. The main goal of this chapter is two-fold: (1) to provide a general overview of the contributions about the informal sector in the literature; and (2) to compare these contributions across two institutionally different types of countries: developed and less developed (developing and transition) countries. Considering the specific case study - a country in transition- and a specific aspect of the informal sector - tax evasion- special attention is given to these two components while describing and analyzing the literature.

The chapter notes that the informal sector is a diversified phenomenon. Although many consider this to be an obstacle, chapter 2 concludes that it does not need to be so as long as one is aware and respects the differences. In addition, some of the criteria used to define the informal sector vary across the two groups of countries. This variance appears to be most notable with respect to the ‘survival’ criterion. This means that contrary to studies in developed countries, research in less developed countries has shown that the informal sector is more often considered as an opportunity for survival. As a result, the informal sector in developed countries is often characterized by its potential for economic investments and
growth as well as the comparable levels of income with the formal sector. In less developed countries, the features of the informal sector indicate the contrary. A difference is also observed in the theories that try to explain informal economic activities. This difference is mainly the result of different institutional features characterizing these groups of countries. In this framework, the distinct relationship between formal and informal institutions, which in turn determines the distinct development path of the informal sector, has been recognized as an important element of the country differences. Regarding the quantitative analysis, various studies in the literature have attempted to estimate the size of the informal sector by applying a variety of methods within two main approaches: the indirect and direct approach. The evidence obtained shows that the magnitude of the informal sector is larger in less developed countries than in developed countries. Finally, chapter 2 reaches a conclusion with respect to the best reaction towards the informal sector. On the basis of its positive implications in the short run, but negative consequences in the long run, the integration of the informal sector into the formal sector is considered a necessity. The attitude of the State towards the informal sector has had specific patterns in the two groups of countries. Whereas most developed countries are in the final stage of attempting to integrate the informal sector into the formal economy, the less developed countries are still either at the stage of tolerating the informal sector or fighting it.

Chapter 3 provides an example of some of the arguments presented in the literature survey concerning a country in transition. It aims at describing the prevailing conditions for the informal sector to emerge in a transition country, which in this study is Albania. The consequences of these conditions are reflected in the various appearances of the informal sector in this country, only two of which are analyzed in this chapter. They are the occurrence of financial pyramid schemes and the street vending business. The analyses are based on the existing scarce evidence with respect to both aspects of the informal sector in Albania. These two examples provide evidence on the significance of the informal sector in a country in transition. On one hand, the implications of pyramid schemes were negative with respect to the banking system, political stability and the overall social cost to Albanian individuals. On the other hand, street vending appeared to be economically and politically supportive during the difficult years of transition. However, street vending can also have negative implications
in the long run, such as tax evasion due to the unregistered activities, lack of public goods due to financial losses in state revenue and deceptive statistical data due to the distortion of the main economic indicators. As a result, the chapter concludes that overall the cons outweigh the pros. Therefore the informal sector needs to be formalized. This chapter recognizes that this formalization can only be done in an environment with the relevant and efficient institutional framework and enforcement mechanisms.

Research in chapter 4 is basically motivated by one of the main conclusions of the literature review in chapter 2, which is that the informal sector has distinctive features in a developed country compared to a transition country. Chapter 4 tests this empirically at the individual level. The original goal is to study individual behavior towards tax evasion. The additional goal is to carry out this study in two different types of countries: Albania (a country in transition) and the Netherlands (a developed country). In the end, it aims at studying the distinct levels of tax evasion in these two countries through a better understanding of the individual behavioral patterns related to tax evasion. To accomplish this, the chapter uses the laboratory experimental approach. This approach provides the unique opportunity to study individuals' attitude towards tax compliance, while keeping many differences across countries -that might otherwise affect the circumstances governing behavior- constant.

In Albania, the tax evasion experiments were run at the ‘Harry Fultz’ high school in Tirana (with high school students and high school teachers), and at the Economics Faculty of the University of Tirana (with university students, university teachers and non-academic university staff). In the Netherlands, the experiments were carried out at the ‘Vossius Gymnasium’ high school in Amsterdam and at the CREED laboratory of the University of Amsterdam, with the same subject pools as in Albania.

The experiments are designed in such a way that participants do not know they are dealing with taxes.131 The design consists of the following. In three out of a total of eight independent rounds, only subjects’ (participants’) personal income for each round is determined, which is unknown to the experimenter or other participants. In the other five

131 For example, the word ‘tax’ was never mentioned in the instructions. The expression ‘contribution to a fund’ was used. For more, see Appendix 4.1.
rounds, subjects have to decide between a random 'registered' income, the realization of which will be known to the experimenter for sure, and a random 'unregistered' income that will only be known to the experimenter with some (audit) probability. After the actual income is determined, subjects have to report it and pay taxes accordingly. If they are audited, there is a fine for underreporting. If they are audited and overreporting is observed, they are not fined. In most of the experimental sessions, a public good is provided by aggregating tax proceeds within a group of four members and dividing them equally among the group members. This design is characterized by the same basic features observed in most tax evasion experiments with respect to tax rate, audit probability and fine for underreporting. However, it has three novel characteristics as well. One has already been mentioned and is the comparison of tax evasion behavior between a developed country and a country in transition. The second introduces a new laboratory setting where subjects can choose either a 'registered' or an 'unregistered' income. This element is important because it brings the experiment closer to reality, where individuals face the choice of working officially for an employer (who reports her/his employees' income to the tax authorities) or they choose to work unofficially or in their own business (which means income has to be reported by themselves). Their choice among these two job options - official and unofficial - determines their choice of income, registered and unregistered respectively. The final novel feature is related to the comparison of tax evasion behavior not only across countries but also across subject pools.

The basic theoretical implications of this setup are that when there are no taxes introduced, a risk neutral individual will choose a 'registered' income. In case of taxes, a public good and a low audit probability, this individual will choose an 'unregistered' income and completely evade the taxes. In case of taxes and a higher audit probability (with or without a public good), this individual will choose a 'registered' income. In all cases, a risk seeking (averse) subject will tend to choose an 'unregistered' income more (less) often. This means that the choice of 'unregistered' income when the audit probability is high indicates risk-seeking behavior. Our experimental evidence did show many such choices.

The first research question addressed in this chapter concerns the factors determining the choice of income. This is tested by using several experimental treatments, such as different audit probabilities and the provision of a public good. Each situation was tested

\footnote{132 The 12 participants of each session are divided into 3 groups of 4.}
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across countries and socio-economic groups (subject pools). The experimental evidence shows that the possibility of tax evasion and the provision of a public good increases the number of choices for 'unregistered' income. This decision is not affected by different audit probabilities applied if the 'unregistered' income is chosen. There appear to be no differences across countries or subject pools.

The second research question is about tax compliance. The main results obtained reflect differences per treatment, as well as differences across countries and subject pools. They consist of the following. When a 'registered' income is chosen, no evasion takes place. When an 'unregistered' income is chosen, individuals do not always comply with taxes. A lower audit probability yields more evasion of taxes. Although underreporting occurs more often than overreporting of income, the latter is still observed. In addition, contrary to the theoretical prediction, some of the cases of underreporting involve an income larger than zero when evading taxes. Moreover, many individuals are willing to choose an income that allows for tax evasion but report their income honestly anyway. Differences across countries and across subject pools are observed. More specifically, Albanian participants evade taxes less than the Dutch do, and pupils and students evade taxes more than other groups do. Overall, differences across groups within a country are similar in size to differences across the two countries. Some of these outcomes are further tested by running regressions that aim at analyzing them more in detail. The additional results show that females evade taxes less than males do, and individuals with a high income evade more.

The third research question addressed is whether the decisions about income source and evasion are made simultaneously. The regression analysis testing this question based on only one round shows that the individual decision to choose a type of income is not independent of the decision about evading taxes.

All in all, chapter 4 concludes that whenever tax evasion is made possible, some individuals –be they Albanian or Dutch- tend to grab the opportunity (i.e., by choosing the 'unregistered' income). Countries and groups reveal significant differences only with respect to tax compliance. Given that differences across institutions in Albania and the Netherlands are controlled for in experiments and tax evasion outside of the laboratory is generally thought to be higher in Albania, this chapter provides the argument that this is not due to
country differences in social norms or cultures. It is apparently due to differences in institutions.

Chapter 5 describes and evaluates the second empirical approach applied in this thesis to study tax evasion. This approach is a field survey designed to collect information on the extent and determinants of tax evasion in Albania, from a cross-section of households in the urban area of Tirana (the capital of Albania). Based on the region and population characteristics, the chapter aims at selecting a suitable method among several potential research methods like 'observation', 'interview' and 'questionnaire'. An analytical comparison suggests that the most suitable method - with respect to logistic, financial and methodological issues - is the 'self-administered questionnaire', a combination of personal contacts with written questionnaires. The main characteristics of the survey consist of the following. The geographically random selection of 1,500 Tirana households produced a response rate of 89.3%, which is one of the indications that the data gathered from this survey are representative for the whole population in Tirana. In addition, an evaluation of the method applied shows that this method is reliable and valid.

The chapter also provides some descriptive characteristics of the sampling population. These characteristics refer to the respondent to the questionnaire (the main income earner of the household) and the household itself. The statistical evidence shows that the number of female main income earners is relatively high, about 26%. The majority of respondents, 81.5%, are married (or live together) with children who live in the same household. 87.3% of the main income earners have some kind of paid work. 22.1% of the respondents report self-employment as their occupation in the main working place. The average size of a household consists of 4.3 people. About two members per household have paid work. 20.5% of the households have at least one family member who lives abroad and supports them financially. The personal monthly gross and net income of the main income earner comprise about 66% of the household's monthly gross and net income, respectively. Finally, the data show that there is a large income inequality in the sample.

Chapter 6 extensively analyzes the data gathered from the field survey. It can be considered as a supplement to the experimental evidence on the factors that determine individuals'
motivations to evade taxes. While the experimental approach studies these motivations in a controlled environment, the field survey provides a large data set that contain information about the ‘real world’ evasion. In addition, the chapter analyzes the ‘real world’ evasion data in relation to the information about individual and household background and attitudes. Finally, the overall analysis cover three kinds of tax evasion: the extent of personal income tax evasion, small business income tax evasion, and social and health insurance tax evasion.

Given that the chapter focuses on the extent of tax evasion reported in the field survey, it provides some tax characteristics of the sample, the reliability of which is also evaluated. The reliability is mainly assessed by testing for differences across the five Tirana regions – where the survey was conducted- with respect to the extent of all kinds of tax evasion. The outcome is that the information concerning tax evasion appears to be reliable.

Given the difficulty of asking direct questions about tax evasion, several questions in our questionnaire are formulated such that they indirectly provide information with respect to the three kinds of tax evasion. After being analyzed and put together, this information creates a basis for constructing the three major variables to be explained in this chapter (representing the three kinds of tax evasion). These variables show that 38.6% of the selected respondents have at least one indication of personal income tax evasion; 56.5% have at least one indication of small business income tax evasion; and 30.7% have at least one indication of the evasion of social and health insurance tax. A statistical comparison indicates that the differences between these three kinds of evasion are significant.

The first main research question of this chapter is related to the determining factors to evade taxes. This question is addressed by first analyzing the effect of the individual background information on the individual extent of tax evasion. To accomplish this, several hypotheses on this relationship are tested, applying two main regression models, a Logit and an Ordered Probit. The results of the two models are very similar and yield the following. Self-employed females evade the small business income tax less than self-employed males do; households with more members living abroad (who support them financially) evade the personal income tax less, but they evade the small business income tax more; individuals who work in the state and private sector (with labor contract) evade the personal income tax and insurance tax less, whereas those who work in the private sector (without labor contract) evade both taxes more; respondents whose main occupation gives them an opportunity to
evade, do so with respect to the personal income tax and insurance tax (e.g., workers and business people); individuals with a low income evade more for all the three types of evasion; migrants from cities other than the center of Albania or from rural areas evade the personal and business income taxes more. These findings are compatible with the existing evidence in the literature. However, the chapter also reports non-compatible results. For example, older people evade the social and health insurance tax more; highly educated people evade less of all three types of evasion; and larger households evade the small business income tax and insurance tax less than the smaller households do. The second step to address the first main research question is related to the effect of individuals’ attitudes on their decision to (non)comply with taxes. The individuals’ attitudes are derived from their responses to several attitudinal statements, using factor analysis. This analysis groups these statements into attitudes about institutional setting and development, attitudes about tax morality, and attitudes about tax mentality and experience. The first group represents individuals’ attitudes towards formal institutions, whereas the other two represent individuals’ attitudes towards informal institutions. The same regression models as for the background information are run to test the existing hypotheses on the relationship between the extent of tax evasion and the respondents’ attitudes categorized in the three groups. The results of the two models are quite similar. Hence, individuals that report a high tax immorality and a low level of tax mentality and experience, evade more. Regarding the attitudes about institutional setting and development, only those of business people affect the extent of tax evasion significantly. The results show that when business people report to be relatively more satisfied with the institutional and development level of the country, they evade more.

The second main research question of this chapter concerns the influence of personal background information on individuals’ attitudes towards formal and informal institutions. This question is addressed by running an OLS regression that explores the relationship between some of the background variables and the attitudes on formal and informal institutions. The results reveal that females have a more negative opinion about institutions and a higher tax morality than males; individuals with a lower education have a more negative opinion about institutions, a lower tax morality, and a lower level of tax mentality and experience than individuals with a higher education; respondents from large households have a more negative opinion about institutions and a lower level of tax mentality and experience
than respondents from small households; respondents from families with more members living abroad (supporting them financially) have a positive opinion about institutions; and migrants from regions other than the center of Albania have a relatively high tax morality and a lower level of tax mentality and experience, whereas individuals from urban area have a better opinion about institutions and a lower tax morality than the ones from rural area.

Finally, a combination of the main findings about the effects of the personal background information on the extent of tax evasion with the main findings about the effects of the former on the individuals’ attitudes towards formal and informal institutions yields the following. Males report a positive attitude with respect to formal institutions and a negative score with respect to informal institutions. This contrast is expected to yield more evasion by males, which is indeed what our evidence shows. Highly educated individuals have a positive score on both formal and informal institutions. As expected, this convergence reveals a low level of evasion by these individuals. Large families report a negative score on both formal and informal institutions. Although there is a compatibility between formal and informal institutions but in a negative sense, large households evade less (contrary to the theoretical prediction). Urban people think positively of formal institutions and have a negative score on informal institutions. Though due to this clash they are expected to evade more, urban people evade less. In addition, emigration affects only individuals’ attitudes towards formal institutions. This effect is positive, whereas the effect on the extent of tax evasion is two-fold, depending on the type of tax.

The overall findings of this chapter imply the following. Individuals employed in their own business evade more than other working individuals do. This is to be expected because evasion is easiest for this group, given that they have to self-declare their income. Age, sector employment, occupation and income have a direct influence on the (non)compliant behavior of individuals towards taxes. In addition, gender, education, family size, migration and emigration affect the respondents’ attitudes towards formal and informal institutions, and consequently their decision to (non)comply with taxes. More specifically, when individuals are satisfied with formal institutions, they evade more. This is strongly observed among the self-employed individuals only. When respondents have a negative score on informal institutions, they evade more. This is strongly observed among all groups of respondents (i.e., people who are obliged to pay the personal income tax, people who are obliged to pay the
small business income tax, and people who are obliged to pay the social and health insurance tax). Here, it is important to mention that the observed effect on business tax evasion of the attitude of self-employed people towards formal institutions is not attributable to personal background variables. These variables appear to explain the individuals’ attitudes similarly for all three groups. We strongly believe that the explanation of this and other evidence related to institutions and tax evasion involves the outcome of an interaction between formal and informal institutions. This interaction appears to be clashing in Albania, which in turn produces the evasion of taxes.

All in all, the two empirical methods yield some complementary results and only one diverging result. The latter is related to the effect of income on the extent of tax evasion. The experimental approach shows that individuals with a higher income evade taxes more, whereas the field survey evidence shows the contrary. To start with, the experimental result is barely statistically significant. Moreover, contrary to the field survey income, the experimental income represents a change in income and not the total income the participants earn. However, a better understanding of this inconsistency requires further research.

A final word about the essential contribution of this thesis. To start with, one of the main conclusions of the literature survey in chapter 2 - ‘the informal sector has distinctive features in a developed country and a country in transition’- is mainly attributed to the institutional country difference. In addition, chapters 4, 5 and 6 emphasize the importance of institutions in the occurrence of tax evasion.

This thesis recognizes that one should distinguish between formal and informal institutions. While formal institutions comprise rules and laws, informal institutions include norms and culture. However, in order to comprehend individuals’ motivations to evade taxes, two types of norms and culture should be distinguished within informal institutions. One represents those informal institutions concerned with individuals’ willingness and inclination to non-comply with taxes. These norms are related to attributes like ‘honesty’ or ‘morality’. The second type of informal institutions are those that individuals develop in order to ‘get along’ with formal institutions, for example through bribery and corruption. As stressed above, the experimental approach studies individuals’ (Dutch and Albanian) attitudes towards
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tax compliance, when controlling for institutions. To be more precise, formal institutions are kept the same for both countries. Moreover, also the second type of informal institutions is kept constant in both countries. In other words, participants do not get a chance to ‘get along’ with formal institutions (at least, there is no difference across countries in the extent to which they can do so). Therefore, in the experiments, differences across individuals’ decisions to (non)evade taxes can only be attributed to one thing: their willingness and inclination to do so. The result is that the Albanians are more ‘honest’ than the Dutch. This means that in an experimental environment, the willingness to evade taxes is higher among the Dutch. This higher level of tax evasion among the Dutch can be explained by a conflict between the ‘right’ (imposed) formal institutions and the ‘wrong’ informal institutions (the first type only). Outside of the laboratory, however, tax evasion (and the informal sector in general) appears to be larger in Albania. Because we just concluded that this can not be attributed to their innate inclination to evade taxes, it is either due to formal institutions or informal institutions (the second type) or both. This is best examined in the decision of the self-employed respondents of the field survey approach. Although they report they are satisfied with formal institutions, they do not comply with taxes. There is apparently a conflict. From what has been concluded so far, it can only be between formal institutions and the second type of informal institutions. The data from the ‘real world’ indicate that this is indeed the case. The reported satisfaction of the Albanian self-employed individuals with respect to formal institutions is in contradiction with their negative score on informal institutions (i.e., the prevailing norms and traditions of finding an informal way to ‘get along’ with formal institutions). This conflict yields a higher level of tax evasion in Albania than in the Netherlands.

This thesis concludes that the different levels of tax evasion in the two countries are not attributable to different tax norms and attitudes, but to different formal institutions and their ‘informal use’ by individuals. Finally, the combination of the experimental approach with the field survey proved to be very useful and instrumental in providing empirical evidence regarding the important distinction between different types of institutions and their consequences for tax evasion.