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**THE IMPACT OF ACCESS TO FINANCE AND INSTITUTIONAL BARRIERS ON SMES
PERFORMANCE IN KOSOVO – ASSESSING THE DIFFERENCE BETWEEN THE
FORMAL AND INFORMAL SECTOR**

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Table of Contents

Chapter 1	1
1. General overview on SMEs development and business environment in Kosovo.....	1
1.1 Introduction	1
1.2 Background of research	3
1.2.1 Macroeconomic trends in Kosovo	5
1.2.2 The importance of SME sector in Kosovo	10
1.3 The problem of research.....	14
1.4 Research objectives	16
1.5 Significance of study	17
Chapter 2.....	19
2. Access to finance.....	19
2.1 Introduction	19
2.2 Theoretical framework	20
2.2.1 Pecking order theory.....	22
2.2.2 Life cycle theory of the firm	23
2.3 The SME financing gap.....	25
2.4 Barriers faced by SMEs to access finance	27
2.5 Access to external sources of finance.....	28
2.5.1 Use of different sources of financing.....	30
2.5.2 Experience with applications for external financing.....	32
2.5.3 Terms and conditions of banking finances	33
2.6 The role of Finance for SMEs growth.....	36
2.7 Financial institutions in Kosovo.....	37
2.7.1 Banking sector and lending.....	39
2.7.2 Loans and interest rates.....	43
2.7.3 Micro finance institutions	44
2.8 Banks competition	46
2.9 Bank products and services for SMEs development.....	49
Chapter 3.....	51
3. Institutional barriers	51

3.1	Introduction	51
3.2	Theoretical framework	52
3.2.1	Institutional Theory.....	54
3.2.2	Institutional constraints of SMEs development.....	55
3.3	The role of court efficiency.....	57
3.4	Rule of law and business climate.....	58
3.5	Business fees and policy constraints for SMEs	60
3.5.1	Business registration and licensing.....	61
3.5.2	Taxation.....	62
3.5.3	Labor regulation.....	64
3.5.4	Criminality and corruption.....	66
3.5.5	Lack of infrastructure provision	68
3.5.6	Business bankruptcy	69
3.6	Trade liberalization	71
3.7	Political instability.....	73
	Chapter 4.....	76
4.	Formal vs. informal economy	76
4.1	Introduction	76
4.2	Theoretical framework	77
4.3	Definition of informal economy.....	80
4.4	The importance of informal economy	82
4.4.1	Advantages of informal economy.....	84
4.4.2	Disadvantages of informal economy	85
4.5	Different views on informality	87
4.5.1	Dualist view	87
4.5.2	Structuralist view	89
4.5.3	Legalist view.....	90
4.5.4	Voluntarist view	92
4.6	Transforming informal economy to formal economy.....	93
4.6.1	Reasons and motives of formalization.....	95
4.6.2	The benefits of reducing informal economy.....	97
4.7	Removing barriers to formalization	98

4.7.1	Regulatory barriers	99
4.7.2	Administrative barriers	101
4.8	The relationship between formal and informal sector	102
4.9	Informal workers and formal firms	103
	Chapter 5	106
5.	Research design and data analysis	106
5.1	Introduction	106
5.2	The framework of empirical analysis	107
5.3	Sampling and data collection	108
5.4	Description of variables	109
5.5	Summary statistics	110
5.5.1	Descriptive analysis regarding access to finance	116
5.5.2	Descriptive analysis regarding institutional barriers	117
5.6	Statistical inference	119
5.6.1	Assessing the difference with respect to access to finance	120
5.6.2	Assessing the difference with respect to institutional barriers	125
	Chapter 6	138
6.	Econometric modelling	138
6.1	Introduction	138
6.2	Justification of models	140
6.3	Specification of econometric models	141
6.3.1	Estimation for the formal sector	143
6.3.2	Estimation for the informal sector	153
6.4	Interpretation of estimated results	168
6.5	Correlation analysis	170
6.6	Diagnostic tests and robustness analysis	173
	Chapter 7	180
7.	Conclusions and policy implications	180
7.1	Introduction	180
7.2	Summary and discussion	181
7.3	Policy recommendations	195
7.3.1	Recommendations for access to finance	195

7.3.2	Recommendations for institutional reforms	198
7.4	Limitations of research	201
7.5	Avenues for further research.....	203
	References:	205

List of tables

Table 1.1 SME categories in the EU.....	10
Table 1.2 Category and structure of SMEs in Kosovo	10
Table 1.3Share of SMEs participation in GDP of Kosovo	11
Table 1.4 Number of Enterprises from the Business registry and Tax department, 2011	12
Table 1.5Rank of indicators of doing business in Kosovo in 2015 and 2016	13
Table 2.1 The financial life cycle of the firm	24
Table 2.2 Financial institutions in Kosovo	38
Table 2.3 Banking sector's assets	40
Table 5.1 List and description of variables.....	110
Table 5.2 Size categories in the samples of formal and informal SMEs	111
Table 5.3 Distribution of the sample of formal and informal businesses over sectors of business activities.....	111
Table 5.4 Average salary for employees in formal sector vs informal sector	113
Table 5.5 Average number of employees and growth of businesses by number of employees in formal vs. informal sector.....	114
Table 5.6 Sales trends over last four years and sales trend predicted for the next four years in formal vs informal sector	114
Table 5.7 Average net profit rate in formal vs informal sector	115
Table 5.8 Mean values and standard deviation in perception of access to finance in the formal sector vs informal sector	116
Table 5.9 Mean values and standard deviation in perception of institutional barriers in the formal sector vs informal sector	118
Table 5.10 Group statistics for the formal and informal sector with respect to limited access to finance.....	121
Table 5.11 Statistic t-test between formal and informal sector with respect to limited access to finance.....	121
Table 5.12 Group statistics for the formal and informal sector with respect to high cost of finance.....	123

Table 5.13 Statistic t-test between formal and informal sector with respect to high cost of finance.....	123
Table 5.14 Group statistics for the formal and informal sector with respect to unavailability of subsidies and favorable loans from the state	125
Table 5.15 Statistic t-test between formal and informal sector with respect to unavailability of subsidies and favorable loans from the state	125
Table 5.16 Group statistics for the formal and informal sector with respect to corruption	126
Table 5.17 Statistic t-test between formal and informal sector with respect to corruption	126
Table 5.18 Group statistics for the formal and informal sector with respect to dysfunctional judiciary system (inefficient courts etc.).....	128
Table 5.19 Statistic t-test between formal and informal sector with respect to dysfunctional judiciary system (inefficient courts etc.).....	128
Table 5.20 Group statistics for the formal and informal sector with respect to high custom tariffs and heavy trade regulation	130
Table 5.21 Statistic t-test between formal and informal sector with respect to high custom tariffs and heavy trade regulation	130
Table 5.22 Group statistics for the formal and informal sector with respect to unfavorable labor law and other business laws.....	131
Table 5.23 Statistic t-test between formal and informal sector with respect to unfavorable labor law and other business laws.....	132
Table 5.24 Group statistics for the formal and informal sector with respect to inefficient tax administration	133
Table 5.25 Statistic t-test between formal and informal sector with respect to inefficient tax administration	133
Table 5.26 Group statistics for the formal and informal sector with respect to inefficient business licenses and permit procedures.....	135
Table 5.27 Statistic t-test between formal and informal sector with respect to inefficient business licenses and permit procedures.....	135
Table 5.28 Group statistics for the formal and informal sector with respect to contract violations by customers and suppliers	136
Table 5.29 Statistic t-test between formal and informal sector with respect to contract violations by customers and suppliers	137

Table 6.1	Hosmer and Lemeshow Test with respect to sales of the formal firms	143
Table 6.2	Classification Table with respect to sales of the formal firms.....	144
Table 6.3	Logit estimates for the sales of formal firms	144
Table 6.4	Goodness-of-Fit for the sales of formal firms	146
Table 6.5	Ordered probit estimate for the sales of formal firms.....	147
Table 6.6	Hosmer and Lemeshow Test for employment in formal firms.....	149
Table 6.7	Classification Table for employment in formal firms	149
Table 6.8	logit estimate for employment in formal firms.....	150
Table 6.9	Goodness-of-Fit for the employment of formal firms	151
Table 6.10	Ordered probit estimate for the employment of formal firms	152
Table 6.11	Hosmer and Lemeshow Test for the sales of informal firms.....	154
Table 6.12	Classification Table for the sales of informal firms	154
Table 6.13	Logit estimates for the sales of informal firms	154
Table 6.14	Goodness-of-Fit for the sales of informal firms	156
Table 6.15	Ordered probit estimate for the sales of informal firms.....	157
Table 6.16	Hosmer and Lemeshow Test for employment in the informal firms.....	159
Table 6.17	Classification Table for employment in the informal firms	159
Table 6.18	Logit estimate for employment in the informal firms.....	160
Table 6.19	Goodness-of-Fit for the employment of informal firms	161
Table 6.20	Ordered probit estimate for the employment of informal firms	161
Table 6.21	Hosmer and Lemeshow Test for potential formalization of informal firms.....	163
Table 6.22	Classification Table for potential formalization of informal firms.....	163
Table 6.23	Logit estimates for potential formalization of informal firms	164
Table 6.24	Goodness-of-Fit for potential formalization of informal firms	166
Table 6.25	Ordered probit estimate for potential formalization of informal firms.....	166

Table 6.26	Correlation matrix for the dataset of formal firms.....	171
Table 6.27	Correlation matrix for the dataset of informal firms.....	172
Table 6.28	Various specifications of the model explaining the sales for the formal firms	173
Table 6.29	Various specifications of the model explaining the sales for the informal firms	175
Table 6.30	Various specifications of the model explaining the employment for the formal firms	177
Table 6.31	Various specifications of the model explaining the employment for the informal firms	178

List of figures

Figure 1.1 GDP Growth rate in Kosovo during the period 2009-2015 -----	6
Figure 2.1 Interest rate of the loan for SME sector -----	43
Figure 5.1 Limited access to finance: current, 4 year ago and 4 years from now in the formal and informal sector. -----	120
Figure 5.2 High cost of finance: current, 4 year ago and 4 years from now in the formal and informal sector -----	122
Figure 5.3 Unavailability of subsidies and favorable loan from the state: current, 4 year ago and 4 years from now in the formal and informal sector-----	124
Figure 5.4 Corruption: current, 4 year ago and 4 years from now in the formal and informal sector-----	126
Figure 5.5 Dysfunctional judiciary system (inefficient courts etc.): current, 4 year ago and 4 years from now in the formal and informal sector -----	127
Figure 5.6 High custom tariffs and heavy trade regulations: current, 4 year ago and 4 years from now in the formal and informal sector -----	129
Figure 5.7 Unfavorable law and other business laws: current, 4 year ago and 4 years from now in the formal and informal sector -----	131
Figure 5.8 Inefficient tax administration: current, 4 year ago and 4 years from now in the formal and informal sector -----	132
Figure 5.9 Inefficient business licenses and permits procedures: current, 4 year ago and 4 years from now in the formal and informal sector -----	134
Figure 5.10 Contract violations by customers and suppliers: current, 4 year ago and 4 years from now in the formal and informal sector -----	136

List of abbreviations

AMIK – Association of Microfinance Institutions of Kosovo
BEEPS – Business Environment and Enterprise Performance Survey
BPAK – Banking and Payment Authority of Kosovo
BSCK – Business Support Centre of Kosovo
CBK – Central Bank of Kosovo
CEFTA – Central European Free Trade Agreement
EBRD – European Bank for Reconstruction and Development
EC – European Commission
EClKS – Economic Initiative for Kosovo
EIB – European Investment Bank
EU – European Union
FDI – Foreign Direct Investment
GEM – Global Entrepreneurship Monitor
GDP – Gross Domestic Product
GIZ – German Organization for International Cooperation
GNI – Gross National Income
IBAN - International Bank Account Numbers
IFC – International Finance Corporation
IMF – International Monetary Fund
IPA – Instrument for Pre-Accession Assessment
KBRA – Kosovo Business Registration Agency
KfW – Reconstruction Credit Institute
KGCF – Kosovo Guarantee Credit Fund
KGS – Credit Guarantee Schemes
KIESA – Kosovo Investment and Enterprise Support Agency
KOSME – Kosovo SME Support Program
ILO – International Labour Organization
MFI – Microfinance Institution
MTI – Ministry of Trade and Industry
OECD – Organization for Economic Cooperation and Development

OLS – Ordinary Least Square
POS – Point of Sales
SAA –Stabilization and Association Agreement
SME – Small and Medium Enterprise
SDC – Swiss Agency for Development and Cooperation
SIDA – Swiss Agency for Development and Cooperation
SME – Small and Medium Enterprises
SOE – Socially Owned Enterprises
SWIFT - Society for Worldwide Interbank Financial Telecommunication
TAK – Tax Administration of Kosovo
UNDP – United Nations Development Programme
UN – United Nations
USAID – United States Agency for International Development
VAT – Value – added Tax
VIF – Variance of Inflation
WB – World Bank
WTO – World Trade Organization

Chapter 1

1. General overview on SMEs development and business environment in Kosovo

1.1 Introduction

1.2 Background of research

1.2.1 Macroeconomic trends in Kosovo

1.2.2 The importance of SME sector in Kosovo

1.3 The problem of research

1.4 Research objectives

1.5 Significance of study

1.1 Introduction

Small and medium sized enterprises (SMEs) in many countries have become the major contributor to employment, GDP growth as well as economic development. The number of those firms has grown considerably during the last three decades showing that they are of crucial importance for job creation and economic growth in developed and developing countries. Though, in order to increase their entrepreneurial activities they need support of institutional policies and access to external finance in appropriate conditions. The lack of access to finance and the rule of law weaken the potential of SMEs to contribute to the creation of new jobs, productivity and value added.

In the Organization for Economic Cooperation and Development (OECD) area; SMEs employ more than half of the labor force in the private sector. In the European Union (EU) they account for over 99% of all enterprises. Furthermore, 91% of these enterprises are micro-firms with less than 10 workers. Given their importance in all economies they are essential for economic development (OECD, 2009). The SMEs represent a factor of balance at the micro and macroeconomic level. Having as the correspondence the middle class in the society, the SMEs counter balance the monopolies and oligopolies, reducing the capacity of the big companies in controlling the market. In the circumstances where the economic environment is in a permanent change, the SMEs are flexible and they have a great capacity of adjustment, encouraged by the low dimensions and fast decision making process (Savlovski and Robu, 2011). SMEs are generators of entrepreneurial activity which is very important for transition process, since it is a

good source for economic growth through job creation and offering a wide variety of products and services (McMillan and Woodruff, 2002).

The transitional business environment is unstable and unreliable, thus hampering the growth of SMEs. In this context, institutional barriers, fiscal constraints and limited access to finance are among external factors that have major role in SMEs growth. For example, Hashi (2001) highlights the difficulties of these enterprises in the business environment based on survey evidences of SMEs in early transition in Albania. He further confirms the role of financial barriers in SMEs growth especially when they are combined with the poor institutional environment. Similarly, Bartlett et al. (2001) based on the survey sample of small enterprises has found that key barrier that impact the growth of these enterprises are linked to the institutional environment including bureaucracy, and external financial constraints including the high cost of capital. On the other hand, internal organization, resource issues, and social support through local development coalitions were found to be less important. Miettinen (2004) in his study on SMEs in a changing environment during transition in Estonia argues that despite of legislation is more or less appropriate, the rule of law is not strong as it might be. Further, he mentions several problems facing SMEs in institutional context such as: the tax evasion and unfair competition as well as costly and time consuming business disputes in courts is. Institutional and financial barriers encourage many firms to conduct some or all of their activities in the informal sector of the economy (Hashi, 2001).

In addition, it is worth mentioning that informal economy represents a large share of economic activities in developing countries. Formal firms can engage with economic and legal institutions for sustaining their activity such as: engaging with chamber of commerce for entering the market, with banks for credit, with courts for contract enforcement and liquidation procedures, with local and international agencies for grants and consultations, with insurances in case of injury or sickness, etc. In contrast, most informal firms have to cope with the exclusion from these institutions facing certain barriers of external environment and lack of support. Due to institutional barriers and lack of access to finance informal firms are marginalized and could not enhance their survival and growth aspiration. Benefits provided by developed institutional context can motivate informal firms to join formal sector. The theory states that scale down of institutional barriers and offering more attractive services to formal firms attracts informal firms to shift to formal economy. Among these services are the following: easy access to finance, low

cost of finance, grants, infrastructure, consultancy support, and public procurement opportunities (De Soto, 2000, Ayagari, 2005, Levine, 2008, La Porta et al., 2014).

Having in mind the above arguments, the aim of this research is to explore external factors that impact performance of formal and informal SMEs, more specifically the role of the access to finance and institutional barriers. Furthermore, the differences between formal and informal business sectors will be assessed depending on their perception to external factors. In this context the worldwide experience with respect to above issues will be used as part of literature review. Due to previous experience and opportunity to access data, empirical part of study will address some research limitations within business environment and firms in Kosovo.

1.2 Background of research

In the last three decades the importance of SME sector has increased all around the world and has been considered as backbone for employment, innovation, competitiveness and economic growth. Accordingly, due to importance of this sector especially to employment, there is increased interest of researchers to study the SME sector and its business environment. In the literature is clearly documented that SMEs are engine of innovation, creation of jobs and economic growth (Storey, 1994; Aidis and Sauka, 2005; Watson, 2006). They are proved for their potential to grow; their ability to invest and implement new technologies and to adapt to frequent changes of complex external business environment (Berry et al., 2001; Almeida, 2004; Banham, 2010).

How SMEs are affected by institutional barriers and access to finance is important issue in their creation and subsequent operation. SMEs with greater access to finance and institutional support are more likely to grow and survive longer (Beck and Demirkuc, 2006). Institutional barriers and inability to access finance has been cited as main cause of SMEs growth obstacles especially in context of transitional economy where institutions and capital market are underdeveloped (Coleman, 2000; Beck et al., 2008). In the early stage of transition fundamental barriers are related to legal issues (Aidis and Sauka, 2005). Recent researches on external obstacle affecting SMEs in Kosovo shows that access to finance and institutional barriers are among the primary concern on development of SME sector (BSCK, 2013; Riinvest, 2014; ECIKS, 2014).

Kosovo represents an interesting example, where studying informal business sector in addition to formal business sector represents a challenging task. Private sector in Kosovo based on SMEs dates in the beginning of 90s. During the period of 90s up to 5,000 SMEs were created and operating in unstable environment due to social exclusions, trade and economic isolation, political instability, inflation and unreliable financial sector. Firms were operating mostly in informal economy. During the war of 1998-99, economy of Kosovo was remarkably destroyed. After the war due to absence of institutions and financial sector firms started operating totally under informal structure. Alongside with the consolidation of institutional framework, the formal business sector has gradually increased. Besides the lack of institutional support that hindrance the firms, there is reluctance of entrepreneurs to shift to formal sector because of the lack of education and business experience. During the period from 1999 to 2008, Kosovo has experienced the stage of completing the basic institutional, legal and regulatory dealing with SME policy which created preconditions for further development of the formal sector.

Since the declaration of independence in 2008, the Government has embarked on several attempts aimed at promoting SME sector development. The government has started fiscal reform consisting in reduction of corporate profit tax rate from 20 to 10 percent, and simplification of administrative barriers for registration of businesses. Meanwhile ‘SME Development Strategy 2012-2016’ as well as ‘Private Sector Development Strategy 2013-2017’ has been launched by Ministry of Trade and Industry aimed at promoting business climate, entrepreneurial culture and competitiveness of SMEs. Government strategy for SMEs has addressed strategic goals and objectives in order to advance reforms aiming to lead to a dynamic SME sector that will create new jobs and contribute to economic growth. The SME strategy is cross-sectoral and includes a number of government agencies that have responsibility of some parts of its implementation. The government has also established a special institution, the Kosovo Investment and Enterprise Support Agency (KIESA) operating under the Ministry of Trade and Industry (MTI), which alongside of promoting foreign investments is responsible for supporting policies and programs for SMEs (ECIKS, 2014).

Other efforts to support business environment reforms and SMEs sector development have been provided by international organizations. Among these organizations are European Commission, United States Agency for International Development (USAID), United Nations Development Programme (UNDP), European Bank for Reconstruction and Development

(EBRD), World Bank, International Finance Corporation (IFC), German Organization for International Cooperation (GIZ), Swedish International Development Cooperation Agency (SIDA), Swiss Agency for Development and Cooperation (SDC), Reconstruction Credit Institute (KfW), Crimson Capital LLC and many more, which have provided great support to strengthen institutional environment, facilitate access to finance, rebuilding infrastructure, incubators, initiation of economic free zones, as well as grants and business consultancy for SMEs. Despite all these efforts, the governmental institutions has not done enough in order to remove barriers that impede performance of SME sector which is crucial of importance for job creation and growth of economy of the country.

Moreover, due to numerous obstacles of business environment there is large share of informal economy including firms that attempt to operate informally. The government to this point has not succeeded to create favorable business environment strengthens competitiveness in SME sector and contributes to formalization of informal economic activities. Consequently, the SME sector in Kosovo has not grown sufficiently in order to fulfill its role as the main supporting sector for employment, productivity and value added. Even though government promotes SMEs as the main sector for poverty alleviation, job creation and GDP growth, still these indicators have not been satisfactory improved (USAID, 2014).

1.2.1 Macroeconomic trends in Kosovo

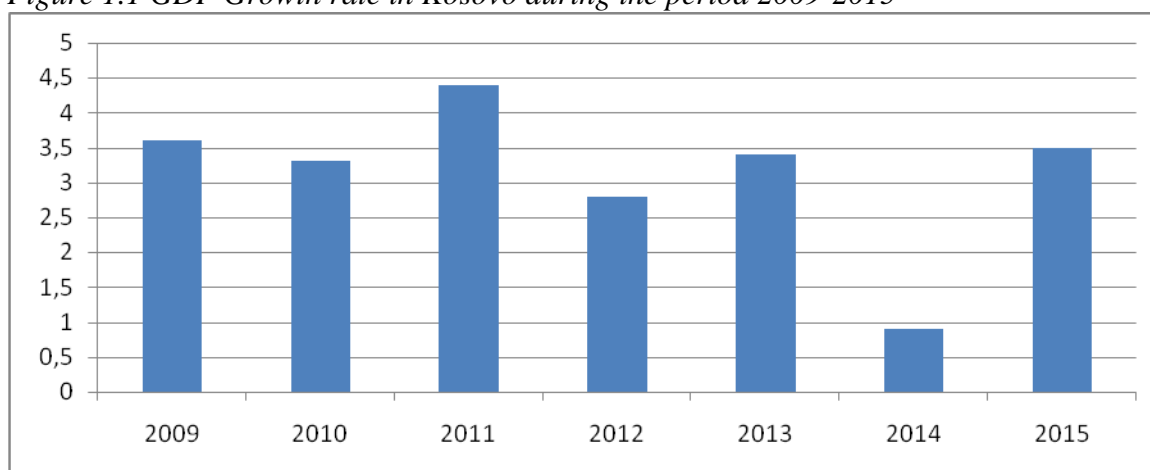
The Republic of Kosovo is a small country with a population of nearly 2 million, GDP per capita around 3.100 €, and unemployment rate around 35 % (CBK, 2015). Economy of Kosovo is undergoing through transitional process which involves movement from centrally planned to market oriented economy. This includes new arrangements in economic field that is characterized by liberalization of capital and competitiveness. The process of transition is followed by dynamic and unstable business environment including large share of informal economy. Also, the main reforms characterizing the period of transition include: the privatization of assets, the liberalization of markets, and the establishment of the degree of macroeconomic stability (EBRD, 1997).

In Kosovo, during socialist period were existed around 600 big socially owned enterprises (SOE) characterized by large capacity in terms of employees and assets. In the case

of transition privatization is given priority as the most important process for transformation of the economic system. About 60% of SOE assets have been privatized through local and foreign investment capital. The privatization of assets has been done through two methods: regular spin off and special spin off. Regular spin off method is done through open auctions and is used for the sale of less valuable enterprises. The bid winner or eligible buyer of enterprises is determined only by the highest price offered, because this method does not imply after sale conditions for the investors. Special spin off method is used for the sale of the biggest enterprises with potential of investments and employment. The bid winner of enterprises privatized through this method is determined on the basis of price by fifty percent, investments commitment by twenty five percent and the number of employees' commitment by twenty five percent. Therefore, the privatization of enterprises through special spin off imposes sales conditions for investors which mean the continuation of business activity through new investments and employment. Heavy regulation of privatization and unfavorable business environment has not attracted enough foreign direct investments, thus the investments and employment through privatization process are quite limited. However, Miettinen (2004) indicate that privatization is seen as an instrument for improving efficiency and productivity and, therefore, a means for promoting economic growth. If it works, more jobs can be created in the long run providing more and better employment opportunities for individuals, and government revenues should be increased, enabling government to enhance support for private sector.

GDP growth in recent years was an average of 3% which is very low to overcome the problem of unemployment and poverty of people (Figure 1.1).

Figure 1.1 GDP Growth rate in Kosovo during the period 2009-2015



CBK, Financial Stability Report (2015)

The economic growth in Kosovo has largely been driven by government spending which does not create a strong recovery and economic base. In addition, remittances, international donations and external loans take a large part of economic progress which cannot be viewed as a good basis of sustainable economic development. Despite economic growth, the current level of GDP in Kosovo is only 5.5 billion Euros, which is much less than countries in the region. Poverty remains an important problem in Kosovo, since according to the reports of UNDP, 30 percent of people live in poverty on less than 1.41 Euros a day and 10.6 percent live on extreme poverty on less than 0.94 Euros a day(UNDP, 2014).

Very high unemployment rate around 35% is key impediment to Kosovo's development. The unemployment is driven by the poor quality education system coupled with generally few quality employment opportunities for youth. Many of the younger workers unable to find employment end up working in low-skilled, low productivity positions, often in the informal sector (EIB, 2016). High unemployment rate in transition economy is partly explained by supply factors such as lack of appropriate education or/and experience among young workers and partly by demand factors such as insufficient job creation. In addition, Long spells of unemployment often leads to the degradation and dehumanization of individuals in society, causing social exclusion and increasing the burden for the government of providing the necessary safety net. Consequently, the problem of unemployment is not only a personal problem for the people who experience it, but it has become a problem for the economy as a whole (Nikoloski, 2009).

Budget revenues in 2014 amounted to 1.33 billion net, representing an annual increase of 1.5 percent. The budget consists mainly of tax revenues, which in 2014 represented about 85.6 percent of total budget revenues. On the other hand, the value of the total budget expenditures in 2015 has amounted to 1.5 billion Euros, which represents almost the same level as in the previous year. Despite the budget limitations, fiscal sector continues to be sustainable, with low budget deficit and public debt. Total budget deficit in 2015 was 78 million or -1.3 percent of GDP (-2.2 percent of GDP in 2014) (CBK, 2015). Ministry of Finance has agreed with the International Monetary Fund (IMF) with a fiscal rule aimed at limiting overall budgetary deficits, with few exceptions, to 2 percent of GDP, reflecting the stability of public finances in the country's economy (World Bank, 2016). In late 2014, the stock of public debt of the government reached a value of 582.9 million Euros or 10.6 percent of GDP. This level of debt makes Kosovo the country with lowest level of public debt compared with countries in the region. For instance,

in 2014 the average public debt of Southeast European countries was about 57.3 percent of GDP (CBK, 2015). The low level of public debt is an advantage that enables Kosovo to develop strategies based on borrowing funds from international financial institutions in order to support SMEs sector development..

Price movements in Kosovo are very similar to price movements in international markets due to the high dependence of the economy on imports. Low prices of oil, energy and food in international markets also affected the price level in the Western Balkan countries, where the average inflation rate, was estimated to be 0.9 percent in 2015. Within the countries of the region, only Kosovo was characterized with deflation of 0.5 percent in 2015, compared to inflation of 0.4 percent in 2014. The decline of price levels was also affected by the decline of prices in educational services, transport services, restaurant and hotel services as well as communication means (CBK, 2015). Having adopted euro as the sole legal tender has brought monetary stability, enhanced credibility of financial system, as well as simplified and reduced transaction costs, though Kosovo does not have access to independent monetary policy instruments (World Bank, 2016).

The exports of goods and services have covered the imports only by 12.3 percent showing a huge negative foreign trade balance of the country. The deficit of goods account amounted to EUR 2.3 billion in 2015 (CBK, 2015). Significant trade balance deficit, running at around 40 percent of GDP continue to be disturbing indicator in country's economy. At the moment, these deficits are being covered by remittances and donors assistance, but with an increasing risk of both of these sources reducing gradually in the coming years. The neighboring countries remain Kosovo's main trading partners. The agreement of association and stabilization (SAA) with EU has provided Kosovo free access to EU market which is expected to increase trade volume with EU countries. In addition, SAA as part of integration process in the EU will bring additional pressure to domestic enterprises in terms of competitiveness. For the most part, enterprises are not yet in a position to compete successfully in local, regional, EU, and international markets. Due to under developed public infrastructure and business climate constraints, domestically produced goods including the agriculture sector have not yet been supplied in the quantity and quality required to compete successfully in either domestic or foreign markets (World Bank, 2016). Although Kosovo has promoted open trade policy, the trading possibilities with foreign world are hampered by limited integration into the global economy. The country has managed to

be a member of Central European Free Trade Agreement (CEFTA), World Bank, and IMF. While, is in continuation the process of integration into the EU, United Nations (UN), and World Trade Organization (WTO).

Industry sector is mainly represented by extractive industry processing, power supply, gas, water supply and waste management. In recent years slight increase in activity have recorded sectors of textile processing, wood processing and wood items, as well as processing of wood products, beverages and tobacco. The number of manufacturing firms is small compared to those of trade and service sector. This is an indicator that domestic production is limited, contributing to reliance mostly on imports. As a consequence the enterprises struggle with low level of productivity and competitiveness on the global markets. Moreover, the manufacturing sector in Kosovo contributes very little to GDP, which in turn leads to constant current account deficit (Gabrisch et al, 2016). Remittances received in Kosovo, which represent the largest category within the secondary income account, amounted to euro 752.4 million representing 13 percent of GDP. With regard to financial account FDI amounted 324.4 million in 2015 which is not significant to boost economic growth (CBK, 2015).

Financial system is mostly stable and credible. Total assets of the financial system has reached a value of 4.5 billion in 2014 marking an annual growth of 7.4 percent, an increase that largely attributed to commercial banks' asset growth and pension funds, while the insurance sector and microfinance sector had small or negligible contribution to the total growth of assets (CBK, 2015). The main challenge facing the financial system is better access to credit in order to support growth. Despite banks' healthy liquidity ratios, Kosovo has the lowest level of credit penetration (33 percent credit-to-GDP) in the Western Balkans. This is partly a function of demand, which is a reason that many potential borrowers do not see investment opportunities or an attractive investment environment in Kosovo. Difficult debt collection procedures, uncertain court processes, and high informality have influenced conservative lending stances and led to both high interest rate spreads and high collateral requirements. In this context, banks are overly focused on short-term trade financing and personal loans to government employees rather than loans to private enterprises that could help to grow a more dynamic economy (IMF, 2015).

1.2.2 The importance of SME sector in Kosovo

SMEs promote market diversification, enhance innovation, provide employment opportunities and contribute to economic growth. SMEs in 2014 accounted for 99.8 % of all enterprises of the non-financial business sector in EU. Moreover, in 2014, about 22.3 million SMEs were active across EU and employed almost 90 million people which represents 67% of total employment, and generated 58% of the sector's value added. Majority of SMEs are micro companies employing less than 10 people (93%). About three quarters of SMEs are active in the five key sectors: trade, services, construction, manufacturing, and accommodation and food services (EC, 2015).

It is a widely acknowledged fact that SMEs are the backbone of the European economy. Different countries set various definitions to SMEs. For, instance, in EU SMEs are defined as enterprises which employ less than 250 staff and have an annual turnover of less than EUR 50 million. They comprise three categories of enterprises namely micro, small and medium sized enterprises (EC, 2015). Hence, based on EU recommendations there are two main factors that determine whether the business is part of SMEs category. These two factors are the number of employees and business turnover or balance sheet (Table 1.1).

Table 1.1 SME categories in the EU

Firm sized	Employees	Turnover or	Balance sheet
Medium	< 250	< € 50 m	< € 43 m
Small	< 50	< € 10 m	< € 10 m
Micro	< 10	< € 2 m	< € 2 m

Source: European Commission, SME annual report 2015

Unlike the EU definition of SMEs in Kosovo the only criterion that determines whether the firm is micro, small or medium is the number of employees (Table 1.2).

Table 1.2 Category and structure of SMEs in Kosovo

Firm sized	Number of employees	Enterprises		Employees	
		Number	Share	Number	Share
Micro size	1 - 9	43,735	95 %	86,360	45.6 %
Small size	10 - 49	1,940	4.2 %	35,546	18.7 %
Medium size	50 - 249	310	0.7 %	31,094	16.4 %
Large size	250 or more	47	0.1 %	36,623	19.3 %
Total		46,032	100.0 %	189,623	100.0 %

Source: ECIKS Report, 2014

As we can see from Table 1.2 the Kosovo's economy is based on SMEs as engine of employment and growth. According to the Tax Administration of Kosovo (TAK) in 2013 actively operated about 46.000 SMEs. SMEs represent 99.9% of total number of enterprises and they employ about 80% of people in the private sector. Besides the positive impact of SMEs on employment opportunities, they have considerable contributions on raising incomes, living standards of people, diversification of products and services, innovation, competitiveness, and GDP growth. Similarly, the OECD reports that more than 95% of enterprises in OECD area are SMEs expected to play a crucial role in growth of GDP and that will employ the largest part of workers (OECD, 2009).

In Table 1.3 is presented the contribution of micro, small, medium and large enterprises in Kosovo's GDP according to Tax Administration of Kosovo.

Table 1.3 Share of SMEs participation in GDP of Kosovo

Firm size	Number of firms	Turnover (*000€)	Share of GDP (%)
Micro	14,968	656,885	16.79
Small	1,210	667,585	17.07
Medium	185	369,455	9.44
Large	58	528,558	13.51
Total	16,421	2,222,485	56.81

Source: ECIKS Report on SMEs in Kosovo, 2014

Based on the data above we can see that total annual turnover of SMEs in Kosovo in 2012 was 43.3%. Obviously, the share of SMEs participation in the GDP is quite high, giving them a significant role in the economic development of the country.

Moreover, it was a large discrepancy between number of enterprises registered in Kosovo Business Registration Agency (KBRA) and enterprises that declare taxes in TAK in fiscal year 2011. According to the data from the Business registry and Tax department there were more than 100,000 enterprises registered in Kosovo but only 18,000 declare taxes (Table 1.4).

Table 1.4 Number of Enterprises from the Business registry and Tax department, 2011

Enterprises according to no.of employees	Business Registration Agency		Tax Administration		Discrepancy	
Total	100,770	100%	18,170	100%	82,600	82.0%
Micro (1-9)	99,110	98.4%	16,279	89.6%	82,911	83.6%
Small (10-49)	1,390	1.4%	1,605	8.8%	215	15.5%
Medium(50-249)	190	0.2%	286	1.6%	96	50.5%

Source: MTI Private sector development strategy 2013-2017

This discrepancy could indicate that a large number of registered enterprises are no longer active. Also, the data shows that the SME sector's contribution to the Kosovo national budget depends on a small number of enterprises. The data also indicate that much of economic activity in Kosovo is still pursued in the informal sector (MTI,2013).

Kosovo's economy suffers huge deficit on trading balance which raises the need for analyzing the impact of business environment on performance of enterprises. Due to the weak business environment, SMEs in Kosovo are not competitive in international market. In addition, the weak export potential limits the contribution of firms to GDP, job creation and economic development. Exports are dominant in the sector of base metals and minerals produced by large companies. Dollars et al. (2006) shows that the business environment affects the minimum level of productivity needed for a firm to export and therefore only most productive firms find exporting profitable.

Although facing a numerous obstacles SMEs in Kosovo have become the major contributors to employment as well as economic development. Though, in order to increase their entrepreneurial activities they need institutional support and policies that will improve the access to external finance in appropriate forms. Based on the World Bank doing business report, Kosovo is ranked 66th out of 189 countries in 2016. In Table 1.5 are present some of the indicators improved in 2016 compared to 2015.

Table 1.5 Rank of indicators of doing business in Kosovo in 2015 and 2016

Indicator	Rank in 2015	Rank in 2016	Progress/ Deterioration
Ease of doing business rank (1-189)	75	66	
1. Starting a business	42	47	Deteriorated
2. Dealing with construction permits	136	136	Stagnant
3. Getting electricity	112	124	Deteriorated
4. Registering property	34	32	Improved
5. Getting credit	23	28	Deteriorated
6. Protecting investors	62	57	Improved
7. Paying taxes	63	67	Deteriorated
8. Trading across borders	118	71	Improved
9. Enforcing contracts	138	48	Improved
10. Resolving insolvency	164	163	Improved

Source: World Bank Doing Business Reports, 2015 & 2016

Despite the fact that the business environment in Kosovo is improving with regard to indicators measured by ease of doing business report, there are other serious barriers that World Bank does not take into account in its annual report. For example getting credit is easy, but cost of credit is very high. In addition, the 2016 corruption perception index ranks Kosovo 95th out of 175 countries indicating high level of corruption in public sector of the country. Some other barriers such as political instability and small market hinder domestic and foreign investments in SME sector. Due to high cost of credit funds, many SMEs finance their business through internal funds rather than bank credits.

There are several surveys over the past few years that assess the factors which affect the ability of Kosovo SME sector to grow and survive, as well as the motivation, opinions and perceptions of SMEs managers (e.g. EBRD, 2010; BSCK, 2012; World Bank, 2013; ECIKS, 2014; Riinvest Institute, 2014). These surveys suggest that the main obstacles to the development of SMEs are related in the first place to financial shortcomings (lack of access to finance, high interest rates) and institutions (regulations, rule of law, lack of SMEs support, bureaucracy). In addition, there have been problems relating to market conditions (poverty of people, small market demands and lack of access to international markets) labor force problems (shortage of managerial and skilled labor), political instability and corruption. Although, infrastructure (lack of energy power supply and lack of water supply, transport) has improved, it is still among barriers for SMEs growth. The ranking of barriers has changed in the last ten years, but the

factors mentioned above have remained among the main constraints to SMEs development, and in fact the government has not done enough to alleviate these problems.

1.3 The problem of research

In recent times extensive researches have been made about the importance of SME sector in developed and developing countries. Nowadays, it is very obvious that SMEs are very crucial factor in economic development with respect to the following aspects: creating jobs, increasing productivity, innovation, training of individuals, and distinguished with flexibility for adaptation to the demands of external business environment. Governments have set as priority development of policies to support the SME sector as the basis for job creation and economic growth. Whether business owners can access adequate and appropriate finance to grow is a particular concern for policy makers (Olawale and Garwe, 2010).

Despite their role in job creation, innovation and economic development, SMEs in Kosovo continue to be hampered by a number of obstacles within institutional context and access to finance. Among the potential barriers in the institutional context are inefficiency of courts, tax rates, heavy trade regulations, corruption, unfavorable labor law and other regulation, extortions and crime. Access to finance and high interest rates charged on loans remain the major obstacles that hinder the SMEs growth.

Based on theory and evidences provided by the researchers on the impact of access to finance and institutional constraints in SMEs performance we can formulate the following hypothesis:

H1: The limited access to finance negatively affects performance of formal SMEs

H2: The high cost of finance negatively affects performance of formal SMEs

H3: The institutional constraints negatively affect performance of formal SMEs

H4: The limited access to finance negatively affects performance of informal SMEs

H5: The high cost of finance negatively affects performance of informal SMEs

H6: The institutional constraints negatively affect performance of informal SMEs

H7: The limited access to finance negatively affects potential formalization of informal SMEs

H8: The high cost of finance negatively affects potential formalization of informal SMEs

H9: The institutional constraints negatively affect potential formalization of informal SMEs

Unfavorable and unreliable business environment has led to unproductive SMEs sector. Furthermore, business environment obstacles have led to a large extent to increasing informal economy in the country. Kosovo's government has defined the SME sector as vital and key sector for development of the economy, but so far has not done enough to support this sector. Considering high unemployment rate, negative trade balance, and slow economic growth we can assume that there is a potential problem of low productivity and development in the SME sector.

Access to external financing means both finances from bank and non bank sources. Access to financing continues to be one of the most significant challenges for the creation, survival, and growth of SMEs (OECD, 2009). SMEs in Kosovo finance their operations through their internal funds, also borrowing from family or friends, grants, trade credits, and loans of the banks and micro finance institutions. According to Business Support Center of Kosovo (BSCK), in 2012 the lending for SMEs in Kosovo has become easier despite the fact that access to finance continues to be their major issue. SMEs rely more on internal business funds and less on bank financial system assistance because of difficulties in accessing bank loans as of high interest rates, whilst high collateral requirements. In addition, the institutional barriers potentially hamper the consolidation of SME sector in Kosovo. In this context, the progress report of European Commission in 2010 has identified the insufficient rule of law among top barriers that neglect the development of SMEs. Furthermore, court inefficiency and corruption are among major obstacles for SMEs growth in Kosovo (Riinvest, 2014).

In less developed countries, where institutions are not well consolidated, firms tend to operate in informal sector. According to OECD (2009) there are three factors favoring informality: 1) established financial institutions are not interested in dealing with SMEs and, hence, there are few positive incentives to operate transparently; 2) entrepreneurs in SMEs seek to avoid regulation and taxation in the formal sector; and 3) governments lack the administrative capacity to enforce laws and regulations. Firms operating in informal sector cannot provide track

record, and cannot build business relations with the banks. Thus, due to risks imposed on payback of the debts banks are not interested to work with firms that are not structured into the formal economy.

1.4 Research objectives

The internal characteristics of firms are important factors. Nevertheless, firms have to cope with business environment in order to perform their operations. This research seeks to examine how access to finance and institutional barriers impact the functioning of formal and informal businesses. In this context, we will attempt from an enterprise perspective to analyze the impact of access to finance and institutions on activities of formal and informal businesses separately. The idea is to compare the functioning of formal and informal businesses by addressing the question how do they cope with external environment.

In addition, the aim of this research is to understand how access to finance and institutional barriers attract potential formalization of small businesses. In this context, we will seek to understand the importance of formalization of firms on improving quality and productivity, correct treatment of employees and contribution to economic growth. By drawing knowledge with regard to both formal and informal sector we would be able to have right conclusions on the impact of external environment to the informal firms that stands on cost advantage comparing to formal ones. On the other hand, informal firms by avoiding taxes may lose the opportunities that institutions and access to finance would provide for their survival and growth aspiration which is an issue of cost-benefit analysis. Djankov et al. (2002) claim that many activities in the informal economy in transition countries will be formalized if the entrepreneurs see the cost of informality rising and its benefits are falling. We would try to understand how informal firms work and to determine how institutional barriers can be reduced and become appropriate for their needs. In sum, the research will address the following research questions:

- What is the difference between the formal and informal businesses in perception of the business environment?
- How access to finance and institutional barriers impact formal and informal firms?

- How and to what extent access to finance and institutional barriers will potentially attract the formalization of firms?
- What are the policy recommendations with respect to formalization?

1.5 Significance of study

In order to justify the significance of current study on SME sector, it is vital to mention that researchers have found this area of study very important to employment, productivity and their contribution to growth of the economy. Extensive research has been carried out on the role of access to finance and institutional barriers on SME sector development. This research will therefore focus on the impact of access to finance and institutional barriers on SME growth and in addition the potential formalization of informal activities of SMEs. A study of this field is important because it is going to highlight the role of institutional capabilities to create a competitive business environment and eliminate informality which still remain at the large scale.

Despite the growing interest of researchers to study the impact of access to finance and institutional environment in SME sector, there is a lack of research in this field in developing countries and particularly in Kosovo. Although the volume of research is limited in this field, it has indicated that access to finance and institutions are among the most frequent constraint to SMEs operations and growth. In addition, despite the developing countries' economies struggle with high rate of informality there is the lack of research that deal particularly with operations of informal SMEs. Numerous studies have recognized the role of informal sector to employment particularly in developing countries. However, the few available studies offer promising way to potential formalizations of informal SMEs. Moving informal SMEs into the formal sector can have considerable advantages for the SME with better access to credit and government services and to the overall economy with higher tax revenues and better regulation (World Bank, 2015).

SME sector as a whole provides job opportunity for active job seekers to boost their living standards in a sustainable manner. Due to SME sector's potential on innovation, productivity and contribution to GDP growth, it is more than obvious the motive to analyze the factors that help the growth of this sector. Thus, it will be recommended a proper policy reforms

to support the development of SMEs, to understand the barriers they may come through and how they can succeed on their growth aspirations.

The study will add value by finding new empirical evidences on the impact of access to finance and institutional barriers on SMEs growth. Further, study will seek to analyze the impact of access to finance and institutional barriers on potential formalization of informal SMEs. It will serve future studies to extend analysis on those external factors of SMEs as well as including other components of business environment that determine the growth of SME sector.

Chapter 2

2. Access to finance

2.1 Introduction

2.2 Theoretical framework

2.2.1 *Pecking order theory*

2.2.2 *The life cycle theory*

2.3 The SME financing gap

2.4 Barriers faced by SMEs to access finance

2.5 Access to external sources of finance

2.5.1 *Use of different sources of financing*

2.5.2 *Experience with applications for external financing*

2.5.3 *Terms and conditions of bank financing*

2.6 The role of finance for SMEs growth

2.7 Financial institutions in Kosovo

2.7.1 *Banking sector and lending*

2.7.2 *Loans and interest rates*

2.7.3 *Microfinance institutions*

2.7.4 *Banks competition*

2.8 Bank products and services for SMEs development

2.1 Introduction

This chapter elaborates theoretical perspective with regard to the impact of access to finance in SMEs performance. The theoretical framework indicates that access to finance is one of the most critical determinants in SMEs performance. In addition, we elaborate the most important theories that explain the external financing needs of firms in different stages including pecking order theory and life cycle theory of the firm. The pecking order theory examines the progression of the firm acquiring external finance through growth phases. Similarly, life cycle theory of the firm is used to describe financial sources needed during growth phases of the firm.

Further, we review literature on financing gap which occurs when there is less supply of funds compared to demand for funds requested by SMEs. In this context, we also identify some of barriers faced by SMEs to access finance as following: perceived high risks by commercial banks' lending to small firms, lack of collateral, reputational effects and existence of information

asymmetries between finance providers and borrowers. Access to external finance means bank and non-bank sources which continues to be one of the most significant challenges for the creation, survival and growth of SMEs. In this context, we further review the literature on use of different sources of finance such as internal and external for SMEs, experience with applications for external financing, as well as terms and conditions for banking loans. Moreover, financial and institutional developments are elaborated in the context of their role to SMEs growth.

Finally, we examine the development and characteristics of financial sector in Kosovo and their role in support of SMEs. The financial sector in Kosovo consists of commercial banks, micro finance institutions, insurance companies, pension funds and financial auxiliaries. Banks have the majority of assets and loans released for SMEs. According to the reports of Central Bank of Kosovo and international organizations, now Kosovo has built a credible, efficient and sustainable financial system. Although there is a wide range of products and financial services for SMEs and continues improvement of access to finance, however the services of financial sector, in particular interest rates are very high and hardly affordable for SMEs. The high cost of finance affects the reduction of opportunities for investment and business growth.

Banks competition is relatively low, the number of commercial banks which have been licensed to operate in the financial market in Kosovo accounts 10 in total. Although, declining in recent years, the banking sector continues to be characterized by the concentration of banking business in three major banks which together represent 65% of total assets of the banks in the country. Moreover, microfinance institutions have increased in number; they have expanded their network and have a greater flexibility in addition to banks in giving loans. However, the MFIs interest loans are very high even three times higher than the interest on loans granted by banks.

2.2 Theoretical framework

The overall macroeconomic, legal, regulatory and financial framework is the critical determinant of firms' access to finance. Poor protection of shareholders, poor contract enforcement, corruption, poor accounting standards, heavily restrictive banking systems, and high inflation tend to have underdeveloped financial systems, which in turn imposes constraints

to firms that are willing to borrow from the banks (Demirgüç-Kunt and Levine, 2008). Evidence suggests that banks are more conservative when they provide loans to SMEs than in the case of large companies (Zhou and de Wit, 2009). Due to the information asymmetries, SMEs are more likely to be charged relatively high interest rates and asked for high collateral and loan guarantees (Stiglitz and Weiss, 1981). Similarly, Beck (2007) in analysis of empirical research has found that SMEs are more constrained by financing and other institutional obstacles than large enterprises, influenced by the weaknesses in the financial systems of many developing countries.

Firms in countries with higher levels of institutional development report lower financing obstacles than firms in countries with less developed institutions. The positive effect of financial and institutional development can also be observed in the use of external finance. Better protection of property rights increases external financing of small firms significantly more than it does for large firms, particularly due to the differential impact it has on bank and supplier finance (Beck et al., 2004b). Many expected benefits of financial consolidation and liberalization are not achievable before institutional development reaches a certain adequate level (Beck et al., 2004; Maurer, 2008). Access to finance has been identified as a key element for SMEs to succeed in their role to build productive capacity, competitiveness, job creation, as well as to contribute to poverty alleviation in developing countries. Without finance SMEs cannot absorb new technologies nor can they expand to compete in global markets or even establish business linkages with larger firms (Quaye et al. 2014).

In addition, informal firms have significant gaps in information, credibility and skills needed to access external finance and they prefer informal sources of financing rather than banks. The data on informal firms collected by World Bank's enterprise survey (Farazi, 2014) shows that use of loans and bank accounts by informal firms is very low and a significant majority of firms finance their day-to-day operations and investments through sources other than financial institutions such as: internal funds, moneylenders, family and friends. Most of the firms would like to register but tend not to opt for it due to tax avoidance reasons and state that relatively easier access to finance would be the most important benefit they could obtain from registering. The owners of informal firms typically lack financial education, often lack adequate financial records, business and credit history, and also do not have acceptable collateral when

asking for a loan (Hommes et al., 2015). In order to ease access to finance emerging economies need to strengthen incentives for SMEs to move into the formal sector (Levine R., 2002).

The successful performance of firms requires appropriate forms of access to finance. Performance and use of financial sources should be treated in relation with theories that complement their importance for the firms. In accordance with objective of the study we further elaborate the most important theories that explain the relationship between external finance and firm performance.

2.2.1 Pecking order theory

Pecking order theory is an approach to define capital structure of a firm, as well as how financial needs are prioritized and how the firms goes about the process of making financial decisions. In order to examine financing options and requirements of the firms, Myers and Majluf (1984) elaborated financing needs in linear order; including that firms at first within their limited capacity prefer to use internal funds, followed by short and long external debt from various financial sources, and finally external equity. Pecking order theory suggests that in business environments with asymmetric information or weak credit system firms prefer to use more internal funds. Firms operating in competitive and developed business environment tend to use more external finance to enable their growth objectives.

According to Silva and Santos (2012), all small firms live under tight liquidity constraints therefore making finance is a major problem for them. Small firms operate within competitive business environment that challenge them to survive and grow. In order to grow firms need to use internal funds effectively and they have to be able to access external finance. The pecking order theory has been used to examine the progression of the firm acquiring external finance through growth phases. Love (2003) using firm level data found that the sensitivity of investment to internal funds is greater in countries with more poorly developed financial system. Greater financial development reduces the link between the availability of internal funds and investment (Rajan and Zingales, 2003; Demirgüç-Kunt and Maksimovic, 2001).

Klaper et al. (2006) employing a large dataset of Polish SMEs find that firm size and growth is positively related to external debts, while profitability is negatively related. Their

finding suggest that firms at the beginning use internal funds, following the external finance that is possible due to the growth of the firm and records of activities, and finally firms may issue equity. Similarly, Abor and Biekpe (2007) use financial data on 105 enterprises over a six year period to find out what determine the use of bank financing by SMEs in Ghana. In line with pecking order theory, they found positive relationship between firm size, age, asset structure and bank financing, and negative relationship between profitability and bank financing. Their findings explain that SMEs at the beginning use internal sources, continuing with using bank financing over time as firms grow in size. Pecking order theory is generally consistent with financial life cycle theory elaborated by Berger and Udell (1998).

2.2.2 Life cycle theory of the firm

Finance is most important resource for growth of the firm. In the theory of capital structure, external finance consists of funds that firms obtain from outside of the firm. It is contrasted to internal financing which consists mainly of profits retained by the firm for investment (Modigliani and Miller, 1958). SMEs need external finance to continue their operations and achieve growth. Based on existing literature and empirical evidences Levine (2005) argue that better developed financial system ease the external financing constraints facing firm, suggesting that this is one mechanism through which financial development matters for growth. Moreover, higher level of financial development facilitates growth in three dimensions including firm, industry and aggregate economic growth.

Life cycle model of growth originates in economics literature which is used to describe financial sources needed during growth phases of the firm (Penrose, 1952; Rostow, 1960). Berger and Udell (1998) suggest that this theory explain the growth of the firm through different stages, involving the financial sources at each stage of firm's life cycle, facilitating identification of potential funding gaps at various points in a firm's development. Growth phases of the firm is not standardized, hence management literature examines different phases of growth where most basic phases of firm' life cycle are born, growth and decline. However, Weston and Brigham (1970) elaborate six phases of growth in line with financial sources needed.

Table 2.1 The financial life cycle of the firm

Stage	Source of finance	Potential problems
Inceptions	Owner's resources	Undercapitalization
Growth I	As above plus: Retained profits, trade credit, bank loans and overdrafts, hire purchase, leasing	Overtrading, liquidity crisis
Growth II	As above plus: Longer term finance from financial institutions	Finance gap
Growth III	As above plus: New market issue	Loss of control
Maturity	All sources available	Maintaining return on investment (ROI)
Decline	Withdrawal of finance: Firm taken over, share repurchase, liquidation	Falling ROI

Source: Weston, and Brigham (1970).

The model presented in Table 2.1 outlines different finance sources at various stage of growth of the firm, along with potential barriers of raising finance. Life cycle financial model incorporates some elements; and remains consistent with trade off theory, agency theory, and pecking order theories; describing sources of finance and potential problems during stages of financial life cycle of growth.

At the first stage firms will find difficulties to accessing external finance. The most important finance during this phase will be personal savings of firm owner and finance from friends and family members. A firm will hire sufficient capital to initiate trading, a lack of planning may affect undercapitalization problem. In extreme conditions of doing business especially facing with strong or unfair competition which is the case in economies of transition where informality is extended phenomenon, the firm may not be able to survive. If the firm is successful, in the second stage would have opportunity to invest its retained profit and based on accumulation of trade records facilitate access to external finance from financial institutions and trade credits. In order to overcome operational costs firms may receive overdrafts which in the one hand enhance firm growth, on the other hand extends the problem of liquidity and overdrafting. In the next stage the firm would face demands to pay short term debts and achieve strategic growth objective. These requirements will suitably be fulfilled by long term debt, or by raising external equity through a private placement or initial public offering of common stock. A

consequence of the sale of equity for the owner is loss of control and managerial independence (Berger and Udell, 1998). In the stage of maturity, firms have acquired a trading history and consolidated network enabling owners to access broad range of external finances. After the phase of maturity, a number of firms may enter a stage of decline due to diminishing returns, whereupon the firm may be liquidated or taken over (Steinmetz, 1969).

2.3 The SME financing gap

The financing gap is prevalent phenomenon in economies around the world. It is regarded as a huge barrier that interrupts development of SMEs. Financing gap is a term that is typically meant to imply that sizeable share of SMEs cannot obtain financing from banks, capital markets or otherwise suppliers of finance for their business activities because the flow of credit would be affected by changes in either the demand or the supply of credit (Quaye et al., 2014). SMEs are the backbone of all economies and therefore financial means are more crucial for this type of firms. Increased information on all aspects of SME market development could promote SME financing, as financial institutions would be better able to judge the attractiveness of the segment and adapt their business models to serve it. In order to get a more complete picture of the SME finance landscape, systematic efforts should be launched to estimate the number of SMEs in the informal sector as well as to examine their access to financial services (IFC, 2013). Financing gap occurs when there is less supply of funds compared to demand for funds requested by SMEs. According to OECD (2014) an actual financing gap exists if firms that need financing cannot obtain it due to the existence of market imperfections.

Even though small companies have limited investments, they all face the same issue in their early stage, providing means that would enable to start up the business and test their product or service. If SMEs cannot find the financing they need, brilliant ideas and entrepreneurial activities may fall by the wayside and this represents a loss in job creation and potential growth for the economy. Barth et al. (2011) argue that SMEs from countries with higher levels of non-performing loans encounter greater financing obstacles. Banking sectors with higher ratios of non-performing loan indicate higher default risks. Thus, banks tend to charge higher interest rates, require larger collateral value and undertake more prudent lending for SMEs (De la Torre

et al., 2008). This phenomenon is more present in transition economies. SMEs with larger markets potential find easier to access credits. The type of industry is another feature that determines the SMEs demand for finance. In this context, Levine (2004) argues that SMEs in manufacturing industries need higher amount of finance to achieve their growth objectives. On the other hand, Silva and Carreira (2010) argue that due to lack of assets firms in service sector avoid long term lending.

More developed banking sector contributes positively to SMEs' access to both short- and long-term loans. Banks from more developed banking systems provide loans with average longer duration and lower annual interest rates (Barth et al., 2011). In general, financial access in developing countries is observed to be much lower compared to that in developed countries. Developed financial markets provide payment services, mobilize deposits, and ease investment financing. The modern market-based model of banking is more likely to work to the advantage of SMEs than highly controlled banking that is closed to foreign competition (OECD, 2006).

Some of barriers that hinder allocation of funds to SME sector are: asymmetric information, lack of trust between SMEs and banks, lack of management skills, poor business plans of the SMEs, lack of track record, and lack of institutional support to protect investment and enforce contracts. Beck (2007) argue that transaction costs and asymmetric information between borrower and lender are the driving factors explaining the limited access to external finance by many SMEs in developing as well as in developed economies. Removing regulatory obstacles could also significantly increase SMEs' access to finance. In addition, more efficient courts and legal procedures have the potential to reduce enforcement costs for lenders (IFC, 2010).

A significant number of SMEs could use funds productively if available, but are often denied access to financing, thus impeding their creation, survival and growth. Although, SMEs represent a wide spectrum with respect to their relative size, sector of activity, seniority, location and performance, there is a vital need for innovative solution for their financing in a globalized knowledge-based economy (OECD, 2009). Berger and Udell (1995) argue that lending records of SMEs are important to obtain bank loans. The experience in business means that SMEs may have accumulated assets to meet the collateral requirements in order to access credits from banks.

2.4 Barriers faced by SMEs to access finance

Access to finance is one of the most serious constraints that affect SMEs growth. Despite their major contribution to the real economy and their importance recovery, the spectrum of funding alternatives available to SMEs is constrained compared with large enterprises. As a result of their organizational features and business strategies that are rarely publicly disclosed, SMEs are usually not as transparent as large enterprises. This informational opacity limits their access to external finance (Deutsche Bank, 2014).

Access to sources of finance is determined, by the firms development phase. During early phases of their development firms have to rely primarily on financial resources of owners or their families, sometimes in grants. Also, it is common that entrepreneurs join their financial and human resources to start and develop a business. During further phase of its development the firm is financed primarily from accumulation of financial surpluses and additionally by means of external capital. External capital becomes the main source of finance that enables firmsto invest in situations when capabilities for internal finance accumulation of SMEs are limited. Insufficient availability of external finance can restrict the firm's growth opportunities (Hyz, 2011). Some of the issues that lead to barriers faced by SMEs to access finance are the following: perceived high risks by commercial banks lending to small firms, lack of collateral, reputational effects and existence of information asymmetries between finance providers and borrowers (Quaye et al, 2014).Risteska et al. (2014) on the basis of the performed analysis of SMEs in Macedonia have identified the following issues as particular problems: lack of initial capital; frequent changes in legal regulation; high interest rates; insufficient and unstable consumption; strong competition from the big companies.

Beck et al. (2008) based on the perception of banks argue that they are attracted to the SME segment due to its perceived high profitability and good prospects. In terms of loans portfolio delivery to SMEs, banks in developed countries see competition as a major obstacle, banks in developing countries point mainly to macroeconomic conditions. Kuntchev et al. (2012) using cross country enterprise survey, constructed a model with four major firm groups to measure the extent of firms to credit constrained such as: fully credit constraint, partially credit constraint, possible credit constraint and not credit constraint. Using the four definitions they

found that firms that are not credit constrained are the minority in 86 out of 113 countries. Aggregating their data at the regional level they found that in Sub-Saharan Africa, East Asia, and in South Asia SMEs are more likely to be fully credit constrained than in other regions. In these three regions around 22-24 percent of SMEs are fully credit constrained, which means that these SMEs have no external credit of any form and are actively looking for credit. Similarly, applying the same model in a cross-country enterprise survey analysis World Bank (2013) found that in South Asia, East Asia and Pacific regions, firms tend to be at the two extremes of the credit constrained status: either they are not credit constrained at all (43%) or they are fully credit constrained (23%) with fewer firms in the two middle categories. The distributions of credit constrained status in Latin America and the Caribbean, Eastern Europe and Central Asia are very similar. In those three regions around 41 percent of the firms are not credit constrained and 10 percent are fully credit constrained. The proportions of maybe and partially credit constrained firms are similar, though Latin America and the Caribbean has more firms that are partially credit constrained while Eastern Europe and Central Asia has more firms that are maybe credit constrained.

The study of Leitner and Stehrer (2015) based on micro level financing patterns in European Union countries show that firms strongly rely on external sources to satisfy their capital needs, with bank finance dominating, closely followed by trade finance. However, they argue that getting external funds is not an easy task and not equally possible for all firms. In particular, SMEs appear to experience strong financing obstacles which limit their growth potential. This is a major policy concern since SMEs play a significant role in many economies in terms of employment, income and knowledge creation or innovation performance. It is broadly argued in theoretical framework and empirical evidences of financial barriers that there is a relationship between financial barriers encountered by firms and their financial positions. Results frequently show that highly leveraged firms, firms with low profits and firms with low amounts of collateral at their disposal find it more difficult to access external finance. Size and ownership also matters in this respect (EIB, 2014).

2.5 Access to external sources of finance

Access to external finance means both finances from bank and non-bank sources which continues to be one of the most significant challenges for the creation, survival, and growth of SMEs (OECD, 2009). SMEs have different needs and face different challenges compared to large businesses with regard to financing. Large businesses have ready access to equity capital markets, which are not accessible to the vast majority of small businesses. The lack of equity capital invested in small firms makes these businesses more reliant on other sources such as bank lending and other types of financial products (European Commission, 2013).

Due to economic development and favorable business environment, SMEs in the EU face less and less barriers to operate and grow. Although, the level of institutional and financial development in EU countries is high, SMEs still encounter some obstacles. Therefore, regarding business obstacles in EU-28 countries, SMEs perceived access to finance as the most pressing obstacle in Cyprus, Greece and Slovenia. In contrast, this problem is the least pressing in Sweden, the Czech Republic and Denmark (Leitner and Stehrer, 2015).

Business Environment and Enterprise Performance Survey (BEEPS) IV carried out in 2009 has indicated that access to finance was the first top barrier in SMEs performance in most of transition countries. Apart of the lack of institutional and financial development this constraint also was related to financial crisis of 2008 and 2009. Meanwhile, there was a slight improvement of the firms' access to finance in 2014 compared to 2009. According to BEEPS V SMEs in 29 transition countries indicate that access to finance is one of the major barriers to SMEs performance. In few countries access to finance is the top first barrier while in most of the countries included in the survey it was the second major barrier in firms' performance (BEEPS, 2014).

Theoretical framework and empirical evidence provide that in order to survive and grow most of SMEs need access to external sources of finance. In this context, Ayagari et al. (2007) argue that easy access to finance (low cost of registering property which makes it easier to put up collateral) and greater information sharing predict a large SME sector. Beck and Demirgüç (2006) based on analysis of recent empirical researches on effects of access to finance in SMEs growth, have found that access to finance is an important growth constraint for SMEs. Financial and legal institutions play an important role in relaxing this constraint, and that innovative financing instrument can help facilitate SMEs' access to finance even in the absence of well

developed institutions. The competitive business environment, of which access to finance is an important component facilitates entry, exit and growth of firms which is essential for the development process. Access to external finance affects implementation of growth opportunities (Fadahunsi, 2012).

2.5.1 Use of different sources of financing

SMEs use different sources of financing, internal and external. In addition to internal finance, external financing for most of SMEs is essential to enhance their growth objectives. It is systematically provided by theoretical framework that SMEs need external finance for short and long term investments whether for survival or growth. Though, the sources of finance differ substantially depending on business environment development and firm characteristics. According to Brown et al. (2011) SMEs in countries with weak rule of law use much less bank and lease financing and instead rely more on informal sources of capital such as friends and family or money lenders. In the poorest countries, trade credit is the most preferred source of external financing for working capital. In this context, SMEs' access to bank debts for new investment depends on the stage of economic development. According to Beck (2007) based on empirical research small firms finance their investment needs with bank credits less than large firms. Also, large firms have advantage in trade credit and development finance, while small firms seem to finance a larger share of investment with internal as well as informal sources of finance.

According to European Commission (2013) when looking for external and internal sources of financing in the EU countries, it was most common for SMEs to have only used external finance during the past six months. Just over half (54%) looked for external financing only; a further 22% of SMEs used both internal and external sources of funding, while only a few (4%) used only internal funding sources. Finally, one in five companies had not used any source of financing during the past six months. The most widely used external sources of financing were bank overdrafts (39%), leasing and factoring (35%), trade credit (32%) and bank loans (32%). Overall, 75% of EU SMEs had used at least one form of debt financing, while equity financing was used only by 5% of SMEs during the past six months.

Leitner and Stehrer (2015) argue that bank credits and trade loans are the two most important sources of external finance of SMEs. They used the dataset to take comparative approach, by analyzing the old member states EU-15 and the new member states EU-13 separately to account for and shed light on differences in macroeconomic context and banking sector structure and performance for the ease with which external financing can be accessed. In the EU-15, small size, young age and group-membership of SMEs are more likely to face stronger obstacles. On the contrary, in the EU-13, ownership matters such that, probably due to more sufficient private property banks can resort to firms that are owned by families or several entrepreneurs which are also less likely to face stronger obstacles when applying for bank loans. With regard to trade credits, results show that suppliers tend to consider particular types of ownership less credit-worthy. SMEs in the EU-15 that are either owned by a single natural person or by venture capital firms, business angels or others have a harder time getting the full amount of their trade credit requested from their suppliers. The results are more consistent when it comes to the role played by the general financial and economic situation of a firm. Specifically, history matters such that both banks and suppliers consider previous experience with external funding an advantage and are therefore more willing to grant the full amount requested. Silivestru (2012) in the research of bank loans and SMEs financing in Romania, shows that access to finance represents the second most pressing problem for all Romanian SMEs.

According to enterprise survey of the World Bank (2013) individual firms in Kosovo use various sources to finance their investments. However, the most important source for investment is internal source of financing. Firms use up to 70% of internal sources for investment, then the most widely used of external sources of financing is bank financing 20%, followed by equity or sale of stock for investment (8%), and other source of financing (2%) (IFC, 2013). These results show the lack of support for SMEs to access finance. In the survey of ECIKS (2014) overall, 60% of the SMEs indicated that they had a need for external financing over the last two years. When looking at sector differences, a financing need is most frequent in the accommodation and food service industry (almost 80% of businesses), while the wholesale and retail trades are slightly above average. In the construction and business services sectors less than 50% of SMEs had a financing need within last two years. Apart from sector differences, the study show that the need for financing apparently increases with firm size for obvious reasons.

2.5.2 *Experience with applications for external financing*

Bank lending is the most common source of external finance for many SMEs and entrepreneurs, which are often heavily reliant on straight debt to fulfill their start-up, cash flow and investment needs (OECD, 2015). To what extent SMEs use external financing, depends on many factors related to firm and country development characteristics such as possession of collateral, business plan, credit history as well as financial and economic development in the country. Fatoki and Asah (2011) argue that SMEs without collateral will find it difficult to obtain debt finance, also business information and managerial competencies are important for SMEs to access finance from commercial banks. Vos et al. (2007) examined two data sets of firms, one from UK and one from US, and argued that SMEs are found to be able to access finance from a sufficient number of external sources. Also, they found that younger and less educated SME owners more actively use external financing, while older and more educated SME owners are found being less likely to seek or use external financing.

Just over one in five SMEs in the EU applied for a bank overdraft and/or a bank loan in the last six months. Slightly fewer applied for trade credit (16%) and one in seven (14%) for other external financing. A small proportion (7% or less for each loan type) might have considered applying but did not do so because of possible rejection. Application for a bank loans were the most common in Luxembourg (32%), Slovenia (30%) and France (30%) but rarest in Latvia (5%), Estonia (8%) and Denmark (8%). Not applying due to fear of rejection was most likely in Cyprus (15%), Greece (15%) and Ireland (16%). In Ireland and Cyprus, the level of those not applying because of possible rejection slightly exceeded the level of those who applied, implying a considerable level of potential need among the SMEs. Outside the EU, the highest level of bank loan applications have SMEs in Turkey (42%), while the the lowest in Iceland (10%), (EC, 2013).

Applications for bank overdrafts, credit lines or credit card overdrafts were the most common in Italy (35%) and Slovenia (32%), while least common in Estonia (4%), Sweden (4%) and Greece (5%). Not applying because of possible rejection (5% overall in the EU) was most likely to have been a concern in Cyprus (15%), Greece (12%) and Ireland (12%). Outside the EU, SMEs in Iceland were most likely to have applied for a bank overdraft (39%), as opposed to

a bank loan. Applications by SMEs for trade credit were especially high in Spain (28%), Italy (30%) and Greece (34%) and lowest in Estonia (2%) and Latvia (3%), followed by Slovenia, Croatia and Hungary (all at 5%). Outside the EU trade credit was widely used by SMEs in Turkey (31%) (EC, 2013). Trade credit use is higher than bank credit in countries with weak legal environments where bank contracts are presumably more difficult to write (Demirgüç-Kunt and Maksimovic, 2002). Brown et al. (2011) show that use of bank debt for new investment is relatively constant across country income groups.

According to European Investment Bank (2014) factors affecting availability of external financing are related to the characteristics of the firms, such as credit history, their own capital, and firm outlook in terms of sales, profitability, business plans, and external factors, such as the general economic activity perceived by firms and the importance of access to public support, including guarantees. More than 50% of the respondents in distressed countries have argued that the general economic outlook is an important factor followed by the firm outlook (36%). For firms in non-distressed countries, the percentages are lower accounting for 37% and 24%, respectively. Credit histories play a more important role for firms in distressed countries (22%) than in non-distressed ones (10%), reflecting differences in underlying credit risk.

Based on empirical evidence Silivestru (2012) argue that most of Romanian SMEs turn to debt financing at an early stage and generally choose banks as their main lenders. In 2011, on average 87% of Romanian SMEs borrowings originate from bank loans, while borrowing from non-bank financial institutions recorded only 7.5%. While, National Bank of Romania based on Bank Lending Survey (2011) showed a significant overall tightening of credit standards on loans to SMEs. As a consequence, almost the third of SMEs which applied for a bank loan did not get any credit or got less than they applied for. Abdelsamed et al. (2014) based on sample of SMEs survey in Lybia show that a smaller firm has a higher probability to apply for a bank loan. On the other hand, tightened loan terms and conditions of the banks such as required collaterals and interests discourage bank loan applications.

2.5.3 Terms and conditions of banking finances

Terms and conditions of credits refer to standards negotiated between creditor and debtor and determined by supply and demand in the capital market. Most important features of credit terms are: total credit amount, time allowed for repayment, interest rates as well as guarantee for repayment such as collateral. The issue of collateral as guarantee for repayment in developing countries has been important determinant on loan conditions. Implementation of collateral depends on the background of real estate property rights and efficiency of courts. Therefore, it is most likely that in developing countries due to risks of debts repayment the terms and conditions of loans are more inappropriate than in developed countries. With this respect, due to the lack of assets to put as collateral SMEs find difficulties to access finance or the term and conditions of loans are inadequate to support their growth. Besides collateral, other specific challenges limit traditional bank lending to SMEs which are largely related to the greater difficulties that lenders encounter on monitoring SMEs relative to large firms (OECD, 2015). First, asymmetric information is a more serious problem in SMEs than in larger firms. SMEs often do not audit financial statements that yield credible financial information and have no obligations to make public disclosure of their financial reports, although they are generally obliged to produce them and make them available to relevant authorities upon request. Second, the principal agent problem, because once financing is received the entrepreneur may use fund in ways other than those for which it was intended. An entrepreneur might undertake excessively risky projects since all of the “upside” of the project belongs to the entrepreneur while a banker would prefer a less risky operation, even if profitability is less than under the riskier alternative (OECD, 2015). Since banks are not able to control all actions of borrowers due to imperfect and costly information, they formulate the terms of the loan contracts in such a way as to reduce the risks associated with borrowing.

The high collateral requirements and unfavorable interest rates are major constraints for SMEs to access finance. Based on survey of banks in developed and developing countries, at least three-quarters of banks require collateral to make business loans. Furthermore, there are no significant differences for small, medium-sized, and large firm financing. As expected, however, given that the informational and institutional environment is weaker in developing countries, a slightly higher percentage of banks require collateral to make business loans in these countries relative to banks in developed countries. Examining, more closely the factors relevant for small business lending, findings show differences between banks in developing and developed

countries. While the size of the loan is the most important criterion in developed countries, the firm's credit history with the bank is the most important factor in developing countries (Beck, 2008).

Banks apply strict standards when they assess creditworthiness of SMEs in order to obtain information in performance of business as well as the ability to repay the loans. Due to the risks imposed on repayment of loans banks choose to set high interest rates on the loans which hinder SMEs access to external finance. Lack of available external finance can result in firms' inability to enhance operations in appropriate forms and pursue market opportunities hence hindering their performance (OECD, 2014).

Leitner and Stehrer (2015) argue that particular country characteristics and the state and structure of a country's banking sector matter for successful bank loan and trade credit application processes of SMEs. However, effects differ across country samples. Only in the old member states or EU-15, SMEs that apply for bank loans are less likely to face higher obstacles if they are located in more rapidly growing economies or in economies with healthier banking sectors where banks hold higher capital buffers or in economies with banks that more strongly engage in relationship lending. The state of the economy is also decisive for the success of trade credit requests and while SMEs in faster growing EU-15 economies are less likely to experience higher obstacles, those located in new member states or EU-13 economies are more likely to experience higher obstacles. The state of the economy and the rule of law affect SMEs growth through the access to external finance.

SMEs in the Euro area are usually more dependent on banks than larger enterprises owing to their typically more opaque balance sheets and corporate capabilities as a result of less informative financial statements and shorter track records. Banks can in part mitigate these informational asymmetries and higher transaction costs for potential investors by establishing long-term and in-depth lending relationships, making it easier to assess the creditworthiness of their borrowers. Nonetheless, in economic downturns or times of crisis these informational asymmetries weigh particularly hard on SMEs' opportunities to obtain financing, and credit sources, including bank credit tend to dry up for small firms more rapidly than for large companies. Therefore, the lack of funds, alongside a generally stronger dependence on the domestic economic and sovereign environment, disrupts the business and investment activities of

small firms to a greater extent (Leitner and Stehrer, 2015). According to Silivestru (2012), since Romania entered the European Union, the financial support system focused more and more on providing funding resources for SMEs by lowering the cost of borrowing from banks and other credit institutions.

2.6 The role of Finance for SMEs growth

In transition countries, it was crucial firstly to have legal and regulatory institutions in order to enable SMEs to register and get license for working purposes. Since there was a lack of relationship and trust between banks and firms, the establishment of different laws, such as commercial, contractual, property rights, bankruptcy and collateral, real estate regulations and labor, have contributed significantly to strengthen their relationship and provide access to external finance. SMEs encounter a difficulty with the compliance cost as a result of changes in the rules and regulations, as well as in laws and administrative procedures. External finance remains a challenge for SMEs, especially for new enterprises, which usually start their businesses with their own sources. Nevertheless, in order to grow, SMEs have to expand by ensuring external finance from bank or non bank sources. It should be emphasized that small firms encounter a challenge to access external finance mainly because they are less able to provide track record and collateral (Hashi and Krasniqi, 2010).

Although, research shows that financial development accelerate aggregate economic growth, theoretical conflicts between economists regarding cross-firm distributional effects of financial development remains unresolved. By using cross-industry and cross-country data, Beck et al. (2008) find out that financial development will have cross-firm distributional effects, helping small firms more than large ones. These results are consistent with the view that small firms face greater informational and contracting barriers to raising funds than large firms. As a consequence, the financial development is particularly important for the growth of industries that for technological reasons are naturally composed of small firms. In addition, the essential ingredients of developed financial system include the following: (1) respect for property rights, (2) an accounting and disclosure system that promotes transparency, (3) a legal system that enforces arm's length contracts cheaply, and (4) a regulatory infrastructure that protects

consumers, promotes competition, and controls egregious risk-taking (Rajan and Zingales, 2003).

The access to finance in appropriate forms facilitates firm growth and new firm formation. Rajan and Zingales (1998) argue that better developed financial system facilitates access of firms to external finance in order to meet their growth requirements. In addition, they found that financial development improve growth rates of industries that are technologically more dependent on external funds. Similarly, Claessens and Laeven (2003) have analyzed the joint effect of financial sector development and property rights protection on the access of firms to external finance. By using cross country sector data they argue that in countries with financial development and developed property rights firms might allocate resources better and consequently grow faster. Hashi (2001) in the survey of SMEs in Albania in the early transition, indicate the role of financial barriers to SME growth, especially when they are combined with the poor institutional environment.

Demirgüç-Kunt, and Maksimovic (2005) use a different dataset to investigate the effect of financial development on easing the obstacles that firms face to growing faster. They show that financial development weakens the impact of various barriers to firm growth and that small firms benefit the most from financial development. Butler and Cornaggia (2009) as measured with the sample of firms in some states in USA, indicate the positive relation between access to finance and productivity of firms. They found a crucial linkage between finance and economic growth. In the analysis of theory and empirical studies Levine (2005) indicate that microeconomic-based evidence is consistent with the view that better developed financial system ease external financing constraint facing firms, which illuminates one mechanism through which financial development influences economic growth.

2.7 Financial institutions in Kosovo

The creation of new financial sector in Kosovo has started, immediately after the war. In 1999, was established Banking and Payment Authority of Kosovo (BPAK) which later was transformed to Central Bank of Kosovo (CBK) as an independent public body which in

accordance to constitution reports to the Assembly of Kosovo. The main responsibility of CBK, among other tasks is licensing and monitoring financial institutions in the country.

The CBK has maintained a focus on preserving banking sector stability. Having adopted Euro as currency, CBK does not have access to monetary policy instruments. The monetary and fiscal authorities have pursued structural reform agenda, which includes the following: allocation of funds for Emergency Liquidity Assistance; establishing a Deposit Insurance Fund; enacting a new Law on Banking, Microfinance and Non-Bank Financial Institutions which was approved by Parliament; promotion of a safe and efficient payment system; and, a receipt of a user assigned code from the Society for Worldwide Interbank Financial Telecommunication (SWIFT). As a consequence, in 2014 Kosovo was able to introduce international bank account numbers (IBANs) (World Bank, 2015).

Since its establishment the Kosovo's financial system has been characterized by continuous expansion of its activity. The value of total assets of financial institutions in 2015 amounted to 4.73 billion, corresponding to an annual growth of 9.5 percent. The structure of financial institutions continues to be dominated by the banking and pension sector, which in 2015 accounted for 69.1 and 25 percent respectively as shares of total assets of the system. The third component of assets is the insurance sector with 3.2 percent followed by microfinance sector with a share of 2.5 percent to total financial system assets (CBK, 2015).

The structure of financial system has expanded also in terms of the number of financial institutions operating in the country. In Table 2.2 are presented the figures of financial institutions in Kosovo during the period 2012-2015.

Table 2.2 Financial institutions in Kosovo

Description	2012	2013	2014	2015
Commercial banks	8	9	10	10
Insurance company	13	13	13	15
Pension funds	2	2	2	2
Financial auxiliaries	39	40	41	43
Microfinance institutions	19	18	18	18

Source: CBK (2015), Financial Stability Report

As shown in Table 2.2 the number of financial institutions in recent years is steadily increasing. The total number of financial institutions in 2015 has reached 88. Commercial banks

continued to expand their infrastructure, thus bringing their services closer to clients. However, the dynamics of infrastructure expansion is noticed to have slowed down compared to the previous three years, which can reflect the measures taken by banks to reduce their expenditure. In addition, it reflects the fact that banks that have been operating in Kosovo have managed to consolidate well their presence in the market in terms of their banking units in the territory of Kosovo. In 2015, the number of branches and sub-branches of commercial banks reached 310.

Despite the fact that financial sector remains stable and credible, the loan conditions offered for SMEs are unfavorable which shows lack of support for this sector. The greater use of internal compared to external finance for business investment is an indicator that financial services in Kosovo are still inappropriate and expensive. Banks face difficulties in the return of debts, because the courts are inefficient in resolving contractual disputes. Another barrier arises because many SMEs are unable to meet collateral requirements from the banks due to the lack of asset possession. Although, in certain cases businesses have difficulties to register assets as collateral because of unclear property rights and various property disputes. As a consequence to institutional barriers and limited financial sources interest rates remain high. This has prompted SMEs to often avoid loans, but instead account to internal financing and informal sources of finances or unite with other businesses in order to overcome financial constraints. However, the general perception is that the lack of access to external finance and absence of appropriate forms hinders SMEs growth in Kosovo. Beck (2007), argues that focus should be on reforms of the business environment, but also on policies that can help SMEs overcome financing constraints particular to their firm size and risk. Furthermore, the focus should be particularly on expanding and strengthening the financial sector in the country.

2.7.1 Banking sector and lending

Since early 50s, Kosovo's banking sector was a part of former Yugoslavia composed of National Bank and several state owned commercial banks governed under Yugoslavian Autonomous System. In the beginning of 90s the wars in former Yugoslavia have affected deepening the financial and economic crisis. In addition to the dissolution of federation, the financial system has fallen and banks went bankrupted.

In 1999 under UN Mission was established the Banking and Payment Authority in Kosovo which was authority for licensing and supervising commercial banks. After the proclamation of independence the Central Bank of Kosovo (CBK) as the successor of BPAK has increased its competencies in the domain of financial sector. Nowadays a number of commercial banks which have been licensed to operate in the financial market in Kosovo account 10 in totals. Banking sector is credible, though the products and services offered by this sector are unaffordable for many SMEs.

Despite the unfavorable conditions in other sectors, the banking sector in Kosovo performs well. The profit has constantly increasing during recent years, attributed mainly to the increase of loan portfolio and partly to the decline of expenses of the banks. According to Wright (2012), banking sector in Kosovo is safe, profitable, well capitalized, carefully regulated, and supervised in compliance with EU standards and with very limited exposure to risk.

The main role of the banks is to deposit money of those who have surplus, and lend to those who have deficit. Hence, banks contribute to development of businesses through allocation of money from saving form to consuming and investments. The banking system is main source of providing SMEs with access to finance and supporting economic development. In other words, the role of banks is of crucial importance having into account that other alternative sources of finances are limited in developing and transition countries. Kosovo as a transition country has a small market and lack of institutional efficiency, especially an efficient court system. In addition, a large extent of informal activities carried out by SMEs leads to mistrust between banks and SMEs, which consequently causes constraints to SMEs financing.

The deposits of banks in Kosovo in 2015 have reached the value of 2.5 billion, which according to CBK (2015) indicate positive perspective of consumers towards banks. On the other hand, the value of assets of the banking sector in 2015 amounted to Euro 3.27 billion, marking an annual increase of 6.9 percent. The highest contribution to the growth of sector's assets was given by the expansion of the loan portfolio which is dominant category of the banking activity. The majority of banking sector assets (85.4 percent) remains invested in instruments which bring profits such as loans, securities and the balance with commercial banks (Table 2.3).

Table 2.3 Banking sector's assets

Description	2012	2013	2014	2015
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	In mil. of euro	Share (%)	In mil. of euro	Share (%)	In mil. of euro	Share (%)	In mil. of euro	Share (%)
Cash and balance with CBK	298.4	11.3%	355.4	12.8%	358.2	11.7%	397.4	12.2%
Commercial banks	265.3	10.0%	261.4	9.4%	318.7	10.4%	341.9	10.5%
Securities	215.6	8.1%	246.3	8.8%	405.3	13.2%	443.8	13.6%
Gross loans	1,776.3	67.0%	1,825.7	65.5%	1,889.9	61.8%	2,005.2	61.3%
Fixed assets	49.9	1.9%	57.6	2.1%	55.2	1.8%	52.7	1.6%
Other assets	46.9	1.8%	40.5	1.5%	32.2	1.1%	28.6	0.9%
Total	2,652.3	100%	2,787.0	100%	3,059.5	100%	3,269.6	100%

Source (CBK 2015), *Financial Stability Report*

From Table 2.3 we can notice that loans remain the most important category of the banking sector, with a share of 61.3% of total assets. Lending activity of the banking sector has increased constantly during last four years, amounting 2 billion in 2015. The expansion of the lending activity among others was influenced by increased demand of enterprises for expansion of their operational capacity, and by the increased level of consumption by households. Structure of total loans is dominated by loans intended for enterprises, which in June 2015 represented 66.7% of total loans (CBK, 2015).

The structure of loans granted to enterprises by economic activity is dominated by trade sector with a share of 54.0% followed by loans for industry (mining, manufacturing, energy and construction) with a share of 23.2%. The sector of other services (hotel and restaurants, other financial services) accounts for 19.0%, while the agriculture represents the lowest share of bank loans (3.8% of total loans to enterprises) (CBK, 2015). In this context, Wasmus (2012) argues that agriculture sector accounting 13% of GDP is largely ignored by the banks only receiving 3% of bank loans. However, the agriculture sector could be less represented because they do not apply for bank loans or because they are rejected more often. Therefore, the agriculture sector is more likely the target for lending by microfinance institutions. In addition, though with relatively limited funds the government is subsidizing agriculture sector in order to overcome the financing gap and enhance competitiveness.

One of the main risks to which the banking sector in Kosovo is exposed is the credit risk. Recently, the non-performing loans to total loan ratio declined from 8.2 percent in 2014 to 7.2 percent in 2015. Regarding the sector on loans to enterprises, energy and manufacturing loans have higher non-performing loan rate (CBK, 2015). With regard to interest rate risk, the banking

sector is relatively well protected due to the fact that loans and deposits have mainly fixed interest rates and interest income and expenditures from these items are not affected by movements in interest rates until their maturity. Around 91.2 percent of total loans had fixed interest rates, while 100 percent of total deposits have fixed interest rates.

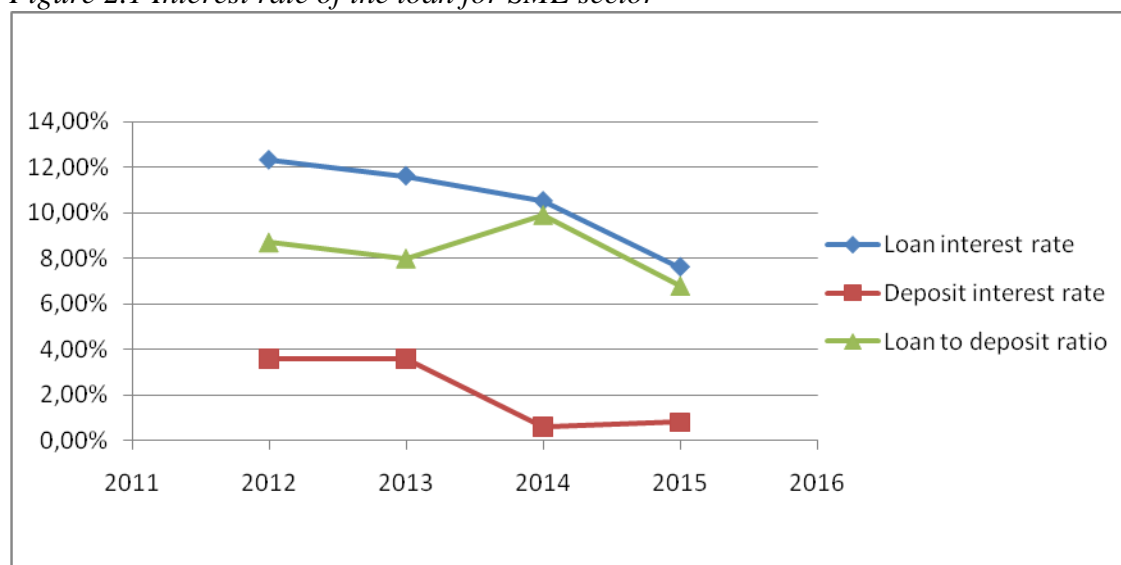
Longenecker et al. (2012) mentioned that commercial banks are the primary providers of debt capital to firms. Commercial banks prefer firms with proven track records and sufficient collateral in the form of hard assets. However, proven track records and collaterals are difficult to obtain for small businesses. Due to lack of track records and collaterals bank lending to small firms impose higher risk on loan repayment. In order to support SMEs access to finance the law for finance guarantee scheme has come to power in 2016. The USAID program in cooperation with Government of Kosovo and other donors have initiated the Kosovo Guarantee Credit Fund (KGCF) as an independent financial institution, established by law to enable lending to small businesses to which banks are not willing to lend because of risks. The KGCF offer the guarantee agreement to commercial Banks, micro finance institutions and non-bank financial institutions in Kosovo that enables them to obtain additional collateral security for loans issued to SMEs registered in Kosovo. The businesses will apply for a loan at a bank as usual, going through the bank's procedures. If the value of the prospective borrower's mortgage/collateral is not sufficient or other terms are not fully met, the bank may decide to qualify the business and issue the loan, using the KGCF guarantee. Businesses will not approach the KGCF to request the guarantee (USAID, 2016). In case of failure of the firms to repay the loan, guarantee scheme will cover up to 50% of the risk for loans to SMEs. This guarantee scheme has started with initial total fund of about twenty million Euros. This fund will be further supported by European Commission and USAID with the aim of supporting startup businesses as well as businesses that plan to expand their operations. The KGCF is designed to increase security for lending, which aim is to facilitate access to finance, create new jobs and increase competitiveness in the private sector. The Credit Guarantee Schemes (CGS) for SMEs lending are already functional in countries in the region. The investment and working capital loans are guaranteed by almost all CGSs. In the case of a guarantor in Macedonia only investment loans are eligible. Investment loans are excluded by CGSs specialized in trade finance in Bosnia-Herzegovina and Croatia. In Romania, all CGSs cover both investment and working capital loans, regardless of their target beneficiary group (European Bank Coordination Initiative, 2014).

2.7.2 Loans and interest rates

Lending activity of the commercial banks represents an important source of financing for the consumption and investments in the country. Loans issued to the SME sector, in addition to the low volume, are also characterized by high interest rates, reflecting the perceived uncertainty by banks with regard to this sector. The high level of interest rates for loans to SME sector may discourage the demand for loans by this sector therefore, representing an additional factor preventing the growth of SMEs.

In the very beginning of the banking system in Kosovo, when banks started to grant loans in 2001 the interest rates on loans provided for enterprises were around 22 percent, while the interest rates on consuming loans were around 18 percent. Loan conditions were unfavorable and particularly unaffordable for SMEs. Many SMEs were even discouraged to apply for the bank loan because the cost of loans was high, while business opportunities were limited. In line with consolidation of institutional framework, improvement of business environment and increased number of banks licensed to operate in the country, interest rates on loans slightly continued their declining trend over the years, though in recent four years there was a greater decrease. At the same time, interest rate on deposits has also decreased with similar trend of those on loans. The dynamics of the interest rates of the loans for SMEs in Kosovo is presented on Figure 2.1.

Figure 2.1 Interest rate of the loan for SME sector



Source: CBK, Financial Stability Report 2015

In 2015, the average interest rates on deposits were 0.8%. On the other hand, interest rates on loans were 7.6%. Consequently, the interest rate spread in 2015 averaged at 6.8%. Compared to other countries in the region, interest rate on deposits are lower, while on loans are still higher, indicating that banking services in the country are expensive and unfavorable for SMEs.

2.7.3 *Micro finance institutions*

Micro finance institutions (MFI) have important role in granting loans to low level income businesses and households. These institutions provide access to finance to small businesses with higher risks of loan repayment, enabling them to develop their business. Wang (2013) argue that the SMEs with higher financial risk and lower level of productivity are more likely to seek microfinance. Due to credit standards practices and risk exposure loans issued by microfinance institutions are usually charged with higher interest rates compared to loans of the banks. In Kosovo, interest rates on loans of the microfinance institutions are extremely higher than the interest rates applied by the banking sector. Thus, the average interest rate on microfinance institution loans in June 2015 was 24.2% which is approximately three times higher than average interest rates of bank loans (CBK, 2015).

Due to the lack of institutional infrastructure development, in the starting phase of development, MFIs were registered at the Ministry of Public Services as Non-Governmental Organization (NGO), obtaining the status of non-profitable organization. Though, their major activity was microcredit lending which enables them generate revenues and profits, they were exempt from taxes. In April 2012 with adoption of the Law by Assembly of Kosovo¹ it has made it mandatory transformation of MFIs to individual business or Joint Stock Companies. The functioning of MFIs in Kosovo is regulated by the Law on Banks, micro finance institutions and non-bank financial institutions. In August 2013, the Board of CBK has approved the Regulation on reporting of MFIs to the CBK (CBK, 2013). Most of MFIs are member of the Association of Microfinance Institutions of Kosovo (AMIK). AMIK has been established in 2012 with responsibility to support infrastructure, activities and connections of MFIs.

¹Law No. 04/L-093

Nowadays, the micro finance institutions have increased in number and they account 19 in total. Despite their growth, MFIs have faced significant difficulties due to increased competition from banks, unclear regulatory regime, and the inability of many MFIs to create a business model that is relevant to the needs of the market. In addition, the newly introduced legislation requires tighter requirements for licensing, regulations and supervision of these institutions, and eliminates their role in deposit mobilization (Easterling et al., 2012). Since microfinance institutions do not have the legal right to be financed by customer deposits, the majority of liabilities of these institutions are comprised of foreign credit lines. Therefore, the exposure of microfinance sector as regards to liabilities is high (CBK, 2015).

The creation of the MFIs is an alternative response to fill the gap of access to finance for SMEs in Kosovo. Namely, Kosovo as transition country has dynamic and unstable business environment characterized by micro and small enterprises as well as including large informal sector. These types of enterprises face higher obstacles to access finance from banks, and they often apply for micro loans of the MFIs as a source of financing. Based on the purpose of loans, MFIs provide different types of loans such as: business loans, consuming or home improving and agro loans. This may help enterprises to improve their performance as well as to support people in rural areas by poverty alleviation. Although, the cost of finance provided by MFIs is expensive in some cases their loans can support enterprises to develop their business.

The majority of microfinance loans in Kosovo of about 65.2% are intended for households, while loans intended for enterprises share 34.8%. The service sectors lead the structure of loans with share of 45.2%. Agricultural sector remain one of the sectors which is the most credited by microfinance institutions with 25.2% in 2015, unlike bank lending characterized with more limited access to finance (CBK, 2015). The MFIs are becoming important sector in Kosovo, because they are the backbone of providing access to micro-credits by new businesses and agribusinesses which usually have difficulties with their finances. Besides the access to micro-credits, microfinance institutions also provide financial training for SMEs representatives (AMIK, 2016). Hence, by providing access to micro-credits and business training microfinance institutions in Kosovo play an important role in SMEs growth.

Despite the risk exposure, microfinance institutions continue to be characterized by good quality of loan portfolio. In 2015, non-performing loans to total loans ratio was 5.4%. The low

level of non-performing loans may have been impacted by the role bailiffs and wage increases in the public sector since the majority of loans issued by MFIs are intended for households (CBK, 2015). Having in account that the number of MFIs is growing and their experience of operation in the market, it is expected that they will find alternative and innovative ways to meet the requirements of their borrowers in the SME sector. However, their capacity of providing access to finance to SMEs is still limited, while it offers inappropriate conditions.

The improvement of microfinance credit conditions has proved to be crucial of importance for development of SME sector in developing countries. According to Quaye (2013) access to credit which is the major challenge in the SME sector has been reduced to a large extent through the operations of micro finance institutions. The microfinance institutions are most likely to issue short term, very small and unsecured loans. They usually target the clients that commercial banks are not willing to lend because of standard credit practices. Therefore, microfinance institutions use more flexible credit standards in the case of loan issuance compared to traditional banks. Firms that borrow from microfinance institutions are often self-employed entrepreneurs and are less likely to conduct operations with a business license, keep audited accounting records, and pay taxes (Brown et al., 2011).

2.8 Banks competition

The main formal external financing source of SMEs is the bank. Banks in Kosovo are growing in number and they are increasing the range of products and services as well as improving their quality. Banks facilitate the allocation of money from deposits to credits in favor of its customers. Developed banking system provides payment services, mobilize deposits, and ease access to finance. The most important banking service is lending to people which is an important source of consumption and investment. The largest part of loans issued by banks in Kosovo is delivered to SMEs, which support them to develop their business potential.

Although, banking sector in Kosovo is growing, there is still a relatively small number of banks, while major share in the market is dominated by banks with foreign ownership which has contributed to the lack of access to finance and unfavorable loan conditions for SMEs. Eight out of ten banks licensed to operate in the country belong to foreign ownership and manage 90.4

percent of total assets and own 93 percent of total banking sector capital (CBK, 2015). With respect to the country of origin Austria, Germany, Slovenia, Albania and Serbia are represented with a single bank each, while Turkey is represented by three banks. In the banking sector operate also two domestically owned banks. The three largest banks are Procredit Bank (former Micro Enterprise Bank) established in 1999 by German and Dutch investment, Raiffeizen Bank (former Kosovo American Bank) taken over in 2000 by Austrian investment and TEB Bank established in 2008 by Turkish investment. Although, declining in recent years, the banking sector continues to be characterized by the concentration of banking business in three major banks which together represent 65% of total assets of the banks in the country.

In 2001 have been established several new banks, amongst them Commercial Bank, New Bank of Kosovo, Kasabanka, Bank for Business, and Credit Bank which has bankrupted in 2006. In addition, in 2008 have been licensed Albanian Commercial Bank (BKT), Commercial Bank of Serbia, Turkish Economic Bank (TEB) as well as NLB Banka from buying the shares of two former banks Kasabank and New Bank of Kosova. In the beginning of 2013 the Turkiye İş Bankasi has been licensed to operate in the country.

Foreign banks are more inclined to lend to large enterprises that are more transparent or to foreign enterprises. Banks from countries with higher foreign bank ownership take longer time to approve loans to SMEs, charge higher interest rates, and require higher collateral value (Barth et al., 2011). In this context, Beck et al (2008) argue that foreign-owned banks rely more on hard verifiable information for lending decisions and real estate as collateral. However, it is worth to mention that foreign banks in Kosovo through their investments, well qualified and experienced management, adoption of high technology, and professional training for employees have essentially contributed to rebuilding safe, credible and sustainable banking sector.

According to International Monetary Fund, despite banks' healthy liquidity ratios, Kosovo has 33 percent credit ratios to GDP which is the lowest level of credit penetration in the Western Balkans (IMF, 2015). This is partly a function of demand because many potential borrowers do not see in Kosovo investment opportunities or an attractive investment environment. Also, business environment, is also holding back lending. Difficult debt collection procedures, uncertain court processes, and high informality have influenced conservative lending stances and led to both high interest rate and high collateral requirements. Therefore, many SMEs do not even apply for the loans because the lack of investment opportunities as well as

unfavorable loan conditions. In this context, banks are partly focused on short-term trade financing and personal loans to government employees rather than loans to private enterprises which could help to grow a more dynamic economy. Banks provide insufficient debt financing to SMEs due to several factors including lower returns, higher risk perceptions, an uninspiring regulatory environment, and a lack of intermediary skills, experience and capacity (Bouri et al., 2011).

The easing of credit standards by banks started in the recent period by offering better conditions for obtaining loans also the customers who have had lower classification in terms of their financial surveys. According to CBK (2015) it is important that further expansion of lending to be done in accordance with the principles of sound lending, aiming at avoiding possible deterioration of credit quality.

Overall, banking infrastructure has increased during recent years with 310 sub-branch offices throughout Kosovo. The number of ATMs installed by commercial banks has reached 505 in June 2015 while the number of POS terminals reached 9,449. The number of cards with debit function, in June 2015 reached 690,914, while the credit cards reached 126,812. Also, e-banking accounts through which users' access online the banking services have continued to grow. Until June 2015, the total number of e-banking accounts reached 164,583. Consequently, the number and the volume of transactions through e-banking service have considerably increased.

According to Wasmus (2013) the three top barriers that hinder access to finance of SMEs in Kosovo are: (i) High level of informality of SMEs, (ii) lack of collateral and enforcement mechanisms, and (iii) insufficient diversity in financial sector. Many registered enterprises do not have proper management accounts, evade taxes and are unable to present well formulated proposals to banks. This increases the costs of lending and may discourage Banks to grant loans to SME sector. The most available source of collateral are apartments which in most cases are not registered, courts are slow and erratic in foreclosure procedures. Furthermore, Kosovo's financial sector is dominated by traditional commercial banks. The combined portfolios of leasing companies, non-bank financial institutions and microfinance institutions account for less than 10% of total assets. Products such as long term loans could be provided by equity funds or investment banks, both of which are absent in today's market and factoring is not offered at all.

The enterprises in Kosovo rely nearly 70% on internal finance for investment and borrowing from informal source of financing such as family, friends or relatives. Efficient financial markets reduce the reliance on internal funds and on money from informal sources by connecting firms to a broad range of lenders and investors (IFC, 2013)

2.9 Bank products and services for SMEs development

In order for SMEs to grow and their positive impact on the economy to continue, they need access to financial services, which historically have been severely constrained. SMEs are particularly in need of bank services because they lack the cash flow to make large investments (IFC, 2010). At the starting phase of development SME sector was considered very difficult to be served by banks. Since this sector has come of crucial importance for economies worldwide, banks have adopted their strategies in order to have SME sector as the main target for their products and services.

Despite the recognized role of the SMEs in innovation, job creation and economic growth, evidences indicate that this sector suffers the lack of financial services in appropriate form. Besides the lack of access to finance, reports also highlight the cost of finance is unaffordable for SMEs in order to support their investments and growth. The World Bank doing business report indicates that access to finance is one of the most important factors for enterprise performance (WB, 2015). While, according to the World Bank Enterprise Surveys, SMEs report the cost of finance as the greatest obstacle to growth and rank access to finance as another key obstacle (BEEPS, 2009). The Riinvest survey analysis (2014) indicates that SMEs report the cost of finance and collateral requirements as major obstacles for their access to finance. Although, the high interest rates on the loans, banks in Kosovo do not provide grace periods on the loan repayment in order to facilitate SMEs long term investments. Moreover, the banks do not allow loan cancelation if clients are able to pre-pay their loans in order to avoid further charge of interests which often is unaffordable particularly for small businesses.

According to Business Support Center of Kosovo (BSCK, 2012) the lending for SMEs in Kosovo has become easier despite the access to finance continues to be their major issue. The existing findings show that SMEs encounter financial constraints as market of Kosovo

encompasses enormous financial constraints. SMEs rely more on internal business funds and less on external finance because of difficulties in accessing bank loans as of high interest rates, whilst high collateral requirements.

Banks are targeting SMEs as their strategic market aiming to provide more and more wide range of products. Among the most important activity of the banks is lending in short and long term for SMEs in order to carry investments for working capital or expansion of business. Lending is usually offered from banks through credit lines, credit cards and overdrafts. Also, the banks provide non-lending products for SMEs which are important for their operations. Some of those products include deposits and savings, transactions, and advisory services.

Deposits and saving products provide SMEs with cash management to increase their safety and obtain revenues from their retained funds. Through transactional products SMEs benefit from payments payrolls, transfers and use of debit and credit cards worldwide. Transactions made available from the banks can save money and time of enterprises. All banks in Kosovo have already introduced e-banking enabling customers to process a range of services online such as: account checking, transfers, e-payments and so on. Points of sales (POS) terminals are installed in almost all enterprises that have bank accounts. Despite the bank efforts to reduce cash transactions through implementing new technologies as well as different campaign for non-cash society, yet the majority of transactions are performed with cash, associating with high rate of informality in economy of the country. Moreover, as the banks are targeting SMEs as their strategic sector they offer different services to intensify relations with this key sector. Hence, the banks are providing the advisory service for SMEs in order to support them in producing financial statements, developing business plans, and selecting appropriate financing products. These advisory services may improve SMEs ability to access finance as well as encourage them to apply for bank loans. The banks, most likely use cross selling strategy through offering a wide range of products and different package of services in order to increase the business relations with SME sector.

Chapter 3

3. Institutional barriers

3.1 Introduction

3.2 Theoretical framework

3.2.1 *Institutional Theory*

3.2.2 *Institutional constraints of SMEs development*

3.3 The role of court efficiency

3.4 Rule of law and business climate

3.5 Business fees and policy constraint for SMEs

3.5.1 *Business registration and licensing*

3.5.2 *Taxation*

3.5.3 *Labour regulation*

3.5.4 *Criminality and corruption*

3.5.5 *Lack of infrastructure provision*

3.5.6 *Business bankruptcy*

3.6 Trade liberalization

3.7 Political instability

3.1 Introduction

This chapter elaborates the literature review on the impact of institutional barriers in performance of SMEs. In the literature, the large numbers of studies argue that institutional barriers are among the most important features that impact entry, operation and growth of SMEs. In the context of theoretical framework we discuss the institutional theory and institutional constraints of SMEs development. The institutional theory addresses institutions as the rule of the games in the society which set the boundary of behavior for individuals and organizations. Furthermore, the theory highlights two types of institutions in society: formal and informal. Complicated legal rules, frequent changes in legislation and bureaucracy can be constraints when it comes to SMEs performance.

Further we elaborate the role of court efficiency and the rule of law which in literature is stressed to play important role in development of competitive SME sector through enforcing contracts, securing property rights, reducing of informality, and fighting organized crime and corruption. While, in the context of business fees and key services, as well as policy constraints we try to explain the role of severe features that affect SMEs performance such as: business

registration and licensing, taxation, labor regulation, criminality and corruption, lack of infrastructure provision, and business bankruptcy.

Trade liberalization is further elaborated with emphasis to the liberalization and openness of economy and its role in strengthening the SME sector as well as the competitiveness. In addition, the importance of the process of integration in international economic and trade organizations is elaborated. The lack of competitiveness in SMEs sector led to inefficient SME sector in Kosovo in terms of its economic integration in the international trade. Finally, we elaborate the role of political instability that reflects the low level of trust among people and firms towards public institutions; political, judiciary and administration which subsequently discourage business growth and economic prospects.

3.2 Theoretical framework

In general, the institutional factors are the main features of the business environment, which consists of legal system, judiciary and law enforcement agencies, as well as the level of crime and the extent of the corruption within a country. Although there are various definitions for institutions from different perspectives, there is compliance among researchers that institutional framework is one of the most important factors that affect performance of SMEs. The OECD (2003) defined institutional framework as the set of governmental and other institutions responsible for the design and implementation of SME policies.

According to Smallbone and Welter (2009) the most important feature of business environment is the institutional framework within which SMEs operate. One of the major barrier that institutional context encounter is the implementation of the rule of law, which represents impediment to secure property rights. Beck et al. (2008) explain that entrepreneurs in transition economies are more likely to reinvest their profits if they feel more secure about property rights protection in their country. The institutional factors affect the growth of businesses, especially the entrepreneurial activities. Hence, due to the poor institutional framework, many enterprises move to partially or fully informal sector by not obeying the necessary laws and regulations. This leads to unfair competition, because those that obey the laws and regulations encounter high costs of doing business (Hashi and Krasniqi, 2010).

Bah el et al. (2011) argue that businesses lose large share of their sale due to government regulation, poor infrastructure, crime and corruption. The implication of the losses is the lower aggregate output and total factor productivity. They have further indicated that, though some opportunities have been created yet the high interest rate, high tax and import duties, and high utility charges are the key institutional constraints leading to high cost of doing business in developing countries. Removal of barriers to business investment, growth and job creation depends on all levels of government, and administrative simplification is important to promoting the development of the SMEs.

A suitable business environment is essential for development of SMEs; the government can enable this by developing regulations to stimulate entrepreneurial activities and competition within SMEs. With this respect, Ovaska and Sobel (2004) have investigated the rates of entrepreneurial activity in post socialist countries and found out that such factors as low government corruption, credit availability, sound monetary policy, high foreign direct investment, contract enforcement, low regulations and taxes are associated with the higher rates of entrepreneurial activity. Beck et al. (2006) argue that main growth constraints of firms are financing, legal obligations and corruption. They suggest that focus on improving institution and the overall business environment is the most effective way of relaxing the growth constraints that firms face and facilitate their contribution to economic growth. Therefore, the better the business environment, the higher is opportunity for SME growth in a particular country.

Institutional changes constitute important area in transition which has to harmonize with market economy and political democracy. These also imply the most difficult task for transition economies since the moving to market economy require long term and crucial changes in laws and regulations. In addition, efficiency and enforcement of law represent a major challenge during institutional changes. Institutions, laws, social and economic environment need to reform in consistence with those of common trading countries and international rules and norms. The large scale of reforms undertaken in transition improves the quality of institutions which in turn support economic development. Furthermore, the role of institutions is of crucial importance in determining SMEs sector development as well as reducing informal economy. Among the most important reforms during transition processes towards market economy are the following: financial regulation reform, private sector policy, pension, labor policy, education and R&D, health care, environmental, public administration, and agricultural (World Bank, 2014).

3.2.1 Institutional Theory

The nature of institutions and their control on activity in social scientific thinking was never clear and consensual. The theories range from economic and political to religious and they variously emphasize either cultural forms of control or more organizational ones (Meyer, 2008). For long period of time in social scientific thinking the institutional theories have continuously evolved. From the Institutional Theory perspective organizations operate in complex environment to which they need to adapt their activity. In this context, North (1990) addresses institutions as the rule of the games in the society which set the boundary of behavior for individuals and organizations. He suggested on dividing two types of institutions in society: formal and informal. The formal institutions comprises of political, social and legal ground rules that establish the framework of rules for production and distributions. The informal institutions comprises of social behavior, codes of conducts, norms and conventions which derive from society's culture. In addition, he noted that organizations have to comply with institutional framework both formal and informal in order to survive and grow. Moreover, according to this theory quality of institutions can support or harm organization through transaction costs and making economic activities more predictive. Taking into account these types of institutions the theory aims to explain the rational way of organizational behavior in relation with stakeholders. According to Worthington et al. (2006), if the enterprise is to remain successful, constant attention needs to be paid to balancing the different influences on the organization and to the requirement to adapt to new external circumstances. This responsibility lies essentially with the organization's management, which has the task of blending people, technologies, structures and environments.

In transitions, where formal institutions lack the capacity to support individuals and organizations, informal institutions will take an important role on affecting activity of individuals and organizations. The consolidation and development of formal institutions over the time will reduce the role of informal institutions in organizations. Shihata (1996) indicates that in all societies informal rules of custom and usage play an important role. This is particularly true when law enforcement is weak and corruption is wide-spread. In such situations, formal law may be readily replaced by informal rules which receive greater compliance in practice. Estrin et al.

(2010) found that entrepreneurial activity still remain low in many places particularly in former communist countries, which they associate with the slow adaptation of informal institutions, including attitudes and social norms. Therefore, the change in informal institutions is slower than in formal institutions and accordingly overcoming the heritage of command economy system is more difficult. By creating appropriate institutional structures, entrepreneurial activities will be developed. With this respect, Hoxha and Capelleras (2010) argue that informal barriers are present due to the lack of strong institutional framework.

In fact, from the institutional theory perspective, it has been acknowledged that individual perceptions on fairness and efficiency of institutions affect performance. In this context, Davidson (1991) based on empirical research in Sweden has indicated that individual perception of business owners on institutional environment affect their motivation and behavior. Institutions are designed to facilitate and reduce transaction costs, and guide interactions of individuals and organizations. Overall, both formal and informal institutions influence the goals, beliefs and motives of individuals and organizations.

SMEs are characterized by smaller structure but with greater ability to adapt to external institutional environment. The Institutional theory indicates that development of institutional structures has promoted SMEs growth. Formal institutions create opportunity fields for SMEs development, while informal institutions determine individual perceptions on entrepreneurial opportunities (Smallbone and Welter, 2001). By employing institutional approach in explaining barriers to doing business, Hoxha (2009) argue that institutions, both formal and informal, are important factors in shaping the entrepreneurial activities.

3.2.2 Institutional constraints of SMEs development

Institutional constraints are generally treated with the focus of SMEs interactions with government bodies, including licenses, taxation and government policies for SMEs. It is difficult for SMEs to grow and use their potential as the generator for job creation, innovation and economic growth if they have constraints of the unfavorable tax system, complicated regulation and court inefficiencies. Erastrus et al. (2014) argue that institutional constraints such as high interest rates, high tax and import duties are among most significant factors that increase the cost of doing business in developing countries, harming SMEs development. Estrin et al. (2013) using

Global Entrepreneurship Monitor (GEM) surveys in 42 countries for the period 2001-2006 found that the relation between growth aspiring entrepreneurs and institutions is complex; they benefit simultaneously from strong government in the sense of property rights enforcement, but are constrained by corruption.

The transition of economy provides reallocation of resources through process of privatization as well as extending private sector with entry of new firms. This opens the doors to competitiveness through easy entry of new firms, but frequent changes in the rules and regulation, high taxes, and bureaucracy represent barriers for growth of firms. Heavy regulation and high taxes provide an incentive for SMEs to find ways to avoid regulations and tax payment leading to the growth of informal economy. Furthermore, institutional constraints may increase transaction costs facing SMEs and hinder the transition to a competitive market economy (Bartlett and Bukvic, 2001).

Using survey sample of SMEs in Slovenia Bartlett and Bukvic (2001) divide barriers that hinder SMEs growth into five groups, including institutional, internal organization and resources, barriers external to the firm, as well as finance and social barriers. Among these groups institutional barriers are most serious one that hinders SMEs growth. Complicated legal rules, frequent changes in legislation and bureaucracy obstruct the competitiveness and growth of SME sector. Moreover, unsuitable tax system and various discriminatory legal regulations towards small firms can hinder their capability to grow (Bartlett and Bukvic, 2001).

In the transitional context SMEs are of crucial importance to boost the productivity and development through competitiveness, innovation and growth. The institutional environment is largely recognized as a guarantee and incentive for investment. Therefore, individuals are more likely to become entrepreneurs and they are more likely to reinvest their profits if the institutional environment is favorable and sustainable. Developed institutions and more enabling business environment are keys to improving firm entry and performance, and particularly that of smaller firms (Beck and Demirgüç, 2005). Hashi and Krasniqi (2010) argue that despite the growing importance of SMEs in all transition economies, they still face many institutional barriers which have prevented them from making a greater contribution. It is not difficult to imagine that SMEs would have a tough period when they face unfavorable tax system, discriminatory regulations and complicated laws (Zhou and de Wit, 2009).

According to the research of Peci et al. (2012) using in depth interview of firms in Kosovo the key findings in the context of formal institutions such as high taxes, fiscal policy, general environment, approach on regional and international markets represent barriers to SMEs. In addition, informal activities caused by low level of professional and ethics of officials in respective institutions and poor enforcement of regulations have impact on increasing transaction costs, which in turn represent a major obstacle to the further growth of SMEs. Generally, the entry of new firms in Kosovo is easy, but the most serious obstacle is the growth of firms due to the lack of institutional support (BSCK, 2012).

Kosovo has already signed the stabilization and association agreement with European Union (EU) moving forward the process of integration in the EU. This stage gives a priority to institutional reforms including business environment as a key for development of SMEs. The agreement addresses the conditions and terms in improvement the rule of law, institutions and economic environment in consistence with countries of the EU which are the top trading partners of Kosovo. The reforms of institutional framework are assumed to affect the performance of Kosovo SMEs and subsequently the general social and economic development of the country.

3.3 The role of court efficiency

The function of courts and mechanisms for the rule of law is complex, challenging and costly. Many countries in Eastern Europe have been plagued by obstacles such as judicial corruption, the abusive use of procedural mechanisms to delay the process, the lack of access to information, and unreliable information systems (Elena et al., 2004). Law enforcement is not well functioning in many developing countries, where courts in charge are characterized by limited expertise and long delays (Djankov et al., 2008).

Recently in Kosovo has been introduced a modern legislation in accordance with principles of market economy. However, the law enforcement is unsatisfactory which requests commitment and improvement of state agencies performance in order to increase efficiency and quality. The inability to appropriately access courts in order to enforce contracts, secure property rights, or collect debts represent a challenge and barrier impeding SMEs growth. Generally, solving business disputes is costly and time consuming. The large numbers of

business disputes are pending cases for years waiting to be resolved by the courts which are overloaded and inefficient in accomplishment of their tasks in appropriate form. Moreover, the government and local authorities have not shown enough capability to further enhance institutional reforms which improve business environment. Therefore, there is a lack of applicability of laws which hinder the competitiveness, access to finance, investment, research and innovation, managerial organization, skills and professionalism.

The lack of court efficiency has led to the situation that SMEs in Kosovo rarely use formal contracts for business deals with counterpart partners. Instead SMEs tend to work and enter in business relations only with firms they know well and they can trust. Inability to use formal contracts with unknown entities can hinder the growth of SMEs and consequently can increase informal economy. According to Caner (2010) contract enforcement and the protection of property rights at low cost are very important for SMEs to start and survive. An SME friendly legal, regulatory and administrative environment mean that property rights are clearly recognized and contracts are easily enforced (OECD, 2004). If contract enforcement costs are too high SMEs may prefer to operate in the informal economy rather than engage in economic activities legally. Therefore, a workable and efficient court system is essential for SME growth. A well-developed legal system is important in facilitating firm growth (Demirguc-Kunt and Maksimovic, 1998).

Due to the lack of court efficiency, SMEs may avoid several transactions in order to avoid the cost and risk of going through enforcement mechanisms for dispute resolutions. In addition, inability of institutions to enforce the law creates insecurity for lenders. The creditors face difficulties to force debtor to pay debts or seizing his collateral will be costly and time consuming. Therefore, the law enforcement system that does not operate efficiently makes lending more risky for lenders and more expensive for borrowers. The high rate of loan interest in Kosovo is particularly attributed to the risk of lending and debt repayments.

3.4 Rule of law and business climate

As command economies began to move towards market economies they adopted a strategy for encouraging local and foreign private investment. In this context, the establishment of the rule of law attracts private investments, to the extent that it creates a climate of stability and predictability, where business risk may be rationally assessed, property rights protected, and

contractual obligations honored (Shihata, 1996). This in turn, leads to lower transaction costs, greater access to finance, competitiveness and business growth. The empirical findings presented by Nyström (2008) clearly points that better legal structure and security of property rights, as well as less regulation of credit, labor and business tend to encourage entrepreneurship. Using a cross-country survey data taken from the Global Entrepreneurship Monitor (GEM), Aidis et al. (2009) argue that the rule of law is the key institutional feature that affects entrepreneurial activity. However, these results are sensitive to the level of development. They found a significant effect in the sample of developing and middle-income economies, while in the sample of developed economies the effect of rule of law is insignificant.

Institutional barriers are mainly discussed with the focus on firms' interaction with government, including legalization, taxation, and government support (Zhou and de Wit, 2009). It is commonly acknowledged that SME sector demands from the government a range of reforms that create suitable business climate to stimulate firm entries and growth. Among factors that need to address in legal framework reform include defining the role of the government and the limits of interventions, appropriate governance, and improvement of performance of the public administration. The legal and regulatory framework establishes "the rules of the game" in the society and governs the way in which the government, enterprises and civil society interact with each other (OECD, 2004).

The quality of institutions exercises a substantial influence on both formal and informal entrepreneurship (Autio and Fu, 2014). Despite the overall progress in business environment in Kosovo, there is less progress in the field of the rule of law including protection of investments and enforcement of contracts. Thus, Kosovo has recently put some efforts to introduce the law on protection of foreign investments and the law on strategic investments. Ineffective laws and the lack of law enforcement lead to higher cost of transactions, evasion, organized crime and corruption, resulting in weak SME sector. The reforms of the legal framework cannot therefore serve its purpose if it does not pay adequate attention to the issues of enforcement, compliance and effectiveness (Shihata, 1996). The study of Hartog et al. (2010) indicates that rule of law influences differently small and large enterprises. More specifically, they argue that large rather than small firms are the prime beneficiaries of the better rule of law. It clearly does not imply that small firms do not benefit from a modern and efficient legal system, but it does imply that large firms are able to acquire more of these benefits.

To a large extent, legislation in commercial sphere has been adopted by institutions in Kosovo such as: business organizations, contracts for selling of goods, guarantees, rules of security and supervision, payment transactions, basic labor law, standards for financial reports, establishment of office for guarantees, credit guarantee schemes, quality assurance. The other regulations are in the process of adoption, among which are: Bankruptcies, competition protection, intellectual properties (MTI, 2016). The completion of commercial legislation creates a more predictable business environment and enhances competitiveness in SME sector and more opportunities for investment.

According to the World Bank (2016) Kosovo has made significant efforts on strengthening its basic legal framework and institutional structures, with a view to enforcing the necessary foundations for a functional market economy. These reforms have been reflected in improved rule of law and business climate indicators. However, the weak institutional capacity, unclear property rights, and a complicated and fragmented licensing and inspection regime continue to create disincentives for formal private sector activities.

3.5 Business fees and policy constraints for SMEs

Although it is recognized that SMEs play a vital role in development of transition economies yet this sector is facing various barriers related to policy constraints and infrastructure issues. Nowadays, a number of studies find that SMEs are frequently constrained and challenged by legal, regulatory and policy constraints (Djankov et al., 2002; Beck et al., 2004; Levine, 2007; Smallbone and Welter, 2009). Using data of 23 transition countries, Aidis and Sauka (2005) found that the constraints faced by SMEs differ during different stages in the transition process.

In Kosovo SMEs have been facing severe problems related to policy constraints mostly related to business registration and licensing, taxation, labor regulation, criminality and corruption, infrastructure provision, and bankruptcy. Due to these constraints it is difficult for SMEs to contribute to job creation, domestic production, competitiveness, poverty reduction and GDP growth as expected. The importance of SME sector and severe constraints faced by this sector has been recognized by Kosovo government which in turn has introduced policies that improve the business environment including above mentioned constraints. The Strategy for SME support 2012-2016 and the Strategy for private sector development 2013-2017 have addressed

issues of policy constraints in order to support SMEs potential for entrepreneurship, job creation and GDP growth. The government has managed to improve a range of the SMEs policy constraints, though some of them have remained unchanged (World Bank, 2016). Nevertheless, SME sector in Kosovo is still characterized with low efficiency and competitiveness.

3.5.1 Business registration and licensing

The cost of entry, license fee and time of processing are important for development of SME sector. The start of business is difficult because SMEs face a lack of finance and experience, which expose them to the higher bankruptcy risk. Therefore, low cost of entry and less procedures will facilitate the initial phase of SMEs and enhance their growth opportunity. In a business environment characterized by high-quality economic institutions, government officials adopt and implement appropriate policies that reduce regulatory burden on new businesses, and thereby, the cost of regulatory compliance. In such an environment, the cost of starting and running a new business is lower, and entrepreneurs are therefore more likely to register their businesses in order to enjoy the benefits associated with registration. These include, for example, the ability to legally own and trade property, the ability to enter formal contracts, the ability to enforce contracts through legal proceedings, and reduced risk of sanctions due to informal operation (de Soto, 2000). According to Beck and Demirguc (2006) the competitive business environment is positively associated with entry, entrepreneurship and investment. Similarly, Ayagari et al. (2007) argue that several dimensions of business environment, such as lower cost of entry and better credit information sharing are associated with a larger size of the SME sector.

In countries with a less developed institutions and high level of corruption procedures of entry are complicated, time consuming and costly. Djankov et al. (2002) examined the burden of regulatory procedures on the path to establish a small business in 85 countries. The number of required procedures range from 2 in Canada to 21 in the Dominican Republic, and the average is 10. They also show that the minimum time required meeting these hurdles ranges from 2 days (Australia and Canada) to 152 days in Madagascar, with a world average of 47 days. More burdensome entry regulations correlate with more corruption, but not with higher goods quality, less pollution or better health outcome. Klapper et al. (2006) argue that heavy entry regulation, measured as a cost of registering the firm hinders the creation of new firms, which in turn affects

economic development. An SME friendly business environment demands that businesses are able to register with authorities through a simple and inexpensive system, preferably by remote access through the internet. If business licensing requirements are minimized, and when they are enforced, the objective is to safeguard health and safety of consumers and labor rather than being a source of revenue for local and/or central government (OECD, 2004).

Due to recent reforms in public administration in Kosovo aiming to remove obstacles and bureaucracy for serving businesses, some improvements were made for starting businesses. The initial required capital has been removed and the registration procedures have been made easier (MTI, 2016). However, according to the World Bank doing business report for starting a business in Kosovo are required 5 procedures and it takes 11 days, and the cost of registration is assumed 1.1 percent of income per capita. Hence, the country is ranked 47th for starting business which show improvement compared to previous years (World Bank, 2016). Simple and small number of procedures for starting business can encourage entry of new businesses.

In addition, the compulsory licenses for standard business activities were removed in 2012. Though, specific licenses and permits need to be obtained for various activities, such as waste management, import and export of medical products, medical institutions and the import of planting materials. The Office of the Prime Minister of Kosovo function as the central authority overseeing the granting of licenses which is done in different ministries. Written guidance on obtaining a license exists for each ministry (EIB, 2016). According to the World Bank estimates about 4.6% of firms in 2013 identified business licensing and permits as a major constraints, which is higher than Western Balkans average. Furthermore, in 2014, the procedures to take three company identification numbers such as: business registration number, fiscal number, and value-added tax (VAT) number, were merged into a single procedure. Also, one stop shops have been established under ARBK supervision in 26 municipalities and are now routinely issuing business registration and fiscal numbers within 24 hours of application in a single application (EIB, 2016).

3.5.2 Taxation

It is well known that SMEs taxes are important revenues which contribute to the budget of a given country. On the other side, the budget of the country has to be utilized for improvement of business environment through public investments. Hence, it is assumed that the

higher is the budget of the government the higher are investments in infrastructure that is used as input from the businesses for the development of products and services. Moreover, tax payment will enhance the capacity of institutions to increase quality of public services for SMEs. However, it is important to implement appropriate tax system, which from one side fulfill the needs of the state budget and on the other side is acceptable for businesses. Charging businesses with higher tax rate from the Tax Administration is considered inappropriate for reasons that reduce investment funds of businesses and may reduce economic growth, as businesses are investors better than the government. In addition, high taxation encourages tax evasion. Therefore, inappropriate tax system can impede SMEs growth and motivate them to operate in the informal economy. In particular, transaction taxes and high tax rates as well as accounting requirements can discourage SMEs to grow (Caner, 2010). An important determinant of firm entry and rising incomes is ease of paying taxes and appropriate tax rates. The simplification of administrative burden for tax payment and reduction on tax rate lead to increase in firm entry. A simple, transparent and low-compliance-cost tax system is appropriate and it is perceived as fair (OECD, 2004). Therefore, in order to support business friendly environment, it is preferred efficient and transparent tax system with possibility of extension in a broad base of tax payers. Due to the indications that small businesses are more constrained than large ones in terms of access to finance, has led some countries to favor small businesses with more favorable tax rates in order to reduce their losses caused by the difficulty of access to finance. For example, for decades, Canada has provided a special tax regime for small businesses. However, Chen and Mintz (2012) argue that this has not justified economic effects since by this exemption the government has discouraged businesses to grow aiming to reduce tax obligations. In addition, this has influenced in the low level of participation of the Canadian businesses in international markets.

Generally, the tax compliance among SMEs is lower compared to large companies. For instance, Atawodi and Ojeka (2012) using SMEs survey data in Zaria Region of Nigeria have found that high tax rates and complex filing of procedures are the most crucial factors causing non-compliance of SMEs. In order to increase the base of taxpayers the government should provide low tax rates to allow enough funds for SMEs to expand their business and survive in the competitive market. High tax rates reduce firms' internal sources of finance (Ishengoma and Kappel, 2008). This in turn, encourages firms to avoid taxes and conduct their activities in the

informal economy. An effective and efficient tax administration system is integral to any country's well-being. The tax administration must provide an appropriate tax policy by ensuring that all taxpayers meet their tax filing and paying requirements. The tax administration must balance its educational and assistance role with its enforcement role (Baurer, 2005).

Kosovo's business tax rate of profit which reflect total number of taxes and contributions paid are relatively low (15.2%) vs. Europe and Central Asia' average of 34.8% according to 2016 Business Doing report. The number of required payments per year is 32 and, is more burdensome compared to Europe and Central Asia which is 19.2 in 2016. The World Bank (2016) doing business report further indicate that Kosovo made paying taxes easier for firms by abolishing the annual business license fee. Nonetheless, tax avoidance is rampant, with businesses frequently keeping separate sets of books for tax authorities and for lenders according to banks interviewed for this study (EIB, 2016). The tax evasion by SMEs deteriorates the budget of the country due to decreasing revenues followed with subsequent reduction of proper provision of public goods and services.

3.5.3 Labor regulation

The SMEs often face shortcomings in providing minimum wages, social protection and job security. Formal work contracts are less common than in enterprises of larger size and infringements of labor law and basic occupational safety and health regulations are frequent (ILO, 2006). Using qualitative study with three medium sized enterprises Atkinson et al. (2014) found that enterprises operating in developed institutional context apply formal and informal forms of employment, though in any case minimum labor regulation is practiced. The interplay between informality and formality provides a form of negotiation which alters the ways in which regulation dynamically and indirectly influences the employment relationship with effects and outcomes which are difficult to foresee. Regulation does not necessarily remove informality, owner-manager prerogative or the role of perceived rights and obligations, although it does influence them and how they are exercised. In developed institutional context, labor regulations are balanced and flexible, protecting the rights of labor and the firm equally (OECD, 2004). However, the context of developing countries is often radically different from that of developed economies. In particular, developing countries are often characterized by weak law enforcement,

a large informal sector, underdeveloped capital markets, and informal credit and insurance networks (Boeri et al., 2008).

The process of transition in Eastern Europe entailed a massive reallocation of resources across sectors of the economy, leading to a dramatic increase in labor market risk for workers. To ameliorate the effects of such increased risk, policymakers were faced with the challenge of designing new labor market institutions (Boeri et al. 2008). The ideologies of employees of the state-owned firms, or state and collective farms, have been replaced by those of owners, employers, entrepreneurs, wage earners of private firms, or the self-employed. These aspects have induced new work ethics and discipline. The previous universal and mandatory system of job security and employment stability has been replaced by a more liberal institutional framework for firings and hiring, and more flexible labor relations overall (Kuddo, 2009).

The Law on labor² in Kosovo was introduced in 2010 which is a part of the basic legislation that regulates relations between employees and employers. The labor law protects the rights and assigns obligations in work relations, and ensures protection at work. The labor law provisions are applied for employment in the public sector, as well as in the private one (EU, 2014). Though its labor regulation is in compliance with the EU ones, Kosovo face enormous challenges to accordingly enforce this regulation. These obstacles are related to the lack of court efficiency, high unemployment rate, as well as high rate of informal employment. Informal employment is exclusively widespread in the private sector. This form of employment occurs with intention of avoiding taxes and social contribution, while it disregards labor regulation.

The labor market in Kosovo despite the high rate of unemployment and inefficient implementation of labor regulation is also characterized by low skilled labor force. In addition, we should stress that the average wages is 250, which is lower compared to other countries in the region and far lower than average in the EU Countries (CBK, 2015). On the one side the privatization of SOEs has dampened jobs for a large number of workers who find very hard to get new jobs because of the lack of skills and fierce competition. On the other side, the youth labor force is not appropriately qualified in different occupational profiles, which has led to a deficit for a well-qualified staff in the labor market, and causes difficulties in the development of the SME sector. Basically, the lack of appropriate qualified job seekers is a consequence of

² Law No. 03/L-212

inadequate educational and professional system characterized by low quality and unadjusted with labor market demands. Therefore, high rate of unemployment and inadequate qualification of workers has led to the growth of employment in the informal sector and difficulties to enforce labor regulation in the private sector.

At a lower rate of unemployment, job creation in the formal sector is relatively more attractive than job creation in the informal sector because of the low cost of the welfare programs for the unemployed, which subsequently imply low taxation. In this situation, the benefits from complying with the labor regulation in the formal sector outweigh the benefits from avoiding these low taxes in the informal sector. At a higher rate of unemployment, the tax burden becomes higher, which in turn slows down job creation in the formal sector, but has the opposite effect on job creation in the informal sector. Therefore, at a higher rate of unemployment, job creation in the informal sector approaches the job creation in the formal sector (Nikoloski, 2009).

3.5.4 Criminality and corruption

Criminality and corruption cause large loss of resources on the country and firm level, while it deters the trust among citizens, firms, and public institutions. Corruption among others contributes to the low level of productivity, high rate of criminality, bureaucracy and the lack of quality of products and services. Furthermore, the criminality and corruption are associated with the lack of institutional development and stability characterized by unfavorable business environment, which therefore hinders SMEs operations and growth. Kanu (2015) argues that corruption is negatively associated with growth, productivity and employment.

As a constraint, corruption prevents fairness to prevail and therefore it is to a large extent a cost to a business owner or individual, the community and the government as a whole. In a corrupted institutional environment businessman want to compensate for the money paid out as bribery, productivity is lowered, prices become high, customer loyalty and demand falls and then as a result growth of firms is affected in a negative way (Nkonoki, 2010).

As mentioned before Kosovo still rely heavy on foreign aid and remittances (EC, 2011), and unfortunately has not attracted enough foreign direct investment which support the private sector, particularly SMEs. The corruption discourages potential investors for investments and

development through which the country benefits know-how, entrepreneurial culture, finance and technology. However, corrupted institutional environment is likely to attract speculative investors who claim access to tenders through bribery, and other ways not considered as honest in business. The corruption dimension of institutional quality is likely to have significant impact on entrepreneurship (McMillan and Woodruff, 2002). Furthermore, corruption is a reflection of all institutional weaknesses in the economy, as it results from weak property rights, arbitrariness in state administration, weak judicial system, excessive and nontransparent regulatory frameworks (Treisman, 2007; Estrin, 2010). Existence of a sound judicial system would discourage corruption which is a burden on SMEs (Caner, 2010). Aidis and Mickiewicz (2006) argue that corruption has been important obstacle to business expansion in transition economies.

According to Aidt (2009) while corruption may have average effect on the growth rate of GDP per capita, it is likely a source of unsustainable development. Based on macro and micro evidence, quantitative evidence from field studies and surveys points to substantial cost of corruption, as an obstacle to development. High crime rates in a country would increase the cost of protection and discourage SMEs from expanding further eventually leading to their demise. Therefore, good public safety enforcement provides a safe environment for SMEs to establish and grow (Caner, 2010). Djankov et al. (2004) using survey data on SMEs found that in addition to many personal characteristics the perception on corruption and government officials' attitude towards entrepreneurship affects a decision to become an entrepreneur. Fisman and Svensson (2002) found that the rate of taxation and bribery are negatively correlated with firm growth. More specifically, a one percentage point increase in the bribery rate is associated with the reduction in firm growth of three percentage points, an effect that is about three times greater than that of taxation.

Despite their role in job creation, innovation and economic development, SMEs in Kosovo continue to be hampered by a number of obstacles within institutional context. Among the most frequent barriers in the institutional context are inefficiency of courts, tax rates, heavy trade regulations, corruption, extortions and crime. According to Riinvest report on business climate (2014) the court inefficiency and corruption are among major obstacles for SMEs growth in Kosovo. The high levels of informal economy and organized crime have constantly been identified by firms as the main reasons that hinder the proper function of the market economy in Kosovo. Bribery in public and private sector is another problem that the business sector

continuously faces. Firms also complain on bureaucratic and inefficient public procurements (Riinvets, 2016). Moreover, the European Commission report (2015) highlights the problem of corruption in privatization, customs, tax administration, health services, and education sector.

The country is ranked 103rd out of 175 in the corruption perceptions index (Transparency International, 2015). Perception of corruption leads to loss of trust in institutions, and this reduces investment and tax collection. The distorted image of the country due to corruption fails to boost investments which are among most important sources of economic growth. In order to have friendly business environment, OECD (2004) suggested that public administrators appreciate entrepreneurs as contributors to economic growth, treat them fairly and are committed to limit corruption to a minimum.

3.5.5 Lack of infrastructure provision

Infrastructure provision, such as transport, telecommunications, energy, water and sanitation, affect SME sector activity and ability to access local, regional and global markets. Furthermore, quality of available infrastructure has a significant influence on SME competitiveness (OECD, 2004). Infrastructure contributes to SMEs development by increasing productivity and providing conditions that enhance quality of outputs. Infrastructure services such as transport, water and electricity are intermediate inputs to production and any reduction in the cost of these inputs increases the profitability of production, enabling a higher quality of output, income and employment. Moreover, firms' incentives to invest are reduced if their access to infrastructure is inappropriate (Haaparanta et al., 2003).

Inadequate and underdeveloped infrastructure in many countries limits the opportunities for developing the international trade, perhaps even for products that are traditionally exported. Some countries may have increased manufacturing of products for export, but have difficulties to export larger quantities due to insufficiently developed infrastructure. Therefore, inadequate provision of public infrastructure and services affect private investment (Svensson and Reinikka, 2001). In recent decades the rise of globalization and the intensification of competition in world trade have resulted not only due to liberalization of trade policies in many countries, but also due to major advances in communication, transportation and technology. Access to infrastructure

allows firms to become more productive, reduce transaction and transportation costs, and expand their businesses by reaching markets. There is ample evidence that shows that greater investment in infrastructure leads to faster growth. Studies also point to higher levels of investment, greater productivity and faster growth of firms that have better access to infrastructure, especially in the poorer countries where infrastructure is less developed. (Rudaheerawa, 2006; Fiestas and Sinha, 2011).

Undeveloped infrastructure is an impediment to SME development in Kosovo. Many of Kosovo's roads, especially in more remote regions, are in need of rehabilitation. The underdeveloped state of the manufacturing sector is attributed to infrastructure problems (EIB, 2016). Infrastructure related costs are also an issue as they increase the cost of products as well as it affects the quality of products and services. For example, the high cost of electricity per capita brings Kosovo's Doing Business ranking for getting electricity to a very low 124th out of 189 countries (World Bank, 2016). Therefore, the underdeveloped state of infrastructure represents an additional constraint to SMEs quality of products and their ability to integrate in international markets.

3.5.6 Business bankruptcy

Bankruptcy can be defined as the legal proceeding that occurs when the liabilities or debts of a firm exceed its assets or revenues over an extended period of time. When a firm declares bankruptcy, its assets are taken and allocated to various creditors and courts may impose restrictions on future borrowing capacities of firm owners (European Commission, 2011). An SME friendly legal, regulatory and administrative environment would be characterized among others as one where bankruptcy legislation does not impose unduly high penalties on the entrepreneur or the SME (OECD, 2004).

SMEs operations and growth depend on business environment including macroeconomic trend, SME policies and growth opportunities. Despite the fact that SMEs are increasing rapidly worldwide, particularly due to their productivity and flexibility in reducing costs, they are also characterized with high bankruptcy rate. While SMEs create many jobs, they also close many jobs due to their failure. This process known as Creative Destruction is the essential fact about

capitalism which as an evolutionary process and led by firms 'competitiveness incessantly destroy old one and create new one (Schumpeter, 1942). Besides the creation of appropriate business environment which support new firm entries and growth, it is also important to have in place appropriate bankruptcy procedures. Lim and Hahn (2003) argue that appropriate bankruptcy proceedings contribute to productivity growth by allowing inefficient firms to exit, encouraging new entries, and stimulating surviving firms to become more efficient. Ayagari et al. (2007) argue that higher exit costs are associated with a larger informal economy.

Kosovo's overall Doing Business ranking is brought down by the country's continued difficulty with resolving insolvency ranked 163rd (World Bank, 2016). This shows the lack of protection for bankrupted firms. In the Policy Framework assessment for 2012, the OECD noted that Kosovo's bankruptcy laws were still in their early stages (OECD, 2012). According to Halliday and Carruthers (2007) countries seeking to encourage more entrepreneurship may achieve this by adjusting their bankruptcy laws to reduce barriers and costs associated with bankruptcy.

Business entry and exit are natural processes that are inherent to European economies; actually 50% of enterprises do not survive the first five years of their life (European Commission, 2011). In case of bureaucratic and heavy exit procedures entrepreneurs may not decide to start a business because of fear of failure. With this respect, Peng et al. (2010) argue that entrepreneur friendly bankruptcy laws can not only lower exit barriers, but also lowers entry barriers for entrepreneurs. Similarly, Lee et al. (2011) amassing a cross-country database of 29 countries, found that entrepreneur friendly bankruptcy laws are significantly correlated with the level of entrepreneurship development as measured by the rate of new firm entry.

Out-of-court settlement is a procedure that allows the affected creditors to find a voluntary agreement both with the debtor and among themselves in the form of recovering all or part of their receivables (with or without guarantees). It involves an agreement initiated and completed outside the judicial process (i.e. without the involvement of courts) but usually with the active involvement of lawyers. The main advantages of the out-of-court settlement procedure are lower costs, faster execution time and the fact that the debtor avoids being declared insolvent or bankrupt publicly. The disadvantages of this procedure are costs linked to the negotiation process (lawyers' fees) and the risk of non-settlement (European Commission, 2011).

3.6 Trade liberalization

The process of transition in many countries has boosted the role of private sector characterized by entry and growth of new firms. The trade liberalization and competitiveness has increased the role of SMEs as the backbone of economies (Smallbone and Welter, 2001). From the skeptical view there is a general presumption in the poorer countries that they will lose from global trade liberalization since their domestic industries are inefficient and non-competitive. This view is despite the arguments from economists as to the gains to domestic consumers from lower prices and the joint benefits which accrue to both exporting and importing countries from exploiting comparative advantage and improved market access opportunities abroad. The trade liberalization enhances more capital flows as well as more labor flows in developing countries (Whalley, 2004). Moreover, trade liberalization by promoting competitiveness has transformed firms' production and management to achieve cost reductions and enabling fast response to customer demands, while in aggregate levels supports institutional and financial development (Rajan and Zingales, 2003).

Now, it is well recognized that business environment influences the international economic integration, aggregate output and SMEs performance as well. Countries and firms in particular, may benefit from international trade apart of market share, also from positive externalities such as: access to finance, know-how transfer, new technology transfer, and product improvements. Despite the fact that Kosovo's economy is in some respects quite open and liberalized the international economic and trade integration has remained unsatisfactory. Prices are also broadly liberalized, with the exception of some utilities and other key goods (EBRD, 2013).

Kosovo participates in the regional Central European Free Trade Agreement (CEFTA) which is the agreement between non-EU countries now mostly located in Southeastern Europe, which are in the process of EU integration. The aim of CEFTA is the elimination of tariffs and facilitation of trade. Since one of the purposes of CEFTA is the establishment of trade rules based on EU and World Trade Organization (WTO) principles, it is expected that the experience gained in trade with the countries in the region will make Kosovo's businesses competitive for

the EU and worldwide markets. Considering the challenges for trade cooperation in politically unstable Balkan countries CEFTA aims to promote trade liberalization, competitiveness, political stability and facilitate integration to the EU (Bartlett, 2008). In addition, in order to comply with the CEFTA rules and regulations Kosovo will establish and build up institutional and policy frameworks to comply with the requirements of the WTO (Holzner and Peci, 2012).

The Stabilization and Association Agreement (SAA) give free access of Kosovo's SMEs to EU market. However, having in consideration the level of quality standard achieved in products and services, it is uncertain how the SMEs will be able to compete in the EU market. This will be challenging in the short and medium term, while in the longer term firms will struggle to improve the quality of products and services. To achieve these substantial efforts are needed by institutions in order to improve business environment and SMEs in adding value to their outputs. The relations with the EU are essential for the development of Kosovo's economy, bearing in mind the fact that the EU is the market with the biggest potential, not only for Kosovo but the whole region, and the main source of investment (Holzner and Peci, 2012). The process of integration in the EU is long journey, though considering the incredible support from the EU institutions in terms of consultations and finances it is an extraordinary opportunity for Kosovo towards trade openness, liberalization, institutional and economic development. Holzner and Peci (2012) argue that the process of integration is expected to be very challenging for Kosovo in terms of trade benefits: because of the lack of competitiveness within a country it can be expected that increasing trade liberalization between Kosovo and the EU will not increase the diversity of Kosovo exports, at least in the short run. Loss in revenue tariffs are expected from imports in medium run, while in the long run increasing trade liberalization and decreasing donor transfers and remittances will make it difficult for Kosovo to sustain its GDP growth.

According to 2012 OECD Policy Index Kosovo is ranked last among others in the region due to the country's limited export base and ad hoc nature of export promotion. Kosovo has been working toward aligning its quality standards and regulations with the European Union in order to gain access to this export market, but the limited size of its manufacturing and agricultural sectors is an impediment to growing exports. Furthermore, Kosovo has not achieved to attract considerable foreign direct investment, which promote SMEs sector competitiveness and export that would exert impact on its international economic integration (Brada et al., 2006).

Kosovo has no reliable public programs in place to support SMEs' integration into global value chains (GVCs). Two indirect programs for the integration of SMEs into GVCs are: 1) the Micro and SME Grant Scheme project supported by MTI and the EU and implemented by International Organization for Migration (IOM); and 2) the SME Development Strategy for Kosovo. Furthermore, actions by the EU-funded Instrument for Pre-accession Assistance (IPA) project Enhancing Competitiveness and Export Promotion are expected to help integrate SMEs into the global value chains (OECD, 2016). According to EIB (2016) Kosovo has made strides toward meeting EU safety standards for food exports, but this process is still in progress, with SMEs having a disadvantage in accessing markets due to an inability to adopt quality standards and underdeveloped value chains for aggregation and selling of agricultural products at scale.

Although, the Kosovo Investment and Enterprise Support Agency (KIESA) is continuously organizing SME promotion events, efforts to foster the development of more sophisticated promotion programs could be intensified, including support for product development and upgrading quality standards (OECD, 2016). In addition, the customs procedures on imports and exports affect the trade liberalization. SMEs, whether they are exporting or importing, interact with customs administration that should be efficient, simple and transparent. Even though Kosovo have made some improvement in trading across borders within the context of cost and procedures on import and exports, it is still lagging behind countries in the region, thereby it is ranked 71st in doing business report of the World Bank (World Bank, 2016).

3.7 Political instability

The political instability plays an important role in sustainability of institutions and economic policies, thereby affecting households, firms and politicians (Carmignani, 2003). Political instability significantly reduces economic growth, both statistically and economically which affect growth potential of the firms. Furthermore, political instability and economic growth are jointly determined (Alesina et al. 1996; Aisen et al. 2011). In contrast, political stability and ideological legitimacy tend to reduce environmental uncertainty and thus encourage future-oriented behavior, giving entrepreneurs the confidence to establish new firms (Miettinen, 2004). Political stability is essential for entrepreneurs to commit their funds as well as their human resources into their businesses.

Frequent changes to common policies and the lack of long-term economic policies cause uncertainty and imply high costs for SMEs. Thus, political instability increases uncertainty to SMEs by reducing their long-term investments. This also affects the image of the country, while sending negative signals to foreign investors. Brada et al. (2006) analyzing FDI inflows into transition economies of Central Europe and Balkan, found that good reform performance of the Central European and Baltic countries enabled them to receive inflows that were several-fold those experienced by comparable West European Countries. Moreover, their results indicate shortfall in FDI into the Balkan transition economies, which in fact more than transition is attributable to the effects of regional political instabilities on the willingness of foreign investors to invest in these countries. Given the low savings rate in many of the Balkan countries, larger FDI inflows would thus have made an important contribution to economic growth as well as it brings in new technology and managerial skills which increase competitiveness and productivity of the firms. However, due to structural reforms at the later stage of transition Uvalic (2012) shows that stronger economic integration of the Balkan countries with the EU has taken place through increasing trade, FDI, and financial flows, even though the establishment of contractual relations with the EU has proceeded at a much slower pace. Transition-related institutional changes implemented in a particularly unstable political and economic environment have not favored fast economic development.

As a potential candidate for EU membership, Kosovo has improved its political and legal systems, striving to bring them close to European standards, and it has recently deepened its coordination with the European Commission on economic policies and governance issues (EIB, 2016). The process of integration in the EU provides an excellent prospect that among other benefits in term of economic growth also enables Kosovo to achieve political stability. In this context, Holzner (2016) argue that process of European integration may at least provide for the countries in the Balkan region with the stable political framework necessary for a coordinated infrastructure policy as well as with the financing required for implementation. In order to accomplish permanent stability in the Balkan region, it is essential to integrate all countries into the EU, economically and politically (Uvalic, 2012).

Kosovo's non-membership in the United Nations (UN) remains a key obstacle to political integration and socioeconomic development. As of end-March 2016, 109 out of 193 UN member countries have recognized Kosovo's independence, including 23 out of 28 EU member states

(World Bank, 2016). One of the issues which affect political instability is non-recognition from Serbia and its persistence to impede Kosovo's recognition by other countries. Meanwhile, negotiations between Kosovo and Serbia with EU mediation are ongoing with aim of resolving disputed issues and normalization of mutual relations. In August 2015 Kosovo signed a series of landmark agreements with Serbia on energy, telecommunications, treatment of Serb majority municipalities, and freedom of movement, paving the way for EU negotiations with Kosovo (European Investment Bank, 2016). In areas where there are ethnic fractionalizations SMEs are negatively affected since this introduces political instability (Caner, 2010).

According to KOSME SME survey (2014), 30 % of SMEs have perceived that political instability is a major constraint for doing business in Kosovo. The political instability reflects the low level of trust among people and firms towards public institutions, political, judiciary and administration which therefore discourage business growth and economic perspective. The development of more capital-intensive sectors such as manufacturing has been slowed by political uncertainty, with SMEs showing hesitance to invest in fixed assets and take on longer-term loans. As a potential candidate for EU membership, Kosovo has worked to improve its political and legal systems, striving to bring them to European standards, and the country has recently deepened its coordination with the EU on economic policies and governance issues. Nonetheless, the rule of law and judicial independence remain as major challenges in Kosovo, with continued problems arising from corruption and organized crime. According to Riinvest (2016) Kosovo continues to have a weak judiciary system, marred by conflicts of interest, political intrusion and lack of resources to exercise the law. The ongoing clashes between the political parties in Kosovo in the last two years have further contributed in deepening the political instability. The political instability and the lack of business opportunities have caused increased mobility particularly among young generation to western developed countries. Despite the negative consequences, this in turn has enhanced their entrepreneurship skills, which has generated positive effects upon their return in home country with new skills, sources of finance, and trade links opportunities.

Chapter 4

4. Formal vs. informal economy

- 4.1 Introduction
- 4.2 Theoretical framework
- 4.3 Definition of informal economy
- 4.4 The importance of informal economy
 - 4.4.1 *Advantages of informal economy*
 - 4.4.2 *Disadvantages of informal economy*
- 4.5 Different views on informality
 - 4.5.1 *Dualist view*
 - 4.5.2 *Structuralist view*
 - 4.5.3 *Legalist view*
 - 4.5.4 *Voluntarist view*
- 4.6 Transforming informal economy to formal economy
 - 4.6.1 *Reasons and motives of formalisation*
 - 4.6.2 *The benefits of reducing informal economy*
- 4.7 Removing barriers to formalisation
 - 4.7.1 *Regulatory barriers*
 - 4.7.2 *Administrative barriers*
- 4.8 The relationship between formal and informal sector
- 4.9 Informal workers and formal firms

4.1 Introduction

The informal economy represents not only an important part of the economy, but also a very complex phenomenon for policy makers. At one side, the informal economy contributes to employment and GDP, and help people in less developed countries to alleviate poverty. At another side, while informal enterprises avoid taxes they consequently reduce the revenues of the state and hinder fair competition. The researchers generally recognize the importance of the informal economy, and they agree that the informal economy should be treated in a prudent way through appropriate policies and encouraged to be integrated into the formal economy. The transformation of the informal economy requires creation of favourable business environment which supports SMEs and additionally it imposes a need for law enforcement. The theories provide that institutional development and growth of the economy will increase the opportunities to transform the informal economy to the formal economy. The goal of policy makers today is

that the potential of the informal economy do not disappear but to encourage its transformation into the formal economy through increasing the opportunities and benefits to operate in the formal part of the economy.

In the theoretical framework of this chapter we elaborate the features as well as differences between formal and informal economy. In section 4.3 we explore the evolution and definition of informal economy from different perspectives. Furthermore, in section 4.4 we evaluate the importance of the informal economy in different economic development context such as: developed, developing and transition economies. In this context, we emphasize the advantages and disadvantages of the informal economy. In order to explore forms of the links between informal and formal firms we evaluate different views on informal economy including: dualist, structuralist, legalist, and voluntarist view in section 4.5. These views help to explain the links between informal firms and regulation. In section 4.6 we elaborate the issues on transformation of informal economy to formal economy. Hence, we discuss on reasons and motives of formalization and the benefits of reducing the informal economy. In section 4.7 we further explore the problems on removing the barriers to formalization. In this context, we explore some of the main barriers that hinder the formalization of informal firms such as regulatory and administrative barriers. In section 4.8 we elaborate the relationship between formal and informal economy which is key aspect to understand the importance and evolution of informal economy. In the earliest studies of the informal economy the dominant theory was one which considered the informal economy as a separate economic domain. The later theories evolved by recognizing the significance of the informal sector and its integration into the national economies. From this perspective, the formal and the informal ends of the economic continuum are often dynamically linked. Finally, in section 4.9 we explore an alternative connection of the informal and formal sectors considered as informal employment in formal firms.

4.2 Theoretical framework

According to De Soto's romantic view on informality (1989) informal firms are reservoirs of productive entrepreneurial energy. He argues that informal firms would like to become formal but are held back by government taxes and regulation, the lack of secure property

rights, as well as access to finance. By this view, De Soto (1989) explains that informal firms are fundamentally similar with formal ones but are kept down by policy. If institutional barriers would scale down, informal firms would get formalization, borrow and get benefits of being formal, and by doing so they would contribute to expand economic growth. In contrast, La Porta and Shleifer (2014) argue that informal firms exhibit low productivity and rarely make transition to formality. Government policies represent obstacle to informal firms, but they are obstacle to formal firms as well. Informal firms are run by uneducated entrepreneurs and they add little value.

The evidence in the research of La Porta and Shleifer (2014) appears consistent with Lewis's (1954) dual view of informality, which considers the formal and informal economies as largely segregated, producing different products with different labor, capital, and entrepreneurial inputs, and serving different customers. Namely, different economic forces on both the demand and the supply side keep the two sectors separate. In such economies, the informal sector delivers low-quality goods cheaply to people who are themselves informal workers and who cannot afford the output of the higherquality but moreexpensive formal sector. In contrast, the formal sector remains small and offers high quality goods to a minority of formal workers (La Porta and Shleifer, 2014).

Another issue that makes distinction between formal and informal firms is the skills of employees they hire. Formal firms hire most often higher skilled employees which is not a case of informal firms. Skilled employees deliver high quality output and based on their performance get more payment. Similarly, high quality managers prefer to work for formal firms. Accordingly, they are willing to pay taxes and bear the cost of government regulations in exchange for being able to advertise their products, access external capital, and access public goods. In contrast, low quality managers avoid taxes and regulations, since the benefits operating in the formal economy are less valuable for small firms (La Porta and Shleifer, 2008).

Formal firms have to pay taxes and comply with regulations, so they have a cost disadvantage relative to the informal firms. On the other hand, they have institutional support such as: grants, access to finance, public service utilities. Joining the formal sector would raise the costs of informal firms, but the benefits they could receive by formalization may outweigh taxes and other employee social contribution payments. With this respect, government policies

and regulations are determinant of the size of informal sector. In this context, Schneider (2002) argues that a large burden of taxation and social security contributions combined with government regulations are the main determinants of the size of the informal economy.

The importance of formal sector relative to informal sector varies from country to country. While less than 5.5% of the formal workforce is employed in formal SMEs in Azerbaijan, Belarus and Ukraine, this share is more than 80% in Chile, Greece and Thailand. Similarly, the ratio of informal economy relative to GDP varies from 9% in Switzerland to 71% in Thailand. While, the share of informal enterprises decreases with the level of economic development, the share of formal enterprises increases (Ayyagari et al., 2007). Thus, in less developed countries informal firms represent a large share of economic activities.

Furthermore, based on the data analysis in developed and developing countries Ayyagari et al. (2007) find that formal sector contribution to total employment differ from the low-income countries (17.56%) compared to high income countries (57.24%). The share of GDP follows a similar trend ranging from 15.56% of GDP in the low income countries to 51.45% in the high income countries. Therefore, an increase in formal sector's contribution to employment is accompanied by an increase in its share of GDP as well. On the other hand, there is a steady decline in contribution of the informal sector to GDP from the low income countries (47.2%) compared to high-income countries (13%). The sector's contribution to total employment also shows a general decline from the low-income group (29.41%) compared to high-income group (15.16%), though it increases slightly in the middle-income group of countries. However, as income increases, there is a marked shift from the informal to the formal sector.

As noted above the informal economy is larger in developing rather than in developed countries. Estimating the size of the informal economy in 110 developing, transition and OECD countries, Schneider (2002) found that the average size of the informal economy, as a percent of official GNI in 2000, in developing countries was 41%, in transition countries 38% and in OECD countries 18%. Moreover, the informal economy in developing countries is growing rather than shrinking (USAID, 2005). Even though, it is a part of developed modern economies make us understand that informality is a long term or permanent issue in the economy.

4.3 Definition of informal economy

The role of the informal economy has evolved over the decades by extending worldwide, and it has become present in every economic development context. Alongside with its evolution as a phenomenon, the definition of informal economy represents a challenging task, while the debates on its definition have a long history. There are various terms used by different authors on informal economy such as: informal, shadow, hidden, unrecorded, unregistered, parallel, grey, black, underground and so forth (Nikoloski, 2009). However, in this study we use the term informal economy to refer to all informal economic activities as the most appropriate term and frequently used in literature.

The informal economy was introduced as a concept in 1971 in the study of British anthropologist, Keith Hart referred to the informal economic activities in Ghana's towns (Hart, 1973). In the report of the International Labor Organization (ILO) in the Kenya Mission (1972) the informal sector was attributed as solution to poverty and unemployment. Then from 1970s driven by ILO the perception on informal economy has shifted towards a more positive view on the potential economic role. The policy recommendations of the agencies such as the ILO and World Bank in the 1970s therefore helped to a changing attitude towards informal sector. Furthermore, many governments embarked on various projects to promote specific elements of the informal sector with aim of increase their potential and register/formalize (Potts, 2007).

Informality is referred to legal production activities that are deliberately concealed from public authorities for the following kinds of reasons: to avoid payment of income, value added or other taxes; to avoid payment of social security contributions; to avoid having to meet certain legal standards such as minimum wages, maximum hours, safety or health standards, etc. (OECD, 2002). The International Labour Organization (ILO, 2002) has been using the term "informal economy" to refer to "all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements", in recognition of the wide diversity of informality across countries. In many developing countries, the low level of education and vocational skills of informal economy workers results in a vicious circle of low productivity, low income and low investment in skills. Improving the skills of informal economy workers is therefore the key to their ability to access gainful and productive jobs (ILO, 2014).

According to Chen (2007) the new definition of the informal economy focuses on the nature of employment in addition to the characteristics of enterprises that are not legally regulated or protected. Thus, the informal economy is comprised of all forms of “informal employment” that is employment without labor or social protection inside and outside informal enterprises, including both self-employment in small unregistered enterprises and wage employment in unprotected jobs.

Despite the debates and critiques, the informal economy has continued to prove a useful concept to many policymakers, activists, and researchers because the reality it captures, the large share of economic units and workers that remain outside the world of regulated economic activities and protected employment relationships is so large and significant (Chen, 2007).

One perspective on the informal economy is guided by the logic of survival. Informal economy activities are the result of pressure exerted by a labor surplus for jobs, when good jobs, usually in the modern sectors, are scarce. The result is that people seek low-productivity, low income solutions by producing or selling anything that may provide for their survival (Tokman, 2007). Conditions of work and the level of earnings differ markedly among those who scavenge on the streets for rags and paper, those who produce garments on a subcontract from their homes, those who sell goods on the streets, and those who work as temporary data processors. Even within countries, the informal economy is highly segmented by sector of the economy, place of work, and status of employment and, within these segments, by social group and gender. But those who work informally have one thing in common: they lack legal and social protection (Chen, 2007).

The reallocation of resources into informal sector undermines tax collections, and consequently the ability of the government to provide public goods in the official sector. Such public goods include law and order, effective tax and regulatory institutions, and relatively uncorrupted public administration (Johnson et al., 1998b). An increase in the size of the informal sector hurts growth by reducing the availability of public services for everyone in the economy (Loayza, 1997). The informal economy is huge, that it shrinks sharply in relative terms as the economy develops (La Porta and Shleifer, 2008).

4.4 The importance of informal economy

The informal sector represents an important part of the economy in many countries, especially in the developing world, and plays a major role in employment creation, production and income generation (OECD, 2002). Informal economy is apparently playing an important role in reducing the extent of poverty and income inequality among households in developing countries (Sethuraman, 1998). The informal economy thrives in a context of high unemployment, underemployment, poverty, gender inequality and precarious work. It plays a significant role in such circumstances, especially in income generation, because of the relative ease of entry and low requirements for education, skills, technology and capital. However, most people enter the informal economy not by choice, but out of a need to survive and to have access to basic income-generating activities (ILO, 2014). Despite a lack of detailed data on informal enterprises and variations in the definitions of informality, it is clear that the number of informal enterprises is high and that they account for a large share of all SMEs. In some developing countries, informal SMEs far outnumber formal enterprises of the same size. India, one of the few countries with reliable data on informal enterprises, in 2007 reported 17 unregistered SMEs for every registered SME (ILO, 2015).

Similarly, using the dataset of firms across 43 countries Williams (2013) argues that informal sector enterprises employ a sizeable share of the total workforce and that marked cross national variations exist in the proportion employed in informal sector enterprises, which is associated with the level of GNP per capita, public sector corruption, tax rates, level of social contributions and poverty rates. Employment in informal sector enterprises is more prevalent in economies where there is greater poverty and less protection of workers facing marginalized population. In this context, Nikoloski et al. (2012) argue that in depressed labor markets which lack job creation in the formal sector, informal employment helps people to enter the workforce by offering an alternative to unemployment or inactivity and, prevents a further decline in living standards.

The informal economy often expands during periods of economic adjustment or transition. When enterprises in public sector are downsized or shut down, the workers who are laid-off and cannot find alternative formal jobs often end up working in the informal economy (Chen, 2012). By the 1950s and 60s the informal economy was widely spread in African

countries. Since 1980s informal economy proliferated in advanced capitalist economies in North America and Europe as production changed from large scale to smaller and more flexible units. These changes were associated with informal employment. Meanwhile, the economic crises in Latin America in the 1980s contributed to expansion of employment in the informal sector. During Asian economic crises in 1990s millions of people who lost formal jobs tried to find jobs in the informal sector. Meanwhile, structural adjustment in Africa and economic transition in the former Soviet Union and in Central and Eastern Europe were also associated with an expansion of employment in the informal economy (Chen, 2012). During the 1990s, globalization of economies contributed to the increase of the informal employment in many industries and countries (Standing, 1999). Small firms hired informal employment to reduce costs as a response to increased competition from globalization (Chen, 2012).

It is obvious that the formal economy is severely affected by reduction in capacity for employment and production during economic crises as well as economic transition. Therefore part of this employment and production has tendencies to shift towards the informal sector. As the informal economy is increasing worldwide its role has become important in extended debates of researchers, activists and policymakers. To many governments worldwide the informal sector has become the core in economic and institutional policies in order to enhance their productivity and encourage formalization through reducing costs and increasing benefits in the formal sector of economy. Smallbone et al. (2001) in a sample survey of firms in transition economies (Ukraine, Belarus) found that contribution to economic and social change was less than it could be, mainly due to an unstable environment and an institutional context that has yet to establish the framework conditions for sustainable private sector development. This has contributed to the expansion of informal economy. Dimova et al. (2005) argue that the increase in the informal sector during transition in Bulgaria came from two sources: a downsizing of the public sector after privatization and a movement out of not working. The economic crisis caused a great amount of hardship and many people found informal work to get by. According to Gërkhani (2002) informal economy in Albania during transition was large and significant. Its significance was two-fold: (1) it has helped people to make a living and survive in the difficult years of transition, but (2) it has not been sufficient to support long-run economic investments and growth. Nikoloski (2009) argue that transition in Macedonia was characterized with high rate of unemployment. However, in the case of long-term unemployment followed by transition in

economy he finds that informal employment play an important role as a labor market adjustment mechanism. In the case of Kosovo, very high youth unemployment, estimated at 55.9% of the population aged 15 to 24 in 2013, is a key impediment to economic development. The unemployment is driven by the poor quality education system coupled with generally few quality employment opportunities for youth. Many of the younger workers unable to find employment end up working in low-skilled, low productivity positions, often in the informal sector (EIB, 2016). The results of Riinvest Institute (2016) survey regarding informal economy show that 34.4% of total sales are not declared, while 37% of total employed workforce is not legally declared from businesses. Informal sector offers uncertain employment, though in the case of the economy with high unemployment rate, helps people to survive or escape of the extreme poverty.

There is increased recognition that much of the informal economy today is integrally linked to the formal economy and contributes to the overall economy; and that supporting the working poor in the informal economy is a key pathway to reducing poverty and inequality. And there is increased recognition that women tend to be concentrated in the more precarious forms of informal employment, so that supporting working poor women in the informal economy is a key pathway to reducing women's poverty and gender inequality (Chen, 2012).

4.4.1 Advantages of informal economy

The informal economy represents an important sector especially in developing countries due to creation of jobs and share of GDP. Many researchers have recognized the advantages of informal sector in contributing to employment, economic growth and alleviating poverty. Nevertheless, they argue that proper policy and institutional reforms shrink informal sector in the way that encourage informal firms to shift to formal sector (De Soto, 1989; Harding and Jenkins, 1989; Levy, 2008; La Porta and Shleifer, 2014). In addition, the informal economy enables poor people to create income and alleviate poverty (Chen, 2102; Autio and Fu, 2014).

By exploring the literature regarding the informal economy Gërkhani (2003) elaborated the main advantages found by the authors who contributed to the development of theories and knowledge in the field of informal economy. She attributes the main advantages of informal economy in three dimensions including economic, social, and political as follows:

Economic:

- informal sector activities may help in maintaining the competitiveness and flexibility of production;
- informal sector activities may bring growth if supported and encouraged;
- this sector puts downward pressure on wages in the formal labour market;
- it offers lower prices for goods and services;
- it generates substantial personal income;
- the informal sector is characterized by very low costs of labour;
- the low labour costs combined with the advantage of not bearing any bureaucratic cost are thought to contribute to a higher productivity of capital in this sector;
- the evidence from some transition countries indicates that the particularly large decline of the official GDP that these countries experienced (especially in the beginning) was alleviated through rapid growth of the informal sector.

Social

- informal sector activities provide families with employment, enables them to meet their basic needs, and increase their well-being;
- it offers freedom and opportunities for initiative and creativity;
- it is a better alternative, even though poorly paid and unprotected, than being dependent on state benefits, or starving.

Political

- the existence of the informal sector can be used as a safety regulator for public dissatisfaction and social tensions;
- informal sector activities are often tolerated or even encouraged as a way to promote political patronage.

4.4.2 Disadvantages of informal economy

Based on review of theoretical framework in term of the informal economy Swaminathan (1991) found that informal enterprises had low level of capital and had less or no possibilities for generating surplus-accumulation of capital. Informal firms are less capital-intensive, pay less skilled wages and no taxes, have poor access to credits, and have less educated managers (Bigsten et al, 2000). Similarly, La Porta and Shleifer (2014) established five critical facts about

the informal economy. First, it is over dimensioned especially in developing countries. Second, it has extremely low productivity compared to the formal economy: informal firms are typically small, inefficient, and stagnant. Third, although avoidance of taxes and regulations is an important reason for informality, the productivity of informal firms is too low for them to thrive in the formal sector. Fourth, the informal economy is largely disconnected from the formal economy. Informal firms rarely transition to formality, and continue their existence, often for years or even decades, without much growth or improvement. Fifth, as countries grow and develop, the informal economy eventually shrinks and becomes less important, and the formal economy comes to dominate economic life.

In addition to the list of advantages based on the literature review Gërxhani (2003) elaborates the list of disadvantages of informal sector in three dimensions including economic, political and social as following:

Economic

- no development strategy and growth is expected from the informal sector;
- the informal sector causes distortions in some main economic indicators such as the unemployment rate, employment rate, and growth rate;
- the operation of informal sector activities causes financial losses in the state revenues and, ceteris paribus, generates budget deficits;
- therefore, it will cause a further increase in the tax rates;
- its existence induces an unfair competition for those involved in the formal sector;
- if the informal sector is quite widespread in a country, it may increase the technological gap between this country and the other industrialized ones;
- work in the informal sector is often characterized by low productivity and low incomes;
- the informal sector is negatively related to the provision of public goods due to the falling State revenues.

Social

- participants of the informal sector are worse off than those of the formal sector regarding their working conditions and because of the exclusion from any social benefit and security;
- citizens will be provided with false information due to the incorrect measurement of GNP;

- participants in the informal sector have an unfair advantage (no taxes or social security contributions) compared to participants in the formal sector.

Political

- due to the fact that informal economic activities are often not included in measuring the GNP, the available statistics will provide a misleading view of the state of the economy to policy makers;
- their operation will increase corruption and political lobbying with negative consequences.

4.5 Different views on informality

The informal sector has attracted many researchers to define its role by developing various theories. Since 1972 when it was defined as a concept, the ILO has played a leading role in analysing the conceptual, as well as the underlying social and economic problems related to the informal economy (ILO, 2014). At one side, some firms do not register or comply with regulations, they make sales and pay for inputs including labor in cash, and they do not pay taxes at all. At another side, as occurred in transition economies, registered firms hide some of their sales from authorities to reduce taxes but still hire formal employees and comply with many regulations (Johnson et al., 1997). There are different ways that firms may avoid taxes and social contribution either partly or entirely. These ambiguities represent difficulties for measuring and defining the informality. However, historically the following four basic paradigms have been established to explain the existence of the informal sector: Dualist, Structuralist, Legalist and Voluntarist (Chen, 2012). Each of these has a different perspective on the role of informal economy and how the informal and formal economies are linked.

4.5.1 Dualist view

According to dualist view economy is divided into two distinct formal and informal sectors. Dualists conceive the informal and formal sectors as entirely disconnected, and predict that economic development should transform the informal sector or cause its absorption into the formal economy (Bacchetta et al., 2009). The work in the informal sector was identified with lower productivity and lower incomes compared to the formal sector. The formal-informal

dualism is identified on the basis of activities and characteristics related to the spheres of organization, production and technology (Swaminathan, 1991).

Informal sector is considered as an autonomous segment characterized by providing employment, goods and services for the lower income groups of the urban population (Sethuraman, 1976). Proprietors and their family help and employees work for each other and buy each other's products (Oshima, 1971). This implies that the informal sector is characterized by lack of links with formal sector. The Informal firms almost never become formal (La Porta and Shleifer, 2008).

According to Tokman (1978) the autonomous informal sector is economically efficient and has comparative advantages in relation to similar activities developed in the formal sector. Informal sector units are able to compete with formal sector units. Moreover, the analysis of income differentials and returns of factors of production suggests that informal-sector activity represents an efficient use of resources, given the overall framework of job scarcity in the modern sector, the low purchasing power which characterizes the market, and the organization of production in the informal units.

The dualist view argues that the informal sector yields sub-optimal economic outcomes due to challenges that informal firms limit their size to avoid detection (Verick, 2008). Informality is associated with uncertainty as informal entrepreneurs have a lack of property rights over their capital when contracts cannot be legally enforced (Loayza et al., 2005), and informal firms may also be unproductive compared to formal due to limits in access to finance, use of training, and innovation (Pages, 2010; Sparks and Barnett, 2010). The Dualist paradigm suggests that the informal sector is the residual component of an economy, and it exists as a subsistence economy, reflecting the inability of the formal economy to provide enough jobs (World Bank, 2013).

In the analysis of dualist view Chen (2007) argues that in regard to informal enterprises, dualists pay relatively little attention to government regulations per se but focus instead on government provision of necessary support services notably, credit and business development services. While in regard to informal wage workers, some dualists subscribe to the neo-classical economics notion that government intervention in labor markets leads to wage rigidities which, in turn, lead to more informal employment. In the analysis of formal and informal sector, Sparks

and Barnett (2010) argue that debate about formal/informal dualism needs to end. They suggest that governments need to recognize and admit the importance of the informal sector and find ways to encourage its growth. They also need at the same time to decide how to strengthen the formal sector and extend benefits to those in the informal sector, while removing barriers to the formal sector to allow more to participate.

By elaborating the dual models, La Porta and Shleifer (2014) argue that informal firms stay permanently informal, they hire informal workers for cash, buy their inputs for cash, and sell their products for cash, they are extremely unproductive, and they are unlikely to benefit much from becoming formal. The economic growth comes from the formal sector: that is, from firms run by educated entrepreneurs and exhibiting much higher levels of productivity. The expansion of the formal sector leads to the decline of the informal sector in relative and eventually absolute terms, although informal employment can remain high for a long time, especially when labor force growth is high. Therefore, this approach strongly supports prediction that informality declines although slowly, with the development.

Furthermore, La Porta and Shleifer (2014) report that on average 91 percent of registered firms started out as registered. An average surveyed informal firm has been in business for nearly a decade without attempting to become formal. Additionally, consistent with this observation is the fact that only 2 percent of informal firms sell their output to large firms (versus 14 percent of firms in the Enterprise Survey). Hence, the informal firms inhabit an economic space of their own, disconnected from the formal space.

4.5.2 Structuralist view

The critics of dualistic view as promoted by the structuralist view consider the co-existence and interconnections between informal and formal sector recognizing the continuum of economic activities rather than distinction in two main sectors. The informal sector should be viewed as subordinated economic units—micro firms and workers that serve to reduce input and labour costs and, thereby, increase the competitiveness of large capitalist firms (Moser, 1978; Portes et al. 1989).

The structuralists emphasize the existence of linkages between formal and informal economies, in a flexible production system where each sector has comparative advantages based

on different factor costs (Schneider, 2008). Therefore, the informality should have positive economic effects at low country income levels because the informal sector drives growth in very poor developing countries by providing sources of livelihood and economic opportunity which are unavailable in the formal sector (Loayza, 1997; Portes et al., 1989).

According to Chen (2007) the structuralist view see a role for government in regulating the unequal relationships between “big businesses” and subordinated informal producers and workers. Namely, they advocate regulation of commercial relations in the case of informal producers and regulation of employment relations in the case of informal wage workers. The informal sector contributes to the formal sector’s risk mitigation and cost reduction strategies. In this view, the informal economy is not viewed as a feature of a traditional sector, but instead a central feature of modern capitalist development (Altman, 2008).

The Structuralist paradigm argues that the informal and formal sectors are interdependent, and the informal sector is part of, and subordinate to the formal sector. In other words, the informal sector provides cheap labor, inputs, and products to formal firms, and contributes to the economy’s flexibility and competitiveness (World Bank, 2013). Despite the researchers and policy makers efforts to find ways of formalizing informal economy, the available evidence suggests that employers are more inclined to convert formal jobs into informal jobs rather than the other way around (Chen, 2007).

4.5.3 *Legalist view*

According to legalist view, the government deregulation would lead to increased economic freedom and entrepreneurship among working people, especially in developing countries (De Soto, 1989). Hernando De Soto (2000) has advocated on the scale down of the regulatory barriers, remove of unnecessary bureaucracies, and the formalization of property rights for the informal workforce to help them convert their informally held assets into real assets. In the developing and former communist nations as a whole about 85 percent of urban parcels in these nations, and between 40 percent and 53 percent of rural parcels, are held in such a way that they cannot be used to create capital. Undefined legal property represents a source of informal economy and barrier for entrepreneurial activity (De Soto, 2000).

The formal property records and titles represent the concept of what is economically meaningful about any asset (De Soto, 2000). This would increase benefits helping secure of investment and having access to external finance. In contrast bureaucratic barriers to legal property ownership of assets and the lack of legal structures that recognize and encourage ownership of assets are forces that keep people dependent on the informal economies. These forces prevent houses, land and machines in developing countries from functioning as capital does in the West, as assets that can be leveraged to create more capital (De Soto, 2002). At one side, the lack of legal property explains why citizens in developing and former communist nations cannot make profitable contracts with foreigners, cannot get credit, insurance or utilities services: they have no property to lose. At the other side, citizens of developed nations are thus able to split most of their assets into shares, each of which can be owned by different persons, with different rights to carry out different functions. For instance, a single factory can be held by countless investors, who can divest themselves of their property without affecting the integrity of the physical asset (De Soto, 2000).

Legalist view would consider informality to be an optimal behaviour in low-income countries (in which labor regulations increase production costs by an average of twenty percent), but would predict a reversal of this effect: as the regulatory costs of formality decline with a country's level of income, informality should become a second-best option in the presence of improved institutions and economic opportunities (Loayza, 1997). Thus, the effects of informality differ depending on growth or changes in income level of economies.

Focusing on transition economies Johnson et al. (1998b), suggests three general propositions. First, that the share of the unofficial economy in GDP should be higher when there is more regulation and more discretion for officials regarding how the regulatory system operates. Second, a higher share of the unofficial economy should be correlated with lower tax revenue as a percent of GDP. Third, a larger unofficial economy should be correlated with weaker publicly provided services, as measured by corruption and the "rule of law".

Therefore, the legalists focus on the relationship between informal entrepreneurs/enterprises and the formal regulatory environment, not formal enterprises. The Legalist paradigm argues that the informal sector is comprised of businesses that prefer to operate informally to evade the exorbitant costs of complying with regulations (Chen, 2007).

4.5.4 *Voluntarist view*

The informal enterprise in developing countries should be viewed as a part of a voluntary small firm sector similar to those in advanced countries that, due to the laxity of enforcement of labor and other codes, is able to choose the optimal degree of participation in formal institutions. The formal sector benefits provision in the developing world is frequently extremely inefficient and of poor quality. Because, workers pay for these implicitly or explicitly, to the degree that perceived benefits fall short of taxes there is an incentive to evade and to become informal. The informal enterprises choose to operate informally after weighing the costs-benefits of informality relative to formality (Maloney, 2004). The causal roots of informal economy come from efforts to avoid taxation and costly regulation in the formal economy (Brown et al., 2014).

According to Maloney (2004), an analysis based on different National Domestic Surveys over 60% of those in the informal self-employed in Mexico left their previous job and entered the sector voluntarily as a desire for greater independence or higher payment as the principal motives. Similarly, a survey in Argentina revealed that 80% of the self-employed in the informal sector had no desire to change jobs and under 18% saw self-employment as a temporary activity before they found a 'real' job. In addition, in Paraguay, only 28% of those in the informal sector (both self-employed and salaried) stated a desire to change occupations. However, the argument that informal employment can be desirable is most likely to be the case among low-skill workers. Thus to say that workers are voluntarily informally employed does not imply that they are either happy or well-off. It only implies that they would not necessarily be better-off in the other sector. Many are simply making the best choices they can, given their low level of education (Maloney, 2004).

The Voluntarist view also focuses on informal entrepreneurs who deliberately seek to avoid regulations and taxation but, unlike the legalist view, does not blame the cumbersome registration procedures. Furthermore, the Voluntarists pay relatively little attention to the economic linkages between informal enterprises and formal firms but subscribe to the notion that informal enterprises create unfair competition for formal enterprises because they avoid formal regulations, taxes, and other costs of production. They argue that informal enterprises should be

brought under the formal regulatory environment in order to increase the tax base and reduce the unfair competition to formal businesses (Chen, 2012).

4.6 Transforming informal economy to formal economy

As mentioned before the informal economy represents a large share of economic activities particularly in developing countries. Formal firms can engage with economic and legal institutions for sustaining their activity such as: engaging with chamber of commerce for entering the market, with banks for obtaining credit, with courts for contract enforcement and liquidation procedures, with local and international agencies for grants and consultations, with insurances in case of injury or sickness and so forth. In contrast, most informal firms have to cope with the exclusion from these institutions facing certain barriers of external environment and lack of support. Due to institutional barriers and lack of access to finance informal firms are marginalized which jeopardize their survival and growth aspiration. The benefits provided by developed institutional context can motivate informal firms to join the formal sector. The theory provides that scale down of institutional barriers and offering more attractive services to formal firms such as: easy access to finance, low cost of finance, grants, infrastructure, consultancy support, public procurement opportunities etc. attracts informal firms to register and to join the formal economy (De Soto, 2000; Djankov et al., 2002; Ayagari et al., 2007; Levine, 2008).

In the last two decades, the procedures for registering a business have been simplified in many countries around the world, and data on these changes has become available. This push began with De Soto's (1989) emphasis on the costs of registration, which in turn encouraged systematic data collection of entry costs around the world (La Porta et al., 2000; Djankov, 2002). This approach was in turn adopted by the World Bank in its Doing Business report, which since 2003 published a variety of measures of business regulation, including the regulation of entry, and country rankings (La Porta and Shleifer, 2014). These efforts have contributed in pushing of policy reforms in many countries in order to facilitate the registration procedures as well as to reduce the cost for new firm entries.

The evidence from changes in registration costs is one indicator on informality (Djankov et al, 2002; Klapper et al., 2006; La Porta and Schleifer, 2014). Another indicator is the access to

finance and cost of credits (Bigsten et al, 2000; Claessens and Laeven, 2003). In addition, an important factor represents the institutional environment in general which encourages the registration of firms through taxes, consulting, and grants, in one hand and law enforcement in another hand (Ayagari et al, 2007; Ischengoma and Kappel, 2008; Taymaz, 2009). The firms in developing countries tend to start their life as informal, and if they perform well, they tend to grow and become formal (Levenson et al., 1998). In this framework, Jovanovic (1982) suggests that firms should move from informal to formal as part of their natural evolution.

The informal sector operates in flexible ways but it is culturally unprepared to produce for demanding markets. Tokman (2007) argue that to take advantage of it, however, micro-entrepreneurs must radically alter their behavior by going through a process of cultural change. They must move from individualistic ways of doing business, driven by the imperative of succeeding by any means in an extremely competitive environment, to a culture that seeks the benefits of pooling productive resources and associating with other producers in an effort to gain access to the marketplace. Previous ways of relating to customers should change too, and new forms of communicating with different actors should be explored. From working on an individual basis and being barred from credit in an environment in which he or she usually entertains a personal relationship with customers, the entrepreneur must start producing for a market in which customers are faceless, request good quality, expect timely services and expect professionalism.

In analysis of productivity of formal and informal firms in Turkey, Taymaz (2009) suggests that policies towards reducing the size of the informal economy would be beneficial in increasing productivity and boosting growth, and both “stick” (enforcement) and “carrot” (training, clustering, market access, etc) policies would be adopted to reduce informality. If informal firms are forced to operate formally through strict enforcement, many informal firms in manufacturing are likely to exit from the market because they could not increase their productivity sufficiently when they operate formally. The productivity effect of operating formally is higher for services, but it is expected that a large number of informal service firms could not survive if they operate formally.

Ingram et al. (2007) after controlling for firm level, sector, and country specific effects, found that the incidence of formality is positively correlated with perceptions regarding the

availability of electricity supply, access to finance and access to land, and negatively correlated with the rate of taxation and corruption. These results suggest that improvements in the investment climate i.e. increasing its beneficial aspects and reducing its costs may result in more firms entering the formal economy, thereby providing a larger base of taxation and other benefits to society as a whole.

ILO (2014) suggests transition to formality through wide range of policies and inclusive growth strategies creating productive employment opportunities in the formal economy, fundamental principles and rights at work, social security, working conditions, income opportunities, education and skills development, access to finance and markets, law enforcement, industrial policy, infrastructure, enterprise registration, the promotion of cooperatives and other social economy enterprises, labor administration and labor inspection, transparent and democratic governance and social dialogue.

4.6.1 Reasons and motives of formalization

In order to clarify the formalization as the concept, Chen (2007) defined from the perspectives of policy makers, informal self-employed and informal wage workers. For policymakers, formalization means that informal enterprises should obtain a license, register their accounts, and pay taxes. But to the self-employed these represent the costs of entry into the formal economy. What they would like is to receive the benefits of operating formally in return for paying these costs, including: enforceable commercial contracts; legal ownership of their place of business and means of production; tax breaks and incentive packages to increase their competitiveness; membership in trade associations; and statutory social protection. While, to informal wage workers, formalization means obtaining a formal wage job or converting their current job into a formal job with secure contract, worker benefits, and social protection. The transitions to formality enhance economic efficiency and welfare, thereby contributing to productivity, sustainable growth and development (ILO, 2014).

The decision to formalize depends on costs and benefits within the informal and formal economy. In the formal economy, firms face certain costs. First, the registration process is usually the first set of costs informal firms face when considering formalization. Second, they must pay taxes and interact with tax officials. In addition, formal firms are subject to regulations

established by the government, including labor regulations, custom/trade regulations, environmental regulations, and health/safety regulations. Along with these costs, there are also several benefits of participating in the formal economy. First, formal firms have easier access to finance. Second, they have more appropriate access to courts in order to solve business disputes. Third, as they are legally recognized entities, they likely have easier access to land. Fourth, they also usually enjoy easier access to standard utility connections such as electricity, and water.

The operation in the informal economy also has its costs and benefits that must be compared to those in the formal economy. On the cost side, entrepreneurs must consider the cost of avoiding government officials. Informal firms also may have to pay bribes for services. In addition, informal firms face more barriers to access finance as well as markets. On the benefit side, they may have access to some services and facilities at lower or no cost, and they do not pay taxes. Therefore, a firm will formalize if the estimated profit in the informal sector is less than that in the formal sector (Djankov et al., 2002; Ingram, 2007; Chen, 2012).

The costs of formality are associated with the entry and operation in compliance with all legal requirements. An informal firm avoids all these by staying informal. The costs of informality include the continuous risk of being detected and punished by the state for not being formal. Also, they cannot enjoy the services provided by the state, most notably including jurisdictional services such as contract enforcement, protection against burglars, and so on (Bigsten, 2000). Utilizing the data of World Bank's Enterprise Surveys, Farazi (2014) argue that most of the firms would like to register but tend not to opt for it due to tax reasons and state that relatively easier access to finance would be the most important benefit they could obtain from registering.

According to Caner (2010) several reasons determine the decision of enterprises to be a part of formal or informal sector. For instance, government procurement assists the development of registered SMEs while discouraging the unregistered SMEs. Due to the legal requirements of government contracts, SMEs hiring unreported labor and evading taxes would not be able to participate in bids for procurement contracts issued by the government. The level and quality of education in a given country is also important in the development of registered SMEs. SMEs operating in the unregistered economy tend to use less productive labor with lesser skills. An increasingly important factor in the development of SMEs is the credit market. Access to credit

for investment and working capital allows registered SMEs to grow while discouraging unregistered SMEs at the same time. Furthermore, the size of the black market premium is also important for SME development. Large premiums in the form of illegal economic rents encourage small enterprises to operate in the informal economy.

Even though theories provide that higher taxes induce a larger informal sector, the empirical findings from transition countries are less clear-cut. For instance, Friedman et al. (2000) suggest that higher taxes are associated with lower shadow activity. Similarly, exploring the factors that influence the informal sector in transition Nikoloski (2009) argue that higher corporate tax rate is associated with a smaller informal economy. This may reflect that the effect of providing better publicly provided services and improved tax morality. Additionally, more competitive economic environment characterized by low entry barriers to the official sector causes decrease the size of the informal sector. In contrast, a higher level of corruption is coupled with a larger informal economy indicating that the so-called ‘lagging reformer’ countries that failed to undertake a fast restructuring of their state sector often suffered from a high level of corruption leading to a relatively larger informal sector.

4.6.2 The benefits of reducing informal economy

In developing countries, a large proportion of employment and output generation are concentrated in the informal sector (Schneider *et al.*, 2010). Even in countries experiencing strong economic growth, the informal sector often remains large and relatively unproductive, pulling down labor productivity and aggregate economic growth (Djankov et al. 2008; La Porta et al. 2014). The formalization is seen as a mean of breaking the vicious circle of low productivity and precarious working conditions that prevail in the informal economy (ILO, 2015). The formalization debate needs to take into account the benefits due to informal enterprises if they operate formally and to workers if they get a formal job; and the costs of working informally for both the self-employed and the salaried employed. The policy challenge is to increase the costs of working informally and to increase the benefits of working formally (Chen, 2007).

Based on analysis of empirical data in developing and transition economies Johnson et al. (1998b) argue that the unofficial economy is a key indicator of overall economic, institutional

and public finance outcomes. Further, they find evidence suggesting that a lower unofficial economy is significantly associated with higher rates of GDP growth. Rand and Torn (2012), based on unique panel data consisting of both formal and informal firms, found that causal evidence that becoming officially registered leads to an increase in profits and investments, and a decrease in the use of casual labor thereby improving contract conditions for workers. Moreover, formal firms have better access to credit. Thus, they conclude that formalizing is beneficial both to firms and the workers in these firms. The formal firms are more productive than informal firms (Dabla-Norris et al., 2005).

The informal economy hinders fair competition and increases costs relative to enterprises operating in the formal sector. The informal labor contracts and systematic evasion of social security contributions weaken the protection of workers and reduce their social benefits. By avoiding payment of taxes and social contributions informal enterprises may induce negative impact on the budget and social infrastructure due to decreasing revenues and subsequent reduction of proper provision of public goods and services. Emerging economies need to strengthen incentives for small firms to move into the formal business sector (Levine, 2002).

The majority of informal enterprises operate as survivalist entities with limited development and growth potential (Portes et al., 1989; Ligthelm, 2008). Thus, policy measures should be designed to make business environment hospitable for this category of enterprises that are large in a number and employ many employees. The formalization should be a priority from a public policy and private sector perspective, given that formalization could lead to higher tax revenues, better quality jobs, access to new markets, suppliers, and clients, more reliable supply chains, and higher rates of productivity (Stein et al., 2013).

4.7 Removing barriers to formalization

In emerging and transition economies, higher levels of regulation lead to a significantly higher incidence of bribery. This amounts to a higher effective tax on official activity and therefore induces firms to move into the unofficial economy (Johnson et al., 1998b). An increasing burden of taxation and social security payments, combined with rising state regulatory activities, are the major driving forces for the size and growth of the informal economy. The informal economies are a complex phenomenon, present to an important extent even in the

industrialized and developed economies. People engage in informal economic activity for a variety of reasons, among most important, of which are government actions, most notable taxation and regulation (Schneider, 2002). Autio and Fu (2014) argue that economic institutions exercise an important influence on the choice of whether to register one's business or not because they influence the cost of entry, the cost of doing business, and the cost of exit.

In the context of sustaining global efforts to reduce barriers of doing business, the World Bank publishes a yearly report on the Ease of Doing Business in 189 countries. The report estimates ten indicators which are among most important ones in doing business. The new statistical research has explored the correlation between the Doing Business indicators and the size of the informal economy. Two methods were used to produce the ranking – one involved averaging out a country's performance across the indicators, and the other used the raw values of indicators. Both regressions have shown that there is a high statistically significant correlation between a country's overall performance on the Doing Business indicators and the size of its informal economy; a worse environment for doing business correlates with a larger informal economy (USAID, 2005). In this respect, understanding the business environment, particularly regulatory and administrative barriers could provide necessary background to develop adequate policies for potential formalization of informal enterprises.

4.7.1 Regulatory barriers

While regulations are implemented to serve specific purposes (e.g. provide job security, health and safety, environmental protection, intellectual property rights etc.), they can also unintentionally raise costs and barriers to investment and employment in the formal economy (OECD, 2011). Regulations in product markets – such as entry barriers, strict licensing requirements, costly administrative procedures and other measures impeding competition – raise costs and barriers for firms to operate in the formal sector (Loayza et al., 2006). Existing empirical evidence suggests that there is a positive correlation between the overall regulatory burden on firms and the share of the informal economy (Loayza et al., 1997; Johnson et al., 2000).

De Soto (1989) research addressed the informal sector in a regulatory framework. In this approach, the legal status is the main element distinguishing informal from formal activities. He

relates the emergence of the informal sector to the policies applied. In this context, he suggests the deregulation of the market and scale down of regulatory barriers in order to motivate informal firms to shift toward formal economy.

Johnson et al. (1997) in their empirical analysis found that countries with over regulation of their economies tend to have a higher share of the unofficial economy in total of GDP. The enforcement of regulation is the key factor that extend formal sector, while the overall extent of regulation which is mostly not enforced drive firms towards the informal economy. Informal economies arise when governments impose excessive taxes and regulations that they are unable to enforce (Loayza, 1997).

The increase of the tax and social security contribution burdens is one of the main causes for the increase of the informal economy. The bigger the difference between the total cost of labor in the official economy and the after-tax earnings (from work), the greater is the incentive to avoid this difference and to work in the informal economy. Since this difference depends broadly on the social security system and the overall tax burden, they are key features of the existence and the increase of the informal economy. But even major tax reforms with major tax rate deductions will not lead to a substantial decrease of the informal economy (Schneider, 2002). Belev (2002) in analysis of informal economy in transition economies found that an increasing burden of taxation and social security payments, combined with rising state regulatory activities, represent the major driving force for the growth of the shadow economy.

A high level of regulatory discretion helps to create potential for corruption and drive firms into the unofficial economy (Johnson et al, 1998a). Investigating entry barriers in a cross section of 85 countries Djankov et al. (2002) found that stricter regulation of entry is associated with sharply higher levels of corruption, and a greater relative size of the informal economy. Sookram (2007) argue that small-business owners are motivated to participate in the informal sector when, amongst other things, they believe that the risk of detection by the tax authorities is low and that government regulations are burdensome. The informality is often associated with weak institutional arrangements and poor governance structures, and therefore with susceptibility to corrupt practices (ILO, 2014).

Regulation is desirable and necessary for raising tax revenues, but it inevitably increases the costs of business entry and operation. Inadequate regulations act as a barrier to development by keeping a large proportion of population out of the formal economy. When imposed at

unrealistic levels and inadequately enforced, regulation divides the economy into formal and informal sectors and erects barriers between the two which perpetuates the division (Bannock et al., 2005). Autio and Fu (2014) investigated the influence of economic and political institutions on the prevalence rate of formal and informal entrepreneurship across 18 countries in the Asia Pacific region during the period from 2001 to 2010. They found the quality of institutions to exercise a substantial influence on both formal and informal entrepreneurship. One standard deviation increase in the quality of economic and political institutions could double the rates of formal entrepreneurship and halve the rates of informal entrepreneurship.

4.7.2 *Administrative barriers*

Administrative barriers may appear during the interactions of the enterprises with institutions. Djankov et al. (2002) argue that complicated administrative process for licence permitting, business registration, access to finance, burdensome tax administration create a costs that may outweigh the benefits of going formal. These barriers discourage enterprises from formalization, particularly in the context of transition and less developed economies where institutions lack the ability to promote appropriate business environment.

Administrative barriers are the bureaucratic requirements that flow from regulations, their implementation and enforcement. A regulation may be well designed, proportionate and efficient, but its true effect on enterprises comes from the way in which it is administered. Administrative barriers are the hassle that dissuades informal enterprises from wanting to interact with government officials. They include the following:

- Excessive paperwork.
- Civil service inefficiency leading to delays in decision-making.
- Low levels of civil service capacity, i.e. poor skills levels so that mistakes are made, and too few people and access points providing services.
- Inaccessibility, as when there is too little delegation to the front-line and decisions have to be referred up the management chain.
- General bureaucratic obstruction.
- Abuse of position linked to corruption (USAID, 2005).

Programs to reduce corruption in public administration and improve the bureaucracy may have larger payoffs in many countries than mere changes in tax rates. Therefore, administrative reforms are likely to have significant payoffs. The elimination of socially unproductive regulations, instituting a one-stop firm registration process, implementing simplified, transparent and market-based environmental regulations are all likely to result in reduced corruption and bribery, less overall regulatory tax burden on the firm, better revenue mobilization and more firms staying in the official economy (Johnson et al., 1998b).

Ayagari et al (2007) in a cross-country analysis argue that several dimensions of the business environment related to regulation and administrative barriers, such as lower costs of entry and better credit information sharing are associated with a larger size of the formal economy, while higher exit costs are associated with a larger informal economy.

4.8 The relationship between formal and informal sector

One of the key aspects to understand the evolution of the informal sector is its interaction with the formal sector (Davies et al., 2010). In the earliest studies of the informal economy the dominant theory was one which considered the informal economy a separate economic domain or in other words which supported dualism. While the precise boundary between formal and informal sectors is often difficult to draw, the two sectors are clearly distinct. The theories later evolved in recognizing the role and significance of the informal sector and its integration into the national economies. The informal sector is not isolated: numerous links between enterprises in the formal and informal sectors were noted including, for instance, the sub-contracting of work by formal enterprises to informal enterprises (Swaminathan, 1991). The formal and the informal ends of the economic continuum are often dynamically linked. For instance, many informal enterprises have production or distribution relations with formal enterprises, supplying inputs, finished goods or services either through direct transactions or sub-contracting arrangements (Chen, 2007).

However, according to La Porta and Shleifer (2014) informal firms avoid taxes and regulations, and they do not trade with the formal sector. Moreover, informal entrepreneurs may act as a source of unfair competition for formal-sector, who have to comply with regulations and taxes. Thus, informal-sector may even undermine formal-sector activity (Williams, 2005).

In some poor or developing countries informal sector is dominant compared to the formal sector. For example, Nicaragua has a large informal sector where three-quarters of the economically active population participates in the informal sector. Within this predominantly informal economic environment, however, a formal sector exists and operates inside the bounds of government oversight and regulation. Most often, the informal sector is studied in isolation from the formal sector and vice-versa. Yet these sectors co-exist simultaneously, sometimes side-by-side, and other times distinct from or co-mingled with one another. Nevertheless, many formal firms also undertake informal practices compounding, and perhaps conflating, enforcement regimes (Pisani, 2015).

Large corporations, notably in the extractive industries, power, tourism and hospitality, agribusiness and forestry, and telecommunication sectors, want reliable and standardized supply chains for the production and distribution of their products and services. Basically, they need reliable contractors that have registered their business. This represents opportunity for small informal firms to become formal in order to access new clients and market opportunities (World Bank, 2013). By analyzing the link between formal sector subcontracting and informal sector employment in India, Monroy et al. (2014) argue that sector subcontracting is positively related to employment growth only in the most modern segments of the informal sector. Moreover, increased subcontracting cannot explain the persistently high employment in traditional informal manufacturing activities in India. Instead, subcontracting can contribute to job creation in relatively modern segments of the informal sector.

4.9 Informal workers and formal firms

The informal employment is defined as employment without a contract, unregistered with the relevant authority such as the social security agency or Ministry of Labor, and employment not entitled to receive social security benefits (ILO, 2012). Chen (2007) argues that many formal enterprises hire salaried workers under informal employment relations. For example, many part time workers, temporary workers and homeworkers work for formal enterprises through contracting or sub-contracting arrangements.

The existence of huge reserves of underemployed and unemployed workers that are generally workers with low skills and low productivity, and workers living in poverty, remains the primary motivation for studying the informal sector and its evolution. In order to find solutions to these problems, the researchers require clearer understanding of the activities that such workers are engaged in and their links with the wider economy (Swaminathan, 1991). The informal employment is attractive alternative for those not having opportunity to get formal employment (Nikoloski, 2016).

In view of the low share of formal employment in many countries, regulations and labour laws in such areas as minimum wages, social protection, health and safety, and employment protection are only applicable to a minority of workers. Due to weak enforcement, stemming from poor governance and weak institutional capacity including inadequate labour inspection, workers in the informal economy do not benefit from these types of protective legislation (ILO, 2014). Almeida and Carneiro (2005) argue that stricter enforcement of worker registration and labor regulation leads to lower employment of informal workers by firms. They also showed that stricter enforcement led to worse firm outcomes in terms of wages, productivity and investment, which was due to a reduction in the firms' access to flexible labor.

Regulations lead to a substantial increase in labor costs in the official economy. But since most of these costs can be shifted on the employees, these costs provide another incentive to work in the informal economy, where they can be avoided (Shneider, 2002). Many formal firms prefer informal employment relationships, in the interest of flexible specialized production, global competition, or reduced labor costs. The related point is that formal firms choose these types of informal employment relationships as a mean for avoiding their formal obligations as employers. In such cases, it is the formal firm not the informal worker that decides to operate informally and enjoys the 'benefits' of informality (Chen, 2007).

Informal employment is more prevalent in economies where there is greater poverty and less protection of workers forcing marginalized populations to conduct such endeavors as a last resort in the absence of alternatives. In recent years, many countries have devoted considerable attention to informal employment, and attempts have been made to understand the mechanisms through which the benefits of growth may or may not be transmitted to the poor. A new consensus has emerged around the belief that if economic growth is not associated with formal

job creation, a shift towards better employment opportunities in the formal economy and an improvement in the conditions of employment in informal activities, it will continue to generate inequality, poverty and vulnerability (ILO, 2014).

Chapter 5

5. Research design and data analysis

5.1 Introduction

5.2 The framework of empirical analysis

5.3 Sampling and data collection

5.4 Description of variables

5.5 Summary statistics

5.5.1 *Descriptive analysis regarding access to finance*

5.5.2 *Descriptive analysis regarding institutional barriers*

5.6 Statistical inference

5.6.1 *Assessing the difference with respect to access to finance*

5.6.2 *Assessing the difference with respect to institutional barriers*

5.1 Introduction

In previous chapters we have provided the theoretical background for the research. In this chapter we start performing the empirical part of the study with elaboration of research design and data analysis. In section 5.2 we elaborate the framework of empirical analysis. In section 5.3 we elaborate sampling and data collection. In this context, we explain appropriate methods and approach used for data collection in formal and informal sector. In section 5.4 we provide description of variables. With this respect, at one side we introduce growth of the firms as dependent variable that can be measured in terms of sales and number of employees. At another side we introduce two groups of independent variables that we expect to have impact on the growth of the firms. The first group of independent variables is related to access to finance, while the second group comprise various institutional barriers. In section 5.5 we introduce summary statistics. In this context, we provide descriptive analysis regarding access to finance in formal and informal sector as well as descriptive analysis regarding institutional barriers in formal and informal sector. Finally, in section 5.6 we elaborate statistical inference. In this context, we assess the differences with respect to access to finance between formal and informal sector. In addition, we assess the difference with respect to institutional barriers between formal and informal sector. Furthermore, we test null hypothesis on differences in perceptions of formal and informal businesses with respect to access to finance and institutional barriers.

5.2 The framework of empirical analysis

Although there are several analysis and published work regarding the impact of external factors on performance of SMEs in Kosovo, there is limited empirical work on the role of access to finance and institutional barriers in their performance. In fact, to our knowledge there is no empirical work that explores the impact of access to finance and institutional barriers neither a comparative analysis of differences in perceptions between the formal and informal sector. Furthermore, there is no empirical work that explores the impact of access to finance and institutional barriers barriers in potential formalization of informal firms.

According to Ghauri (2005) research is a process of planning, executing and investigating in order to find answers to our specific research questions. In order to get reliable answers to these questions, we need to do investigation in a consistent manner. We make efforts that through a systematic collection of reliable data of primary sources through survey and secondary data obtained from other sources, to explain the link of empirical analysis with existing theories. An empirical analysis uses data to test a theory or to estimate a relationship (Wooldridge, 2006).

In order to determine whether the access to finance and institutional barriers have an impact on performance of formal and informal SMEs, we have undertaken assessment in both sectors. The assessment was based on the surveys carried out on representative sample of formal and informal businesses. The survey on a sample of 1,000 formal SMEs was carried out by Riinvest Institute in all regions of Kosovo and including firm activities in different sectors. The sample of SMEs was stratified by the database of SMEs taken by Tax Administration of Kosovo (TAK). The second survey with sample size of 250 informal businesses was carried by using the same questionnaire modified to informal sector specifics. The surveys were carried out in the similar way with regard to geographic and sector distribution in all regions of Kosovo and including main sectors of economic activity of SMEs such as: service, trade, production and construction. As data are scarce and there is no database of any public agency that contains evidences of the informal businesses, the sample was selected by applying the non-probability snowballing techniques in combination with convenience sampling as one of the main types of

non-probability of sampling methods. These techniques were useful to access informal businesses and gather necessary data by contacting them face to face.

The primary aim of the study is to provide analysis of the impact of access to finance and institutional barriers in performance of formal and informal SMEs in Kosovo. For this purpose we use results from a survey on 1.250 SMEs to find similarities and distinction about the impact of access to finance and institutional barriers in formal and informal businesses. In addition, the focus of the study is to explore the impact of access to finance and institutional barriers to potential formalization of informal businesses. The initial analysis includes calculating the common summary statistics and drawing statistical inference based on comparison of two populations.

5.3 Sampling and data collection

There are two main sources of data regarding the businesses operating in the formal sector: Kosovo Business Registration Agency (KBRA) and Tax Administration of Kosovo (TAK). For the purpose of this research TAK data is being preferred over KBRA data for the reason that KBRA business register is not cleared adequately and contains many inactive firms. However, the inconvenience of using data from the official register is that it covers only formal economy but not the informal economy. The survey on SMEs has been conducted in order to obtain further information on the feature, obstacles and support needs of SMEs to facilitate access to finance and institutional barriers. The sample has been designed in such a way to take account on business environment obstacles for SMEs, and to provide results for the main sectors, size categories and regions of Kosovo.

On the other hand, there is no official register over informal businesses. The main criterion for inclusion is the registration status, i.e. the sampled business should not be registered. Although the number of informal businesses is large, it is not possible to approximate the population of informal businesses or to estimate their proportion compared to formal businesses. Due to the lack of official registers and tendency of these businesses to keep their activities hidden from public authorities it is very challenging to gather the necessary data from them for the purpose of empirical study. Therefore, the most appropriate form of approaching informal

businesses was snowball technique and convenience sampling. Snowball sampling is a special non-probability method for developing a research sample where existing study subjects recruit future subjects from among their acquaintances. This sampling technique is often used in hidden populations which are difficult for researchers to access, or in cases where a sampling frame is hard to establish and it is assumed that cases are affiliated through links that can be exploited to locate other respondents based on existing one (Katz, 2006). At the other side, a convenience sample is one of the main types of non-probability sampling methods. This is the least rigorous technique, involving the selection of the most accessible subjects (Marshall, 1996). The interviews with owners of the informal businesses with purpose of data collection were carried out face to face.

5.4 Description of variables

Following Miller and Friesen (1984), which emphasize the necessity of testing the impact of a large number of variables simultaneously in order to create a more complete and realistic image of phenomenon. We group the independent variable into two separate components which belong to external financing and institutional barriers affecting the firms' performance.

The first group representing external finance we gather variables such as: limited access to finance (loan documents, collateral, etc.), cost of finance (interest rates, and other administrative costs), and unavailability of subsidies and favorable loans from the state. The second group on institutional barriers consists of the following variables: Corruption, dysfunctional judiciary system (inefficient courts etc.), high custom tariffs and heavy trade regulations, unfavorable labor law and other business laws, inefficient tax administration, inefficient business licenses and permit procedures, and contract violations by customers and suppliers.

Variables of both groups are measured according to perceptions of business' owners/managers about external factors estimated as a barrier for doing business. In this context we use a Likert scale where respondents value the institutional barriers from 1 meaning that a given variable is not perceived as obstacle, to 5 meaning that particular variable is perceived as a major obstacle for doing business.

Growth of firms will be used as a dependent variable in our study. It takes value 1 if a random chosen firm will grow and 0 if such a firm does not grow. We expect to have more firms that grow if bottlenecks are low and vice versa. We use the number of employees and sales of firms as indicators of firm's growth.

Table 5.1 List and description of variables

Name of the variable	Description
Sales	1 if the sales grow and 0 otherwise
Number of employees	1 if the number of employees grow and 0 otherwise
Limited access to finance	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Cost of finance	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Unavailability of subsidies and favorable loan from the state	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Corruption	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Non-functioning judiciary system (inefficient courts etc.)	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Contract violations by customers and suppliers	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
High custom tariffs and heavy trade regulations	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Labor law and other business laws	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Inefficient tax administration	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business
Inefficient business licenses and permit procedures	It takes value from 1 to 5. 1-not obstacle, 5-major obstacle for doing business

Independent variables included in Table 5.1 will be incorporated in our model as they capture some main effects that business environment have on firms. These variables provide information on the firm's perception about the business environment in Kosovo that could affect the firms' growth.

5.5 Summary statistics

The sample structure of the informal businesses has been similar with that of the formal sector regarding enterprise size category, sectors of activity and geographic distribution. The summary descriptive statistics in regard to the size of the firms for both samples of formal and informal sectors is given in Table 5.2.

Table 5.2 Size categories in the samples of formal and informal SMEs

Size categories	Formal sector sample		Informal sector sample	
	Number of businesses	Share	Number of businesses	Share
1 - 9 persons employed	856	85.60%	225	90%
10 - 49 persons employed	123	12.30%	22	8.80%
50 - 249 persons employed	21	2.10%	3	1.20%
Total	1,000	100%	250	100%

From the Table 5.2 we can notice that in the sample of 1,000 formal businesses majority of businesses (85.6%) belong to the micro sized enterprises with 1 to 9 persons employed. Small sized enterprises employing 10 to 49 persons are represented with 12.3%, while the rest of the sample consists of medium sized businesses represented with 2.1% of the total number. The representative sample has been extracted from the business register of TAK with categorizing of SMEs accordingly.

On the other hand in the sample of 250 informal businesses 90% belong to the micro size enterprises with 1 to 9 persons employed. The share of small businesses represents 8.80%, while the share of medium sized businesses is only 1.20%. The formal sector consists of 95% of micro sized enterprises. Based on our experience from previous research, the informal sector comprises more than 95% micro size enterprises with 1 to 9 persons employed. Businesses with larger number of employees and capital turnover are more difficult to survive in the informal sector. Therefore, businesses that aim at business consolidation and growth need to be formalized in order to benefit most from external environment, particularly in the possibility of easier access to financing and institutional support. Most frequent cases where informal businesses can be found with larger number of persons employed are those in farming and agriculture or production respectively. The distribution of the sample of formal and informal businesses with respect to sectors of business activities is presented in Table 5.3.

Table 5.3 Distribution of the sample of formal and informal businesses over sectors of business activities

Sector of business activities	Formal sector sample		Informal sector sample	
	Number	Share	Number	Share
Service	428	42.80%	64	25.60%
Trade	434	43.40%	80	32%

Production	110	11%	95	38%
Construction	28	2.80%	11	4.40%
Total	1000	100%	250	100%

From Table 5.3 we can notice that SMEs sample of formal sector consists of 42.8% of service sector businesses, 43.4% of businesses are in the trade sector, 11% of businesses in the production sector, while only 2.8% of businesses in the construction sector. The sectoral distribution of SMEs in Kosovo in the sample of formal businesses is close to that observed from the official data. Namely, according to TAK register trade is a dominant sector with share of 43% of the total number of enterprises. Service sector is on the second place with 33%, followed by the production sector with 12 % of enterprises, while construction sector contain 7% of enterprises (KOSME, 2014).

In addition, from Table 5.3 we can note that similarly, the sample of informal businesses is divided in four main sectors of economic activities. Production sector contains more informal businesses compared to other economic sectors, i.e. it is represented by 38% of businesses. As small units they are located in different locations and usually they sell their products in open markets across regions in Kosovo, but they cannot export formally. Most of the informal businesses in the production sector are among those for production of household furniture, farms and agriculture businesses.

Trade sector also contains large number of informal units, since it is represented by 32% of the total number of businesses. These types of informal businesses in most of the cases sell products in different markets across regions in Kosovo. Service sector is represented by 25.6% of businesses. Although this sector is among the largest in the formal sector, this is not the case in informal sector because it is most difficult for these companies to operate without registration and licensing permits. Finally, construction sector is represented with only 4.4% of the total number of businesses. Despite the relatively small size of the informal sector sample, the construction sector contains a large number of the informal businesses, and they are in most cases micro size category employing between 1 to 9 employees. Due to specific type of the work, and because these businesses have no stable location where they offer services it is difficult to reach their representatives in order to be interviewed.

The average salaries of employees in the formal and informal sector are presented in Table 5.4. In addition, we provide analysis on the trends of salaries for both sectors in the last four years. The changes of salaries have been analyzed based on the reports of the businesses on the increase, decrease or no change in salaries for their employees.

Table 5.4 Average salary for employees in formal sector vs informal sector

Sectors	Average salary	Salary Increase/SMEs		Salary Decrease/SMEs		No change/SMEs	
		Number	share	Number	share	Number	share
Formal	228.1	340	34%	121	12.10%	539	53.90%
Informal	246.82	23	9.44%	125	50%	102	40.56%

From Table 5.4 we can notice that the average monthly gross salary of employees in the formal sector in Kosovo is 228.1 Euro. Formal businesses pay taxes and social contribution which further deduct the salaries for their employees. An average personal income tax rate in Kosovo is 5%, while social contribution is paid at the rate of 5% from the employee's salary and 5% from the employer (Government of Kosovo, 2016). However, 34% of surveyed businesses reported that their salaries increased in the last four years, 12.10% of businesses reported that their salaries decreased, while more than half (53.9%) of businesses reported that their salaries have not changed during the same period. On the other hand, the average monthly salary that informal businesses pay for their employees is 246.82 Euro. However, only 9.44% of businesses reported that there has been increase, 50% of businesses reported that there has been decrease, while 40.56% reported that there has been no change in the level of salaries during the last four years.

We can note that informal businesses work in critical conditions with only few of them having increase of salaries, while most of them have decline or no change in salaries. Furthermore, informal businesses have had more declines in the salaries compared to formal businesses. Though, the results show that the average salary is higher in informal businesses, this has been changing in favor of formal businesses for the reason that in the last four years has been less decrease, and respectively more increase in the salaries of the formal sector compared to informal sector. In addition, employers in the formal sector do not pay taxes and social contribution which allow them to pay higher net wage to their employees. Due to slightly improvement of the business environment formal businesses could receive more support from

institutions, while informal businesses could be further marginalized and threaten by strong competition. Therefore, we expect that the growing trend of salaries could continue in the formal sector rather than in the informal sector.

The average number of employees in businesses of formal and informal sector is presented in Table 5.5. In addition, the table presents the analysis in growth of businesses by number of employees during the last four years as well as forecast of employment growth in both sectors four years in the future.

Table 5.5 Average number of employees and growth of businesses by number of employees in formal vs. informal sector

Sector	4 years ago	Now		4 years from now (forecast)	
	Av. Number	Number	Increase/decrease	Av. Number	Increase/decrease
Formal	5.81	6.77	16.66%	8.63	27.35%
Informal	4.7	4.59	-2.44%	4.48	-2.39%

From Table 5.5 we can notice that the average number of employees within the formal sector sample is 6.77, while the average number of employees within the informal sector sample is 4.59. This difference indicates that informal businesses are smaller than formal businesses in terms of employed personnel. Our analysis based on business growth with respect to employment in both sectors shows that formal sector had average growth in the last four years by 16.66%, while informal sector had negative growth or decline by 2.44%. Moreover, employment forecast in the next four years in both sectors shows that businesses in the formal sector is expected to have increase in the number of employees by 27.35%, while businesses in the informal sector is expected to have decline in the number of employees by 2.39%. These trends of employment in both sectors indicate that formal sector enjoys better performance over informal sector in terms of growth of the number of employees.

The sales trend over the last four years as well as sales trend predicted for the next four years for the formal and informal sector is presented in Table 5.6. Businesses of both sectors have reported increase, decrease, or no change on their sales.

Table 5.6 Sales trends over last four years and sales trend predicted for the next four years in formal vs informal sector

Sector	Sales trend/last four years	Sales trend/next four years

	sales increase	sales decrease	No change	sales increase	sales decrease	No change
Formal	27.40%	44.60%	27.90%	44.30%	23.90%	31.70%
Informal	6.82%	69.07%	24.09%	8.00%	70.00%	22.00%

From Table 5.6 we can notice that with regard to sales trend, the formal sector outperforms the informal sector. Hence, 27.4% of businesses in the formal sector reported that they had sales increase during the last four years, 44.6% reported that they had sales decrease, while 27.9% reported that they had no change in sales. At the other side, only 6.82% of businesses in the informal sector reported that they had sales increase during the last four years, 69.07% reported that they had sales decrease, while 24.09% have reported that they had no change in sales. With respect to expected changes of sales in the next four years, businesses in the formal sector were more optimistic than businesses in the informal sector. Namely, 44.3% of businesses in the formal sector expect to have increase of sales, 23.9% of businesses expect to have decrease of sales, and 31.7% expect to have no change of their sales. In contrast, only 8% of businesses in the informal sector expect to have sales increase in the next four years, 70% expected to have sales decrease, and 22% expected to have no change of their sales. The means of average net profit rate for the sample of formal and informal businesses is presented in Table 5.7.

Table 5.7 Average net profit rate in formal vs informal sector

Sector	Mean-average net profit rate
Formal	22.22%
Informal	17.85%

From Table 5.7 we can notice that with respect to the net profit rate, the formal sector outperform the informal sector. The average net profit rate reported by the businesses in the formal sector is 22.22%, while informal sector businesses have reported an average net profit rate of 17.85%. Despite the fact that formal businesses are charged with taxes and social contributions they still enjoy higher net profit rate than informal businesses. Generally, it is expected that formal businesses have better management and are more efficient in the use of their resources which enable them better performance compared to the informal businesses. In addition, by operating in the formal sector they enjoy more opportunities in terms of access to

market as well as better institutional support, while avoiding costs related to detection by authorities.

5.5.1 Descriptive analysis regarding access to finance

Access to finance is very important determinant for starting and growing businesses. The businesses can count on two main sources of finance: internal and external. For the purposes of the study we are interested to know the obstacles of enterprises to access external finance and the assessment of differences between formal and informal sector in accessing finance. In this context, we have introduced three potential barriers that determine the use of external finance for businesses such as: limited access to finance, high cost of finance, and unavailability of subsidies and favorable loans from the state. In order to scale perceptions of respondents we apply the well-known Likert scale with the following modalities: 1-no obstacle; 2-minor obstacle; 3-neutral; 4-moderate obstacle; 5-major obstacle. In the table below we represent mean values of responses for the formal sector regarding the access to finance. The results are presented in Table 5.8.

Table 5.8 Mean values and standard deviation in perception of access to finance in the formal sector vs informal sector

No.	Formal sector	Mean Current	Std. Deviation	Mean 4 years ago	Std. Deviation	Mean 4 years from now	Std. Deviation
1	Limited access to finance	3.26	1.50	3.41	1.44	2.78	1.35
2	High cost of finance	4.25	1.11	4.26	1.11	3.64	1.26
3	Unavailability of subsidies and favorable loans from the state	4.11	1.19	4.16	1.16	3.57	1.29
No.	Informal sector	Mean Current	Std. Deviation	Mean 4 years ago	Std. Deviation	Mean 4 years from now	Std. Deviation
1	Limited access to finance	2.77	1.28	2.84	1.29	2.69	1.25
2	High cost of finance	4.31	1.17	4.32	1.18	4.20	1.22
3	Unavailability of subsidies and favorable loans from the state	3.30	1.50	3.31	1.50	3.26	1.48

From Table 5.8 we can notice that access to finance is essential factor as perceived by the businesses in the formal sector. Limited access to finance is related to administrative procedures for loan issuance from the bank. These procedures include loan documents, collateral, business

plan analysis etc. Businesses perceive limited access to finance as neutral obstacle with slight improvement during three time intervals of perception. In addition, the formal businesses perceive high cost of finance as moderate obstacle. High cost of finance is referred to interest rates and other administrative costs that banks charge businesses for loan issuance. Unavailability of subsidies and favorable loans from the state is perceived as moderate obstacle by the formal businesses. With respect to standard deviation of the datasets of access to finance in the formal sector we can notice that data are concentrated around the mean, hence there is small standard deviation. However, the standard deviation in responses with respect to high cost of finance is smaller compared to limited access to finance and unavailability of subsidies and favorable loans from the state.

At the other side we can notice that high cost of finance is the biggest obstacle for informal businesses. Unavailability of subsidies and favorable loans from the state represent second obstacle. Limited access to finance is smaller obstacle for informal businesses compared to formal businesses. This result can be explained by the fact that informal businesses generally finance their activities from informal sources of finance which require less procedure while they charge higher cost for the loans. In addition, the informal firms perceive as neutral obstacle the unavailability of subsidies and favorable loans from the state. Generally, the informal businesses are aware that as far as they have not register their business they could not be eligible for subsidies and favorable loans from the state. With respect to standard deviation of the datasets of access to finance in the informal sector we can notice that data are concentrated around the mean; hence there is small standard deviation. However, the standard deviation in responses with respect to high cost of finance is smaller compared to limited access to finance and unavailability of subsidies and favorable loans from the state.

5.5.2 Descriptive analysis regarding institutional barriers

Institutional environment is very important determinant for starting and growing businesses. Businesses during their operations face frequent and complex interactions with institutional framework. For the purposes of the study we are interested to evaluate the institutional obstacles and the assessment of differences between formal and informal sector. In this context, we have analyzed seven variables as institutional barriers that potentially impact the

performance of businesses: Corruption, dysfunctional judiciary system (inefficient courts etc.), high custom tariffs and heavy trade regulations, unfavorable labor law and other business laws, inefficient tax administration, inefficient business licenses and permit procedures, and contract violations by customers and suppliers. Similarly, as in the case of the access to finance variables we apply the well-known Likert scale with the following modalities for perceptions: 1-no obstacle; 2-minor obstacle; 3-neutral; 4-moderate obstacle; 5-major obstacle. In Table 5.10 we represent mean values and standard deviations for the formal vs informal sector regarding the institutional barriers.

Table 5.9 Mean values and standard deviation in perception of institutional barriers in the formal sector vs informal sector

No.	Formal sector -Institutional barriers	Mean Current	Std. Deviation	Mean 4 years ago	Std. Deviation	Mean 4 years from now	Std. Deviation
1	Corruption	4.12	1.32	4.16	1.30	3.66	1.45
2	Dysfunctional judiciary system (Inefficient Courts etc.)	3.89	1.35	3.96	1.34	3.49	1.42
3	High custom tariffs and heavy trade regulations	3.33	1.48	3.40	1.46	2.90	1.39
4	Unfavorable Labor Law and other business laws	2.71	1.43	2.64	1.44	2.08	1.28
5	Inefficient Tax Administration	2.66	1.43	2.79	1.47	2.37	1.32
6	Inefficient business licenses and permit procedures	2.45	1.44	2.64	1.50	2.22	1.32
7	Contract violations by customers and suppliers	2.45	1.46	2.54	1.48	2.13	1.26
No.	Informal sector -Institutional barriers	Mean Current	Std. Deviation	Mean 4 years ago	Std. Deviation	Mean 4 years from now	Std. Deviation
1	Corruption	3.21	1.47	3.17	1.46	3.18	1.44
2	Dysfunctional judiciary system (Inefficient Courts etc.)	1.53	1.09	1.53	1.09	1.54	1.08
3	Unfavorable Labor Law and other business laws	1.32	0.78	1.32	0.81	1.30	0.78
4	High custom tariffs and heavy trade regulations	1.17	0.67	1.17	0.67	1.18	0.65
5	Inefficient business licenses and permit procedures	1.19	0.62	1.19	0.62	1.19	0.61
6	Inefficient Tax Administration	1.08	0.44	1.08	0.43	1.09	0.43
7	Contract violations by customers and suppliers	1.08	0.39	1.08	0.39	1.07	0.38

From Table 5.9 we can notice that corruption and inappropriate functioning of judiciary system is perceived as the biggest obstacle for the firms in the formal sector. These institutional barriers are interactive due to the fact that the inappropriate functioning of courts may increase corruption in a given country. Formal sector has perceived as neutral obstacles high custom tariffs and heavy trade regulations, unfavorable labor law and other business laws, and inefficient tax administration. Meanwhile, inefficient business licenses and permits procedures, and contract violations by customers and suppliers is perceived as minor obstacle. Even though, formal businesses expect that institutional barriers will have slight improvement in the next four years. With respect to standard deviation of the datasets of institutional barriers in the formal sector we can notice that data are concentrated around the mean, hence there is small standard deviation. Moreover, the standard deviation in responses of formal businesses is very similar among independent variables in the group of institutional barriers.

At the other side, we can notice that informal sector perceive corruption among the biggest obstacle of the institutional environment. Dysfunctional judiciary system is perceived as minor obstacle, following with other institutional barriers which informal businesses perceive them as not obstacles for their performance. Furthermore, informal businesses expect that institutional barriers will remain the same in the next four years. This in fact shows the lack of engagement of informal businesses with formal sector and institutions. With respect to standard deviation of the datasets of institutional barriers in the informal sector we can notice that data are concentrated around the mean, hence there is small standard deviation. However, the standard deviation in responses regarding institutional barriers in the informal sector is smaller compared to formal sector. As regard to differences of standard deviations among institutional variables in the informal sector there are some differences. Hence, there is bigger standard deviation with respect to mean responses on corruption, while the smallest standard deviation is occurred with respect to mean responses on contract violations by customers and suppliers.

5.6 Statistical inference

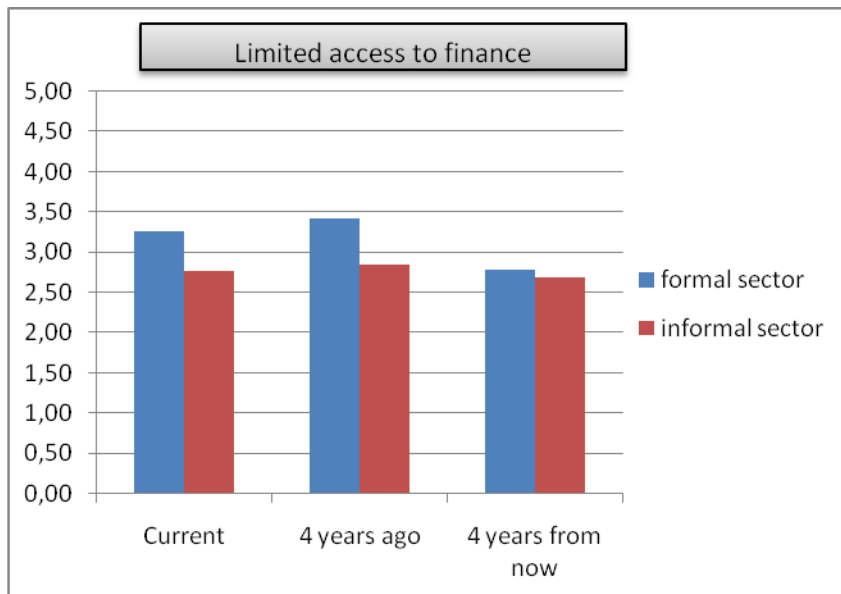
Utilizing data from formal and informal sector, statistical inference is useful to evaluate differences between two sectors with regard to access to finance and institutional barriers. Statistical inferences of all kinds use statistical models, which embody theoretical assumptions.

When we use a statistical model to make a statistical inference we implicitly assert that the variation exhibited by data is captured reasonably well by the statistical model, so that the theoretical world corresponds reasonably well to the real world (Kass, 2011).

5.6.1 Assessing the difference with respect to access to finance

Utilizing empirical data we evaluate the differences of formal and informal sector with respect to the firms' perception on the access to finance. In Figure 5.1 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to limited access to finance. The firms' perception on limited access to finance is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.1 Limited access to finance: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.1 we can notice that assessment for limited access to finance based on the perception of firms in the formal and informal sector is done in three intervals: now, four years ago, and four years in the future. Formal businesses perceive limited access to finance as an obstacle to business operation and growth more than informal businesses. However, formal businesses foresee an improvement in limited access to financing, while informal businesses perceive that limited access to financing will be relatively the same after four years.

Informal businesses are not well consolidated and mostly have a lack of growth objectives. Due to the fact of operating in the informal sector they do not count so much in accessing external finance. Moreover, informal businesses in most cases keep working with the aim of self-employment and maintain the survival rather than growth. In such circumstances they mainly rely on internal finance and other informal sources of financing. Some of the informal firms are not interested in external finance for reasons that they have no profitable investment projects and have difficulties to return due to the very high interest rates.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to limited access to finance. The null hypothesis states: There is no difference in the means of two populations with respect to limited access to finance.

Table 5.10 Group statistics for the formal and informal sector with respect to limited access to finance

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Limited access to finance	F	969	3.2673	1.50611	.04838
	I	250	2.7680	1.27777	.08081

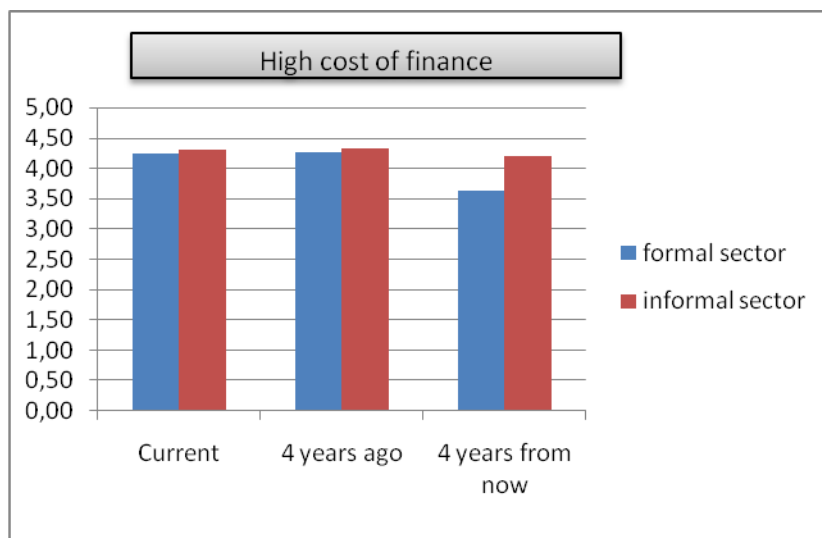
Table 5.11 Statistic t-test between formal and informal sector with respect to limited access to finance

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Limited access to finance	Equal variances assumed	28.077	.000	4.813	1217	.000	.49929	.10373	.29578	.70280
	Equal variances not assumed			5.301	444.796	.000	.49929	.09419	.31417	.68440

From Table 5.11 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to limited access to finance.

In Figure 5.2 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to high cost of finance. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.2 High cost of finance: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.2 we can notice that both sectors: formal and informal perceive the cost of finance as major obstacle that impedes business operation and growth. Informal businesses compared to formal businesses assess the high cost of finance as the bigger obstacle. In the next four years, formal businesses perceive that high cost of finance will be smaller obstacle in their operation and growth. Most likely, they are optimistic that cost of finance, consequently interest rates will move downward. On the other hand, informal businesses perceive that cost of finance or interest rates will remain high and therefore will be an obstacle to their operation and growth. Due to high cost of finance many businesses, particularly those of informal sector entirely avoid application for the loans.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to high cost of finance. The

null hypothesis states: There is no difference in the means of two populations with respect to high cost of finance.

Table 5.12 Group statistics for the formal and informal sector with respect to high cost of finance

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Cost of finance	F	979	4.2503	1.10940	.03546
	I	250	4.3120	1.17139	.07408

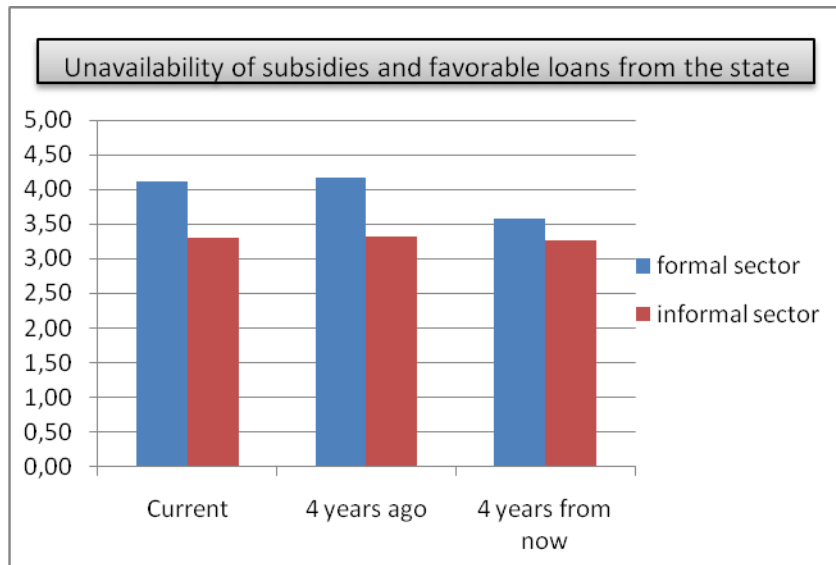
Table 5.13 Statistic t-test between formal and informal sector with respect to high cost of finance

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Cost of finance	Equal variances assumed	.125	.723	-.776	1227	.438	-.06174	.07953	-.21777	.09428
	Equal variances not assumed			-.752	371.173	.453	-.06174	.08213	-.22325	.09976

From Table 5.13 we can notice that p-value is higher than α . Since p-value = 0.453 > 0.05 we do not reject the null hypothesis. There is no difference in the means of two populations in the formal and informal sector with respect to high cost of finance.

In Figure 5.3 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to unavailability of subsidies and favorable loan from the state. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.3 Unavailability of subsidies and favorable loan from the state: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.3 we can notice that unavailability of subsidies and a favorable loan from the state is obstacle for businesses in formal and informal sector. Even though, it is more obstacle for formal businesses compared to informal businesses. With this respect, formal businesses differ from informal businesses by several features such as: they register and pay taxes as well as other social contributions; in turn they expect more institutional support through subsidies and access to finance in appropriate conditions. Moreover, formal businesses in comparison with informal businesses have more expectations for reasons that are more capable in their organization, skills and education, preparation of business plans, so as a result they find easier fulfillment of certain criteria for obtaining subsidies and favorable loan from the state. Therefore, those businesses assess the lack of financial support as an obstacle for their operations and growth.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to unavailability of subsidies and favorable loans from the state. The null hypothesis states: There is no difference in the means of two populations with respect to unavailability of subsidies and favorable loans from the state.

Table 5.14 Group statistics for the formal and informal sector with respect to unavailability of subsidies and favorable loans from the state

Group Statistics				
Firms	N	Mean	Std. Deviation	Std. Error Mean
Unavailability of subsidies F	985	4.1127	1.18617	.03779
I	250	3.3000	1.49766	.09472

Table 5.15 Statistic t-test between formal and informal sector with respect to unavailability of subsidies and favorable loans from the state

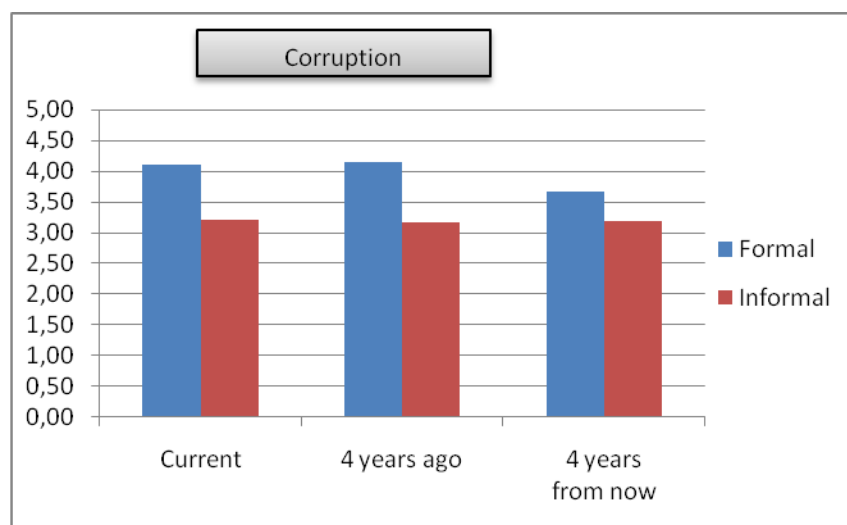
Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Unavailability of subsidies	Equal variances assumed	72.569	.000	9.142	1233	.000	.81269	.08890	.63828	.98710
	Equal variances not assumed			7.969	332.467	.000	.81269	.10198	.61208	1.01330

From Table 5.15 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to unavailability of subsidies and favorable loans from the state.

5.6.2 Assessing the difference with respect to institutional barriers

Utilizing empirical data we evaluate the differences of formal and informal sector with respect to the firms' perception on institutional barriers. In Figure 5.4 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to corruption which is reported as the biggest obstacle. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.4 Corruption: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.4 we can notice that corruption is perceived as an obstacle for formal and informal sector. Moreover, corruption is biggest obstacle among institutional barriers that impact the performance of businesses in formal and informal sector. Even though, it is more obstacles for formal businesses compared to informal businesses. The formal sector perceived corruption at the same level now and four years ago, however they expect that the level of corruption will decrease four years in the future. Informal businesses perceive corruption as an average obstacle, though they believe that the level of corruption will not change four years in the future.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to corruption. The null hypothesis states: There is no difference in the means of two populations with respect to corruption.

Table 5.16 Group statistics for the formal and informal sector with respect to corruption

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Corruption	F	984	4.1159	1.31846	.04203
	I	250	3.2120	1.46685	.09277

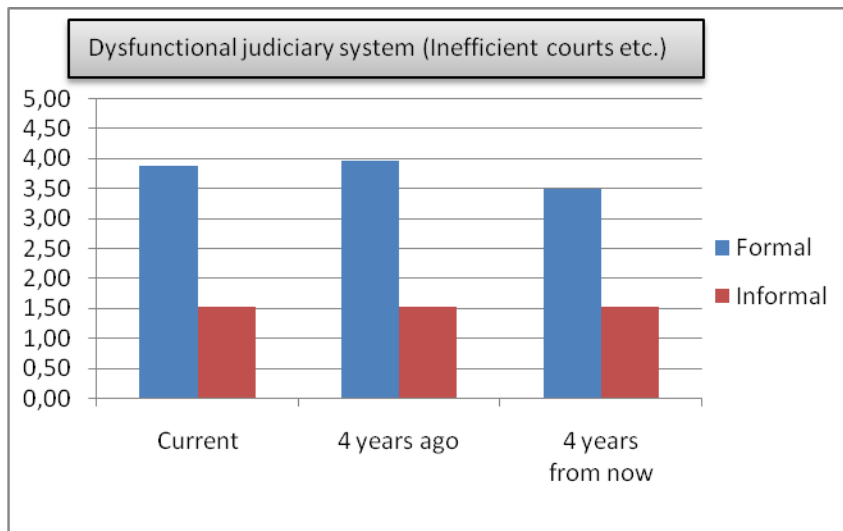
Table 5.17 Statistic t-test between formal and informal sector with respect to corruption

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Corruption	Equal variances assumed	15.928	.000	9.455	1232	.000	.90385	.09560	.71630	1.09141
	Equal variances not assumed			8.874	357.891	.000	.90385	.10185	.70356	1.10415

From Table 5.17 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to corruption.

In Figure 5.5 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to dysfunctional judiciary system (inefficient courts etc.). The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.5 Dysfunctional judiciary system (inefficient courts etc.): current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.5 we can notice that dysfunctional judiciary system (inefficient courts etc.) is an obstacle for formal sector, while it is a minor obstacle for informal sector. This institutional

barrier is one of essential problems that encourage the presence of informality and corruption influencing directly and indirectly the performance of businesses. However, from the formal businesses' perception dysfunctional judiciary system is expected to slightly improve, while on the perception of informal businesses it is expected to remain the same for the next four years.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to dysfunctional judiciary system (inefficient courts etc.). The null hypothesis states: There is no difference in the means of two populations with respect to dysfunctional judiciary system (inefficient courts etc.).

Table 5.18 Group statistics for the formal and informal sector with respect to dysfunctional judiciary system (inefficient courts etc.)

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Dysfunctional judiciary system (inefficient courts etc.)	F	967	3.8862	1.34960	.04340
	I	250	1.5280	1.08717	.06876

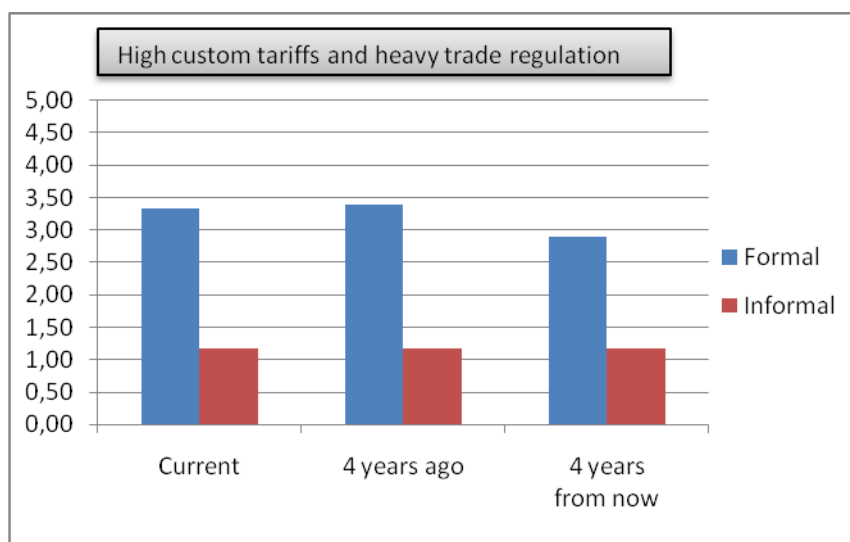
Table 5.19 Statistic t-test between formal and informal sector with respect to dysfunctional judiciary system (inefficient courts etc.)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Dysfunctional judiciary system (inefficient courts etc.)	Equal variances assumed	27.928	.000	25.564	1215	.000	2.35825	.09225	2.17727	2.53923
	Equal variances not assumed			29.003	467.790	.000	2.35825	.08131	2.19847	2.51802

From Table 5.19 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to dysfunctional judiciary system (inefficient courts etc.).

In Figure 5.6 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to high custom tariffs and heavy trade regulations. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.6 High custom tariffs and heavy trade regulations: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.6 we can notice that high custom tariffs and heavy trade regulations is an average obstacle for businesses in the formal sector, while for the businesses in the informal sector is not an obstacle, and it is not expected to change in the next four years. This institutional barrier according to formal businesses perception has remained unchanged during last four years, even though it is expected to decrease for the next four years. Formal businesses are more engaged in international trade consequently they face directly the barriers and costs of custom tariffs and heavy trade regulations when they trade with foreign businesses. Informal businesses cannot be engaged in international trade due to their unregistered status with public authorities making them marginalized, while serving in difficult circumstances and limited only to local markets. However, informal businesses could be indirectly linked to international trade through formal trading business partners.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to high custom tariffs and heavy trade regulation. The null hypothesis states: There is no difference in the means of two populations with respect to high custom tariffs and heavy trade regulation.

Table 5.20 Group statistics for the formal and informal sector with respect to high custom tariffs and heavy trade regulation

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
High custom tariffs and heavy trade regulations	F	954	3.3312	1.48067	.04794
	I	250	1.1680	.66750	.04222

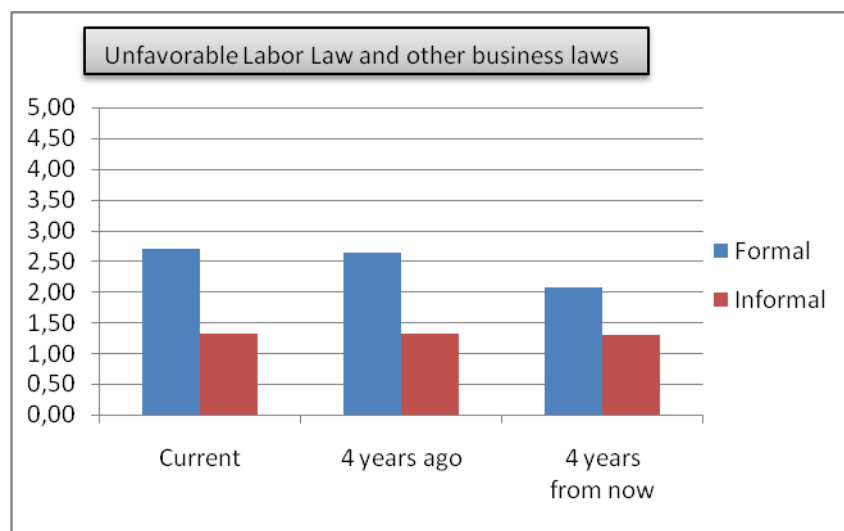
Table 5.21 Statistic t-test between formal and informal sector with respect to high custom tariffs and heavy trade regulation

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower		Upper
High custom tariffs and heavy trade regulations	Equal variances assumed	395.907	.000	22.503	1202	.000	2.16324	.09613	1.97464	2.35184
	Equal variances not assumed			33.865	909.875	.000	2.16324	.06388	2.03787	2.28860

From Table 5.21 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to high custom tariffs and heavy trade regulation.

In Figure 5.7 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to unfavorable labor law and other business laws. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.7 Unfavorable law and other business laws: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.7 we can notice that at one side formal businesses perceive unfavorable labor law and other business laws as an average obstacle which is expected to decrease as a minor obstacle in the next four years. At the other side, informal firms perceive unfavorable labor law and other business laws not an obstacle. Informal businesses work in marginal business environment context, while disregarding labor law and other business laws. In addition, working for a long time in the informal sector and due to low level of education of their owners and employees, in general they have a lack of knowledge with respect to business laws and regulations.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to unfavorable labor law and other business laws. The null hypothesis states: There is no difference in the means of two populations with respect to unfavorable labor law and other business laws.

Table 5.22 Group statistics for the formal and informal sector with respect to unfavorable labor law and other business laws

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Unfavorable Laborlaw and other business laws	F	978	2.7086	1.42716	.04564
	I	250	1.3200	.77718	.04915

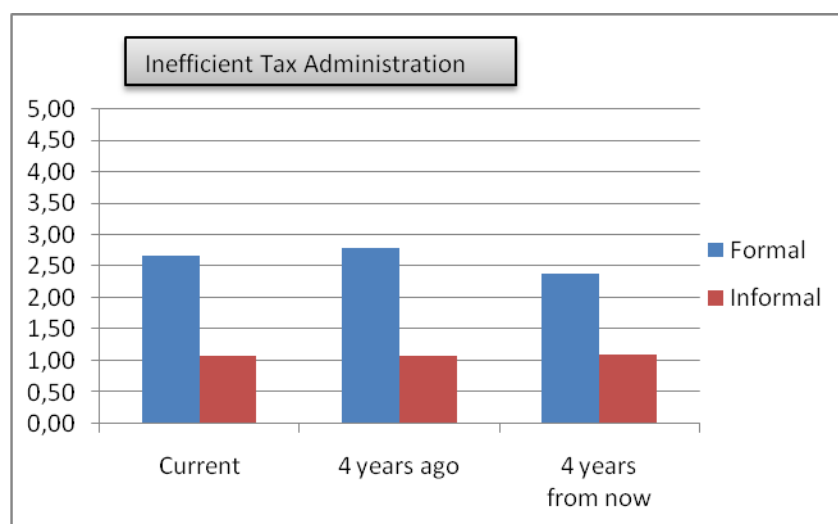
Table 5.23 Statistic t-test between formal and informal sector with respect to unfavorable labor law and other business laws

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Unfavorable Laborlaw and other business laws	Equal variances assumed	236.661	.000	14.829	1226	.000	1.38859	.09364	1.20488	1.57230
	Equal variances not assumed			20.703	725.832	.000	1.38859	.06707	1.25691	1.52027

From Table 5.23 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to unfavorable labor law and other business laws.

In Figure 5.8 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to inefficient tax administration. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.8 Inefficient tax administration: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.8 we can notice that inefficient tax administration mostly due to insufficient number of inspectors is perceived as an average obstacle for businesses in the formal sector. Even though, according to their perception it is expected to decrease to a minor obstacle four years in the future. Inefficient tax administration is among the institutional barriers that increase informal sector which consequently raises unfair competition for the formal sector. At the other side on the perception of informal businesses inefficient tax administration is not an obstacle. Insufficient numbers of inspectors and inefficiency of tax administration reduce the possibilities to detect economic activities of informal businesses.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to inefficient tax administration. The null hypothesis states: There is no difference in the means of two populations with respect to inefficient tax administration.

Table 5.24 Group statistics for the formal and informal sector with respect to inefficient tax administration

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Inefficient Tax administration	F	978	2.66	1.432	.046
	I	250	1.08	.436	.028

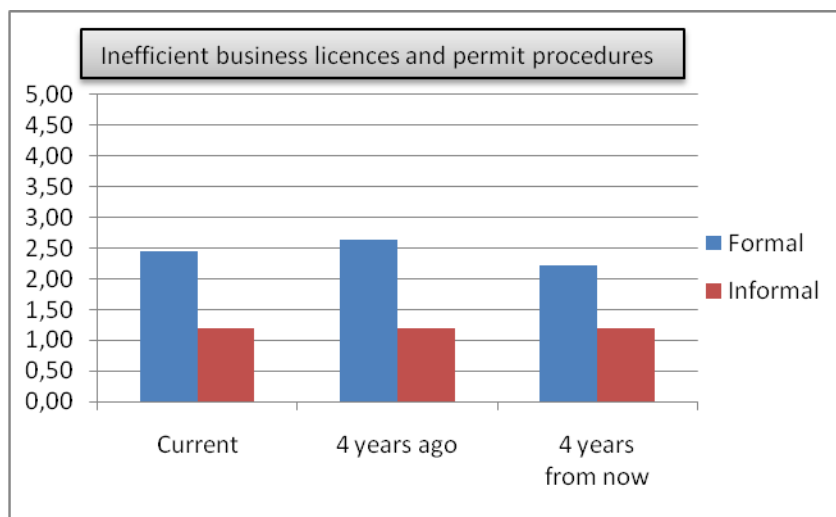
Table 5.25 Statistic t-test between formal and informal sector with respect to inefficient tax administration

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Inefficient tax administration	Equal variances assumed	534.397	.000	17.230	1226	.000	1.580	.092	1.400	1.759
	Equal variances not assumed			29.555	1197.06	.000	1.580	.053	1.475	1.684

From Table 5.25 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to inefficient tax administration.

In Figure 5.9 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to inefficient business licenses and permit procedures. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.9 Inefficient business licenses and permits procedures: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.9 we can notice that at one side formal businesses perceive inefficient business licenses and permit procedures as a minor obstacle. At the other side informal businesses perceive inefficient business licenses and permit procedures not an obstacle. Even though, formal businesses foresee further improvement with respect to business licenses and permit procedures, while informal businesses perceive that business licenses and permit procedures will remain the same four years in the future. However, the business licenses and permit procedures are among factors for doing business that in recent few years have improved significantly in Kosovo.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to inefficient business licenses

and permit procedures. The null hypothesis states: There is no difference in the means of two populations with respect to inefficient business licenses and permit procedures.

Table 5.26 Group statistics for the formal and informal sector with respect to inefficient business licenses and permit procedures

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Inefficient business licenses and permit procedures	F	978	2.4540	1.44303	.04614
	I	250	1.1920	.61698	.03902

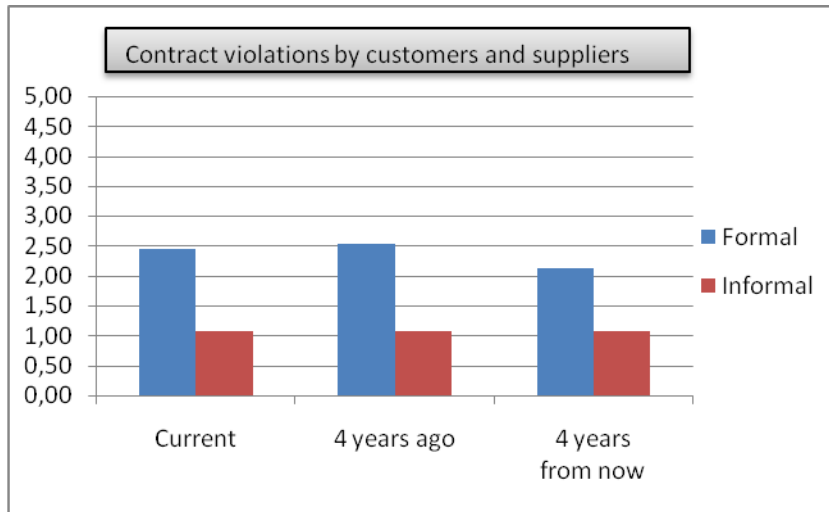
Table 5.27 Statistic t-test between formal and informal sector with respect to inefficient business licenses and permit procedures

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Inefficient business licenses and permit procedures	Equal variances assumed	465.063	.000	13.512	1226	.000	1.26199	.09340	1.07876	1.44522
	Equal variances not assumed			20.883	955.893	.000	1.26199	.06043	1.14340	1.38058

From Table 5.27 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to inefficient business licenses and permit procedures.

In the Figure 5.10 is presented summary of the firms' perception and comparison between the two sectors: formal and informal with respect to contract violations by customers and suppliers. The firms' perception is evaluated in three time intervals: four years ago, current, and four years from now.

Figure 5.10 Contract violations by customers and suppliers: current, 4 year ago and 4 years from now in the formal and informal sector



From Figure 5.10 we can notice that contract violations by customers and suppliers are perceived as a minor obstacle for businesses in the formal sector, while it is not an obstacle for businesses in the informal sector. There was no improvement in last four years for the businesses in the formal sector, while they perceive that slight improvement will occur four years in the future. For the businesses in the informal sector contract violations by customer and suppliers will not change four years in the future. Due to weak contract enforcement many formal businesses seek to enter in business contractual relations with business partners that they can trust in order to avoid contract violations, while informal businesses may entirely avoid formal contracts as their access to courts and other judiciary mechanisms is limited.

In the following using confidence level 95% we test the hypothesis on differences in perceptions between formal and informal businesses with respect to contract violations by customers and suppliers. The null hypothesis states: There is no difference in the means of two populations with respect to contract violations by customers and suppliers.

Table 5.28 Group statistics for the formal and informal sector with respect to contract violations by customers and suppliers

Group Statistics					
Firms		N	Mean	Std. Deviation	Std. Error Mean
Contract violations by customers and suppliers	F	972	2.4475	1.45666	.04672
	I	250	1.0760	.38836	.02456

Table 5.29 Statistic t-test between formal and informal sector with respect to contract violations by customers and suppliers

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Contract violation by customers and suppliers	Equal variances assumed	678.147	.000	14.749	1220	.000	1.37153	.09299	1.18909	1.55397
	Equal variances not assumed			25.983	1218.841	.000	1.37153	.05279	1.26797	1.47509

From Table 5.29 we can notice that p-value is zero. Since $p\text{-value} = .000 < 0.05$ we reject the null hypothesis. There is difference in the means of two populations in the formal and informal sector with respect to contract violations by customers and suppliers.

Generally, the lack of the role of the institutions to informal sector shows that informal businesses have a lack of relations with formal sector and they avoid links with institutions and regulations. Informal businesses work in marginal institutional context and they serve their products and services mostly in local informal markets. They employ workers informally and they further serve with low quality and low cost to low incoming customers. Moreover, some of informal businesses have a lack of aspirations for growth and they show unwillingness for potential formalization. In the early transition the business environment was heavily characterized by the lack of laws as well as non-function of institutions that enforce the rule of law. Nevertheless, some substantial progress has occurred in context of institutional environment, there is still non-performance of institutions and dysfunctional judiciary system which consequently raises informality and hinders performance of businesses.

Chapter 6

6. Econometric modelling

- 6.1 Introduction
- 6.2 Justification of models
- 6.3 Specification of econometric models
 - 6.3.1 Estimation for the formal sector
 - 6.3.2 Estimation for the informal sector
- 6.4 Interpretation of estimated results
- 6.5 Correlation analysis
- 6.6 Diagnostic tests and robustness analysis

6.1 Introduction

In order to examine the determinant factors in performance of formal and informal firms we utilize datasets containing the financial and institutional barriers information from the perception of both formal and informal sectors. In addition, we utilize the dataset of the informal firms to examine the determinant factors on access to external finance and institutional barriers in potential formalization of informal firms. With this respect we gain statistical evidences and explain our results in line with theory reviewed in previous chapters on access to finance, institutional barriers, and potential formalization of informal firms. When the econometric model is build up, it is suitable way to interpret the results and analyze or compare with evidences provided from the theory. The theory has provided us the ground to outline hypothesis, while based on the empirical evidences we test our hypothesis and draw conclusions if they are true or false. Therefore, econometric modeling is useful to examine the impact of business environment in performance of formal and informal firms as well as potential formalization of informal firms.

This empirical research will add value in the theoretical basis of work in this area by explaining the effect of access to finance and institutional barriers in performance of both formal and informal firms as well as potential formalization of informal firms. From the previous theoretical basis, a number of factors from financial and institutional barriers were found to affect performance of the firms. We test a considerable number of factors in the models to see if they are significant in performance of firms as well as potential formalization of informal firms. In this context, two research questions are addressed:

- How access to finance and institutional barriers impact formal and informal firms?
- How and to what extent access to finance and institutional barriers will potentially attract the formalization of firms?

The effect of external factors on the firms' performance will be estimated by using econometric modeling with binary response variables, such as the logit model and ordered probit model. In our econometric models, the indicators of performance of firms will be used as dependent variables. Namely, dependent variable will be considered the firms' growth in terms of sale and employment. It will take value one if the randomly chosen firm will grow and zero in the opposite case. We expect to have more firms that grow if access to finance and institutional barriers are scale down and vice versa. In the literature we can observe different indicators that explain growth of the firms in terms of employees, sales, profit rates, etc. in our case we use sales of the firms and number of employees as dependent variable to explain the performance of the firms. Our focus of study is to measure the impact of access to finance and institutional barriers as key important indicators to firms' performance. In this context, Weinzimmer et al. (2004) argue that researchers who seek to advance theory need to define clearly what they are measuring so, that they fairly replicate and extend previous research.

In section 6.2 we provide justification on the logistic regression and ordered probit model that we employ in our empirical study as the most appropriate technique of model estimation. Logistic regression and ordered probit represent appropriate econometric models to predict a dichotomous variable from a set of predictor variables. In section 6.3 we provide specification of econometric models that we employ to predict the future values of the dependent, or forecast variables, on the basis of known or expected future values of the explanatory, or predictor, variables. In this context, in line with our research questions we employ logistic regression and ordered probit to provide estimation for the factors that impact the performance of the formal and informal firms. In addition, we employ models to draw estimations for potential formalization of the informal firms. In section 6.4 we provide interpretation of empirical evidence on factors that impact performance of formal and informal firms. In addition, based on our model estimation we interpret the results on potential formalization of informal firms. In section 6.5 we further perform correlation analysis of independent variables for the formal and informal firms' samples. We employ multivariate analysis and variance of inflation to check for correlations among

independent variables. Finally, in section 6.6 we perform diagnostic tests and robustness analysis.

6.2 Justification of models

Choosing an appropriate model and estimation technique depends on the research question we have formulated with respect to the dependent variable. In this case, we have two dependent variables which are continuous expressed in the percentage from 0 to 100 percent. In such cases one would consider a simple linear regression using Ordinary Least Square (OLS) but as long as dependent variable is bounded by 0 and 100 probably would yield predicted values outside the boundaries of our response variable. The structure of the logistic regression model is designed for binary outcomes, whereas OLS is not. Logistic regression results will be comparable to those of OLS in many respects, but give more accurate predictions of probabilities on the dependent outcome. Both models allow continuous, ordinal and/or categorical independent variables (Pohlmann and Leitner, 2003).

OLS may give predicted values beyond the range (0,1), but the analysis may still be useful for classification and hypothesis testing. The normal distribution and homogeneous error variance assumptions of OLS will likely be violated with a binary dependent variable, especially when the probability of the dependent event varies widely. According to Wooldridge (2004) the two most important limitations of such models are that the fitted probabilities can be less than zero or greater than one and the partial effect of any explanatory variable (appearing in level form) are constant. Apparently, other alternatives should be considered in our case. These disadvantages of linear probability models can be eliminated by using more sophisticated binary response models.

Logistical regression is regularly used rather than discriminant analysis when there are only two categories of the dependent variable. Logistic regression is also easier to use with SPSS than discriminant analysis when there is a mixture of numerical and categorical independent variable's, because it includes procedures for generating the necessary dummy variables automatically, requires fewer assumptions, and is more statistically robust. Thus, in instances where the independent variables are categorical, or a mix of continuous and categorical, and the dependent variable are categorical, logistic regression is necessary (Park, 2013).

In our study we consider logistic regression and ordered probit as most appropriate technique of model estimation. In order to run logistic regression we transform dependent variables in dichotomous category, i.e. it takes value 1 for growth and 0 for not growth of the firm. We use two dependent variables, respectively sales of the firms and employment. In this case we will run two separate logistic regressions to capture the effects of independent variables in the dependent variables.

6.3 Specification of econometric models

We use the econometric model to predict the future values of the dependent, or forecast variable Y , on the basis of known or expected future values of the explanatory, or predictor, variable X (Gujarati, 2004).

$$P_i = E(Y = 1/X_i) = \beta_1 + \beta_2 X_i$$

where, X is independent variable and Y is dependent variable.

In order to avoid the OLS limitations, it is considered a class of binary response models of the form where G is a function taking on values strictly between zero and one: $0 < G(z) < 1$, for all real numbers z .

$$P(y=1/x) = G(\beta_0 + \beta_1 x_1 + \dots + \beta_k X_k) = G(\beta_0 + \mathbf{x} \beta),$$

This ensures that the estimated response probabilities are strictly between zero and one. Various nonlinear functions have been suggested for the function G in order to make sure that the probabilities are between zero and one. In the logit model, G is the logistic function which is between zero and one for all real numbers z .

$$G(z) = \exp(z)/[1 + \exp(z)] = \Lambda(z),$$

This is the cumulative distribution function for a standard logistic random variable. Logistic regression forms a best fitting equation or function using the maximum likelihood method, which maximizes the probability of classifying the observed data into the appropriate category given the regression coefficients (Wooldridge, 2006).

Like ordinary regression, logistic regression provides a coefficient b , which measures each independent variable's partial contribution to variations in the dependent variable. The goal

is to correctly predict the category of outcome for individual cases using the most parsimonious model. To accomplish this goal, a model (i.e. an equation) is created that includes all predictor variables that are useful in predicting the response variable. Variables can, if necessary, be entered into the model in the order specified by the researcher in a stepwise fashion like regression (Wooldridge, 2006).

Since logistic regression calculates the probability of success over the probability of failure, the results of the analysis are in the form of an odds ratio. Logistic regression also provides knowledge of the relationships and strengths among the variables (Wooldridge, 2006).

We separately estimate two models where dependent variables are sales and employees as measures of firms' performance. We create dummy variables coded 1 if the respondent reported growing sales and 0 if sales have not grown. Similarly, we create dummy variable for employees which is respectively coded 1 if the respondent reported growing employment and 0 if employment has not grown. We alternatively apply logit and ordered probit model in order to check robustness of the model on the impact of the identified factors in performance of firms through growth of sales and employees. Growth of sales and employment were measured as the difference between the logarithm of current sales and employment and the logarithm of sales and employment four years ago.

In line with our hypothesis testing we use as independent variables a group of indicators for access to finance barriers, institutional barriers, and firm characteristics as control variables. Independent variables of access to finance and institutional barriers are measured according to perceptions of business' owners/managers about external factors estimated as a barrier for doing business. In this context we use a Likert scale where respondents value the institutional barriers from 1 meaning that a given variable is not perceived as obstacle, to 5 meaning that particular variable is perceived as a major obstacle for doing business. Apart from access to finance and institutional variables we have introduced common control variables related to the firms' characteristics. Therefore, we control for gender of the owner (male = 1, and female = 0) and age of the firm's owner. Next, the size of the company is measured by the number of employees. In addition, the total sales are introduced as ordinal in seven categories that present firms' sales per year, ranging from: 1) €0 - €10,000; 2) €10,000 - €50,000; 3) €50,000 - €100,000; 4)

€100,000 - €200,000; 5) €200,000 - €500,000; 6) €500,000 - €1,000,000; 7) €1,000,000 and more. Finally, we have introduced as control variable the firm's average net profit rate.

6.3.1 Estimation for the formal sector

Logit model for the sales of the formal firms

Logistic regression is an appropriate econometric model to predict a dichotomous variable from a set of predictor variables. For a logistic regression, we have predicted dependent variable, namely sales of the firms which we transform in dichotomous category, coding 1 if sales grow and 0 if sales do not grow. On the other hand, we have a set of independent variables to predict the sales of the businesses. The set of independent variables is consisted of external factors such as access to finance, institutional barriers, and firm characteristics.

A probability (p) value is computed from the chi-square distribution with 8 degrees of freedom to test the fit of the logistic model. If the H-L goodness-of-fit test statistic is greater than 0.05, as we want for well-fitting models, we fail to reject the null hypothesis that there is no difference between observed and model-predicted values, implying that the model's estimates fit the data at an acceptable level. That is, well-fitting models show non-significance on the H-L goodness-of-fit test. This desirable outcome of non-significance indicates that the model prediction does not significantly differ from the observed.

Table 6.1 Hosmer and Lemeshow Test with respect to sales of the formal firms

Step	Chi-square	Df	Sig.
1	6.656	8	.574

From table 6.1 we can notice that Hosmer and Lemeshow test has a significance of 0.574 which means that it is not statistically significant and therefore our model is quite well specified.

Rather than using a goodness-of-fit statistic, we often need to look at the proportion of cases we have managed to classify correctly. For this purpose we look at the classification table, which shows how many cases of the dependent variable have been correctly predicted. In the classification table, the columns are the two predicted values of the dependent variable, while the

rows are the two observed values of the dependent variable. In a perfect model, all cases will be on the diagonal and the overall percent correct will be 100%.

Table 6.2 Classification Table with respect to sales of the formal firms

Observed		Predicted			
		Sales growth/not growth		Percentage Correct	
		.00	1.00		
Step 1	Sales growth/not growth	.00	518	22	95.9
		1.00	146	36	19.8
Overall Percentage					76.7

From Table 6.2 we can notice that 95.9% were correctly classified for the group of businesses that reported not growing sales and 19.8% for the group of businesses that reported growing sales. Overall 76.7% were correctly classified which make the model appears good.

The variables in the equation table summarize the importance of the explanatory variables individually whilst controlling for the other explanatory variables. (Table 6.3).

Table 6.3 Logit estimates for the sales of formal firms

Sales growth/not growth	B	S.E.	Wald	Sig.	Exp(B)
Limited access to finance	-.206	.069	9.009	.003***	.814
High cost of finance	-.248	.093	7.081	.008***	.781
Unavailability of subsidies	.140	.088	2.519	.112	1.150
Inefficient tax administration	.103	.075	1.891	.169	1.109
High custom tariffs	-.009	.073	.015	.904	.991
Business registration and license permits	.314	.081	15.097	.000***	1.369
Unfavorable labor law and other business regulation	-.301	.087	12.043	.001***	.740
Dysfunctional Judiciary System (Inefficient courts etc.)	-.041	.085	.228	.633	.960
Corruption	.047	.090	.274	.601	1.048
Contract violations by businesses and customers	-.086	.071	1.472	.225	.918
Gender	.416	.323	1.655	.198	1.516
Age	-.048	.010	22.165	.000***	.953
Number of employees	-.008	.013	.389	.533	.992
Average salary	.002	.001	1.652	.199	1.002
Total sales	.348	.084	17.159	.000***	1.416
Average net profit rate	.144	.743	.037	.847	1.154
Constant	.336	.800	.177	.674	1.400

Pseudo R2 = 0.183, Log likelihood = 719.688, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.3 we can notice that the Wald criterion demonstrates that some variables made a significant contribution to prediction. From the theory access to finance and institutional barriers are very important determinants for starting and growing businesses. In this context, we have introduced three potential barriers that determine the importance of external finance and seven potential barriers related to institutional environment. In order to scale perceptions of respondents we have applied Likert scale with the following modalities: 1-no obstacle; 2-minor obstacle; 3-neutral; 4-moderate obstacle; 5-major obstacle. Based on the perceptions of representatives of the firms limited access to finance was a significant predictor ($p = .003$). Predicted B value indicates that when barriers for access to finance are increased by one unit sales of the firms are likely to decline by 20.6 %, suggesting a negative relationship between two variables. The difference in the odd ratio: $\exp(-20.6) - 1 = -18.6\%$ indicates that when barriers for access to finance are increased by one unit the sales of the firms are likely to decline by 18.6% or as shown in the model 0.81 times less likely to grow, while holding other predictors in the model constant. Our evidence supports the hypothesis that limited access to finance negatively affects performance of formal SMEs. Similarly as expected high cost of finance was a significant predictor ($p = .008$). Predicted B value indicates that when cost of finance barriers are increased by one unit, the sales of the firms are likely to decline by 24.8%. The odd ratio: $\exp(-0.248) - 1 = -22\%$ indicates that when barriers cost of finance are increased by one unit the sales of the firms are likely to decline by 22% or as shown in the model sales of the firms are 0.78 times less likely to grow. This evidence supports the hypothesis that high cost of finance negatively affects performance of formal SMEs.

With respect to institutional barriers, business registration and license permit procedures was a significant predictor ($p = .000$). Predicted B value indicates that when barriers for business registration and license permit procedures are increased by one unit sales of the firms are likely to grow by 31.4%. The odd ratio: $\exp(0.314) - 1 = 36.9\%$ indicates that when barriers for business registration and license permit procedures are increased by one unit the sales of the firms are likely to grow by 36.7% or 1.37 times likely to grow. Although this may be unexpectedly formal businesses may perceive barriers to business registration as positive because of the decline in new entrants, thus as protection from competition. In addition, the unfavorable labor law and

other business regulation was a significant predictor ($p = .001$). Predicted B value indicates that when barriers for labor law and other business regulation are increased by one unit, sales of the firms are likely to decline by 30.1 %. The odd ratio: $\exp(-30.1) - 1 = -0.26$ indicate that when unfavorable labor law and other business regulation barriers are increased by one unit sales of the firms are likely to decline by 26% or 0.74 times likely to grow. The results support only partially the hypothesis that institutional constraints negatively affect performance of formal SMEs.

With respect to firm characteristics the age of the owner was a significant predictor ($p = .000$). Predicted B value indicates that an additional year of age of the company's owner would cause a decrease of sales by 4.8%. The odd ratio: $\exp(-0.048) - 1 = 4.7\%$ indicates the decline of sales by 4.7% or 0.95 times less likely to grow. Total sales of the firm was a significant predictor ($p = .000$). Predicted B value indicates that when total sales are increased by one unit, sales of the firms are likely to increase by 34.8 %. The odd ratio: $\exp(0.348) - 1 = 41.6$ indicates that when total sales increase by one unit sales of the firms are likely to increase by 41.6% or 1.42 times more likely to grow. Other independent variables included in the model are not statistically significant at level 0.05.

Ordered probit model for the sales estimate of the formal firms

Ordered probit model is an appropriate econometric model to predict a dichotomous variable from a set of predictor variables. Similar to logit model, using probit ordered model we have predicted dependent variable, namely sales of the firms which we transform in dichotomous category, coding 1 if sales grow and 0 if sales do not grow. On the other hand, we have a set of independent variables to predict the sales of the businesses. The set of independent variables is consisted of the same external factors such as access to finance and institutional barriers, and firm characteristics. In what follows we examine the goodness-of-fit statistics. The observed significance level is .374 (Table 6.4).

Table 6.4 Goodness-of-Fit for the sales of formal firms

	Chi-Square	df	Sig.
Pearson	715.484	704	.374
Deviance	719.316	704	.336

Link function: Probit.

From Table 6.4 we can notice that the goodness-of-fit has large observed significance levels, so it appears that the model fits well.

The parameter estimates are summarized in Table 6.5 together with statistical significance of the explanatory variables.

Table 6.5 Ordered probit estimate for the sales of formal firms

		Parameter Estimates				
		Estimate	Std. Error	Wald	df	Sig.
Thres hold	[Sales growth/not growth = .00]	-.663	.421	2.484	1	.115
	Limited access to finance	-.122	.040	9.321	1	.002***
	High cost of finance	-.146	.055	7.093	1	.008***
	Unavailability of subsidies	.081	.051	2.498	1	.114
	Inefficient tax administration	.059	.044	1.837	1	.175
	High custom tariffs	-.007	.042	.025	1	.874
	Business registration and license permit procedures	.181	.047	14.943	1	.000***
	Unfavorable labor law and other business regulation	-.172	.050	12.002	1	.001***
	Dysfunctional Judiciary System (Inefficient Courts)	-.021	.050	.180	1	.672
	Corruption	.022	.052	.178	1	.673
	Contract violations by businesses and customers	-.048	.041	1.360	1	.244
	Gender male 1	-.239	.192	1.554	1	.212
	Age of the owner	-.028	.006	23.087	1	.000***
	Number of employees	-.005	.008	.370	1	.543
	Average salary	.001	.001	1.902	1	.168
	Total sales	.205	.049	17.271	1	.000***
	Average net profit rate	.095	.428	.049	1	.824

Link function: Probit, Pseudo R2 = 0.184, Log likelihood = 719.316, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.5, parameter estimates in the sample of formal firms we can notice that statistically significant are the following independent variables: limited access to finance, high cost of finance, business registration and license permit procedures, unfavorable labor law and

other business regulation, age of the owners, and total sales. The probit regression coefficients give the change in the z-score (probit index) for a one unit change in the predictor.

For one unit increase in perception of formal firms on limited access to finance obstacle, the sales decreases by 12.2%. The odd ratio: $\exp(-0.122)-1 = -11.48$ indicates that when limited access to finance obstacle is increased by one unit, the sales decline by 11.48%. For one unit increase in cost of finance, the sales decline by 14.6%. The odd ratio: $\exp(-0.146)-1 = -13.6\%$ indicates that when cost of finance barrier is increased by one unit, the sales decline by 13.6%. For one unit increase in business registration and license permit procedures, the sales increases by 18.1%. The odd ratio: $\exp(0.181)-1 = 19.8\%$ indicates that when business registration and license permit procedures obstacles is increased by one unit, the sales increases by 19.8%. For one unit increase in unfavorable labor law and other business regulation, the sales decrease by 17.2%. The odd ratio: $\exp(-0.172)-1 = -15.8\%$ indicates that when unfavorable labor law and other business regulation obstacle increase by one unit, the sales decline by 15.8%. For one each year increase in the age of the company's owner, the sales decline by 2.8%. The odd ratio: $\exp(-0.028)-1 = -2.76\%$ indicates that for one each year increase in the age of the company's owner, the sales decline by 2.76%. For one category increased in total sales of the firms, the sales increase by 20.5%. The odd ratio: $\exp(0.205)-1 = 22.76$ indicate that when total sales of the firms are increased by one category, the sales increase by 22.76%. From this interpretation we can conclude that the same independent variables appear to be statistically significant as in the case of the estimated logit model, although the magnitude of significance is lower in ordered probit model compared to the logit model.

Logit model for employment estimate of the formal firms

In addition to sales of the firms we use growth of employment as a second dependent variable which we transform in dichotomous category, coding 1 if number of employees grows and 0 if number of employees does not grow. On the other hand, we have a set of independent variables to predict the growth of the firms in the number of employees. The set of independent variables is comprised of external factors such as access to finance and institutional barriers, and firm characteristics.

A probability (p) value is computed from the chi-square distribution with 8 degrees of freedom to test the fit of the logistic model. If the H-L goodness-of-fit test statistic is greater than 0.05, as we want for well-fitting models, we fail to reject the null hypothesis that there is no difference between observed and model-predicted values, implying that the model's estimates fit the data at an acceptable level. That is, well-fitting models show non-significance on the H-L goodness-of-fit test. This desirable outcome of non-significance indicates that the model prediction does not significantly differ from the observed.

Table 6.6 Hosmer and Lemeshow Test for employment in formal firms

Step	Chi-square	df	Sig.
1	11.917	8	.155

From table 6.6 we can notice that Hosmer and Lemeshow test has a significance of .155 which means that it is not statistically significant and therefore our model is well specified.

Rather than using a goodness-of-fit statistic, we look at the proportion of cases we have managed to classify correctly. For this purpose we look at the classification table, which shows how many cases of the dependent variable have been correctly predicted.

Table 6.7 Classification Table for employment in formal firms

		Predicted			
		Employees grow/not grow		Percentage Correct	
Observed		.00	1.00		
Step 1	Employees grow/not grow	.00	401	36	91.8
		1.00	170	66	28.0
	Overall Percentage				69.4

From Table 6.7 we can notice that 91.8% were correctly classified for the group of businesses that reported not growth of the number of employees and 28.0% for the group of businesses reported growth of the number of employees. Overall 69.4% were correctly classified which make the model appears good.

The variables in the equation table summarize the importance of the explanatory variables individually whilst controlling for the other explanatory variables. (Table 6.9).

Table 6.8 logit estimate for employment in formal firms

Employment growth/not growth	B	S.E.	Wald	Sig.	Exp(B)
Limited access to finance	-.057	.064	.791	.374	.944
High cost of finance	-.030	.091	.106	.745	.971
Unavailability of subsidies	.090	.084	1.140	.286	1.094
Inefficient tax administration	-.024	.071	.118	.731	.976
High custom tariffs	-.055	.067	.692	.406	.946
Business registration and license permits	.218	.074	8.702	.003***	1.243
Unfavorable labor law and other business regulation	-.070	.078	.804	.370	.932
Dysfunctional Judiciary System	.011	.082	.018	.894	1.011
Corruption	-.170	.085	3.960	.047**	.844
Contract violations by businesses and customers	.130	.064	4.074	.044**	1.139
Gender	.036	.333	.011	.915	1.036
Age	-.009	.009	1.029	.310	.991
Average salary	.000	.001	.107	.743	1.000
Total sales	.452	.074	36.805	.000***	1.571
Average net profit rate	-1.178	.713	2.730	.098*	.308
Constant	-.924	.698	1.754	.185	.397

Pseudo R2 = 0.148, Log likelihood = 795.245, Prob. > Chi2 = 0.000

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.8 we can notice that the Wald criterion demonstrate that some variables made a significant contribution to prediction. Business registration and license permit procedures was a significant predictor in the model ($p = .003$). Predicted B value indicates that when barriers business registration and license permit procedures are increased by one unit, the employees of the firms are likely to grow by 21.8 %. The odd ratio: $\exp(0.218) - 1 = 24.3$ indicates that when barriers of business registration and license permit procedures are increased by one unit the employees of the firms are likely to grow by 24.3% or 1.24 times more likely to grow. Corruption was a significant predictor in the model ($p = .047$). Predicted B value indicates that when corruption is increased by one unit, the employees of the firms are likely to decline by 17 %. The odd ratio: $\exp(-0.17) - 1 = -15.6$ indicates that when corruption is increased by one unit, the employees of the firms are likely to decline by 15.6% or 0.84 times less likely to grow. Contract violations by businesses and customers was a significant predictor in the model ($p =$

.044). The odd ratio: Predicted B value indicates that when contract violations by businesses and customers are increased by one unit, the employees of the firms are likely to grow by 13 %. The odd ratio: $\exp(0.130)-1=13.9\%$ indicates that when the contract violations by businesses and customers are changed by one unit, the employees of the firms are likely to grow by 13.9% or 1.14 times more likely to grow. Hence, we have evidence that business registration and license permit procedures, and contract violations by businesses and customers affect employment positively, while corruption affect negatively the growth of formal firms' employment. These evidences provide partial support for hypothesis that institutional constraints negatively affect performance of formal SMEs.

Total sales was a significant predictor in the model ($p=.000$). Predicted B value indicates that when total sales are increased by one unit, the employees of the firms are likely to grow by 45.2 %. The odd ratio $(0.452)-1=57.1\%$ indicates that when total sales are increased by one unit the employees of the firms are likely to grow by 57.1% or 1.57 times more likely to grow. The average net profit rate was a significant predictor in the model ($p=.098$). Predicted B value indicates that when average net profit rate is increased by one unit, the employees of the firms are likely to decline by 118 %. The odd ratio $(-1.178)-1= -69.2\%$ indicates that when average net profit rate is increased by one unit the employees of the firms are likely to decline by 69.2% or 0.308 times less likely to grow.

Ordered probit model for employment estimate of the formal firms

In addition to sales of the firms we use growth of employment as a second dependent variable which we transform in dichotomous category, coding 1 if number of employees grows and 0 if number of employees does not grow. On the other hand the set of independent variables is consisted of the same external factors such as access to finance and institutional barriers, and firm characteristics. In the following table we examine the goodness-of-fit statistics. The observed significance level is .310 (Table 6.9).

Table 6.9 Goodness-of-Fit for the employment of formal firms

	Chi-Square	df	Sig.
Pearson	670.719	656	.337

Deviance	795.070	656	.000
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From Table 6.9 we can notice that the goodness-of-fit has large observed significance levels, so it appears that the model fits well.

The parameter estimates are summarized in Table 6.10 together with statistical significance of the explanatory variables.

Table 6.10 Ordered probit estimate for the employment of formal firms

		Parameter Estimates				
		Estimate	Std. Error	Wald	df	Sig.
Threshold	[Employees growth/not growth = .00]	.539	.420	1.648	1	.199
	Limited access to finance	-.037	.039	.897	1	.344
	High cost of finance	-.012	.055	.051	1	.821
	Unavailability of subsidies	.052	.050	1.079	1	.299
	Inefficient tax administration	-.017	.042	.160	1	.689
	High custom tariffs and heavy trade regulation	-.034	.040	.712	1	.399
	Business registration and license permit procedure	.135	.044	9.317	1	.002***
	Unfavorable labor law and other business regulation	-.042	.047	.805	1	.370
	Dysfunctional judiciary system	.003	.049	.003	1	.955
	Corruption	-.102	.051	3.975	1	.046**
	Contract violations by businesses and customers	.078	.039	4.099	1	.043**
	Gender	.006	.199	.001	1	.977
	Age	-.006	.005	1.129	1	.288
	Average salary	.000	.001	.091	1	.763
	Total sales	.273	.044	38.412	1	.000***
	Average net profit rate	-.690	.422	2.674	1	.102

Link function: Probit, Pseudo R2 = 0.149, Log likelihood = 795.070, Prob. > Chi2 = 0.000

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.10 of parameter estimates of formal firms we can notice that independent variables business registration and license permit procedures, corruption, contract violations by businesses and customers, and total sales are statistically significant. For one unit increase in the perception of formal firms on business registration and license permit procedures, the employees

of formal firms increase by 13.5%. The odd ratio: $\exp(0.135)-1=14.5\%$ indicates that when perception of formal firms on business registration and license permit procedures is increased by one unit, the employees of formal firms increase by 14.5%. For one unit change in the perception of formal firms on the level of corruption, the number of employees decline by 10.2%. The odd ratio: $\exp(0.102)-1= -9.7\%$ indicates that when perception of formal firms on the level of corruption is increased by one unit, the number of employees decline by 9.7%. For one unit change in the perception of formal firms on contract violations by businesses and customers, the number of employees increases by 7.8%. The odd ratio: $\exp(0.078)-1= 8.11\%$ indicates that when perception of formal firms on contract violations by businesses and customers is increased by one unit, the number of employees increase by 8.11%. For one unit increase of total sales of the firm, the employees of the firm increase by 27.3% while holding other predictors in the model constant. The odd ratio: $\exp(0.273)-1= 31.39\%$ indicates that when total sales of the firm are increased by one unit, the employees of the firm increase by 31.39%. In contrast, other independent variables have insignificant p value which suggests that changes in the predictor are not associated with changes in the predicted variable.

6.3.2 *Estimation for the informal sector*

Logit model for the sales of informal firms

Similar to the formal firms we use logistic regression for the informal firms to predict a dependent variable from a set of predictor variables. For a logistic regression, we have predicted dependent variable sales of the firms which we transform in dichotomous category, coding 1 if sales grow and 0 if sales do not grow. On the other hand, we have a set of independent variables to predict the sales of the firms. The set of independent variables is consisted of the group of variables related to access to finance, institutional barriers, and firm characteristics.

A probability (p) value is computed from the chi-square distribution with 8 degrees of freedom to test the fit of the logistic model. If the H-L goodness-of-fit test statistic is greater than 0.05, as we want for well-fitting models, we fail to reject the null hypothesis that there is no difference between observed and model-predicted values, implying that the model's estimates fit the data at an acceptable level.

Table 6.11 Hosmer and Lemeshow Test for the sales of informal firms

Step	Chi-square	df	Sig.
1	7.585	8	.475

From table 6.11 we can notice that Hosmer and Lemeshow test has a significance of .475 which means that it is not statistically significant and therefore our model is well specified.

Rather than using a goodness-of-fit statistic, we look at the proportion of cases we have managed to classify correctly. For this purpose we look at the classification table, which shows how many cases of the dependent variable have been correctly predicted.

Table 6.12 Classification Table for the sales of informal firms

Observed		Predicted		
		Sales increase/decrease		Percentage Correct
		.00	1.00	
Step 1	Sales increase/decrease	.00	1.00	
		229	4	98.3
		13	4	23.5
Overall Percentage				93.2

From Table 6.12 we can notice that 98.3% were correctly classified for the group of businesses that reported not growth of sales and 23.5% for the group of businesses that reported growth of sales. Overall 93.2% were correctly classified which make the model appears good.

The variables in the equation table summarize the importance of the explanatory variables individually whilst controlling for the other explanatory variables. (Table 6.13).

Table 6.13 Logit estimates for the sales of informal firms

Sales growth/not growth	B	S.E.	Wald	Sig.	Exp(B)
Limited access to finance	-.214	.340	.398	.528	.807
High cost of finance	-.207	.284	.532	.466	.813
Unavailability of subsidies	-.060	.212	.081	.777	.942
Inefficient tax administration (insufficient number of inspectors)	2.852	1.146	6.189	.013**	17.32
High custom tariffs and heavy trade regulation	-2.957	2.573	1.321	.250	.052
Business registration and license permit procedures	-2.064	1.256	2.701	.100	.127

Unfavorable labor law and business regulation	-.031	.436	.005	.943	.969
Dysfunctional Judiciary System	.679	.305	4.963	.026**	1.972
Corruption	-.690	.263	6.851	.009***	.502
Contract violations by businesses and customers	2.337	1.493	2.449	.118	10.352
Gendermale1	.956	3.104	.095	.758	2.602
Age	-.004	.037	.012	.914	.996
Numberofemployees	-.035	.077	.203	.652	.966
Averagesalary	.012	.004	7.996	.005***	1.012
Totalsales	.245	.482	.259	.611	1.278
Averagenetprofitrate	2.258	1.705	1.753	.186	9.563
Constant	-5.455	4.990	1.195	.274	.004

Pseudo R2 = 0.406, Log likelihood = 80.908, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.13 we can notice that the Wald criterion demonstrates that access to finance was not a significant predictor. The results do not support the hypothesis that limited access to finance negatively affects performance of informal SMEs. High cost of finance was not a significant predictor. The results do not support the hypothesis that high cost of finance negatively affects performance of informal SMEs.

In the context of institutional barriers, inefficient tax administration was a significant predictor ($p = .013$). Predicted B value indicates that when informal firm perception on inefficiency of tax administration (insufficient number of inspectors) is increased by one unit, sales of the firms are likely to increase by 285 %. The odd ratio: $\exp(2.85) - 1 = 1,629\%$ indicates that when barrier inefficient tax administration is changed by one unit the sales of the firms are likely to increase by 1,629% or 17.32 times more likely to grow. Dysfunctional judiciary system was a significant predictor ($p = .026$). Predicted B value indicates that when informal firm perception on dysfunctional judiciary system is increased by one unit, sales of the firms are likely to increase by 67.9 %. The odd ratio: $\exp(0.679) - 1 = 97.2\%$ value indicates that when barrier dysfunctional judiciary system is increased by one unit the sales of the firms are likely to increase by 97.2% or 1.97 times more likely to grow. Corruption was a significant predictor ($p =$

.009). Predicted B value indicates that when perception of informal firms on corruption is increased by one unit, sales of the firms are likely to decline by 69 %. The odd ratio: $\exp(-0.69)-1 = -49.3\%$ indicates that when corruption obstacles are increased by one unit, sales of the firms are likely to decline by 49.3% or 0.50 times less likely to grow. The results provide no evidence in support of hypothesis the institutional constraints negatively affects performance of informal SMEs. In terms of institutional constraints only corruption hinders the sales of informal firms. In some circumstances we may understand that institutional barriers that hinder the growth of formal firms, conversely, may stimulate the business opportunities for informal firms. Therefore, some key institutional obstacles such as inefficiency of tax administration and dysfunctionality of judiciary system are positively correlated with the sales of the informal firms.

The average salary was a significant predictor ($p = .005$). Predicted B value indicates that when average salary is increased by one unit, sales of the firms are likely to increase by 1.2 %. The odd ratio: $\exp(0.012)-1 = 1.21\%$ indicates that when average salary is increased by one unit, sales of the firms are likely to increase by 1.21% or 1.01 times more likely to grow.

Moreover, the majority of informal firms have reported not growth of sales and the lack of perspective for their business, which is most likely attributed to their operations in marginalized and isolated context, including the lack of support from institutional environment. In addition, the informal firms are very small which make them weak against fierce competition of formal and bigger companies. Therefore, the intention of informal firms is to survive rather than grow their business.

Ordered probit model for the sales estimate of the informal firms

Similar to the formal firms we use ordered probit model for the informal firms to predict a dependent variable from a set of predictor variables. In the following table we examine the goodness-of-fit statistics. The observed significance level is .310 (Table 6.14).

Table 6.14 Goodness-of-Fit for the sales of informal firms

	Chi-Square	df	Sig.
Pearson	243.198	233	.310
Deviance	81.585	233	1.000

Link function: Probit.

From Table 6.14 we can notice that the goodness-of-fit has large observed significance levels, so it appears that the model fits well.

The parameter estimates are summarized in Table 6.15 together with statistical significance of the explanatory variables.

Table 6.15 Ordered probit estimate for the sales of informal firms

Parameter estimates					
	Estimate	Std. Error	Wald	df	Sig.
[Sales growth/not growth = .00]	3.080	2.124	2.102	1	.147
Limited access to finance	-.075	.165	.208	1	.649
High cost of finance	-.112	.142	.616	1	.432
Unavailability of subsidies	-.063	.111	.323	1	.570
Inefficient tax administration (Insufficient number of inspectors)	1.405	.636	4.888	1	.027***
High custom tariffs and heavy trade regulation	-1.440	1.113	1.673	1	.196
Business registration and license permit procedures	-1.028	.692	2.210	1	.137
Unfavorable labor law and heavy trade regulation	.004	.238	.000	1	.985
Dysfunctional judiciary system	.313	.160	3.837	1	.049**
Corruption	-.330	.129	6.481	1	.011**
Contract violations by businesses and customers	1.239	.675	3.370	1	.066*
Gender male 1	.440	1.259	.122	1	.727
Age	.001	.018	.006	1	.937
Number of employees	-.018	.036	.243	1	.622
Average salary	.006	.002	6.579	1	.010**
Total sales	.175	.253	.481	1	.488
Average net profit rate	1.304	.942	1.916	1	.166

Link function: Probit, Pseudo R2 = 0.400, Log likelihood = 81.585, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.15 parameter estimates we can notice that in the sample of the informal firms, independent variables: inefficient tax administration, dysfunctional judiciary system, corruption, and average salary are statistically significant. For one unit increase in the perception of the informal firms on inefficiency of tax administration (insufficient number of inspectors), the sales of informal firms will increase by 140%. The odd ratio: $\exp(1.40) - 1 = 305\%$ indicates that when inefficiency of tax administration (insufficient number of inspectors) is increase by one unit, the sales of informal firms increase by 305%. For one unit increase in the perception of the informal firms on dysfunctionality of judiciary system, the sales of informal firms increase by 31.3%. The odd ratio: $\exp(0.313) - 1 = 36.8\%$ indicates that when dysfunctionality of judiciary system is increased by one unit, the sales of informal firms increase by 36.8%. For one unit increase in the perception of the informal firms on the level of corruption, the sales of informal firms decline by 33%. The odd ratio: $\exp(-0.33) - 1 = 28.1\%$ indicates that when perception of the informal firms on the level of corruption is increased by one unit, the sales of informal firms decline by 28.1%. For one unit increase in the average salary, the sales of the informal firms increase by 0.6%. The odd ratio: $\exp(0.006) - 1 = 0.6\%$ indicates that when the average salary is increased by one unit, the sales of the informal firms increase by 0.6%.

As mentioned before, having in account that informal firms face fierce competition from formal firms and they operate in isolated institutional context, some institutional obstacles that hinder performance of formal firms may have the opposite effect for informal firms. The same independent variables as in logit affect dependent variable, although the magnitude of significance is lower in ordered probit model compared to logit one.

Logit model for employment estimate of the informal firms

Similar to the formal firms we use logistic regression for the informal firms to predict a dichotomous dependent variable from a set of predictor variables. We use number of employees as dependent which we transform in dichotomous category, coding 1 if employees grow and 0 if employees do not grow. On the other hand, we have a set of independent variables to predict the growth of the firms in the number of employees. The set of independent variables is consisted of external factors such as access to finance and institutional barriers, and firm characteristics.

A probability (p) value is computed from the chi-square distribution with 8 degrees of freedom to test the fit of the logistic model. If the H-L goodness-of-fit test statistic is greater than 0.05, as we want for well-fitting models, we fail to reject the null hypothesis that there is no difference between observed and model-predicted values, implying that the model's estimates fit the data at an acceptable

Table 6.16 Hosmer and Lemeshow Test for employment in the informal firms

Step	Chi-square	df	Sig.
1	3.187	8	.922

From table 6.16 we can notice that Hosmer and Lemeshow test has a significance of .922 which means that it is not statistically significant and therefore our model is well specified.

Rather than using a goodness-of-fit statistic, we look at the proportion of cases we have managed to classify correctly. For this purpose we look at the classification table, which shows how many cases of the dependent variable have been correctly predicted.

Table 6.17 Classification Table for employment in the informal firms

Observed			Predicted		
			Sales grow/not grow		Percentage Correct
Step	Sales grow/not grow	.00	1.00		
1	grow	.00	240	1	99.6
		1.00	8	1	11.1
Overall Percentage					96.4

From Table 6.17 we can note that 99.6% were correctly classified for the group of businesses that reported not growth of employees and 11.1% for the group of businesses that reported growth of employees. Overall 96.4% were correctly classified which make the model appears good.

The variables in the equation table summarize the importance of the explanatory variables individually whilst controlling for the other explanatory variables (Table 6.18).

Table 6.18 logit estimate for employment in the informal firms

Employment growth/not growth	B	S.E.	Wald	Sig.	Exp(B)
Limited access to finance	.165	.352	.221	.638	1.180
High cost of finance	-.141	.352	.160	.689	.869
Unavailability of subsidies	-.053	.260	.041	.839	.949
Inefficient tax administration	-15.590	5898.514	.000	.998	.000
High custom tariffs	-13.575	3841.847	.000	.997	.000
Business registration and license permit procedures	.560	.505	1.229	.268	1.750
Unfavorable labor law and heavy trade regulation	.007	.580	.000	.991	1.007
Dysfunctional judiciary system	-.116	.434	.071	.790	.891
Corruption	.157	.287	.301	.583	1.170
Contract violations by businesses and customers	-14.325	6570.296	.000	.998	.000
Gender male1	16.527	8129.415	.000	.998	150548 13.86
Age	-.071	.051	1.953	.162	.931
Number of employees	.015	.050	.095	.758	1.016
Average salary	-.001	.006	.021	.884	.999
Total sales	.759	.635	1.428	.232	2.136
Average net profit rate	4.446	1.945	5.223	.022**	85.309
Constant	23.426	12601.923	.000	.999	1491843 3514.73

Pseudo R2 = 0.241, Log likelihood = 60.905, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.18 we can notice that the Wald criteria demonstrate that most of independent variables contribution to prediction is negligible in the sample of informal firms. The average net profit rate was a significant predictor in the model ($p = .022$). Predicted B value indicates that when average net profit rate is increased by one unit, the employees of the firms are likely to grow by 444 %. The odd ratio: $\exp(4.44) - 1$ indicates that when the average net profit rate is increased by one unit the employees of the firms are likely to grow by 8,377% or 85.30 times more likely to grow. This exaggerated result may have come as a consequence that only 9 out of 250 firms have reported growth of employees in the last four years. Moreover, as

shown in Table 6.11 the group of businesses that reported growth of employees was correctly predicted in the model only 11.1%. As business environment in recent years is improving in some dimensions it take more difficult for informal firms to plan the growth of the employees. Due to the strengthening of the institutional framework, informal firms should formalize in order to grow in terms of sales and number of employees. The results do not support the hypothesis: limited accesses to finance negatively affect performance of the informal firms; the hypothesis high costs of finance negatively affect performance of the informal firms; and the hypothesis institutional constraints negatively affect performance of the informal firms.

Ordered probit model for the employment estimates of informal firms

Similar to the formal firms we use ordered probit for the informal firms to predict a dichotomous dependent variable from a set of predictor variables. We use number of employees as dependent variable, while we have a set of independent variables to predict the growth of the firms in the number of employees. The set of independent variables is comprised of external factors such as access to finance and institutional barriers, and firm characteristics. In the following table we examine the goodness-of-fit statistics. In the table 6.19 we examine the goodness-of-fit statistics.

Table 6.19 Goodness-of-Fit for the employment of informal firms

	Chi-Square	df	Sig.
Pearson	155.533	233	1.000
Deviance	60.398	233	1.000

Link function: Probit.

From Table 6.19 we can notice that the goodness-of-fit has large observed significance levels, so it appears that the model fits well.

The parameter estimates are summarized in Table 6.20 together with statistical significance of the explanatory variables.

Table 6.20 Ordered probit estimate for the employment of informal firms

Parameter estimate					
	Estimate	Std. Error	Wald	df	Sig.

Threshold	[Employment growth/not growth = .00]	-5.340	1583.152	.000	1	.997
	Limited access to finance	.109	.161	.460	1	.498
	High cost of finance	-.048	.171	.077	1	.781
	Unavailability of subsidies	-.015	.124	.015	1	.901
	Inefficient tax administration	-4.405	1253.785	.000	1	.997
	High custom tariffs	-3.644	966.640	.000	1	.997
	License procedures and permits	.300	.269	1.243	1	.265
	Unfavorable labor law and heavy trade regulation	.011	.271	.002	1	.968
	Dysfunctional judiciary system	-.065	.200	.104	1	.747
	Corruption	.088	.129	.460	1	.498
	Contract violations by businesses and customers	-3.720	0.000		1	
	Gender male 1	4.101	0.000		1	
	Age	-.032	.023	1.921	1	.166
	Number of employees	.005	.025	.038	1	.846
	Average salary	.000	.003	.023	1	.878
	Total sales	.356	.299	1.417	1	.234
	Average net profit rate	2.523	1.056	5.706	1	.017**

Link function: Probit. Pseudo R2 = 0.248, Log likelihood = 60.398, Prob. > Chi2 = 0.378.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.20 parameter estimates of the sample of informal firms we can notice that independent variables contribution to prediction is negligible in the model. The access to finance and institutional obstacles do not affect the employment of informal firms. The average net profit rate is statistically significant. For one unit increase in average net profit rate, the employees of informal firms increase by 252 %.

Logit model estimates for potential formalization of informal firms

With the purpose of drawing statistical inference on likelihood of formalization of informal firms we measure the impact of access to finance and institutional barriers in the potential formalization of informal firms. We employ logistic regression to predict a potential

formalization of informal firms from a set of predictor variables. We have predicted dependent variable, potential formalization, coding 1 if informal firms will formalize and 0 if informal firms will not formalize when access to finance and institutional factors are improved for businesses. On the other hand, we have a set of independent variables to predict potential formalization of the informal firms. The set of independent variables is consisted of external factors such as access to finance, institutional barriers, and firm characteristics.

A probability (p) value is computed from the chi-square distribution with 8 degrees of freedom to test the fit of the logistic model. If the H-L goodness-of-fit test statistic is greater than 0.05, as we want for well-fitting models, we fail to reject the null hypothesis that there is no difference between observed and model-predicted values, implying that the model's estimates fit the data at an acceptable level.

Table 6.21 Hosmer and Lemeshow Test for potential formalization of informal firms

Step	Chi-square	df	Sig.
1	7.609	8	.473

From table 6.21 we can notice that Hosmer and Lemeshow test has a significance of 0.473 which means that it is not statistically significant and therefore our model is well specified.

Rather than using a goodness-of-fit statistic, we look at the proportion of cases we have managed to classify correctly. For this purpose we look at the classification table, which show how many cases of the dependent variable have been correctly predicted (Table 6.22).

Table 6.22 Classification Table for potential formalization of informal firms

			Predicted		Percentage Correct
			Potential formalization		
Observed			.00	1.00	
Step 1	Potential formalization	.00	63	32	66.3
		1.00	26	129	83.2
Overall Percentage					76.8

From Table 6.22 we can notice that 76.8% of cases were correctly classified which make the model appears good.

The variables in the equation table summarize the importance of the explanatory variables individually whilst controlling for the other explanatory variables. (Table 6.23).

Table 6.23 Logit estimates for potential formalization of informal firms

	B	S.E.	Wald	Sig.	Exp(B)
Limited access to finance	-.463	.132	12.349	.000***	.629
High cost of finance	-.777	.255	9.269	.002***	.460
Unavailability of subsidies	-.504	.137	13.573	.000***	.604
Inefficient tax administration	-.222	.165	1.807	.179	.801
High custom tariffs and heavy trade regulation	.181	.147	1.519	.218	1.199
Business registration and license permit procedures	-.101	.208	.237	.626	.903
Unfavorable labor law and other business regulation	.075	.172	.192	.662	1.078
Dysfunctional Judiciary System	.135	.136	.989	.320	1.145
Corruption	-.342	.136	6.344	.012**	.710
Contract violations by businesses and customers	-.035	.407	.007	.932	.966
Gender	.088	.627	.019	.889	1.091
Age	-.009	.018	.261	.609	.991
Average salary	.003	.003	1.390	.238	1.003
Total sales	-.047	.285	.027	.870	.954
Average net profit rate	-1.690	1.641	1.060	.303	.185
Constant	8.284	1.979	17.518	.000	3960.366

Pseudo R2 = 0.434, Log likelihood = 236.111, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.23 we can notice that the Wald criterion demonstrates that some variables made a significant contribution to prediction. From the theory access to finance and institutional barriers are very important determinants for potential formalization of informal firms. In this context, we have introduced three potential barriers that determine the importance of external finance and seven potential barriers related to institutional environment. In order to scale perceptions of respondents we have applied Likert scale with the following modalities: 1-no obstacle; 2-minor obstacle; 3-neutral; 4-moderate obstacle; 5-major obstacle. On the other hand in regard to potential formalization of informal firms we code 1 if firms will formalize when

access to finance and institutional factors are improved and 0 if firms will not formalize when access to finance and institutional factors are improved. Based on the perceptions of representatives of the firms limited access to finance was a significant predictor ($p = .000$). Predicted B value indicates that when barriers for access to finance are increased by one unit, formalization of the informal firms is likely to decline by 48.7 %, suggesting a negative relationship between two variables. The odd ratio: $\exp(-0.487) - 1 = -38.6\%$ indicates that when barriers for access to finance are increased by one unit the formalization of the informal firms is likely to decline by 38.6% or 0.61 times less likely to formalize, while holding other predictors in the model constant. Our evidence support the hypothesis that limited access to finance negatively affects formalization of informal firms. Similarly, high cost of finance was a significant predictor ($p = .003$). Predicted B value indicates that when cost of finance barriers are increased by one unit, the potential formalization of informal firms is likely to decline by 75.3%. The odd ratio: $\exp(-0.753) - 1 = -52.9\%$ indicates that when barriers cost of finance are increased by one unit the potential formalization of informal firms is likely to decline by 52.9% or 0.47 times less likely to formalize. This evidence supports the hypothesis that high cost of finance negatively affects formalization of informal firms. Further, unavailability of subsidies and the lack of favorable loans from the state was a significant predictor ($p = .000$). Predicted B value indicates that when obstacle unavailability of subsidies and the lack of favorable loans from the state is increased by one unit, the potential formalization of informal firms is likely to decline by 51.1%. The odd ratio: $\exp(-0.511) - 1 = -40\%$ indicates that when obstacles unavailability of subsidies and the lack of favorable loans from the state are increase by one unit, the potential formalization of informal firms is likely to decline by 40% or 0.60 times less likely to formalize.

With respect to institutional barriers, corruption was a significant predictor ($p = .000$). Predicted B value indicates that when corruption is increased by one unit formalization of the informal firms is likely to decline by 34.5 %. The odd ratio: $\exp(-0.345) - 1 = -29.2$ indicates that when corruption is increased by one unit the formalization of the informal firms is likely to decline by 29.2% or 0.71 times less likely to formalize. The result supports partially the hypothesis that the institutional constraints negatively affect potential formalization of informal SMEs.

Ordered probit model estimates for potential formalization of informal firms

Similar to the logit model we use ordered probit for the informal firms to predict a dichotomous dependent variable from a set of predictor variables. We use potential formalization as dependent variable, while we employ a set of independent variables to predict the potential formalization of the informal firms. The set of independent variables is comprised of external factors such as access to finance, institutional barriers, and firm characteristics. In the table 6.24 we examine the goodness-of-fit statistics.

Table 6.24 Goodness-of-Fit for potential formalization of informal firms

	Chi-Square	df	Sig.
Pearson	216.808	234	.783
Deviance	235.228	234	.465

From Table 6.24 we can notice that the goodness-of-fit has large observed significance levels, so it appears that the model fits well.

The parameter estimates are summarized in Table 6.25 together with statistical significance of the explanatory variables.

Table 6.25 Ordered probit estimate for potential formalization of informal firms

Parameter estimates					
	Estimate	Std. Error	Wald	df	Sig.
[Potential formalization = .00]	-4.846	1.115	18.889	1	.000
Limited access to finance	-.276	.078	12.634	1	.000***
High cost of finance	-.455	.141	10.471	1	.001***
Unavailability of subsidies	-.305	.079	15.045	1	.000***
Inefficient tax administration	-.139	.095	2.133	1	.144
High custom tariffs and heavy trade regulation	.120	.087	1.923	1	.166
Business registration and license permit procedures	-.072	.119	.370	1	.543
Unfavorable labor law and other business regulation	.050	.100	.251	1	.616
Inefficient courts	.079	.079	1.002	1	.317
Corruption	-.194	.080	5.938	1	.015**

Contractviolationsbybusinessesandcustomers	-.033	.240	.019	1	.890
Gender	.093	.376	.062	1	.804
Age	-.005	.011	.231	1	.631
Averagesalary	.002	.002	1.496	1	.221
Totalsales	-.031	.167	.035	1	.852
Averagenetprofitrate	-1.045	.955	1.197	1	.274

Link function: Probit. Pseudo R2 = 0.437, Log likelihood = 235.228, Prob. > Chi2 = 0.000.

**** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.*

From Table 6.25, parameter estimates in the sample of formal firms we can notice that statistically significant are the following independent variables: limited access to finance, high cost of finance, unavailability of subsidies and the lack of favorable loans from the state, and corruption. The probit regression coefficients give the change in the z-score (probit index) for a one unit change in the predictor. For one unit increase in the perception of informal firms on limited access to finance obstacle, the potential formalization of informal firms decline by 27.6%. The odd ratio: $\exp(-0.276)-1 = -24.1\%$ indicates that when limited access to finance obstacle increase by one unit, the potential formalization of informal firms decline by 24.1%. For one unit increase in the perception of informal firms on high cost of finance obstacle, the potential formalization of informal firms decline by 45.5%. The odd ratio: $\exp(-0.455)-1 = -36.6\%$ indicates that when high cost of finance obstacle is increased by one unit, the potential formalization of informal firms decline by 36.6%. For one unit increase in the perception of informal firms on unavailability of subsidies and the lack of favorable loans from the state, the potential formalization of informal firms decline by 30.5%. The odd ratio: $\exp(-0.305)-1 = -26.2\%$ indicates that when unavailability of subsidies and the lack of favorable loans from the state obstacle is increased by one unit, the potential formalization of informal firms decline by 26.2%. For one unit increase in the perception of informal firms on the level of corruption, the potential formalization of informal firms decline by 19.4%. The odd ratio: $\exp(-0.194)-1 = -17.6\%$ indicates that when the level of corruption is increased by one unit, the potential formalization of informal firms decline by 17.6%. From the results we can notice that the same independent variables appear to be statistically significant as in the case of the estimated logit

model, although the magnitude of significance is lower in ordered probit model compared to the logit model.

6.4 Interpretation of estimated results

In order to estimate empirical evidences on the impact of access to finance and institutional obstacles in performance of formal and informal SMEs we have processed the data and estimated logit model and ordered probit model. Goodness of fit tests indicates that models are well specified. Pearson chi square test, and Hosmer and Lemeshow test statistic allow us to reject the null hypothesis that the data do not fit the model indicating a good fit. Assuming that the econometric models are reasonably good approximation of reality, we seek to find out whether the estimates from the models are in accordance with the expectations of the theory.

In both logit and ordered probit models there is consistence regarding the statistical significance of predictors. All indicators that were significant in logit model remained significant in the ordered probit model as well with some changes in the magnitude of estimated coefficients. As assumed in the theoretical part, our results indicate that access to finance and institutional barriers affect formal SMEs more than informal one. From the theory, informal sector is characterized by lack of links with the formal sector, informal firms face considerable costs in avoiding detection from tax administration, and due to their unregistered status they cannot interact with public authorities, financial institutions, and trade associations in order to support their business growth opportunities. The dualist view conceive the informal and formal sectors as entirely disconnected, and predict that economic development should transform the informal sector or cause its absorption into the formal economy (Bacchetta et al., 2009). Although the informal economy is big, it shrinks sharply in relative terms as the economy develops (La Porta and Shleifer, 2008).

As we have expected access to finance indicators are significant in performance of formal firms measured by sales. However, the same indicators are not significant in terms of employment within formal firms. We may understand that employment is industry specific, estimating that some type of firms especially those in agriculture may increase sales in given periods with the same number of employees. The results provide that the hypothesis limited access to finance negatively affects performance of SMEs is partially supported. Similarly, high

cost of finance is significant for the sales of formal firms, even though it is not significant for employment. Thus, the results provide that hypothesis high cost of finance negatively affects performance of formal SMEs is partially supported.

In regard to institutional barriers some indicators are significant in performance of formal firms. At one side the results show that some indicators are significant for the sales of formal firms including business registration and license permit procedure positively affect sales, and unfavorable labor law and other business regulation negatively affect sales. At the other side some indicators are significant for the employment of formal firms including business registration and license permit procedure positively affect growth of employment, corruption negatively affect employment, and contract violation by businesses and customers positively affect employment. The results provide partial support for hypothesis: institutional constraints negatively affect performance of formal SMEs.

Limited access to finance is not significant for growth of the sales and employment of informal firms. The results do not support the hypothesis limited access to finance negatively affects performance of informal SMEs. Similarly high cost of finance is not significant for growth of sales and employment of informal firms. The results do not support the hypothesis high cost of finance negatively affects performance of informal SMEs.

In regard to the impact of institutional barriers in sales of informal SMEs some indicators are significant including inefficient tax administration (insufficient number of inspectors) positively affect sales, dysfunctional judiciary system positively affect sales, while corruption negatively affect sales of informal firms. On the other hand independent variables related to institutional barriers are not significant on employment of informal firms. The results provide partial support for the hypothesis institutional constraints negatively affects performance of informal SMEs.

Nevertheless, in our model estimation on potential formalization of informal firms, limited access to finance is significant for potential formalization of informal firms, the evidence support the hypothesis that the limited access to finance negatively affects potential formalization of informal firms. High cost of finance is significant for potential formalization of informal firms, the evidence support the hypothesis that the high cost of finance negatively affect

potential formalization of informal firms. With respect to institutional barriers the model estimate has shown that corruption is significant for potential formalization of informal firms. Therefore, the evidences support only partially the hypothesis that institutional barriers negatively affect potential formalization of informal firms.

6.5 Correlation analysis

In this section we provide correlation of independent variables for the formal and informal firms employed in multivariate analysis. In cases where two or more independent variables are highly correlated we face difficulties with understanding which independent variable contributes to the variance explained in the dependent variable. Thus, in the tables below we check correlations between variables in the samples of formal and informal firms.

As shown in table 6.26 correlation analyses indicate some significant correlations between variables. In order to check potential multicollinearity, the variance inflation (VIF) scores for the dataset of the formal firms were calculated. In general, VIF scores are low, where the highest score is 1.61, which is below common thresholds. Therefore, in terms of our independent variables, multicollinearity is not a pronounced problem. Similarly, we provide correlations of independent variables for the informal firms employed in multivariate analysis.

Table 6.26 Correlation matrix for the dataset of formal firms

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Limited access to finance	1															
2	High cost of finance	.335**	1														
3	Unavailability of subsidies	.230**	.420**	1													
4	Inefficient tax administration	.237**	.145**	.097**	1												
5	High custom tariffs	.188**	.225**	.209**	.282**	1											
6	Business registration license permits	.234**	.115**	.076*	.328**	.282**	1										
7	Unfavorable labor law	.255**	.161**	.212**	.332**	.302**	.478**	1									
8	Dysfunctional Judiciary System	.231**	.271**	.235**	.232**	.291**	.244**	.336**	1								
9	Corruption	.257**	.222**	.226**	.269**	.269**	.284**	.359**	.564**	1							
10	Contract violations by businesses and customers	.116**	.085*	.095*	.182**	.127**	.255**	.252**	.110**	.161**	1						
11	Gender	-.046	.111**	.036	-.010	.017	.020	-.017	.019	-.032	-.051	1					
12	Age	-.024	.014	-.001	.010	.057	-.003	-.015	.067	.047	.029	.105**	1				
13	Number of employees	-.002	.030	.063	.059	.050	.044	.017	.052	.016	.006	.081*	.059	1			
14	Average salary	-.037	-.035	-.044	.067	-.002	.074*	.025	.037	.005	-.008	.084*	.113**	.300**	1		
15	Total sales	-.038	-.001	.038	.000	.140**	.063	.017	.082*	.023	.014	.066	.063	.524**	.354**	1	
16	Average net profit rate	-.033	-.040	-.080*	.005	-.046	.031	.070	-.075*	-.026	.066	-.058	-.022	-.093*	.039	-.118**	1

*Correlation is significant at the 0.05 level, **Correlation is significant at the 0.01 level

Table 6.27 Correlation matrix for the dataset of informal firms

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Limited access to finance	1															
2	High cost of finance	.413**	1														
3	Unavailability of subsidies	.169**	.242**	1													
4	Inefficient tax administration	.064	.066	.029	1												
5	High custom tariffs	.112	.082	.118	.504**	1											
6	Business registration and license permit procedures	.036	.033	.046	.508**	.467**	1										
7	Unfavorable labor law and other business regulation	.027	.071	-.041	.300**	.523**	.466**	1									
8	Dysfunctional Judiciary System	.013	.037	.107	.355**	.469**	.309**	.389**	1								
9	Corruption	.050	-.018	.071	.129*	.107	.115	.060	.224**	1							
10	Contract violations by businesses and customers	.044	.018	.071	.247**	.617**	.257**	.505**	.390**	.098	1						
11	Gender	-.002	.008	.066	-.053	-.139*	-.089	-.124*	-.050	.009	-.265**	1					
12	Age	-.037	.183**	-.016	-.121	-.077	.139*	-.093	-.106	.109	-.028	-.007	1				
13	Number of employees	-.159*	-.090	.141*	-.018	-.040	-.043	-.080	-.071	.105	-.065	.072	.166**	1			
14	Average salary	-.155*	-.040	.257**	-.024	-.090	-.100	.096	.020	-.053	-.105	.133*	.096	.183**	1		
15	Total sales	.190**	-.011	.038	-.034	.033	.015	.020	.138*	.060	.007	.099	.126*	.446**	.398**	1	
16	Average net profit rate	-.041	-.151*	-.159*	.118	.024	.058	.085	-.002	-.095	-.013	.034	-.110	.112	.216**	.040	1

*Correlation is significant at the 0.05 level, **Correlation is significant at the 0.01 level

From Table 6.27 we can notice that correlation analyses indicate some significant correlations between variables, even though the coefficients are low enough to conclude that multicollinearity will not affect our results. In order to check potential multicollinearity, the variance inflation (VIF) scores for the dataset of the informal firms were calculated. In general, VIF scores are low, where the highest score is 2.37, which is below common thresholds. Therefore, in terms of our independent variables, multicollinearity is not a pronounced problem. We will not face difficulties with understanding which independent variable contributes to the variance explained in the dependent variable.

6.6 Diagnostic tests and robustness analysis

Common exercise in empirical studies is a “robustness check”, where the researcher examines how certain “core” regression coefficient estimates behave when the regression specification is modified in some way, typically by adding or removing regressors (White and Lu, 2010). Leamer (1983) argue that “fragility” of regression coefficient estimates is indicative of specification error, and that sensitivity analyses (i.e., robustness checks) should be routinely conducted to help diagnose misspecification. A finding that the coefficients don’t change much is taken to be evidence that these coefficients are “robust” (White and Lu, 2010).

In order to examine the effects of the access to finance and institutional environment on sales growth, and validate previous regressions results we perform robustness check by adding variables in the model as group components, we begin by estimating the following simple logit specification:

$$Sales_i = (P_i/1 - P_i) = \beta_0 + \beta_1 \text{ Limited access to finance} + \beta_2 \text{ Cost of finance} + \beta_3 \text{ Unavailability of subsidies} + \mathcal{E}_{i,\dots} \quad (1)$$

In this specification the dependent variable is the likelihood that sales of the firms will grow. Independent variables include perception of firms about access to finance, cost of finance and unavailability of subsidies and favorable loans from the state. Coefficients for all estimated equations are given in the Table 6.28.

Table 6.28 Various specifications of the model explaining the sales for the formal firms

Logit estimates-formal firms/sales	(1)	(2)	(3)
------------------------------------	-----	-----	-----

Sales growth/not growth	B	Sig.	B	Sig.	B	Sig.
Limited access to finance	-.141	.007***	-.181	.002***	-.186	.004***
High cost of finance	-.197	.006***	-.204	.010**	-.200	.020**
Unavailability of subsidies	.053	.441	.073	.326	.085	.304
Inefficient tax administration			.061	.325	.100	.160
High custom tariffs			.059	.347	-.009	.901
Business registration and license permit procedures			.309	.000***	.296	.000***
Unfavorable labor law and other business regulation			-.260	.000***	-.252	.002**
Dysfunctional Judiciary System			-.051	.488	-.092	.252
Corruption			.009	.905	.040	.640
Contract violations by businesses and customers			-.037	.526	-.087	.191
Total sales					.346	.000***
Average net profit rate					-.176	.795
Observations	960		899		779	
Log likelihood	1094.28		979.54		802.71	
Chi ²	21.17		49.25		73.95	
Prob>chi ²	0.000		0.000		0.000	
Pseudo-R ²	0.32		0.78		0.14	
Classified correctly	0.73		0.74		0.77	

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.

As shown in Table 6.28 in the first specification we may see that limited access to finance is significant and negatively correlated with firms' sales growth. Our results show that limited access to finance obstacle, decrease the likelihood of firms' sales growth by 14.1%. Similarly, high cost of finance is significant and negatively affects firms' sales growth. Estimated coefficient show that high cost of finance decrease the likelihood of firm's sales growth by 19.7%. Unavailability of subsidies and the lack of favorable loans from the state are not significant. The results of first specification are robust with the previous results in logit estimate for sales of the formal firms shown in Table 6.3. We continue with second logit specification adding institutional obstacles in the model analysis.

$$Sales_i = (P_i / 1 - P_i) = \beta_0 + \beta_1 \text{ Limited access to finance} + \beta_2 \text{ Cost of finance} + \beta_3 \text{ Unavailability of subsidies} + \beta_4 \text{ Inefficient tax administration} + \beta_5 \text{ High custom tariffs and heavy trade regulations} + \beta_6 \text{ Business registration and license permit procedures} + \beta_7 \text{ Unfavorable labor law} + \beta_8 \text{ Dysfunctional Judiciary System} + \beta_9 \text{ Corruption} + \beta_{10} \text{ Contract violations} + \mathcal{E}_i \dots \dots (2)$$

In the second specification, similar to first specification access to finance and high cost of finance are significant and negatively correlated with firms' sales. In terms of institutional obstacles business registration and license permit procedures are significant and positively affect the sales of the firms, respectively, increased perception of firms on business registration and license permit procedure as obstacle affect the firms' sales increase by 30.9%. Unfavorable law and other business regulation are significant and affect negatively the firms' sales. Increased perception of firms on unfavorable law and other business regulation affect firm's sales decline by 26%. Other independent variables that belong to the group of institutional barriers are not significant in the formal firms' sales. The results are robust with the previous estimated results in Table 6.3.

$$Sales_i = (P_i/1 - P_i) = \beta_0 + \beta_1 \text{ Limited access to finance} + \beta_2 \text{ Cost of finance} + \beta_3 \text{ Unavailability of subsidies} + \beta_4 \text{ Inefficient tax administration} + \beta_5 \text{ High custom tariffs and heavy trade regulations} + \beta_6 \text{ Business registration and license permit procedures} + \beta_7 \text{ Unfavorable labor law} + \beta_8 \text{ Dysfunctional Judiciary System} + \beta_9 \text{ Corruption} + \beta_{10} \text{ Contract violations} + \beta_{11} \text{ Total sales} + \beta_{12} \text{ average net profit rate} + \epsilon_i \dots\dots\dots (3)$$

In third specification we estimate access to finance and institutional independent variables, and we add two control variables, respectively total sales and average net profit rate. Total sales are significant and positively affect the firms' sales. Increase of total sales per one category reported by firms increase the likelihood of sales' growth by 34.6%. The estimates for access to finance and institutional barriers are consistent with first and second specification. The final results shown in Table 6.28 are robust with previous results in Table 6.3.

We use similar specifications to check robustness for the sales of the informal firms. In the following in order to check robust analysis for the sales of informal firms we present logit estimate (Table 6.29).

Table 6.29 Various specifications of the model explaining the sales for the informal firms

Informal firms/sales	(1)		(2)		(3)	
	B	Sig.	B	Sig.	B	Sig.
Limited access to finance	-.248	.305	-.279	.342	-.307	.309
High cost of finance	-.109	.592	-.210	.384	-.073	.784
Unavailability of subsidies	-.198	.257	-.277	.162	-.241	.227
Inefficient tax administration			2.559	.019**	2.701	.018**
High custom tariffs and heavy trade regulation			-2.554	.188	-2.996	.193

Business registration and license permit procedures	-1.674	.158	-1.842	.137
Unfavorable labor law and other business regulation	.402	.320	.417	.284
Dysfunctional Judiciary System	.773	.005***	.666	.019**
Corruption	-.779	.001***	-.659	.006***
Contract violations by businesses and customers	1.029	.339	1.421	.229
Total sales			.617	.097*
Average net profit rate			2.485	.126
Observations	250	250	250	
Log likelihood	119.625	94.524	89.486	
Chi ²	4.592	29.693	34.731	
Prob>chi ²	.001	.001	.001	
Pseudo-R ²	0.046	0.28	0.33	
Correctly Classified	0.93	0.94	0.94	

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.

From Table 6.29 we can notice that in the first specification, the limited access to finance as independent variable is not statistically significant. The cost of finance is not significant in the firms' sales. Similarly, unavailability of subsidies and favorable loan from the state is not significant. Independent variables in the group of access to finance obstacles are not significant in the informal firms' sales. As explained before informal firms avoid applications to the bank loans and subsidies mostly due to the probability that their applications will be rejected. The majority of informal firms do not have intentions to grow, they account on their limited funds and they also look for informal sources of obtaining credits. The results in the first specification are robust with previous results in the logit model shown in Table 6.13.

In the second specification, similar to the first specification independent variables in the group of access to finance obstacles are not significant. With respect to institutional barriers inefficient tax administration is significant and affects positively sales of the informal firms. An increase of the informal firms' perception on inefficiency of tax administration increase firms' sales by 256%. Dysfunctional judiciary system is significant, and affects positively the informal firms' sales. Increase perceptions of informal firms on dysfunctionality of judiciary system increase the firms' sales by 77.3%. Corruption is significant, affecting negatively the sales of the

informal firms. An increase perception on corruption decreases the sales of informal firms by 77.9%. The results are robust with the previous estimated results in Table 6.6.

In third specification variables, total sales and average net profit rate are not significant. The estimates for access to finance and institutional barriers are consistent with first and second specification. The final results shown in Table 6.29 are robust with previous results in Table 6.13.

We use similar specifications to check robustness for the employment growth/not growth of the formal firms (Table 6.30).

Table 6.30 Various specifications of the model explaining the employment for the formal firms

Formal firms employment	(1)		(2)		(3)	
	B	Sig.	B	Sig.	B	Sig.
Employment growth/not growth						
Limited access to finance	-.062	.219	-.073	.188	-.053	.397
High cost of finance	-.069	.337	-.074	.342	-.030	.726
Unavailability of subsidies	.059	.378	.073	.311	.085	.298
Inefficient tax administration			-.022	.710	-.010	.888
High custom tariffs			.036	.536	-.043	.507
Business registration and license permit procedures			.228	.000***	.207	.004***
Unfavorable labor law and other business regulation			-.104	.113	-.096	.207
Dysfunctional Judiciary System			.065	.366	-.005	.955
Corruption			-.153	.037	-.143	.085*
Contract violations by businesses and customers			.092	.089	.117	.059*
Total sales					.450	.000***
Average net profit rate					-1.022	.124
Observations		877		824		714
Log likelihood		1145.364		1044.618		847.386
Chi ²		3.33		25.55		75.19
Prob>chi ²		0.344		0.004		0.000
Pseudo-R ²		0.005		0.042		0.138
Correctly classified		0.64		0.65		0.7

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.

From Table 6.30 we can notice that in the first specification, the limited access to finance as independent variable is not significant in the firms' employment. Cost of finance is not significant in the firms' employment. Similarly, unavailability of subsidies and favorable loan from the state is not significant. The results in the first specification are robust with previous results in the logit model shown in Table 6.9.

In the second specification, similar to the first specification independent variables in the group of access to finance obstacles are not significant. In regard to institutional barriers, business registration and license permit procedure is significant and affect positively the employment of the formal firms. An increase of the formal firms' perception on business registration and license permit procedures affects the firms' employment increase by 22.8%. Corruption is significant and correlated negatively with employment of the formal firms. An increase of the formal firms' perception on corruption affects the formal firms' employment decrease by 15.3%. The results are robust with the previous estimated results in Table 6.9.

In the third specification we add to estimate equation two control variables, total sales and average net profit rate. Total sales are significant and positively affect the formal firms' employment. Increase of total sales per one category reported by firms increase the probability for employment growth by 45%. The estimates for access to finance and institutional barriers are consistent with first and second specification with minor changes in coefficients. The final results shown in Table 6.30 are robust with previous logit estimated results shown in Table 6.9.

In the following, we use similar specifications to check robustness for the employment growth/not growth of the informal firms (Table 6.31).

Table 6.31 Various specifications of the model explaining the employment for the informal firms

Informal firms employment	(1)		(2)		(3)	
	B	Sig.	B	Sig.	B	Sig.
Employment						
Limited access to finance	.232	.459	.192	.548	.151	.668
High cost of finance	-.296	.331	-.253	.417	-.036	.916
Unavailability of subsidies	-.060	.794	-.082	.730	-.048	.838
Inefficient Tax Administration			-.15.52	.998	-15.59	.998
High custom tariffs and heavy trade regulations			-15.38	.997	-14.03	.997

Business registration and license permit procedures	.858	.058	.704	.137
Unfavorable labor law and other business regulation	-.176	.770	-.091	.871
Dysfunctional Judiciary System	-.092	.831	-.110	.794
Corruption	-.67	.784	.119	.664
Contract violations by businesses and customers	-15.31	.998	-14.40	.998
Total sales			.649	.196
Average net profit rate			4.594	.015**
Observations	250	250	250	
Log likelihood	76.326	71.285	63.759	
Chi ²	1.183	6.223	13.749	
Prob>chi ²	.757	.796	.317	
Pseudo-R ²	.018	.092	.201	
Correctly classified	.96	.96	.96	

*** Significant estimate at 1% level; ** significant estimate at 5%; * significant estimate at 10% level.

From Table 6.31 we can notice that in the first specification, the limited access to finance as independent variable is not significant. Cost of finance is not significant in the firms' employment. Similarly, unavailability of subsidies and favorable loan from the state is not significant. In the second specification, similar to the first specification independent variables in the group of access to finance obstacles are not significant. Furthermore, independent variables in the group of institutional barriers are not significant. The results are robust with the previous logit estimated results in Table 6.18.

In the third specification we estimate two control variables, total sales and average net profit rate. The average net profit rate is significant and positively affects the informal firms' employment. An increase of average net profit rate per one category reported by firms increase the employment by 459%. The estimates for access to finance and institutional barriers are consistent with first and second specification. The final results shown in Table 6.31 are robust with previous logit estimated results in Table 6.18.

Chapter 7

7 Conclusions and policy implications

7.1 Introduction

7.2 Summary and discussion

7.3 Policy recommendations

7.3.1 *Recommendations for access to finance*

7.3.2 *Recommendations for institutional reforms*

7.4 Limitations of research

7.5 Avenues for further research

7.1 Introduction

In this chapter the findings of this doctoral dissertation are presented in line with proposed research objectives. With this respect the theoretical and methodical contributions in the literature regarding the access to finance and institutional barriers in formal and informal SMEs are examined. We discuss our empirical results based on the surveys which enabled to gather information from the firms' perceptions of the formal and informal sector. We intend to explain by using the empirical evidences the impact of the business environment, specifically access to finance and institutional barriers in SMEs performance. In addition, we explain empirical evidences on the impact of these external barriers in potential formalization of informal firms.

Following our analysis in previous chapters, we provide policy recommendations aiming to improve the business environment in support of SMEs performance. The chapter is structured as follows. In section 7.2 we provide summary and discussions presenting the finding and added value in previous chapters in terms of contribution to knowledge. In section 7.3 we consider the policy implications of our findings and provide recommendations for the improvement of business environment for SMEs development. In this context, and given the focus of our analysis above, we pay attention to two main policy areas: first, the design of appropriate financial sector that facilitate access to finance for SMEs in appropriate conditions, and second pushing reforms that support creation of suitable institutional environment that support growth of SMEs sector and encourage formalization of informal firms. The discussion in section 7.4 highlights the

limitations that constrained us in fully exploring the issues under consideration. Finally, section 7.5 suggests avenues for further research in the field of our study.

7.2 Summary and discussion

The main goal in this doctoral research was to understand the role of access to finance and institutional barriers based on the firms' perceptions of formal and informal sector. In addition, the role of informal economy is elaborated in the context of its contribution to employment, differences with formal economy and interaction with institutional environment. In the case of Kosovo until a decade ago the informal SMEs were dominant due to the lack of institutional development particularly the lack of the law enforcement. With establishment and gradual consolidation of institutional framework, informal economy has been reduced continuously, even though it is still largely presented in the Kosovo economy. In this section we present discussions from the previous chapters including the literature review and empirical analysis.

In the first chapter we provided general overview on the business environment and the importance of SME sector in job creation, productivity, innovation and economic growth. SMEs have grown considerably during the last three decades showing that they are essentially important for job creation and economic growth in transitional and developing economies. However, in order to enable the growth of SMEs, they need support of institutional policies and access to external finance in appropriate conditions. The lack of access to finance and the rule of law weaken the potential of SMEs to contribute to the creation of new jobs, productivity, innovation and value added.

Based on literature and empirical analysis we provided evidences in difference between formal and informal sector as well as barriers and motives for potential formalization of informal firms. We argue that research of informal sector represent an interesting and challenging task in Kosovo. Despite its consequences in tax evasion, unfair competition and creating unreliable business environment, the informal economy in Kosovo is important sector due to employment opportunities. The government to this point has not succeeded to create favorable business environment that strengthens competitiveness of SMEs and contributes to formalization of

informal economic activities. Consequently, the SMEs in Kosovo have generally not grown sufficiently in order to fulfill their role as an important generator of employment, productivity and value added.

The economy of Kosovo is undergoing through transitional process which involves movement from centrally planned to market oriented economy. This includes new arrangements in economic field that is characterized by liberalization of capital and competitiveness. In this context the priority is given to transitional privatization as the most important process for transformation of the economic system. About 60% of SOE assets have been privatized through local and foreign investment capital. The economic growth in Kosovo has been largely driven by government spending which does not create a strong recovery and economic base. In addition, remittances, international donations and external loans take a large part of economic progress which cannot be viewed as a good basis of sustainable economic development. Although, these funds have been essential for rebuilding the infrastructure and restructuring the economy, it is expected that they will decline in the future, particularly international donations and external debts. The aim of donations from international agencies and developed countries is to help the country become self-sustaining economy for a certain period of time, while the IMF recommends receiving external debt up to one third of the GDP that Kosovo is expected to reach in a few years. Remittances may fall in the future especially during the economic crises or potential political instability in the countries where these funds come from. Therefore, the development and empowerment of SMEs remains the most important strategy for production of final goods and services, job creation, growth of welfare and economic development.

Despite the fact that the business environment in Kosovo is improving with regard to indicators measured by ease of doing business report, there are other serious barriers that World Bank does not take into account in its annual report of 2016. For example getting credit is easy, but cost of credit is very high. In addition, the 2016 corruption perception index ranks Kosovo 95th out of 175 countries indicating high level of corruption in public sector of the country. Some other barriers such as political instability and small market hinder domestic and foreign investments in SMEs (Carmignani, 2003; Brada et al, 2006; Aisen et al, 2011). Due to high cost of credit funds, many SMEs finance their business through internal funds rather than bank credits (Demirgüç-Kunt and Maksimovic, 2001; Rajan and Zingales, 2003; World Bank, 2013; ECIKS, 2014).

In this section we have further elaborated the problem of research. Based on theory and evidences provided by the researchers on the impact of access to finance and institutional constraints on SMEs performance we have formulated the hypothesis of our study. Further we have outlined research objectives followed by research questions and the significance of the study.

In Chapter 2 the literature on the importance of access to finance in SMEs performance was outlined. Firstly, in the light of research objectives we have elaborated the most important theories that explain the external financing needs of firms in different stages including pecking order theory and life cycle theory of the firm. The pecking order theory examines the progression of the firm acquiring external finance through growth phases. In this context, Myers and Majluf, (1984) elaborated financing needs in linear order; including that firms at first within their limited capacity prefer to use internal funds, followed by short and long external debt from various financial sources, and finally external equity. Pecking order theory suggests that in business environments with asymmetric information or weak credit system firms prefer to use more internal funds. Firms operating in competitive and developed business environment tend to use more external finance to enable their growth objectives. Similarly, life cycle theory of the firm is used to describe financial sources needed during growth phases of the firm (Weston and Brigham, 1970). At the first stage firms will find difficulties to accessing external finance. The most important finance during this phase will be personal savings of firm owner and finance from friends and family members. In extreme conditions of doing business especially facing with strong or unfair competition which is the case in economies of transition where informality is extended phenomenon, the firm may not be able to survive. If the firm is successful, in the second stage would have opportunity to invest its retained profit and based on accumulation of trade records facilitate access to external finance from financial institutions and trade credits. In order to overcome operational costs firms may receive overdrafts which in the one hand enhance firm growth, on the other hand extends the problem of liquidity and over drafting. In the next stage the firm would face demands to pay short term debts and achieve strategic growth objective. These requirements will suitably be fulfilled by long term debt, or by raising external equity (Berger and Udell, 1998).

Both theories: the pecking order and life cycle theory are close in explaining the case of Kosovo regarding how SMEs finance their business and growth objectives. While SMEs perceive access

to finance and high cost as a major obstacle for their growth, they rely mainly on internal financial resources in order to avoid problems with liquidity. Unfavorable loan terms and conditions of the banks such as required collaterals and high interest rates discourage SMEs to apply for the bank loans. According to enterprise survey of the World Bank (2013) individual firms in Kosovo use various sources to finance their investments. However, the most important source for investment is internal source of financing. Firms use up to 70% of internal sources for investment, then the most widely used of external sources of financing is bank financing 20%, followed by equity or sale of stock for investment (8%), and other source of financing (2%) (IFC, 2013). SMEs rely more on internal business funds and less on external finance because of difficulties in accessing bank loans as of high interest rates, whilst high collateral requirements (BSCK, 2012; Riinvest, 2014).

Further, we have reviewed literature on financing gap which occurs when there is less supply of funds compared to demand for funds requested by SMEs. In this context, we also identified some barriers faced by SMEs to access finance as following: perceived high risks by commercial banks' lending to small firms, lack of collateral, reputational effects and existence of information asymmetries between finance providers and borrowers. Access to external finance means bank and non-bank sources which continues to be one of the most significant challenges for the creation, survival and growth of SMEs. In addition, we have reviewed the literature on use of different sources of finance such as internal and external for SMEs, experience with applications for external financing, as well as terms and conditions for banking loans.

Following this we examined the development and characteristics of financial sector in Kosovo and their role in support of SMEs. The financial sector in Kosovo consists of commercial banks, micro finance institutions, insurance companies, pension funds and financial auxiliaries. Banks have the majority of assets and loans released for SMEs. According to the reports of Central Bank of Kosovo and international organizations, Kosovo has recently built a credible, efficient and sustainable financial system. Although there is a wide range of products and financial services for SMEs and continues improvement of access to finance, however the services of financial sector, in particular interest rates are very high and hardly affordable for SMEs. The high cost of finance affects the reduction of opportunities for investment and business growth.

In Chapter 3 the theoretical and empirical literature regarding the impact of institutional barriers in SMEs performance was examined. From the theory institutional barriers are among the most important features that influence entry, operation and growth of SMEs. We reviewed the institutional theory which addresses institutions as the rule of the games in the society which set the boundary of behavior for individuals and organizations. From the Institutional Theory perspective organizations operate in complex environment to which they need to adapt their activity. Furthermore, the theory highlights two types of institutions in society: formal and informal. The formal institutions comprises of political, social and legal ground rules that establish the framework of rules for production and distributions. The informal institutions comprises of social behavior, codes of conducts, norms and conventions which derive from society's culture. Moreover, according to this theory quality of institutions can support or harm organization through transaction costs and making economic activities more predictive. In transitions, where formal institutions lack the capacity to support individuals and organizations, informal institutions will take an important role on affecting activity of individuals and organizations. The institutional theory appears to be applicable in explaining the case of Kosovo where business environment is dynamic and unstable characterized by institutional changes and social transformations. From the perception of SMEs in Kosovo, some institutional barriers cause obstacles to business performance, and corruption is one of the biggest constraints on SMEs performance. There is a dynamic and emerging business environment, though obstacles coming from formal and informal institutions are large and have hampered the development of SMEs. Complicated legal rules, frequent changes in legislation and bureaucracy are some of the constraints when it comes to SMEs performance. The consolidation and development of formal institutions over the time will reduce the role of informal institutions in organizations. Shihata (1996) indicates that in all societies informal rules of custom and usage play an important role. This is particularly true when law enforcement is weak and corruption is wide-spread. In such situations, formal law may be readily replaced by informal rules which receive greater compliance in practice. Estrin et al. (2010) found that entrepreneurial activity still remain low in many places particularly in former communist countries, which they associate with the slow adaptation of informal institutions, including attitudes and social norms. Therefore, the change in informal institutions is slower than in formal institutions and accordingly overcoming the heritage of command economy system is more difficult. By creating appropriate institutional

structures, entrepreneurial activities will be developed. With this respect, Hoxha and Capelleras (2010) argue that informal barriers are present due to the lack of strong institutional framework.

The relation between growth aspiring firms and institutions is complex; they benefit simultaneously from strong government in the sense of property rights enforcement, but are constrained by corruption. Complicated legal rules, frequent changes in legislation and bureaucracy obstruct the competitiveness and growth of SME sector (Estrin et al, 2013). Moreover, unsuitable tax system and various discriminatory legal regulations towards small firms can hinder their capability to grow (Bartlett and Bukvic, 2001).

Further we have elaborated the role of court efficiency and the rule of law which in literature is stressed to play important role in development of competitive SME sector through enforcing contracts, securing property rights, reducing of informality, and fighting organized crime and corruption. Following this we examined the role of severe features of the institutional context that affect SMEs performance such as: business registration and licensing, taxation, labor regulation, criminality and corruption, lack of infrastructure provision, and business bankruptcy. SMEs would have a tough period when they face unfavorable tax system, discriminatory regulations and complicated laws (Zhou and de Wit, 2009).

Trade liberalization was elaborated with emphasis on the role of strengthening the SMEs performance as well as their competitiveness. In addition, the importance of the process of integration in international economic and trade organizations was examined. The lack of competitiveness of SMEs has led to inefficient SMEs performance in Kosovo and therefore with lower integration in the international trade. Finally, in the context of institutional environment we elaborated the role of political instability that reflects the low level of trust of the people and firms towards public institutions; political, judiciary and administration which subsequently discourage business growth and economic progression.

In Chapter 4 we reviewed the theoretical and empirical work on the features of the informal economy as well as differences between formal and informal economy. We have explored the evolution and definition of informal economy from different perspectives. Furthermore, we evaluated the importance of the informal economy in different economic development context such as: developed, developing and transition economies. In this context, we evaluated the advantages and disadvantages of the informal economy. In order to explore the

forms of links between informal firms and external environment we evaluated different views on informal economy including: dualist, structuralist, legalist, and voluntarist view (ILO, 1972; Portes et al. 1989; De Soto, 1989; Maloney, 2004). These views help to explain the links of informal firms with formal firms, institutions and regulation. Following this we further elaborated the issues on transformation of informal businesses into formal businesses. Hence, we discussed reasons and motives of formalization and benefits of reducing the informal economy. We explored some of the main barriers that hinder the formalization of informal firms such as regulatory and administrative barriers. Moreover, we elaborated the relationship between formal and informal economy which is key aspect to understand the importance and evolution of informal economy. In the earliest studies of the informal economy the dominant theory was one which considered the informal economy as a separate economic domain. The later theories evolved by recognizing the significance of the informal sector and its integration into the national economies. From this perspective, the formal and the informal ends of the economic continuum are often dynamically interrelated. According to dualist view economy is divided into two distinct formal and informal sectors. The work in the informal sector was identified with lower productivity and lower incomes compared to the formal sector. Dualists conceive the informal and formal sectors as entirely disconnected, and predict that economic development should transform the informal sector or cause its absorption into the formal economy (Bacchetta et al., 2009). The dualist view argues that the informal sector yields sub-optimal economic outcomes due to challenges that informal firms limit their size to avoid detection (Verick, 2008). Informality is associated with uncertainty as informal entrepreneurs have a lack of property rights over their capital when contracts cannot be legally enforced (Loayza et al., 2005), and informal firms may also be unproductive compared to formal due to limits in access to finance, use of training, and innovation (Pages, 2010; Sparks and Barnett, 2010). The Dualist paradigm suggests that the informal sector is the residual component of an economy, and it exists as a subsistence economy, reflecting the inability of the formal economy to provide enough jobs (World Bank, 2013).

In contrast, the structuralist view considers the co-existence and interconnections between informal and formal sector recognizing the continuum of economic activities rather than distinction in two main sectors. The informal sector should be viewed as subordinated economic units-micro firms and workers that serve to reduce input and labour costs and, thereby, increase

the competitiveness of large capitalist firms (Moser, 1978; Portes et al. 1989). Therefore, the informality should have positive economic effects at low country income levels because the informal sector drives growth in very poor developing countries by providing sources of livelihood and economic opportunity which are unavailable in the formal sector (Loayza, 1997; Portes et al., 1989).

According to legalist view, the government deregulation would lead to increased economic freedom and entrepreneurship among working people, especially in developing countries (De Soto, 1989). Hernando De Soto (2000) has advocated on the scale down of the regulatory barriers, remove of unnecessary bureaucracies, and the formalization of property rights for the informal workforce to help them convert their informally held assets into real assets. The Legalist paradigm argues that the informal sector is comprised of businesses that prefer to operate informally to evade the exorbitant costs of complying with regulations (Chen, 2007).

According to voluntarist view, the informal enterprises choose to operate informally after weighing the costs-benefits of informality relative to formality (Maloney, 2004). The causal roots of informal economy come from efforts to avoid taxation and costly regulation in the formal economy (Brown et al., 2014). Furthermore, the Voluntarists pay relatively little attention to the economic linkages between informal enterprises and formal enterprises but subscribe to the notion that informal enterprises create unfair competition for formal enterprises because they avoid formal regulations, taxes, and other costs of production. They argue that informal enterprises should be brought under the formal regulatory environment in order to increase the tax base and reduce the unfair competition to formal businesses (Chen, 2012).

According to the analysis in our sample of informal firms, the dualist view and legalist view are closer in explaining the informal sector in the case of Kosovo. Hence, the dualist view would be more applicable to explain the complexity of informal sector in Kosovo when we consider the distinctions between formal and informal sectors. Due to limitations in accessing finance and institutional support the informal firms are unproductive and with poor performance compared to formal firms. While legalist view also finds support in the case of informal firms in Kosovo because our findings have shown that the perception of informal firms for the improvement of access to finance and institutions will affect potential formalization of the firms.

Finally, in the context of informal economy we explored an alternative connection of the informal and formal sectors such as informal employment in formal firms. The formal firms avoid paying some taxes and social contributions when they hire employees without employment contracts. The informality is also widespread in the formal firms in Kosovo (Riinvest, 2013; MTI, 2013; World Bank, 2016).

In Chapter 5 we started the empirical part of the study with elaboration of research design and data analysis. With this respect we elaborated the framework of empirical analysis as well as sampling and data collection. In this context, we explained the methods and approach used for data collection in formal and informal sector. By providing description of variables at one side we introduced performance of the firms as dependent variable that can be measured in terms of sales and number of employees. At the other side we introduced two groups of independent variables that we expected to have impact on the growth of the firms. The first group of independent variables was related to access to finance, while the second group was comprised of various institutional barriers.

Following this, we presented summary statistics, providing the categorization to the size of the firms for both samples of formal and informal sectors. Firms in both samples are categorized as micro, small, and medium. The distribution of the sample of formal and informal businesses with respect to sectors of business activities was presented as well. In both samples businesses were divided into four major sectors of business activities such as service, trade, manufacturing and construction. Furthermore, with respect to firms characteristics the average salaries of employees in the formal and informal sector were presented. Thus, we provided analysis on the trends of salaries for both sectors in the last four years. The changes of salaries have been analyzed based on the reports of the businesses on the increase, decrease or no change in salaries for their employees. The average number of employees in businesses of formal and informal sector was presented. The average number of employees within the formal sector sample is greater than the average number of employees within the informal sector sample. This difference indicates that informal businesses are smaller than formal businesses in terms of employed personnel. In addition, we presented the analysis in growth of businesses by number of employees during the last four years as well as forecast of employment growth in both sectors for the period of four years in the future. Our analysis on business growth with respect to employment in both sectors shows that formal sector had average growth in the last four years by

16.66%, while informal sector had negative growth or decline by 2.44%. Moreover, employment forecast in the next four years in both sectors shows that businesses in the formal sector expect to have increase in the number of employees by 27.35%, while businesses in the informal sector expect to have decline in the number of employees by 2.39%. These trends of employment in both sectors indicate that formal sector enjoys better performance over informal sector in terms of growth of the number of employees.

The sales trends over the last four years as well as sales trend predicted for the next four years for the formal and informal sector were presented and compared with respect to whether they reported increase, decrease, or no change on their sales. Hence, 27.4% of businesses in the formal sector reported that they had sales increase during the last four years, 44.6% reported that they had sales decrease, while 27.9% reported that they had no change in sales. At the other side, only 6.82% of businesses in the informal sector reported that they had sales increase during the last four years, 69.07% reported that they had sales decrease, while 24.09% have reported that they had no change in sales. With respect to expected changes of sales in the next four years, businesses in the formal sector were more optimistic than businesses in the informal sector. Namely, 44.3% of businesses in the formal sector expect to have increase of sales, 23.9% of businesses expect to have decrease of sales, and 31.7% expect to have no change of their sales. In contrast, only 8% of businesses in the informal sector expect to have sales increase in the next four years, 70% expect to have sales decrease, and 22% expect to have no change of their sales. Therefore, with regard to sales trend, the formal sector outperforms the informal sector. Finally, the means of average net profit rate for the sample of formal and informal businesses were presented. With respect to the net profit rate, the formal sector outperforms the informal sector. The average net profit rate reported by the businesses in the formal sector is 22.22%, while informal sector businesses have reported an average net profit rate of 17.85%. Despite the fact that formal businesses are charged with taxes and social contributions they still enjoy higher net profit rate than informal businesses. Generally, it is expected that formal businesses have better management and are more efficient in the use of their resources which enable them better performance compared to the informal businesses. In addition, by operating in the formal sector they enjoy more opportunities in terms of access to market, access to finance in appropriate forms, as well as better institutional support, while avoiding costs related to detection by authorities.

Moreover, we provided descriptive analysis regarding access to finance and institutional barriers in formal and informal sector. Then, we elaborated statistical inference. In this context, we assessed the differences with respect to access to finance between formal and informal sector. Similarly, we assessed the difference with respect to institutional barriers between formal and informal sector. In addition, by applying t-test we tested the null hypothesis on differences in perceptions of formal and informal businesses with respect to access to finance and institutional barriers. From the perception of formal and informal businesses to different independent variables of access to finance and institutional barriers, we have found that most of these variables have been perceived as bigger obstacles to formal businesses compared to informal ones. Therefore, based on the perception of businesses, with respect to high cost of finance there is no difference in the means of two populations in the formal and informal sector. While, based on the perception of businesses with respect to other independent variables in terms of access to finance and institutional barriers there is difference in the means of two populations in the formal and informal sector. Hence, the mean value calculated for variables in the sample of formal and informal sectors indicate that formal firms are more affected by access to finance and institutional barriers with respect to following independent variables:

- Limited access to finance
- Unavailability of subsidies and unfavourable loans from the state
- Inefficient tax administration
- High custom tariffs and heavy trade regulation
- Business registration and license permit procedures
- Unfavourable labour law and other business regulation
- Dysfunctional judiciary system
- Corruption
- Contract violations by businesses and customers

In Chapter 6 we utilized datasets containing the perception of both formal and informal firms with respect to access to finance and institutional barriers in order to examine the determinant factors in their performance. In addition, we utilized the dataset of the informal firms to examine the determinant factors on access to external finance and institutional barriers in potential formalization of informal firms. From the previous theoretical basis, a number of

factors from financial and institutional barriers were found to affect performance of the firms. We test a considerable number of factors in the models to see if they are significant in performance of firms as well as potential formalization of informal firms.

The effect of external factors on the firms' performance were estimated by using econometric modeling with binary response variables, such as the logit model and ordered probit model. In our econometric models, the indicators of the firms' performance were used as dependent variables. Therefore, in order to estimate firms' performance we separately estimated models with two different dependent variables, namely sales and employment.

In order to estimate the impact of access to finance and institutional obstacles in performance of formal and informal SMEs we have further analyzed the obtained results from the estimated logit and ordered probit models. In both logit and ordered probit models we observed consistent outcomes regarding the statistical significance of predictors. As assumed in the theoretical part, our results indicate that access to finance and institutional barriers affect formal SMEs more than informal one.

As we have expected access to finance indicators are significant in performance of formal firms measured by sales. However, the same indicators are not significant in terms of employment within formal firms. We may understand that employment is industry specific, estimating that some type of firms especially those in agriculture may increase sales in given periods with the same number of employees. Hence, the results partially support the hypothesis that limited access to finance negatively affects performance of SMEs. Similarly, high cost of finance is significant for the sales of formal firms, even though it is not significant for employment. Thus, the results partially support the hypothesis that high cost of finance negatively affects performance of formal SMEs.

With regard to the institutional barriers some indicators are significant in performance of formal firms. At one side the results show that some indicators are significant for the growth in terms of sales of formal firms including business registration and license permit procedure positively affect sales, and unfavorable labor law and other business regulation negatively affect sales. At the other side some indicators are significant for the growth in terms of employment of formal firms such as: business registration and license permit procedure, and contract violation by businesses and customers which positively affect growth of employment, while corruption

negatively affect employment. The results provide partial support for hypothesis that institutional constraints negatively affect the performance of formal SMEs.

The limited access to finance is not significant for the growth of sales and employment of informal firms. The results do not support the hypothesis that limited access to finance negatively affects the performance of informal SMEs. Similarly, high cost of finance is not significant for the growth of sales and employment of informal firms. The results do not support the hypothesis that high cost of finance negatively affects the performance of informal SMEs.

With respect to the impact of institutional barriers on sales of informal SMEs some indicators are significant including inefficient tax administration (insufficient number of inspectors) and dysfunctional judiciary system which positively affect sales, while corruption negatively affect sales of informal firms. On the other hand, the independent variables related to institutional barriers are not significant regarding their impact on the growth of employment of informal firms. The results provide partial support for the hypothesis that institutional constraints negatively affect the performance of informal SMEs.

Furthermore, in our model estimation on potential formalization of informal firms, limited access to finance is significant for potential formalization of informal firms, the evidence support the hypothesis that the limited access to finance negatively affects the potential formalization of informal firms. High cost of finance is significant for the potential formalization of informal firms, the evidence support the hypothesis that the high cost of finance negatively affect the potential formalization of informal firms. With respect to institutional barriers the model estimate has shown that corruption is significant for potential formalization of informal firms. Therefore, the evidences partially support the hypothesis that institutional barriers negatively affect the potential formalization of informal firms.

In cases where two or more independent variables are highly correlated we face difficulties with understanding which independent variable contributes to the variance explained in the dependent variable. Thus, in order to clarify this issue we have checked correlations between independent variables in the samples of formal and informal firms by undertaking a multivariate analysis. Correlation coefficients in both samples of formal and informal firms have indicated some significant correlations between variables. Following this, in order to check

potential multicollinearity, the variance inflation (VIF) scores for both datasets of the formal and informal firms were calculated. In general, VIF scores in both samples are low, where the highest score is 1.61 for the dataset of formal firms and 2.37 for the dataset of informal firms which is below common thresholds. These evidences indicate that in terms of our independent variables in both samples, multicollinearity is not a pronounced problem. Therefore, we will not face difficulties with understanding which independent variable contributes to the variance explained in the dependent variable.

Furthermore, we performed diagnostic tests and robustness analysis. Thus, in order to estimate consistence of the models we tested how certain regression coefficient estimates behave when the regression specification is modified in some way, typically by moving or adding predictors in the model. For this purpose we employed various specifications of the models explaining the dependent variables for the dataset of formal and informal firms. Therefore, in order to examine the effects of the access to finance and institutional environment on sales growth, and validate previous regressions results we performed robustness check by adding variables in the model as group components. In the first specification we employed as the dependent variable the sales of firms, while as the independent variables we included the perception of firms on limited access to finance, cost of finance and unavailability of subsidies and favorable loans from the state. In the second specification we added to the model the independent variables from the range of institutional barriers such as: inefficient tax administration, high custom tariffs and heavy trade regulation, business registration and license permit procedures, unfavorable labor law and other business regulation, dysfunctional judiciary system, corruption, contract violations by businesses and customers. In the third specification from the group of control variables we added in the models total sales and average net profit rate. Similarly we replicated the same specification for both datasets of formal and informal firms to estimate the employment as the second dependent variable.

In both samples of formal and informal firms as well as both dependent variables sales and employment that we employed in various model specifications has resulted that the same predictors are significant with minor differences in the magnitude of the significance. Therefore, the results from the various specifications of logit and ordered probit econometric models are robust.

7.3 Policy recommendations

By using firm level data in this research we have explored the impact of business environment on firms' performance. As the evidence on business environment comes from firms' responses to the survey, it allowed us to have a better understanding what hinder firms' performance particularly in terms of access to finance and institutional barriers which are the focus of our study. According to our empirical analysis limited access to finance, unfavourable loan conditions and some institutional obstacles including corruption, unfavourable labour law and other business regulation make firms in Kosovo less likely to grow.

Given the importance of SME sector in Kosovo in terms of job creation, productivity, innovation and economic development, and understanding what determines the performance of SMEs is an important topic that deserves the attention of policy makers. This should allow them to undertake the appropriate policy reforms that support SME development and motivate the formalization of informal business activities. Following this, we outline a number of policy recommendations in terms of improving the access to finance and undertaking suitable institutional reforms.

7.3.1 Recommendations for access to finance

The theory provides arguments that access to finance has substantial influence on firms' performance. Access to finance has been identified as a key element for SMEs to succeed in their role to build productive capacity, competitiveness, job creation, as well as to contribute to poverty alleviation in developing countries (Beck et al., 2004; Maurer, 2008; Demirgüç-Kunt and Levine, 2008). With this respect, in our empirical study we find out that access to finance hinders the performance of SMEs. Furthermore, access to finance has substantial influence in potential formalization of informal firms.

Due to substantial importance of SMEs in employment, particularly in the case of Kosovo where unemployment rate represents a major concern in the economy, the policy makers should focus on further reforms of the business environment. In this context, in order to encourage potential formalization of SMEs respective institutions should facilitate access to

financing and undertake policies that develop financial sector which allow financial institutions to offer SMEs access to finance with appropriate terms and conditions. Alternative and innovative ways should be explored to facilitate access to finance with favorable conditions which is strongly demanded by SMEs.

Facilitating access to finance for SMEs requires from the public authorities a further liberalization and development of financial market in order to provide greater competition among financial institutions in SME lending. Increasing the number of smaller credit institutions can facilitate access to finance for small businesses. They are more flexible in providing their services and tend to focus on segments of the market that have been neglected by larger financial institutions. Moreover, they are more likely to implement innovative way of providing loan services to SMEs. This will allow businesses with a limited track record to seek adequate financing to support their early stages of growth.

The institutional framework should provide effective functioning of the rule of law for the resolution of contractual disputes and reduction of the risks for financial institutions in order to serve SMEs the loans with favorable terms and conditions. Further progress is needed to define and implement an efficient real property right system in order to facilitate collateral requirements as a basis for the provision of loans and the circulation of financial capital.

Guarantee credit scheme funds should be strongly supported as such schemes been shown to have significant impact on SMEs to access credit. Although the Government has created appropriate law conditions for credit guarantee schemes, financial support is needed in order to facilitate SMEs access to finance and reduce the cost of finance. In the future, emphasis should be placed on making guarantee credit schemes more effective and less bureaucratic. Government should find proper legal way to allocate a part of funds received from privatization of the assets of SOEs towards supporting the credit guarantee schemes. This is possible after the financial obligations have been settled against former SOE creditors. The remaining funds from privatization of SOE assets which seem to be significant should be used to support SMEs with favorable loan conditions.

The focus should be particularly in facilitating access to finance for SMEs in manufacturing sectors which is very weak and not competitive in Kosovo. The manufacturing is

a strategic sector for SMEs development and enhancing competitiveness in Kosovo. Due to its specifics, this sector demands more investments which are highly exposed to the risk compared to other sectors. A favorable loan conditions in terms of cost, flexibility and loan period may encourage and facilitate investments to this sectors in expanding production facilities, upgrading technologies and creating new production lines. In this context, the manufacturing SMEs would contribute to production of final goods, job creations, increase of exports, and hence reduction of foreign trade deficits.

In the future, greater effort should be made to improve SME access to the equity markets as they are over reliant on bank financing compared to their counterparts in developed economies. The Government should consider undertaking administrative and law arrangements for creating a stock market that has proved to be very supportive for enabling SMEs in developed countries more access to capital, hence more opportunities to grow. This would help people to merge their entrepreneurial skills and financial capital with the purpose of achieving common goals in business such as employment and profit generation, expanding networks and so forth.

Policy makers should also consider providing incentives for SMEs to be more transparent in their financial dealings and adopt appropriate accounting systems. This should assist them in getting better access to external sources of finance. Initially, the accounting regulations could be further strengthened in order to ensure more accurate financial reporting by SMEs. In addition, governments should provide consulting and training for SMEs to develop their skills and knowledge in order to write business plans, and learn to practice efficient and reliable approach when they apply for loans or grants. At one side, this facilitates the work of financial institutions to assess creditworthiness of loan applicants from the SME sector. At the other side, SMEs will be more effective and reliable while applying for the loans with the purpose to grow their business.

Last but not least, special attention should be devoted to increasing young people's access to financing as they have potential for innovations, productivity and value added. It is recommended that grants and soft loans provided to this category of entrepreneurs upon the presentation of their new innovative projects especially in the manufacturing sectors and services that needs to be expanded.

7.3.2 *Recommendations for institutional reforms*

It is obvious that SMEs in Kosovo have become the major contributor to employment, innovation, GDP growth as well as economic development. Though, in order to increase their entrepreneurial activities they need support of institutional policies in appropriate forms. Governments, at local and national level have a substantial role to play in reforming the business environment in favor of SMEs sector development. They build the basic institutions that support SMEs and ensure the law implementation through functionality of judiciary system. Taking more positive view, governments through appropriate public policies create more sustainable investment climate for SMEs. With this respect we recommend several institutional reforms aiming to support the development of the SME sector.

In order to enhance SMEs growth and competitiveness a general and specific policy reforms of the business environment are needed. The general policies have wider macroeconomic effects and accordingly could affect SMEs performance, such as developing financial markets, tax policies, legal aspects, and capable institutional structures. While the specific policy reforms support SMEs with appropriate forms of access to finance, provision of information, networking, consulting programs, incentives for innovation, economic infrastructure such as incubators and commercial free zones.

Recently the Kosovo Government has embarked on several attempts aimed at promoting SMEs development. With this respect ‘SME Development Strategy 2012-2016’ as well as ‘Private Sector Development Strategy 2013-2017’ has been launched by Ministry of Trade and Industry aimed at promoting business climate, entrepreneurial culture and competitiveness of SMEs. Before these strategies only short term policies were designed in the context of SMEs sector development. Government strategy for SMEs has addressed strategic goals and objectives in order to advance reforms aiming to lead to a dynamic SME sector that will create new jobs and contribute to economic growth. However, it is most important the manner in which these development strategies are managed and implemented. There is need to minimize the levels of bureaucracy embedded in the programs. Administration needs to be efficient, well qualified staff should be hired to ensure implementation of SMEs development strategies in appropriate forms.

Without proper administrative capacities, it would be difficult to achieve intended results. Moreover, it is necessary an active participation of the representatives of the SMEs' associations in designing and promotion of programs which aim to overcome business environment obstacles in performance of the firms.

The agency for SMEs development, local governments, and chamber of trade and economy should support businesses through trainings and education for developing suitable customer oriented strategies. The entrepreneurial education gives an effective approach in application to finance, overcome management resource constraints, improve quality of products and services, and enable SMEs to expand their network of businesses and customers. The improvement of these SMEs features facilitates their cooperation with foreign firms and entering foreign markets which have much higher demands than the local market. Furthermore, multilateral cooperation should be undertaken among the public authorities, SMEs and universities for the purpose of promoting and developing an entrepreneurial culture by supporting cooperation between schools and SMEs, such as increasing the number of student internships in SMEs and encouraging the establishment of business incubators within universities.

Despite immediate action to improving the business environment, the industry specific factors should be taken into account in designing policies to support the SMEs development. Due to the fact that production sector is weak and not competitive, it is necessary to treat this sector in the most favourable manner, particularly the agriculture sector in which Kosovo has a solid potential for development. Furthermore, production sectors could contribute to international economic integration and adjustment in foreign trade imbalances of the country.

Equal opportunities for SMEs to participate in public procurements should be provided, and government should abolish the bureaucracies in the proceeding of these procurements. Transparent public procurement should be provided as well as effective communication of the institutions with firms that participate in public procurements. With this respect comprehensive strategy to improve the image of institutions and enhance the trust of firms towards institutions is necessary. Furthermore, in line with the assessment of transparency international reports and the perception of the firms for the high level of corruption, the government must be determined and consistent in fighting this phenomenon that hinders the performance of the SMEs.

Trade liberalization should be further enhanced by abolishing and simplifying bureaucratic custom procedures, and imposing lower tariffs in raw materials. Also policy makers should closely cooperate with business and trade associations in order to support domestic SMEs to create joint ventures with foreign businesses as well as to develop more business links abroad. With this respect, more efforts are necessary to create a suitable business environment and favourable tax system that attracts foreign direct investments. These investments enhance productivity, innovation, competitiveness in SME sector and enable more financial flows.

Since Kosovo has a small market of the final goods and services this indicates that institutions should support SMEs to produce for domestic market as well as export in foreign markets. Having in consideration that Kosovo has signed Stabilisation and Association Agreement (SAA) with the EU this implies that SMEs will face more competition in the future in local market from foreign businesses. Moreover, in order to be able to export in the EU market domestic SMEs should improve quality standards of their products. It is necessity that institutions support quality assurance of the products which is one of the main preconditions to enter foreign markets.

In addition, the informal economy represents a large share of economic activities in Kosovo. Informal economy is consisted by very small entities mainly concentrated in agriculture, small production units and trade. Gathering statistics about who is engaged in informal economy activities, the frequencies with which these activities are occurring and their magnitude is crucial for making effective and efficient decisions regarding the allocations of a country's resources in this area (Schneider et al., 2004). Despite the challenges to get accurate information of informal firms because informal firms' representatives wish not to provide reliable data we have got enough in order to know the conditions and environment in which they operate and the importance of informal sector.

Smaller informal economies appear in countries with higher tax revenues, if achieved by lower tax rates, fewer laws and regulations and less bribery facing enterprises. Countries with a better rule of law, which is financed by tax revenues, also have smaller informal economies (Johnson et al., 1998). Transition countries have higher levels of regulation leading to a significantly higher incidence of bribery, higher effective taxes on official activities and a large discretionary framework of regulations and consequently to a higher informal economy

(Schneider et al., 2004). However, the policies should be designed based on the context of the economic and institutional development. Thus, in order to encourage the formalization of economic activities it is suitable to arrange a lower tax rates that are affordable for the firms where most of them are faced with survival in the market. This would make it possible to increase the number of tax-paying firms.

Due to institutional barriers and lack of access to finance informal firms are marginalized and could not enhance their survival and growth aspiration. Hence, the benefits provided by developed institutional context can motivate informal firms to join formal sector. Theory states that scaling down the institutional barriers and offering more attractive services to formal firms such as: easy access to finance, low cost of finance, grants, infrastructure, consultancy support, public procurement opportunities etc. attracts informal firms to shift to formal economy (De Soto, 2000; Ayagari, 2005; Levine, 2008; La Porta et al., 2014). More efficient fight against informal sector is necessary in appropriate way that encourages formalization of informal firms. Further improvement of access to finance and loan conditions, and alleviation of institutional barriers motivate informal firms to move to formal sector.

In summary, it is a necessity to enable functional and fair legal, regulatory and administrative environments, where property rights are clearly recognized, contracts are easily enforced, over regulations, bureaucracies and transaction costs in doing business are minimized through fair, simple and less costly taxation, customs, licensing, financial, labor law, liquidations and other procedures that firms have to cope with government during their operations. It is necessary to make further efforts in implementing the rule of law with competence and professional manner, consistency in simplifying the business regulations, determination in fighting corruption and lowering costs of doing business would also encourage informal firms to shift to the formal economy. In addition, an appropriate way to support integration of informal economy into formal economy is economic growth and education for all.

7.4 Limitations of research

Our study has some limitations that need to be considered in the interpretations of the study findings, but in the same time contribute to a current theory and evidences on the impact of access to finance and institutional barriers in SMEs performance as well as potential

formalization of informal firms. These limitations can affect the overall reliability and validity of the study and together can offer more opportunities for future research.

First of all, some limitations are related to the data collection for the samples of formal and informal sector. With regard to the formal sector the public business registry provided by the Tax Administration of Kosovo was used to select the representative sample of formal SMEs. This way of selecting the sample is problematic in less developed transition countries where business registries are not entirely reliable.

On the other side, empirical research of informal economy presents difficulties in finding appropriate representative sample of informal firms as they try to avoid detection from public authorities. In the context of informal sector, we used snowball and convenience sampling as most appropriate methods to find informal entities. However, both formal and informal firms' representatives are reluctant in providing precise information on their business activities.

As mentioned above, in this study we used a survey questionnaire method to collect data, whereas alternative approaches such as qualitative research may allow the researcher to broaden and gain in-depth knowledge in the area of SMEs and their perception on access to finance and institutional obstacles from both managerial and employee perspectives. The alternative approaches may be efficient to gain in-depth information regarding informality within the formal sector as well. Qualitative approach may help to overcome some potential misunderstandings and avoiding inaccurate information provided by respondents.

We have focused our study at informal sector to find evidence on informality. Although we assume that a large scale of informality exist at the formal sector, we have not explored informal activities within this sector. The formal SMEs hide a large part of their economic activities from the authorities in order to avoid paying taxes and social contributions. Therefore, in order to gather more information about informal economy it is necessary to explore the informal activities within the formal sector.

The fact that the empirical part of study examined the determinant factors of access to finance and institutional barriers in performance of formal and informal firms, and potential formalization of informal firms bring into question the generalization of its findings in transitional and developing economies.

We have employed a considerable number of independent variables to explore their impact in performance of the firms. However, we are conscious there are other independent variables in the business environment that affect the performance of the firms. Future researches can increase the independent variables or add moderating variables to the study in order to enhance the results.

7.5 Avenues for further research

The study adds value by finding the new evidences on the impact of access to finance and institutional barriers on SMEs performance. Although our study was focused in the influence of access to finance and institutional barriers in SMEs performance, however other components of the business environment are important and should be examined in the future research.

The case of informality is widespread among formal SMEs as some firms more or less avoid paying taxes and social contributions. The future research should examine the informality in the formal sector for the validation purposes.

The future research may use mixed methods in gathering data on SMEs. The quantitative and qualitative research may be efficient for future studies particularly to gain in-depth information on the perception of respondents on access to finance and institutional barriers. Using additional research methods such as case study may have the potential to enhance the findings and provide additional findings that could concentrate on specific factors of the business environment that influence the performance of the firms.

We suggest additional research for different sectors in order to assess differences in barriers to growth facing the SMEs in different segments of the economy. As we have emphasized the role of SMEs in production sectors to competitiveness, and sustainable economic growth, further surveys in this sectors are recommended in order to examine the barriers that have left production sectors weak and underdeveloped. Also we recommend a special survey with SMEs which are founded by foreign direct investment in order to understand the problems they may come through, and provide policy recommendation for further reforms to attract FDI in SMEs.

Further, the lack of links and cooperation among governments, financial institutions, SMEs, universities and researchers represent other perspective for future research. It is worth noting that the simultaneous efforts can support the performance of SMEs which are identified as among most important for job creation, innovation, and economic growth.

Even though the government has promoted different strategies and programs in order to support the SMEs development, what seems to be the reality is that there have been no substantial measures for SMEs development. With this respect, we suggest future research to assess the effectiveness of the government strategies and programs dedicated to supporting the SMEs business environment.

References:

- Abdesamed, K., and Wahab, K., (2014). Financing of small and medium enterprises: Determinants of bank loan applications. *African Journal of Business Management*, 8(17), 717-727.
- Abor, J., and Biekpe, N., (2007). Corporate governance, ownership structure and performance of SMEs in Ghana: Implications for financing opportunities. *Corporate Governance*, 7(3), 288–300.
- Aidis, R., and Sauka A., (2005) Entrepreneurship in a changing environment: Analyzing the impact of transition stages on SME development. 2nd inter-RENT online publication.
- Aidis, R., and Mickiewicz, T., (2006). Entrepreneurs, Expectations and Business Expansion: Lessons from Lithuania. *Europe-Asia Studies*, 58(1), 855-880.
- Aidis, R., Estrin, S., and Mickiewicz, T. M., (2009). Entrepreneurial Entry: Which Institutions Matter? *CEPR Discussion Paper No.DP7278*.
- Aidt, T. S. (2009). Corruption, institutions, and economic development. *Oxford Review of Economic Policy*, 25(2), 271-291.
- Aisen, A. and Veiga, F. (2011). How does political instability affect economic growth?. *IMF Working Paper*, WP/11/12. Washington DC: International Monetary Fund.
- Alesian, A., Ozler, S., Roubini, N., and Philip, S., (1996). Political instability and economic growth. *Journal of Economic Growth*, 1(2): 189-211.
- Almeida, R. and Carneiro, P., (2005). Enforcement of Regulation, Informal Labor and Firm Performance, *IZA Discussion Paper, No.1759*.
- Almeida, H., and Campello, M. (2007). Financial Constraints, Asset Tangibility and Corporate Investment. *Working Paper*, New York University.
- Altman, M. (2008). Formal – Informal Economy Linkages, Pretoria: *Human Science Research Council*.
- AMIK (2016). Association for Microfinance Institutions in Kosovo. Retrieved from <http://www.amik.org/english/>
- Andrews, D., Sánchez, A.C., and Johansson, A., (2011). Towards a better understanding of the informal economy. *OECD Economics Department Working Papers, No. 873*. OECD Publishing.

- Atawodi, W., and Ojeka, S. (2012). Factors that affect tax compliance among small and medium enterprises (SMEs) in North Central Nigeria. *International Journal of Business and Management*, 7(12), 87-96.
- Atkinson C, Mallett, O. and Wapshott, R. (2014). You try to be a fair employer: Regulation and employment relationships in medium-sized firms. *International Small Business Journal*, 1-18.
- Autio, E., and Fu, K. (2014). Economic and political institutions and entry into formal and informal entrepreneurship. *Asia Pacific Journal of Management*. Imperial College Business School, London.
- Ayagari, M., Beck, T. and Demircuc-Kunt, A. (2007). Small and Medium Enterprises Across the Globe. *Small Business Economics*, 29, 415-434.
- Bacchetta, M., Ernst, E., and Bustamante, J. P. (2009). Globalization and Informal Jobs in Developing Countries. International Labour Organization and the World Trade Organization, Geneva.
- Bah el, H. and Fang, L. (2011). Impact of the Business Environment on Output and Productivity in Africa. *Federal Reserve Bank of Africa* 016, 047, L23.
- Banham, HC (2010). External environment analysis for small and medium enterprises (SMEs), *Journal of Business and Economics Research*, 10, (8), 19-25.
- Bannock, G., Gamser, M., and Juhlin, M. (2005). The Importance of the Enabling Environment for Business and Economic Growth: A 10 Country Comparison of Central Europe and Africa. London: Bannock Consulting, Ltd.
- Barth, J. R., Lin, D., and Yost, K. (2011). Small and medium enterprise financing in transition economies. *Atlantic Economic Journal*, 39(1), 19-38.
- Bartlett W. and Bukvic, V. (2001). Barriers to SME growth in Slovenia. *Economic Policies in Transitional Economies*. 11 (2), 177-195.
- Bartlett, W. (2008). Regional integration and free-trade agreements in the Balkans: opportunities, obstacles and policy issues. *Economic Change and Restructuring*, 42(1), 25-46.
- Baurer, L. I., (2005). Tax administrations and small and medium enterprises (SMEs) in Developing Countries. *The World Bank Working Paper No. 39110*. Washington DC.

- Beck, T., Demirgüç-Kunt, A., and Maksimovic, V. (2004). Bank Competition and Access to Finance: International Evidence. *Journal of Money, Credit, and Banking* 36(3), 627-648.
- Beck Th, and Demirgüç -Kunt A. (2005). Small and Medium Sized Enterprises: Overcoming Growth Constraints. *World Bank Working Paper*.
- Beck, T., Demirgüç-Kunt, A. and Maksimovic, V. (2005). Financial and legal constraints to firm growth: Does size matter? *Journal of Finance*, 60, 137–177.
- Beck, T., and Demirgüç-Kunt, A. (2006). Small and medium sized enterprises: Access to finance as a growth constraints. *Journal of banking and finance*, 30(1), 2931-2943.
- Beck, T., (2007). Financing Constraints of SMEs in Developing Countries: Evidence, Determinants and Solutions. *Journal of International Money and Finance*, 31(2), 401-441.
- Beck, T., Demirgüç -Kunt, A., Laeven,L., and Levine, R. (2004). “Finance, Firm Size and Growth”. *World Bank Policy Research Working Paper 3485*.
- Belev, B. (2002). The Informal Economy in the EU Accession Countries, Size, Scope, Trends and Challenges to the Process of EU Enlargement, *Centre for the Study of Democracy*, Sofia.
- Berger, A. N. and Udell, G.F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle, *Journal of Banking and Finance*, 22, 613-673.
- Berger, A.N. and Udell, G.F. (1995). Relationship lending and lines of credit in small firm finance, *Journal of Business* 68, 351-382.
- Berry, A. Rodriguez, E. and Sandee, H. (2001). Small and medium enterprise dynamics in Indonesia. *Bulletin of Indonesian Economic Studies* 37(3): 363-84.
- Bigsten, A., Kimuyu, P., and Lundvall, K. (2000). Are formal and informal small firms really different? Evidence from Kenyan manufacturing. *Institute of Policy Analysis and Research Discussion Papers*.
- BNR (2011). Financial Stability Report. National Bank of Romania. Retrieved from <http://www.bnro.ro/Regular-publications-2504.aspx>

- Bouri, A., Breij, M., Diop, M., Kempner, R., Klinger, B., and Stevenson K., (2011). Report on Support to SMEs in Developing Countries Through Financial Intermediaries. *European Investment Bank Report 2011*.
- Brown, D., McGranahan, G., and Dodman, D. (2014). Urban informality and building a more inclusive, resilient and green economy. *Working Paper*. London: Human Settlements Group, International Institute for Environment and Development.
- Brown, G., Chavis, L., and Klapper, L., (2011). Institutions, external financing and Growth around the World: A new lease on life? *World Bank, research publication, 2011*.
- BSCK (2012). Entrepreneurship and Small Business Development in Kosovo in 2011. *Research Report*.
- Butler, A and Cornaggia, J. (2009). Does access to external finance improve productivity? Evidence from a natural experiment. *Journal of Financial Economics (JFE)*, 99 (1) 184-203.
- Boeri, T., Helppie, B., and Macis, M., (2008). Labor Regulations in Developing Countries: A Review of the Evidence and Directions for Future Research. *Discussion Paper No. 0833*. World Bank, Washington, DC.
- Brada, J. C., Kutan, A. M., and Yigit, T. M. (2006). The effects of transition and political instability on foreign direct investment inflows, *Economics of Transition*, 14(4), 649-680.
- BSCK.(2012). Entrepreneurship and Small Business Development in Kosovo. *Research Report*. Retrieved from: <http://www.bsckosovo.org/publikimet/20120124100346631.pdf>
- Caner, S. (2010). The Role of Small and Medium Size Enterprises in Economic Development. *HSE Conference*, Moscow.
- Carmignani, F., (2003). Political instability, uncertainty and economics. *Journal of Economic Surveys*, 17(1), 1-54.
- Central Bank of Kosovo.(2013). Financial Stability Report, Central Bank of Kosovo, *Annual Bank Report*.
- Central Bank of Kosovo.(2015). Financial Stability Report, Central Bank of Kosovo, *Annual Bank Report*.
- Chen, D., Lee, F., and Mintz, J., (2002). Taxation, SMEs and Entrepreneurship. *Working Paper*, 2002/9, OECD, Paris.

- Chen, M. A. (2007). Rethinking the Informal Economy: Linkages with the Formal Economy and the Formal Regulatory Environment, *DESA Working Paper* No. 46, UN Department of Economic and Social Affairs.
- Chen, M.A. (2012). The Informal Economy: Definitions, Theories and Policies. Women in Informal Employment: Globalizing and Organizing (*WIEGO*), *Working Paper* No. 1.
- Claessens, S., and Laeven, L. (2003). Financial development, property rights and growth. *The Journal of Finance*, 58 (1), 2401-2436.
- Coleman, S. (2000) Access to capital and terms of credit: A comparison of men and women owned small businesses. *Journal of Small Business Management* 38(3), 37-53.
- Dabla-Norris, E., Gradstein, M., and Inchauste, G. (2005). What Causes Firms to Hide Output? The Determinants of Informality, *Working Paper* No. 05/160, IMF, Washington DC.
- Davidsson, P. (1991). Continued entrepreneurship: Ability, need, and opportunity as determinants of small firm growth. *Journal of Business Venturing*, 6(6), 405-429.
- Davies, R., and Thurlow, J., (2010) Formal-informal economy linkages and unemployment in South-Africa. *South Africa Journal of Economics* 78(4), 437-459.
- Demirguc-Kunt, A., and Maksimovic, V., (1998). "Law, Finance, and Firm Growth". *The Journal of Finance* 53 (6), 2107–2137.
- De Soto, Hernando (1989). *The Other Path: The Economic Answer to Terrorism*. Harper Collins, New York.
- De Soto, Hernando (2000). *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else*. Basic Books, New York.
- De Soto, Hernando (2002). *The Other Path: The Economic Answer to Terrorism*. New York: Perseus Books Group.
- Dimova, R., Gang, I.N., and Landon-Lane, J., (2005). The Informal Sector during Crisis and Transition. *Research Paper* No. 2005/X, Sweden, Expert Group on Development Issues, UNU-WIDER, Finland.
- Djankov, S., Rafael La Porta, Lopez-de-Silanes F., and Shleifer, A., (2002). The Regulation of Entry. *Quarterly Journal of Economics*, 67 (1), 1- 37.
- Djankov, S., Hart, O., McLiesh, C., and Shleifer, A. (2008). Debt Enforcement around the World. *Journal of Political Economy* 116 (6), 1105–1149.

- De la Torre, A., Martinez Peria, M.S., and Schmukler, S.L., (2008). Bank involvement with SMEs: Beyond relationship lending. *Policy Research Working Paper* No. 4649, World Bank, Washington, DC.
- Demirgüç-Kunt, A. and Levine, R. (2001). *Financial Structures and Economic Growth: A Cross-Country Comparison of Banks, Markets, and Development*, Cambridge, MA: MIT Press, 3-14.
- Demirküç-Kunt A., Levine R. (2008). *Bank-Based and Market Based Financial Systems: Cross Country Comparisons*. World Bank, Development Research Group.
- Demirgüç-Kunt, A., Maksimovic, V., (2002). *Firms as Financial Intermediaries: Evidence from Trade Credit Data*, *Working paper*, World Bank.
- Deutsche Bank Research, (2014). *SME financing in the euro area*. EU Monitor, Global financial markets.
- De Soto, H., (2000). *The Mystery of Capital: Why Capitalism Triumph in the West and Fails Everywhere Else*. New York. Basic Books.
- Djankov, S., La Porta R., Lopez-De-Silanes, F. and Shleifer, A. (2002). *The Regulation of Entry*. *The Quarterly Journal of Economics*, 117(1), 1-37.
- Dollar, D., Hallward-Driemeier, M., and Mengistae, T. (2006). *Investment Climate and International Integration*. *World Development* 34(9), 1498-1516.
- Gabrisch, H., Hanzl-Weiss, D., Holzner, M., Landesmann, M., and Vidovic, H., (2016). *Improving competitiveness in the Balkan Region-Opportunities and Limits*. *The Vienna Institute for International Economic Studies (WIIW) Research Report* 411.
- Easterling, T., Qorlaze, L., (2012). *Mid-term performance evaluation of the USAID/Kosovo loan portfolio guarantee (LPG) project with Raiffeisen bank JSC*.
- EBCI (2014). *Credit Guarantee Schemes for SME lending in Central, Eastern and South-Eastern Europe*. *A report by the Vienna Initiative Working Group on Credit Guarantee Schemes*.
- EBRD (2007). *European Bank for Reconstruction and Development. Annual Report*.
- EBRD (2009). *The Business Environment and Enterprise Performance Survey IV (BEEPS)*. The European Bank for Reconstruction and Development and the World Bank.
- EBRD (2013). *Strategy for Kosovo-Report on the invitation to public to comment*. European Bank for Reconstruction and Development.

- EBRD (2014). The Business Environment and Enterprise Performance Survey V (BEEPS) The European Bank for Reconstruction and Development and the World Bank.
- ECIKS (2014). Kosovo SME Promotion Programme. *Report on SMEs in Kosovo 2014*: KOSME sub-activity 1.3a.
- EIB (2014).Unlocking Lending in Europe. European Investment Bank, Luxembourg.
- EIB (2016).Assessment of financing needs of SMEs in the Western Balkan Countries/ *Country Report Kosovo*. European Investment Bank.
- Elena, S. Herrero, and Henderson, K. (2004).Barriers to the Enforcement of Court Judgments in Peru. Winning the courts is only half of the battle: Perspectives from SMEs and other users. *IFES Rule of Law Occasional Paper Series*.
- Erastrus, Y. E., Stephen, A. and Abdullai, I. (2014). Institutional framework for promoting small and medium scale enterprise in Ghana: perspective of entrepreneurs. *Australian Journal of Business and Management Research*, 3 (10), 28-45.
- Estrin, S., and Mickiewicz, T., (2010). Entrepreneurship in Transition Economies: The Role of Institutions and Generational Change. *Economics working paper No. 106*, Centre for Comparative Economics. London: University College London.
- Estrin, S., Korosteleva, J., and Mickiewicz, T. (2013). Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing*, 28(4), 564-580.
- European Central Bank, (2014). SME access to finance in the euro area: barriers and potential policy remedies. *Monthly Bulletin*, July, 2014
- European Commission, (2011). Business Dynamics: Start-ups, Business Transfers and Bankruptcy. *Final Report*, Brussels 2011.
- European Commission (2013). SMEs access to finance survey. *Analytical Report*.
- European Commission.(2014). Survey on the access to finance of enterprises (SAFE).*Analytical report*.
- European Commission (2015). Annual Report on European SMEs 2014/2015; SMEs start hiring again.
- European Union (2014).Law on Labour in Kosovo.EU Office in Kosovo. Retrieved from http://www.partneretsocial.org/uploads/files/2014/June/20/Labour_Law_in_Kosovo1403267166.pdf
- Fadahunsi, A. (2012). The Growth of Small Businesses: Towards A Research Agenda.

- American Journal of Economics and Business Administration*. 4(1), 105-115.
- Farazi, S. (2014). Informal firms and Financial Inclusion. *Journal of International Commerce, Economics and Policy*, 5(3), 1-28.
- Fatoki, O., and Asah, F. (2011). The Impact of Firm and Entrepreneurial Characteristics on Access to Debt Finance by SMEs in King Williams' Town, South Africa. *International Journal of Business and Management*. 6(8).
- Fiestas, F., and Sinha, S. (2011). Constraints to investment in business in the poorest developing countries. *Nathan Associates London, United Kingdom*.
- Fisman, R., and Svensson, J. (2007). Are Corruption and Taxation Really Harmful to Growth? Firm Level Evidence, *Journal of Development Economics*, 83(1), 63–75.
- Friedman, E., Johnson, S., Kaufmann, D., Zoido-Lobaton, P. (2000). Dodging the Grabbing Hand: The Determinants of Unofficial Activity in 69 Countries, *Journal of Public Economics*, 76(4), 459-493.
- Gërxxhani, K. (2002). The informal sector in transition: Tax evasion in an institutional vacuum Amsterdam: *PhD Thesis*, Tinbergen Institute Research series, no.265, University of Amsterdam.
- Gërxxhani, K. (2003). The informal sector in developed and less-developed countries: A literature survey, *Public Choice*, 114 (3-4), 295-318.
- Ghauri, P., Gronhaug, K. (2005). Research Methods in Business Studies: A Practical Guide, Financial Times Prentice Hall, *Business & Economics*, 3-257.
- Government of the Republic of Kosovo (2016). Retrieved from: <https://www.rks-gov.net/en-US/Bizneset/FinancatTaksatDoganat/Pages/Taksat.aspx>
- Gujarati, N. D. (2004). Basic Econometrics, *Fourth Edition*. The McGraw-Hill Companies.
- Haaparanta, P., Juurikkala, T., Lazareva, O., Pirttila, J., Solanko, L., and Zhuravskaya, E.V. (2003). Firms and Public Service Provision in Russia. *BOFIT Discussion Paper No. 16*.
- Halliday, T.C., Carruthers, B.G. (2007). The recursivity of law: Global norm making and national lawmaking in the globalization of corporate insolvency regimes. *American Journal of Sociology*, 112(1) 1135-1202.
- Harding, P., Jenkins, R. (1989). The Myth of the Hidden Economy: Towards a New Understanding of Informal Economic Activity, *Open University Press*, Milton Keynes, Philadelphia.

- Hartog, Ch., van Stel, A., and Storey, D.J. (2010). Institutions and entrepreneurship: The role of the rule of law, *EIM Scales paper H*, 201003, Zoetermeer, Netherlands: EIM Business Policy and Research.
- Hashi I, (2001). Financial and Institutional Barriers to SMEs Growth in Albania: Results of an Enterprise Survey. *Kluwer Academic Publishers*. 11(3), 221-238.
- Hashi, I. and Krasniqi, B. (2010). Entrepreneurship and SME Growth: Evidence from Advanced and Laggard Transition Economies. *International Journal of Entrepreneurial Behavior & Research*, 17(5), 456-487.
- Holzner, M. and Peci, F. (2012). The Impact of Customs Procedures on Business Performance: Evidence from Kosovo, The Vienna Institute for International Economic Studies, *Working Papers 76*.
- Holzner, M. (2016). Policy Options for Competitiveness and Economic Development in the Western Balkans: the Case for Infrastructure Investment. *Policy Notes and Reports 16*.The Vienna Institute for International Economic Studies.
- Hommel, M., Khan, A., Gerber, C., Kipnis H., and Hamm, K. (2015). Out of the Shadows and Into the Banks; Financing Very Small and Informal Enterprises. *Journal Enterprise Development Microfinance* 25(3), 212-225.
- Hosmer, D., Lemeshow, S. (2000). Applied Logistic Regression (Second Edition). New York: John Wiley & Sons, Inc.
- Hoxha, D. (2009). Barriers to doing business in Kosova: an institutional approach. *International Journal on Entrepreneurship and Small Business*, 8 (2), 186-199.
- Hoxha, D., and Capelleras, J.L. (2010). Fast-growing firms in a transitional and extreme environment: are they different? *Journal of Small Business and Enterprise Development*, 17 (3), 350-370.
- Hyz, A. (2011). Small and Medium Enterprises in Greece - Barriers in Access to Banking Services.An Empirical Investigation.*International Journal of Business and Social Science*, 2 (2), 161-165.
- IFC (2010).Scaling-Up SME Access to Financial Services in the Developing World.Financial Inclusion Experts Group.G20 Seoul Summit 2010.
- IFC (2013).Closing the Credit Gap for Formal and Informal, Micro, Small and Medium Enterprises.IFC, Washington DC.

- IFC (2010).The SME Banking Knowledge Guide.Second Edition / World Bank Group.
- ILO (1972). Employment, incomes and equality: a strategy for increasing productive employment in Kenya: report of an inter-agency team financed by the United Nations Development Programme and organized by the International Labour Office, Geneva.
- ILO (2006).Business Environment, Labor Law and Micro and Small Enterprises. The International Labor Office, Geneva 297th session.
- ILO (2012).Measuring informality: a Statistical Manual on the informal sector and informal employment. International Labour Office,Geneva.
- ILO (2014).Transition from the informal to the formal economy. International Labour Office, Report V(1) Geneva.
- ILO (2015).Small and medium-sized enterprises and decent and productive employment creation.International Labour Office.ILC 104/IV, Geneva.
- IMF (2015). Article IV/ The Republic of Kosovo. IMF Country Report No. 15/131. Retrieved from: <https://www.imf.org/external/pubs/ft/scr/2015/cr15131.pdf>
- Ingram, M., Vijaya, R., and Desay, V. (2006). Why Do Firms choose to be Informal? Evidence from the Africa Investment Climate Surveys, Regional Program on Enterprise Development, *Working Paper 134*, World Bank, Washington, DC.
- Ishengoma, E.K., and Kappel, R. (2008). Business Constraints and Growth Potential of Micro and Small Manufacturing Enterprises in Uganda, *GIGA Working Paper No. 78*, GIGA, Hamburg.
- Johnson, S., Kaufmann, D., and Shleifer, A. (1997).The unofficial economy in transition, *Brookings Papers on Economic Activity*, Fall, Washington D.C. 159–240.
- Johnson, S., Kaufmann, D., and Zoido-Lobato, P. (1998a).Regulatory discretion and the unofficial economy.*The American Economic Review*, 88(2), 387-392.
- Johnson, S, Kaufmann, D., and Pablo Zoido-Lobato, P. (1998b). Corruption, public finances and the unofficial economy. Washington, D.C.: The World Bank, *DiscussionPaper*.
- Jovanovic, B. (1982). Selection and The Evolution of Industry, *Econometrica*, 50, 649-670.
- Kass, R. (2011). Statistical inference: The big picture. *Statistical Science, Institute of Mathematical Statistics*. 26 (1), 1–9.

- Kanu, A.M., (2015). The Effect of Corruption on Small and Medium Enterprises: Perspective from a Developing Country. *International Journal of Small Business and Entrepreneurship Research*, 3 (3), 12-27.
- Klapper, L., Laeven, L., and Rajan, R. (2006).Entry Regulation as a Barrier to Entrepreneurship.*Journal of Financial Economics*, 82(3), 591–629.
- Klapper, L.F., Sarria-Allende, V., and Zaidi, R. (2006).Firm-level analysis of small and medium size enterprise financing in Poland.World Bank Policy Research Working Paper 3984, Washington DC.
- Kuddo, A. (2009). Labor Laws in Eastern European and Central Asian Countries: Minimum Norms and Practices. *SP Discussion Paper No. 0920*.World Bank, Washington, DC.
- Kuntchev, V., Ramalho, R., Rodríguez-Meza, J., and Yang, J. S. (2012). What have we learned from the Enterprise Surveys regarding Access to Finance by SMEs? World Bank, Washington, DC.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R. (2000). Investor protection and corporate governance.*Journal of Financial Economics* 58, 3–27
- La Porta, R and Shleifer, A. (2008). The Unofficial Economy and Economic Development, Brookings Papers on Economic Activity, Economic Studies Program, *The Brookings Institution*, 39(2), 275-363.
- La Porta, R and Shleifer, A. (2014). Informality and Development.*Journal of Economic Perspectives*, 28 (3), 109-126.
- Lee S.H., Yamakawa Y., Peng M.W., and Barney Y.B. (2011). How do bankruptcy laws affect entrepreneurship around the world? *Journal of Business Venturing*, 26(5), 505- 520.
- Leitner, S., Stehrer, R. (2015). What Determines SMEs’ Funding Obstacles to Bank Loans and Trade Credits? A Comparative Analysis of EU-15 and NMS-13 Countries.The Vienna Institute for International Economic Studies.*Working Paper 114*.
- Levenson, A.R., Maloney, W.F. and Ventura, G. (1998).The Informal Sector, Institutional Participation, and Micro-firm Dynamics, *Working Paper*.
- Levine, R. (2002). Bank-Based or Market-Based Financial Systems: Which is Better? *Journal of Financial Intermediation* 11(1), 1-30.

- Levine R., (2004). Finance and growth: Theory and evidence, NBER Working paper 10766. JEL, in Handbook of Economic Growth, ed. by Philippe Aghion and Steven Durlauf Amsterdam, Elsevier Science.
- Levine, R., (2008). Finance and the Poor. Manchester: Manchester School. 76(1), 1–13.
- Levy, S. (2008). Good Intentions, Bad Outcomes: Social Policy, Informality, and Economic Growth in Mexico. *Brookings Institution Press*. Retrieved from: <http://www.jstor.org/stable/10.7864/j.ctt6wpfgg>
- Lewis, W.A. (1954). Economic Development with Unlimited Supplies of Labour, *Manchester School of Economic and Social Studies*, 28(2), 139-191.
- Ligthelm, A.A. (2008). A targeted approach to informal business development: the entrepreneurial route, *Development Southern Africa*, 25(4), 367-382.
- Lim, Y., and Hahn, C. (2003). Bankruptcy policy reform and total factor productivity dynamics in Korea: Evidence from micro data. *East Asia Seminar on Economics*, 13. University of Chicago Press.
- Loayza, Norman V. (1996). The economics of the informal sector: a simple model and some empirical evidence from Latin America, *Carnegie-Rochester Conference Series on Public Policy* 45, 129-162
- Loayza, N., Oviedo, A.M., and Servén, L. (2005), The Impact of Regulation on Growth and Informality: Cross-Country Evidence, *Policy Research Working Paper WPS 3623*, World Bank Group.
- Longenecker, J.G., Petty J.W., Leslie, P., Francis, H. (2012). Small business management: launching and growing entrepreneurial ventures. 16th edition South Western United States.
- Love, I. (2003). Financial development and financing constraint: International evidence from the structural investment model. *Review of Financial Studies* 16(3), 765–791.
- Maloney, W. F. (2004). Informality revisited. *World Development* 32 (7), 1159– 1178.
- Marshall, N. M. (1996). Sampling for qualitative research. *Family Practice, Oxford University Press*, 13(6), 522-525.
- Maurer, M. C. R. (2008). Foreign bank entry, institutional development and credit access: Firm-level evidence from 22 transition countries. Swiss National Bank, *Working Papers Series*, No. 2008–4.

- McMillan, J., Woodruff, C. (2002). The Central Role of Entrepreneurs in Transition Economies. *Journal of economic perspectives*, 16(3), 153-170.
- Meyer, J. W. (2008). Reflections on Institutional Theories of Organizations. Pp. 790- 812 in *The Sage Handbook of Organizational Institutionalism*, R. Greenwood et al. (eds.). London: Sage.
- Miettinen, A. (2004). Estonian SMEs in a changing environment: From institutional constraints to emphasis on market factors. *Journal of Enterprising Culture*, 12(3), 195-210.
- Milgram, B. L. (2011). Reconfiguring Space, Mobilizing Livelihood: Street Vending, Legality, and Work in the Philippines, *Journal of Developing Societies*, 27 (3), 261-293.
- Miller, D., and Friesen, P.H. (1984). A Longitudinal Study of the Corporate Life Cycle. *Management Science*. 30(1), 1161-1183.
- Ministry of Trade and Industry (2013). Private Sector Development Strategy 2013-2017. Ministry of Trade and Industry, Republic of Kosovo.
- Ministry of Trade and Industry (2016). MTI/Republic of Kosovo. Retrieved from: www.rks.gov.net/en-us/bizneset/infrastruktura/pages/legjislacioni.aspx.
- Modigliani, F., and Miller, M. (1958). The Cost of Capital, Corporation Finance, and the Theory of Investment, *American Economic Review*, 48, 261–297.
- Moreno-Monroy, A., Pieters, J., and Erumban, A. A. (2014). Formal sector subcontracting and informal sector employment in Indian manufacturing. *IZA Journal of Labor and Development*, 3(22), 1–17.
- Moser, C.N. (1978). Informal sector or petty commodity production: Dualism or independence in urban development. *World Development* 6: 1041-1064.
- Myers, S. C., Majluf, N., (1984). Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have. *Journal of Financial Economics*. 13(2), 187-221.
- Nikoloski, D., (2009). The sustainable rate of unemployment in transition countries – A case study for Macedonia, VDM Verlag, May 2009.
- Nikoloski, D., Pechijareski, Lj., Pechijareski, G. (2012). The role of the alternative labour market adjustment mechanisms in Macedonia during the economic crisis. *The wiiw Balkan Observatory Working Papers No.101*.

- Nikoloski, D., (2016). Determinants of Labour Market Segmentation in Transition Countries with Particular Reference to Macedonia. *Der Donauraum*, 53(3-4), 429–444.
- Nkonoki, E. (2010). What are the Factors Limiting the Success and/or Growth of Small Businesses in Tanzania? An Empirical Study on Small Business Growth, Arcada University of Applied Sciences, International Business, Helsinki.
- North, D. (1990). Institutional change and economic performance, Cambridge: Cambridge University Press.
- Nyström K. (2008). The institutions of economic freedom and entrepreneurship: Evidence from panel data. *Public Choice* 136(3-4), 269–282.
- Oberholzner, Th. (2014). Report on SMEs in Kosovo 2014. Austrian Institute for SME Research. Kosovo SME Promotion Programme.
- OECD (2002). Measuring the Non-Observed Economy. A handbook, Statistics brief No.5. Paris, France.
- OECD (2003). OECD science, technology, and industry scoreboard. Paris: Organization for Economic Co-operation and Development.
- OECD (2004). Promoting entrepreneurship and innovative SMEs in a global economy: towards a more responsible inclusive globalization. Istanbul, *OECD Conference of Ministers responsible for SMEs*.
- OECD, (2006). The SME Financing Gap, Volume 1 Theory and Evidence. OECD Development Centre.
- OECD, (2009). SME Policy Index: Progress in the Implementation of the European Charter for Small Enterprises in the Western Balkans. Retrieved from: <https://www.oecd.org/globalrelations/43469966.pdf>
- OECD (2014). New Approaches to SME and Entrepreneurship Financing: Broadening the Range of Instruments. Retrieved from: <http://www.oecd.org/cfe/smes/New-Approaches-SME-full-report.pdf>
- OECD (2016). SME Policy Index: Western Balkans and Turkey 2016. Assessing the Implementation of the Small Business Act for Europe.
- Olawale, F., Garwe, D. (2010). Obstacles to the growth of new SMEs in South Africa: A principal component analysis approach. *African Journal of Business Management*. 4 (5), 729-738.

- Oshima, H.T., (1971). Labour Force Explosion and the Labour-intensive Sector in Asian Growth.*Economic Development and Cultural Change*, 19 (1), 161-183.
- Ovaska, T., Sobel, S. (2004).Entrepreneurship in Post-Socialist Economies.*Working Paper from Department of Economics*. West Virginia University.
- Pagés, Carmen., (2010). The Age of Productivity: transforming economies from the bottom up, Inter-American Development Bank, Palgrave Macmillan, New-York.
- Park, H., (2013). An introduction to logistic regression: from basic concepts to interpretation with particular attention to nursing domain. *Journal of Korean Academy of Nursing*, 43 (2), 154–164.
- Peci, F., Kutllovci, E., Tmava, Q., and Shala, V. (2012).Small and Medium Enterprises Facing Institutional Barriers in Kosovo.*International Journal of Marketing Studies*, 4(1), 95-107.
- Peng, M., Yamakawa, Y., Lee, S. (2010). Bankruptcy laws and entrepreneur-friendliness.*Entrepreneurship Theory and Practice*, 34 (3), 517–530.
- Penrose, E., (1952). Biological Analogies in the Theory of the Firm.*The American Economic Review*, 42(5), 804–19.
- Pisani, M.J. (2015). Does informality impacts formal sector firms? A case study from Nicaragua.*The Journal of Developing Areas*, 49 (2), 317-334.
- Pohlman, John T., Leitner, and Dennis W. (2003). A Comparison of Ordinary Least Squares and Logistic Regression¹, *Department of Educational Psychology, Southern Illinois University, Carbondale, IL 6290*.
- Portes, A., Castells, M., and Benton, L. A. (1989).The Informal Economy: Studies in Advanced and Less Developed Countries, Baltimore, *Johns Hopkins University Press*.
- Potts, D. (2007). The state and the informal in sub-Saharan African urban economies: revisiting debates on dualism. *Crisis States Working Paper 18*, London School of Economics.
- Quaye, I., Abrokwah, E., Sarbah, A., and Osei, Y. (2014).Bridging the SME Financing Gap in Ghana: The Role of Microfinance Institutions.*Open Journal of Business and Management*, 2, 339-353.
- Rajan, R. G., and Zingales.L. (1998).Financial Dependence and Growth.*The American Economic Review*, 88 (3) 559-586.

- Rajan, R. G., Zingales, L., (2003). The Great Reversals: The Politics of Financial Development in the Twentieth Century. *Journal of Financial Economics*, 69(1), 5–50.
- Rand, J., and Torm, N. (2012a). The informal sector wage gap among Vietnamese micro-firms, *Journal of the Asia Pacific Economy*, 17(4), 560-577.
- Rand, J., Torm, N. (2012b). The Benefits of Formalization: Evidence from Vietnamese SMEs, *World Development*, 40(5): 983-998.
- Riinvest Institute (2013). To pay or not to pay: A business perspective of informality in Kosovo. *Research Report*, 15-16.
- Riinvest Institute (2014). Business Climate in Kosovo: A Cross Regional Perspective. *Research Report*.
- Riinvest (2016). Assessment of Corruption in Kosovo. *Research Report*. Riinvest Institute Prishtina.
- Risteska, A., Nikoloski, D., Gveroski, M., Spaseska, T., and Risteska, F. (2014). Analysis of SMEs Financing in the Republic of Macedonia-Conditions and Perspectives. *Annals of the "Constantin Brancusi" University of Targu Jiu, Economy Series, Issue 3/2014*.
- Rostow, W. W. (1960). A stage of economic growth: A Non-Communist Manifesto, Cambridge University Press.
- Rowlatt, A. (2012). SME Access to External Finance. Department for Business Innovation and Skills. *BIS Economics Paper No. 16*.
- Rudaheerwa, N. (2006): Trade Policy and Transport Cost in Ugandan, Nottingham: *Credit Research Paper No. 09*.
- Savlovski, L., Robu, N. (2011). The Role of SMEs in Modern Economy. Bucharest Academy of Economic Studies. *Economia, Seria Management*, 14(1), 277-281.
- Schneider, F., and Enste, D. (2002). The Shadow Economy: Theoretical Approaches, Empirical Studies, and Political Implications, Cambridge (UK): *Cambridge University Press*.
- Schneider, F. (2008). The shadow economy in Germany: a blessing or a curse for the official economy? *Economic Analysis and Policy*, 38(1), 89-111.
- Schneider, F., Buehn, A. and Montenegro, C.E. (2010). Shadow Economies All over the World: New Estimates for 162 Countries from 1999 to 2007. *Policy Research Working Paper 5356* (Washington, DC: World Bank).
- Schumpeter, J.A. (1942). *Capitalism, Socialism, and Democracy*, New York: US: Harper.

- Sethuraman, S.V. (1976). The urban informal sector: Concept, measurement and policy. *International Labour Review*, 114 (1): 69-81.
- Shihata, I.F.I., (1996). The role of law in business development. *Fordham International Law Journal*, 20 (5), 1577-1589.
- Silivestru, DR. (2012). Bank loans and small firm financing in Romania. *Annales Universitatis Apulensis Series Oeconomica* 14(1), 178-187.
- Silva F., and Carreira C. (2010). Financial constraints: Are there differences between manufacturing and services, *GEMF Working Papers*, no. 16.
- Silva, A.P., and Santos, C.M. (2012). Financial and Strategic Factors Associated with the Profitability and Growth of SME in Portugal. *International Journal of Economics and Finance*, 4(3), 46-52.
- Smallbone, D., Welter, F., and Isakova, N. (2001). Economic Policy in Transitional Economies, 11(4), 3-3.
- Smallbone, D., Welter, F., (2001). The distinctiveness of entrepreneurship in transition economies. *Small business economics*, 16(4), 249-261.
- Smallbone, D. and Welter, F. (2009). Entrepreneurship and Small Business Development in Post-socialist Economies. *Routledge*, London and New York.
- Sookram, S., and Watson. P. K. (2007). Small Business Participation in the Informal Sector of an Emerging Economy. *Journal of Development Studies*, 1-25.
- Sparks, D. and Barnett, S.T. (2010). The informal sector in sub-saharan Africa: out of the shadows to foster sustainable employment and equity, *International Business & Economics Research Journal*, 9(5), 1- 11.
- Standing, G. (1999). *Global Labour Flexibility: Seeking Distributive Justice*. New York: *St. Martin's Press*.
- Stein, P., Ardic, O.P., and Hommes, M. (2013). Closing the credit gap for formal and informal micro, small, and medium enterprises. International Finance Corporation, World Bank Group, Washington DC.
- Steinmetz, L.L. (1969). Critical stages of small business growth. *Business Horizons*, 29-36.
- Stiglitz, J. E., and Weiss, A. (1981). Credit Rationing in Markets with Imperfect Information. *American Economic Review*, 71(3), 393-410.

- Svensson, J., and Reinikka, R. (2001). How Inadequate Provision of Public Infrastructure and Services Affects Private Investment, World Bank, Washington, D.C.
- Storey, D. J. (1994). The role of legal status in influencing bank financing and new firm growth. *Applied Economics* 26(2), 129-136.
- Swaminathan, M. (1991). Understanding the informal sector: a survey. *WIDER Working Paper no.95*. Centre for International Studies, M.I.T Cambridge, Massachusetts 1-39.
- Taymaz, Erol. (2009). Informality and Productivity: Productivity Differentials between Formal and Informal firms in Turkey. *ERC Working Paper*, 0901, Economic Research Centre, Middle East Technical University, Ankara.
- Transparency International (2015), Corruption Perception Index. Retrieved from: <http://www.transparency.org/cpi2015>
- Treisman, D. (2007). What Have We Learned About the Causes of Corruption from Ten Years of Cross-National Empirical Research? *Annual Review of Political Science*, 10, 211–244.
- Tokman, V. E. (1978). An exploration into the nature of the informal-formal sector relationship. *World Development*, 6 (9/10), 1065-1075.
- Tokman, V. (2007). Modernizing the informal sector. *UN/ DESA Working Paper no. 42*. United Nations, Department of Economic and Social Affairs.
- UNDP (2014). Migration as a Force for Development. *Kosovo Human Development Report 2014*. United Nations Development Program.
- USAID (2005). Removing Barriers to Formalization: The Case for Reform and Emerging Best Practice. United States Agency for International Development. Prepared by Development Alternatives, Inc. and Bannock Consulting Ltd.
- USAID (2014). Kosovo: Country Development Cooperation Strategy 2014-2018. United States Agency for International Development.
- USAID (2016). Kosovo Credit Guarantee Fund. Retrieved from: <http://www.usaid-ecs.org/en/kosovo-credit-guarantee-fund>
- Uvalic, M. (2012). Transition in Southeast Europe: Understanding economic development and institutional change, Part of the series Studies in Development Economics and Policies, 364-399.

- Verick, Sh. (2008). The Impact of Globalization on the Informal Sector in Africa. Economic and Social Policy Division, United Nations Economic Commission for Africa (ECA) and Institute for the Study of Labor (IZA), Addis Ababa.
- Vos, E., Yeh, A.J., Carter, S., and Tagg, S., (2007). The happy story of small business financing. *Journal of Banking and Finance*, 31, 2648–2672.
- Wang, X. (2013). The Impact of Microfinance on the Development of Small and Medium Enterprises: The Case of Taizhou, China. *Asian Journal of Business and Management Sciences*, 2(9), 2-16.
- Wasmus (2012). SME Finance in Kosovo – A Tale of Price and Prejudice. The Kosovo Banker. <http://bankassoc-kos.com/wp-content/uploads/2013/01/ENG-The-Kosovo-Banker.pdf>
- Watson, J. (2006). External funding and firm growth: Comparing female and male controlled SMEs. *Venture Capital*, 8(1), 33-49.
- Weston J.F., Brigham, E.F. (1970). Managerial Finance. Page 157.
- Weinzzimer, L., Nystrom, P., and Freeman, J. (1998). Measuring Organizational Growth: Issues, Consequences and Guidelines. *Journal of Management*. 24 (2), 235-262.
- Whalley, John. (2004). Assessing the Benefits to Developing Countries of Liberalization in Services Trade, *Working Paper No. 10181*, Cambridge MA.
- White, H., and Lu, X. (2010). Robustness checks and robustness tests in applied economics. Technical report, *Department of Economics Discussion Paper*, University of California, San Diego, CA.
- Williams, C.C. (2005). Small Business in the Informal Economy: Making the Transition to the Formal Economy-The Evidence Base, *Small Business Council, London*, the United Kingdom.
- Williams, C.C. (2013). Beyond the formal economy: evaluating the level of employment in informal sector enterprises in global perspective, *Journal of Developmental Entrepreneurship*, 18 (4), 1-18.
- Wooldridge, M.J. (2006). Introductory Econometrics: A Modern Approach. Mason, OH: Thompson South-Western.
- World Bank (2013). Enterprise surveys what businesses experience. Retrieved from: <http://www.enterprisesurveys.org/data/exploreconomies/2013/kosovo>.

- World Bank (2013). Closing the Credit Gap for Formal and Informal Micro, Small, and Medium Enterprises. IFC advisory services, World Bank, Washington DC.
- World Bank (2014). Obtaining Finance in Latin America and Caribbean. *Research Report*.
- World Bank (2014). Business Environment and Enterprise Performance Survey (BEEPS V), Country Profile.
- World Bank (2015). Small and Medium Enterprises (SMEs) Finance. Retrieved from: <http://www.worldbank.org/en/topic/financialsector/brief/smes-finance>
- World Bank (2015). The World Bank Group in Kosovo/ Country Snapshot.
- World Bank (2016). Country Program Snapshot in Kosovo. The World Bank and International Bank for Reconstruction and Development.
- Worthington, I., and Britton, C. (2006). The Business Environment, fifth edition, *Pearson Education Limited*.
- Wright, R. (2012). The sustainability of banking system in Kosovo. First Edition of the Banking Association of Kosovo.
- Zhou, H., and de Wit, G. (2009). Determinants and Dimensions of Firm Growth. Zoetermeer, EIM Business and Policy Research. *Research Report 200903*.