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# Entrepreneurs' Trust in Institutions and Its Effect on Entrepreneurial Behaviour in Latvia

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# Abstract

This bachelor thesis investigates the relationship of entrepreneurs' trust in both formal and informal institutions to entrepreneurial behaviour as measured by tax evasion proxy. The impact of environment changes on entrepreneurship is particularly relevant to study in transition economies such as Latvia. We base our study on a model developed by Mickiewicz, Rebmann and Sauka (2010) that attempts to measure the link. Empirically, the thesis draws on 348 telephone interviews with top managers and/or owners of companies in Latvia, who were approached as their industry experts. According to the investigation we find institutional distrust to be present in Latvia as suggested by previous research on transition economies. Furthermore, there is partial support to the previous research on investigating the factors influencing the relationship between entrepreneurs' trust in institutions and entrepreneurial behaviour namely probability of punishment, moral values and evaluation of economic situation.

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# 1 Introduction

Recent entrepreneurship literature emphasizes the role of context determining not only entrepreneurial behaviour but also the value companies create on various levels (Sauka, 2008). In this light, as argued by Baumol (1990), changes in the context lead to adaptation of entrepreneurs to new "rules of game". The rules are introduced by institutions and provide a setting for entrepreneurial activity.

According to North (1990) institutions are set of rules that regulate people's behaviour. Those can be formal institutions meaning codified settings or informal institutions - moral values and conventions. In his work North (1990) creates a distinction between institutions and organizations as the last have evolved as a consequence of the institutional framework. In this paper when referring to term institutions in general we address both formal and informal institutions. Additionally, when referring to formal institutions we do not distinguish between institutions and organizations, we use the concept for meaning codified rules and organizations including parliament, government, tax authority and courts.

According to entrepreneurship literature, trust into institutions is seen as an important social capital that is crucial in establishing effective market systems (Arrow, 1972; North, 1981; Putnam, 1993; Fukuyama, 1995; Stiglitz, 1999). Low level of trust in institutions is seen as a straightforward indicator of imperfect institutional framework. Low institutional trust sets barriers for efficient market economy as people are less willing to enter into partner relations due to inefficient legal safeguards and sanctions in case of failure (Kolb, Veleva & Welter, 2008; North, 1990). This implies a specific impact on entrepreneurship – trust in institutions affects both behaviour and values companies create.

The transition setting is particularly suited for studying the impact of environment changes on entrepreneurship. Transition countries have undergone tremendous political and social changes that have reshaped the economic environment. The most important changes are related to the switch from planned economy to the market economy i.e. private sector. These changes in both formal and informal institutions shape legal and behavioural environment which is of a specific interest in our study. Hohman and Malieva (2002) claim that successful changes in formal institutions do not grant successful transition process, as a lot is dependent on adjustment and change of informal institutions.

According to Van de Mortel (2002) transition process can be divided in three transition stages and trust in institutions has a crucial role in passing them. Despite the importance institutional trust has on the development of transition countries few authors have explored the relationship of institutional trust and entrepreneurs' behaviour in transition. Moreover, to a large extent the research of transition countries is limited to such countries as Russia, Belarus, Moldova (e.g. Smallbone & Welter, 2001; 2006). There is no specific research on smaller countries such as Latvia (also with different previous "tradition of market economy" than Russia) which is the research object in this paper.

In general, it is hard to determine the transition stage of a country and answering this question is not in the scope of our study. However, in case of Latvia we rely on the manuscript by Aidis and Sauka (2008) who defined those stages for various countries including Latvia basing their evaluation on European Bank of Reconstruction and Development (EBRD) transition indicators and state that Latvia is in the advanced stage of transition. According to Van de Mortel (2002) in the last stage of transition formal institutions are already formed, and harmonization between formal and informal institutions needs to be attained. The on-going harmonization process allows us to explore successfully the relationship between trust in institutions and entrepreneurial behaviour.

Drawing on the above discussion, with this paper we aim to contribute to the existing entrepreneurship literature by further exploring the topic linking concepts of entrepreneurs' trust in both formal and informal institutions and entrepreneurial behaviour<sup>1</sup> in transition setting. Empirically our paper provides deeper insights in the case of Latvia being one of the post Soviet Union countries.

More specifically the paper has two main aims. First, we are interested in determining the level of entrepreneurs' trust in institutions and learn how this influences entrepreneurial behaviour in transition context, namely Latvia. Secondly, we explore the relationship between entrepreneurs' trust in both formal and informal institutions and measure their explanatory power in relation to entrepreneurial behaviour. Our research questions are formulated as follows:

#### - What is the level of entrepreneurs trust in institutions in Latvia?

#### - How entrepreneurs trust in institutions affects entrepreneurial behaviour in Latvia?

Conceptually, the thesis draws on methodology developed by Mickiewicz, Rebmann and Sauka (2010), attempting to measure entrepreneurs' trust in institutions and its effect on entrepreneurial behaviour. Empirically, the thesis is based on 348 telephone interviews with higher level representatives and owners of the companies, who were asked to give their expert view on the whole industry they operated in. The main question clusters were related

<sup>&</sup>lt;sup>1</sup> The concept of entrepreneurial behavior is further operationalized for the measurement in the methodology part of the thesis.

to formal and informal institutions of Latvia as well as questions measuring the entrepreneurial behaviour.

The rest of the paper is structured as follows. In section 2 a background for the study is provided. Section 3 follows with literature review. In section 4 and 5 the methodology and validity, reliability and biases of the research are presented. Section 6 provides data overview and presents empirical findings. Section 7 discusses the findings and the last section 8 concludes and provides insights in further study needed.

# 2 Background of the Study

In order to build a link between entrepreneurs' trust in institutions and its effect on their behaviour in Latvia, this section provides general background of the political and economic situation as well as social processes in the country.

Latvia has been incorporated in Soviet Union for around half a century. Starting from World War II up until 1990s both politics and economics of Latvia were dictated under the planned economy regime (Embassy of Latvia, n/d). In 1991 Latvia declared restoration of independence and switched for democracy and liberalization of economy. During the past two decades Latvia has been a transition economy (Encyclopedia of the Nations, n/d).

In 2004 Latvia joined the European Union and during the following years showed the highest GDP growth rates among the EU countries (Eurostat, 2010) and together with Estonia and Lithuania was called the Baltic Tiger. The real growth in 2007 was approximately 4 times higher than the average EU-25 figure, 11.9% and 2.9% respectively (Eurostat, 2010). However, by the end of 2007 the real growth had ceased as a result of domestic real estate bubble and global financial crisis (Latvijas Statistika, 2010).

Currently, Latvia seems to have underdevelopment in economics as well as politics. In the Global Competitiveness Report done by World Economic Forum Latvia takes 84<sup>th</sup> place from 139 according to the macroeconomics environment (Schwab, 2010). According to Kalniete (2010) the fact that after regaining independence there were 15 governments in Latvia appeared to be harmful for the development and stability of the country. According to the ranking of institutions by World Economic Forum Latvia got 75<sup>th</sup> place out of 139. Respondents of the study recognized such factors as inefficient government bureaucracy, corruption, policy and government instability among the most problematic factors for doing business in the country.

According to TNS Latvia research 36% of Latvian society trust courts and judicial system, 20% trust government and 15% trust parliament. These figures are more than two

times lower than e.g. trust in Latvian army or television – 65% and 62% respectively. The lowest trust level is related to political parties – only 6% of the society trust political parties (TNS Latvia, 2011).

According to Latvian Ministry of Finance the shadow/illegal economy accounts for around 32 percent of economic activity in 2010 (Leta, 2010) and one of Latvian Tax Authority priorities currently is to effectively minimize the proportion of illegal economic activities and increase the tax compliance (Diena, 2010).

The next section presents a summary of findings from the existing research on the topics and frameworks needed to base empirical research on.

#### **3** Literature Review

#### 3.1. Institutions

In this work we look at institutions referring to the theory of North (1990), who defines institutions as "rules of the game in a society". Institutions are said to be constraints that shape and guide people's interaction and sets structure to daily life. Institutions have an effect on economy by affecting exchange and production costs. North (1990) emphasizes reduction of uncertainty in the society to be the most important role of institutions.

According to North (1990) institutions can be both formal and informal. Formal institutions are the official rules set by people for society to follow; they include political, judicial, and economic rules. However, formal institutions are not always associated with the most efficient outcome for the society. North (1990) refers to informal institutions as "invisible rules of the game", meaning that they usually are not legally enforced. Informal institutions are reflected in moral values, norms and culture of the society. Both forms tend to compliment one another, which leads to stronger effect on economic welfare and society well-being. However, characteristic difference between the two forms is the fact that formal institutions can be changed very fast, for example, by changing law, while informal institutions change and develop much slower and it is much harder to control their development purposefully (North, 1990).

If looking on the effect of institutional framework on entrepreneurship, North (1990) claims that formal institutions put constraints and create opportunities for entrepreneurship, while informal institutions establish perception of entrepreneurial opportunities both individual and collective. Moreover, informal institutions affect the way entrepreneurs operate via established values and norms embedded deeply in the culture of the society. In this work by institutions we mean both formal and informal forms of the issue.

#### 3.2. Institutions and Trust

In the literature there is no single comprehensive definition of trust as there are different areas of science as economics, marketing and philosophy amongst others which approach the issue from different angles. Gambetta (1988) explained trust as "a subjective probability of the trustee performing an action that is beneficial or at least not detrimental to other parties". Bachmann (2001) explains trust as one of the most common mechanisms for coordinating social expectations and interaction of society by reducing uncertainty and allowing to make specific assumptions about other parties' behaviour. In the beginning of "trust-based relationship" parties make assumptions that other parties will not act opportunistically (Bachmann, 2001). Similarly Welter et al. (2004) explain trust as a form of reducing uncertainty by providing information and as a way of managing opportunistic behaviour.

In the works by Welter et al. (2004) and Welter, Veleva and Kolb (2008) the authors define trust using its three forms: personal, collective and institutional. According to Welter et al. (2004) existence of *personal trust* builds on "initial knowledge about the partner". In case of personal trust, partners think that another side will not behave in a harmful way to the relationship even without any written rules. *Collective trust* is referred to group behaviour in wider sense than only basic knowledge of a person; it is more dependent on shared norms and mutual business conventions which are different in different areas of business. *Institutional trust* is said to be trust into political, economic and legal frameworks and informal rules of these areas (Welter et al., 2004).

From the three forms of trust defined in previous studies, this study focuses its attention on trust in institutions or as previously introduced – institutional trust. Institutional trust is seen to be crucial for an efficient market economy. In case of existence of institutional trust, people easier enter into transactions even with limited knowledge about the partner, as they believe to be protected by institutions in case of conflict (Welter et al. 2004). Thus, trust in institutions is seen to be important issue in entrepreneurial environment. The issue of institutional trust is discussed in more detail in the next section.

#### 3.3. Institutional Trust

Referring to the theory developed by North (1990) institutional trust is approached from two sides - trust into formal and informal institutions. Trust into formal institutions stands for control (legal and political framework), while trust into informal institutions represents the perspective of trust (culture). Trust is affected by both formal and informal institutions, but Welter et al. (2004) sees trust itself as a form of informal institutions. Just the fact of existence of formal institutions is not enough due to the tendency of individuals to act in an opportunistic and only partly rational way at the same time dedicating a lot of energy in pursuing self-interests. Moreover, formal institutions need to be efficiently enforced and legitimized through norms and values of the society to make the system work properly (Welter et al, 2004).

During the past decade considerable number of researchers paid their attention to the importance of trust in institutions, several of them are Braithwaite and Levi (1998), Putnam (1993), etc. Such interest in the issue is explained by Pearce (2011), who claims institutional trust to be a necessity for developed civil society and well functioning democracy, as it connects citizens and institutions operating to represent their interests. Moreover, decrease of confidence in institutions, especially the ones representing democracy is much more important threat to democracy than loss of trust in particular politicians or other citizens. The reason for this is the fact that politicians change over time and people change their attitudes towards particular people relatively fast and easy. But institutions are impersonal and large bodies and indicators of trust towards them fluctuate much less than towards particular people. This means that trust in institutions is associated with better indication of public attitudes and satisfaction (Newton & Norris, 1999).

In order to run business entrepreneurs need to follow both formal and informal constraints shaped by formal and informal institutions. As stated above individuals tend to act in an opportunistic and sometimes not fully rational way and pursue self-interests. Entrepreneurs have their own interests while performing business and not always their actions are rational and fair. Thus, for entrepreneurs it is important to have well developed and trustworthy institutions in order to perform their business. In case of existence of institutional trust entrepreneurs feel more secure as their interests are protected by formal institutions. Moreover, development of business occurs easier if informal institutions are highly developed.

Institutional trust facilitates entering into transactions with parties previously unknown through reducing uncertainty and defining common rules of the game (Raiser, 1999, Zucker, 1986, Welter et al., 2004, Welter & Kautonen, 2005). In successful business relationships trust in institutions is a need as establishment of personal trust takes much time and effort (Zucker, 1986). In case of low institutional trust market entry, growth of business and competition are constrained. At the same time it facilitates unproductive forms of entrepreneurship (Welter et al., 2004).

#### 3.4. Institutional Trust in Transition Economies

Looking at different forms of trust, institutional trust appears to be the one with the slowest development. This is confirmed in the research done by Welter et al. (2004), who proved that natural development of institutional trust is slower than development of personal and collective trust, especially in fragile environments. One of the reasons for slow development is a need of "learning to trust into institutions", which develops over time through experiences with institutions (Welter et al., 2008).

Additional attention is paid to exploring trust in slowly developing countries and countries experiencing transition process from centrally planned to free market economy. Raiser (1999) argues that institutional distrust is common characteristic of countries which are slow in economic, political and societal reforms. If personal trust is a viable form of trust even without any formal institutions, institutional trust requires stability and some predictability of the institutions (Raiser, 1999; Zucker, 1986).

Countries in the process of transition tend to experience lack of trust in institutions. Leipold (as cited in Welter et al., 2004) finds mistrust in public institutions coming from the experiences of social period when ties with family and friends were of great importance, but institutions were not trustworthy. Contrary to mature market economies, during the transition process trust framework is less developed, allocation of resources usually is not the most efficient one and transaction costs are higher (Welter et al, 2004). Dogan and Higley (1998) explain characteristic institutional distrust in post-Communist countries with a perception of "Communist-era" leaders to be untrustworthy.

Van de Mortel (2002) proposed to divide transition process into three stages. Sauka and Aidis (2008) defined those stages for various countries including Latvia basing their evaluation on European Bank of Reconstruction and Development transition indicators. According to this classification Latvia is in advanced stage of transition now. According to Van de Mortel (2002) the last transition stage is associated with ongoing change of economic behaviour. The change of formal institutions is usually completed in the early stages of the process while changes in informal institutions take much longer time and are visible in the end of the last stages of the process. Hohman and Malieva (2002) claim that successful changes in formal institutions do not grant successful transition process, as a lot is dependent on adjustment and change of informal institutions. In case this transformation does not take place, the transition process may regress and return to the previous stage (Van de Mortel, 2002). *Hypothesis 1*: Taking into account that Latvia is in the advanced transition stage and economic, political and social reforms are slow here, institutional trust among entrepreneurs is low in the country.

Transition process affects entrepreneurial behaviour in an important way. According to Van de Mortel (2002) people need to accept the new system and learn how to operate and trust in it. Without this harmony between formal and informal institutions transition process cannot be successful. The problem for entrepreneurs might arise due to the condition that after transformation formal institutions require particular behaviour, which might not be consistent with the one necessary for entrepreneurs to survive in the existing environment (Welter, 2006)

#### 3.5. Indicators of Institutional Trust

In order to reveal the level of trust in institutions researchers usually ask people questions about their attitude towards political system, government, tax authority, and alike. However, those indicators are not enough to reflect reliable information, due to different understanding of what particularly is meant by trust. In order to deal with this problem researchers also look at habitual behaviour, opinions and expectations about related areas implying on level of trust (Glaeser, Laibson, Scheinkman and Soutter, 2000; Putnam, 1995). In those researches different determinants of institutional trust were revealed (Folger & Konovsky, 1989; Murphy, 2004; Welter et al., 2004; Ahmed & Braithwaite, 2005; Levi & Stoker, 2000; Newton & Norris, 1999).

Government and institutions acting in ways people think to be fair is associated with creation of institutional trust (Folger & Konovsky, 1989; Murphy, 2004). Existence of perception that authorities "act fair" increases trust in motives, decisions and long-term plans of the authority. Polite and respectful treatment of the authority towards people has significant influence on the feeling of fairness. This means that, in case people perceive an authority to act fair, treat them with respect and dignity, the level of trust into authorities will be higher and people will be more willing to act according to the rules and decisions of the authority (Ahmed & Braithwaite, 2005; Levi & Stoker, 2000).

Both expectations about actions of institutions and government and actual experience play important role in creating trust. Welter et al. (2005) found that entrepreneurs who had some positive experience when dealing with authorities or at least did not have negative experience were much more positive in their opinion about institutions. Newton and Norris (1999) argue that due to the fact that all citizens are affected by government actions, trust in institutions usually is randomly distributed among different personality, cultural and social types. This means that overall those institutions performing well are recognized by the society and society answers to the level of performance by the level of trust and further actions. Moreover, Newton and Norris (1999) claim that actual performance of institutions is the most important determinant in attitude towards them.

Among the determinants and indicators of trust in institutions is perception of efficiency and actual power of institutions. Welter et al. (2005) argue that in case people think authorities ensuring behaviour to act according to rules are strong enough, the level of trust is higher. This means that if authorities responsible for detection corruption or some other actions against the law are powerful and do their job efficiently people trust both the controlling authority and those which are under control. Moreover, the higher is the punishment for illegal actions, the higher is institutional trust (Welter et al, 2005).

#### 3.6. Institutional Trust and Entrepreneurial Behaviour

Environment surrounding entrepreneur has an important effect on his behaviour. Baumol (1990) has shown that the way entrepreneur acts is seriously affected by "the rules of the game". This means that a lot of entrepreneur's behaviour can be at least partly explained by the environmental conditions. Similarly Welter et al. (2004) claim that influential factors are reflected in economic behaviour as, for example, strategy formulation, regulation of interand intra- firm relationships, networking behaviour etc.

Among other conditions creating environment around entrepreneurship and affecting entrepreneurial behaviour is trust. In case of "low-trust" environment new market entries and free competition are burdened, enterprises experience slower growth, at the same time unproductive and parasitic entrepreneurship are emboldened (Welter et al., 2004). The next section presents studies on approaches entrepreneurial behaviour can be measured.

#### 3.7. Ways to Measure Entrepreneurial Behaviour

Entrepreneurial behaviour can be addressed from various perspectives. In a research by Chaudhari et al. (2007) nine components of entrepreneurial behaviour were selected in order to test their relevance as measurements. Those components are innovativeness, achievement motivation, decision making ability, risk orientation, co-ordinating ability, planning ability, information seeking behaviour, cosmopoliteness and self confidence. According to the results of the study all of the selected components are significant when measuring entrepreneurial behaviour. In researches about the link between institutional trust and entrepreneurial behaviour several authors used tax evasion as tool for evaluating entrepreneurial behaviour dependent on the level of institutional trust (Murphy, 2004; Andreoni et al., 1998; Pommerehne, Hart & Frey, 1994).

Relevance of tax evasion level being a tool for measuring entrepreneurial behaviour is well explained by rational choice model (Murphy, 2004). According to this model people are motivated entirely by economic welfare. Opportunities and risks are evaluated and in case probability of being caught and possible punishment are small enough compared to the gain from non compliance the law is obeyed. In context of tax payments taxpayer loses money paid in taxes. If taxpayer evades, he gains, but there is a probability of detection which most probably will result in punishment and even greater loss than when paying taxes. According to the rational choice model taxpayer evaluate possible gain, loss, probability of detection and magnitude of punishment (Murphy, 2004). Thus, the level of tax evasion among entrepreneurs is a result of serious considerations and calculations, which can be approached as an indicator of rational entrepreneurial behaviour. In the next section a direct relationship between institutional trust and level of tax evasion is discussed.

#### 3.8. Direct Effect of Institutional Trust on Tax Evasion

In different countries researchers devoted their time in order to explore the relationship between trust and tax compliance. It appears that level of trust in institutions usually has significant effect on such expression of entrepreneurial behaviour as tax evasion. For example, Scholz and Lubell (1998) looked at the situation in USA and found that the level of trust in government significantly influenced the level of tax compliance, where a decrease in governmental trust increased the level of tax evasion. Dissatisfaction with authorities is associated with low level of trust in them, which leads to unwillingness to pay taxes (Andreoni et al., 1998; Adams & Webley, 2001; Murphy, 2004). Webley et al. (1991) proved experimentally that people who are satisfied with government are more wiling to pay taxes in full amount, while those who did not trust government were more likely to enter into evasion.

In this context the same relationship should be true also in Latvia, thus, we introduce the second hypothesis.

*Hypothesis 2*: Institutional trust is negatively related to the level of tax evasion in Latvia.

As explained previously, direct questions about the level of trust are explanatory, but they also might show not fully reliable results due to different understanding of the issue, different valuation systems, etc. In order to deal with this problem other indicators which indirectly imply on the level of trust in institutions are recognized and presented in the next section.

# 3.9. Indirect Indicators of Institutional Trust and Their Relationships with Tax Evasion

Different researchers investigated relationships between tax evasion and different indicators of trust. Positive experience with authorities is among the most important sources of institutional trust. For example, Pommerehne, Hart and Frey (1994) analyzed the relationship between government public good provision, waste by government, considerations of fairness and taxpayers' compliance. In the model it is assumed that in each period people decide how much to pay in taxes referring to the experience of the previous period. It is found that the greater is the gap between person's optimal choice of public good provision and its actual level the more others have underpaid taxes. Moreover, the higher government waste is perceived to be, the less people were willing to pay taxes.

The way how government spends taxpayers' money affects behaviour regarding paying taxes. Spicer and Lundstend (1976) argue that taxpayers will not be satisfied if believe that their tax payments are spent in an inappropriate way. Ahmed and Braithwaite (2005) argue that in this case people are building their opinion through perceptions of the fairness of exchange, meaning that people have beliefs about the ways taxes should be spent. In case real action differs from expectations satisfaction and trust towards government decreases. Moreover, this will motivate them to pay only part of full tax liability, thus, encouraging tax evasion.

*Hypothesis 3:* Perception that government wastes taxpayers' money has positive relationship with tax evasion level in Latvia.

Among other determinants of institutional trust which appears to have effect on tax evasion is a "perception of the fairness of tax burden" (Andreoni et al., 1998). This means that if taxpayers perceive to be treated unfair by the tax system and responsible authorities, tax evasion is more likely. One of the possibilities is that taxpayer might believe to be treated unfair by the nominal tax system in comparison to others. Another possibility is violation of tax rules by tax evasion of other people resulting in unfair dispersion of tax payments among people. Ahmed and Braithwaite (2005) also agree that the concept of fairness is much more important for people if measured in relative terms by comparison to others. In case of perception of unfair treatment tax payers could evaluate costs of cheating and find it rationally more beneficial. This is proven in the experiment done by Spicer and Becker (1980), where individuals told to pay higher taxes than others evaded by higher amounts if compared to those who were told that their taxes were lower than taxes of other people.

*Hypothesis 4*: Entrepreneurs' perception of fairness of tax system has significant effect on tax evasion in Latvia.

Strong influence on tax compliance is coming from receiving tax funded benefits. Empirical tests showed that positive experience connected with receiving public goods financed by taxes tends to improve institutional trust, resulting in decrease of tax evasion, while an opposite experience of non-receiving such benefits results in lower levels of trust and tax payments (Alm, Jackson & McKee, 1992; Scholz & Lubell, 1998).

*Hypothesis 5:* Belief of entrepreneurs to receive benefits financed by taxes has negative effect on tax evasion.

Trust into institutions also reveals in perception of power and efficiency of controlling institutions. This means that while deciding on behaviour concerning tax evasion, taxpayers evaluate possible gain, loss, probability of detection and punishment (Murphy, 2004). The study by Andreoni et al. (1998) also confirms rational choice theory by experimental results. Experimental studies show that the probability of audit and penalty rate has positive correlation with compliance, meaning the higher is the probability of audit and the higher the penalty rate, the higher is tax compliance.

*Hypothesis 6:* The probability of detection not paying taxes has inverse relationship with tax evasion in Latvia. That is, if entrepreneurs think there is a small probability of detection, they will evade paying taxes more than if the probability of detection is high.

Informal institutions are revealed in forms of moral values, feeling of duty and emotional connection. All these indicators reveal the framework of informal institutions and affect entrepreneurs' behaviour in their way of dealing with tax payments (Kagan & Scholz, 1984). People may be concerned about social problems and damaging their reputation a lot, which might affect their decision whether to evade or not. In their work Ahmed and Braithwaite (2005) explain one of the reasons of voluntary paying of taxes by so called "tax morale", explained more in a study by Frey (1997), who refer to the belief of people that tax paying is the right thing to do.

*Hypothesis* 7: If entrepreneurs in Latvia think that paying taxes is the right thing to do, the level of tax evasion is low.

The next section of this thesis explains methodology used in order to perform analysis.

# 4 Methodology

From the research perspective trust is a specific topic, due to lack of certainty in how to measure it. Putnam (1995) suggests to look not only on direct answers about the level of trust, but to pay attention to behavioural indicators. The reason for this is threat that respondents might understand meaning of trust differently, while actual behaviour clearly implies on respondents' attitudes. Glaeser, Laibson, Scheinkman and Soutter (2000) asked two types of questions in their survey: direct questions about level of trust and questions about behaviour indirectly indicating level of trust.

The methodology used in this research is developed by Prof. Tomasz Mickiewicz, University College London, Dr. Anna Rebmann, University College London and Dr. Arnis Sauka, Stockholm School of Economics in Riga. The methodology is consistent with suggestions of knowledgeable researchers in the field to measure trust both directly and on a behavioural level. As suggested by Gerxhani (2007) two main approaches could be used in the survey: direct questions about respondents (non)compliance with taxes and gradual approach, which suggests to embed sensitive questions into non sensitive ones. Respondents are asked to answer direct questions not about themselves but instead about, for example, their environment and friends. These answers are considered to indicate respondents' behaviour as well (Gerxhani, 2007). In our case all the respondents were approached as industry experts instead of individual company representatives.

According to the review by Gerxhani (2007) questionnaire method is the most suitable for investigating the issue of tax evasion. This method is advantageous as it provides detailed insights "on the dynamics behind (non)compliance". Main reasoning of using telephone interviews for data collection is provision of accurate data collection which suites the needs of the research question and the model used to answer it. Additionally, interviews over the phone are more convenient as time on arranging physical meetings and the time to travel do not need to be wasted. Furthermore, telephone interviews are less personal, thus, interviewees feel more comfortable on answering delicate questions. Finally, during the interviews the interviewer has a possibility to explain questions in case of incomprehension, thus, the proportion of questions answered is higher.

In order to gather data a survey with 29 questions was created (see appendix A). The questions can be divided into three types: Likert scale questions asking to what extent

respondents agree with the statements, multiple choice questions and open ended questions mostly defining respondents' demographic indicators.

The questions in the first section reveal respondents' attitude towards the Latvian taxation system. They are followed by the questions regarding attitude towards the Latvian tax authority and the severity of the punishment for tax evasion. Section three aims to reveal attitudes towards the political system and political institutions. The perceived benefits from the social system and other redistribution mechanisms are addressed in section four. Moral values and believes are determined in section five. Attitudes towards national economic performance are addressed in section six. Sensitive questions on misreporting are asked in section seven. Finally, sections eight and nine disclose general information about the company and respondent respectively.

Prior to launching the survey and starting data gathering piloting of the questionnaire was performed. This allowed improving formulation of the questions which granted higher response rate and more valid responses.

The link between entrepreneurs' trust in institutions and behaviour is measured using a proxy - tax evasion. In our model tax evasion is a dependent variable. In order to operationalize it, three multiple choice questions were asked related to underreporting of net profit and number of employees employed as well as legal salaries vs. illegal salaries paid. All the possible answers included the same proportions and were later codified using values from 1 to 5.

In order to answer to the first research question about the level of trust as noted before we examine in more detail both direct questions asking about the level of trust as well as related behavioural questions. To avoid biases related to respondent's interpretation of the concept and level, direct questions are complemented with other related questions. For example, we asked: "How much confidence do you have in Latvian parliament?" The answers were recorded on a 4-point Likert scale: "Not at all", "Not very much", "Quite a lot", "A great deal". Then more elaborative question on Latvian democracy followed: "On the whole, how satisfied are you with the way democracy works in Latvia?" The answers were recorded on 4-point Likert scale: "Not at all satisfied", "Not very satisfied", "Fairly satisfied" and "Very satisfied". Based on these answers mean analysis and hypothesis testing to evaluate statistical significance of the results are performed. This enables us to evaluate the level of entrepreneurs trust in institutions. In order to answer to the second research question about entrepreneurs trust in institutions and how it affects entrepreneurs' behaviour OLS linear regression analysis was made. We utilize a set of independent and control variables as described in appendix B.

The regression analysis allows examining which factors determine tax evasion and, thus, we can speculate about the entrepreneurs' behaviour.

Questionnaire was prepared in Latvian, Russian and English as a large share of owners and representatives of companies do not speak Latvian. However, only questionnaires in Latvian and Russian were used as none of the respondents wanted to answer in English.

Empirically, thesis draws on a randomly sampled 348 telephone interviews with companies' top managers and/or owners. The length of the interview was approximately 15 minutes. The sample was provided by Lursoft database - the official registry of Latvian legal entities. The interviews were conducted in Latvia during a period November, 2010 - January, 2011.

The next subsection explains reasoning and provides methodology for creation of indices used in regression analysis.

# 5 Creation of Indices and Amendments in Data Set

Indices were created in accordance with the model used. Creation of indices allows reducing the number of variables via merging the ones measuring the same issue. Moreover, justified ability to create indices implies on the level of reliability of the results, namely, if variables indicating similar issues are possible to merge into an index, results are more reliable, as people have answered in a same way to similar questions.

When creating indices a rule of thumb was used regarding the indicator of Cronbach's alpha. For merging three and more variables Cronbach's alpha needs to be greater than 0.7 in order to provide consistent index. Individual variables were excluded if deleted they granted higher Cronbach's alpha. In cases where index was created from two variables, correlation coefficient higher than 0.6 was lowest accepted for merging the two variables. Those variables, which according to the model were supposed to be merged in index, but were excluded due to the result of Cronbach's alpha, are added as separate variables in the regression. Created indices are shown in appendix B.

In order to merge some of the variables into indices several amendments were made in the data set, those changes are summarized in appendix C.

# 6 Validity, Reliability and Bias of the Study

The research can be useful and valuable only if it is consistent with indicators of internal and external validity and the results are reliable. In this part of the thesis issues of validity and reliability are discussed and possible biases in the work are presented.

Level of internal validity represents how valid are inferences regarding causal relationships (Trochim, 2006a). To be confident in internal validity estimators of causal effect should be unbiased and consistent. Different techniques were used in order to maximize internal validity of the study. Firstly, the mechanism of sample selection was accurately developed in order not to influence availability of data. We chose telephone interviews as they are maximally anonymous, at the same time they allow to gather a lot of valuable information and give explanations in case of uncertainties. Moreover, as in the focus of our study are entrepreneurs, respondents were approached via telephones during working time. This eliminates possibility to exclude anybody from the sample.

In our study there is a threat to internal validity, which is hard to control and predict. During the process of data collection and recording different mistakes could be made causing errors in variables. However, as interviewers had printed copies of a survey and they just needed to circle the answer, we consider possible errors to be insignificant. Another threat to internal validity is outliers. In our study most of the measurements are taken in 5-point Likert scale, which sets limits to answers. Due to this we eliminate possibility to have outliers which could affect results in a significant way.

External validity mainly refers to the process of generalization. It is important that results obtained from the sample are valid and representative enough to make predictions about entire population. Another angle of external validity refers to the possibility of making conclusions about other populations (Shuttleworth, 2009). In order to draw conclusions about population, sample needs to be large and random. In our case sample size is large enough and random. Altogether 866 telephone calls were made. The attained response rate was 40.2% which is considered to be very good, especially taking into account the specifics of the topic which included very sensitive questions. Overall, 312 respondents (36%) said they were not willing to answer the questions, 112 respondents (12.9%) were busy and could not talk at the moment of calling, 94 respondents (10.9%) asked to call back later but did not answer at the specified time.

Main threats regarding external validity come from people, places and time. External validity is high if conclusions of the study also hold for other people in other places and time (Trochim, 2006b). In our case we can say that other countries as, for example, other Baltic

states should have similarities in their trust framework and its effect on entrepreneurial behaviour. However, due to differences in development of the countries a research should be made before generalizing. Hence, knowing that institutional trust is the one with the slowest development we conclude that from this angle external validity is high enough. By this we mean that also after some time our findings and conclusions should be valid for Latvia.

Measures are considered reliable if repeating the research it produces the same results (Trochim, 2006c). It is hard to predict whether the results of this research would be the same if research was repeated. However, the fact that we used different indicators of trust and tax evasion (both direct and indirect questions were asked about the issues) and could merge them into indices adds reliability to our measures.

Although we have considered different threats and tried to develop our work in a way to get valid and reliable results, there is still a possibility to have some biases in the results.

The questionnaire includes sensitive questions about tax compliance. Thus, there is a risk of receiving not honest answers. In order to avoid this problem, all interviewees are approached as industry experts and asked to express their view on industry level not their own company. All the questions are formulated indirectly and unanimity to all the respondents is granted. Moreover, the most sensitive questions are asked in the end of the interview because then interviewees are already warmed up and feel more secure and free.

In most of the questions interviewees are asked to express their attitude towards the issue according to the scale of given values. Results of the questionnaire could be biased due to different valuation systems of respondents. The most common difference comes in valuation of median value, as some respondents perceive it as "don't know", while some choose it if they are indifferent about the issue. In order to reduce this kind of uncertainty and bias, after asking a question and before receiving an answer, interviewer defines meanings of all the values.

In the next section results of the study are introduced.

# 7 **Results**

This paper is focused on the effects of different determinants of institutional trust on tax evasion used as a proxy for entrepreneurs' behaviour. Additionally demographic characteristics were included in order to provide descriptive statistics of the sample. Variables were chosen, indices were created and regression was run in accordance with Mickiewicz, Rebmann and Sauka's model (2010).

#### 7.1. Descriptive Statistics

Overall 348 questionnaire forms were filled after interviewing owners/ managers of the companies of Latvia. Some respondents did not answer all the questions. In order to deal with missing data, the missing values were imputed through expectation maximization algorithms.

#### **Demographics**

51.4% of respondents were females, 46.8% males, but in 1.7% cases the gender was not stated. The largest part of the respondents (32.2%) was in an age group of 30-39 years. Slightly less represented age group is 40-49 years old (29.9%). A part of respondents older than 50, but not older than 59 years is 22.1% large. Other groups were much smaller – all below 10%. 53% of the companies were founded after the year 2000. Most of the respondents have bachelor's degree (55.7%), quite a large share have secondary school education (29%), 11.2% and 1.5% of respondents have master's and doctor degrees respectively. 79.3% of respondents are Latvians, 15.2% Russians and the rest were other nationalities. Significantly dominating group of owners is domestic only – 90.8%. 3.4% of owners are foreigners, while for 4.3% of the surveyed companies' ownership structure is mixed. More than a half of respondents' businesses are located in Riga (54.6%). If looking at division by industries more than a half of the companies provide different services (50.6%). More than one fifth deals with trade (22.7%), while 12.1% constitute production and processing industry. 7.2% of the companies are in construction industry. Other results are shown in Appendix D.

#### Indicators of Trust

There are 3 main indicators of trust in institutions in the model: trust in political system (TPOLSYS), trust in government (TGOV) and trust in tax authority (TTAUTH). These indices are operationalized by questions measured in Likert scale, thus, by exploring the mean values the level of trust in institutions can be determined.

The mean value of trust in political system is 2.6922 (5-point Likert scale: 1 is "Not at all", 2 is "Not very much", 3 is "Neither trust nor distrust", 4 is "Quite a lot", and 5 is "A great deal"). In order to test whether mean value is statistically different from value 2 indicating "not very much", a hypothesis testing is done and it results in t-value=12.331. Knowing this result we have to reject a hypothesis stating that there is no significant difference between mean value of trust in political system and value 2. Thus, we conclude

that mean value of trust in political system is significantly different from "not very much" in positive direction.

The mean value of trust in tax authority is 3.3419. The result of t-test is 7.417, thus, we have to reject a hypothesis that there is no statistical difference between mean value of trust in tax authority and value 3. From all three indicators of institutional trust, trust in tax authority has the highest mean value. Due to statistical difference of the mean from 3 (neither agree nor disagree), we can conclude that in this case trust in tax authority has some positive meaning.

The mean value of trust in government is 2.0592. The value of t test is 1.488. In this case we fail to reject hypothesis stating that there is no difference between mean value and value of 2. This means that on average respondents not very much trust government. For more detailed results of all hypothesis tests see appendix E.

#### 7.2. Regression Results

The regression was run in accordance with Mickiewicz, Rebmann and Sauka's model (2010), which has 19 independent and 10 control variables measuring effect of different indicators of trust and demographic characteristics on the dependent variable – level of tax evasion. According to R squared value, independent variables explain 23% of the variance of dependent variable. The ANOVA test states the regression model to be significant (Sig. = 0.000) (Appendix F). Below there is a table showing regression results.

Coefficients <sup>a</sup>									
Model				Standardized					
		Unstandardized Coefficients		Coefficients					
	_	В	Std. Error	Beta	t	Sig.			
1	(Constant)	3.560	.885		4.022	.000			
	TPOLSYS	053	.061	060	860	.391			
	TGOV	012	.091	010	131	.896			
	TTAUTH	017	.063	017	275	.784			
	FTSYS	.100	.091	.064	1.093	.275			
	STAXSY	005	.046	007	117	.907			
	GOVSUPENTRE	.024	.041	.034	.587	.558			
	NEEDSUP	038	.045	046	836	.404			
	PUNISH	385	.066	350	-5.839	.000			
	UREPconseq	.088	.059	.084	1.478	.140			
	SRSINFLU	.039	.045	.048	.870	.385			
	FOLSRS	076	.043	098	-1.749	.081			
	CHEATTAX	066	.038	098	-1.729	.085			
	INCDIF	002	.044	003	046	.964			
	RESP	055	.048	067	-1.149	.252			
	GOVPERCH	.059	.059	.065	1.013	.312			
	ECSIT	110	.065	102	-1.692	.092			
	LAT	.287	.249	.128	1.153	.250			
	RUS	.057	.269	.023	.212	.832			
	RIGA	043	.213	024	203	.839			
	VIDZEME	294	.239	116	-1.227	.221			
	KURZEME	059	.237	023	247	.805			
	ZEMGALE	.008	.258	.003	.032	.974			
	SECOND	069	.450	035	154	.878			
	BACH	171	.440	094	387	.699			
	MASTER	220	.459	080	480	.632			
	HELPCOUNT	.076	.042	.103	1.808	.072			
	BELATCOM	.005	.060	.005	.088	.930			
	RECSUP	.016	.043	.021	.363	.717			
	AGE	007	.005	088	-1.547	.123			

#### **Coefficients**<sup>a</sup>

a. Dependent Variable: TAVOID Table 1: Regression results Source: Created by authors There is a set of independent variables which are not significant even at 25 percent significance level. According to the regression results these independent variables do not have any explanatory power on dependent variable in our sample. These variables include: trust in political system (TPOLSYS), government (TGOV) and tax authority (TTAUTH), fairness of tax system (FTSYS, STAXSY), benefits entrepreneurs receive from government (GOVSUPENTRE, NEEDSUP, RECSUP), influence of state revenue service (SRSINFLU), attitude towards redistribution of income (INCDIF), attitude towards social protection (RESP), impact of economic crisis on attitudes towards government (GOVPERFCH) and feeling of attachment to society (BELATCOM).

There is one independent variable being significant at 15 percent significance level – severity of punishment if caught (UREPconseq). However, the beta coefficient for the variable is positive (0.088) indicating the more severe is the punishment the greater is tax evasion. Possible explanation could be an assumption that if punishment is severe, than people will engage in tax evasion only for large amount of money. This means that they will not risk to be punished for small gain. However, there is no empirical proof for this in our work, thus, in order to explain this a further research would be needed.

Variables of law abidingness (FOLSRS, CHEATTAX), evaluation of economic performance (ECSIT) and feeling of attachment to the country (HELPCOUNT) are significant at 10 percent significance level. The first three variables have negative beta coefficient stating reverse relationship between positive increase in perception of the factor and tax evasion. The last HELPCOUNT has positive beta coefficient estimate, meaning the more entrepreneurs feel attached to the country the greater is tax evasion holding all other factors constant.

The strongest effect on dependent variable comes from a variable indicating a chance of being caught if trying to evade (PUNISH). The beta magnitude is -0.385 and it is significant at 1 percent significance level.

Demographic variables such as binary variables for Latvian nationality (LAT) and Vidzeme region (VIDZEME) are statistically significant at less than 25 percent level. Age variable (AGE) is statistically significant at less than 13 per cent level. The beta value for Latvians is positive 0.287. Region Vidzeme and age have negative coefficients of -0.294 and -0.007 respectively.

The next section provides discussion of the results, which also results in giving answers to the hypotheses set.

## 8 Discussion of the Results

The results of the studied sample support the links between the entrepreneurs trust in institutions and their effect on entrepreneurial behaviour as described in the literature. However, there are also independent variables that lose their explanatory power and do not support the evidence from the literature review. This section focuses on answering the hypotheses and research questions set, tries to find reasoning to the results.

In response to our first research question regarding the level of entrepreneurs trust in institutions the results show that the lowest trust level among entrepreneurs is in government with mean value 2.0592 out of 5. The result for trust in political system is better (2.6922) and hypothesis testing recognized significant difference from value representing "not very much trust", which means that trust in political system is significantly higher than trust in government. From all three institutions researched the highest trust is in tax authority with mean value 3.3419. Hypothesis testing recognized that the mean value is significantly higher than 3, which represent "neither trust nor distrust". Thus, we can conclude that trust in tax authority posses some positive meaning.

Relatively low result for trust in government can be associated with a tendency of Latvian governments to lose stability and ministers' involvement in different scandals. Slightly better result for trust in political system can be explained by the fact that there were occasions of change in government made by Latvian parliament because of society's dissatisfaction with the work of government. The tax authority has the highest trust level if comparing among analyzed institutions. It has tried to position itself as an open and cooperative institution for entrepreneurs. It seems that people do not associate recent increase in tax rates with the tax authority and understand that the tax authority is not the one issuing the rules about tax rates, otherwise the level of trust in institutions in Latvia is relatively low according to our 5-point Likert scale since positive attitude of entrepreneurs towards institutions is revealed by the values 4 and 5. This is consistent with the first hypothesis stating that Latvia similarly to other transition economies has low level of trust in institutions among entrepreneurs.

According to the previous researches institutional trust has inverse relationship with the level of tax evasion (Webley, 1991; Scholz & Lubell, 1998; Andreoni et al. 1998; Adams & Webley, 2001; Murphy 2004). In this research institutional trust is measured with three indices: trust in political system, trust in government and trust in tax authority. The results of the regression are consistent with the findings of previous researches as estimates of the coefficients have negative sign. However, the effects of all three indicators of trust on the level of tax evasion are statistically insignificant. This means that even if entrepreneurs estimate their trust in institutions with higher confidence (greater trust) there would not be any significant behavioural change i.e. the level of tax evasion would not be influenced holding all other factors constant. Thus, we have to reject hypothesis 2, which states that trust in institutions is negatively related to the level of tax evasion in Latvia. The fact that all three indices consist of several variables measuring trust into particular institutions both directly and indirectly and that there are three different indices representing trust in different institutional trust on the level of tax evasion can be explained by the fact that the works reviewed and used as a basis for the hypothesis analyzed developed economies where trust in institutions is higher and, thus, the link between trust and entrepreneurs' behaviour (tax evasion) is also established and developed, which does not apply to transition economies such as Latvia.

When paying taxes people usually have their own opinion of how this money should be spent. In case reality differs from "the way it should be done" people are not satisfied and trust towards government decreases (Spicer & Lundstend, 1976; Ahmed & Braithwaite, 2005). Thus, after studying the literature about the issue we formulated hypothesis 3, which mainly states that perception of money waste from the government side is associated with higher level of tax evasion. In the survey used for data gathering respondents were asked to express their attitude towards the way government spends taxpayers' money. This variable was a component of an index measuring trust in government. As previously mentioned, according to our results we do not find a significant relationship between trust in government index and tax evasion. On the same grounds, we conclude that entrepreneurs' behaviour is not affected by the perception of government wasting taxpayers' money (tax evasion proxy is not influenced by changes in the index). We assume that lack of causality in this case is because entrepreneurs decide whether to pay or not basing their decision on other factors than perception of government wasting money. For example, probability of being punished or severity of punishment if caught might play much more important role in this case for entrepreneurs.

The level of trust in tax authority is affected by the existing tax system. Andreoni et al. (1998) claim, that in case people believe to be treated unfair by the tax system in both nominal and relative terms, they are more likely to change their behaviour in favour of tax evasion. In this research perception of the fairness is measured by direct question about satisfaction with tax system in Latvia and index consisting of relative comparison to the

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amount other companies are paying in taxes. After running the regression both those measures were insignificant. Thus, we conclude that according to the studied sample the level of tax evasion among entrepreneurs is not affected by the perception of fairness of tax system in both nominal and relative terms and reject hypothesis 4. If entrepreneurs change their perception of fairness of tax system, still it would not change entrepreneurs' behaviour regarding tax evasion. The results show that respondents have quite similar opinion about tax burden regarding their own company and other companies in the industry. This means that in most cases if respondent thinks that his company should pay less in taxes, he thinks that other companies should also pay less.

After studying the works by Alm, Jackson and McKee (1992) and Scholz and Lubell (1998) we set a hypothesis 5 consistent with the findings of the researchers: entrepreneurs' confidence in receiving benefits financed by taxes has negative effect on tax evasion. The relationship was tested using three variables and all three appeared to have insignificant effect on tax evasion. Thus, we reject hypothesis 5 and conclude that government benefits to the companies and individuals do not affect entrepreneurial behaviour. In this case we again explain this result by a condition that when deciding on whether to evade or not entrepreneurs are more concerned about other factors than received benefits from the government. However, in order to reveal true reasoning further research would be needed.

Andreoni et al. (1998) claims that probability of audit and penalty rate has positive relation with tax compliance. In consistence with this finding we set hypothesis 6. The variable measuring respondents' perception of probability of being caught if evading has the strongest effect on tax evasion. According to our results if the probability of being caught if evading all other factors constant (more detailed explanation on this result is in appendix G). This result is significant even at 1% significance level, thus, we approve hypothesis 6. We find support for rational choice model described by Murphy (2004) that if the value of possible benefits from tax evasion is decreased by the estimated costs of punishment, entrepreneurs are more willing to comply with the rules. In addition to direct punishment costs there are also costs of reputation which also motivate tax compliance, however, it was not measured in the scope of our study.

Moral values are said to have significant direct relationship with behaviour of people (Kagan & Scholz, 1984). In our analysis we looked at two variables which were operationalized by different questions. Firstly, respondents were asked to evaluate whether cheating on taxes can be justifiable. The variable measuring this issue has statistically

significant negative beta estimate. By this we conclude the more respondents find cheating on taxes to be unjustifiable, the lower is the level of tax evasion. However, in economic terms the effect is quite weak. If the perception of tax cheating being unjustifiable is increased by one unit, the tax evasion diminishes by 1.65%. In another question respondents were asked to express their agreement on the thought that people should follow the decisions of the State Revenue Service even they do not agree with them. Statistically significant result allows concluding that the more people think that following the rules is the right thing to do the lower is the level of tax evasion. In economic terms this means that in order to decrease tax evasion by 1.9% the entrepreneurs' law abidingness perception should increase by one unit which in our case equals 25% holding all other factors constant. Regression results on both variables are consistent with the findings of previous studies discussed in the literature review of this work and support our hypothesis 7.

Several control variables appeared to have significant effect on the level of tax evasion. Index representing attitude and expectations about economic situation consists of respondents' evaluation of present economic situation if compared to the one a year ago and their expectations about the future economic situation. Improving the perception of economic situation by one scale unit decreases the tax evasion by 2.75%. The more people are positive in their attitude and expectations about the economic development of the country, the less is tax evasion. We assume that the finding might also be related to the condition that in good economic situation entrepreneurs do not have cash flow problems, thus, can "afford" paying taxes.

The feeling of attachment to the country was also included in the regression model as a control variable. It reflects the concern of people about whether their actions help the country. The result of estimate (0.076) is unexpected as the positive sign means the more people are concerned whether their actions help the country, the more they evade tax payments ( $\alpha$ =10%). If perception of helping the country is increased by one unit of our Likert scale, the tax evasion increases by 1.9% holding all other factors constant. The phenomenon is rather hard to explain and demands further research. It might be speculated that people believe that they themselves can better allocate money via spending than tax system does in helping the country.

To sum up the discussion above we can answer our second research question that entrepreneurs trust in political system (parliament), government and tax authority does not affect the entrepreneurial behaviour. Similarly, we do not find support for trust in fairness of tax system, benefits entrepreneurs receive from the government having significant explanatory power on entrepreneurial behaviour. On the other hand, in line with the literature we find that a chance of being caught, law abidingness and evaluation of economic situation are reliable determinants of entrepreneurial behaviour in Latvia. Contradictory evidence is related to feeling of attachment to the country. According to our sample we find an opposite relation to behaviour to what has been observed in the previous researches.

From the results demographic factor age can be described as having a significant negative impact on entrepreneur behaviour at alpha less than 12%, however, the economic effect is quite weak. If the age of an entrepreneur increases by one year then the level of tax evasion decreases by 0.175% holding all other factors constant. This can be associated with the fact that the older generation was raised up in the Soviet Union times, when law abidingness was very strong and they are "used" to pay taxes.

From all other demographic factors none has statistically significant effect on entrepreneurial behaviour. Being Latvian (LAT) and being from region Vidzeme (VIDZEME) are significant only at 25 percent significance level, which is the highest significance level after age from demographic indicators. Thus, we conclude that from all demographic indicators only age has some significant effect on tax evasion, while other indicators appeared to be insignificant. We explain regional differences to have not significant effect because Latvia is relatively small country to possess important differences among regions.

#### 9 Conclusions

According to Baumol (1990) environment significantly affects entrepreneurs' behaviour. One of the elements creating environment is trust in institutions which is also a part of social capital needed to establish effective market systems (Arrow, 1972; North, 1981; Putnam, 1993; Fukuyama, 1995; Stiglitz, 1999). This implies a specific impact on entrepreneurship – trust in institutions affects both behaviour and values companies create.

The issue of institutional trust gains additional importance in transition economies. Significant political and social changes affect also economic environment, i.e. switching to market economy. Hohman and Malieva (2002) claim that successful changes in formal institutions do not grant successful transition process, as a lot is dependent on adjustment and change of informal institutions.

Latvia is a good example of transition economy that has entered the advanced stage of transition (Aidis & Sauka, 2008). In this stage formal institutions are already formed and harmonization between formal and informal institutions need to be attained (Van de Mortel,

2002). In our thesis we explored the relationship between trust in institutions and entrepreneurial behaviour during the harmonization process.

After conduction of 348 telephone interviews with top managers and owners the data enabled us to contribute to the existing entrepreneurship literature by further exploring the topic linking concepts of entrepreneurs' trust in institutions and entrepreneurial behaviour as measured by tax evasion proxy. Empirically our paper provides deeper insights in the case of Latvia being one of the post Soviet Union transition economies.

In our thesis we found partial confirmation for the theory on institutional distrust in transition economies. There is a lack of trust in government among entrepreneurs in Latvia. The level of trust in political system is slightly higher and on average entrepreneurs cannot distinguish whether they trust or distrust political system, answering that they have neutral opinion. From the three institutions explored the tax authority has the highest level of trust, which is significantly higher than neutral position measuring in positive direction of trust level. The results are associated with the processes in the country. Since regaining independence the Latvian government has been rather unstable compared to parliament, while tax authority has followed a rather stable development strategy.

Our results only partially confirm the links of trust in institutions having influential power in explaining the entrepreneurial behaviour. We do not find trust in government, political system and tax authority to have significant influence on entrepreneurial behaviour as stated in previous studies. Similarly, fairness of tax system, perception of government wasting taxpayers' money and benefits entrepreneurs receive from government fail to explain entrepreneurial behaviour in Latvia according to the studied sample.

On the other hand, as suggested by the literature we found moral values of law abidingness, evaluation of economic situation and probability of punishment in particular playing a significant role in explaining entrepreneurial behaviour. However, there is a contradictory finding related to feeling of attachment to the country. We found that the more entrepreneurs are concerned whether their actions help to the country, the worse is behavioural aspect of tax evasion. One of the explanations could be that people believe that they themselves can better allocate money via spending than tax system does in helping the country. However, in order to find precise answer further research would be beneficial.

Demographic factors are not very helpful in explaining the relationship between entrepreneurs' trust in institutions and how it affects entrepreneurial behaviour in case of Latvia. We found that only age has statistically significant explanatory power, however, the economic effect is weak. Although we tried to maximize validity and reliability and minimize biases of our thesis, there are still some shortcomings present. The minor issues include possibility that respondents were not honest while answering due to the specifics of the topic studied and possible different understanding of the Likert scale values. We also consider that our work would benefit from involving experts of the field including representatives of institutions studied. Knowing opinions of professionals, we could better explain reasons and causes of our results.

With the purpose to better understand the nuances explaining the relationship of entrepreneurs trust in both formal and informal institutions with entrepreneurial behaviour in Latvia further research is suggested. Currently our thesis applies an existing model developed by Mickiewicz, Rebmann and Sauka's (2010). The model is well supported by the existing literature; however, many explanatory variables lose their power in explaining the relationship. Under the current setting we are not able to provide supported facts and explain the insignificant relationships. Thus, further research would be needed in order to discover why some explanatory variables lose their significance. Eventually the theory on entrepreneurs trust in institutions and its effect on entrepreneurial behaviour could be expanded after the research.

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### Appendices

#### Appendix A Interview questions: English

#### Good day,

Entrepreneurship department of the Stockholm School of Economics in Riga conveys a research about shadow economy in Latvia and factors that affect it. Experts from different fields are asked to comment on the situation by answering to the interview questions. We would like also you to participate in the research as an expert of your own industry. Some questions might seem delicate, thus, we guarantee anonymity. All the results will be aggregated and presented purely in statistical terms, identity of the company or respondent will not be included in our database. The database will also be used for writing a thesis paper on a similar topic.

#### Attitude towards the Latvian tax system

#### 1. Please evaluate your satisfaction with the tax system in Latvia

Not at all satisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied
1	2	3	4	5

#### 2. In your opinion, do the following groups should pay more or less tax?

Should pay	Much more	A bit more	Pay fair share	A bit less	Much less
Your business	1	2	3	4	5
Any Small businesses	1	2	3	4	5
Businesses in Your industry	1	2	3	4	5
Large businesses	1	2	3	4	5
All businesses	1	2	3	4	5

3. Overall, how dissatisfied or satisfied are you with the way the government spends

taxpayers' money? (Please circle a number)

Not at all satisfied	Unsatisfied	Neither satisfied	Satisfied	Very satisfied
		nor unsatistieu		
1	2	3	4	5

#### Attitude towards the Latvian state revenue service

#### 4. Please evaluate your satisfaction with the performance of the State Revenue Service in Latvia

Not at all satisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied
1	2	3	4	5

#### 5. To what extent do you agree with the following statements about the State Revenue Service:

The State Revenue Service	Strongly disagree	Disagree	Neither	Agree	Strongly Agree
competently administers the tax system	1	2	3	4	5
administers the tax system fairly	1	2	3	4	5
acts in the interest of all citizens	1	2	3	4	5
is generally honest in the way it deals with people	1	2	3	4	5
listens to powerful interest groups not to ordinary people	1	2	3	4	5
is corrupt	1	2	3	4	5

#### 6. The following questions relate to the power that you perceive the State Revenue Service as having.

#### a. To what extent do you disagree or agree with the following:

The State Revenue Service	Strongly disagree	Disagree	Neither	Agree	Strongly Agree
can't do much if a small business decides to defy it	1	2	3	4	5
can't do much if a self-employed taxpayer decides to defy it	1	2	3	4	5

#### b. If a typical firm in your area of activity underreports its income to State Revenue Services

#### what do you think the chances are that it will get caught?

About zero/0%	About 25%	50/50	About 75%	Almost certain/100%

#### c. If a small business underreports the number of employees it employs, what do you think the

#### chances are that it will get caught?

About zero/0%	About 25%	50/50	About 75%	Almost certain/100%

d. If a small business underreports the salary of employees it pays, what do you think the chances

#### are that it will get caught?

About zero/0%	About 25%	50/50	About 75%	Almost certain/100%		
e. If a firm did get caught seriously underreporting how severe are the typical consequences:						

Not severe at all, minimal impact	It will suffer some financial penalties	It will suffer serious financial penalties and become unprofitable	It will suffer serious financial penalties and may go out of business	A company will go out of business
1	2	3	4	5

<u>Attitudes towards the political system and political institutions</u> 7. I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all? (Read out and code one answer for each)

	A great deal	Quite a lot	Not very much	None at all
The Government	1	2	3	4
Parliament	1	2	3	4
The Civil Service	1	2	3	4
The State Revenue Service	1	2	3	4
The Courts	1	2	3	4

8. On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the

#### way democracy works in your country?

Very satisfied	Fairly satisfied	Not very satisfied	Not at all satisfied
4	3	2	1

#### 9. To what extent do you agree with the following statements?

	Strongly	Slightly	Neither agree	Slightly	Strongly
	agree	agree	nor disagree	disagree	disagree
The government cares about what people think	5	4	3	2	1
You can generally trust the government to do what is right	5	4	3	2	1
The government is run by those with power looking for their own interests	5	4	3	2	1
The government knows what it is doing	5	4	3	2	1
Quite a few people running the government are corrupt	5	4	3	2	1
The government wastes a lot of money we pay in taxes	5	4	3	2	1
People like me have no say in what the government does	5	4	3	2	1

#### **Benefits**

#### 10. Please evaluate your satisfaction towards government support for entrepreneurship in Latvia

Not at all satisfied	Unsatisfied	Neither satisfied nor unsatisfied	Satisfied	Very satisfied
1	2	3	4	5

11. a) What is the likelihood that you may need some welfare support from the state within next five years (unemployment benefits, income support, health benefits, pensions)

Not likely	Likely	Neither satisfied nor unsatisfied	Unlikely	Very unlikely
1	2	3	4	5

b) If you did need some welfare support from the state within the next five years, how likely is that you would receive the needed support?

Not likely	Likely	Neither satisfied nor unsatisfied	Unlikely	Very unlikely
1	2	3	4	5

#### Beliefs

12. How would you place your views on this scale?

- 1 means you agree completely with the statement on the left;
- 10 means you agree completely with the statement on the right;
- and if your views fall somewhere in between, you can choose any number in between.

(Choose one number for each issue):

Incomes should be							We nee	ed larger	income differences	
made more equal as incentives for individual effor							or individual effort			
1	2	3	4	5	6	7	8	9	10	

The government should								Peopl	e should take more	;
take more responsibility to ensure									responsibility to	
that everyone is provided for							for pr	ovide for themselv	es	
1	2	3	4	5	6	7	8	9	10	

13. Please tell me whether you think "Cheating on tax if you have the chance" can always be justified, never be justified, or something in between?

- 1 means you think it is always justifiable;
- 10 means you think it is never justifiable;
- and if your views fall somewhere in between you can choose any number in between.

Alwa	ys justifia	able					Neve	r justifiable	;	]
1	2	3	4	5	6 7	8	9	10		
14. Pl	lease cho	ose one	<u>of five opt</u>	<u>ions for e</u>	ach of those	statements:				
					Strongly	Slightly	Neith	er agree	Slightly	Strongly
					agree	agree	nor d	lisagree	disagree	disagree
I'm n	ot really	concerne	d whether	my	5	4		3	2	1

#### Gudino, Liseks

actions benefit or help the country as a					
whole					
b. Being a member of the Latvia community	5	4	3	2	1
is important to me	5		5	2	1
c. People should follow the decisions of the					
State Revenue Service even if they disagree	5	4	3	2	1
with them					

#### **National Economic Performance**

## **15.** a) Compared to the period 12 months ago, do you think that the general economic situation in

#### this country is ...?

a lot better	a little better	the same	a little worse	a lot worse
5	4	3	2	1

#### b) What about 12 months from now, do you think that the general economic situation in this

#### country will be ...?

a lot better	a little better	the same	a little worse	a lot worse
5	4	3	2	1

#### 16. How your assessment of the government performance changed since 2007?

It is a lot better	It is a little better	It is the same	It is a little worse	It is a lot worse
5	4	3	2	1

#### Misreporting

## 17. Please estimate approximate degree of underreporting business income (net profits) by firms in your

#### area of activity (year 2009):

- $\Box$  Firms in the industry report all of their actual business income
- **D** Report more than three quarters but not all of the actual business income
- **Report more than a half but less than three quarters of their income**
- **Report** more than one fourth but less than half of their income
- **Report less than one fourth of their income**

#### 18. Please estimate approximate degree of underreporting number of employment employed by firms in

#### your area of activity (year 2009):

- Firms in the industry report all of their employees
- □ Report more than three quarters but not all of the actual employees
- **D** Report more than a half but less than three quarters of their employees
- □ Report more than one fourth but less than half of their employees
- □ Report less than one fourth of employed

#### 19. Please estimate approximate proportion of official (reported salary) vs. unofficial (salary actually paid

#### but not reported) (year 2009)

- $\Box$  No unofficial salary is being paid
- **Report more than three quarters but not all of the paid salaries**
- **Report more than a half but less than three quarters of the paid salaries**
- **Report more than one fourth but less than half of the paid salaries**
- □ Report less than one fourth of the paid salaries

#### Information about the business

20. In what region is your company based? \_\_\_\_\_

21. Sector (s) \_\_\_\_\_

22. In which year did your company start operation? Year \_\_\_\_\_

23. Please tell me what is the ownership status of your company:

- 1 = domestic only
- 2 =foreign only
- 3 = mixed: domestic with some foreign ownership
- 4 = mixed: domestic with some institutional owners banks/financial institutions
- 5 = mixed: domestic with some institutional owners large publicly quoted firms

6 = mixed: domestic with some government/government agencies/local government

# 24. What is the approximate % of your net sales profit, sales turnover, employment and % change (increase/decrease as compared to 2009)

			Total number
% change (for decrease use minus	Net sales profit	Sales turnover	employees (including
sign)			part-time)
% change (increase/decrease as			
compared to 2009)			
% change (increase/decrease as			
compared to 2007)			

#### Information about the owner-manager

25. What is the total number of years of your business experience? \_\_\_\_\_

26. What is your highest level of education? \_\_\_\_\_

27. What is your age in years? \_\_\_\_\_

**28. Gender** M / F

29. Please tell me your ethnicity \_\_\_\_\_

Thank you for your response!

Interview questions: Latvian

Labdien,

Rīgas Ekonomikas augstskolas Uzņēmējdarbības fakultāte veic pētījumu par ēnu ekonomiku Latvijā un faktoriem, kas to ietekmē. Šajā pētījumā dažādu nozaru eksperti tiek lūgti komentēt situāciju atbildot uz vairākiem anketas jautājumiem. Vēlamies lūgt arī Jūs iesaistīties šajā pētījumā, kā savas nozares ekspertam. Mēs apzināmies, ka daži jautājumi var šķist delikāti, tāpēc mēs garantējam anonimitāti. Visi rezultāti tiks apkopoti un analizēti tikai statistiski, neidentificējot atsevišķus uzņēmumus vai respondentus. Šī pētījuma rezultāti tiks izmantoti arī bakalaura darba rakstīšanai.

#### Attieksme pret Latvijas nodokļu sistēmu

1. Cik apmierināts/-a Jūs esat ar Latvijas nodokļu sistēmu kopumā?

1 – pilnībā neapmierina 5 – pilnībā apmierina

<u> </u>				
Pilnībā neapmierina	Daļēji neapmierina	Grūti pateikt	Daļēji apmierina	Pilnībā apmierina
1	2	3	4	5

#### 2. Vai, Jūsuprāt, sekojošām uzņēmumu grupām būtu jāmaksā lielāki vai mazāki nodokļi? 1 – daudz lielāki

5 – daudz mazāki

	Nodokļi būtu jamaksā	Daudz lielāki	Nedaudz lielāki	Maksā atbilstoši	Nedaudz mazāki	Daudz mazāki
А	Jūsu uzņēmumam	1	2	3	4	5
В	Jebkuram mazam uzņēmumam	1	2	3	4	5
С	Uzņēmumiem jūsu industrijā	1	2	3	4	5
D	Lieliem uzņēmumiem	1	2	3	4	5
Е	Visiem uzņēmumiem	1	2	3	4	5

#### 3. Kopumā vai Jūs esat apmierināts/-a ar to, kā valdība tērē nodokļu maksātāju naudu?

1 - pilnībā neapmierina

5 – pilnībā apmierina

Pilnībā neapmierina	Dalēji neapmierina	Grūti pateikt	Dalēji apmierina	Pilnībā apmierina
1	2	3	4	5

#### Attieksme pret Latvijas ienēmumu dienests

#### 4. Vai Jūs apmierina Valsts Ieņēmumu dienesta darbība?

1 – pilnībā neapmierina

5 – pilnībā apmierina

Pilnībā neapmierina	Daļēji neapmierina	Grūti pateikt	Daļēji apmierina	Pilnībā apmierina
1	2	3	4	5

#### 5. Vai Jūs piekrītat sekojošiem apgalvojumiem par Valsts Ieņēmumu dienestu?

1 – pilnībā nepiekrītu 5 – pilnībā piekrītu

5 -	pinnoa piekritu					
	Valsts Ieņēmumu dienests	Pilnībā	Daļēji	Grūti	Daļēji	Pilnībā
		nepiekrītu	nepiekrītu	pateikt	piekrītu	piekrītu
Α	kompetenti pārvalda nodokļu sistēmu	1	2	3	4	5
В	pārvalda nodokļu sistēmu godīgi	1	2	3	4	5
С	rīkojas visu pilsoņu interesēs	1	2	3	4	5
D	kopumā rīkojas godīgi pret cilvēkiem	1	2	3	4	5
Е	ieklausās spēcīgās interešu grupās nevis parastos cilvēkos	1	2	3	4	5
F	ir korumpēts	1	2	3	4	5

## 6. Jūsuprāt, cik liela ir Valsts Ieņēmumu dienesta ietekme sekojošos jautājumos:

### a. Vai Jūs piekrītat sekojošam:

1 – pilnībā nepiekrītu

5 – pilnībā piekrītu

	Valsts Ieņēmumu dienestam	Pilnībā nepiekrītu	Daļēji nepiekrītu	Grūti pateikt	Daļēji piekrītu	Pilnībā piekrītu
A	Ir maza ietekme gadījumos, ja mazie uzņēmumi neatbalsta tā rīcību	1	2	3	4	5
В	Ir maza ietekme gadījumos, ja pašnodarbinātie nodokļu maksātāji neatbalsta to rīcību	1	2	3	4	5

# b. Gadījumos, ja tipisks jūsu sfēras uzņēmums neuzrāda savus ienākumus Valsts Ieņēmumu dienestam pilnā apjomā, Jūsuprāt, cik liela ir iespēja, ka tas tiks atklāts?

Gandrīz 0% Ap 25%	50/50	Ap 75%	Gandrīz 100%
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## c. Gadījumos, ja mazais uzņēmums neuzrāda patieso darbinieku skaitu, Jūsuprāt, cik liela ir iespēja, ka tas tiks atklāts?

Gandrīz 0%         Ap 25%         50/50         Ap 75%         Gandrīz
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## d. Gadījumos, ja mazais uzņēmums neuzrāda darbinieku algas pilnā apmērā, kāda, Jūsuprāt, ir iespēja, ka tas tiks atklāts?

Gandrīz 0% Ap 25% 50/50 Ap 75% Gandrīz 100%					
	Gandrīz 0%	Ap 25%	50/50	Ap 75%	Gandrīz 100%

## e. Gadījumos, ja tiek atklāts, ka uzņēmums ir slēpis patieso informāciju, cik nopietnas, Jūsuprāt, ir tipiskās sekas?

Nav nopie minimāla ie	,	Neliels naudas sods	Nopietns naudas sods un uzņēmums vairs nav konkurētspējīgs	Nopietns naudas sods un uzņēmums varētu pārtraukt darbību	Firma pārtrauks uzņēmējdarbību
1		2	3	4	5

#### Attieksme pret politisko sistēmu un politiskām iestādēm

#### 7. Es nosaukšu vairākas institūcijas. Vai Jūs varētu pateikt, cik ļoti Jūs uzticaties katrai no tām?

1 – pilnībā uzticos

#### 4 - pilnībā neuzticos

		Pilnībā uzticos	Daļēji uzticos	Vairāk neuzticos nekā uzticos	Pilnībā neuzticos
А	Valdība	1	2	3	4
В	Saeima	1	2	3	4
С	Ierēdniecība	1	2	3	4
D	Valsts Ieņēmumu dienests	1	2	3	4
Е	Tiesas	1	2	3	4

#### 8. Kopumā, vai Jūs apmierina veids, kādā demokrātija darbojas Latvijā?

1 - pilnībā neapmierina

4 - pilnībā apmierina

Pilnībā apmierina	Daļēji apmierina	Daļēji neapmierina	Pilnībā neapmierina
4	3	2	1

#### 9. Cik ļoti Jūs piekrītat sekojošiem apgalvojumiem?

- 1 pilnībā nepiekrītu
- 5 pilnībā piekrītu

		Pilnībā	Daļēji	Grūti	Daļēji	Pilnībā
		piekrītu	piekrītu	pateikt	nepiekrītu	nepiekrītu
Α	Valdībai rūp tas, ko domā cilvēki	5	4	3	2	1
В	Kopumā Jūs varat uzticēties valdības rīcībai, ka tā būs pareiza	5	4	3	2	1
С	Valdību sastāda tie, kas ar savu varu cenšas piepildīt savas intereses	5	4	3	2	1
D	Valdība zin, ko dara	5	4	3	2	1
Е	Salīdzinoši nedaudz cilvēku pie varas ir korumpēti	5	4	3	2	1
F	Valdība izšķiež lielu daļu nodokļu maksātāju naudas	5	4	3	2	1
G	Tādi cilvēki kā es nenosaka valdības rīcību	5	4	3	2	1

#### <u>Pabalsti</u>

#### 10. Cik ļoti Jūs apmierina valsts atbalsts uzņēmējdarbībai Latvijā?

 $1-piln \overline{\imath} b \overline{a} \ neapmierina$ 

4 - pilnībā apmierina

Pilnībā neapmierina	Daļēji neapmierina	Grūti pateikt	Daļēji apmierina	Pilnībā apmierina
1	2	3	4	5

## 11. a) Cik liela ir iespēja, ka jums varētu būt nepieciešams kāds materiāls atbalsts no valsts puses nākošo 5 gadu laikā (bezdarbnieka pabalsts, veselības aprūpe, pensija, u.c.)?

1 – ļoti maza iespēja

5 – ļoti liela iespēja

Ļoti maza iespēja	Maza iespēja	Grūti pateikt	Liela iespēja	Ļoti liela iespēja
1	2	3	4	5

b) Ja jums būtu nepieciešams kāds materiāls atbalsts no valsts puses nākamo 5 gadu laikā, cik liela iespēja, ka Jūs to saņemtu?

#### 1 – ļoti maza iespēja

5 – ļoti liela iespēja

Ļoti maza iespēja	Maza iespēja	Grūti pateikt	Liela iespēja	Ļoti liela iespēja
1	2	3	4	5

#### <u>Pārliecība</u>

Es velētos dzirdēt Jūsu viedokli sekojošos jautājumos:

#### 12. Kuru viedokli Jūs atbalstat skalā no 1 līdz 10, kur

a)

#### 1 – Ieņēmumiem sabiedrībā ir jākļūst vienlīdzīgākiem

10 – Mums ir nepieciešamas lielākas ieņēmumu atšķirības, lai motivētu indivīdus

10	1	2	3	<u>4 A</u>	5	6	7	8	0	10	
	1	2	5	4	5	0	1	0	9	10	
b)											

#### 1 - Valdībai būtu jāuzņemas atbildību par to, lai visi būtu nodrošināti

10 – Cilvēkiem pašiem būtu jārūpējas par savu labklājību

	1	2	3	4	5	6	7	8	9	10	
--	---	---	---	---	---	---	---	---	---	----	--

#### 13. Jūsuprāt, vai "Šmaukšanās ar nodokļiem, ja pastāv tāda iespēja" ir attaisnojama?

1 – pilnībā attaisnojama

10 – nekad na	10 = 0 EKAO DAV ADAISUOJADDA										
1	2	3	4	5	6	7	8	9	10		

#### 14. Vai piekrītat apgalvojumiem skalā no 1 līdz 5, kur

#### 1 - pilnībā nepiekrītu

5 – pilnībā piekrītu

		Pilnībā piekrītu	Daļēji piekrītu	Grūti pateikt	Daļēji nepiekrītu	Pilnībā nepiekrītu
А	Mani īsti nesatrauc vai mana darbība palīdz valstij kopumā	5	4	3	2	1
В	Būt par Latvijas sabiedrības daļu man ir svarīgi	5	4	3	2	1
C	Cilvēkiem būtu jāievēro Valsts ieņēmumu dienesta noteikumi pat, ja viņi tiem nepiekrīt	5	4	3	2	1

#### Valsts ekonomiskā situācija

#### 15. a) Kā Jūs vērtējat valsts ekonomisko situāciju, salīdzinot ar laika periodu pirms 12 mēnešiem?

1 – daudz sliktāka

5 – daudz labāka

Daudz labāka	Nedaudz labāka	Bez izmaiņām	Nedaudz sliktāka	Daudz sliktāka
5	4	3	2	1

#### b) Jūsuprāt, kāda būs ekonomiskā situācija valstī pēc 12 mēnešiem?

1 – daudz sliktāka

5 – daudz labāka

Daudz labāka	Nedaudz labāka	Bez izmaiņām	Nedaudz sliktāka	Daudz sliktāka
5	4	3	2	1

#### 16. Kā Jūs vērtējat valdības darbību, salīdzinot ar 2007.gadu?

1 – daudz sliktāka

5 – daudz labāka

Daudz labāka	Nedaudz labāka	Tādi pati	Nedaudz sliktāka	Daudz sliktāka
5	4	3	2	1

#### <u>Ēnu ekonomikas apmēri</u>

#### 17. Lūdzu novērtējiet, cik lielā mērā uzņēmumi jūsu industrijā uzrāda patiesos uzņēmuma ienākumus (2009. gads):

- Uznēmumi manā industrijā uzrāda visus ienākumus
- Uzrāda vairāk kā 3/4 ienākumu, bet mazāk kā patiesie ienākumi
- Uzrādītie ienākumi svārstās robežās no 1/2 līdz 3/4
- Uzrādītie ienākumi svārstās robežās no 1/4 līdz 1/2
- Uzrādītie ienākumi ir mazāki par 1/4 patieso ienākumu

#### 18. Lūdzu novērtējiet, cik lielā mērā uzņēmumi uzrāda patieso darbinieku skaitu jūsu darbības sfērā (2009. gads):

- Uzņēmumi manā industrijā uzrāda visus esošos darbiniekus
- Uzrāda vairāk kā <sup>3</sup>/<sub>4</sub> darbinieku, bet mazāk kā patiesais skaits
- Uzrādītais darbinieku skaits svārstās robežās no 1/2 līdz 3/4
- Uzrādītais darbinieku skaits svārstās robežās no 1/4 līdz 1/2
- Uzrādītais darbinieku skaits ir mazāks par 1/4 no patiesā skaita

#### 19. Lūdzu novērtējiet aptuvenu attiecību starp oficiālo un neoficiālo algu (samaksāto, bet nedeklarēto algu) jūsu darbības sfērā (2009. gads):

- Visas algas tiek maksātas oficiāli
- Vairāk kā 3/4 algu tiek maksātas oficiāli
- Oficiālo algu apmērs svārstās robežās no 1/2 līdz 3/4
- Oficiālo algu apmērs svārstās robežās no 1/4 līdz 1/2
- Oficiālo algu apmērs ir mazāks par 1/4

#### Informācija par uzņēmumu

- **20. Kurā reģionā atrodas Jūsu uzņēmums?** (Vidzeme, Latgale, Zemgale, Kurzeme, Rīga)

21. Industrija

#### 22. Kurā gadā uzņēmums tika dibināts? Gads

- 23. Kāda ir uzņēmuma īpašnieku struktūra? Kas ir īpašnieki?
  - 1. Tikai vietējie
  - 2. Tikai ārzemnieki
  - 3. Jaukta: vairākums vietējie un dala ārzemnieki
  - 4. Jaukta: vietējie un daļa institucionāli īpašnieki bankas/ finansu institūcijas
  - 5. Jaukta: vietējie un daļa institucionāli īpašnieki publiskas akciju sabiedrības
  - 6. Jaukta: vietējie un daļa valsts īpašums

#### 24. Aptuveni procentuāli, kā ir izmainījies uzņēmuma apgrozījums, peļņa un strādājošo skaits salīdzinoši ar iepriekšējo (2009) gadu?

% izmaiņa (samazinājumam lietot "-" zīmi)	Tīrā peļņa	Apgrozījums	Darb. Sk. (t.sk. darb. uz pusslodzi)
Šī gada (2010) rādītāji			
% izmaiņa (palielinājies/samazinājies pret 2009.g.)			
% izmaiņa (palielinājies/samazinājies pret 2007.g.)			

#### Informācija par īpašnieku-menedžeri

25. Cik ilga ir Jūsu profesionāla pieredze? Cik gadus esat uzņēmējs?

26. Kāda ir Jūsu izglītība? \_\_\_\_\_ (vidējā, bakalaurs, maģistrs, doktorantūra)

27. Kāds ir Jūsu vecums?

28. Dzimums Vīr / Siev

29. Kāda ir Jūsu tautība?

Paldies par Jūsu atsaucību!

#### Interview questions: Russian

#### Здравствуйте,

Факультет Предпринимательства Рижской Школы Экономики проводит исследование касательно теневой экономики в Латвии и влияющих на неё факторов. Мы просим специалистов от разных отраслей прокомментировать ситуацию отвечая на вопросы интервью. Мы хотели бы, чтобы и Вы приняли участие в исследовании в качестве специалиста от Вашей отрасли. Некоторые вопросы могут показаться деликатными, поэтому мы гарантируем анонимность. Все результаты будут обобщены и представлены исключительно в виде статистических данных, название компании и личность респондента не будут включены в нашу базу данных. База данных также будет использеваться для написания диссертации на аналогичную тему.

#### <u>Отношение к налоговой системе Латвии</u> 1. Оцените степень Вашей удовлетворённости налоговой системой Латвии

Крайне неудо-	Неудовлетво-	Затрудняюсь	Удовлетво-	Крайне удо-
влетворительно	рительно	ответить	рительно	влетворительно
1	2	3	4	5

#### 2. По-Вашему, должны ли следующие группы платить больше или меньше налогов?

Должны платить	Гораздо	Немного	Платят по	Немного	Гораздо
	больше	больше	справедливости	меньше	меньше
Ваше предприятие	1	2	3	4	5
Любое малое предприятие	1	2	3	4	5
Предприятия в Вашей	1	2	3	4	5
индустрии					
Крупные предприятия	1	2	3	4	5
Все предприятия	1	2	3	4	5

#### 3. В целом, насколько Вы удовлетворены тем, как государство тратит деньги

#### налогоплательщиков?

Крайне неудо-	Неудовлетво-	Затрудняюсь	Удовлетво-	Крайне удо-
влетворительно	рительно	ответить	рительно	влетворительно
1	2	3	4	5

#### Отношение к Службе государственных доходов Латвии

#### 4. Насколько Вы удовлетворены работой Службы государственных доходов Латвии?

Крайне неудо-	Неудовлетво-	Затрудняюсь	Удовлетво-	Крайне удо-
влетворительно	рительно	ответить	рительно	влетворительно
1	2	3	4	5

Служба государственных доходов	Полное	Частичное	Затрудняюсь	Частичное	Полное
	несогласие	несогласие	ответить	согласие	согласие
компетентно администрирует	1	2	3	4	5
налоговую систему	1	2	5	+	5
администрирует налоговую систему	1	2	3	4	5
честно	1	2	5	т	5
действует в интересах всех граждан	1	2	3	4	5
в целом, честно обходится с людьми	1	2	3	4	5
прислушивается к влиятельным	1	2	3	4	5
кругам, а не к обычным людям	1	2	5	+	5
подвержена коррупции	1	2	3	4	5

#### 5. Согласны ли Вы со следующими утверждениями о Службе государственных доходов?

#### 6. В следующих вопросах оценивается насколько влиятельна, по-Вашему, Служба

#### государственных доходов.

#### а. Согласны ли Вы со следующими утверждениями:

Служба государственных доходов	Полное	Частичное	Затрудняюсь	Частичное	Полное
	несогласие	несогласие	ответить	согласие	согласие
мало что может сделать, если малые предприятия не поддерживают её действия	1	2	3	4	5
мало что может сделать, если самозанятые налогоплательщики не поддерживают её действия	1	2	3	4	5

b. Если типичная фирма в Вашей сфере деятельности занижает сведения о своих доходах,

#### какова, по-Вашему, вероятность, что это будет обнаружено?

Близка к 0%	Около 25%	50/50	Около 75%	Близка к 100%
-------------	-----------	-------	-----------	---------------

#### с. Если малое предприятие занижает сведения о количестве своих работников, какова, по-

#### Вашему, вероятность, что это будет обнаружено?

Γ	0	50/50	Ожала 75%	<b>F 1000</b> /
Близка к 0%	Около 25%	50/50	Около 75%	Близка к 100%

#### d. Если малое предприятие занижает сведения о зарплатах своих работников, какова, по-

#### Вашему, вероятность, что это будет обнаружено?

Близка к 0%	Около 25%	50/50	Около 75%	Близка к 100%

# е. Если занижение сведений обнаруживается, насколько серьёзны, по-Вашему, типичные последствия для предприятия?

Незначительные, минимальное влияние	Небольшой штраф	Большой штраф и потеря конкурен- тноспособности	Большой штраф и возможное прекращение деятельности	Предприятие прекратит работу
1	2	3	4	5

#### Отношение к политической системе и политическим учреждениям

# 7. Я назову несколько организаций. Можете ли Вы оценить какова степень Вашего доверия каждой из них?

	Полное доверие	Ощутимое доверие	Слабое доверие	Полное недоверие
Правительство	1	2	3	4
Сейм	1	2	3	4
Государственная гражданская служба	1	2	3	4
Служба государственных доходов	1	2	3	4
Суды	1	2	3	4

#### 8. В целом, насколько Вас удовлетворяет то, как работает демократия в Латвии?

Крайне удовлетворяет	Удовлетворяет	Не удовлетворяет	Крайне не удовлетворяет
4	3	2	1

#### Gudino, Liseks\_

	Полное	Частичное	Затрудняюсь	Частичное	Полное
	согласие	согласие	ответить	несогласие	несогласие
Правительство заботят мысли людей	5	4	3	2	1
В целом, решениям правительства можно доверять	5	4	3	2	1
Правительство состоит из людей, использующих власть в собственных интересах	5	4	3	2	1
Правительство знает что делает	5	4	3	2	1
Среди стоящих у власти людей, довольно мало коррумпированных	5	4	3	2	1
Весомую долю денег налогоплательщиков правительство разбазаривает	5	4	3	2	1
Люди вроде меня не могут повлиять на действия правительства	5	4	3	2	1

#### 9. Насколько Вы согласны со следующими утверждениями?

#### Пособия и льготы

#### 10. Насколько Вы удовлетворены поддержкой, оказываемой предпринимательству

#### правительством Латвии?

Крайне неудо-	Неудовлетво-	Затрудняюсь	Удовлетво-	Крайне удо-
влетворительно	рительно	ответить	рительно	влетворительно
1	2	3	4	5

#### 11. а) Какова вероятность того, что Вам понадобится материальная поддержка со стороны

# государства в течении следующих 5 лет (пособие по безработице, пособие по болезни, пенсия, и др.)?

Крайне маловероятно	Маловероятно	Затрудняюсь ответить	Вероятно	Крайне вероятно
1	2	3	4	5

b) Если Вам понадобится материальная поддержка со стороны государства в течении

#### следующих 5 лет, какова вероятность того, что Вы её получите?

Крайне маловероятно	Маловероятно	Затрудняюсь ответить	Вероятно	Крайне вероятно
1	2	3	4	5

#### <u>Убеждения</u>

12. Как бы Вы выразили своё мнение при помощи следующей шкалы?

- 1 означает полное согласие с утверждением слева;
- 10 означает полное согласие с утверждением справа;
- если же Ваше мнение находится где-то между приведёнными утверждениями, выберите соответствующее число между ними.

Доходы в обществе должны						H	Іеобходи	мо увели	ичить разницу в	стать
более равным	до	ходах с п	елью мо	тивации	индивид	цуумов				
1	2	3	4	5	6	7	8	9	10	

Правительство должно отвечать						Люди с	ами дол:	кны забс	титься	
за то, чтобы все были обеспечены							о сво	ём благополучии		
1	2	3	4	5	6	7	8	9	10	

# 13. По-Вашему, «Уклон от уплаты налогов, если есть такая возможность» может быть оправданным?

- 1 означает что, по-Вашему, он всегда оправдан;
- 10 означает что, по-Вашему, он никогда не оправдан;
- если же Ваше мнение находится где-то между приведёнными утверждениями, выберите соответствующее число между ними.

Всегда опр	авдан						Н	[икогда н	е оправдан	[
1	2	3	4	5	6	7	8	9	10	

#### 14. Согласны ли Вы со следующими утверждениями?

	Полное	Частичное	Затрудняюсь	Частичное	Полное
	согласие	согласие	ответить	несогласие	несогласие
а. Я не очень обеспокоен тем,					
являются ли мои действия	5	4	3	2	1
полезными для страны в целом					
b. Быть частью латвийского	5	4	3	2	1
сообщества важно для меня	5	4	3	2	1
с. Люди должны следовать правилам					
Службы государственных доходов,	5	4	3	2	1
даже если с этими правилами не	5	4	5	2	1
согласны					

#### Экономическая ситуация в стране

#### 15. а) Как Вы оцениваете текущую экономическую ситуацию в стране, по сравнению с

#### ситуацией 12 месяцев назад?

Гораздо лучше	Немного лучше	Такая же	Немного хуже	Гораздо хуже
5	4	3	2	1

#### b) Какой, по-Вашему, экономическая ситуация в стране будет через 12 месяцев, по

#### сравнению с текущей ситуацией?

ſ	Гораздо лучше	Немного лучше	Такая же	Немного хуже	Гораздо хуже
	5	4	3	2	1

#### 16. Как Ваша оценка работы правительства изменилась с 2007 года?

Гораздо лучше	Немного лучше	Такая же	Немного хуже	Гораздо хуже
5	4	3	2	1

#### Масштаб теневой экономики

17. Пожалуйста, оцените приблизительно степень занижения сведений о доходах фирмами в Вашей сфере деятельности (2009 год):

- Фирмы в моей индустрии предъявляют все свои доходы
- Предъявляют не все доходы, но более 3/4 своих доходов
- Предъявляют более 1/2, но менее 3/4 своих доходов
- Предъявляют более 1/4, но менее 1/2 своих доходов
- Предъявляют менее 1/4 от общего объёма доходов

## 18. Пожалуйста, оцените приблизительно степень занижения сведений о своих работниках фирмами в Вашей сфере деятельности (2009 год):

- Фирмы в моей индустрии предъявляют всех своих работников
- Предъявляют не всех, но более 3/4 своих работников
- Предъявляют более 1/2, но менее 3/4 своих работников
- Предъявляют более 1/4, но менее 1/2 своих работников
- Предъявляют менее 1/4 от их числа работников

# 19. Пожалуйста, оцените приблизительно соотношение официальной и неофициальной (выплаченной, но не задекларированной) зарплат (2009 год):

- Все зарплаты выплачиваются официально
- Более 3/4 зарплат выплачиваются официально
- Более 1/2, но менее 3/4 зарплат выплачиваются официально
- Более 1/3, но менее 1/2 зарплат выплачиваются официально
- Менее 1/4 зарплат выплачиваются официально

#### Информация о предприятии

20. В каком регионе находится Ваше предприятие? \_\_\_\_\_\_ (Видземе, Латгале,

Земгале, Курземе, Рига)

- 21. Индустрия \_\_\_\_\_
- 22. В каком году было основано предприятие? Год \_\_\_\_\_
- 23. Какова структура владения предприятием? Кто владельцы?
  - 1. Только местные
  - 2. Только иностранцы
  - 3. Смешанная: большинство местные и часть иностранцы
  - 4. Смешанная: местные и часть институционные банки/ финансовые учреждения
  - 5. Смешанная: местные и часть институционные открытые акционерные общества
  - 6. Смешанная: местные и часть государственная собственность

# 24. Приблизительно, насколько % изменились оборот, прибыль, и количество работников предприятия, по сравнению с предыдущим (2009) годом?

% изменение (для уменьшения использовать знак минуса)	Чистая прибыль	Оборот	Кол-во рабочих (в т.ч. на пол ставки)
Показатели этого года (2010)			
% изменение (рост/падение по			
сравнению с 2009 годом)			
% изменение (рост/падение по			
сравнению с 2007 годом)			

#### Информация о владельце-менеджере

25. Как давно Вы работаете? Сколько лет занимаетесь предпринимательством? \_\_\_\_\_

26. Какое у Вас образование? \_\_\_\_\_ (среднее, бакалавр, магистр, доктор)

27. Сколько Вам полных лет? \_\_\_\_\_

28. Ваш пол М / Ж

29. Какой Вы национальности? \_\_\_\_\_

#### Благодарим за Вашу отзывчивость!

	Model a	and Indices			
Dependent Variable	Operationalized by questions	Index name	Cronbach's Alpha	Excluded from index	Cronbach's Alpha if item deleted
Tax Evasion	17, 18, 19	TEVADE	0.841		
Independent Variables	Operationalized by questions	Index name	Cronbach's Alpha	Excluded from index	Cronbach's Alpha if item deleted
Trust in political system	7b, 8	TPOLSYS	0.583		
Trust in government	3, 7a, 9a,b,c,d,f,g	TGOV	0.773	9e (GOVcorr)	0.791
Trust in tax authority	5a,b,c,d,e,f, 7d	TTAUTH	0.507	5f (SRScorrupt)	0.656
Fairness of tax system	2.1	FTONO	0.554	1 (STAXSY)	0.837
	2a,b,c,e	FTSYS	0.554	2d (PAYTAXlb)	0.904
Benefits entrepreneurs receive from government - Business benefits	10	GOVSUPENTRE		GOVSUPENTR E	0.127
- Personal benefits	11a	NEEDSUP	0.159	NEEDSUP	0.230
	11a 11b	RECSUP	-	RECSUP	-0.06
<u>Punishment</u> - Chance of being caught (if trying to evade)	6b,c,d 6a (A & B)	PUNISH SRSINFLU	0.896 0.830		
-Severity of Punishment if caught	бе	UREPconseq			
<u>Moral Values</u> - Law-abidingness	14c 13	FOLSRS CHEATTAX	- 0.288		
- Duty to society to contribute to common good /	12a	INCDIF	0.070		
attitude towards redistribution &/social protection	12b	RESP	0.373		
Control Variables	Operationalized by questions	Index name	Cronbach's Alpha	Excluded from index	Cronbach's Alpha if item deleted
Other variables -Evaluation of economic situation	15a,b	ECSIT	0.676		
- Impact of economic crisis on attitudes towards government	16	GOVPERFCH			
- Feeling of attachment	14a	HELPCOUNT	0.490		
	14b	BELATCOM			
Demographic variables - Region	20	dummy: RIGA, VIDZEME, KURZEME, ZEMGALE			
- Education	26	dummy: SECOND, BACH, MAST			

### Appendix B Model and Indices

Source: Created by authors based on Mickiewicz, Rebmann, Sauka (2010) model.

### Appendix C Amendments in the Data Set

Question No.	Scale changed to 5- point Likert scale	Scale reversed
6 b,c,d	Х	
7	Х	
9		Х
12	Х	
13	Х	
14a		Х
17, 18, 19	Х	

Source: Created by the authors

	Males	Females	Missing			
GENDER	46.8%	51.4%	1.7%			
	20-29	30-39	40-49	50-59	60-69	70-79
AGE	8.3%	32.2%	29.9%	22.1%	6.2%	1.5%
	Earlier than 1990	1991-1999	2000-2009	2010	Missing	
FOUNDATION	0.6%	41.2%	52.4%	0.6%	5.2%	
	Secondary school	Bachelor's degree	Master's degree	Doctor	Missing	
EDUCATION	29%	55.7%	11.2%	1.5%	2.6%	
	Latvians	Russians	Other	Missing		
NATIONALITY	79.3%	15.2%	3.8%	1.7%		
	Domestic	Foreign	Mixed	Missing		
OWNERSHIP	90.8%	3.4%	4.3%	1.4%		
	Riga	Vidzeme	Kurzeme	Zemgale	Latgale	Missing
LOCATION	54.6%	14.1%	14.7%	8.9%	5.7%	2%
	Services	Trade	Production & processing	Construction	Other	Missing
INDUSTRY	50.6%	22.7%	12.1%	7.2%	6.6%	0.8%

Appendix D Sample Descriptive Statistics: Demographics

Source: Created by the authors

### Appendix E Trust in Institutions Level: t-test Results

	0	One-Sample	Statistics	
	N	Mean	Std. Deviation	Std. Error Mean
TPOLSYS	348	2.6922	1.04717	.05613

			One-Sam	ple Test		
			Т	est Value = 2		
					95% Confidenc Differ	
				Mean	Dillel	ence
	t	df	Sig. (2-tailed)	Difference	Lower	Upper
TPOLSYS	12.331	347	.000	.69217	.5818	.8026

		One-Sample	e Statistics	
	N	Mean	Std. Deviation	Std. Error Mean
TTAUTH	348	3.3419	.85990	.04610

\_\_\_\_\_

		Test Value = 3				
					95% Confidence	e Interval of the
				Mean	Differ	ence
	t	df	Sig. (2-tailed)	Difference	Lower	Upper
TTAUTH	7.417	347	.000	.34191	.2513	.4326

		One-Samp	le Statistics	
	Ν	Mean	Std. Deviation	Std. Error Mean
TGOV	348	2.0592	.74278	.03982

		Test Value = 2					
					95% Confidenc	e Interval of the	
				Mean	Differ	ence	
	t	df	Sig. (2-tailed)	Difference	Lower	Upper	
TGOV	1.488	347	.138	.05923	0191	.1375	

Appendix F
Regression Analysis: Model Summary and ANOVA Test

Model Summary									
Model			Adjusted R	Std. Error of the					
	R	R Square	Square	Estimate					
1	.480 <sup>a</sup>	.231	.155	.82483					

a. Predictors: (Constant), AGE, SECOND, SRSINFLU, FTSYS, UREPconseq, ZEMGALE, FOLSRS, HELPCOUNT, INCDIF, KURZEME, RUS, GOVSUPENTRE, NEEDSUP, MASTER, VIDZEME, RECSUP, ECSIT, CHEATTAX, STAXSY, TTAUTH, BELATCOM, RESP, PUNISH, TPOLSYS, GOVPERCH, TGOV, LAT, RIGA, BACH

ANOVA <sup>b</sup>										
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	60.126	29	2.073	3.047	.000 <sup>a</sup>				
	Residual	200.701	295	.680						
	Total	260.827	324							

a. Predictors: (Constant), AGE, SECOND, SRSINFLU, FTSYS, UREPconseq, ZEMGALE, FOLSRS, HELPCOUNT, INCDIF, KURZEME, RUS, GOVSUPENTRE, NEEDSUP, MASTER, VIDZEME, RECSUP, ECSIT, CHEATTAX, STAXSY, TTAUTH, BELATCOM, RESP, PUNISH, TPOLSYS, GOVPERCH, TGOV, LAT, RIGA, BACH

b. Dependent Variable: TAVOID

Variable	Beta coefficient	Tax evasion scale (1 unit)	Economic impact
PUNISH	-0.385	25%	-9.625%
CHEATTAX	-0.066	25%	-1.65%
FOLSRS	-0.076	25%	-1.9%
ECSIT	-0.11	25%	-2.75%
HELPCOUNT	0.076	25%	1.9%
AGE	-0.007	25%	-0.175%

### Appendix G Calculations of Economic Impact

Source: Created by the authors