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The impact of customs procedures on business performance: evidence from Kosovo

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# The wiiw Balkan Observatory

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Mario Holzner and Florin Peci

The impact of customs procedures on business performance: evidence from Kosovo



# www.balkan-observatory.net

#### About

Shortly after the end of the Kosovo war, the last of the Yugoslav dissolution wars, the Balkan Reconstruction Observatory was set up jointly by the Hellenic Observatory, the Centre for the Study of Global Governance, both institutes at the London School of Economics (LSE), and the Vienna Institute for International Economic Studies (wiiw). A brainstorming meeting on Reconstruction and Regional Co-operation in the Balkans was held in Vouliagmeni on 8-10 July 1999, covering the issues of security, democratisation, economic reconstruction and the role of civil society. It was attended by academics and policy makers from all the countries in the region, from a number of EU countries, from the European Commission, the USA and Russia. Based on ideas and discussions generated at this meeting, a policy paper on Balkan Reconstruction and European Integration was the product of a collaborative effort by the two LSE institutes and the wiiw. The paper was presented at a follow-up meeting on Reconstruction and Integration in Southeast Europe in Vienna on 12-13 November 1999, which focused on the economic aspects of the process of reconstruction in the Balkans. It is this policy paper that became the very first Working Paper of the wiiw Balkan Observatory Working Papers series. The Working Papers are published online at www.balkanobservatory.net, the internet portal of the wiiw Balkan Observatory. It is a portal for research and communication in relation to economic developments in Southeast Europe maintained by the wiiw since 1999. Since 2000 it also serves as a forum for the Global Development Network Southeast Europe (GDN-SEE) project, which is based on an initiative by The World Bank with financial support from the Austrian Ministry of Finance and the Oesterreichische Nationalbank. The purpose of the GDN-SEE project is the creation of research networks throughout Southeast Europe in order to enhance the economic research capacity in Southeast Europe, to build new research capacities by mobilising young researchers, to promote knowledge transfer into the region, to facilitate networking between researchers within the region, and to assist in securing knowledge transfer from researchers to policy makers. The wiiw Balkan Observatory Working Papers series is one way to achieve these objectives.

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### Abstract

This paper aims to identify formal and informal institutional factors in customs procedures and their impact on the performance of small and medium-sized enterprises (SMEs) involved in international trade in Kosovo based on a questionnaire conducted in 2009. The econometric findings show that one of the most important obstacles encountered by SMEs are regular appeals against customs decisions that are assumed to be inter alia a consequence of frequent changes in over-complicated laws and regulations. However, there is a positive and significant effect of the formal customs institutions that facilitate the trade of imported goods, namely of so-called customs procedures with economic impact.

**Keywords:** customs, firm performance, formal and informal institutions, small and medium-sized enterprises, Kosovo

JEL classification: F14, K42, L25

### Mario Holzner and Florin Peci

# The impact of customs procedures on business performance: evidence from Kosovo

### 1 Introduction

The government institutions in transition countries are still regarded as ill-performing, fragile and weak in terms of the design and implementation of state policies. This has affected the economies of those countries, which suffer under the lack of general continuity in the economic sector; in particular, these obstacles are more pronounced for small and medium-sized enterprises (SMEs) (Hashi, 2001). One of the biggest barriers for enterprises in transition countries is the low level of institutional development in the area of rules and conduct of business laws, as well as the business tax system (Aidis and Sauka, 2005). The multitude of institutional policies affects the regular functioning of the businesses and often plays a destructive role in the growth and performance of SMEs. Another argument for the destructive role of the state institutions in transition countries is the issuance of a considerable number of unnecessary rules and laws in terms of allocation of the activities of entrepreneurship and business operation. The excessive and inadequate overload of these formal rules will cause an increase in corruption and nepotism (Bartlett and Bukvic, 2001; Smallbone and Welter, 2001a; Djankov et al., 2002).

The role of small and medium-sized enterprises (SMEs) in a country's economic, political, social and technical development continues to be the focus of an intensive debate between academics and policy makers. Generally, the scholars investigating SMEs consider these enterprises being a key factor in economic growth, raising employment, supporting the formation of competitive markets, technical innovation and other aspects of socioeconomic development (Acs and Audretsch, 1990; Johnson and Loveman, 1995; Storey, 1994). The importance of the role of SMEs derives from the fact that the vast majority of enterprises are SMEs and therefore SMEs are considered as a generator of economic growth (Audretsch, 2007; Storey, 1994; McMillan and Woodruff, 2002).

SME growth is also of great importance for countries in transition because of the radical changes that have occurred in the system of the command economies where private companies were discriminated against public ones in terms of institutional support and other business factors. Creating a supportive environment in which the SME sector and efficient entrepreneurship can develop remains one of the biggest challenges for the countries in transition.

Many authors have investigated the various obstacles faced by SMEs, including those that occur in the transition economies (Estrin et al., 2005; Aidis and Estrin, 2006; Aidis, 2002;

Bukvic and Bartlett, 2001; Bartlett and Prasnikar, 1995; Blanchard, 1997; Hashi, 2001; Pissarides et al., 2003; Smallbone, 2002). Their findings are related to the fact that the barriers caused by the business environment are mostly dispensable, and come from an imperfect institutional framework. These barriers include the uncertainty of duty and tax regulations, access to financial systems, as well as other obstacles caused especially in the early stages of transition (Aidis, 2005; Krasniqi, 2007; Smallbone and Welter, 2001b; Schaffer and Weder, 2001). Discussing issues of entrepreneurship is at the centre of the transition debate and examines the functioning of entrepreneurship and the cost of obstacles which arise in this regard (Smallbone and Welter, 2006).

The traditional role of customs as a state institution is characterized by responsibilities that include collecting duties on internationally traded commodities which is a common extension of the collection of other forms of taxes, such as the Value Added Tax (VAT), and excise duties. But the responsibility of the Customs Administration differs from one country to another. While in developing countries import duties are mainly collected as revenues for the national budget, in developed countries the main role of the customs institutions is the protection of the economy and law enforcement (Widdowson, 2007). Certainly, customs procedures represent an important source of barriers to economic activity, especially for SMEs.

Hence there are good reasons to analyse the impact of customs procedures on the business performance of SMEs for the case of Kosovo. This is a country where the private sector is highly dominated by SMEs, while the remaining socially owned enterprises are operating with minimum capacities at a time when they are waiting for the final phase of the privatization process. SMEs make up 98% of all enterprises in Kosovo and represent a potential for significant economic growth (Riinvest, 2005). Given the small size of the country, engagement in international trade is of utmost importance even for very small companies. Also the most recent historical developments make Kosovo an interesting case.

Kosovo as a country that is undergoing a process of transition is characterized by various barriers inherited from the previous system and by a high level of uncertainty in a marginalized context (Hoxha, 2009). As a developing country Kosovo is entering a new phase in history, being one of the newest independent states in the world. However, it is evident that the economy of Kosovo before and after the war in 1999 faced and still faces many problems that derive from the sphere of the political and institutional setup, including the privatization process that is accompanied by high unemployment, excessive import growth, a weak export sector, growing budget deficits and informal economy (Riinvest, 2005).

From June 1999 the territory of Kosovo was administered by the United Nations Mission in Kosovo (UNMIK). On 17 February 2008, in an extraordinary session the parliament of Kosovo unilaterally declared Kosovo's independence and with the promulgation of the constitution of Kosovo the institutions of the Republic of Kosovo took over all governance authorities.

Thus, Kosovo as one of the last Southeast European (SEE) countries to undergo the process of transition acts as a specific case study for investigating formal and informal barriers which have an impact on the growth and development of entrepreneurship.

Moreover, Kosovo represents an interesting case as several international and supranational organizations have contributed to the establishment of institutions such as the customs administration. In Kosovo the customs administration was established in August 1999 by the pillar of the EU that was working under the United Nations Mission in Kosovo (UNMIK) authorities. The UNMIK Customs Service was responsible for ensuring the application of fair and uniform trade regulations and other provisions applicable to goods that are under the customs procedures. In December 2008, UNMIK transferred its competencies entirely to the Kosovo institutions. The activities and functioning of the Kosovo Customs are regulated by the new Customs Code of Kosovo adopted by the Assembly of Kosovo on 11 November 2008.

Considering the issues raised above, this study adds to the literature by analysing how customs procedures affect SMEs' growth and performance. The extreme case of Kosovo, a tiny country with a small-structured business community dependent on foreign trade and exposed to high-frequency institutional change, and with a unique post-war environment characterized by a transitional economy, could act as a case study of general interest that yields new insights relevant for the generic understanding of the role of compliance costs.

The remainder of the paper is organized as follows. In Section 2 we develop the research questions and a set of hypotheses tested in this paper. In Section 3 we describe the data and the research methodology. Section 4 discusses the results. In Section 5 we present the conclusions.

### 2 Research questions and hypotheses

Based on the above discussion we formulate the following research questions: Which are the main factors in explaining turnover growth of SMEs engaged in international trade? Are there differences regarding the effects of these factors on the level of turnover of SMEs engaged in international trade? Which are the main formal and informal barriers in the activities of the firms involved in international trade? Are the customs institutions focused towards trade facilitation of businesses? Based on these questions we develop the following hypotheses.

First, we will start from the assumption that an increase in the educational level of human capital in a firm has a positive effect on firm growth. This is supported by a number of authors who have analysed the growth of firms in other aspects. Becker (1964) focuses on differences between formal education and skills and knowledge that has a narrower scope

of applicability, thus defining general and specific human capital. Highly educated entrepreneurs are important in identifying and using opportunities (Ucbasaran et al., 2006). According to Chandler and Hanks (1998), increased levels of human capital can substitute for financial capital. Highly educated entrepreneurs are particularly successful when they are owners of firms; their educational level makes them choose the firms with higher growth expectations (Almus, 2002; Wasilczuk, 2000). Thus, we propose the following hypothesis:

*H*₁: SMEs engaged in international trade that are managed by well educated managers have higher turnover growth.

Individuals with higher levels of specific human capital are better suited to understanding neglected business opportunities and effective strategic decisions (Collombo and Grilli, 2005). These agents do have what is usually referred to as know-how, and tacit abilities that are often decisive for a successful enterprise (Jovanovic, 1982; Westhead and Storey, 1996). Specific knowledge on customs transactions is also an aspect of specific human capital. If it is not present in the enterprise, external consultants can be hired. Thus, we formulate the following hypothesis:

*H*<sub>2</sub>: SMEs engaged in international trade that hire consultants for customs transactions will achieve higher turnover growth.

Based on Gibrat's Law (1931), firm growth is independent of the size and the age of the firm. Jovanovic (1982) has opposed this view, claiming that new firms learn based on previous periods and experience, and thus they consequently grow faster and survive. Other rejections of Gibrat's Law can be found in Almus (2002); Suton (1997); Caves (1998); and Geroski (1995). The results of the research regarding the validity of Gibrat's Law depend largely on the methodology applied. Using a standard regression model and kernel regression estimators in a sample of 2188 Spanish firms, Farinas and Moreno (2000) conclude that failure rates, as well as the mean growth rate of successful firms, decline with the size and age of firms. It should be stressed that their analysis was built on the theoretical firm growth model of Jovanovic (1982) called the noisy selection model, which is based on the lifecycle learning theory approach. The validity of Gibrat's Law for newborn firms was tested also by Lotti et al. (2003), in a sample of 1570 newborn firms in the Italian manufacturing sector. While Gibrat's Law applies after the newborn firms have achieved the size necessary for overcoming the minimum efficient scale, it fails to hold for firms in five out of six industries analysed in the years immediately following their start-up. For the case of Kosovo the validity of Gibrat's Law was investigated by Krasnigi (2006), who concluded that the Law does not hold for the firms he analysed in the SME sector. These included firms involved in trade, production and services. Following this, we can make the following two hypotheses regarding the size and age of firms:

*H*<sub>3</sub>: SMEs engaged in international trade that have a higher number of employees have lower rates of growth of turnover.

*H*<sub>4</sub>: SMEs engaged in international trade that exist for a longer period of time have lower rates of growth of turnover.

The frequency of the exchange of information with customs authorities, as well as the way in which this information is gathered and exchanged, can be considered as issues that can increase the efficiency of the firm, due to the possibilities for the reduction of the transaction costs (Verwaal and Donkers, 2003). In general, the procedures applied in the exchange of this information include the filing of a declaration for each export or import transaction. By simplifying this procedure, through combining various transaction data into a single administrative customs declaration (SAD), the filing frequency is reduced, thereby reducing the value of this transaction cost. The lowering of the filing frequency can also be achieved when the firms that have met certain conditions are enabled to declare imported goods of the international transactions on a monthly basis. These simplified procedures, in turn, enable firms to spend less time on gathering data and on the preparation of customs documentation. We therefore state the following hypothesis:

*H*<sub>5</sub>: SMEs engaged in international trade that use simplified customs procedures will face a decrease in transaction costs and thus have higher turnover growth.

Firms involved in international trade can also use other customs procedures that are beneficial for them. These are the so-called 'procedures with economic impact'. These include, among others, the possibility for the firms to be excluded from the obligation to pay customs taxes during the entry of their import goods, as long as these goods do not enter into free circulation in the market. These procedures are part of the trade facilitations that were launched by the World Trade Organization (WTO) and the World Customs Organization (WCO), as a result of the pressure applied by businesses for avoiding trade barriers for the benefit of economic development. The firms that are authorized by customs authorities for using these procedures will gain the same benefits as in hypothesis H<sub>5</sub>, i.e. a reduction of compliance costs. These considerations result in the following hypothesis:

*H*<sub>6</sub>: SMEs engaged in international trade that use procedures with economic impact have higher turnover growth.

In transition countries many formal barriers are caused by the general regulatory environment, the high level of taxation, skills requirements, complicated laws and regulations that are changed frequently and the low level of enforcement of these laws and regulations (Pissarides et al., 2003; Aidis, 2005; Bohata and Mladek, 1999; Xheneti, 2006; Hashi, 2001; Barlett and Bukvic, 2001; Glas et al., 2001; Acevska, 2002; Krasniqi, 2007). The lack of experience and of knowledge of the market economy by the state employees is characteristic of the early years of transition, which results in their inability to provide appropriate services to businesses. The ensuing time- and money-consuming procedures, as well as the inadequate legal system and deficiencies typical of the process of transformation, are

serious obstacles for business growth (Krasniqi, 2007). Thus, we can develop the following hypothesis:

*H*<sub>7</sub>: SMEs engaged in international trade that put forward regular complaints and appeals against the customs decisions have less turnover growth.

There are also informal barriers, besides the formal ones, that may hinder the growth of firms. These include mainly barriers that are related to corruption and the unofficial economy, and we will refer to them as barriers confronted by the firms as a consequence of low ethics of officials. In both, developed and underdeveloped economies, a heavy-handed bureaucracy is considered a risk for business growth. This includes the unsuitable tax system and various discriminatory legal regulations, in particular complicated laws, rules and regulations that regulate the functioning of companies (Bartlett and Bukvic, 2001). It is important to note that the over-regulation of the company sector quite often leads to the evasion of regulation by entrepreneurs and, consequently, to an increase of the grey economy, as well as to their decisions to devote resources to influence the regulatory environment in their own favour, thereby encouraging so-called 'unproductive entrepreneurship' (Baumol, 1990).

Surprisingly, Xheneti (2006) has found that corruption-related barriers have shown to positively affect firms' growth: he argues that corruption seems to be a way of coping with transitional problems and 'buying' the possibility of a rapid pace of institutional change. He concludes that corruption can be an informal institutional mechanism, 'the grease for the wheels' of growth, which is apparently effective in overcoming many of the frictions which would otherwise inhibit business growth.

The report of the World Bank (2005) shows that corruption has been mentioned as a severe obstacle to investments by 20% of the respondents from emerging markets, as well as a major obstacle by 15% of respondents in a survey of more than 26,000 firms in 53 countries (World Bank, 2005). The interdependence of formal and informal barriers, and the ways in which these two types of barriers influence each other, are analysed by Smalbone et al. (2001) for Belarus, and Aidis (2005) for Lithuania. It is important to note that in his work, Aidis mentions as the most frequent informal barriers the implementation of business regulations, the high frequency of tax inspections, the long time spent on negotiations and the corruption of tax inspectors. In Kosovo's context, Krasniqi (2007) surveyed 600 SMEs during 2002, concluding that the growth of Kosovo's SMEs is impeded by several informal barriers, unfair competition and corruption. Consequently, corruption harms the development of the SME sector, for the simple reason that it increases the transaction costs of businesses. Based on what has been said above, we can make the following two hypotheses:

*H*<sub>8</sub>: SMEs engaged in international trade that face low ethics of customs officials have lower turnover growth.

*H<sub>9</sub>: SMEs engaged in international trade that are subject to frequent customs audit controls have lower turnover growth.* 

The density of clearance of imported goods at a certain entry point is yet another important variable that influences business efficiency, by increasing or decreasing the transaction costs of imports. In Kosovo, the highest density of clearance and, consequently, the largest amount of time spent on it, is at the entry point of Hani i Elezit: this is one of the cross-border points with the highest frequency of transport of imported goods in the Balkans. The time spent on clearance at this entry point is considerably longer than that at other entry points. Therefore, firms importing their goods through this cross-border point face higher transaction costs in the form of longer time necessary for clearance. Thus, we formulate our last hypothesis:

 $H_{10}$ : SMEs engaged in international trade that declare goods at the entry point with the highest density of clearance will have higher transaction costs and thus lower growth of turnover.

### 3 Data and methodological approach

In this section we present empirical evidence on the impact of transaction costs and other impediments on business performance for 122 SMEs in the trade and manufacturing sectors that operate in Kosovo. The sample was randomly selected from the business register in the database of the Ministry of Trade in Kosovo, where more than 4000 active firms are involved in international trade<sup>2</sup>; it represents more than 3% of the total population of Kosovo SMEs engaged in international trade. The sample covers businesses across all regions of Kosovo and was stratified in terms of size as well, including micro enterprises, small enterprises and medium-sized enterprises. Out of 160 contacts, 122 agreed to interviews, thus resulting in a response rate of over 76%.

According to the European Commission's<sup>3</sup> definition of SMEs by number of employees, the sample contains 42 micro enterprises (less than 9 employees), 77 small enterprises (between 10 and 49 employees) and 3 medium-sized enterprises (between 50 and 249 employees). The represented firms have an average age of 7.5 years in the year of the survey (2009) and an average of 13 employees. As far as the legal form is concerned, the sample contains 3 public limited companies, 10 limited liability companies and 109 private companies.

We did not include firms that were inactive in the period 2005-2008.

<sup>&</sup>lt;sup>3</sup> http://europa.eu.int/comm/enterprise/enterprise\_policy/sme\_definition/index\_en.htm.

About 73% of the firms included in our sample belong to the trade sector, another 10% of the firms are involved in manufacturing production, and the rest are firms involved in other services sectors. About 10% of the firms in our sample have an annual turnover of more than EUR 1 million.

The questionnaire was developed in accordance with various stakeholders involved in international trade in Kosovo: the business committee, the chamber of trade, trade alliances, border agencies, and others. The questionnaire was completed between February and March 2009, with the resulting data processed in April 2009. From this we created and developed a database with several indicators. The questionnaire covers general information about the firm's turnover, number of employees, company age, and so on. The interviews were conducted using the face-to-face method with the key people responsible for firm activity in each enterprise, mainly owners or general managers. The survey also contains information about the perception of entrepreneurs regarding the business environment and customs procedures.

One of the main issues in firm growth studies is the lack of longitudinal research (Davidsson, 2005) – growth is a phenomenon that necessarily happens over time. In this study however the time dynamic that would illustrate the effects of the institutional environment is limited to only one period of SMEs' growth between 2008 and 2007. This is because our database does not contain longitudinal data. Only the data on turnover and employment do exist separately for the years 2007 and 2008 respectively. Considering this, future research should try to include panel data techniques when studying the growth of firms, in particular in the context of transition when the formal and informal institutional environment is changing constantly and thus affecting also SMEs' growth. Future research of Kosovo firm growth should also take into account other growth indicators apart from turnover growth such as sales or profits and employment growth, and compare the results and observe the changes when a particular growth indicator is introduced.

The analysis is based on a cross section database for the year 2008 with limited information for 2007. The dependent variable is the growth rate of turnover in 2008 of a firm that acts on the international market (GRO). A firm is considered to be an 'exporter-importer' if it is more than three years old and has submitted more than 20 customs declarations on a cross-borders entry point – a Terminal Clearance Station of Kosovo.

The independent variables are mostly qualitative in nature, while the variables such as the number of employees, consultancy costs and firm age are quantitatively measured. The remaining variables such as the education of manager, the Hani border crossing location, the use of simplified procedures, ethics of customs officials, appeals, audit control, procedures with economic impact are converted into dummy variables taking the value of 1 if the respective barrier to firm turnover growth is recorded and taking the value of 0 otherwise.

- 1. Education of managers (EDU): This human capital variable is expected to have a positive correlation with firms' turnover growth. The variable equals one if the respondent has a university education and zero otherwise.
- Consultant costs (CON): It is expected that firms which hired costly but knowledgeable and helpful experts for the trade and customs transactions have higher turnover growth. Consultant costs are measured in euro.
- 3. Employees (EMP): We take the number of employees in the year 2007. It is expected that this variable has a negative relationship with turnover growth.
- 4. Age of firms (AGE): It is expected that this variable has a negative relationship with turnover growth. The number of years that the firm is active is measured.
- 5. Use of simplified procedures (SIM): Imported goods under this procedure have higher turnover, and transaction costs should be reduced. The variable equals one if firms use simplified procedures, otherwise zero.
- 6. Use of procedure with economic impact (ECO): Traders who use procedures with economic impact are expected to have higher turnover growth. Thus, for firms that use procedures with economic impact the variable is one, otherwise zero.
- 7. Appeals (APP): Appeals are time- and money-consuming and thus cause an increase in transaction costs. The variable is one if the trader appealed, otherwise zero.
- 8. Customs officials' ethics (CUS): This variable represents 'bad behaviour' of customs officials such as red tape and corruption. If this behaviour occurs, the variable is one, otherwise zero. We use this variable as a qualitative one and transform answers on a scale from 1 'very bad' into one, and the rest from 2-5 into zero.
- 9. Audit control (AUD): This is also time-consuming and increases compliance costs for the firms. The variable equals one if the firm had an audit control, otherwise zero.
- 10. Hani location of clearance (HAN): It is expected that this variable has a negative relationship with turnover growth because 40% of all customs clearance is concentrated at the Hani location, which involves congestion costs.

The empirical model has the following form and will be estimated with a stepwise ordinary least squares (OLS) estimator:

$$GRO_i = a_0 + a_1 EDU_i + a_2 CON_i + a_3 EMP_i + a_4 AGE_i + a_5 SIM_i + a_6 ECO_i + a_7 APP_i + a_8 CUS_i + a_9 AUD_i + a_{10} HAN_i + e_i$$

In addition we include a dummy variable for the few exporting firms<sup>4</sup> in the sample in order to see whether or not they perform better. We perform a stepwise estimation procedure, starting with the full model and stepwise removing the least significant variable. Thus we will only present the results for an empirical model with coefficients significant at least at a

The vast majority of Kosovo firms engaged in international trade are solely importing. The country has not yet developed a proper export sector.

10% level. A Breusch-Pagan / Cook-Weisberg test for heteroskedasticity in our data rejects the zero hypothesis of constant variance and thus all estimations are performed in a robust way. None of the variables is very much correlated with each other and we can therefore rule out any multicollinearity (see correlation matrix in the Appendix). As a robustness check we also estimate different sub-samples such as one without exporting firms and one without firms having negative turnover growth. Moreover, in an alternative estimation we use the level of the 2008 turnover in euro as the dependent variable with additional explanatory variables such as the turnover in 2007 as well as the squared terms of the number of employees and consulting costs in order to check for possible endogeneity and non-linearity for some of the variables.

### 4 Empirical findings

Estimating our main model as described in the equation above provides us with the following results. Our hypotheses 1 and 2 regarding higher education of managers and involvement of consultants for customs transactions are being supported. Both coefficients are positive and significant. The interpretation of the coefficients is as follows. An increase in consulting costs of EUR 1000 is associated with an increase in the firm's growth of turnover by 1.4%. If a firm's manager has tertiary education, the turnover growth was found to be higher by almost 13 percentage points. Our hypotheses 3 and 4 are also supported. We find the number of employees and the number of years that the firm has been active negatively correlated with turnover growth, with both coefficients being highly significant. These results do not support Gibrat's Law but are in line with other studies (see Krasniqi, 2006, 2007). From the set of customs-related indicators, only two remained significant. These are the use of procedures with economic impact as well as the appeals variable. While the former coefficient is highly significant, the latter is only significant at the 10% level. The coefficient for the use of procedures with economic impact has a positive sign and the coefficient for the appeals variable has a negative sign. The coefficients of both dummy variables are of similar size, indicating that the use of the former relates to higher turnover growth of about 12%, while turnover growth is 11% lower in firms engaged in appeals. All other customs-related coefficients are insignificant, indicating that the use of simplified procedures, perceived bad customs behaviour, audits, and congested customs clearance locations are not significantly related to turnover growth of Kosovo's SMEs. The exporter dummy variable proved to be insignificant. The R<sup>2</sup> of the model is at about 28%. Thus there are obviously other important determinants of turnover trade which are missing in our database. Using hierarchical procedures in order to calculate delta R2's allows us to estimate how the single explanatory variables add to the explained variance of the model. Out of the overall 28% of the model's R<sup>2</sup> about one quarter is related to the variable years of firm activity, while approximately one fifth of the model fit is attributed to the education of manager and procedures with economic impact. The other three significant variables cover each about one tenth of the explanatory power of the model.

Table 1

Determinants of Kosovo SMEs' turnover growth, 2008

	Coefficients	P-value
Constant	35.752	0.000
Education of manager	12.950	0.003
Consulting costs	0.001	0.017
Number of employees 2007	-0.459	0.002
Years of firm activity	-2.381	0.000
Procedure with economic impact	11.698	0.006
Appeals against customs decisions	-11.280	0.082

N = 122 $R^2 = 27.7\%$ 

Estimator: Stepwise OLS, robust standard errors.

The robustness check using different sub-samples such as one without exporting firms and one without exporting firms and firms having negative turnover growth yielded the following results: In both cases the appeals coefficient turned insignificant; all other results remained stable as compared to our main estimation. This might hint at the fact that especially exporters and firms with negative growth were involved in troublesome customs appeals.

We also conducted an alternative estimation explaining the level of 2008 turnover in euro as the dependent variable with additional explanatory variables such as turnover in 2007 as well as the squared terms of the number of employees and consulting costs in order to check for possible endogeneity and non-linearities. One outlier observation had to be removed from the data set. Interestingly, the results do not differ a lot from the growth model. Almost the same variables have coefficients of the same sign and significance. Again, the managers' education as well as the consulting costs prove to be positively correlated with the dependent variable. Only now the squared consulting costs have a negative coefficient. This implies that expenditures on consulting in customs issues have a diminishing return. Instead of the number of employees, the squared number of employees is significant in explaining less turnover, indicating that in terms of employees only larger firms have a disadvantage. The amount of firm years has again a negative coefficient. There are no changes concerning the customs-related coefficients either. The coefficient for the use of procedures with economic impact has a positive sign and the coefficient for the appeals variable has a negative sign. In this model the R2 is above 99%. This is certainly due to the inclusion of the lagged turnover variable.

Table 2				
	<b>Determinants of</b>	Kosovo SMEs'	turnover level.	2008

	Coefficients	P-value
Constant	20862.060	0.172
Turnover level 2007	1.104	0.000
Education of manager	20531.520	0.015
Consulting costs	10.271	0.000
Consulting costs squared	-0.001	0.029
Number of employees 2007 squared	-42.722	0.036
Years of firm activity	-3492.184	0.004
Procedure with economic impact	26436.700	0.001
Appeals against customs decisions	-15595.480	0.097

N = 121 $R^2 = 99.4\%$ 

Estimator: Stepwise OLS, robust standard errors

### 5 Conclusion and policy implications

The research suggests that one of the most important institutional obstacles encountered by SMEs in the import-export sector in Kosovo is regular appeals against customs decisions. This supports earlier results on Kosovo by Krasniqi (2007). However, there is also a positive and significant correlation of formal customs institutions that facilitate the trade of imported goods, namely so-called procedures with economic impact. This result supports the efforts made by the WTO and WCO in the field of trade facilitation. In this line another determinant that is positively correlated with turnover growth is the engagement of experts in the field of customs clearance procedures. However, too high expenditures for consulting harm the level of turnover. From this it can be supposed that institutional support needs to be developed in the direction of simplification of customs procedures, which will reduce the compliance costs of firms. Also law enforcement needs to be put in place more effectively.

The fact that a large number of employees and many years of the firm's existence are negatively correlated with both growth and level of turnover are a reassuring signal for new entrants in this market. Also, this reaffirms earlier results by Krasniqi (2006, 2007) and adds to the literature that empirically rejects Gibrat's Law (1931). However, it was also found that it is beneficial for a firm to have a well-educated management. This should be an additional incentive for the public and private sector to invest in the education of Kosovo's population. Although not very surprisingly, this result affirms earlier findings as in Almus (2002) and Wasilczuk (2000).

It is interesting to note that, contrary to popular belief, perceived bad customs behaviour such as red tape and corruption as well as audit controls do not seem to be correlated with the level and growth of the turnover of SMEs engaged in international trade in Kosovo. Here our findings do not match earlier results on Albania and Kosovo. In the former case Xheneti (2006) found a positive relationship and in the latter case Krasniqi (2007) observed a negative correlation. Thus, it seems that it is mainly in the sphere of formal customs procedures that reforms can improve the efficiency of doing business in Kosovo. However, simplified procedures that aim at reducing the declaration filling time did not prove to be significant. This is in contrast to what Verwaal and Donkers (2003) found in their Dutch sample.

Thus, while it has to be noted that the offered policy recommendations do not necessarily follow directly from our empirical research, the assumption is that some of the main barriers to doing business in the import-export sector in Kosovo are inter alia a consequence of frequent changes in over-complicated laws and regulations. Future research has to analyse in more detail the linkages between state laws, regulations and policies and the parameters important for Kosovo SMEs' economic well-being.

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## **Appendix**

Appendix Table 1

Pairwise correlation coefficients, significant at the 10% significance level

		turnov.				years				behav.	audit	hani
growth	1											
turnov.	-0.197											
educat.	0.229		1									
consult.	0.165	0.224		1								
empl.	-0.166			0.268	1							
years	-0.293					1						
simple							1					
econ	0.223	-0.207	-0.287					1				
appeals	-0.211								1			
behav.				-0.210						1		
audit									0.205		1	
hani										0.165		1

### Appendix Table 2

## **Descriptive statistics**

Variables	Mean	Std. Dev.	Minimum	Maximum
Turnover growth 2008	19.9	23.9	-88.8	131.6
Turnover level 2008	418942	507901	28000	3135000
Education of manager	0.344	0.477	0	1
Consulting costs	2207	3201	0	13800
Number of employees 2007	11.8	8.2	2	55
Years of firm activity	5.7	2.3	3	23
Simplified procedure	0.238	0.427	0	1
Procedure with economic impact	0.434	0.498	0	1
Appeals against customs decisions	0.836	0.372	0	1
Bad customs behaviour	0.500	0.502	0	1
Audit	0.861	0.348	0	1
Hani	0.459	0.500	0	1