KOSOVA ACADEMY OF SCIENCES AND ARTS
ACADEMIA SCIENTIARUM ET ARTIUM KOSOVIENSIS
SECTION OF SOCIAL SCIENCES

COMPETITIVENESS IN THE WESTERN BALKANS: CHALLENGES AND OPPORTUNITIES FOR KOSOVO

Editors

Justina Shiroka-Pula
Isa Mustafa
Besnik A. Krasniqi

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2023

AKADEMIA E SHKENCAVE DHE E ARTEVE E KOSOVËS
ACADEMIA SCIENTIARUM ET ARTIUM KOSOVIENSIS
SEKSIONI I SHKENCAVE SHOQËRORE

KONKURRENCA NË BALLKANIN PERËNDIMOR: SFIDAT DHE MUNDËSITË PËR KOSOVËN

Redaktorë

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List of contributors

Justina Shiroka-Pula	Kosova Academy of Sciences and Arts, Kosovo
Isa Mustafa	Kosova Academy of Sciences and Arts, Kosovo
Besnik A. Krasniqi	Kosova Academy of Sciences and Arts and University of Prishtina, Kosovo
Will Bartlett	London School of Economics, United Kingdom
Nebojsa Stojcic	University of Dubrovnik, Croatia
Adnan Efendic	University of Sarajevo, Bosnia and Herzegovina
Nick Williams	University Leeds, United Kingdom
Veland Ramadani	Southeast European University, North Macedonia
Hyrije Abazi	Southeast European University, North Macedonia
Adhurim Haxhimusa	University of Applied Sciences of the Grisons
	FHGR (Fachhochschule Graubünden), Swisserland
Azem Rexhaj	University of Business and Technology, Kosovo
Liridon Kryeziu	University of Business and Technology and Riinvest Institute for Development Research, Kosovo

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This book is a testament to the collaborative spirit and shared enthusiasm of editors, contributors and all those involved.

Editors

Prishtina, 2023

Abbreviations

ACER	Agency for Cooperation of Energy Regulators
ALPEX	Albanian Power Exchange
BEEPS	Business Environment Enterprise Performance Surveys
BiH	Bosnia and Herzegovina
BPO	Business Process Outsourcing
CBAM	Carbon Border Adjustment Mechanism
CCC	Croatian Chamber of Commerce
CEFTA	Central European Free Trade Agreement
CRM	Common Regional Market
DESI	Digital Economy and Society Index
EBRD	European Bank for Reconstruction and Development
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EPP	Export Promotion Programs
ERA	European Reform Agenda
ERO	Energy Regulatory Office
ERP	Economic Reform Program
FDI	Foreign direct investment
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
GNI	Gross National Income
HCI	Human Capital Index
ICT	Information and Communication Technology
IMF	International Monetary Fund
ITU	International Telecommunication Union
KAS	Kosovo Agency of Statistics
KBRA	Kosovo Business Registration Agency
KEDS	Kosovo Electricity Distribution Services
KEK	Kosovo Energy Corporation

KIESA	Kosovo Investment and Enterprise Support Agency
MAP-REA	The Multi-annual Action Plan for a Regional Economic Area
MSMEs	Micro Small and Medium Size Enterprises
OECD	Organization for Economic Cooperation and Development
PISA	Program for International Student Assessment
PPP	Public Private Partnership
R&D	Research and Development
RCC	Regional Cooperation Council
REA	Regional Economic Area
RIRA	Regional Investment Reform Agenda
S3	Smart Specialisation Strategies
SAA	Stabilization and Association Agreement
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SEECP	South-East European Cooperation Process
SEEIC	South East Europe Investment Committee
SEZ	Special Economic Zones
UN	United Nations
UNMIK	United Nations Interim Administration Mission in Kosovo
WB	World Bank

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CHAPTER 1

INTRODUCTION

Justina Shiroka-Pula, Besnik A. Krasniqi, Isa Mustafa

Abstract

This chapter overviews critical issues on Kosovo's competitiveness and Western Balkans. This chapter lists the main aims and issues tackled in this book. The chapter ends with a brief description of all the chapters included in this book and concluding remarks.

Keywords: competitiveness, Kosovo, Western Balkans

1.1. Introduction

With great pleasure, we introduce this edited volume, collaborative research that brings together the intellectual contributions of a remarkable group of scholars focused on the Western Balkans and Kosovo.

This edited book results from a large-scale project, ' Kosovo’s Competitiveness in Global Economy’, funded by the Kosova Academy of Sciences and Arts in Prishtina. The edited volume provides a descriptive and empirical analysis of factors influencing competitiveness in the Western Balkans and draws lessons and recommendations for Kosovo. The edited volume brings together Western Balkans and Kosovo experts, including the United Kingdom, Switzerland, Bosnia & Herzegovina, Croatia, North Macedonia, Albania, and Kosovo. This book aims to advance scholarly knowledge about factors influencing the competitiveness in the Western Balkans, both micro and macro factors, providing an outlet for the contributing authors’ expertise and drawing lessons for Kosovo’s export and competitiveness promotion policy. The book seeks to provide Kosovo’s policymakers with a broader view of the competitiveness policies in the Western Balkans, enabling them to design future policies based on evidence-based recommendations.

This book will also contribute to the ongoing debate on developing Kosovo's competitive strengths and enabling regional and international comparisons. In addition, the proposal of measures for policies encouraging innovation, entrepreneurship, export capacity and specific sectors to build competitive advantage.

1.2. Overview of book chapters

The book Competitiveness in the Western Balkans: Challenges and Opportunities for Kosovo comprises ten chapters. Each chapter, crafted with precision and passion, adds a unique layer to the overarching narrative of this volume. The diversity of perspectives and countries enriches the content and fosters a holistic exploration of the subject matter, providing a guiding framework for Kosovo's policy context.

The opening chapter, 'Kosovo's context' (Chapter 1), briefly describes Kosovo's economic context and sets the scene for familiarizing the reader with Kosovo's critical economic challenges and opportunities. In this chapter, Justina Shiroka-Pula, Isa Mustafa, and Besnik Krasniqi provide a detailed analysis of the economic performance of Kosovo by informing readers on economic growth, employment, trade, and exports.

Chapter 2, titled 'Challenges of Competitiveness in the Western Balkans: A Regional Cooperation Perspective' by Professor Will Bartlett, sets out the role of regional cooperation in promoting economic competitiveness. He argues that regional cooperation is vital to improving competitiveness and, hence, the productivity of the region's economies, focusing on the crucial role of education systems in promoting competitiveness, showing that foreign direct investment and the education level of the workforce are essential drivers of the competitiveness of the region's economies.

Chapter 3, 'The Competitiveness of Exports from Manufacturing Industries in Croatia', is written by Nebojša Stojčić. This chapter contributes to ongoing debates on the competitiveness of the manufacturing sector and export potential in the Croatian context. It explores the competitiveness of Croatian manufacturing exporters in years after the country joined the European Union. He argues that Croatia experienced a delayed integration in global and European economic flows, severe war consequences, and domestic institutional weaknesses have resulted in severe deindustrialisation and loss of much of this initial competitiveness. Drawing from the export literature the chapter explores whether and due to which factors the competitiveness of Croatian manufacturing industries change once the country finds itself in the European Union family of nations. The chapter concludes with lessons for the competitiveness of Kosovar manufacturing industries, which similarly experienced deindustrialisation and War.

In Chapter 4, 'Competitive Advantages of Bosnia and Herzegovina – the Role of Institutions' by Adnan Efendic, readers are guided through institutions, their role and the implications for the country's competitiveness. He argues that institutions are one of the key pillars of competitive advantages of countries, and Western Balkans, particularly Bosnia and Herzegovina and Kosovo, have the lowest performance. The Chapter points out that general improvements in institutional efficiency are identified as a short-run priority for all Western Balkan countries. Institutional underperformance remains a persistent challenge for the Western Balkans in improving its competitive position at the regional and global scale.

Nick Williams, in Chapter 5—'The Role of the Diaspora in Economic Development', discusses the crucial role of diaspora in the economic development of transition countries, with particular emphasis on Kosovo. The authors suggest that despite the importance of the diaspora in policy discourse, they remain an under-utilised resource in economic development. The chapter focuses on Kosovo, a post-conflict economy seeking to harness the skills and experience of the diaspora to benefit economic development at home. Professor William discusses a strong emotional connection to the homeland born out of the past's conflict, a topic neglected in the literature. He suggests that policy measures tackle numerous barriers the diaspora faces in the homeland on returning, with unstable institutional environments discouraging economic activity, urging the need for institutional improvements to encourage investment. The chapter contains several implycations for policy related to economic development and competitiveness.

Chapter 6, 'Correlation between innovation activities and export performance: Evidence from North Macedonia' authored by Veland Ramadani and Hyrije Abazi-Alili' explores the link between innovation activities and firm export performance. This chapter employs firm-level data from the World Bank and the European Bank for Reconstruction and Development. It applies the instrumental variable (IV) technique to control for the endogeneity between innovation activities undertaken by entrepreneurial businesses and their extent of direct export. Their findings suggest that enterprises that have undertaken innovation activities, foreign ownership, size, technology, and an internationally recognized quality certificate tend to have a higher percentage of sales share from direct export.

Adhurim Haxhimusa, in Chapter 7, 'Energy sector and economic growth', discuss opportunities and challenges of energy sector and economic growth in Kosovo. The author provides insights into a reliable energy supply, a fundamental prerequisite for economic growth. He suggests that Kosovo must implement comprehensive energy, climate, and industrial policies that provide the right incentives for replacing coal-powered facilities with renewable energy alternatives while advancing industry energy efficiency. It contributes to the debate on reduction in energy intensity, offering policy options on how it can be achieved through the substitution of outdated industrial technologies with modern and energy-efficient solutions or by transitioning towards industries that generally have lower energy intensity.

Azem Rexhaj, Justina Pula, and Besnik Krasniqi are authors of Chap. 9— 'Export Potential of the Mining Sector in Kosovo'. In this chapter, they report data on mineral resources and related export potential. The authors suggest that in countries like Kosovo, the rational mining and adequate management of these resources can boost sustainable economic development and significantly improve social and environmental conditions. They conclude that Kosovo can potentially increase the export of mineral resources. However, concrete decisions are required to implement existing legislation and make necessary legislative changes and improvements to enable the mining sector to function more efficiently, which would positively impact the attraction of foreign investments and increase exports.

In the last Chap. 10, 'Export potential in Kosovo: a policy perspective', Besnik A. Krasniqi and Liridon Kryeziu analyse Kosovo's export potential and related policy perspective to promote export. They argue that weak institutional settings and slow progress in reforms have created uncertainty in doing business and discouraged firms from engaging in exporting activities. Focusing on the ICT sector with high export potential, they show that despite challenges, firms in the ICT sector have become competitive in international markets over the years. They conclude with policy proposals and implications for relevant stakeholders and institutions.

1.3. Conclusion

In conclusion, the editors and the contributors of this book hope that this edited volume brings an attractive and significant contribution to the field of competitiveness in Western Balkans in general and Kosovo in particular. While the topic of competitiveness has been attentive and challenging for all countries worldwide, it remains crucial for transition economies, especially for countries struggling to build competitiveness and boost exports. We believe this publication will be eagerly received by academics, researchers, and policymakers locally and regionally. It caters for those keen on gaining insights into promoting competitiveness across diverse perspectives, contexts, and countries.

CHAPTER 2

CONTEXT OF KOSOVO: CHALLENGES AND OPPORTUNITIES FOR ECONOMIC DEVELOPMENT

Justina Shiroka-Pula, Isa Mustafa, Besnik A. Krasniqi

Abstract

The chapter sets the scene for discussing challenges and opportunities for Kosovo's economic development and competitiveness. It describes Kosovo's economic context by providing a detailed analysis of Kosovo's economic performance by informing readers on economic growth, education employment, trade, and exports.

Keywords: Kosovo, economic development, trade and exports, private sector, education, labour market.

2.1. Introduction

Kosovo is a market-oriented economy aiming to increase capacities, investment and competitiveness and create economic and political stability as a key development factor. Kosovo has several comparative advantages, such as a young population, natural resources, good digital connections, low labour costs, favourable climatic conditions, and new road infrastructure. The geographical position allows easy access to the regional Central European Free Trade Agreement (CEFTA) and European Union (EU) markets. Fiscal policies with favourable taxes, such as the liquid financial sector and strong ties with the diaspora, help the development of Kosovo by providing employment, reducing poverty, and raising the standard of living for citizens (See Figure 2-1). These advantages require the application of a sustainable economic growth model that rationally uses its resources, especially human capital, the growth and application of knowledge and new technologies, digitization and environmental protection; meanwhile, the businesses are pushed to develop and increase the total productivity of the factors in order to be competitive, innovative, increase export and the attraction of foreign direct investments.

Figure 2-1. Kosovo: Key facts and figures

Kosovo is in the central part of the Balkan Peninsula (Southeastern Europe). The borderline of Kosovo with neighbouring countries has a length of 743.5 km[2]. It is bordered by Albania in the south-west (116.3 km), North Macedonia (FYROM) in the south (167.6 km), Montenegro in the north-west (78.0 km), and Serbia in the north-east (381.6 km). * Kosovo covers An area of 10,905.25 km^2. According to data from 2020, the road infrastructure is 2,012 km long, where 96 percent are paved roads, of which 4 percent are international roads, 65 percent highways and 31 percent regional roads. Currently, there are 38 municipalities in Kosovo, with 1,469 settlements organized according to the country's laws. According to the results of the population census by KAS (Kosovo Agency of Statistics of 2011), Kosovo had 1.78 million inhabitants, of which 92.9 percent were Albanian, 3.4 percent were Serbian, and 5.6 percent were other (Bosnians, Turks, Montenegrins, Croats, Roma, Ashkali, Egyptians, Gorans). ** The population of Kosovo is young. The age group up to 24 years includes 47.4 percent of the population, the

25-64 age group constitutes 45.9 percent of the population, while over 65 years old are 6.7 percent. About 66 percent of the population are aged 15-65. According to the data of 2011, the average age is estimated to be 30.2 years. While the average life expectancy of both sexes is estimated at 76.7 years (for men 74.1 years, while for women 79.4 years). *** About 40 percent of the population in Kosovo lives in urban areas, and about 60 percent in rural areas. ***

Source: **The territory lies within latitudes 41° 51' and 43° 16', and within longitudes 19° 59' and 21° 47'.*

***Census of the population, households and housing in Kosovo, Quality Report, (2011), Kosovo Agency of Statistics (KAS): Prishtina, Republic of Kosovo.*

****Statistical Yearbook of the Republic of Kosovo 2023, KAS: Republic of Kosovo*

From June 1999 until the declaration of independence in February 2008, Kosovo was an entity under international temporary administration, where political power was held by the United Nations Interim Administration Mission in Kosovo (UNMIK), while the military one, the forces of the North Atlantic Alliance (KFOR). During this time, all of Kosovo's political, military, and economic powers belonged exclusively to international representatives, while since 2005, most of these powers began to be transferred to local institutions.

Immediately after the declaration of independence of the Republic of Kosovo, on 17 February 2008, the phase of consolidation of citizenship and internal state building began. The Constitution and the fundamental laws were adopted, establishing the general state institutional consolidation and strengthening the legal and political position at the international level.

Kosovo has become a member of many important international institutions, providing opportunities to create economic relations and promote its image in the financial markets. In addition to becoming a member of CEFTA in 2007, Kosovo became a member of the International Monetary Fund (IMF) and the World Bank (WB) in 2009, while in 2012, it became a member of the European Bank for Reconstruction and Development (EBRD). In 2015, after a long process of negotiations and fulfilling the criteria, the Stabilization and Association Agreement (SAA) was signed between Kosovo and the EU, the highest legal act establishing the Republic of Kosovo's contractual relations with the European Union.

Since declaring independence, Kosovo has improved its legal framework for investments. It has entered regional agreements to increase trade and investments, joined the European Reform Agenda (ERA), strengthened the rule of law, promoted foreign direct investment (FDI) and improved the business environment.

Box 2-1 Opportunities and orientation

Kosovo: Between 1990 and 1999, Kosovo faced a drastic decline in the social product (as the GDP was then defined) with disinvestment, a decline in exports, unemployment, and poverty because of the war. Initially, with international aid and then with the consolidation of self-governing institutions, from the beginning of 2000, the first steps of economic development with a clear European platform were established.

Business Environment: Kosovo has invested in legislation according to the best European practices and has used the assistance of the EU and the USA to increase efficiency in the implementation of laws, to facilitate the establishment of businesses and make the process of economic disputes efficient, especially in cases of foreign investments. During the years 2015 and 2016, serious measures were taken in the fiscal field (Fiscal Package 1 and Fiscal Package 2), which encouraged the growth of investments and their quality in the advancement of the offer of products and services in the local and foreign markets.

National Statistics: Kosovo is committed to providing national statistics data from all areas, from demographic developments, population, economic and social activities, and, in particular, national accounts.

Public Expenditures: Priority public investments in road infrastructure have been directed as essential assets for the economy and citizens in education, health, and social transfers.

Kosovo began the economic and political transition in the second half of 1999, after the end of the war, with a delay of about ten years from other transition countries, promoting the free-market economy and starting the process of privatization of former social enterprises and corporate governance in central and local level public companies. The private sector dominates the economy of Kosovo, where the participation of small and medium businesses is mainly over 98 percent (Box 2-1).

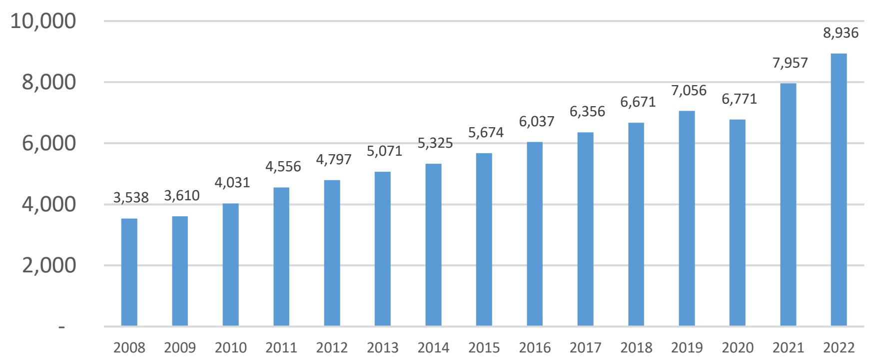
2.2. Economic Growth

The economic growth expressed by the growth of the real gross domestic product in Kosovo has been accompanied by a broad spectrum of strategies and policies, including financial, developmental, human resources, sustainable development, sectoral policies, and legal regulations. Gross Domestic Product (GDP) is the primary macroeconomic indicator used to measure economic growth, representing the total value of all goods and services produced during a given period. Annual GDP figures are often considered a benchmark for economic strength and growth. However, this growth does not always express the balance between economic, social, and environmental aspects.

2.2.1. Economic Development

In the period of the Administration of Kosovo by the United Nations (UN), from the second half of 1999 to 2008, when Kosovo declared independence, the economic growth in the emergency phase, immediately after the war until 2002, was high (10-20 percent), either from the fact of starting from a very low level of development, then from the emergency measures from the international community and the rapid revival of the services, trade and construction sector. A large part of the economic progress, especially in the post-independence period, has been based on the help of donors, external assistance, private consumption, and remittances (Shiroka-Pula, 2013). Foreign aid as a share of GDP, according to the IMF (2005), in 2001 was 72.3 percent; in 2002, it was 52.6 percent; in 2003, it dropped to 41 percent to continue with a significant decline.

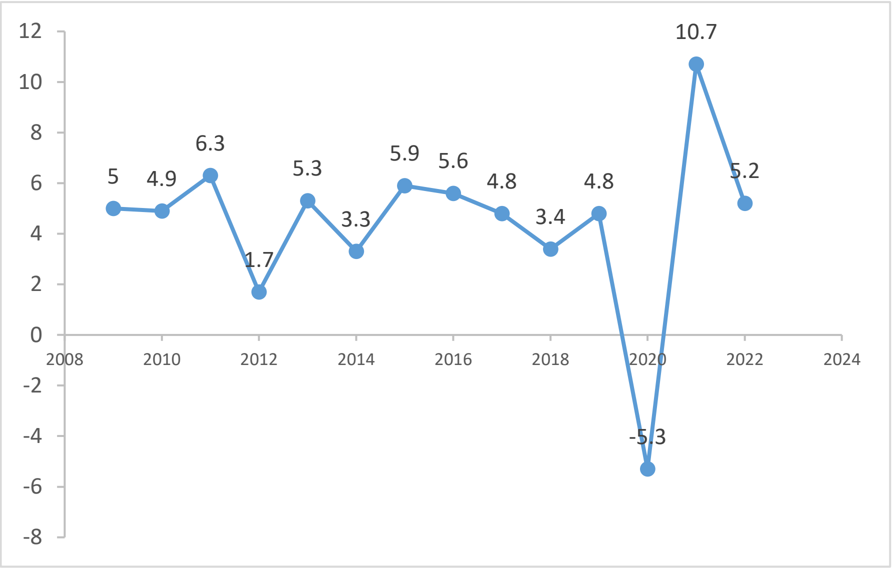
Figure 2-2. GDP based on current prices, 2008-2022 (in millions of Euros)



Source: KAS 2023

From 2003 to 2008, the trend of real economic growth, according to the IMF (2010), was 5.4 percent in 2003, 2.6 percent in 2004, 3.8 percent in 2005, and 3.4 percent in 2006. Due to low integration with the global economy, low intensity of financing from external sources, and simple fiscal policies, the global financial crisis of 2007-2008 did not directly impact Kosovo. In 2007, real economic growth of 6.3 percent was recorded, while in 2008, it was 8.3 percent. From 2009 to 2022, the consolidated national indicators speak of continuous growth of the Gross Domestic Product, from 3.91 billion Euros in 2009 to 8.95 billion Euros in 2022 (Figure 2-2**).** The absolute decrease of the gross domestic product in Kosovo in 2020 to 248.5 million euros compared to a year ago was a consequence of the COVID-19 pandemic.

Figure 2-3. Real GDP Growth (2008-222)

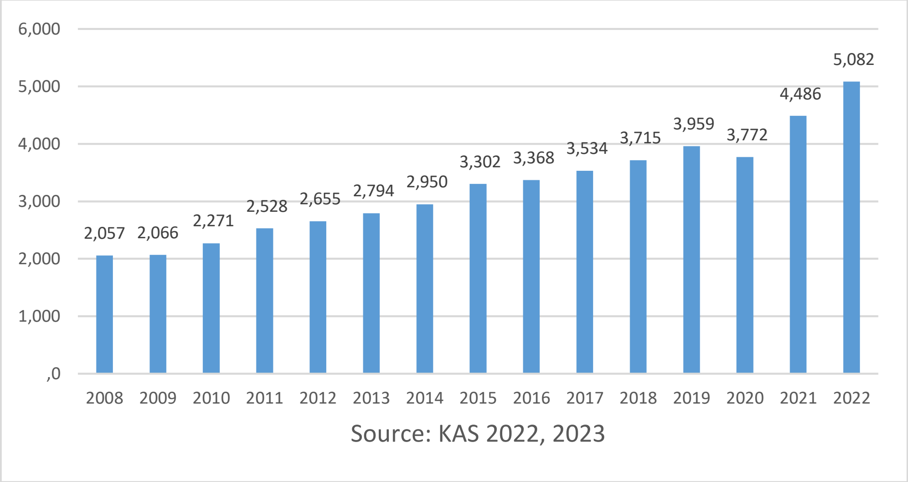


Source: KAS (2023)

Apart from 2020, during 2008-2022, economic development has been within the parameters that reflect a stable macroeconomic situation, both in the fiscal and financial sectors. During these years, Kosovo had an increase in economic activities, with a real growth rate that varies from year to year, of 5 percent (2009), 4.9 percent (2010), 6.3 percent 2011), which was mainly the result of increased demand, private consumption, and investments. A decrease was noted between 2011 and 2012 because of the decrease in remittances from the diaspora and negative growth of -5.3 percent in 2020 caused by Covid-19 to revive then in 2021 with an increase of 10.7 and in 2022 with an increase of 5.2 percent (see Figure 2-3).

In Kosovo, in 2022, economic growth of 5.2 percent was recorded, driven by private consumption - which continues to show stability despite inflation, investments, public consumption, and exports. Remittances from the diaspora continue to have a high impact on GDP, while in 2022, they had a participation of 14 percent, which was lower than the year before. Although from a low development base, the Kosovar economy has continuously grown during the global financial crisis, higher than the average of the Western Balkans countries. Kosovo's GDP per capita increased from 2,057 Euros in 2008 to 3,368 Euros (2016) and 5.082 Euros in 2022 (Figure 2-4).

Figure 2-4. GDP per capita (2008-2022)



Moreover, the World Bank study (World Bank, 2021) reflects the analysis of GDP per capita in Kosovo in 2009, which has increased by about 40 percent, a rate higher than that of some structural counterparts but lower than that of Armenia, Moldova, Latvia, and Lithuania. This study emphasizes that Kosovo must grow faster and become more dynamic to catch up with aspiring EU countries.

Table 2-1. GDP per capita, EUR, for the Balkan countries (2010 – 2022)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kosovo	**2.271**	**2.528**	**2.655**	**2.294**	**2.950**	**3.202**	**3.368**	**3.534**	**3.715**	**3.959**	**3.772**	**4.486**	**5.082**
Albania	3.165	3.235	3.235	3.471	3.637	3.818	4.027	4.266	4.553	4.876	4.631	5.290	5.848
North Macedonia	3.456	3.662	3.678	3.926	4.128	4.310	4.522	4.764	5.032	5.334	5.253	5.662	6.210
Montenegro	5.015	5.208	5.062	5.340	5.489	5.711	5.969	6.262	6.572	6.900	6.744	7.968	9.320
Serbia	4.023	4.672	4.300	4.762	4.673	4.556	4.716	4.968	5.260	5.584	6.779	7.757	8.765
Bosnia and Herzegovina	3.216	3.301	3.352	3.476	3.571	3.678	3.865	4.089	4.342	4.625	5.087	5.746	7.146

Source: Focus Economics | Economic Forecasts from the World's Leading Economists. *Economy - GDP, Inflation, CPI, and Interest Rate*. Available at: https://www.focus-economics.com/countries/

https://www.imf.org/external/datamapper/NGDPDPC@WEO/OEMDC/ADVEC/WEOWORLD/UVK, 2020, 2021 and 2022 – calculated by the authors with the average euro/dollar exchange rate for the respective years.

Box 2-2. GDP figures in Kosovo

GDP in Kosovo in 2020 was 7.77 billion euros, which per capita reached 3,772 euros, while in 2021 it has reached 7.96 billion euros, reaching a value of 4,495 euros per capita. In 2022 the total gross product was 8. 94 billion euros or 5037 euros per capita at current prices.   Source: KAS, (2023), Statistical Yearbook of the Republic of Kosovo 2023"

Although Kosovo from 2010 to 2022 increased its economic growth by 2.2 times, and the other Western Balkans countries had lower dynamics (except Serbia), it remains in the last place with GDP per capita compared to these countries. Compared to other European countries, Kosovo is considered one of the poorest countries, after Ukraine and Georgia, depending on the measurement approach, with GDP or GNI.

2.2.2. Kosovo Economy Structure

The structure of Kosovo's economy does not offer many opportunities in terms of added value and employment. According to the World Bank (2022), the services sector has the highest participation in GDP with 45 percent, followed by industry and construction at 28.2 percent and agriculture, forestry, and fishing at 7.4 percent. Meanwhile, the remaining 20 percent is comprised of all other activities. So, the participation in the activities of other sectors is lower in terms of added value and employment, which is also noticed and manifested in the agricultural sector. According to KAS (2022), the wholesale sector, with a participation of 13.8 percent (2008) remains constant at 14.3 percent (2022). Thus, service is the most important sector and the main driver of real value-added growth. This sector creates jobs, led by consumption (the main component of domestic demand) and driven by remittances, as an important source of private consumption financing. The industry has changed in its contribution to GDP, from 14 percent (2008) to 13.2 percent (2022).

Participation of agriculture in GDP from 11.3 percent (2008) has marked a downward trend from year to year, so in 2022, it is 3.9 percentage points lower, ending at 7.4 percent. Agriculture is mainly characterized by small agricultural farms (small firm size), high land fragmentation, low access to new technologies, and high costs, making it uncompetitive in the region and beyond. Employment in agriculture has been relatively stable, but over time, the productivity of its workers has decreased, and as a result, this sector is inefficient and results in slow growth.

Like other Western Balkan countries, the structure of Kosovo's economy is affected by the quality of education and the gaps between education and labour market demand. This gap directly influences the restrictions for attracting foreign direct investments to improve the economy's sectoral structure and strengthen exports. Kosovo, despite significant investments in road infrastructure, is faced with the instability of the energy infrastructure, which is challenged by the demands and the need to switch to renewable energy sources and the construction and reconstruction of railway lines with neighbouring countries, which would create access to regional markets and in the unique European market, creating conditions for investment, trade, and integration. Stronger GDP growth is closely related to increased production and exports, which are essential to improving the foreign trade balance.

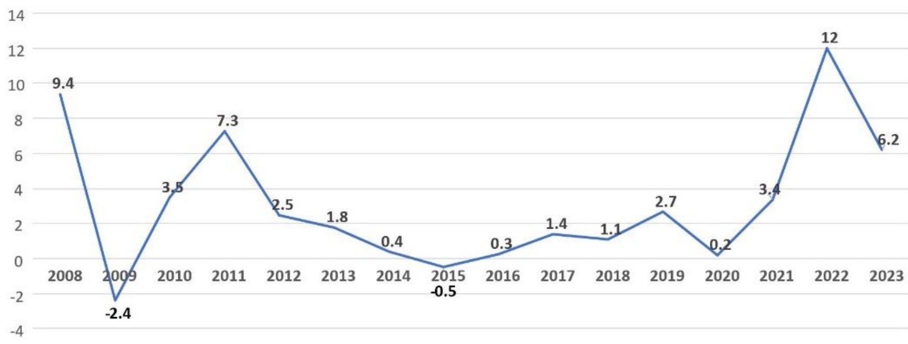
2.2.3. Inflation

The average inflation rate in the European Union in 2022 was 8.4 percent. This inflation highlighted the fragility of some Western Balkan economies with inelastic economic structures and smaller opportunities for market adjustment. The average inflation rate in the Western Balkans countries in 2022 reached an annual increase of 11.6 percent (CBK, 2023), as much as in Kosovo. The highest growth was recorded in North Macedonia and Bosnia and Herzegovina, with 14 percent, while Albania had the lowest inflation rate of 6.6 percent. Montenegro 11.9 percent, while Serbia 11.7 percent.

According to the Central Bank (2022) estimates, high inflation has influenced the increase in turnover in commercial enterprises, while the volume of industrial production recorded low growth. Debt of enterprises and households continued with the growth trend. Inflation significantly affected the deterioration of households' financial situation because of the high price increases of essential products and services. In Kosovo, living became more expensive, and there was an increase in the prices of all essential products (from bread, oil, sugar, and flour to fruits and vegetables).

Referring to IMF data (2023), inflation in 2007 was 4.4 percent, in 2008, it was 9.4 percent, while in 2009 and 2015, there was deflation of 2.4 percent, respectively 0.5 percent (Figure 2-5). The next period until 2019 is characterized by the stable purchasing power of money in Kosovo, under reasonable and acceptable parameters (IMF 2023). According to KAS, inflation in Kosovo in June and July 2022 was higher, 14.2 percent, while according to the analysis of the World Bank, the inflation of products for June was precisely 19.2 percent.

Figure 2-5. Inflation rates in Kosovo (2008-2023)



Source: IMF (2002-2027); CBK (2023); KAS (2018-2021)

The year 2022 did have adverse effects not only on the economy of Kosovo but also, more widely, due to Russia's military attack on Ukraine. This year, problems appeared in the supply of goods and transport, as well as the increase in the prices of energy, food, and goods and increased uncertainty, being reflected in high inflation and weakening of the economic outlook. Figures 2-5 present the inflation in Kosovo, which rose from 3.4 percent at the end of 2021 to around 12 percent at the end of 2022. Inflation will be one of the main problems that Kosovo will continue to face in 2023, but the growth trend is expected to be slower.

2.3. COVID-19 and Kosovo's economy

The COVID-19 pandemic, which spread rapidly in all countries, also had implications for Kosovo's economy (Box 2-3). On 11 March 2020, the World Health Organization officially declared the disease COVID-19 a global pandemic. The Government of Kosovo restricted the movement of citizens and ordered the closure of most economic activities. The measures to prevent the spread of the pandemic caused the fall in GDP in Kosovo, which resulted in negative growth of -5.3 percent in 2020. A further economic downturn was prevented by increasing remittances and exports from the diaspora. To overcome as quickly as possible, the difficulties faced by some businesses and to avoid the increase in loan defaults, CBK, in cooperation with lending institutions, initially offered the possibility of postponing the loan instalment payment deadline for three months and the possibility of application for their restructuring. (CBK, 2022). In terms of business-related obstacles created by COVID-19, Krasniqi et al. (2020), in their study on SMEs, suggest the problems with cash flow and reduction of customer demand, among others, are significant problems faced by SMEs across all firm size groups and industry types. Furthermore, their factor analysis clustered SME policy preferences into three groups: policy preferences related to financing, liquidity constraints, market-related constraints, and tax preferences.

Box 2-3. COVID-19 and Kosovo's economy

Pandemic Impact. The impact of the COVID-19 pandemic was pressure to preserve the financial sector and macroeconomic stability. The COVID-19 pandemic has significantly impacted the economy of Kosovo and the Western Balkans in 2020. GDP in the region is estimated to have fallen by 3.3 percent as a result of the decline in domestic demand and exports. The extent to which each economy was affected by the pandemic crisis in 2020 was dependent on the base of the economy, the strength of the fiscal response, external debt as well as the relative strength of the pandemic wave.

Law on Recovery. The government has proposed a new economic recovery law containing a larger aid package for citizens and businesses.

CBK initiative. CBK, in cooperation with credit institutions, initially offered the possibility of postponing the term of loan payments for businesses to overcome the difficulties they faced.

CBK oversight. The Central Bank continued to carefully monitor financial and monetary developments in domestic and foreign environments.

Opportunity for economic growth. Despite the great crisis that appeared during the pandemic, businesses in Kosovo reported job demands, resulting in improved work infrastructure and raised wages. These reflections from businesses reflect a positivity and expectation that there is a movement for sustainable economic growth in the future.

Source: European Commission (2021), EU Candidate Countries' & Potential Candidates' Economic Quarterly (CCEQ), Q1 2021, European Commission, https://ec.europa.eu/info/sites/default/files/economy-finance/tp048_en.pdf.

2.4. Structure of enterprises

This section provides an overview of the enterprise sector in Kosovo, with a particular focus on employment and the size of the enterprises.

2.4.1. Structure of enterprises by size and number of employees

Regardless of other economic indicators, small businesses are considered an important development factor, and they continue to be the main drivers of new jobs in Kosovo (Shiroka-Pula 2008). The role of the private business sector in Kosovo is gaining weight in market competition and employment. The dynamics of businesses, which generate jobs and promote productivity, either that of work or production factors, have also contributed to identifying challenges and obstacles that have occurred before them. This is essential for the design of efficient and comprehensive policies at the level of businesses as well as at the level of the country in this sector of the economy.

Based on the data of the Kosovo Business Registration Agency (KBRA) reported in Figure 2-7, from 2007 to 2022, a total of 145,976 businesses were registered in Kosovo, while about 23,350, or about 16 percent, were closed, which is considered a relatively high percentage of businesses closed (KAS 2014-2022). Data reported in Figures 2-6 show that from 2012 to 2021, the registration of new enterprises grew from 9,592 to 10,649. On the one hand, a total number of 1,608 businesses were closed. According to MTI (2022), a significant trend of closed enterprises can be seen, especially in 2013 (1,508 of them), in 2015 (2,205 closed), and in 2016 (2,376 closed).

Figure 2-6. Number of newly registered and closed enterprises (2007-2022)

Source: KAS (2023)

In 2020, also to be analyzed, Kosovo, like other countries, was affected by the COVID-19 pandemic and mobilized to face the consequences. It is worth noting that even during the pandemic, the dynamics of registration of new businesses, viewed by quarter, was solid, as was the second quarter (Q2) when 2,033 enterprises were registered. In this form, Kosovo firms confirmed the pandemic's asymmetric impact.

The economic benefits from the development of SMEs in Kosovo are multidimensional. SME researchers have long identified and ranked them

(Krasniqi, 2012). For example, Sultan (2007), analyzing the competitiveness of small and medium-sized businesses, pointed out that there are not only economic but also political benefits from these businesses, enumerating them as follows: (i) generate jobs at a lower cost of capital; (ii) contribute positively to the gross domestic product; (iii) provide a good foundation for new entrepreneurs; (iv) ensure the flexibility required to adapt to changes in the market and (v) contribute to development policies, which are more oriented towards decentralization and rural development.

Table 2-2. Main indicators of the structure and size of the enterprise in Kosovo (2016-2021)

Categories of SME-s	**2016**		**2017**		**2019**		**2020**		**2021**	
	No. of SME-s	(%)	No. of SME-s	(%)	No. of SME-s	(%)	No. of SME-s	(%)	No. of SME-s	(%)
Micro enterprises	10.316	99.0	9.123	98.9	9.880	98.8	9.687	98.79	10,487	98.5
Small enterprises	100	1.0	90	1.0	114	1.1	107	1.09	137	1.3
Medium enterprises	6	0.1	9	0.1	8	0.1		0.08	15	0.1
Total SME-s	**10.422**		**9.222**		**10.002**		**9.802**		**10.639**	
Large enterprises	2	0.01	1	0.06	2	0.01	3	0.03	10	0.1
Total	**10.424**	100%	**9.223**	100%	**10.004**	100%	**9.805**	100%	**10.649**	100%

Source: KBRA (2022)

Data reported in Table 2-2 illustrate the dominance of the small size of the private sector in Kosovo. More than 98 percent of enterprises are micro enterprises (with an average of fewer than 10 employees), 1.3 percent are small enterprises (with about 10–49 employees), and the participation of other enterprises in the structure of enterprises is very low. The improvement of the structure of SMEs, to move from micro-enterprises to small, medium, and large ones, is related to the objectives of increasing productivity, the number of employees and greater orientation towards external markets. If we compare the effects of employment according to the categories of enterprises with the EU and Albania, an approximate occurrence of micro-enterprises' role in employment can be observed across all countries in the region (see Table 2-3).

Table 2-3. Employment by size of SMEs in percentage (2020)

SME-s	Kosovo	Albania	North Macedonia	Bosnia and Herzegovina	Serbia
Micro	31.3	37	31.79	13.3	29.7
Small	25.6	22.1	22.56	23.25	16.16
Medium	18.59	23.04	19.58	26.59	18.8
Large	24.51	22.8	26.06	0.85	34.9
SME-s	**75.49**	**81.9**	**73.94**	**36.86**	**65.1**

Source: OECD, European Commission: SME Policy Index Western Balkans and Turkey 2022. Assessing the implementation of the Small Business Act for Europe.

Several areas and barriers have been identified where SMEs have room to improve their performance. According to Shiroka-Pula (2021), the most prevalent barriers of SMEs are (i) financial barriers, (ii) institutional barriers, (iii) skills barriers and (iv) market barriers. Among the most necessary are considered access to financing, the improvement of the quality of the staff, management skills, the continuous improvement of the climate of doing business, the encouragement of innovations, digitization, and strengthening of competition. Furthermore, Krasniqi (2012) points out that the institutional barriers to doing business remain unaddressed and have implications for the performance of the private sector; its contribution to the economy remains limited.

Analyzing labour productivity in Kosovo, the World Bank (World Bank Group 2021) finds that the COVID-19 Pandemic has accelerated the digital adoption of firms in Kosovo. Between April and June 2020, about 25 percent of Kosovar firms increased their use of digital platforms, and 7 percent invested in digital solutions. Although it has occurred under severe and particular conditions, encouraging the digitisation of firms can increase productivity and improve market access now and in the future. According to the same source, "Between 2010 and 2018, domestic credit for the private sector in Kosovo increased from 35.4 to 44.1 percent of GDP, but less than a third of firms have access to financing through formal channels and more than 70 percent of the credit to the private sector consists of short-term loans." Improving access to financing will help the growth of firms, especially firms run by women.

Another critical obstacle to the development of the SME sector is the shadow economy, which in Kosovo, as in other developing countries, continues to be high, especially in the sectors of agriculture, construction, and services. Moreover, from the Project "Analysis of the Shadow Economy in Kosovo" (Kosovo Academy of Sciences and Arts, 2019) it is estimated that the shadow economy index for Kosovo in 2018 was 39.5 percent. In the meantime, it is estimated that a greater formalization of employees and enterprises from the shadow economy to the formal economy has occurred with support measures for employees and businesses during the pandemic and beyond.

2.4.2. Women Entrepreneurship

Women's entrepreneurship is an essential source of job creation and growth. Although women represent half of Kosovo's population, their engagement in economic activity remains low despite their efforts to obtain a more significant role in society, economy, and politics. The lower rates of women's participation in employment were often regarded as push factors out of the necessity to be involved in entrepreneurship. The key factor encouraging women to open businesses is mainly unemployment, whereas other motives are related to an increase in economic welfare and interest in working in their own companies and not elsewhere - the motive to be owner and employer. Over the last few years, women entrepreneurs have shifted from traditional sectors such as services to more non-traditional sectors such as production and engineering.

Despite the positive trends in women entrepreneurship development, they still face various institutional and cultural barriers. Women's entrepreneurship challenges and barriers encouraged the interest of many researchers. For example, Yadav (2016) finds that women's entrepreneurship has proliferated over the last three decades but estimates that time is still needed for research to reach firm-based findings on women entrepreneurship. Addressing women's entrepreneurship and the role of gender in management, Panda (2018), in addition to financial limitations, also emphasizes the still unstable business environment, which is worth treating as one of the main priorities for women's businesses. In his paper, he aims to identify and list other limitations women entrepreneurs face: gender discrimination, work-family conflict, financial difficulties, lack of infrastructure, lack of training, education, and skills development.

In Kosovo, the formal participation rate of women in entrepreneurship is above 20 percent (Table 2-4). There is an increase in registered firms from year to year from 2018 to 2022. Of the 51,287 businesses registered during these five years, 10,976 businesses are owned by women, or 21.4 percent of them; as such, they lag in terms of the part of businesses registered to be owned by men. After 2018, when the number of registered women-owned businesses was 16.9 percent, there has been a steady increase yearly in women-owned businesses, with an average participation of about 23 percent.

Table 2-4. Number of enterprises owned by women by year

Year	Women	Total	Participation
2018	1.659	9.805	16.90%
2019	2.297	10.009	22.90%
2020	2.125	9.805	21.70%
2021	2.442	10.649	22.90%
2022	2.453	11.024	22.30%
Total	10.976	51.292	21.40%

Source: KAS, 2023

However, we should note that the businesses run by women in Kosovo are primarily micro and small enterprises. The orientation of women in these structures is estimated to be conditioned by the potential for individual investments and limited financial opportunities because of small and limited access to credit. Women-owned enterprises are mainly focused on the service sector, retail and wholesale trade, and food processing, - although they recently moved to non-traditional sectors. Like other businesses, many women-owned businesses operate in the shadow economy, which can be a limiting circumstance for quality financing, training, and government incentive policies.

2.5. Trade Exchange in Kosovo

The trade balance is one of the economic problems that Kosovo is facing, which has a relevant impact on the Gross Domestic Product. With a relatively small export level, Kosovo's foreign trade is dominated by imports, resulting in a high trade deficit. An adequate increase in exports is not accompanying a significant increase in imports. The net trade balance continues to be unfavourable, although the relative coverage of imports with exports is improving very slowly. In 2022 this coverage was 16.3 percent (Table 2-5).

Table 2-5. Percentage of coverage of imports with exports (values in 000 euros)

Years	Export	Import	Trade balance	Coverage percentage
2005	56.283	1,157,492	-1,101,209	4.9
2010	295.957	2,157,725	-1,861,769	13.7
2015	325.294	2,634,693	-2,309,399	12.3
2020	474.994	3,296,635	-2,821,751	14.4
2022	920.405	5,639,393	-4,718,989	16.3

Source: KAS (2023)

In the structure of exports by category, basic metals recorded high growth, followed by plastic, rubber and mineral products. In recent years, the EU countries and the CEFTA countries are the leading partners for exporting goods. Exports to EU countries have moved from 45.3 percent in 2010, declining to 29.8 percent in 2014 to 34 percent in 2022, dominated by Germany with 9.5 percent (Figure 2-7).

Exports with CEFTA countries had shown a growth trend with some deviations, from 22.6 percent in 2010 to 47.2 percent in 2018, when the decline began, reaching 36.2 percent in 2022. The most significant impact on the decline of exports in the CEFTA countries in recent years was exerted by the decline of exports in Serbia, from 13.3 percent in 2016 to 6.8 percent in 2022, and in Albania, from 18.6 percent in 2018 to 11.1 percent in 2022. Exports to EFTA countries increased from 2013 (2.4 percent) to reach a share of 7.8 percent in 2022. In the last three years, the export has also increased in other European countries (15 percent) and in the USA (14.8 percent - where the export of mattresses dominates). In 2022, according to CBK (2023), it appears that Kosovo has increased its reach into new markets: from 127 countries where it exported in 2021 to 140 countries in 2022.

Data from KAS (2022) suggest that mineral products, food products, machinery, and household appliances dominate ss for imported goods. There is a continuous increase in imports of consumer goods, while the share of capital goods remains low. The most significant import is made from European Union countries, with a constant from 40.4 in 2010 to 42.4 in 2022, then from CEFTA countries, with a decrease from 34.5 percent in 2010 to 17.7 percent in 2022, from other European countries, from 3 percent in 2010 to 14 percent in 2022, where Turkey dominates with 12.5 percent, while from Asian countries China dominates with 9.7 percent, (2022). In the trade of services, the diaspora continues to play a vital role in the consumption of travel services.

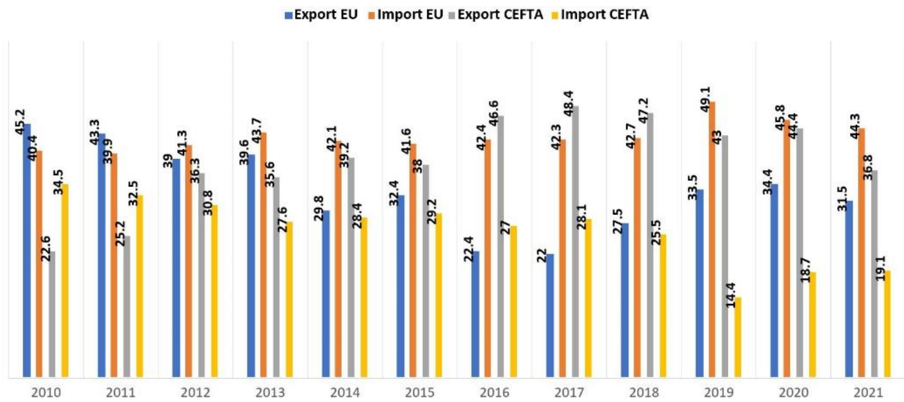


Figure 2-7. Structure of export and import by country 2010-2021 (in percent)

Source: KAS (2022)

In 2010, the leading share of products for export were: processed goods at 56 percent, raw materials 24 percent and 6.3 percent food and live animals. In 2020 and 2021, exports increased, while the structure of goods improved in exports, reducing the share of raw goods. In the case of imports, in 2010, machinery and transport equipment reached 20 percent, unprocessed goods 19.6 percent, food and live animals 1.0 percent and fuel 15.7 percent.

In conclusion, Kosovo experiences a positive trade balance trend every year, which is a very good indicator of a country's economy because cooperation and trade volume with different countries are increasing. The improvement of the trade balance in recent years does not express the increase in the value of the exports (it still has a very low base). Still, it shows that however small, the positive fluctuations are in the export increase and the replacement of imports with local products; thus, import/export ratios are directly or indirectly improved, and the negative net trade balance decreases, albeit very high.

From a policy perspective, policies need to improve productivity and increase the supply base of production capacities for export. Improving the institutional and business environment by eliminating limitations on any potential production and creating an attractive environment to attract FDI will foster local value chains and increase demand for local firms. Doing this can also increase regional and international integration. In addition, promoting and mobilising diaspora capital is vital to increase firms' penetration of export markets. Kosovo's government should make access to credit for exporting firms easier and cheaper because export firms mainly have faced restricted access to finance, which can hinder market diversification and reduce firm productivity and the number of products. This export promotion policy is more critical in light of the recent increase in the interest rates for bank loans.

2.6. Demographic overview

In Kosovo, the last complete population census was conducted in 1981. This census shows Kosovo had 1,584,440 inhabitants (KAS, 2008). Meanwhile, according to the data of the Kosovo Agency of Statistics, based on the 2011 census, the number of residents in Kosovo was 1,739,825 (Table 2-6).

Table 2-6. Number of inhabitants in Kosovo

1953	1961	1971	1991	2001	2011	2020
815,908	963,988	1,243,693	1,956,196	2,489,000	1,739,825	1,773,971

Source: KAS for 1953, 1961, 1971, 1991 and estimates for 2020. For 2001, Riinvest Institute, Labor Market and Unemployment in Kosovo (2003). Note: Residents of Leposaviq, Zubin Potok, Zveçan and North Mitrovica municipalities are excluded from this census.

Kosovo is among the countries with the highest participation of the young population in the region, but in recent years, it has been facing significant demographic changes (Table 2-7). One of the reasons for the changes in the population is the consequences of the war, when many citizens left Kosovo and emigrated abroad, the decrease in the birth rate and the current migrations abroad.

Table 2-7. Population age groups in 1991 and 2011

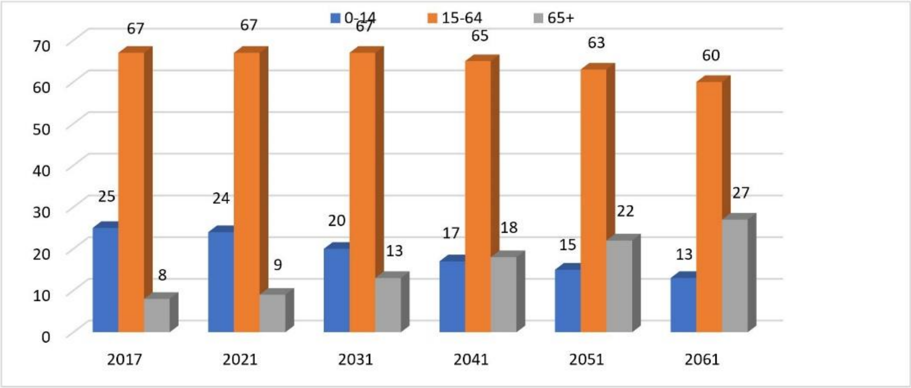
Age of the population				
Years	0-14	15-64	65+	%
1991	37.4	58	4.6	100
2011	28	65.3	6.7	100

Source: Calculation of data according to KAS 2023

According to KAS, the population in Kosovo for 2021 was estimated to be 1,773,971, resulting in 37,635 inhabitants than in 2011, or 2.2 percent less. In this period, there is an increase in the age group of 15-64 years by 7.3 percentage points and a decrease in the age group of 0-14 years from 37% to 289 percent or 9.4 percentage points. A drastic decrease is observed in children's participation (0-4 years old) from 13.5 in 1991 to 8.6 in 2011, or by 4.9 percentage points.

The still high participation of the relatively young population in Kosovo constitutes an advantage in developing human resources. Therefore, investments in human resources, through quality education, training, and retraining qualifications, will enable their support for the labour market and be an essential and sustainable contribution. Human resources are necessary capital with opportunities to increase knowledge and skills, which offer opportunities for a more productive future and the country's long-term social and economic development. KAS forecasts reported in Figure 2-8 for the period 2017 - 2061 (middle variant) suggest a slight increase in the population until 2031 (1,818,674), continuing with the trend of its reduction by 1,759,492 (2041); 1,652,090 (2051) until 2061 where there will be 1,492,192 inhabitants. The population of Kosovo is expected to undergo a change in its age structure that is manifested through the reduction of the young population (from 0-14 years) from 25 percent (2017) to 20 percent (2031) and 13 percent (2061). At the same time, the participation of the 65-year-old age group in the population structure will increase from 8 percent (2017) to 13 percent (2031) and 27 percent (2061).

Figure 2-8. Projection of the age groups of the population of Kosovo by year in percentage (middle variant).



Source: KAS, 2017.

2.7. Education

Investment in education has shown to be an essential factor in promoting the modern development of the economy, exerting influence on improving social well-being in the future and advancing human capital. Therefore, the education system, which provides adequate access and high quality for the new generation (labour contingent), will produce skills against the demands of the labour market and will be oriented towards an increasingly competitive and more stable global economy.

2.7.1. Human Capital Index

The World Bank, in its report Human Capital Index (HCI) for 2020 (WB, 2020), presents the population projection in Kosovo by age for the years 2020-2060. According to this data, Kosovo has promising potential, namely a favourable environment for investment in human capital and a need for investment and improvement in the quality of education. As noted, the young population shows the potential to join the workforce in this and the following decades despite the rapid demographic evolution.

Many studies show that education is vital for successful intellectual, academic, and social development. According to the report of the Riinvest Institute (2004), human capital is evaluated as an essential element for economic growth, especially for countries in transition. According to the World Bank WB report (2020), among 176 countries, Kosovo ranks 87th with an HCI of 0.57. Singapore heads this table with an index of HCI 0.89. The HCI of 0.57 (2000) shows that the preparation of children for work is lower by 43 percent compared to the situation with an adequate education level. Among the Western Balkan countries, North Macedonia is worse than Kosovo, with an HCI of 0.56, ranked 90th. This indicates the low level of productivity that children will have when they complete schooling by the age of 18.

2.7.2. Quality of Education

Education in Kosovo takes place in public and private institutions. According to the law, public education is financed by Kosovo's budget, is free of charge at the primary and secondary levels, and guarantees equal education to all communities in Kosovo. The organizational structure of the education system in Kosovo[1] has the 5+4+3 system (in general and

[1] Structure of the education system: **1. Preschool education**, children aged < 6 years (with three levels / (i) *Nursery* (for children aged 1-2 years) / (ii) *Kindergarten* (for

vocational education) and the implementation of the Bologna Agreement in higher education.

Education development in Kosovo from World War II has passed through five main stages. The first stage (1944 - 1966) was a socialist education system with all people included to eradicate illiteracy.[2] The second stage (1966 – 1980) - consolidating the education system at all levels[3]. The third stage (1980 - 1991) is the return of the influence of politics in education; The fourth stage (1991 – 1999) - the violent expulsion of pupils, students, and teachers from educational institutions—the fifth stage, from the second half of 1999 until today.

The Program for International Student Assessment (PISA) is a three-year survey of 15-year-old students that assesses the extent to which they have acquired essential knowledge and skills (skills in reading, mathematics, science, and an innovative area for full participation in society) that show low student success in Kosovo. The results of the PISA test ranked Kosovo among the last three countries out of 70 (2015), respectively 79 participating countries (2018). Students in Kosovo scored lower than the OECD average in reading, math, and science. According to the OECD (2018), in Kosovo, 21% of students have reached at least level 2 reading proficiency (OECD average: 77%); about 23% of students in Kosovo have reached level 2 or higher in mathematics (OECD average: 76%); in Kosovo, about 1% of students scored at level 5 or higher in mathematics (OECD average: 11%); about 23% of students in Kosovo have achieved level 2 or higher in science (OECD average: 78%). Kosovo participated in PISA for the second time in 2018. The results showed that compared to 2015, average performance was similar in reading and math but 13 points lower in science (365 points in 2018 compared to 378 in 2015). In 2022, Kosovo also scored low in PISA - out of 85 participating countries it ranked 74.

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children aged 3-4)/ (iii) *Pre-primary class* (for children aged 5 years): 2. **Primary education** (gr. I - V) and includes children aged 6 - 11 years; 3. **Secondary education**, age 11 - 18 years (with two levels/ (i) *Lower secondary education* (four years, age 11 - 15 years) and (ii) *Upper secondary education* (three and four-year-olds, age 15 - 18); 4. **University Education** (with three study levels/ (i) *First degree – Bachelor/* (ii) *Second degree - Masters (MA) and* (iii) *Third Degree - Doctorate (Ph.D).*

[2] In 1958, the first Higher Pedagogical School was founded and in 1960 the Faculty of Philosophy in Prishtina was established too. Another great achievement during this stage was the beginning of the operation (albeit with obstacles of different natures) of what would later be known as National and University Library of Kosovo.

[3] A democratization of the education system was marked, especially after 1970, when University of Prishtina was founded.

The research report of KASA (2021, Box 2-4) emphasises that the degradation in the education system continued even after 2002, when the locals took responsibility for the management of the education system. In this period, new legislation and several strategies for the development of education have been approved (MEST Strategy 2003-2008; Strategy for the Development of Higher Education in Kosovo 2005-2015; Strategy for the Development of Pre-University Education in Kosovo 2007-2017; the Strategic Plan of Education in Kosovo 2011-2016/ which replaced the two strategies in force and the Strategic Plan of Education in Kosovo 2017-2021).

Box 2-4. Key facts of Kosovo education system

Degradation of quality in education, and damage to generations of pupils and students is analyzed separately in the study "Platform for the Recovery of Education in Kosovo" (ASAK 2021).

"The segregation imposed by the Serbian government in the 90s has resulted in serious consequences for the quality of education in Kosovo. Teaching was organized in private facilities and spaces that did not provide minimum conditions for work, with shortened schedules and frequent interruptions of the teaching process due to the state of war.

In the Period 1991-1999, the independent education system functioned without being subject to Serbia; educational institutions were preserved with an unprecedented dedication and will of teachers and other education workers. The financing of this system was made by the voluntary contributions of citizens in Kosovo and by the contributions of compatriots from Western countries.

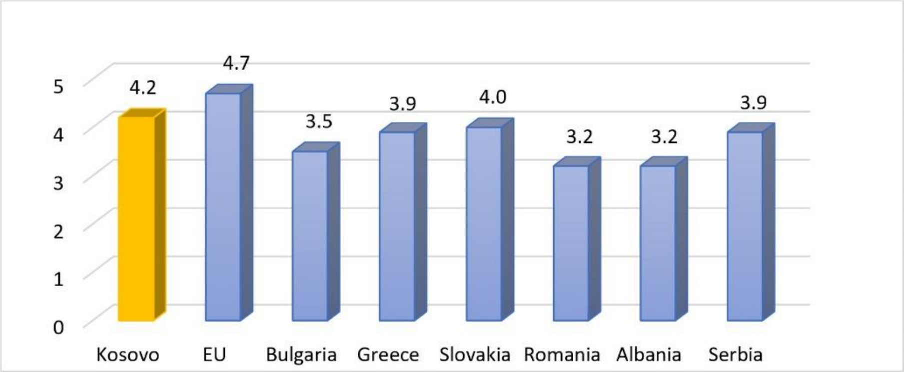
"The post-war period has brought a significant improvement in creating conditions for normal work, but not achieving the needed quality. The international authorities, which had full authorization for the governance of the education system in the period 1999-2002, have promoted several reforms that have not produced the desired results. One of them is the transition of higher education to the Bologna System, which was done without proper preparation through the mechanical shortening of study programs from 4 to 3 years and the opening of dozens of new bachelor's and master's programs without qualified academic staff. In this period, by the decision of UNMIK, the pedagogical service in schools was removed from the system, and the Pedagogical Entity of the Republic of Kosovo and the municipal pedagogical entities were closed, replacing them with completely ineffective structures of professional support and supervision."*

Source: Kosovo Academy of Sciences and Arts, 2021, “Platform for Recovery of Education in Kosovo”: Kosovo, p. 16

2.7.3. Financing of Education

Kosovo has marked a significant improvement in inclusion at all levels of education and has a decentralized system of education, where the management of pre-university educational institutions belongs to the municipalities, while the central government manages higher education. The participation of education expenses in GDP has continuously increased from 3.3 percent of GDP in 2007 to 4.2 percent of GDP in 2018 (with a tendency to increase in the following years). These figures make Kosovo comparable with the countries of the region. Comparing the public expenditures of Kosovo with other countries, it turns out that in 2018, they were below the EU average (of 4.7 percent), but above the level of the countries of the Western Balkans as well as some EU countries (see Figure 2-9).

Figure 2-9. Public expenditure on education as a share of GDP



The participation of education expenses in GDP in Kosovo is higher than Romania and Albania (3.2 percent), Bulgaria (3.5 percent), Greece and Serbia (3.9 percent), and Slovakia (4.0 percent) (Figure 2-9). As for scientific activity, The Law on research-scientific activity determines up to 0.7 percent of the annual state budget for this activity, but this participation has been many times lower than the legal determination (about 0.1 percent).

2.8. Unemployment and employment

Labour market outcomes have improved in Kosovo over the last decade. However, as the World Bank (2021) notes, high unemployment and low participation in the labour market still coexist in Kosovo. In 2022, labour force participation was 38.6 percent of the working-age population, primarily driven by the gender gap: female participation was only 22 percent compared to male participation of 55.5 percent. This year, only 33.8 percent of the working-age population is employed. In 2022, because of the government's temporary youth employment measures, unemployment decreased by 8.1 percentage points (from 20.7% in 2021 to 12.6% in 2022). The improvement was among the youth category (15-24), for which unemployment fell to 21.4% in 2022 from 38% a year earlier (of women to 27.0% of men to 18.6%).

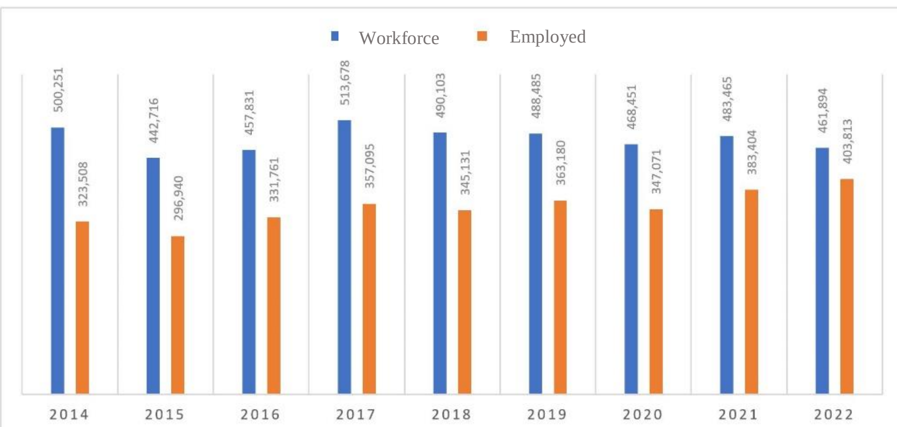
Table 2-8. Key indicators of the labour market

Categories of labour activity	2012	2013	*2014*	2015	2016	2017	2018	2019	2020	2021	2022
Labor force participation rate (15- 64 years old)	36.9	40.5	41.6	37.6	38.7	42.8	40.9	40.5	38.3	39.3	38.6
Economically inactive population (15-64 years old)	63.1	59.5	58.4	62.4	61.3	57.2	59.1	59.5	61.7	60.7	61.4
Employment	25.5	28.4	26.9	25.2	28	29.8	28.8	30.1	28.4	31.1	33.8
Unemployment	30.9	30	35.3	32.9	27.5	30.5	29.6	25.7	25.9	20.7	12.6

Source: Statistical Yearbook of the Republic of Kosovo, Prishtina 2023

Estimation by KAS (2023) shows that in Kosovo, at the end of 2022, 403,813 people were employed out of a workforce of 461,894 (Figure 2-10).

Figure 2-10. Workforce and number of employees



Source: KAS 2023

Analyzing the relationships between the trends in the labour force participation rate, the inactive population, employment, and unemployment, it emerges that the reduction of the workforce contingent has significantly influenced the decrease in unemployment in recent years. In 2015, -11.5%

and in 2022, for -4.5%. In these years, the increase in employment was at a rate of -3.4% in 2018, 5.2% in 2019, -4.4% in 2020, 10.4% in 2021 and 5.4% in 2022.

In the total population of Kosovo, in 2022, the labour force participation rate reached 38.6 percent, while 61.3 percent or 733,532 people were estimated to be economically inactive. The number of inactive population, i.e., those of working age and not part of the labour market, is very high. This can be explained by the new age structure of the population, the high number of pupils and students, and housewives, but also by the high participation in informal employment of those who work but do not appear as a contingent in the labour force or as an official contingent of employees.

Box 2-5. World Bank observations on education

Improving education and labor market outcomes can accelerate the convergence towards higher incomes. Poor educational outcomes, low labor force participation and high unemployment have limited the contribution of human capital to growth.*
**WORLD BANK GROUP, Kosovo Country Economic Memorandum Gearing up for a More Productive Future, November 2021*
The Labor Force Survey (LFS) data further highlights the marked gender disparities within the labor market, including significant differences in employment rates (49.4 percent for men and 18.4 percent for women in 2022), rates of inactivity (45 percent for men and 78 percent for women), as well as moderate levels of youth unemployment (21.4 percent) **.
**World Bank Group. Western Balkans Regular Economic Report No.24 | Fall 2023 Toward Sustainable Growth

In recent years, the significant difference between the population defined as the labour force and the employed population has decreased. Until 2014, this difference was 176,743 people, and the unemployment rate was 35.3 percent *(176,743/500,251=35.3%);* this difference in 2022 has fallen to 58,081 people or 12.6 percent unemployed. However, according to the European Commission (2023), the gap between male and female employment rates (49.4% and 18.4%, respectively) widened. The labour market continues to be characterized by significant gender imbalances in employment (an employment rate of 45.9 percent for men and 16.5 percent for women in 2021) and very high inactivity, where the inactivity rate for women is 78 percent, and the rate of inactivity for men reaches 43.4 percent, (World Bank 2023).

According to the same source, despite the formalization of the labour market, information on labour markets remains limited, so it is worth noting that according to data on pension contributions, formal employment increased by 4.9 percent compared to 2021 and at the same time, in December 2022, registered job seekers decreased by 1.5 percent compared to the previous year. Labor Force Survey (LFS) found that the working-age population shrank during 2022, possibly due to migration, while the employment-to-population ratio declined to provide an increase, from 31.1 percent in 2021 to 33.8 percent in 2022, WB (2023).

There are critical challenges in the labour market in Kosovo. They are closely related to the gap between education and the current demands of businesses for qualifications needed by the labour market. Insufficient human capital limits employment and private sector development in Kosovo. This problem of human capital insufficiency is also supported by the low human capital index caused by the low knowledge of science subjects.

The significant gender imbalance and long-term unemployment is another challenge that is related not only to equality but also to the quality of employment. (see Table 2-9).

Table 2-9. Gender participation in unemployment and long-term unemployment

	Unemployment			Long-term unemployment		
Years	Male	Female	Total	Male	Female	Total
2012	28.1	40	30.9	59.1	61.3	59.8
2013	26.9	38.8	30	71	68.9	68.9
2014	33.1	41.6	35.3	73	75.6	73.8
2015	31.8	36.6	32.9	71.1	75.5	72.2
2016	26.2	31.8	27.5	65.6	65	65.5
2017	28.7	36.6	30.5	72.5	69	71.5
2018	28.5	33.4	29.6	61.3	50.1	58.4
2019	22.6	34.4	25.7	61.8	66.9	63.6
2020	23.5	32.3	25.9	72.1	71	71.7
2021	19	25	20.7	71.2	70	70.8
2022	11	16.5	12.6	69.2	58	65.1

Source: KAS 2023

On average, women's unemployment is 50% higher than men's, while long-term unemployment affects both sexes, although women more. Better participation of women in employment is noted in public administration, education, health, and trade. Nevertheless, in general, the participation of women in the labour market is marginal. The employment rate of women in 2022, which was 18.4%, was 2.7 times lower than that of their male counterparts (49.4%). It is considered extremely important to provide opportunities for the workforce to upgrade their skills to those required by employers, in line with the supply and demand of skilled labour (European Commission 2020). Developmental consequences from the past and structural unemployment caused by the consequences of the war and the process of privatization lay the need for the design and implementation of labour market programs that will address general and structural unemployment.

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CHAPTER 3

CHALLENGES OF COMPETITIVENESS IN THE WESTERN BALKANS: A REGIONAL COOPERATION PERSPECTIVE

Will Bartlett

Abstract

The chapter sets out the role of regional cooperation in promoting economic competitiveness. It argues that regional cooperation is key to improving competitiveness and, hence, the productivity of the region's economies. Improved productivity is expected to boost the region's exports as a basis for future economic growth. The chapter first provides a general overview of the competitiveness of the Western Balkan economies in international trade and attracting foreign direct investment and reviews the role of education systems in promoting competitiveness. It analyses the determinants of competitiveness in the Western Balkan region compared to the EU. It shows how foreign direct investment and the workforce's education level are essential drivers of the competitiveness of the region's economies. It then focuses the attention on the case of Kosovo. It shows how a tailored industrial policy based upon developing the services sector and improving the educational level of the labour force through greater investment in the education system would be most appropriate. It concludes with a summary of the findings and some recommendations on how regional cooperation efforts can be leveraged to boost the competitiveness of the Kosovo economy.

Keywords: competitiveness, regional cooperation, Western Balkans.

3.1. Introduction

Almost all commentators agree that the Western Balkan countries have a competitiveness problem expressed in relatively low productivity levels (i.e., output per worker). For example, labour productivity in Kosovo is only one-third that of the EU (World Bank, 2021a). According to the World Economic Forum, the competitiveness of a country includes the whole set of institutions, policies and factors that determine its level of productivity.[1] The OECD has identified 16 policy dimensions that are key to the competitiveness of the Western Balkans, such as investment attraction policies, trade policies, education policies, science, technology and innovation policies, and policies to promote the digital society, to mention just a few (OECD, 2021).

Regional cooperation is an additional policy dimension not mentioned by the OECD that can underlie improved economic competitiveness. In so far as regional cooperation agreements between countries improve efficiency in the allocation of resources between them or enable cost-reducing or quality-improving efficiencies in enterprises, especially among those producing for export, regional cooperation may make an important contribution to a country's economic competitiveness. Although competitiveness and cooperation may seem to be uneasy bedfellows, there are good reasons why regional cooperation can be a useful tool to boost an individual country's competitiveness. For a start, there are strong externalities between neighbouring countries. For example, if aggregate demand is increased in one country through a government programme or a reduced sense of uncertainty about the future, this may spill over into neighbouring countries in the form of an increase in the demand for imports from those countries. Improved regulation, or an improvement in the rule of law may trigger such a change in perceptions of uncertainty. Other types of externalities are also relevant. For example, building regional infrastructure in almost any sector (roads, railways, electricity networks) can benefit all concerned (Sanfey & Zeh, 2012). In addition, the reduction of tariffs and non-tariff barriers through a free trade agreement can benefit all parties to such an arrangement. It should, however, be noted that international trade can also involve negative externalities which may give rise to conflict between countries. Under increasing returns to scale, country competition over market shares may improve the productivity of a country which captures a higher market share of a particular increasing-returns sector (Gomory & Baumol, 2000). Managing such conflict can best be achieved through institutions of regional cooperation, which consider the inevitable tensions involved.

The next section of this chapter reviews the literature on competitiveness in the Western Balkans and its relationship to regional cooperation. Section 3 analyses the determinants of export competitiveness in the region, and section 4 presents an overview of industrial policies promoting exports in the context of regional cooperation. Section 5

1 See: https://www.weforum.org/agenda/2016/09/what-is-competitiveness/. Productivity is relatively low in the Western Balkans. For example, the ratio of GDP to the labour force is about €48,000 in Slovenia, €32,000 in Croatia, but only €15,000 in Kosovo.

concludes with a summary of the lessons for Kosovo concerning its involvement in regional cooperation to promote competitiveness.

3.2. Regional cooperation and competitiveness in the Western Balkans

The institutional framework for regional cooperation in the Western Balkans has gone through various phases of development. An early attempt to support regional cooperation was made in 1999 through the establishment of a Stability Pact for South East Europe with its office in Sarajevo (Bartlett & Samardžija, 2000). Its successor organisation, the Regional Cooperation Council (RCC), was officially launched at the Ministers of Foreign Affairs meeting of the South-East European Cooperation Process (SEECP) in Sofia in February 2008, under whose auspices it continues to operate. The RCC has 46 participants and is financed by the EU and its other Board members. It has a Secretariat based in Sarajevo and a Liaison Office in Brussels. One of the key themes of the RCC is to improve the competitiveness and productivity of the region's economies through regional cooperation. Among its regional initiatives, the RCC hosts the activities of the South East Europe Investment Committee (SEEIC) established by the OECD in 2007 as a ministerial-level body to lead common investment strategies on a regional basis.[2] This committee supports reforms related to foreign direct investment entry, protection and retention.[3]

The policies involved in regional cooperation have been formalised through the adoption of plans for establishing a Regional Economic Area (REA) and, more recently, a Common Regional Market (CRM).[4] The Multi-annual Action Plan for a Regional Economic Area in the Western Balkans Six (MAP-REA) adopted at the Trieste Summit of June 2017. [5] It covered the period 2017-2020 and set out a joint approach to economic cooperation to improve competitiveness and promote economic growth in

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2 SEEIC's members included national ministries of economy and international partners such as the European Commission, CEFTA, World Bank/IFC, OECD, USAID, ETF and others. Since 2009 it has been managed by the RCC. http://www.seeic.rcc.int/pages/1/background

3 Dozens of regional initiatives have developed both independently and through the auspices of the RCC. See Minić (2013) for an account of the development of regional cooperation initiatives over time.

4 See: https://www.rcc.int/pages/143/common-regional-market

5 The MAP-REA was based on the frameworks of the Central European Free Trade Agreement (CEFTA) and the South East Europe 2020 Strategy (SEE2020) and reflected the rules and principles of the Stabilisation and Association Agreements (SAAs).

the region (Sanfey & Milatović, 2019). It aimed to ensure further trade integration, promote the region as a joint investment destination for multinational companies, support the creation of regional supply chains in specific sectors, facilitate regional mobility, and create a digital integration agenda among the Western Balkan Six (WB6) economies. It also proposed developing a regional smart specialisation strategy to promote innovation and investment in key priority areas. Increased international trade within the region was to be supported by the liberalisation of trade in services through additional protocols of the Central European Free Trade Agreement (CEFTA) and by removing non-tariff barriers to trade. The competitiveness of the region was also to be supported by increased international mobility of researchers and professionals in defined areas and increased use of digital technologies to increase the speed, efficiency and transparency across borders and improve the supply of new services to consumers and businesses. All this was expected to support socio-economic development, high-value job creation and a knowledge-based society based on improved skills and education. A key element of the knowledge economy is the improvement of digital skills and digital infrastructure. The Western Balkans have lagged behind the EU (Mitrovic, 2015). Digital integration within the MAP-REA Digital Agenda envisaged a regional approach to intergovernmental cooperation in digital matters and integration within the European Digital Single Market. It also proposed enhanced support for developing digital infrastructure, improved regional connectivity, a "roaming free" region, and improved digital skills.

Building on the achievements of the MAP-REA, a Common Regional Market (CRM) Action Plan 2021-2024 was developed to increase the investment attractiveness and competitiveness of the Western Balkan region.[6] Its broad aim was to pursue regional economic integration to attract global investors to the region by aligning rules and regulations with the principles governing the EU Internal Market based on the "four freedoms" approach.[7] It also aimed to integrate the Western Balkans into the pan-European digital area and upgrade the industrial base and innovation infrastructures.[8] The CRM Action Plan is made up of targeted actions in four

6 https://www.rcc.int/pages/143/common-regional-market

7 The four freedoms are the free movement of goods, capital, services and people across international borders. It involves, for example, mutual recognition arrangements, removing obstacles, and cutting costs and time needed for goods, services, capital and people to move freely across the region.

8 The CRM Action Plan was adopted at the Western Balkans Summit of the Berlin Process held in Sofia in November 2020. A parallel initiative to establish an "Open Balkans" prioritising the free movement of labour has also been recently established by

key areas (i) a regional trade area promoting the free movement of goods, services, capital and people; (ii) a regional investment area to align investment policies with the EU standards and best international practices and promote the region to foreign investors, (iii) a regional industrial and innovation area, to transform industrial sectors, and promote human capital, (iv) a regional digital area, to integrate the Western Balkans into the pan-European digital market and promote digital skills.

In 2020, the EU launched an Economic and Investment Plan (EIP) for the Western Balkans (Bartlett et al. 2022). A flagship initiative supports the competitiveness of the private sector by supporting collaboration between the business sector, government, and research and development institutions. It also supports improved business quality standards and export-oriented investments to increase regional trade.

In the rest of this section, I identify specific ways in which regional cooperation in trade, investment and human capital development underpin the competitiveness of the Western Balkan economies.

3.3. Regional exports

The CEFTA includes the countries of the Western Balkans and Moldova.[9] A recent business survey reveals that 60% of business owners and managers believe the CEFTA agreement benefited their companies. In Kosovo, 80% of respondents thought that CEFTA had benefited their business performance (RCC 2022: 118).

Several studies have used available trade data to analyse the role of CEFTA in promoting export competitiveness using the standard "gravity model" of trade. This model proposes that trade is determined by the GDP of importer and exporter countries, the geographic distance between them, whether countries have contiguous borders or speak common languages, and whether the trading partners are members of a free trade agreement such as CEFTA. Almost all of these studies have confirmed the positive effect of

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some of the countries of the region. The initiative is strongly supported by the USA but does not have the same level of institutional embeddedness in treaties or a secretariat. Its objectives include similar aims to that of the CRM including the mutual recognition of degrees and work permits, cooperation in disaster prevention, and food security. So far however only three countries have joined this parallel initiative: Albania, North Macedonia and Serbia. Kosovo has not agreed to join it, preferring to go along with the more encompassing and EU-oriented CRM.

9 CEFTA was originally established by the Central European transition economies and was renewed in 2006 (after the original members joined the EU in 2004) for the countries of South East Europe, while retaining the "Central Europe" name.

country size and distance between countries as factors determining the volume of trade flows. Studies have differed in their estimates of the effect of the CEFTA on intra-regional trade. Not surprisingly, early studies found a small or no effect (Mojsoska-Blazevski & Petreski, 2010; Begović, 2011). The exception was an early study by Peci et al. (2010), which found a positive effect of CEFTA on Kosovo's exports and imports, indicating the special importance of regional cooperation for improving the competitiveness of the Kosovo economy. A similar positive early effect of CEFTA on Kosovo's exports was found in a study by Gjonbalaj et al. (2011) using a difference-in-difference methodology. As time passed, businesses throughout the region began to adjust to the new arrangements, and the whole region began to experience positive effects of CEFTA, as reported in studies by Petreski (2013), Dragutinović-Mitrovic & Bjelić (2015), Petreski (2018), and Grieveson et al. (2021). Some studies investigated individual sectors, for example, Matkovski (2018) and Matkovski et al. (2022) found a positive contribution of CEFTA to agri-food sector exports. Other studies have investigated the effect of CEFTA on the export competitiveness of individual countries. For example, Choi and Minondo (2019) found that CEFTA membership had increased exports from Albania by more than 34%. Overall, the positive impact of regional cooperation on trade flows within the region has been firmly established, and it is apparent that regional cooperation in trade is a major factor contributing to improvements in export competitiveness on a regional level. This is likely to have a self-reinforcing effect since companies that can export to a wider market will benefit from economies of scale and will have lower average costs, enabling them to expand production and further improve their competitiveness.[10] Kosovo joined CEFTA in 2007, and by 2019, over two-fifths (43%) of Kosovo's exports were sold on the CEFTA markets compared to just over one-third (36%) on the EU markets (OECD, 2021). This suggests that regional cooperation in trade through CEFTA has strongly benefitted the competitiveness of the Kosovo economy.

According to a recent EBRD report, Kosovo has revealed comparative advantages in goods trade in metals, hides and skins, textiles, and foodstuffs (EBRD, 2022). Nevertheless, Kosovo, along with Albania and Montenegro, has based its economic development mainly upon the expansion of services exports. In contrast, Bosnia and Herzegovina, North Macedonia and Serbia have oriented their exports more towards the export of manufactured goods (Krasniqi et al., 2022). Since Kosovo's main

10 This is a well-known effect of free trade agreements. See for example Pomfret (1997) and Schiff & Winters, 2003).

strength in the export market lies in services rather than goods, basing a revealed comparative advantage analysis on the goods sector alone is not likely to present the full picture of the opportunities available to improve the economy's competitiveness. The services focus of the Kosovo economy is emphasised by the fact that in 2019, services accounted for 74% of GDP, 85% of employment, and 83% of new businesses registered (OECD 2021).

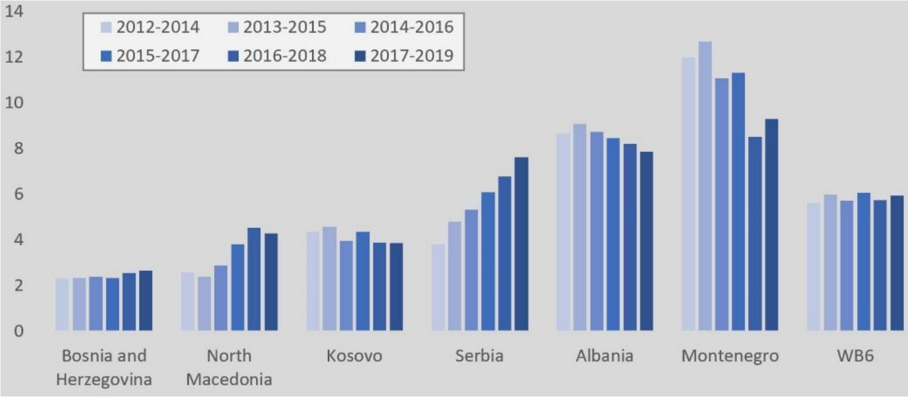
Kosovo has a large deficit in trade in goods trade, amounting to 44% in 2019, while it has a modest surplus in trade in services (13% in 2019). This suggests that services exports are relatively more competitive than goods exports, and this comparative advantage in services could be a strong driver of economic growth in the future. Within the services sector, tourism plays a large part, with four-fifths of revenue linked to tourist visits by the diaspora. Kosovo is the region's most open economy for trade in services and has the least restrictive regulatory framework for service providers (OECD 2021: 1067), especially in telecommunications, road freight transport, insurance and architecture services. Such trade openness in services is beneficial for domestic firms, as it allows them to specialise according to their comparative advantages in services and skills. Kosovo additionally benefits from reduced restrictions on trade in services following the agreement on the Additional Protocol 6 to CEFTA in December, which was adopted in 2019.

3.4. Regional investment

Low inflows of international capital to the Western Balkans due to high country risk in the 1990s and 2000s have hindered technological catch-up and weakened the region's international competitiveness (Bartlett, 2009). In the period before the global economic crisis of 2008, FDI had mainly been attracted to service sectors such as banking and telecommunications (Botrić, 2010). FDI has been below the expected level given the economic fundamentals of the region, which Estrin and Uvalić (2014) explained as being due to a political risk factor that they called the “Balkan effect”. The late 2000s and early 2010s eurozone crisis led to a further substantial reduction in FDI (Bartlett & Prica, 2013). In analysing the effects of the crisis, Jacimović (2012) proposed that new policies were needed to attract FDI into “productive, self-sustaining and competitive sectors”. This call was taken up in several of the Western Balkan countries which introduced special incentives for FDI inflows, including the establishment of special economic zones in North Macedonia and Serbia and to some extent in Bosnia and Herzegovina (Bartlett et al., 2019). This has led to a substantial increase in foreign investment in these economies for the inward processing of intermediate goods to be exported for final processing in the EU, especially in the motorcar components industries.

Each Western Balkan country now has an investment promotion agency which provides "aftercare services" for foreign investors. However, this individual-economy approach has led to a divergence in economic structures, while national policies to attract FDI through tax breaks have led to a "race to the bottom", resulting in low or non-existent corporate tax rates. In this context, the programme to establish a Common Regional Market (CRM) has widened the idea of regional cooperation to encompass the creation of a "regional investment area" to facilitate regional economic growth and job creation.[11] This extends individual country initiatives by supporting a coordinated approach to investment promotion. It is intended to remove barriers to regional investment, develop regional investment promotion campaigns, and attract investment in sustainable regional value chains. FDI is also expected to enable the transfer of technologies and the learning new skills.

Figure 3-1: FDI/GDP 3-year moving average (%), 2012-2019



Source: World Development Indicators online database

So far, investment attraction policies have been particularly successful in North Macedonia, Serbia, Bosnia, and Herzegovina (see Figure 3-1). These have involved tax breaks for foreign investment and the creation of special economic zones (SEZs) where investor companies, usually foreign multinationals, are entitled to special

[11] See RCC website: https://www.rcc.int

privileges, including tax breaks, easy processing of customs, subsidies for the construction of factories and other benefits (Bartlett et al. 2019). As a result, FDI as a share of GDP has increased spectacularly in Serbia, from 3.8% in 2012-14 to 7.6% in 2017-19. In North Macedonia, the FDI share grew from 2.4% to 4.5% over a similar period. The increase in Bosnia and Herzegovina has been more modest due to the less impressive subsidies and tax breaks in the relatively few SEZs set up there. In Albania, attempts to establish SEZs have floundered in the face of intractable problems regarding property rights laws and practices. Kosovo has not adopted an FDI attraction policy of the same type, and FDI inflows have stagnated. Despite the absence of special policies, Montenegro has had the highest rate of FDI inflow in the region due to investment in construction and the tourism industry, often by Russian investors, although this has fallen off somewhat in recent years.

However, while FDI flows into the three manufacturing economies (Bosnia and Herzegovina, North Macedonia, and Serbia) increased from 2012 to 2019, overall FDI as a proportion of regional GDP showed little or no change (see Figure 3-1). This suggests that individual-country investment attraction measures have only succeeded in diverting FDI within the region from one economy to another and that, from a regional point of view, the public expenditures on these measures have been a dead-weight loss. Countries have been competing against each other to attract foreign investment. Instead, what is needed is a regional approach to investment attraction. This is precisely the approach that the MAP-REA and the CRM have championed through the proposal for a regional investment area to increase the overall level of FDI flowing into the region as a whole.

3.5. Regional human capital

The OECD PISA studies have shown that the Western Balkan countries lag other European countries in the educational performance among pupils in the final year of compulsory schooling (OECD 2020). Low levels of public expenditure on education have led to skills deficits, especially in rural areas, adversely impacting the skill levels of the labour force in the region. The Western Balkans had become a "super-periphery" of the EU, following a low-skill path of transition characterised by deindustrialisation through privatisation, mass unemployment and job loss leading to deskilling and the loss of human capital through the emigration of skilled workers (Bartlett, 2009). This, in turn, has led employers and foreign multinationals to focus on low-skill industries and the specialisation in the exports of low-skill goods, which undermined the upgrading of the workforce and weakened competitiveness (Bartlett, 2009: 33).

Studies of higher education revealed large skill mismatches in the graduate labour market in the Western Balkan in general (Bartlett et al., 2016; Bartlett & Uvalić, 2018) and in Kosovo in particular (Gashi & Bartlett, 2016). The region's low level of tertiary educational attainment was a contributing factor to poor macroeconomic performance during the global economic crisis (Živković & Panić, 2020). The recent inflow of FDI to the region has led to some upgrading of the skill base of exports, and yet the main driver of export growth in recent years has still been the medium-skill technology-intensive manufactures rather than the sophisticated high-skilled exports which characterise more dynamic and competitive economies (Shimbov, et al., 2019). All this points to the critical importance of having a skilled labour force in being able to take advantage of foreign direct investment to boost competitiveness. Indeed, a recent OECD report has put the problem of the low quality of the education system at the forefront of the competitiveness problem in the Western Balkans. The report states that: "Better education and more competencies are prerequisites to raising productivity, creating jobs, encouraging civic participation and making the region an attractive destination" (OECD, 2022: 23). Poor teaching quality, inadequate educational infrastructure and weak vocational education and training (VET) systems were identified by the OECD study as the most pressing problems.

3.6. Determinants of export competitiveness in the region and Kosovo

This section sets out to identify the key determinants of export competitiveness in the Western Balkans. The share of exports in GDP can represent export competitiveness. This is far lower in the Western Balkans than in the EU (see Table 4-1). Key determinants of export competitiveness are the size of a country represented by its population, foreign direct investment inflows and the education level of the labour force. Countries with relatively small populations stand to benefit more than larger countries from export-led growth as they do not benefit so much from economies of scale provided by a large internal market. Foreign direct investment is a key determinant of export performance, especially in the Western Balkans, as foreign multinationals engaged in outward processing seek to take advantage of a relatively low-cost labour force nearby. The education level of the labour force is an essential driver of export competitiveness as a higher-skilled labour force can produce a given quality at a lower cost than a low-skilled labour force. I also explore the interactions between FDI and the labour force's skills since foreign investors may pay attention to the skill level of the labour force when making their investment decisions. The model also distinguishes between EU and Western Balkan countries, and I allow for an interaction between these country groups and the education level of the labour force since unskilled workers may have a more difficult time finding a job in the Western Balkans, where unemployment rates tend to be higher than in the EU (Bartlett et al., 2021). The exact specification of the model is as follows.

$$\left(\frac{Export}{GDP}\right)_{it} = \beta_0 + \beta_1\, POP_{it} + \beta_2 \left(\frac{FDI}{GDP}\right)_{it} + \beta_2\, EducLF_{it} + \beta_3 WB6_i + \alpha_i + \varepsilon_{it}$$

Here, Export/GDP is the export competitiveness of each country at time t, POP is the population size of each country at time t, FDI/GDP is the inflow of foreign direct investment as a proportion of a country's GDP at time t, EducLF is the difference between the participation rate of the labour force with advanced education and the participation rate of the labour force with basic education in each country at time t, WB6 is a dummy variable having the value 1 for the Western Balkan countries and 0 for the EU countries, α_i is a set of unobservable characteristics of each country (such as cultural factors), and ε_{it} is the error term. I assume that the unobserved characteristics do not vary with the other explanatory variables in the model and use random effects estimator to run the model. I also assume that there are specific differences between the Western Balkan countries as a group and the EU countries as a group, such as the fact that EU countries are members of the Single Market, whereas the Western Balkan countries do not yet have a Common Regional Market established. In the econometric specification, I will also allow for interactions between the country groupings and FDI. The idea here is that there is a "Western Balkan" effect that limits the inflow of foreign direct investment, as demonstrated by Estrin and Uvalić (2014). Data are taken from the World Bank World Development Indicators database for the years 2012-2019.

Table 3-1: FDI/GDP and education level of labour force, 2019

	Exports/GDP	Population (millions)	FDI/GDP	LFAE	LFBE	EducLF
Albania	31.3	2.8	7.8	62.7	24.0	38.8
Bosnia and Herzegovina	40.6	3.3	2.2	74.6	22.0	52.6
Kosovo	29.3	1.8	3.6	77.0	15.4	61.6
Montenegro	43.8	0.6	7.5	79.7	25.4	54.3
North Macedonia	62.4	2.1	4.4	81.1	32.7	48.3
Serbia	51.0	6.9	8.3	71.8	33.9	37.9
WB6	43.1	17.6	5.6	74.5	25.6	48.9
EU	66.3	513.5	10.5	78.8	34.3	44.5

Source: World Bank "World Development Indicators" online database. Note: LFAS = Labour force / working population with advanced education; LFBS = Labour force / working population with basic education; EducLF = LFAS – LFBS

As can be seen from Table 1, the export intensity of the Western Balkan economies is lower than the EU, as is the inflow of FDI compared to the level of GDP. The variable LFAE represents the participation rate of workers with advanced education (i.e., tertiary education), while LFBE represents the participation rate of workers with only basic education (i.e., primary and lower secondary education). The difference between these two variables is shown in the final right-hand side column as EducLF, i.e., the relative education level of the labour force. The skill gap in the Western Balkans is somewhat higher than in the EU. In the former group of countries, unskilled workers are less active in the labour market than skilled workers in the EU. The effect is not large, although there is a relatively large labour force participation gap in Kosovo (61.6 percentage points), which is exacerbated by the very low participation rate of women with only a basic level of education.

Table 4-2 shows the results of the panel data regression estimation of the model of export competitiveness in the EU member states and the Western Balkans from 2012-2019.[12] Based on this model, the predicted export competitiveness gaps can be computed as the residuals from the model (i.e., the gap between the actual and the predicted export intensity). The results show that Kosovo's export performance (exports/GDP) is below the level predicted by the econometric model for the given values of the independent variables. If Kosovo had followed the average pattern for all European countries, her export intensity would have been more like 44% of GDP in 2019 rather than the observed 29% of GDP, implying an "export competitiveness gap" of 15%. This is the weakest

[12] For this exercise Croatia, which formally joined the EU in 2013, is included among the EU members states

performance in the Western Balkans but above that of some EU member states such as Croatia and Greece. In contrast, the Western Balkans's two "manufacturing" economies (North Macedonia and Serbia) outperform their expected export intensity.

Table 3-2: Export intensity - panel data regression 2012-2019

Dependent variable: Exports/GDP	1			2			3		
	coefficient	**z statistic**	**P > |z|**	**coefficient**	**z statistic**	**P > |z|**	**coefficient**	**z statistic**	**P > |z|**
Population	-0.471**	-2.51	0.012	-0.409**	-2.03	0.043	-0.407**	-2.05	0.041
FDI	-0.038***	-6.67	0.000	-0.034***	-5.09	0.000	-0.213	-0.89	0.373
EducLF	0.564***	4.58	0.000	0.873***	3.91	0.000	0.832***	3.77	0.000
WB6	-33.67***	-3.62	0.000	-13.09	-0.97	0.335	-26.861**	-2.08	0.037
FDI*WB6				0.329	1.05	0.292	3.132***	4.95	0.000
EducLF *WB6				-0.484**	-1.99	0.046	-0.229	-0.97	0.333
FDI* EducLF							0.004	0.77	0.442
FDI* EducLF *WB6							-0.054***	-4.84	0.000
Constant	48.202***	4.75	0.000	33.458**	2.51	0.012	35.166***	2.80	0.005
R-squared Within Between Overall	0.2190 0.2741 0.2733			0.2482 0.2592 0.2590			0.2697 0.2583 0.2584		
N (groups)	264(33)			264(33)			264(33)		
Wald chi2(8) Prob > chi2	109.47*** 0.00			123.37*** 0.00			314.24*** 0.00		
Marginal effects				**dy/dx**	**zstat**	**P > |z|**	**dy/dx**	**zstat**	**P > |z|**
FDI				0.026	0.46	0.646	0.101***	3.34	0.001
FDI: EU				-0.036***	-5.09	0.000	-0.251***	-4.06	0.000
FDI: WB6				0.295	0.95	0.344	0.731***	4.20	0.000
EducLF				0.785***	4.28	0.000	0.769***	4.18	0.000
EducLF: EU				0.873***	3.91	0.000	0.868***	3.87	0.000
EducLF: WB6				0.389***	4.04	0.000	0.184***	3.11	0.002

Note: random effects model using robust standard errors.

The first set of columns (model 1) show the basic model in which the competitiveness of exports is determined by population size, the inflow of FDI in relation to GDP, and the level of education of the labour force. These variables explain over one quarter of the variation in export competitiveness. As expected, the results show that larger countries are less reliant on external competitiveness than smaller countries. On average, a country with a one million smaller population than another has on average a share of exports in GDP that is 0.4-0.5 percentage points greater. The inflow of FDI is negatively related to export intensity, indicating that overall, FDI is market-seeking and serves the host markets, but the effect is small. The most important factor in determining export competitiveness is the labour force's education level. Countries with a larger gap between the proportion of the labour force with advanced education and the proportion with basic education have a significantly lower share of exports in GDP. This reflects the increasing sophistication of export markets and the need for a highly skilled workforce to achieve international competitiveness.

Model 2 allows for a different relationship between FDI and export competitiveness for EU countries and Western Balkan countries, and similarly for the education variable. The model behaves similarly to the first model, except that the negative relationship between FDI and export competitiveness is a feature of the EU member states rather than the Western Balkans. This may be explained as an effect of the EU Single Market, which permits a free allocation of market-seeking investment throughout the Union. Another difference to model 1 is that the effect of the education variable is stronger in the EU member states than in the Western Balkans, suggesting more efficient education systems in those countries and the greater sophistication of their exports in terms of the need for skilled labour in production.

Model 3 allows for interaction between FDI inflows and the workforce's education level, also distinguished by country groups (EU and Western Balkan Six - WB6). This is done since it is likely that the effect of FDI on export competitiveness depends on the education and skill level of the workforce, which determines productivity. The results of model 2 reflect that of model 1 with a few differences. The effect of country size is slightly lower in model 2, with a one million smaller population giving only a 0.4 percentage point increase in export intensity. The main effect of FDI is no longer significant, but the interaction terms with WB6 and the composite triple interaction are significant. The main effect of education level is still significant, and while the simple interaction with FDI is not significant, the interaction with WB6 and the triple interaction are both significant. To interpret these interactions, the marginal effects need to be calculated.

The calculations in the lower right corner of the table show the marginal effects of these interactions under the heading "dydx", i.e., the overall slope of the regression line.[13] Here, the overall effect of FDI on export intensity is shown to be positive and significant, with a modest effect: a one percentage point increase in FDI intensity gives rise to a 0.14 percentage point increase in export intensity. Distinguishing between country groups, the model shows that FDI does not significantly affect export intensity in the EU group of countries (because it affects both absolute exports and absolute GDP equivalently). In the Western Balkans, however, the effect of FDI is strongly positive, with a one percentage point increase in FDI giving rise to an increase in export intensity of 1.3 percentage points. This latter relationship indicates that FDI in the Western Balkans is oriented towards export processing rather than being market-seeking. Foreign investors are taking advantage of the FDI attraction policies, which provide subsidies to attract foreign investors. However this may have little impact on the upgrading of the competitiveness of local businesses since the import content to the multinational corporations operating in the region is high (Krasniqi et al., 2022). Nevertheless, the inflow of FDI contributes to overall export competitiveness in the Western Balkans, and the right complementary policies to ensure backward linkages to the local SME sector could become a major promotor of local economic development. Further analysis shows that this effect is predominantly due to the impact of FDI on exports from the three manufacturing countries of the region.

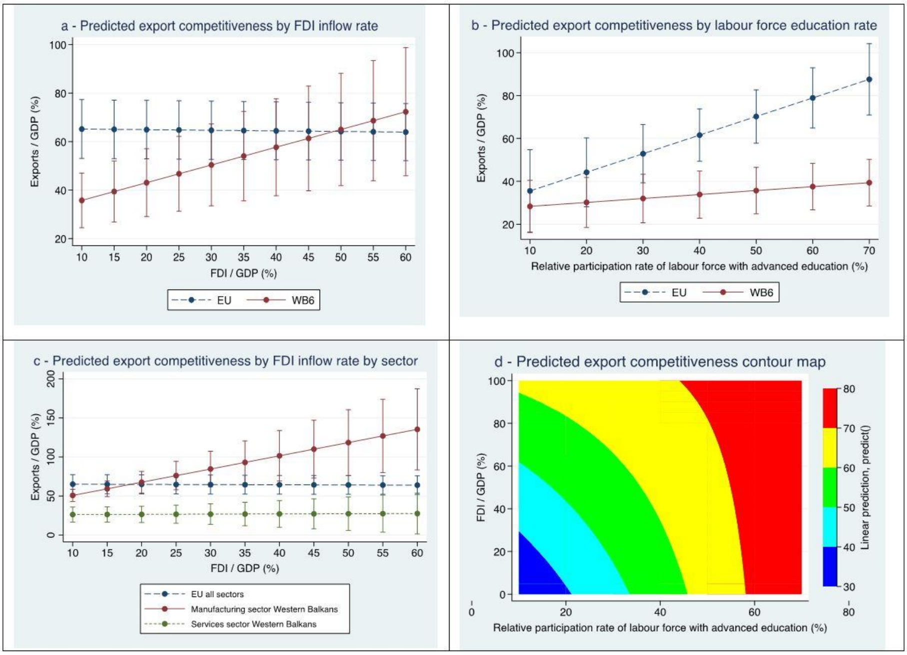
In the interactive model, the marginal analysis shows that the relationship between education level and competitiveness is strong: a one percentage point decrease in the participation rate of the labour force with only basic education increases export intensity by 0.8 percentage points – a substantial effect. In the EU countries, however, a percentage point improvement in the education level of the labour force gives a slightly stronger 0.9 percentage point increase in export intensity. In the Western Balkans, this relationship is weaker, with a one percentage point improvement in the education level of the labour force, giving only a 0.13 percentage point increase in export intensity. This relatively weak connection between education and export competitiveness in the Western Balkans may be due to a less well-performing education system combined with a less high-skilled composition of exports and/or a higher level of skill mismatch in the labour force. Overall, while the education of the labour force makes an important contribution to competitiveness in the EU it does not seem to do so in the Western Balkans. Yet, the strong EU effect demonstrates a high potential for improvement in the Western Balkans. This finding emphasises the

[13] These calculations are done with the STATA "margins" command.

importance of post-compulsory education for the competitiveness of a country and that the quality of that education matters.

While the overall effects of FDI and education on export competitiveness can be seen from Table 4, the interaction between FDI and education levels cannot be so easily observed from the reported regression output, either overall or between country groups. To better interpret the data, I turn to diagrammatic methods, as shown in Figure 3-2. The first part of the Figure, panel (a), shows the predicted export competitiveness by FDI inflows divided into EU and Western Balkan country groups. While FDI inflows within the EU have little impact on export competitiveness because these are mature economies and FDI is mainly market-seeking, FDI strongly impacts export competitiveness in the Western Balkan countries. Panel (c) shows that this effect is strongest in the manufacturing economies of the region – Bosnia and Herzegovina, North Macedonia, and Serbia, compared to the service economies of the region – Albania, Kosovo and Montenegro. As explained above, the manufacturing economies have succeeded in attracting a large inflow of FDI into the export processing sectors, which probably accounts for the strong relationship between FDI inflows and their export competitiveness.

Figure 3-2: Predicted export intensity across by FDI intensity and level of labour force education



Panel (b) in the Figure relates export intensity to the education level of the labour force (as expressed by the EducLF variable). This demonstrates the strong effect of the gap between the participation rate for workers with advanced education compared to the participation rate of those with only basic education in the EU and the weaker effect in the Western Balkans. The difference, as suggested above, is likely due to the weaker education systems and the relatively low quality of education in producing effective labour force skills that reduce the export competitiveness of those countries.

Finally, panel (d) of the Figure shows a contour plot relating the combined effect of FDI inflows and the education level of the labour force. This reveals a production possibility frontier for export intensity, with each contour corresponding to a defined level of exports/GDP. High levels of FDI inflow and low levels of labour force education can produce as much exports as a low level of FDI inflow and a high level of education of the labour force. In effect, FDI and labour force education are a form of substitutes for each other. The first implication is that FDI (i.e., the importation of foreign productive capital and technology), especially to the Western Balkans, is a way to generate export competitiveness based on the employment of a low-cost unskilled labour force. The second implication is that an alternative strategy to generate an equivalent level of export competitiveness, if large FDI inflows are not desired, or not possible due to country risk factors, would be to produce a well-educated labour force to raise the level of domestic human capital.

3.7. Industrial policies promoting export competitiveness

Industrial policies can improve the private sector's competitiveness by supporting the development of regional supply chains to provide inputs for multinational companies and upgrade the technological level of local businesses (Krasniqi et al., 2022). They can also support clusters of local businesses to increase business efficiency and reduce barriers to entry in specific markets (Petrović-Ranđelović et al., 2018). Smart specialisation strategies can be used to support sectors with a comparative advantage and to encourage regional research, innovation, and technology transfer (Bartlett et al., 2019). Successful industrial policies may also involve better regulation, ensuring the rule of law, and reducing the barriers to SME start-up and growth.

Industrial policy in the Western Balkans has been promoted on a regional basis by SEEIC, which has established a Working Group on Industrial Policy to improve industrial competitiveness in line with EU standards and practices such as Smart Specialisation Strategies (S3) and to develop regional industrial value chains in priority sectors. As part of the MAP-REA and more recently, the CRM, the SEEIC supervises the Regional Investment Reform Agenda (RIRA) and associated policies to promote the entry of new firms and provide investor protection and investment promotion. The RIRA is coordinated by the RCC along with individual-economy Investment Reform Action Plans (IRAPs). This investment promotion programme is designed to promote foreign direct investment in the region. Key policy reforms within RIRA relate to improving regulatory standards for business establishment, taxation, investment attraction incentives, protection of intellectual property rights, and harmonisation with EU regulations and international best practices. SEEIC has established an Industrial Policy Working Group to analyse, design and coordinate national industrial policies by sharing information and knowledge about best practices. It aims to improve industrial competitiveness by establishing regional supply chains and their integration into European and global value chains. According to the CRM Action Plan, industrial policy supports priority sectors, SME development and entrepreneurship, especially youth and female entrepreneurship, start-ups, and early-stage business formation.

Developing a regional industrial and innovation area is the most ambiguous element of regional cooperation proposed within the CRM. Although it aims to coordinate national industrial policies, only Montenegro, North Macedonia, and Serbia have adopted industrial strategies (OECD, 2021). These industrial strategies are geared toward increasing investments in the manufacturing sector, facilitating innovation, and supporting technology transfer through training and promoting an exchange of technology. The regional industrial and innovation area encourages the creation of networks of industrial incubators and technology and science parks throughout the region. Networks of excellence and technology transfer programmes are to be established to facilitate collaboration between research and industry, as well as smart specialisation strategies. It also aims to introduce mechanisms for diaspora knowledge transfer. These industrial policies are appropriate for the manufacturing economies of the region but probably not so much for the service economies such as Kosovo. There, a different set of industrial policies would be appropriate, based upon developing the high value-added services sectors of the economy.

3.8. Kosovo and FDI in a regional investment area

In 2019, Kosovo attracted USD 304 million in net FDI inflows, or 3.8% of its GDP (Kosovo Agency of Statistics, 2019). In recent years, FDI has gone predominantly into non-tradeable sectors, primarily real estate, leasing activities, financial services, and energy. In 2011-21, real estate accounted for some 60% of FDI inflows, with another 12% going into financial and insurance activities (EBRD 2022). Investment in mining and agriculture and other tradable sectors such as manufacturing has been very low. Over half of all FDI has come from Germany, Switzerland, Austria, and the United States, all countries with a large Kosovan diaspora that primarily invest in real estate. Despite low labour costs, Kosovo has not managed to attract much FDI to its manufacturing sector. This has accounted for only 2% of FDI inflows over the last decade (EBRD, 2022). Financial support for special economic zones and industrial parks has been ineffective in attracting FDI. Physical and social infrastructure gaps are significant, limiting the country's attractiveness to foreign investors (IMF, 2022).

Although Kosovo does not have a comprehensive strategy for attracting FDI, the Law on Foreign Direct Investment gives equal treatment to foreign and domestic investors and offers protection for foreign investors. In addition, the Law on Strategic Investments lists priority sectors: energy, infrastructure, mining, transport and telecommunication, tourism, processing industry, agriculture and food industry, health, industrial and technological parks, and wastewater and waste management. The Law provides state-owned property and supports access to basic infrastructure. The Kosovo Investment and Enterprise Support Agency (KIESA) promotes industrial clusters in the special economic zones but does not offer special investor incentives to attract investments, which are directly negotiated with the government on a discretionary basis. However, there is a flat corporate tax rate of 10% and value-added tax advantages, including deferments and exemptions for raw materials and machinery imports. According to the Law on Economic Zones, KIESA supports investment in special economic zones. A revision to the Law on Foreigners in 2017 removed the labour market tests for work permits issued to third-economy nationals, facilitating the inflow of foreign direct investment and improving the economy's attractiveness to FDI inflows. Kosovo has selected automotive light manufacturing as a targeted priority sector, along with ICT, with Germany, Austria, and Switzerland selected as target markets for investor outreach (2nd annual report on the regional economic area, RCC 2019). As mentioned above, it is unlikely that Kosovo will be able to replicate the success of North Macedonia and Serbia in attracting manufacturing FDI to the motorcar components industries. Instead, Kosovo should focus on developing services exports based on the promotion of small and medium-sized enterprises (SMEs), new high-tech and digital start-ups, and the promotion of youth entrepreneurship and female entrepreneurship and on a more highly skilled and better-educated labour force.

3.9. Kosovo's educational system and human capital development

Kosovo maintains a high level of participation in the education system comparable to other European countries (Gashi, 2020). However, the quality of education is problematic. According to the 2018 Programme for International Student Assessment (PISA), the educational performance of 15-year-old pupils is relatively low in international comparisons, with Kosovo scoring lowest among the Western Balkan economies in reading, maths and science performance tests (Bartlett et al., 2020). About four-fifths (79%) of 15-year-olds failed to reach a minimum level in reading compared to 23% of pupils in OECD, with similar outcomes in maths and science tests. The poor quality of education is also observed when analysing the success in achievement tests in the 9th grade; reports from the Ministry of Education, Science and Technology show that average test points fell over three consecutive years from 2016 to 2018 (Gashi, 2022). The PISA 2018 report furthermore shows that many schools lack adequate educational materials and infrastructure and that as many as 86% of pupils are taught in schools where the lack of educational materials severely hinders learning. Schools lack adequate IT infrastructure, and few teachers have the skills needed to teach computer programming and related digital subjects (Gashi, 2022).[14] The PISA 2018 test scores also reveal wide inequalities in educational performance, with three-quarters of pupils in Kosovo being classified as low achievers, scoring below the minimum level of reading proficiency, compared to just one-fifth in the OECD countries and the worst outcome in the Western Balkans. There is a large effect of socio-economic inequality in these outcomes, with a large gap in the share of pupils from poorer families (86%) falling into the category of low achievers than of more prosperous families (66%) (Bartlett et al., 2020).

In the higher education system, there is also a continuing concern over the quality of the education provided. Often, study programmes have not been updated to meet the latest changes in the labour market and to keep pace with the latest technological developments. A graduate survey in 2015 showed that 48% of respondents considered that better teaching methods would have improved their job prospects and a similar proportion thought

[14] The new Education Strategy 2022-2027 places a strong focus on the digitalisation of schools and may go some way to overcoming these problems.

better-qualified professors were needed (Gashi & Bartlett, 2016). Many employers find that graduates lack the essential soft skills to perform their jobs adequately, while at the same time, there is a severe problem of skill mismatch among the graduate labour force. The cited survey revealed that more than half of graduates (53%) experienced vertical skill mismatch, revealing a large problem of under-employment in relation to skills. It is of particular concern that the labour force in Kosovo has a relatively low level of digital skills, with less than a third having basic or above basic digital skills in 2019 (OECD, 2022).

3.10. Conclusions: lessons for Kosovo

According to the most recent assessment by the European Commission, Kosovo lacks "a coherent policy for industry development throughout the supply chain" (European Commission, 2021: 88). This is hardly surprising since the basis of economic policy in Kosovo has been built along the lines of neoliberal pro-market economics, with a disdain for active industrial policies (Uberti, 2014). In recent years, industrial policy has become more acceptable in mainstream EU policymaking (Bartlett, 2014). The question is: which type of industrial development should Kosovo policymakers aim to support? The main recommendation of this chapter is that Kosovo's industrial policies should dovetail with regional cooperation policies in promoting services exports through CEFTA, engage in the regional approach to FDI attraction to avoid a race to the bottom while avoiding a simple replication of the industrial policies followed by the manufacturing economies of the region and increase public investment in a high-quality education system capable of producing a labour force with more advanced skills to support a competitive economy. Overall, Kosovo's industrial policy should focus on the services sector, promoting new high-tech and digital start-ups and SMEs, supporting youth and female entrepreneurship, and ensuring a more highly skilled and better-educated labour force.

As the discussion and analysis presented in this chapter has shown, regional cooperation can benefit economic competitiveness along several dimensions. The first of these is in international trade, and Kosovo is an active party to the CEFTA free trade agreement in the region. As the studies outlined above have shown, this has improved the export competitiveness of its members, among whom Kosovo was an early beneficiary. However, the trade flows induced by CEFTA have led to a divergence among the economies of the Western Balkans, with some specialising in manufacturing and others in services sector trade (which inter alia includes construction activities, transport, tourism, financial services and business services). Kosovo is among the latter group of countries in the region, and so stands to benefit from the adoption of the CEFTA Additional Protocol 6 on the liberalisation of services trade. Therefore, Kosovo should engage actively in the CEFTA programming and policymaking bodies to leverage its comparative advantage in services.

An additional essential element of regional cooperation that has become formalised through the adoption of the CRM Action Plan is the effort to create a regional investment area and coordinate individual countries' investment attraction policies. This is designed to avoid a race to the bottom, and so should benefit all participants, including Kosovo. So far, the recent increase in the inflow of FDI to the region has benefitted the manufacturing sectors in a few countries, especially North Macedonia and Serbia and, to some extent, Bosnia and Herzegovina. Inflows of FDI to the other countries have mainly been into tourism and construction, the latter especially so in Kosovo. Policymakers should recognise this divergence and the difficulty that latecomers to the process might experience in seeking to attract manufacturing investment. Therefore, Kosovo should engage in the regional investment area by attracting foreign direct investment into the services sector. Developing investment in services could enhance and reinforce the existing comparative advantages in this sector. For example, investments in the construction sector could develop a competitive construction sector industry that could export its products to neighbouring countries in the region. Comparative advantages in high value-added services through the investment in travel and tourism services and high value-added business services could also be expanded through engagement with the regional cooperation bodies that have been set up to support the regional investment area. Public investments in the digital sector, opening new opportunities for young people to establish their own small enterprises based on high-tech start-ups, can also be subsumed within the services sector framework.

Key to developing a successful services-based industrial policy is an improvement to the education sector and the development of labour force skills. Kosovo has neglected public investment in education, following the neo-liberal small-state policies implemented during the UNMIK period and continued by elected governments following independence. The econometric analysis developed above reveals the need for a strategic choice among potential variants of industrial policies. This has shown that there is a trade-off between (i) a development strategy that relies on large inflows of FDI taking advantage of a relatively low-skilled, low-wage labour force and

(ii) an alternative strategy of a lesser reliance on FDI inflows accompanied by a greater public investment in education and the skills of the labour force to support a competitive service sector economy, focused on exporting high value-added services (rather than low value-added semi-processed manufactured goods). Given the first-mover advantages already attained by other countries in the region in attracting manufacturing investment, it would seem appropriate for Kosovo to engage in the regional cooperation process based on the latter strategy. This would involve a higher level of public investment in the education system at all levels, including primary education, post-compulsory secondary education especially vocational education, and higher education. It would require raising per-pupil allocations for school buildings, equipment, and educational materials, improving quality assurance mechanisms, and updating the curricula. Kosovo would also benefit from taking advantage of and actively engaging in regional cooperation initiatives for the mobility of tertiary-level students and university research and teaching staff to gain knowledge and expertise from joint programmes with neighbouring countries.

Thus, policymakers in Kosovo should consider developing an industrial strategy to increase investments in the services sector, facilitate services innovation, and support technology transfer in the services sector.[15] They should become more involved in SEEIC's Industrial Policy Working Group, established to analyse, design, and coordinate tailored industrial policies and share information and knowledge about best practices. The aim should be to leverage regional cooperation institutions to support new services industries that would increase export competitiveness, *inter alia,* by participating in regional supply chains and their integration into European and global value chains. A Kosovo industrial policy should support SME development and entrepreneurship, especially youth entrepreneurship, female entrepreneurship, start-ups, and early-stage firm formation. Overall, Kosovo could benefit greatly from a greater engagement in regional cooperation initiatives, especially in trade, investment, and mobility. If carefully designed in accordance with the real strengths of the Kosovo economy and people, such a service-based industrial policy could lead to a step-change in competitiveness and an enhancement of the rate of economic growth, leading to increased prosperity.

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15 A recent World Bank report has referred to the experience of Ireland in developing a services sector based industrial strategy (World Bank 2021b)

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CHAPTER 4

THE COMPETITIVENESS OF EXPORTS FROM MANUFACTURING INDUSTRIES IN CROATIA

Nebojša Stojčić

Abstract

The growth and development perspectives of small and open economies are closely tied to the competitiveness of their exporters. By selling at the international market, these countries gain access to valuable knowledge and technology that add to the competitiveness of exporters and spill over to the domestic market through vertical and horizontal linkages. These spillover mechanisms are particularly pronounced in manufacturing industries. For this reason, policymakers and academics devote a great deal of attention to ways of building export competitiveness in manufacturing. This chapter aims to explore the competitiveness of Croatian manufacturing exporters in the years after the country joined the European Union. Croatia entered transition as one of its forerunners. Delayed integration in global and European economic flows, severe war consequences, and domestic institutional weaknesses have resulted in severe deindustrialisation and loss of much of this initial competitiveness. Several studies have pointed to immediate gains from EU accession that manifested in higher export competitiveness. This chapter builds on that literature and explores whether and due to which factors the competitiveness of Croatian manufacturing industries change once the country was in the European Union family of nations. Lessons are discussed for the competitiveness of Kosovar manufacturing industries.

Keywords: manufacturing, competitiveness, export, Croatia.

4.1. Introduction

It is often said that nations' ability to compete and provide their citizens with a better standard of living is closely tied to the international competitiveness of their firms and industries (Stojcic, 2012). By delivering their products to international markets, nations gain access to means to finance their imports and, more importantly, access to knowledge and technology that can serve to improve the competitiveness of both domestically oriented and exporting firms. This process of "learning by exporting" (Bernard and Jensen, 1999) has gained particular attention in research on the export competitiveness of industries in less advanced economies (Hobday, 2003), particularly those in transition from middle to high-income levels. In a globalising world, export competitiveness is high on policy makers', academics', and businesses' agendas (Vuksic, 2005). Together, all of them are searching for ways to improve the ability of their firms and industries to stand the test of international markets.

A question of relevance for national competitiveness is one of the sectors on whose shoulders it rests. The academic literature recognised a long time ago that the transformation of economic structure from primary over secondary to tertiary activities occurs as nations progress towards higher levels of development (Kuznets, 1957; Chenery, 1960). The manufacturing sector is particularly relevant in the context of economies advancing from middle to high-income levels. The advancement along the manufacturing axis of development is relevant not only for the contribution of this sector to growth but, more importantly, for its ability to generate spillovers within and between sectors (Stojcic and Aralica, 2018a). This creates impetus to job creation and growth in other parts of the economy.

Broadly speaking, nations can climb the competitiveness ladder by mastering production capabilities or developing innovation capabilities. Structural weaknesses of their innovation systems make advancing less advanced economies along the innovation ladder uncertain and unlikely (Vujanovic et al., 2022). As a result, their integration in global value chains mainly occurs through production activities and manifests itself in forms such as the assembly of products created elsewhere (Radosevic, 2017) and the application of technologies embodied in machinery, equipment and know-how (Cirera and Maloney, 2017). This is why, for most of them, integration in global value chains takes place through a backward integration pattern, i.e. by exporting products characterised with a high share of foreign value added (Stojcic et al., 2021). Over time, the manufacturing industries of such countries improve their competitiveness through gradual climbing along the production sophistication ladder (Lee, 2019), as experiences worldwide reveal.

Building on the above grounds, policymakers of many advancing economies have attempted to base their development strategies on the backs of manufacturing sectors. In these efforts, they often look for examples of countries that have walked the same path. This is the case with Western Balkan countries as well, where experiences of countries covered by previous waves of European Union enlargement and integration in regional, European and global economic integrations are often analysed as materials for lessons to be drawn. For many of these countries, the manufacturing sector, and its exporting part in particular, was pivotal in enhancing their competitiveness and securing their citizens a better standard of living. During COVID, the countries with functional and competitive manufacturing sectors also proved more resilient, implying that understanding manufacturing dynamics also has a sustainability dimension.

Among countries whose experience is relevant to Western Balkans and Kosovo, Croatia stands as particularly interesting. Croatia entered transition as one of the most advanced parts of the Central European economic landscape, expecting to be among the transition forerunners. The devastating war, late integration in international economic and political integrations, and internal structural and institutional weaknesses have diminished much of this initial competitive advantage (Stojcic et al., 2018). This was particularly evident in the manufacturing sector which lost much of its competitiveness and experienced severe deindustrialisation. After EU accession, several sectors have improved their export sophistication and competitiveness while new sectors have emerged on the back of digital transformation and positioned themselves at the world's technological frontier.

This contribution aims to assess the evolution of export competitiveness in the Croatian manufacturing sector. It provides a literature review on the factors that led to deindustrialisation in the years preceding EU accession before it applies dynamic shift and share analysis in the assessment of export trends after EU accession. The discussion then takes the place of the policy framework that can be used to promote manufacturing export competitiveness, a brief overview of policy aims, and some of the measures supporting exporters in their international efforts. The relevance of these lessons for industrial competitiveness in Kosovo is then discussed.

The chapter is structured as follows. The next section discusses academic contributions to export competitiveness in Croatian manufacturing during the past three decades. The third section empirically investigates recent developments in Croatian manufacturing competitiveness. The reflection on export competitiveness policies is then provided in section four, followed by implications of discussion and findings for Kosovo. Finally, section six concludes.

4.2. Literature review

During the past three decades, Croatia had a somewhat distinctive transition path. Complex internal, external, political, and economic factors such as the War of Independence, institutional framework development and pace of integration in regional, European, and international economic and political integrations have taken its toll on manufacturing export competitiveness (Bezić et al., 2011) but also shaped transition experience in a way unique to Central European landscape (Stojcic et al., 2018). As a result, its manufacturing competitiveness has frequently been out of focus in cross-country analyses of Central and East Europe covered by early waves of EU enlargement. Nevertheless, several studies have traced industrial competitiveness of Croatian manufacturing sector over decades which makes it possible to reconstruct the main milestones on this journey. Broadly speaking, the assessment of Croatian manufacturing competitiveness can be assessed up to the point of EU accession and after the EU accession.

Croatia was characterised by comparative advantages in products with low embodied value added and low export unit values throughout the transition. Its inter-industry trade was mainly concentrated in labour-intensive and raw-material-intensive activities (Buturac, 2009; Stojcic, 2012). Towards the end of the second decade of transition, the first signs of intra-industry specialisation across industries emerged (Stojcic and Hashi, 2011), but even in this trade segment, exports were characterised with low added value. Croatia was experiencing a loss of its manufacturing export competitiveness throughout the period, which was particularly evident in traditional industries such as clothing and textiles (Buturac, 2009). Several reasons have contributed to this, among which the most prominent one stands out as the late integration in European economic and political integrations (Stojcic and Aralica, 2018). In a situation when several Central European countries were advancing towards EU membership and, thus, enjoying the benefits of preferential access to markets of these economies, Croatian producers found themselves in a position that offset most of their competitiveness. Vuksic (2005) notes that the status of EU accession candidate countries increased exports between 30% and 90% for some Central and East European countries.

Part of the reason for these developments should also be looked for in the outcomes of the Croatian restructuring programme during the 1990s and early 2000s. While the Stabilization programme from the early 1990s managed curbing inflation and stabilising exchange rate, its success in achieving manufacturing efficiency has been only partial (Bezic et al., 2011). The reasons for this have been looked at as an overvalued exchange rate, lack of transparency in privatization and slow development of institutional framework (Vuksic, 2005), which became a too heavy burden for the competitiveness of the manufacturing industry, whose competitiveness was mainly based on unit labour costs and productivity gains, typical for cost-competitive advancing economies (Stojcic, 2012).

Croatian manufacturing exports were concentrated in several industries in the early years of the transition. According to Buturac (2009), by 2007, more than half of manufacturing exports were in the shipbuilding, manufacturing of coal, chemicals, machinery and equipment and food products and beverages. Signs of deteriorating competitiveness were present in several sectors, such as clothing, where the international business model was based on a B2B (business to business) principle and characterised by low added value and limited knowledge and technology intensity. At the time, the leading trade partner was the European Union, in particular Italy and Germany, but its export competitiveness to this market did not improve considerably, although the position was somewhat better than that of Western Balkan countries (Buturac, 2009).

The recession years have brought another shock to the Croatian manufacturing industry. Except for Greece, Croatia was the European country to experience the deepest recession dive that lasted longer than any other European country and heavily influenced its economy. However, during the later years of the crisis, from 2009 onward, the share of manufacturing in gross domestic value experienced a slightly increasing trend (Bogdan et al., 2015) but with the deteriorating technological intensity of manufacturing. Partly, this may be attributed to the structure of foreign direct investment inflows before EU accession. Vuksic (2005) found that FDI contributed marginally to the export competitiveness of Croatian manufacturing during precession years, while Bogdan et al. (2015) noted that less than 18% of foreign direct investment in this period had manufacturing as its destination. If one knows that in other Central European countries, FDI-generated spillovers were a major channel for improving the export competitiveness of manufacturers (Stojcic and Orlic, 2020) such findings can be more easily understood.

Empirical evidence from other studies has mostly confirmed the continuation of structural weaknesses of Croatian manufacturing exports. Stojcic and Hashi (2011) have attempted to quantify the reasons behind the changes in Croatia's manufacturing export competitiveness. Their findings reveal that over the years, the Croatian export structure shifted towards higher technology-intensive sectors, but within these sectors, Croatian producers have remained in low value-added segments of value chain. Buturac et al. (2019) attempted to quantify the sources of manufacturing export growth in Croatia and to quantify the overall contribution of manufactured product exports to the national economy using a constant market share and input-output model. Their results present one of the first evidence of improving Croatian manufacturing export competitiveness after the country's EU accession. An essential finding of the study is that these effects were not localised to the exporting segment of manufacturing but contributed indirectly to better performance and competitiveness of domestic entities involved in the value chain of exporters within manufacturing and other sectors of the economy.

Stojcic (2012) used firm-level data to assess the competitiveness of Croatian manufacturing firms on international markets. Using dynamic panel analysis, the study established that during the 1999-2007 period, Croatian manufacturing exporters had characteristics of price-competitive firms. They relied on cost reductions and improvements in labour productivity, a finding consistent with that of Vuksic (2005), in building their export competitiveness and were sensitive to wage increases. An interesting finding from the study was that it first highlighted the importance of agglomeration externalities and the relevance of export-targeting policies for building export competitiveness. This was particularly true for firms in small, sparsely populated areas where business infrastructure access often presents insurmountable obstacles.

In several later studies, attention has been devoted to the role of regional and local factors in building export competitiveness. Stojcic et al. (2014) examined how agglomeration externalities, innovation potential, firm size, ownership structure and concentration, and regional development level influence Croatian manufacturers' export competitiveness. In one of the first spatial analyses of export competitiveness at the regional level, the study identified the heterogeneous distribution of export intensities across Croatian regions in the range between 3% and 40% intensity but also spatial restructuring in the distribution of exporters that could have been caused with spillovers from export-oriented counties to their adjacent regions.

The results of the investigation have revealed that export-enhancing mechanisms operate within and between regions. Within regions, the export seems to be driven mostly by the presence of localisation economies, while the strongest mechanisms are found between regions. To this end, it appears that the export competitiveness of Croatian manufacturers has been mainly driven by lower foreign ownership concentration and innovation potential. Such a finding has implications for the profile of exporters as it signals that it is production-oriented domestic firms integrated into foreign value chains or producers of standardised products that are exporters. Another important implication of the study is related to the relationship between the level of local development and exporting, as the study signalled that less developed areas are more likely to seek opportunities beyond domestic borders.

In another investigation, Stojcic and Vojinic (2022) have explored how, at a local level, the structure of manufacturing exports influences entrepreneurial dynamics. Using the population of enterprises from 2007 to 2017 at the level of cities and municipalities, these authors examined the relevance of extensive and intensive export margins on firm entry, survival, and growth. The extensive margin, reflecting a diversified export structure, has been identified as the main channel of influence on local entrepreneurial outcomes within cities and towns, but its impact on other areas has mainly been negative. Thus, without balanced territorial policies, export promotion can likely contribute to spatial polarization and widening development gaps among cities and regions. Another important finding of the study is the effect of manufacturing through both of its margins on the entrepreneurial outcomes in other sectors of the local economy. Within cities, fostering manufacturing competitiveness induces positive effects in primary and retail sectors, suggesting that exporting creates growth opportunities through the supply of upstream inputs to existing and newly diversified exporters. However, at the same time, these processes induce adverse effects across the space, further adding to the thesis about spatially polarising effects of exporters.

Šelebaj (2020) explored the microeconomic aspects of Croatian manufacturing exports after EU accession. The study found that the relative share of exporters in the population increased along with their growth in export intensity and productivity recovery. Here, too, the strong effects of extensive export margins were identified as predominant in the work of Stojcic and Vojinic (2022), suggesting that the export activity of new exporters drives export improvement. After EU accession, the relevance of export intensity considerably increased among enterprises, suggesting that market reorientation was taking place. The study found, with means of empirical analysis, significant differences between exporters and non-exporters in total factor productivity, profitability, wages paid and unit costs of labour. While these differences were already present in the pre-accession period, they have become more pronounced following EU accession, particularly among continuous exporters.

Overall, during the early decades of transition, Croatia experienced deindustrialisation and a loss of industrial competitiveness that was not offset before it entered the EU. Throughout all this time, exporters proved more resilient and able to fight negative industrial trends in the domestic market. These firms were more productive, more cost-efficient and able to pay higher wages to their employees. However, it was the diversification of exports that was driving these trends. This process was not instantaneous, which can be established from the strongest effects found among continuous exporters and the required accumulation of relevant competencies and capabilities.

4.3. Manufacturing export competitiveness in Croatia post-EU accession

According to the National Recovery and Resilience Plan 2021-2026 (NPOO) for Croatia, even in post-accession years, Croatian exports were characterised by low-value-added goods and concentrated to several regional markets or markets where Croatian exporters have a long tradition of exporting. A relatively small number of Croatian firms export (around 15%), accounting for 51% of employment, 62% of investment and 66% of sales revenues. Croatia also exports considerably less highly technology-intensive products (8,1%) than the EU (17,9%). Nevertheless, since the EU accession, the performance in the EU market has been steadily increasing. This section employs a "shift and share" analysis approach to the Croatian manufacturing export competitiveness to assess factors that contributed to this trend.

A shift and share technique is often applied to analyses of sectoral competitiveness. In the Croatian context, it was applied by Hashi and Stojcic (2011) to analyse export competitiveness in the pre-accession period and by Butorac et al. (2019) for the early years of EU accession. This technique allows the decomposition of changes in the volume of exports from country i to market/country k to three components defined as competitiveness, demand, and restructuring effects. The methodology rests on a somewhat simplified assumption that the demand of the partner entity (country or EU) in each industry and its demand for imports of that same industry from the reporting country increase proportionally. When divergence between these two ratios happens, it is said that a "shift" has taken place (Selting and Loveridge, 1994). Following Hashi and Stojcic (2014), the change in exports (x) of industry *i* from country *j* to country *k* in two periods can be decomposed as:

$$\begin{aligned}\Delta x_{ijt} = x_{ijt-n}&(\Delta M_{kt}/M_{kt-n}) \\ &+ x_{ijt-n}[(\Delta M_{ikt}/M_{ikt-n}) - (\Delta M_{kt}/M_{kt-n})] \\ &+ x_{ijt-n}[(\Delta x_{ikt}/x_{ikt-n}) - (\Delta M_{ikt}/M_{ikt-n})]\end{aligned}$$

In the formula above, the exports of manufacturing (*i)* from Croatia (*j*) to EU market (*k*) can be decomposed into three components commonly defined as the: i) general increase in demand in entity *k*, an increase in the demand of entity *k* in the manufacturing sector that exceeds general increase for import demand and improvement in the competitiveness of manufacturing from country *j* in relation to other importers in entity *k.* To this end, x_{ij} refers to the value of exports from Croatian manufacturing in period *t*, while M_k and M_{ki} refer to the total imports and imports of manufacturing in the EU.

An interpretation of the above terms is required before the presentation of results. The term $x_{ijt-n}(\Delta M_{kt}/M_{kt-n})$ stands for the general demand component. It signals how would the demand for Croatian manufacturing exports in the EU develop when its growth rate would be identical to the one of the overall demand for imports in the EU. $x_{ijt-n}[(\Delta M_{ikt}/M_{ikt-n}) - (\Delta M_{kt}/M_{kt-n})]$ is a structural effect component that reveals if the demand for Croatian manufacturing in the EU market is growing at above- or below-average rate. A positive sign on this component would imply that the demand for manufacturing in EU was growing faster than its overall demand. The last component is $x_{ijt-n}[(\Delta x_{ikt}/x_{ikt-n}) - (\Delta M_{ikt}/M_{ikt-n})]$. It is known as the competition effect and indicates whether the growth of Croatian manufacturing in the EU market is higher than the rate of export growth from producers from other EU and non-EU countries. This component is particularly interesting as it signals industrial competitiveness and is often considered endogenous (Hashi and Stojcic, 2014).

Each component is weighted with the factor x_{ijt-n} which can take the value of a dependent variable in the base or terminal year or in preceding year. When a former approach is employed, we are talking about the static shift and share analysis. Such practice rests on the simplified assumption that the export structure remains constant throughout the analysed period (Barff and Knight, 1988; Selting and Loveridge, 1994). Further biases were identified due to assigning weights to particular change components in the market share, primarily change of demand. Barff and Knight (1988) have proposed a solution to this problem through a dynamic shift and share analysis. This estimates the three components annually and then adds them together. Such an approach solves bias issues and allows interpretation on an annual basis and for the aggregate period.

To assess trends in Croatian manufacturing export competitiveness, we apply dynamic shift and share analysis to the most recent available data taken from Eurostat covering the 2016-2020 period. The choice of the period is shaped by data availability. The data for EU demand does not include Malta and Luxembourg as data for these countries are classified or not available, and Estonia for 2017 as such data were also not available.

Table 4-1. Dynamic shift-share analysis of changes in Croatian exports (in thousand EUR) 2016-2020.

Period	Δx_{ijt}	Demand effect	Structural effect	Competition effect
2017	549.487,6	448.916,6	216.425,5	-115.854,5
2018	215.004,7	138.628,9	50.309,47	26.065,29
2019	503.942,4	99751,12	83.003,23	321.188,0
2020	-546.248,7	-578.772,1	-227.147,3	259.670,7
Total	722.186,0	108.524,52	122.590,90	491.069,49

Source: Author calculations based on Eurostat data

Table 4-1 provides results from dynamic shift-share analysis. It is evident that, overall, the volume of exports to the EU market increased in the years before the pandemic and after EU accession. This trend was present in all years except for 2020 when the Covid pandemic started. Positive values can be observed in all three cases by looking at three components. Accordingly, we find positive demand, restructuring and competitiveness effects. The latter two are particularly relevant as the positive restructuring effect signals that during the analysed period, demand for Croatian products in the EU market grew at above-average rates compared to the overall growth of EU demand. Also, during the observed period, a positive competitiveness effect has been observed, suggesting that improvements have also taken place along this dimension.

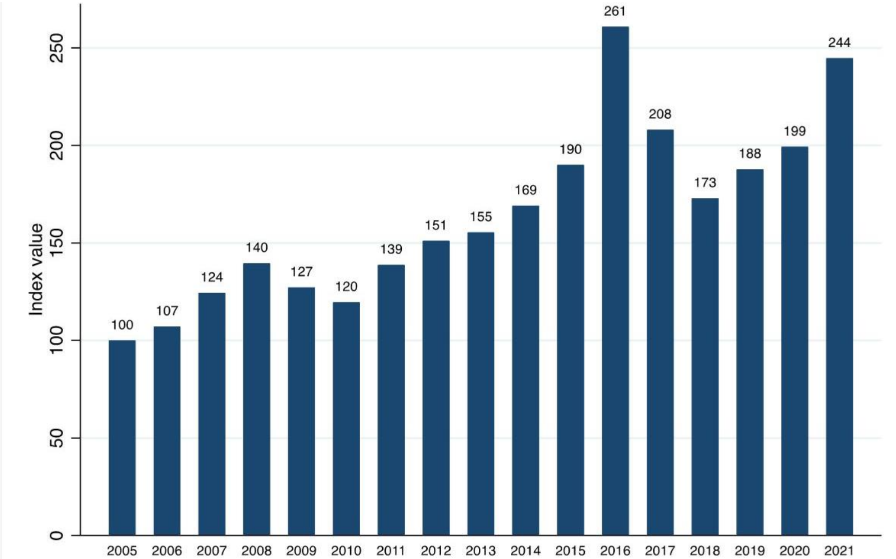
Looking at the magnitude of each component, it is evident that competitiveness gains are almost four times stronger than those attributed to the other two components. This makes it easier to understand Selebaj's (2020) findings about the widening export premiums of Croatian exporters in the years following EU accession. Interestingly, even during the pandemic, the competitiveness effect was positive, partially offsetting the adverse effects of overall EU demand and demand for Croatian products.

How do these findings correspond to those from the pre-accession period? Hashi and Stojcic (2011) applied dynamic shift-share analysis for the 2001-2007 period using the same data source but focused on the EU15 market. Their findings suggest that the strongest impulse to export came from increased EU15 demand in that period, while the restructuring effect was negative. The competitiveness effect was positive but four times smaller than the demand effect.

Two implications arise from these findings. First, there has been a shift in the drivers of improvements in Croatian export competitiveness. While previously, better export performance was mainly due to the rising EU demand, in recent years, the main impulse to increase exports has come from the better competitiveness of Croatian exporters. Second, whether this improvement has been along a production-driven path or has Croatian manufacturers shifted their competitive profile towards an innovation-driven path. To answer the later question, a closer look can be taken into export unit values and the innovation performance of Croatian exporters. Eurostat provides information on both data categories. As Figure 4-1 reveals, Croatian manufacturing exports experienced rise in export unit values over both pre-accession and post-accession periods. This growth has been particularly pronounced after 2016. Compared to 2005, our base year, the export unit values have increased about twice. This is the first sign that structural change has taken place in Croatian manufacturing after EU accession and that this change went toward higher export sophistication, a process relevant to improving export competitiveness.

To properly position the above finding, a closer look needs to be given to the innovation behaviour of Croatian exporters. Through such an approach, one can discern between production and innovation-driven competitive profiles of exporters. Such distinction is crucial for Croatia as, for many years, it was ranked among modest innovators in the European Innovation Scoreboard, a group of countries where innovation resembles more a pattern of knowledge use than knowledge creation (Cirera and Maloney, 2017) and domestic innovation systems lack systemic capabilities for yielding support to innovators. For this purpose, data from the Community Innovation survey, a survey on the innovation behaviour of European firms undertaken by Eurostat in collaboration with national statistical offices, can be consulted. CIS is a biannual survey, but it is, at the same time, closest to a longitudinal source of information on the innovation behaviour of exporters.

Figure 4-1. Export unit values of the Croatian manufacturing industry

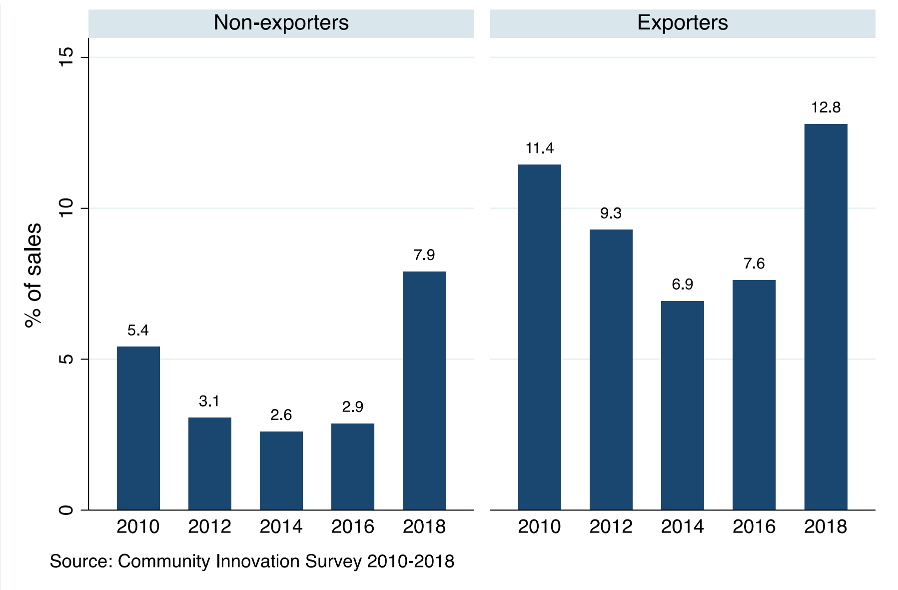


Source: Author calculations based on Eurostat data

To assess exporters' innovation behaviour, we investigate the structure of their sales revenue, particularly the share of sales coming from innovative products. According to Hashi and Stojcic (2013), the success of innovation is best reflected in the market's reaction to the products it offers. Higher intensity of sales from innovative products would suggest greater orientation and success of Croatian exporters in innovation activities. Figure 4-2 provides data on the share of sales turnover from innovative products among exporters and non-exporters in Croatian manufacturing over 2010-2018. As one can see, exporters in Croatia in all years were characterised with two to three times the highest shares of revenues from innovative products.

The above finding at first suggests the presence of a shift towards innovative products among Croatian exporters. However, a closer look reveals that the share of innovative products in sales revenues of both non-exporters and exporters is very low, peaking in 2018 at 12% among exporters. Such findings align with those cited in NPOO, and they signal that Croatian manufacturing industries are still heavily production-oriented and that improvements in their export unit values come from the improvements in their production capabilities. Overall, one can conclude that Croatian exports exhibited a different and upward-oriented trend after the country joined the EU. This process mainly consisted of improvements in the sophistication of export-oriented activities through upgrading production capabilities. While such a pattern has potential for job generation and growth, it must be borne in mind that for convergence and positioning in high-income countries, a different competitive profile is required, one based on innovative products.

Figure 4-2. Percentage of sales from innovative products



4.4. Industrial policies promoting export and competitiveness in Croatia

The above section suggests that manufacturing exports in Croatia are on an upward trend, at least since the EU accession, but also that a further step forward is needed towards greater innovation intensity. The question then arises of how exporters can be assisted in building their competitiveness. As it happens, the competitiveness of exporters can be promoted through the myriad of channels that can be of a financial and non-financial nature. Across countries, governments establish various export-promoting agencies and programmes coordinated by ministries, chambers of commerce or in collaboration with exporters' associations. Export promotion can also take place through development banks or specialised government offices. Some channels through which export promotion can take place involve internationally funded projects for export promotion or databases of contacts in foreign countries aimed to reduce sunk costs of search for exporters. In this way, firms can acquire information about ways of product placement in foreign markets at lower costs. Less common are situations in which exports are financed directly through different loans and financial guarantees.

Croatia's policy focus on exports starts with the highest level strategic documents. National development strategies, including the most recent strategy, covering the 2020-2030 period, contain several measures for productivity improvement through education, labour participation, technological modernisation and strengthening of innovation capacity and institutional efficiency. These measures are intended to improve the economy's dynamism and allow it to produce more diverse and better-quality products that stand the test of the international market. The strategy acknowledges strengthening Croatian manufacturing exports to boost national productivity. In doing this, the need to strengthen innovativeness is underlined. In its current industrial policy, Croatia acknowledges the duality of its needs.

On the one hand, the overall transformation of the economic landscape requires it to foster the development of novel export-oriented sectors based on smart specialisations such as ICT, electronic machinery and equipment, pharmaceuticals, automotive and shipbuilding. This also covers the European strategic value chains and sectors based on using natural resources. However, on the other hand, there is a need to foster the transition of traditional industries and to align them more with the requirements of modern markets.

Another support mechanism and policy measure set is embodied in the National Recovery and Resilience Plan 2021. – 2026. As one of its aims, this strategic document underlines improvement in the quantity and quality of Croatian exports. The plan envisages supporting firms in the green and digital transition, improving management capacities and practices, and commercialising innovations to achieve this. While a considerable part of these measures are aimed at existing sectors, they also devote attention to emerging sectors, which are iterated several times as technological windows of opportunity with the potential to restructure Croatian manufacturing and push it towards higher export competitiveness and sophistication.

At lower levels, several mechanisms exist that are suitable for export promotion. For example, the Croatian Chamber of Commerce (CCC) is the contact point for exporters regarding information relevant to their internationalisation. To reduce sunk costs, exporting firms are provided with information on foreign markets, mechanisms to improve the quality of their products or information on how to operate in different European and world markets. Croatian Bank for Reconstruction and Development (HBOR) supports exporters by informing them about different ways of financing and providing bank guarantees and insurance of liabilities for exporters. This way, exporters can reduce sunk costs of financial and knowledge resources relevant to exports. In addition to the activities mentioned above, HAMAG-BICRO (Croatian Agency for SMEs, Innovation, and Investments) provides guarantee programmes, subsidies and consultancy services to improve export competitiveness. While the list of policy tools to support exporters is by far from complete here, it does provide a clear indication that a multi-dimensional approach is needed to build industrial export competitiveness.

4.5. Implications for Kosovo

The above sections provide discussion and evidence on Croatian manufacturing export competitiveness. Croatia holds several valuable lessons as one of the rare countries that went through the entire way from forerunner to latecomer in transition. Its experience shows how late integration in regional, European, and global economic flows can deter national industrial competitiveness. Such developments threaten national prosperity in the context of recent post-COVID developments and concerns over national sustainability that go beyond the usual competitiveness debate. As the Croatian experience during pandemics shows, the lack of ability to produce some products due to the deindustrialisation of past decades may threaten the functioning of the local economy.

Another lesson worth remembering is related to the structure of local industry. Low value-added and cost-competitive products characterise the Croatian industry. While such a production structure can generate jobs and ignite growth, its ability to secure convergence is far more limited. Croatian experience vis a Central European economy demonstrates this. While these economies improved through much of their transition industrial competitiveness along the sophistication axis, mastering the production of more complex products with higher added value, low value-added standardised products prevailed in Croatian structure. As a result, by the third decade of transition, divergence between these countries and Croatia became more evident. The policy implication arising from this finding is that industrial structure considerations should also accompany the enticing industry.

In areas where industrial competitiveness is lost, it may be challenging to reignite the industrial flame due to a lack of human capital, material, and financial resources. As Croatian experience shows, vast opportunities for such areas may lie in developing newly emerging industries such as those on the back of green and digital transition. Nevertheless, such a transition is not a win-win game, and concerns must be taken for the traditional industries that already exist due to their share in employment and the fact that they are likely to exist in the economic landscape for some time. Finally, industrial competitiveness rests on producers' shoulders but cannot be achieved without public support. Such support should be forward-looking and aim at emerging trends in existing industries and new sectors appearing on the horizon. It should cover both financial and non-financial support aspects.

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CHAPTER 5

COMPETITIVE ADVANTAGES OF BOSNIA AND HERZEGOVINA – THE ROLE OF INSTITUTIONS

Adnan Efendic

Abstract

Institutions are one of the key pillars of competitive advantages of countries, and we observe them in the Western Balkans region with reference to Bosnia and Herzegovina. Our analysis identifies that institutional efficiency in the whole region is unsatisfactory; institutions linked to government do not perform well, with the lowest performance registered in Bosnia and Herzegovina. Regarding institutional indicators more linked to the economic environment, Kosovo recorded the lowest value for most indices; BiH was not far better. Looking at the dynamics of institutional performance in the region, BiH witnessed a significant drop in government efficiency indicators last year, which fits very well with the political blockages and government underperformance being in place over the last political cycle. A need for general improvements in institutional efficiency is identified as a short-run priority for all Western Balkan countries, while BiH needs to work much more to achieve better government efficiency. Institutional underperformance remains a persistent challenge for the Western Balkans in improving its competitive position at the regional and global scale.

Keywords: competitiveness, institutions, Western Balkans, Bosnia and Herzegovina

5.1. Introduction: Bosnia and Herzegovina from the war to the EU aspiring candidate

During the post-World War II period (1945-1992), Bosnia and Herzegovina (BiH) were two of the six republics of the former Socialist Federal Republic of Yugoslavia. Its economy was characterized by a strong raw material base, natural resources with a strong industrial sector (particularly in energy and the production of raw materials) and a developed construction sector (Savezni Zavod za Statistiku, 1991). Still, it was one of the weaker republics (like the Federal Republic of Macedonia at that time) in terms of its per capita national output ("društveni proizvod"), and was economically surpassed by Slovenia, Croatia, Serbia and Montenegro. A lower starting position in transition generally affected later success in transition reforms (Mickiewicz, 2005), but BiH faced an unfortunate situation with the four-year-long war that took place (Bosnian War 1992-1995). This war had a significant impact on the economic development and competitive prospects of BiH nowadays, a structural event that cannot be avoided when discussing the competitive dynamics of this economy. The war formally ended in 1995 after the Dayton Peace Accord (DPA) was signed, but compared to 1991, the conflict outcomes included around 23% fewer people in the country, industrial production dropped by more than 90%, and the unemployment rate was around 90%. Estimated GDP per capita fell from $1,900 in 1991 to $500 in 1995. The total war damage in terms of the replacement costs of productive capacities was estimated at $15 – 20 billion, while the overall damage from the war was estimated to be $50-70 billion (World Bank, 1996; 1997). Such an economic collapse in Europe was not seen since the end of World War II (Efendic and Hadziahmetovic, 2015), and a new start for the BiH economy was more than challenging.

Immediately after the war, the international community supported the country through a $5.1 billion reconstruction program to rebuild the economy. During the first three years after the war, nearly $5 billion was provided through various mechanisms (World Bank, 1998). With the substantial presence of foreign aid, BiH recorded extraordinarily high rates of economic growth – over 80% in 1996, 34% in 1997, 16% in 1998 and 10% in 1999, all being the consequence of low starting position (World Bank, 2014). A massive increase in economic activity after the war resulted in a sharp increase in production and employment, but more than two decades later, the BiH economy has been persistently facing high unemployment as its key macroeconomic challenge. Its competitiveness has not been improved to the level which might be satisfactory. From today's perspective, Bosnia and Herzegovina are the 92 most competitive nations out of 140 countries ranked in the 2019 edition of the Global Competitiveness Report published by the World Economic Forum. Competitiveness Rank in BiH averaged 97 from 2007 until 2019, reaching an all-time high of 111 in 2016 and a record low of 82 in 2007 (World Economic Forum, 2022).

The Bosnian War had a particularly negative impact on the country's competitiveness. The previously presented data and numerous other studies have documented unprecedented economic damage that the conflict caused in BiH, most often seen through the destruction of the physical infrastructure and industrial base. Furthermore, it also had an adverse effect on BiH's human capital development. The pre-war population of 4.1 million was reduced in 2020 to less than three million according to many estimates, of which around 100,000 belong to the lives lost during the war, while over one million would be counted to emigration and unfavourable demographic trends. Furthermore, the long-run effect of conflict on war exposed individuals caused a negative effect on their educational and economic performance (Efendic et al., 2021), which is combined with persistent emigration that continues to plague the country through two decades of permanent outflow of population, which was particularly emphasized in the second half of the 2010-2020 period (Efendic, 2021).

Moreover, recent research shows that the effects of the war, unfortunately, go way beyond the destruction of physical and human capital, impacting the economic psychology of its people as well. For instance, Muminovic and Efendic (2022) find that individuals who spent the war living in municipalities suffering a higher share of fatalities during the Bosnian War express more distrust towards people and less willingness to take risks even two decades after the conflict. This is particularly worrisome if one considers that social capital and risk willingness are crucial for trade, investments, entrepreneurship, and, consequently, a country's competitiveness.

Furthermore, the fear of a new war remains an ever-present perception in BiH, which is not conducive to innovativeness and growth. In one study, business students from around the country were exposed to fictional yet realistic media reports discussing the imminence of a war, which decreased their entrepreneurial intentions by making them less willing to take risks (Muminovic, 2022). These findings could go a long way in explaining why the population in BiH (including young people) prefers low-risk jobs in the public sector rather than jobs in the private sector, with unexplored implications for the competitiveness of this economy.

As a result, the war indirectly casts a long shadow over BiH's economic development and its competitive potential. Without a willingness to take risks and trust in other people, entrepreneurs and the public are unlikely to undertake significant investments and perform jobs that ultimately bring innovation, which are key to long-term growth and development.

At the time of writing this chapter, Bosnia and Herzegovina has received initial hints from the European Commission about potential developments in the direction of the formal candidate status award in the near future. However, although the progress in different socio-economic parameters of BiH after the war might be observed, institutional efficiency in BiH remains the main concern, which affects overall competitiveness of the economy, which we will discuss more deeply in the following section.

5.2. The competitiveness and institutional environment of WB, with a particular focus on BiH

BiH's economic potential and competitive advantages can be discussed from various angles, approaches, and focuses. We intend to say more about the institutional context of BiH as the determinant of its competitiveness, considering its unique instituticonal structure and the possibility that the institutional environment poses one of the most significant challenges for improving the competitive performance of this economy. Moreover, as the institutional environment includes formal and informal institutions, we will shed light on both dimensions that coexist in BiH, including their interaction.

The current institutional arrangement was established by the Dayton Peace Accord in 1995, which primarily aimed to stop the Bosnian War but also attempted to satisfy the ethnic interests of the three constituent peoples (Bosniaks, Serbs and Croats), with "Other" ethnicities being less in focus. The country comprises two entities (Federation of BiH - FBiH and Republika Srpska - RS) and one district (District Brcko of BiH). With such an institutional structure, the country has 14 governments at different institutional levels: a state-level government; two entity governments (FBiH, RS); ten cantonal governments (only in FBiH); and one district government (District Brcko), including a municipality level in both entities. Various studies and reports have concluded that the arrangement is very complex, costly, inefficient, and ineffective and is burdened with several negative trends and decision-making bottlenecks (Kačapor-Džihić and Oruč, 2012), emphasising the need for new and sound institutional changes.

Considering BiH's large and complex institutional structure, it is not surprising that public expenditures exceed 40% of GDP and that a quarter of the labour force is employed in the public sector, with ongoing challenges to limit the public sector size and improve public finances' efficiency. Over the last two decades, around 90% of public expenditures have been allocated to current spending and social benefits, with limited use of capital spending and related influence of the long-run growth from this source. Nevertheless, cointegration between revenues and expenditures is essential for fiscal sustainability. The empirical results of a recent analysis show the absence of cointegration between total revenues and total expenditures in BiH over the last two decades (Medjedovic, 2022). Public expenditures in BiH grow faster than public revenues, which leads to the generation of a budget deficit that is ultimately financed by borrowing. The obtained findings indicate that the fiscal sustainability of Bosnia and Herzegovina is at risk in the long run if more fiscal discipline is not put in place. However, the total level of public debt does not seem to be worrying as many estimates suggest that it is far from the level of 60% of GDP, a threshold level expected for the Euro area integration.

As we can see, a complex and decentralized institutional structure in BiH puts much pressure on achieving efficient institutional outcomes, but it is also a challenge for efficient fiscal policy. While indirect taxation (value-added tax) is unique for the whole country, that is not the case with direct taxes, primarily under the jurisdiction of entities in BiH. Tax competition between tax jurisdictions, especially if they are an integral part of the single market, might cause distortions in the economic functioning of the market in terms of high taxation costs as well as double taxation through transfer pricing due to different tax treatments of transactions that are embedded in the tax regulations of individual regions (Gammie et al., 2005). Moreover, there is evidence that tax competition can cause less efficient distribution of funds, lower amount of public revenues, and consequential loss in economic inefficiency (Matei & Pirvu, 2010).

BiH has some disparities between the developmental levels of its entities that rely on different tax jurisdictions within the country. While being harmonized to a certain extent, tax legislation still varies between the entities, imposing a notable burden on the country's SME sector. Namely, different tax rates applicable to wages affect the costs of labour and different treatment of allowable costs under corporate profit tax regulation, which impact investment decisions and contribute to uneven distribution of capital within the country. However, most importantly, perhaps, they contribute to the increase in the tax compliance costs on the part of the taxpayers, i.e., SMEs, which make up the majority of the country's corporate fibre. High compliance costs limit the capacities of an already fragile and underdeveloped SME sector and hinder its competitive opportunities in the regional and international markets (Lavic and Hadziahmetovic, 2021).

However, in BiH, institutional efficiency might not be marked as desirable in the whole Western Balkans region. Despite improving their economic performance, most Western Balkan countries are far from having a developed institutional framework conducive to a friendlier business environment. The key international organisations monitoring the formal institutional environments (Miller et al., 2019; World Bank, 2019) conclude that the region suffers from institutional complexity, overlapping jurisdictions, government ineffectiveness and time-consuming processes in most cases. The EU neighbouring countries, Slovenia and Croatia, perform better than the rest of Western Balkan countries, not only in their institutional performance if measured by different institutional indices but also in their business and economic development. In the following two tables (5-1 and 5-2), we present typical institutional indicators used to follow the performance of different institutional dimensions, including all Western Balkan countries plus Slovenia and Croatia, with data from the pre-pandemic period and the latest year available when writing this analysis.

Figure 5-1. Formal institutional indices – Governance indicators

Country	WoB GE 2018	WoB GE 2021	WoB RQ 2018	WoB RQ 2021	WoB RL 2018	WoB RL 2021	WoB CC 2018	WoB CC 2021
Albania	56.7	53.4	63.5	59.6	38.0	43.8	34.6	31.7
BiH	27.4	13.5	48.1	46.2	46.6	42.8	31.3	28.8
Croatia	71.6	70.2	69.2	69.2	63.0	60.1	59.6	59.1
Kosovo	38.9	42.8	39.4	43.3	40.4	43.3	35.1	44.7
Montenegro	57.7	53.8	65.9	66.8	55.3	52.9	57.7	54.3
N. Macedonia	55.3	50.0	70.2	66.3	43.3	52.4	42.8	43.3
Serbia	56.3	55.8	60.6	53.4	50.0	51.0	41.8	36.1
Slovenia	83.2	84.6	74.0	75.5	83.2	83.2	80.3	76.0

Note: WoB refers to the World Bank's governance indicators: GE (Government Effectiveness), RQ (Regulatory Quality), RL (Rule of Law) and CC (Control of Corruption). Countries are assigned a global percentile ranking (0–100). Sources: World Bank (2022).

Let's look at Governance indicators, which are frequently used as a proxy for institutional performance of different countries. Bosnia and Herzegovina scored poorly from a comparative perspective. It has the lowest value of this indicator in the whole region. Moreover, if we look at the dynamics of these different indices, there is a clear pattern that BiH recorded decrease in all institutional dimensions that we follow over the last couple of years. Indeed, the most worrying is the government effectiveness indicator, which scores very low and recorded the highest drop in the observed period from an already low level. Such change indicates that governments in BiH have underperformed, which is not surprising, given the political blockages that this country witnessed over the last couple of years, including that in one of the entities (FBiH), the new government has never been established after the last elections in 2018. BiH had general elections in 2022, and it is unclear whether this trend will continue in the future, but there are some indications that the future period could be more promising regarding the functioning of the government, although this is always hard to predict. Finally, if we compare BiH with the other countries from the WB region, BiH still scored the worst in all four institutional indicators, while Kosovo has similar performance in the majority of indices, and Albania is likely the next in the list of the lowest-scored countries. However, as we argue in this section, the complexity of institutional setup in BiH makes the functioning of its public institutions hard, particularly those linked to governance, which, through direct and indirect channels, affect the competitiveness of this economy.

Figure 5-2. Formal institutional indices – Index of economic freedom

Country	IEF PP 2019	IEF PP 2022	IEF JE 2019	IEF JE 2022	IEF GI 2019	IEF GI 2022
Albania	54.8	55.5	30.6	49.8	40.4	35.6
BiH	40.2	49.2	37.9	37.2	30.2	33.4
Croatia	66.0	81.1	42.9	69.9	38.6	50.0
Kosovo	57.2	47.4	53.5	31.0	44.7	37.5
Montenegro	55.4	61.3	51.8	43.0	39.5	46.4
N. Macedonia	65.1	57.4	60.7	50.2	44.7	38.7
Serbia	50.1	58.8	44.8	50.4	37.2	37.9
Slovenia	76.4	89.7	46.5	91.6	53.6	66.7

Note: The Heritage Foundation Index of Economic Freedom (IEF) measures PP (Property Rights), JE (Judicial Effectiveness) and GI (Government Integrity) on a scale of 0–100. Sources: Miller et al. (2022).

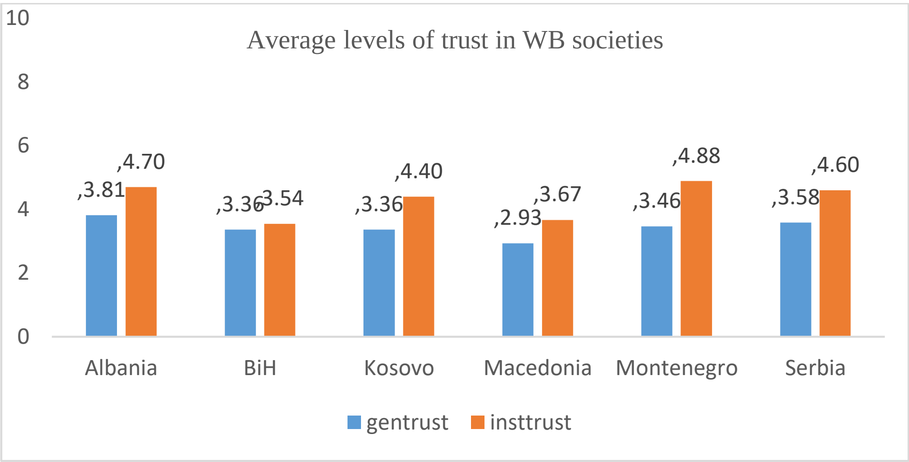
If we look at the Indices that measure the countries' economic freedom, the Property Rights Index is critical as adequate protection of property rights is a fundamental pillar of the market economy. Bosnia and Herzegovina have registered some improvements in this indicator over the last few years, also still being at the bottom in the region, together with Kosovo, which recorded a slightly lower value of this index. It is similar to Judicial effectiveness, while Government Integrity records the lowest value in BiH, again suggesting low performance linked to government efficiency. However, neither the rest of the Western Balkan countries cannot be marked as doing better in 2022, as Albania, Kosovo, and North Macedonia recorded drops in this index over the last four years, which are observed.

It is possible to follow other institutional indicators used to assess the formal institutional environment and its quality or efficiency, but we already have some patterns. The formal institutional environment in BiH scores low, mainly if we are talking about institutions linked to government efficiency and regulation. Indeed, the situation is more promising if we follow indices that mark more economic institutions, as those linked to monetary or fiscal policy in BiH. The overall conclusion goes in the direction that much more attention is needed to improve institutions linked to the government, while market institutions are functioning better, implying that the economic and business environment is struggling primarily because of those public institutions that indirectly affect their functioning. Similar trends might be observed for the rest of the countries in this region, which also recorded worsening of some institutional indicators. Kosovo shows the most significant drop in these indices over the last few years, including North Macedonia, which recorded similar changes.

These formal institutional inefficiencies, uncertainties, and weaknesses decrease citizens' trust in the functionality of the formal institutional system. When the functionality of the formal institutional environment is questioned, citizens turn to more favourable (informal) rules and norms, as they have a more stable and consistent nature over time. These arrangements will cause asymmetry between state morality (laws and regulations) and societal morality (norms, values and beliefs regarding those laws and regulations). The incentives to turn to an informal institutional setting might increase as the asymmetry increases. Indeed, the existing research on the association between formal and informal institutions in BiH, for example, suggests that they operate predominantly as substitutes, i.e. formal institutional deficiencies are mirrored by the increasing role of informality (Efendic et al., 2011), causing an asymmetry or gap between formality and informality (Gordy and Efendic, 2019).

The asymmetry between formal and informal institutions is hard to measure. However, an indication of it can be captured through the citizens' trust in people (societal morality) and government (state morality)—the higher the citizens' trust in institutions and people, the lower the asymmetry between state and societal morality is, and vice versa. Trust in institutions reflects the individuals' confidence that the institutional system works appropriately, including all its components: formal rules, organizations and enforcement mechanisms (World Bank, 2002). The trust will be high if these institutional pillars are aligned with societal morality. In addition, generalized trust is understood as individuals' trust in social norms. In other words, it reflects the individuals' expectation that unknown people will engage in socially accepted behaviour (Efendic et al., 2015). Figure 5-3 presents trust data for all Western Balkans countries.

Figure 5-3. Citizen's trust in general people and different levels of government in BiH



Source: INFORM, 2017.

To some extent, these two types of trust reflect the outcomes of a country's formal and informal institutional environment (Efendic and Ledeneva, 2021). The result of the (subjective) questions asked as part of the H2020 INFORM survey in 2017 with a scale of 1-minimum to 10-maximum, yield an average of 3.4 and 4.2 for personalized and impersonal trust respectively, thus confirming that the whole region is a low-trust institutional environment. Both indicators in Bosnia and Herzegovina are below the regional average, although we notice that institutional trust deviates more negatively from the region, again suggesting the lowest level of trust in this regional comparative perspective. The general implication is that the respondents have low trust in both people and institutions, which is fertile ground for the emergence of an undeclared economy. Low levels of trust are not surprising, as transition economies are low-trust societies due to their communist past (Estrin and Mickiewitz, 2011). In the case of BiH, we believe that a low trust culture has been notably deepened by the recent conflict, which "seriously damaged the rule of law, confidence in formal institutions and perceptions of equality under the law and due judicial process" (Efendic et al., 2015, p. 7). However, apart from BiH, we can reach similar conclusions for Kosovo and North Macedonia.

5.3. Conclusions

Institutional efficiency affects diverse socio-economic outcomes in a country through its direct and indirect channels, thus affecting the economy's overall competitiveness. Considering the importance of institutions for competitiveness, this work focused on the Western Balkans, Bosnia, and Herzegovina, shedding light on different institutional dimensions relevant to improving the competitive advantages of the WB region and particular countries. Our findings suggest that the institutional performance of the Western Balkans cannot be marked as satisfactory, with some rather slight differences between different countries. Overall assessments suggest that the efficiency of formal institutions in Bosnia and Herzegovina is worrying, with opposing trends linked to government institutions over the last couple of years. We observed slightly better outcomes for economic institutions, which leads us to conclude that public and non-market institutions are more problematic in this country than economic institutions. If we look at other countries, Kosovo also seems to be challenged to improve institutions linked to economic freedoms, as many of these indices scored the worst in the region. Government efficiency institutions scored slightly better than in Bosnia and Herzegovina.

Trust in institutions and general people is very low in the region, suggesting asymmetry between formal and informal institutional outcomes or state and societal morality. Interestingly, trust in people has generally recorded lower grades than institutional trust. However, differences between countries do not seem to be high, with Bosnia and Herzegovina still having the lowest value of this measure for institutional trust, suggesting systematic functioning problems at all institutional dimensions that we observed. We recommend that this country urgently improve its institutions linked to government, particularly government effectiveness, rule of law, and control of corruption. Political instability and blockages over the last few years have strongly influenced these indicators. The competitive index was not available for the last few years when writing this report, but it will likely follow negative trends observed through institutional deterioration.

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CHAPTER 6

THE ROLE OF THE DIASPORA IN ECONOMIC DEVELOPMENT

Nick Williams

Abstract

This chapter examines the role of the diaspora in economic development. Drawing on recent research, the chapter shows that despite the importance attached to the diaspora in policy discourse, they remain an under-utilised resource in economic development. The chapter focuses on Kosovo, a post-conflict economy seeking to harness the skills and experience of the diaspora to benefit economic development at home. The diaspora has a strong emotional connection to the homeland born out of the conflict of the past. This means that their entrepreneurial skills can be utilised to secure valuable investments. Many were forced to flee the homeland but have maintained ties with those who remained. However, they face numerous barriers to returning, with unstable institutional environments discouraging economic activity. Many provide financial remittances but can remain isolated from entrepreneurship. Institutional improvements are required if the diaspora is better assimilated into their homeland economy, ensuring trust that can encourage investment. The chapter contains several implications for policy related to economic development and competitiveness.

Keywords: diaspora entrepreneurship, investment, economic development, Kosovo.

6.1. Introduction

The world is witnessing increasing movements of people worldwide (Williams et al., 2022). As such, transnational economic activity is becoming an ever more critical phenomenon and a key focus for public policy (Reuber et al., 2018). In post-conflict economies, which have experienced significant migration as a result of war as well as ongoing economic and demographic challenges, policy engagement with diaspora communities living abroad presents a potential source of development (Williams, 2018). In this chapter, diaspora entrepreneurs are defined as migrants and their descendants who establish entrepreneurial activities that span the national business environments of their home and host countries (Riddle et al., 2010).

The diaspora often has a strong emotional tie to their home country and possesses valuable skills that can be transferred home (Riddle et al., 2010). However, it is challenging to attract them home to environments with weak formal institutions, such as poor enforcement of laws, regulations, property rights, and informal institutions that do not view entrepreneurship positively (Williams and Efendic, 2019). While there is extant research which examines the impact of diaspora entrepreneurs in their home countries (see, for example, Lin et al., 2018; Nielsen and Riddle, 2010; Riddle et al., 2010), these studies mainly focus on case studies of individuals and firms. Much less research examines institutional change and diaspora entrepreneurship (Gamlen, 2014). In addition, much of the recent research has focused on the return to large, dynamic, fast-growing economies, with the diaspora filling entrepreneurial gaps in innovation and technological knowledge (Li et al., 2012, 2018). Therefore, there is a need to examine a broader range of contexts where return occurs.

This chapter draws on institutional theory to examine the evolution of diaspora policy in post-conflict economies seeking to engage with and mobilise the diaspora in homeland entrepreneurial activity. Following Gamlen et al. (2019), the chapter defines diaspora policy as government programmes and initiatives which seek to engage and mobilise emigrants and their descendants. Diaspora communities are defined by the dispersion of ethnic and national groups across international borders and often maintain a relationship with their country of origin (Nielsen and Riddle, 2010; Riddle and Brinkerhoff, 2011). When returning, diaspora entrepreneurs can benefit their home country by sharing capital, technical knowledge, expectations of how business should be conducted and direct investment (Williams, 2018). Entrepreneurial activity can be fostered by direct involvement in the creation of new firms or the management of existing firms, by investing in the entrepreneurial activities of others, or by acting as a role model and inspiration to entrepreneurs in the home country (Lin et al., 2018). The role model, 'demonstration effect', whereby residents in the diaspora's country of origin are encouraged into economic activity due to the increased investment from abroad, can be significant in countries with low levels of entrepreneurship (Riddle et al., 2010: 403).

As a result of globalisation, the diaspora has become an important category of entrepreneurs (Krasniqi and Williams, 2018; Ram et al., 2016). They often facilitate international business connections, adopt cultural lessons from home and host countries (Berry, 1997), and have key roles in homeland investment (Brinkerhoff, 2009, 2016). Transnational character-ristics allow diaspora entrepreneurs to operate in intermediary roles between countries as they possess the advantage of a deeper international understanding of social and business environments (Riddle et al., 2008). Migrants who operate abroad often gain knowledge and skills that can be lacking in their home country (Nielsen and Riddle, 2010). When they return to invest or start a new business, they remit this acquired human capital back to the country of origin, thereby turning 'brain drain' into 'brain gain' (Stark, 2004). Diaspora entrepreneurs can also contribute by sending financial remittances to their home country (Czaika and Spray, 2013; Fransen, 2015; Vargas-Silva, 2017). Remittances can improve macroeconomic stability, reduce poverty rates by enabling family members to meet consumption needs, facilitate human capital formation by enabling higher expenditure on education and health, and support entrepreneurial activity (Gillespie et al., 1999; Vaaler, 2013). Remittances are a signal of a diaspora's connection to their homeland (Bloe and Opoku-Owusu, 2018) and commonly go towards supporting friends and family and are an example of the diaspora communities feeling of moral responsibility to benefit the development of their home country, created by their emotional ties and connections (Vaaler, 2013). However, despite the often large volumes of remittances, their benefit for economic growth has been called into question, with Brinkerhoff (2016) stating that they are primarily household transfers, providing income that is often essential to sustenance but could be applied for a variety of purposes, including conspicuous consumption. Furthermore, those in receipt of remittances may be more likely to migrate (Dimova and Wolff, 2015). However, research is moving away from focusing on financial remittances (Clemens et al., 2014) to consider non-economic remittances, such as the transfer of social, technical and political knowledge (Kshetri et al., 2015). Indeed, Discua Cruz and Fromm (2019) show that social remittances, which can be defined as the ideas, behaviours, identities and social capital that flow from host to home country, are valuable when emerging from the highly skilled diaspora. These social remittances relate to normative structures of ideas, values and beliefs, practice systems and social capital (Levitt and Lamba-Nieves, 2011). Social remittances are distinct from economic ones because they are conveyed interpersonally between individuals who learn, adapt and diffuse ideas and practices from their environment through roles in families, communities and organisations (Discua Cruz and Fromm, 2019).

6.2. The context of Kosovo

Kosovo has experienced significant outward migration because of conflict. This has resulted in a number of policy attempts to attract the diaspora home (Williams, 2018). The breakdown of the communist regime in the early 1990s was the beginning of the end of 'old Yugoslavia', and the ethnic wars during the 1990s led to the creation of several newly independent states, with Kosovo unilaterally declaring independence in 2008. The Kosovo War of 1998–1999 resulted in large-scale outward migration as people sought to avoid conflict. Kosovo saw widespread migration, and the legacy of war has been continued political and ethnic tensions (Williams and Krasniqi, 2018).

In common with many post-conflict economies (Aldairany et al., 2018), since the end of the war, economic and institutional development in Kosovo has been slow (Krasniqi and Mustafa, 2016; Williams, 2018). While reforms have aimed to encourage entrepreneurship, much of the post-conflict economic activity has been associated with foreign direct investment from large multinational corporations and governments (Williams and Vorley, 2017). Combined with institutional voids (Efendic et al., 2015), this can crowd out entrepreneurial activity.

Kosovo can be characterised as having formal institutional voids (Williams and Vorley, 2017; Williams and Efendic, 2019), the meso-level context of social and ethnic ties (Welter et al., 2019) has been important in creating bonds between people due to the shared experience of conflict. At the meso-level, there are strong ethnic communities in Kosovo. However, there are lasting ethnic divisions (Williams, 2018), and at the micro-level, there is respect for individual entrepreneurs, with Kosovo possessing a relatively positive enterprise culture despite formal institutional voids (Williams and Vorley, 2017).

Kosovo's diaspora is estimated at approximately 700,000 people, equivalent to 40% of the resident population (Williams et al., 2022). During the conflict, remittances to Kosovo from the diaspora accounted for 45 percent of annual domestic revenues (Demmers, 2007), and was in part used to support the war effort, with the Kosovo Liberation Army establishing a 'Homeland Calling' fund (Adamson, 2006). In addition, a '3% fund' was used so that migrants contributed not only to the war but also to support government spending on schools and hospitals (Hockenos, 2003). In the aftermath of the conflict, Kosovo became partially dependent on international aid and remittances from the Kosovar diaspora (Loxha, 2012). Around a quarter of Kosovo Albanian households receive remittances (Kosovo Agency for Statistics, 2013), totalling approximately 17% of GDP, making Kosovo one of the top 15 recipients of remittances worldwide relative to the size of the domestic economy (UNDP, 2012). Kosovo has also seen increased remittances during the COVID-19 pandemic to support family and friends who have faced wage cuts and job insecurity (IOM, 2020;

OECD, 2021). Over time, Kosovo has introduced a number of policies to attract the diaspora home (Williams, 2018). The policies are driven by acute economic, social, and demographic challenges in the countries as they require greater levels of entrepreneurship and innovation to create jobs for current and future generations (Domm, 2011).

6.3. The institutional environment and diaspora entrepreneurship

6.3.1. The importance of institutions

Institutional improvements are important for lower-income economies (Krasniqi et al., 2023), not simply for attracting more diaspora investment but more generally to secure growth and slow down outward migration. In this regard, there has been some attempt to involve diaspora communities in the development of formal institutions (Kshetri, 2013; Riddle and Brinkerhoff, 2011), defined as the rules and regulations governing economic activity in a country (Williams and Vorley, 2015). Similarly, informal institutions, defined as the prevailing norms and values, have also been targeted to enhance absorptive capacity, for example, through diaspora networks for business advice and mentorship (Kshetri, 2013). Involving the diaspora in policymaking can be beneficial as they have the potential to act as change agents in their country of origin (Riddle and Brinkerhoff, 2011), with diasporans considered as emerging agents of development (Weinar, 2010).

Transition economies have generally experienced path extension concerning their institutions (Hashi and Krasniqi, 2011), with previous institutional arrangements adapted with varying degrees of success, while informal institutions have been slow to change (Manolova and Yan, 2002; Tonoyan et al., 2010; Estrin and Mickiewicz, 2011). However, post-conflict countries can be understood as having experienced a ‘path break’ and, subsequently, new ‘path creation’ due to rapid political change (Williams and Vorley, 2017). This break and reorientation of institutions is born out of efforts to rebuild fragile economies, and positive institutional reforms can provide a significant opportunity for growth (Efendic et al., 2015).

Creating institutions which can foster entrepreneurship and increased competitiveness represents a particular challenge. There are immediate issues associated with embedding and enforcing newly established formal institutions, while in path-dependence terms, the extension of prevailing informal institutions simultaneously undermines these reforms due to the substitutive effect. For entrepreneurs in post-conflict environments, navigating new formal institutional frameworks can be challenging, and this can be exacerbated when there is a resistance to entrepreneurial activity viewed as individualistic and contrary to socialist norms. Efendic et al. (2015) also note that where the social fabric has been damaged, the level of trust is low, and people are unwilling to share knowledge. This can further stymie entrepreneurial endeavours. Moreover, internal conflicts can undermine the rule of law, which is a critical element of institutions, as weak rules increase the risk of expropriation of entrepreneurial returns (Estrin et al., 2016), with it being replaced by local informal structures of power such as criminal groups which are likely to leave a legacy of institutional asymmetries after the conflict has ceased (Efendic et al., 2015).

Perceptions of institutions are important, as expectations are self-fulfilling (Crawford and Ostrom, 1995). Where expectations are of a changing environment which lacks stability, individuals can seek to circumvent rules or not risk undertaking entrepreneurial activity (Williams and Vorley, 2015). In economies with weak or negative perceptions and expectations, informal institutions will take time to change (Winiecki, 2001; Estrin and Mickiewicz, 2011) but can be targeted through media campaigns, education and utilisation of role models (Hindle and Klyver, 2007; Williams and Vorley, 2015). Analogous to this, there is a need to develop the ambition and capabilities of entrepreneurs in order to foster more productive and systemic entrepreneurship, which will increase the complementarity of formal and informal institutions (Williams and Vorley, 2017). This focus on developing and embedding institutions is particularly critical given the geo-political challenges facing post-conflict economies, as further political marginalisation will constrain opportunities for entrepreneurship.

Weak formal and informal institutions unsupportive of entrepreneurial activity often characterise post-conflict economies. Where formal institutions reduce risks and ensure stability, they will generate trust (Busenitz et al., 2000). Such regulations assign property rights (Spencer and Gomez, 2004), and where these are poorly defined or not enforced, the risk of expropriation of entrepreneurial returns is increased (Estrin et al., 2016). Where such expropriation exists, productive entrepreneurs can see assets liquidated, their venture terminated, and proceeds consumed by others (Desai et al., 2013). As a result, trust in institutions will decline.

Since diaspora entrepreneurs have significant international experience, they can compare the relative stability of the institutional environment in their host country with the instability of their home country. Although the diaspora can be the first mover foreign investors into uncertain political and economic climates (Gillespie et al., 2001), such activity may be stymied where there is a lack of trust. Overcoming a lack of trust is critical to harnessing entrepreneurial intentions towards the homeland. Intentions are the first step in a typically long-term process of starting a new business (Thompson, 2009). Understanding what drives entrepreneurial intentions in challenging environments, for example, post-conflict economies, can assist in the design of (more) effective institutions to support entrepreneurial endeavour (Bullough et al., 2014). To launch a venture, individuals require self-efficacy associated with opportunity recognition and risk-taking, even in a stable and supportive environment. In post-conflict economies, self-efficacy can support entrepreneurial intentions, but if these are to be realised, they must overcome risk perceptions. As such, institutions must lead to improved trust and perceptions of risk. Navigating institutional frameworks is always challenging, particularly for the diaspora who may never have lived in their home country, have lived abroad for several years, or know relatively few people (Nielsen and Riddle, 2010).

6.3.2. Diaspora entrepreneurs and institutional change

As has been shown, institutional challenges in post-conflict economies not only influence entrepreneurial activity in the home country (Efendic et al., 2015) but also influence the willingness of entrepreneurs among the diaspora to invest (Brinkerhoff, 2016; Chrysostome and Nkongolo- Bakenda, 2018). Weak institutional frameworks may prove daunting for even experienced and well-connected diaspora investors who view the financial risk to investments, lack of support and political fragmentation as barriers to investment (Agunias and Newland, 2012). Thus, institutional reform is imperative if the diaspora is to return to benefit their home country (Williams, 2018).

Previously, much of the institutional focus of policymakers centred on ‘extracting obligations’ from the diaspora: asking ‘what they can do for them’ rather than what ‘they can do for’ diaspora investors (Gamlen, 2006). This has often been due to competing policy priorities and a lack of coordination between different departments and levels of government, as policy emphasises building nascent and fragile institutional environments rather than engaging with the diaspora (Nielsen and Riddle, 2010).

Navigating institutional frameworks is always challenging, particularly so for diaspora entrepreneurs. In order to tackle this, formal institutional changes have included advice and guidance for returning diaspora entrepreneurs so that risks associated with return can be minimised (Gamlen, 2014). Such approaches are critical in ensuring a ‘one-stop-shop’ approach to providing advice and support to the diaspora as they act as the focal point for communication (Nielsen and Riddle, 2010). Matching grant schemes are also used, where the government funds a specified proportion of a project and can address the financial risks associated with an unfavourable business environment (Agunias and Newland, 2012).

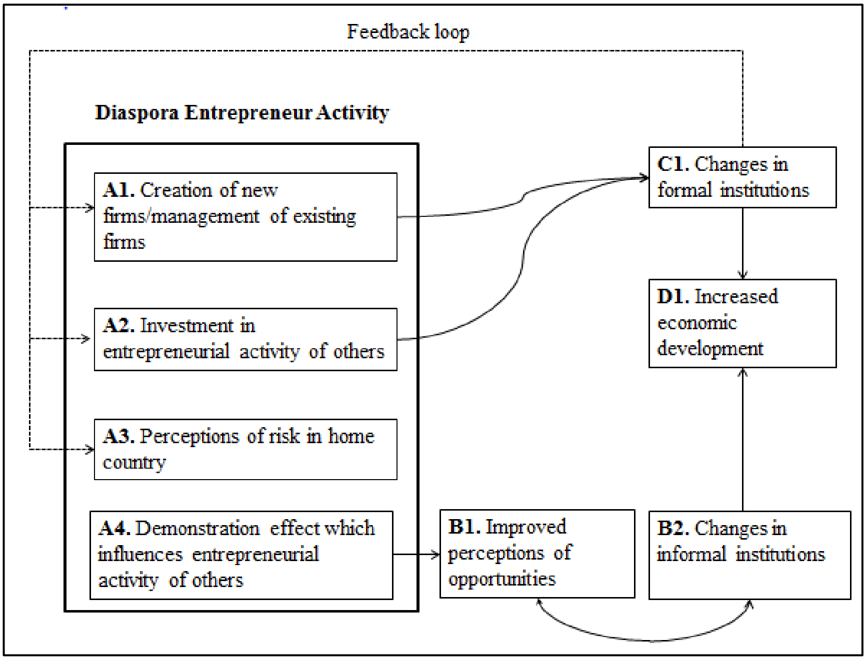
A further common approach is the short-term attraction of high-skilled workers from the diaspora to ensure the transfer of knowledge to those within the home country (Newland and Tanaka, 2010). For example, the Transfer of Knowledge through Expatriate Nationals (TOKTEN) programme has been used to cover travel expenses, daily allowances and insurance of diaspora experts to engage in consulting opportunities in their home country (International Labour Organization (ILO), 2001). Such policy approaches can be important in less developed economies, not simply for attracting more diaspora entrepreneurship but more generally to secure growth and slow outward migration (Brinkerhoff, 2016).

The diaspora has the potential to influence improvements in institutions as they can act as change agents in their home country (Brinkerhoff, 2016; Riddle and Brinkerhoff, 2011). However, this will only be effective if policymaking is responsive. In taking forward a theory on institutions and diaspora entrepreneurship, Figure 6-1 demonstrates the interplay between diaspora entrepreneurial activity and institutional change in the home country. It demonstrates how, by taking a processual view of entrepreneurship policy-making (Arshed et al., 2019), the institutional reforms of the homeland are affected by a combination of diaspora activity and policy changes.

The figure shows a circular flow between the activities of the diaspora and policy-making, with the two interacting to inform each other. As activity in the homeland increases, policy evolves, and priorities change. In emerging and post-conflict economies, the diaspora can be involved in the creation of new firms and/or management of existing firms (A1), as well as investment in the entrepreneurial activity of others (A2); yet a key barrier to this activity is the perception of risk associated with an under-developed institutional environment (A3). This is both a response to and an impetus for changes to formal institutions. As formal institutions improve, more entrepreneurial activity and investment can be created, allowing policymakers to make further institutional changes to harness higher levels of economic activity. In less developed and post-conflict economies, policymakers are seeking to involve the diaspora in policymaking more so that positive changes can be made and to ensure that there is an effective feedback loop between the diaspora and institutional change (Kshetri, 2013;

Riddle and Brinkerhoff, 2011). The changes in formal institutions create a feedback loop (C1) that fosters further entrepreneurial activity through improvements in risk perceptions. At the same time, entrepreneurial activity by the diaspora influences those in their home country through a demonstration effect (A4), with the diaspora acting as a role model, which encourages others into entrepreneurial action through improved perceptions of opportunity (B1). This improves the perceptions of home-based entrepreneurs on the institutional environment, thereby changing the norms and values associated with informal institutions (B2), and has a two-way effect as improvements in informal institutions positively impact perceptions. Improvements in both formal and informal institutions and the increased entrepreneurial activity result, in turn, in increased economic development (D1). The figure demonstrates how effective institutional change can lead to greater assimilation of the diaspora. However, if these conditions are not met, in other words, the impetus of the diaspora does not lead to positive institutional change, then there will be increased isolation. The diaspora will remain isolated from their homeland due to the risks associated with entrepreneurial activity at home, and as such, neither financial nor social remittances will be secured.

Figure 6-1. Impacts of the diaspora on home country institutions



Source: Williams (2018)

6.4. Policy responses in Kosovo

6.4.1. Policy approaches

Policy approaches to mobilising the diaspora are multi-faceted, often uncoordinated, and ill-defined (Gamlen, 2014). Yet, at the same time, they have become a crucial part of economic and social policy in many lower-income economies (Riddle and Brinkerhoff, 2011). In Kosovo, the government has sought to coordinate policy better so that greater benefits can be accrued from mobilising the diaspora. However, research has shown a lack of policy coordination (Williams, 2020). In part, this is due to the political situation, with ethnic divisions still evident in political decision-making, which makes policy coordination at the national level extremely challenging. This has meant that diaspora investment is 'highly fragmented along political and ideological lines' (Office of the Prime Minister, 2016: 10).

The government of Kosovo launched a Ministry of Diaspora in 2011, a political commitment not seen in many neighbouring economies (Williams, 2020). The Ministry coordinated efforts to work with the diaspora abroad and harness their investment and involvement at home (Government of Kosovo, 2015). The Ministry launched the Strategy for Diaspora 2014–2017 as a key guiding policy, which sets out the goals of supporting diaspora integration into Kosovo while at the same time preserving their cultural identity and facilitating investments and transfer of skills to their home country (Office of the Prime Minister, 2016). However, there is no evidence that this strategy has led to any changes in policy as yet. Indeed, no legislation has been passed to bring direct policies to mobilise the diaspora; instead, the Ministry tried to coordinate a range of existing, disparate and small-scale activities across the country.

The Ministry of Foreign Affairs and the Diaspora have now taken over the Ministry for the Diaspora. Alongside this, Kosovo has developed a 'National Development Strategy' (NDS), which has the strategic vision to secure the economic development of the country up to 2030 and to secure social cohesion and inclusion, within which are policies and strategies to mobilise activities of the diaspora to benefit the economy (Prime Minister Office of Kosovo, 2022). The NDS contains the goal that 'the Kosovo diaspora will increase investments in their homeland to contribute to the development of the country and the preservation of our culture abroad' (Prime Minister Office of Kosovo, 2022).

Kosovo's NDS has been explicit about policy being in harmony with EU integration processes, although it is non-specific about what this means in practice for diaspora policy. As such, despite significant external involvement in economic and social policy-making in the Balkans following the break-up of the former Yugoslavia (Xheneti et al., 2013), this has not filtered down into diaspora policy despite its potential to have a significant impact on development, and the fact that many of the Balkan diaspora reside in EU countries.

6.4.2. Institutional development

In addition to specific diaspora policy, improvements in institutions are essential for post-conflict economies, not simply for attracting more diaspora investment but more generally to secure growth and slow down outward migration. In this regard, in many countries, there has been some attempt to involve diaspora communities in the development of formal institutions, which has the potential to be beneficial as they can act as change agents in their home country (Brinkerhoff, 2016). Previous research has shown that policymakers stated a need to involve the diaspora more in political processes (Williams, 2020). This research showed that government policymakers desired more PR campaigns to show that institutions are improving in the country and developing business networks (Williams, 2020). To improve this, Kosovo's NDS has specified that a database needs to be established to provide a central contact point to engage with the diaspora (Government of Kosovo, 2016) so that they can be involved in decision-making. While establishing a database of diaspora was welcomed by policymakers, there are challenges to doing so. The diaspora is difficult to identify, as they are spread over numerous host country locations, and no contact information exists.

Furthermore, a fundamental problem was the range of formal and informal networks seeking to engage with the diaspora. There is potential here as the diaspora is often deeply engaged in digital networks and can use them to contribute to socio-economic development in their home country (Brinkerhoff, 2009; Elo and Minto-Coy, 2018). In addition, as in other countries that have improved voting rights (Gamlen et al., 2019), there are plans to provide seats in government directly voted on by the diaspora. However, political tensions meant that changes to the structure of parliaments were challenging to introduce (Williams, 2020). As such, while Brinkerhoff (2016) demonstrates that diaspora entrepreneurs can play a key role in pushing for specific institutional reforms, this is currently lacking in Kosovo.

6.5. Conclusions: Implications for Kosovo

The chapter has examined the role of diaspora entrepreneurs in homeland economic development, drawing on institutional theory to highlight the challenges and opportunities. It has demonstrated that institutional reform is a critical aspect of the engagement and mobilisation of diaspora entrepreneurs.

The chapter shows that the process of institutional reform is not linear. Much literature on institutional reform and the diaspora assumes a controlled, linear process (Brinkerhoff, 2016). However, reforms in post-conflict economies such as Kosovo are complex and change over time concerning government priorities and what benefits they seek to yield. Thus, they differ from the institutional environments of large, dynamic economies often examined in diaspora research. These larger economies are relatively stable, and policy in these economies has been more tailored, aiming to bring home skilled migrants to fill managerial and/or entrepreneurial gaps (Gamlen et al., 2019; Qin et al., 2017). Yet, in post-conflict economies, institutional reform is more complex, with policies being developed more ad hoc manner.

Institutions in Kosovo have evolved to place an increased emphasis on remittances, which are seen as increasingly crucial for impacting growth in the homeland. While financial remittances can play an essential role in post-conflict economies, the policy emphasis on them has weakened over time. This has been replaced by increasing emphasis on the physical return of the diaspora. However, the diaspora who return to post-conflict economies can have lower skills than those returning to large, dynamic economies. This is often because of the forced nature of their migration, meaning that they have not moved because of a superior educational or employment opportunity that provides them with skills to reapply to the homeland. If the diaspora returnees are not highly skilled, the benefits from entrepreneurship are less easy to capture. In Kosovo, social remittances produced by knowledge transfers have not previously been adequately harnessed, chiefly because of the (low) skills gained in the host country. However, more coordinated approaches to policy can help ensure that the transfer of knowledge is maximised for the individuals involved (both the diaspora and those receiving investment) and that the knowledge from this can be shared and put into practice in other contexts (Berry, 1997). This is particularly important in engaging the second generation (i.e. the children of those who were forced to flee), who often have superior skills and knowledge gained through the host country.

In addition to institutional change not being linear, it has a time-bound element. The analysis has shown that despite increased policy emphasis on diaspora engagement, many are still caught between isolation and assimilation due to the institutional environments at home. They can be isolated because of their years living abroad and their negative perceptions of the institutional environment at home. The fact that the diaspora connectivity to the homeland weakens over time means the need for practical, coordinated institutional change is pressing. A proactive and coordinated provision programme is required to educate diasporas about institutional change and opportunities within countries and to provide more holistic support encompassing a wide range of business barriers.

There is scope for the diaspora's involvement in institutional reform as they can act as change agents (Brinkerhoff, 2016). While Kosovo has sought to improve their relationship with the diaspora, there is a lack of real engagement and consultation related to institutional change. Policymakers need to consider the interplay between formal and informal institutions needs to be considered (Williams and Vorley, 2015) if higher levels of diaspora investment are to be secured. Tackling barriers such as corruption is critical if perceptions of opportunity are to improve. Akin to other areas of public policy, these economies can seek to adopt policy from elsewhere and transfer it to a new context (Xheneti and Kitching, 2011). Programmes such as TOKTEN can be learnt from and replicated.

Previous research has shown that post-conflict countries such as Kosovo can be characterised as containing institutional voids (Williams et al., 2022). However, this can be enabling, contrasting with the prevailing research on institutional voids, which focuses on them as constraints (Doh et al., 2017). In Kosovo, institutional voids can trigger the usage of informal networks and ultimately influence the objectives of the diaspora. Experience in the host country allows individuals to develop skills and knowledge of other institutional environments, but the historical legacy of conflict will influence activity more than this experience. Rather than activity reflecting international experience (Li et al., 2012; Qin & Estrin, 2015), diaspora entrepreneurial activity reflects a desire to assist the homeland (Williams et al., 2022). Networks of family, friends, and ethnic ties are reconnected upon return, and a key objective is a moral obligation to the homeland.

Given that forced migration is a phenomenon that is not likely to desist, governments will be increasingly required to consider the potential of the diaspora to return to boost competitiveness. Policy focused on the diaspora has the potential to contribute significantly to economic development, especially given that the diaspora may be driven to invest through emotional ties (Elo, 2016). However, institutional reforms are required to make this happen. At the most fundamental level, post-conflict economies such as Kosovo must seek to improve the institutional environment so that it is supportive of entrepreneurship, tackles corruption, and engenders trust in government so that investment will be encouraged.

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CHAPTER 7

CORRELATION BETWEEN INNOVATION ACTIVITIES AND EXPORT PERFORMANCE: EVIDENCE FROM NORTH MACEDONIA

Veland Ramadani, Hyrije Abazi-Alili

Abstract

This chapter investigates the determinants of innovation activities and their impact on direct export for companies in the RNM. For the study's empirical analysis, we employ Business Environment Enterprise Performance Surveys (BEEPS) firm-level data conducted by the World Bank and the European Bank for Reconstruction and Development (EBRD) in 2009, 2013, and 2019. To examine the relationship between innovation activities (measured as an introduction of a new product and/or process) and direct export (measured percentage of establishment share of sales as direct exports), we apply the instrumental variable (IV) technique, which enables us to control for the endogeneity between innovation activities undertaken by entrepreneurial businesses and extend of direct export. Our findings suggest that technology licensed from a foreign-owned company, age, digitalization, creativity, and international market positively and significantly impact their incentive to undertake innovation activities. Considering the determinants of the extent of direct export, we find evidence that enterprises that have undertaken innovation activities (instrumented variable), foreign ownership, size, technology and having an internationally recognized quality certificate tend to have a higher percentage of sales share from direct export.

Keywords: innovation, direct export, firm, business environment enterprise performance surveys, instrumental variable (IV) technique, North Macedonia (RNM)

7.1. Introduction

The topic of innovation has attracted the attention of many researchers based on the argument of Schumpeter (1934) that innovation represents a significant source of long-term firm success (Atalay et al., 2013; Jiménez et al., 2014; Rexhepi et al., 2019; Rosenbush et al., 2011). To increase the innovation activities undertaken by enterprises in the EU, the Lisbon Strategy set a goal for Europe to become “the world’s most competitive and dynamic knowledge-based economy in the world, capable of sustaining growth with more and better jobs and greater social cohesion” by 2010. This aspiration also presents the priority area of the ‘Europe 2020’ Strategy, which is ‘smart growth’ through the development of knowledge, innovation, and education (European Commission, 2010). To accomplish these goals, the OECD has prepared an 'innovation strategy', containing the following major themes: i) the "openness" of innovation; ii) the central role of entrepreneurship; iii) creating and applying knowledge; iv) applying innovation to address global and social challenges; and v) improving the governance of policies for innovation. It was also expected that the intensified competitive market pressure in transition economies will enhance the innovation activities of firms and their overall performance (Snoj et al., 2007). The impact of innovation activities on economic growth has been studied extensively for developed market economies (Ahmed and Shepherd, 2010; Crescenzi and Rodriguez-Pose, 2011; O'Mahony et al., 2010). This paper aims to empirically examine the innovation activities undertaken by firms and their impact on export performance in North Macedonia.

There is a vast literature on the determinants of firm performance. However, the relationship between innovation activities and firm performance has not been studied thoroughly, especially in transition economies, including North Macedonia. The literature on innovation activities varies on different ways of defining innovation and the measures employed, with challenges faced related to the problem of finding relevant variables for measuring innovation activities. The most often employed measures in the empirical literature are R&D expenditure – as a measure of input, patents - as a measure of output; and introducing a new product/new process - as output accepted by the market. Further, we investigate the empirical evidence on the relationship between innovation activities and firm performance, focusing on the data and methodology used.

About the correlation between innovation and export performance, several studies (Anh et al., 2009; Gërguri-Rashiti et al., 2017; Halpern and Muraközy, 2012; Higon and Driffield, 2011; Kurtishi-Kastrati et al., 2016; Wagner, 2001; Pickernell et al. 2016; Roper and Love, 2002; Sterlacchini, 2001) have found that innovation has a positive and significant impact on the export performance.

The structure of the chapter is divided into several sections. The first section summarizes the relevant literature review related to the innovation and export activity of active businesses in the Republic of North Macedonia (RNM), primarily focusing on the model and the determinants of innovation activity. Section two elaborates on the sample and data used for the empirical analysis, i.e., BEEPS 2009, 2013, and 2019, which consist of 1086 firms in the Republic of North Macedonia. Section three considers the methodology and the empirical estimations using the instrumental variable (IV) technique, followed by the interpretation of the results provided in section four. The paper ends with conclusions, discussions, and limitations of the research.

7.2. Literature review

Enterprises today act under considerable pressure from other enterprises that offer the same or similar production or service, or they are under the pressure of customers who expect more and more from the products they consume. In order to face new conditions and situations, enterprises are made to continuously search for new ways of production, namely offering new products or enhancing existing ones. In other words, they should continuously introduce innovations (Ramadani and Gerguri, 2011; Lipit, 2006; Shan and Jolly, 2013). However, what, in fact, do innovations represent?

Ramadani and Gerguri (2011) define innovations as creating a new product or service, new technological process, new organization, or enhancement of an existing product or service, existing technological process, and existing organization. UK Department of Trade and Industry (2003) defines innovation as the successful exploitation of new ideas, and it is central to meeting this challenge; it involves investments in new products, processes, or services and new ways of doing business. OECD (2005) Oslo manual guiding the collection of data on innovation reflects this perspective by defining innovation as: "... the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations" (p. 46). An alternative definition of innovation adopted more recently by policymakers in the UK and also applied in the literature (Battisti and Stoneman, 2010) regards innovation as the 'successful exploitation of new ideas'. If this is scrutinized further, (i) new ideas – involve new products/processes or services, (ii) exploitation – presents the applicability of the idea, (iii) successful – implies that the innovation is adapted by the market (from the firm-level viewpoint the target is increased profitability).

According to the given definitions, if we analyse their separate elements, we can say that we classify innovations into *product innovations* – development or enhancement of a specific product; *services innovations* – offering new or enhancing existing services; *process innovations*– finding of new ways of organizing and combining inputs in the process of production of specific products or services; and *organizational innovations* – creating new ways of organizing business resources. According to Drucker (1993), there are four basic types of innovation: *incremental innovation* –

doing more of the same things you have been doing with somewhat better results; *additive innovation* – fully exploiting already existing resources, such as product line extensions, and can achieve good results. These opportunities should rarely be treated as high-priority efforts. The risks should be small – and they should not take resources away from complementary or breakthrough opportunities; *complementary innovation* – offers something new and changes the structure of the business, and *breakthrough innovation (radical innovation*) – changes the fundamentals of the business, creating a new industry and new avenues for extensive wealth creation.

The theoretical developments focused on firm performance started about twenty years ago (Romer, 1986; Leeuwen, 2008; Bhaskaran, 2006; Verhees and Meulenberg, 2004). Different indicators, such as profit, revenue, growth, productivity, efficiency, stock price, new markets, and exports, could measure firm performance. Murphy et al. (1996) and Sohn et al. (2007) noted that firm performance is a multidimensional concept whose indicators can be departmental, related to production, finance, or marketing. Wolff and Pett (2006) say that performance indicators are consequential and related to growth and profit. Abazi-Alili et al. (2014), Castany et al. (2005), Van Biesebroeck (2005), Pagés (2010), Geroski (1998), and Tybout (2000) concluded that firms that have better access to technology managerial skills, finance, learning, flexible non-hierarchical structure perform better than the others.

Regarding the innovation-performance relationship of enterprises, Tiwari and Buse (2007) developed a model known as the BCF model (better, cheaper, and faster), which means that innovations make enterprises produce better products and services (B-better) with lower costs (C-cheaper) and faster (F-faster). Those companies that succeed in producing products with better quality at lower costs and place them on the market faster than the others increase the possibility of building a better competitive position in the market, increasing profitability, and strengthening its stability. So, all this enables enterprises to enhance their overall performance. We measure these changes in the enterprises by the innovation variable, which indicates the improvements in products and services, changes in process, and foreign-owned technology.

According to Reçica et al. (2019), who have analysed the correlation between innovation and export performance in transition economies, "following the logic of the Krugman model, it can be asserted that exporting firms have a greater tendency to be more innovative than non-exporting firms and their degree of innovation novelty is expected to be higher.

Innovation may take the form of completely new products (new to the market or even to the world) or upgrading existing products. Higher degrees of product novelty may increase the competitiveness of firms in international markets and thus positively affect their export performance, an issue largely neglected in the economic literature" (p.480).

There are few studies in North Macedonia about the correlation between innovation and export performance. A study by Bogdanovska et al. (2015) found that more than two-thirds of the companies have undertaken innovative activities - introducing either new products, services, or both. Respectively, around 35% of companies introduced new services, 13% introduced a new product or an improved good, and 24% introduced both, while 28% of companies were not active in providing product/service innovation. These innovations, provided by companies in North Macedonia, were new to the company (69%) and to the market (63%). Further, innovative companies in North Macedonia predominately are focused on exporting their products and services to local/regional/national markets, with one-third exporting to the European Union (EU), European Free Trade Association (EFTA), or EU candidate countries (34%), and one fifth (21%) exporting to other markets. Half of these innovative companies experienced increased or radically increased revenues (46%), while one-third of the surveyed companies (38%) have experienced an increase in the number of employees. Madzova (2018) found that "process innovations influence the intensive margin of export volumes via their impact on export prices. In turn, product innovations affect the extensive margin of exports through their impact on export offer" (p.26). Ramadani et al. (2017) found that firms that export directly are.004 % more likely to undertake innovation activities. This will be among the first studies conducted in the RNM that will employ export as a dependent variable.

7.3. Methodology

7.3.1. Data

This section presents the source of data employed for this paper's empirical analysis, where the characteristics and data collection of the WB/EBRD BEEPS dataset 2009, 2013, and 2019, employed for the empirical investigation are discussed (Table 7-1).

Table 7-1. BEEPS data for North Macedonia

Country	Year of survey			Total
	2009	2013	2019	
North Macedonia	366	360	360	1,086

Source: BEEPS database, 2020.

Table 7-2. Description of the variables

Variable Name	Variable Definition	BEEPS question
Age	Firm's age	2014 minus the year when the firm was established. In what year did your firm begin its operations in this country?
Agesq	The firm's age squared	
Competitors		Competitors for the main product/ service in the main market
Direct Exports	% of Establishment direct exports	What % of the establishment's sales were: Direct exports?
Domestic Ownership	Type of owners	Shares owned by private domestic individuals, companies or organizations
E_mailCOM		Use e-mail to communicate with clients or suppliers
Ownership Concentration		What percentage of this firm does the largest owner(s) own?
Foreign Ownership	Type of owners	Shares owned by private foreign individuals, companies or organizations
Innov_act		Dummy variable =1 if New product / new process=1
internetCONN		Is there a high-speed internet connection on the establishment's premises?
Productivity	Sales /labour	
Sales	Last year's total annual sales	In the last fiscal year, what was this establishment's total annual sales?
Size	Number of Employees	No. of permanent, full-time employees of this firm at end of last fiscal year.
Tech_FRGN_com		Technology licensed from foreign-owned company
Top_MNG_exp		How many years of experience working in this sector does the top manager have?
website		The establishment has its own website
quality_cert		Does the establishment have an internationally recognized quality certification?
new_idea_ps		New approach or new idea about products or services, business process, firm management

For the empirical analysis of this paper, we use firm-level data from the World Bank/EBRD's Business Environment Enterprise Performance Surveys (BEEPS) conducted in 2009, 2013, and 2019.[1] The BEEPS questionnaire consists of questions that allow us to specify the variables used in the theoretical framework followed here (export, innovation activities, knowledge spillover, etc). For this investigation, we employ the panel component of the database collected for 2009, 2013, and 2019 in North Macedonia, which consists of 1,086 observations used to benefit from the advantages of panel techniques).[2]

The BEEPS questionnaire consists of questions that allow us to specify the variables of our interest by following the theory. Table 7-2 gives a description of the variables employed in the model. Table 7-3 describes the variables employed in the model and their expected signs.

Table 7-3. Summary statistics of the variables

(i) continuous variables

Variables	**Obs**	**Mean**	**Std.Dev**	**Min**	**Max**
age	1,078	23.6	13.37	2	137
Direct_export	1,083	13.34	28.81	0	100
FRGNowner	1,086	7.14	23.9	0	100
own_concentration	1,079	87.12	23.2	2	100
Competitors	414	14.32	53.03	0	1000
Size	1,084	71.49	180.74	1	2146
Top_MNG_exp	1,076	18.79275	9.720885	1	60

[1] The variable year will be employed in the model in order to control for the round of the survey.

[2] The group of 366 firms were selected randomly in the 2009 round. They were asked if they agree to be surveyed in 2013, and they are re-interviewed in 2013. Again, asked if they would like to be surveyed in 2019 and, if they replied positively, were re-interviewed in 2019. Thus the 360 firms are firms that were interviewed in the three rounds of surveys 2009, 2013 and 2019 consist of the 1,086 observations.

(ii) dichotomous variables.

Variables	**Obs**	**Yes**	**No**
Innov_act	1,086	54.33	45.67
website	1,085	42.21	57.79
Tech_FRGN_com	835	22.51	77.49
quality_cert	1,034	29.11	70.89
E_mailCOM	726	85.54	14.46
new_loans	1,077	27.86	72.14
new_idea_ps	358	38.83	61.17

Source: Author's calculations based on data from BEEPS 2009, 2013, and 2019 RNM.

Dependent Variable: The dependent variable in the first model is the dummy variable of firms undertaking innovation activities. The available variable in the dataset is based on two questions: 'In the last three years, has this establishment introduced new products or services?' and 'In the last three years, has this establishment introduced new production/supply methods? *Innov_act* is equal to one if the answer to either question is 'yes' and zero otherwise. According to the survey data, 54.33% of firm respondents have undertaken innovation activities.

The dependent variable in the second model is direct exports. It is measured as a percentage of establishments sales. According to the survey data, the average of direct exports is 13.34, with a minimum of 0 and a maximum of 100.

7.3.2. Regression analysis

To explain the extent of companies' export activities in the RNM, we empirically investigate the relationship between a firm's innovation and direct exports. Endogeneity is a major problem that arises in the literature investigating the relationship between innovation and export activities. Considering the endogeneity problem, direct export and innovation activities are determined simultaneously, i.e., innovation activities are endogenous. This implies that endogeneity should be considered when investigating the relationship between direct export and innovation activities. Endogeneity appears in equations correlating between an independent variable and the disturbance term.[3] When there is endogeneity among the variables, Baltagi et al. (2003a) show substantial bias in OLS and the random effect estimators, and both yield misleading inferences.

One solution to the problem is using consistent instrumental variables (IV) with a large-sample normal distribution (Baum, 2006). Satisfactory instruments with meaningful economic rationale are not always easy to find, especially not valid ones that satisfy the two key properties – that it must be uncorrelated with the error term but correlated with the independent variable. The simple IV estimator assumes the presence of independent and identically distributed (i.i.d.) errors.

We apply an instrumental variables (IV) estimator as one of the solutions to the problem (Green, 2012). The empirical estimations of the export-innovation relationship are generated in two steps. The first model presents the probability of the enterprises to innovate (probit model), which reveals the importance of individual factors on enterprises' innovation activity with particular emphasis on the technology used. The second estimation presents the OLS estimates, which incorporate the predicted values of the first regression in conjunction with other firm characteristics that determine export activities.

The general model we will refer to can be written as follows:

$$Innov\_act_{it} = \phi_0 + \phi_1 Size_{it} + \phi_2 Tech\_FRGN\_com_{it} + \phi_3 Age_{it} + \phi_4 Agesq_{it} + \phi_5 E\_mailCOM_{it} + \phi_6 new\_idea\_ps_{it} + \phi_7 Internationa\_mrk_{it} + \phi_8\, new\_loans_{it} + \varepsilon_{it} \quad (1)$$

$$Direct\_export_{it} = \theta_0 + \theta_1\, prINNOV_{it} + \theta_2 FRGNowner_{it} + \theta_3\, own\_concentration_{it} + \theta_4 website_{it} + \theta_5 Size_{it} + \theta_6\, Tech\_FRGN\_com_{it} + \theta_7\, Top\_MNG\_exp_{it} + \theta_8 quality\_cert_{it} + \theta_9 Age_{it} + \theta_{10} Agesq_{it} + \mu_{it} \quad (2)$$

The impact of individual factors, such as size, technology licensed from a foreign company, ICT in the firm, new ideas, international market, and new loans, on the probability to innovate of a firm 'i' in period 't' are examined. The dependent variable of the first model (Innov_activity) shows product and/or process innovation.

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[3] The violation of the zero-conditional-mean-assumption (E[u| x]=0) can also arise for two other causes than endogeneity: omission of relevant variables and measurement error in regressors.

Following the methodological approach applied in the literature, in the next step, the predicted values of the above innovation regressions are inserted as innovation activity variables into the export activity model. Other firm characteristics such as ownership, ICT, and certifications are employed to estimate their impact on the extent of export.

Table 7-4 displays the estimated models' regression coefficients and corresponding p-values using probit, OLS, and IV methods, respectively. The inserted model, apart from the determinants of export activity, allows for digitalization, quality certificates, and other sources of foreign contribution, such as foreign ownership and technology licensed from foreign-owned companies on direct exports.

Before going to the coefficient's interpretation, the regressions' diagnostics are provided. The results indicate that we have insufficient evidence to reject the null hypothesis that the model has the correct functional form at a 5% significance level. The diagnostic tests suggest insufficient evidence to accept the null hypothesis that the residuals have a normal distribution. Furthermore, there is insufficient evidence to reject the null hypothesis of homoscedasticity in the model.

Considering the instrumental variable regression, our null hypothesis is that the instruments are valid and the model is correctly specified from the validity test of the instruments employed, where the F-test shows that they are jointly significantly different from zero. The statistics of 4.63 indicates the strength of the instruments. There is insufficient evidence to reject the null hypothesis that the variables are exogenous. This finding confirms that in the OLS, variables are exogenous and have no endogeneity problem.

We run a *Hausman examination* of the two regression OLS and IV, where the output reproduces the coefficients of IV and OLS. The *chi*-square statistic is 12.48, which is less than the critical value of *chi*-square at a 5% significance level with eight degrees of freedom. Thus, we do not reject the null hypothesis of the difference in coefficients in OLS and IV estimates. We conclude that it is safe to employ OLS rather than IV. Furthermore, the standard errors of the OLS are smaller than their estimates of IV. The findings will be interpreted for the probit and OLS coefficients.

Table 7-4. The productivity models: (i) the predicted values of innovation activities incorporated and (ii) IV regression results

Independent Variables	**Dependent Variable: Innovation Activities**		**Dependent Variable: Direct Exports**			
	Probit		**OLS**		**IV regression**	
	Coeff.	**ρ-values**	**Coeff.**	**ρ-values**	**IV Coeff.**	**ρ-values**
Innov_act			4.271**	(2.120)	21.53	(15.98)
FRGNowner			0.226***	(0.0673)	0.187**	(0.0848)
own_concentration			-0.0162	(0.0455)	-0.0283	(0.0565)
website			1.644	(2.154)	-0.226	(4.422)
Size	-0.00101	(0.00145)	0.0305***	(0.0118)	0.0500**	(0.0248)
Tech_FRGN_com	0.626**	(0.252)	5.910*	(3.108)	4.385	(5.304)
Top_MNG_exp			0.181	(0.120)	0.206	(0.186)
quality_cert			6.672***	(2.558)		
Age	-0.0317*	(0.0295)	-0.145	(0.164)	-0.443	(0.448)
Agesq	0.000594	(0.000500)	0.00266	(0.00164)	0.00689	(0.00658)
E_mailCOM	0.776***	(0.292)				
new_idea_ps	1.464***	(0.164)				
Internationa_mrk	0.235**	(0.119)				
new_loans	-0.111	(0.187)				
Constant	-1.388***	(0.461)	3.860	(5.394)	3.265	(8.951)
Instruments:						
E_mailCOM					√	
quality_cert					√	
Observations		352	788		442	
R-squared			0.142		0.066[4]	
F-statistics						
Sargan statistics			.			
Cragg-Donald Wald F statistic			.			

Note: Standard errors in parentheses, and *** p<0.01, ** p<0.05, * p<0.1

[4] As discussed by Woodridge (2020), we should not make anything of the smaller R-squared in the IV estimation: by definition, the OLS R-squared will always be larger because OLS minimizes the sum of squared residuals.

7.4. Findings

The *technology licensed from foreign-owned company* variable in the regression appears to have a positive and significant relationship with innovation activities. The coefficient of digitalization (e-mail communication) is significant and positively related to export activities. The regression results show a positive significant impact of creativity (new approach or new idea about products or services) on innovation activities.

We calculated the marginal effects coefficients after generating the probit model for Innovation activities. We find significant coefficients for technology licensed from foreign-owned companies, age, e-mail communication, creativity, and international market, which can be interpreted as follows:

- The coefficient of the *Tech_FRGN_com* is positive and statistically significant. This indicates that those firms that employ technology licensed from foreign-owned companies are 62 percent more likely to undertake innovation activities compared to those that do not employ.
- The relationship between innovation activities and age is found to be statistically significant and non-linear; in particular, innovation activities initially fall with age and reach a minimum at age 26 (the turning point is calculated using the approach of Wooldridge (2002).[5] Amongst those aged 26 or more, the effect of age is positive. The average of the age variable is 24 years.
- Firms that have gone through some digitalization processes (email communication) are 77 percent more likely to undertake innovation activities than those that do not, and this finding is statistically significant.
- Innovation activities are significantly and positively associated with creativity. In other words, firms that employ new approaches or ideas about products or services are more likely to undertake innovation activities.
- Firms that export directly are.004 percent more likely to undertake innovation activities.
- The variable international market is significant, indicating that companies that target the international market are 0.24 times more likely to undertake innovation activities.

[5] In the estimated equation with $B>0$ *and* $B_2<0$, the turning point is always achieved at the coefficient on x over twice the absolute value of the coefficient on X_2. $X^* = |B_1/(2B_2)|$.

The interpreted coefficients are statistically significant at a 1% significance level, offering evidence that the H_o hypothesis ($\theta_{it} = 0$) can be rejected for these cases. According to *chi2 statistics*, the explanatory variables are jointly significant (since Prob>chi2 = 0.000) at a 1% level of significance; therefore, the null hypothesis that all regressors are jointly insignificant may be rejected.

Export model regression is estimated using OLS and instrumental variable techniques (instruments used for innovation activities are digitalization and quality certificates). As explained earlier, we continue with the interpretation of the OLS. The results show a positive and statistically significant impact of undertaken innovation activities on direct exports. This impact confirms our hypothesis that more innovative enterprises tend to have a larger percentage of sales on direct exports. Furthermore, the larger the firm, the higher the direct exports. Also, *Tech_FRGN_com* and quality certification have a positively statistically significant impact on firms' direct exports.

7.5. Discussion and conclusion

This study extends and critically reviews the empirical literature concerning firms' incentives to undertake innovation activities and investigates how these changes affect firms' export activities. Our findings (using BEEPS 2009, 2013, and 2019 in RNM) show that age, technology, and digitalization are significant and positively related to firm innovation activities. We further examine the impact of (the predicted values of) the innovation activity model on direct export and thus conclude a positive and significant relationship. In addition to the impact that arises from the innovation model, we conclude that foreign ownership, managers' experience, and quality certificates have positive and statistically significant impacts on export activities.

Out of these results, we recommend that the government should support internationally recognized quality certification through mechanisms such as international quality assurance for businesses, innovation vouchers, matched funding of creativity, etc. Other ways of fostering creativity may be through getting businesses to work more closely with universities and research institutions and helping researchers, innovators, and businesses bring together specific knowledge, skills, and technical resources.

The positive and significant findings of the foreign ownership variable on export activities emphasize the importance of foreign investments. Based on these findings, we suggest that RNM should work on some improvements to the institutional framework, specifically the ownership rights and investments in infrastructure, which will encourage foreign investments that will further stimulate the innovativeness of firms and thus enhance export activities.

Limitations of the research

Limitations of any research in this area are partly conceptual and partly data-related. Data limitations, of course, were the main limitations of this research. The thesis relied on BEEPS surveys. Considering the BEEPS data set, the limitations were the following:

- *The availability of relevant variables*. Having in mind the effect of innovation activities undertaken by firms on their performance, we were primarily interested in investigating the determinants of the innovation process among firms in TEs in different stages of the innovation process (the so-called CDM model), starting from the decision of firms to innovate to the impact of innovations on the performance (using a three-equation system). Because of a lack of data, we had to limit ourselves to examining the relationship between innovation activities and firm performance using a single-equation model.
- *Short panel*. We use the panel data component of BEEPS, where the 1999 round is not included because the questionnaire in this round was significantly different from those in the later years, thus forcing the use of a three-year panel dataset, as explained above.
- *Treatment of missing observations*. There are large numbers of missing observations for some questions in BEEPS for an important variable of interest to this research - R&D intensity. Although the process of cleaning the data established that a large number of the missing observations were indeed zero, the problem was not fully resolved.
- *Change in the measurement of variables.* The problem related to the innovation activities variable comes from the questionnaire. While in the previous datasets, the question on innovation activities referred to product and process innovation in separate questions, in the latter dataset, the innovation question only referred to product innovation. However, since we have considered the innovation activities variable as product and/or process innovation, we have overcome the problem.

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Appendix

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. Hausman export2IV export2OLS

Note: the rank of the differenced variance matrix (8) does not equal the number of
coefficients being tested(9); be sure this is what you expect, or there may be problems
computing the test.  Examine the output of your estimators for anything unexpected and
possibly consider scaling your variables so that the
       coefficients are on a similar scale.

                ---- Coefficients ----
             |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
             |   export2IV   export2OLS    Difference          Std. err.
-------------+----------------------------------------------------------------
   Innov_act |    21.53127     4.270647       17.26062        19.92914
   FRGNowner |    .1874578     .2261168       -.038659        .0459531
own_concen~n |   -.0282664    -.0162086      -.0120578        .0400979
     website |   -.2260921     1.643673      -1.869765        4.402804
        Size |    .0499961     .0305244       .0194717        .0085497
Tech_FRGN_~m |    4.385121     5.909779      -1.524657        5.120178
 Top_MNG_exp |    .2064493     .1809464       .0255029        .1312485
         Age |   -.4430452    -.1450234      -.2980218        .4036247
       Agesq |     .006886     .0026608       .0042252         .005672
------------------------------------------------------------------------------
       b = Consistent under H0 and Ha; obtained from ivregress.
       B = Inconsistent under Ha, efficient under H0; obtained from regress.

Test of H0: Difference in coefficients not systematic
|
    chi2(8) = (b-B)'[(V_b-V_B)^(-1)](b-B)
          = 12.48
    Prob > chi2 = 0.1309
```

CHAPTER 8

ENERGY SECTOR AND ECONOMIC GROWTH

Adhurim Haxhimusa

Abstract

The energy transition presents a significant challenge for Kosovo. On the one hand, this challenge arises from its heavy reliance on ageing coal-fired power plants, the difficulties in attracting investments for renewable energy projects and the modernization of an outdated grid. Indeed, the investment costs associated with the energy transition will be borne by both industries and households. Consequently, energy prices are expected to rise with the adoption of renewable energy sources. On the other hand, Kosovo's economy, characterized by high energy intensity, is particularly vulnerable to increases in energy costs. Nevertheless, a reliable energy supply remains a fundamental prerequisite for economic growth. Therefore, Kosovo must implement comprehensive energy, climate, and industrial policies that provide the right incentives for replacing coal-powered facilities with renewable energy alternatives while advancing industry energy efficiency. A reduction in energy intensity can be achieved by substituting outdated industrial technologies with modern and energy-efficient solutions or by transitioning towards industries with lower energy intensity.

8.1. Introduction

In modern economies, both economic and social activities rely heavily on energy. Without it, none of these activities would be able to function effectively. The wide use of energy enables fast and efficient development of transportation systems, thus fostering local and global mobility. Energy also enables the production of goods and services and the heating and cooling living and working spaces. Empirical studies indicate a strong relationship between energy and economic growth (Stern and Kander, 2012; Stern, 2011; Kilian, 2008; Yergin, 2006; Lee & Ni, 2002). Bernanke (2006) points out that a shortage in energy supply leads to an upward push on inflation, subsequently impacting economic growth and social welfare. The Russian invasion of Ukraine in February 2022, coupled with sanctions imposed by Western countries on Russia, has disrupted global energy supply chains, resulting in significantly elevated global energy prices. This event shows how fast energy supply shortages can push upward prices. Kosovo has been significantly affected by this surge in global energy prices, primarily due to its heavy reliance on energy imports. The second section provides a deep discussion on the importance of energy for economic and social development.

This chapter explores the importance of energy supply security in fostering economic growth in Kosovo. In a competitive global landscape for investment, a reliable energy supply with affordable prices is essential for attracting investors. This article delves into the security of supply in Kosovo and draws comparisons with its neighbouring countries. It also dips into the complexities of how to supply security in Kosovo, intersects with the energy transition in the European Union (EU) and Kosovo, and examines its implications for Kosovo. Furthermore, this article provides an in-depth examination of energy intensity and pollution levels in Kosovo, offering a comprehensive perspective on the energy and pollution footprint of Kosovo's economy and how it has evolved over the past decade compared to neighbouring countries and the EU.

For Kosovo's economic growth, it is crucial to guarantee both the security of the energy supply and the affordability of energy. Despite authorities in Kosovo highlighting the advantage of very low energy prices for foreign investors, the security of supply, as indicated by SAIDI and SAIFI measures, is relatively low compared to its neighbouring countries (section six provides a deep discussion). The energy infrastructure is severely outdated, including old coal power generation facilities and an ageing and inefficient distribution grid associated with large network losses, necessitating substantial investments for modernization and expansion of both generation and distribution capacities. In the last two decades, Kosovo has been facing many challenges to ensure the security of its energy supply because of its, on the one hand, very old energy infrastructure (i.e., generation, transmission, and distribution) and, on the other hand, the high energy intensity of its economy. However, investment in modernization and expansion of energy infrastructure poses a financial challenge for Kosovo. Therefore, Kosovo has struggled to attract adequate investment in its energy infrastructure to enhance supply security. Over the past three years, some renewable generation capacities have been invested, primarily incentivized through feed-in tariffs. Unfortunately, the feed-in tariffs offered by Kosovo to investors exceed the price paid by consumers, including grid tariffs and additional taxes. Consequently, in the near future, industrial consumers and households in Kosovo will likely face high electricity prices as generation capacities from renewable energies expand. The third section provides a detailed discussion related to this issue. Additionally, the fourth section provides a comprehensive overview of the transition towards renewable energy systems.

The chapter discusses the EU's energy and climate policies, including the internal energy market, carbon pricing, and renewables. This is essential, particularly given Kosovo's political aspiration to join the EU. Indeed, Kosovo is actively collaborating with the EU to align its legal framework with EU standards. As part of its efforts to drive energy transition and address the EU's strategy to combat carbon leakage (such as the EU's carbon border adjustment mechanism - CBAM), Kosovo plans to tax emissions soon using carbon pricing. It is important to emphasize that carbon pricing is widely acknowledged as the most effective climate policy to promote energy transition (Pigou, 1920). However, it is essential to point out that, given that over 90% of Kosovo's electricity generation relies on coal, implementing carbon pricing will inevitably lead to a surge in electricity prices. Moreover, implementing carbon pricing will not result in an immediate reduction of emissions, as no alternative power plants are available to replace coal-fired power plants.

Improving energy efficiency is an appropriate way for Kosovo to counteract the effects of elevated energy prices on the economy. The data indicates that Kosovo has significantly reduced its energy intensity of GDP by 25% between 2005 and 2020. Nevertheless, compared with the EU, it is evident that Kosovo consumed 1.77 times more energy per capita than the EU to generate one unit of GDP in 2005. By 2020, this ratio has increased to 1.87 times. This shift signifies a worsening in Kosovo's competitiveness relative to the EU. Indeed, due to the current spike in global energy prices, producers in Kosovo experienced a more pronounced increase in production costs compared to producers from other countries (such as neighbouring countries) with low energy intensity. By investing in Kosovo's economy to improve energy efficiency, it will be less affected by steep rises in global energy prices. Therefore, it is essential for Kosovo to implement policies that encourage both firms and households to replace old, energy-intensive technologies and appliances with new and energy-efficient alternatives.

Furthermore, Kosovo's emissions intensity is twice as high as the EU's. Moreover, over time, this disparity has become more pronounced. Specifically, while Kosovo's emissions intensity increased by 6% between 2008 and 2020, the EU's intensity decreased by 15% during the same period. Indeed, this results from the increasing electricity demand, which is currently met by over 90% of outdated coal power plants characterized by low efficiency and high emissions factors. According to the Energy Strategy 2022-2031, Kosovo plans to invest in renewable energies with a total capacity of 1400MW by 2031. In Kosovo, each unit of electricity generated from renewable energies will replace coal-generated electricity, resulting in a lower emission intensity. Nonetheless, even with this additional capacity from renewable energies, Kosovo will only be able to meet about 35% of the increasing electricity demand. This indicates that its polluting coal power plants will continue to operate constantly beyond 2031 to ensure supply security.

To enhance the competitiveness of industries in Kosovo within regional and European markets, Kosovo must implement measures that promote investment. This includes replacing coal power plants with renewable energy sources and improving energy efficiency within industries. The latter can be achieved by substituting outdated industrial technologies with modern and more energy-efficient solutions or shifting towards inherently less energy-intensive industries.

8.2. Energy and economic growth

Energy powers economic growth (Yergin, 2006); hence, depending on the reliability and affordability of energy supply, energy is an opportunity or a constraint for economic growth and development. Studies conducted in the past use complex econometric methods to investigate the causal relationship between energy supply and economic growth (Kilian, 2008; Lee & Ni, 2002). Bernake (2006) argues that in the short run, energy price changes affect consumer spending and, thus, economic growth. They argue that due to high energy prices, economic growth will suffer in the long run following a cut in investment in new production facilities. As a result, labour productivity growth may slow down, thus making firms less profitable and lowering real wages. In their empirical study, Stern and Kander (2012) argue that the increase in energy supply is a key factor in explaining economic growth in Sweden in the first half of the 20th century, a time characterized by a very constrained energy supply. This relationship is especially pronounced when the energy supply is relatively limited, while the importance of labor-augmenting technological changes increases after relaxing the energy supply constraints. This means that when energy is scarce, it significantly constrains economic growth. Unfortunately, this is the current situation in Kosovo, as it struggles with an unstable energy supply.

Conversely, when there is a sufficient energy supply, its impact on economic growth becomes less pronounced (Stern, 2011). A current example from South Africa demonstrates the importance of the security of energy supply, where daily blackouts hamper business activities at that level, leading factories to close in this country. In 2019, supply shortages with electricity contributed to a drop in GDP growth by about 1.3 percentage points (Economist, 2023).

Governments worldwide are aware of the high importance of modern energy services and, therefore, are investing trillions in establishing reliable energy infrastructure for their economies (IEA, World Energy Investment 2021, 2021).

The importance of energy supply as one of the most important pillars to support economic growth and stability is discussed by Bernake (2006) concerning inflationary pressures driven by high energy prices. Generally, energy prices are driven by increased energy demand and/or supply shortages in global and regional markets. Inflation driven by high energy prices pushes economies of developing and developed countries into recession after it first causes a drop in quantity demand and, thus, in production, investment, and employment (World Bank, 2019). However, in developing countries with relatively high unemployment and poverty rates, such events might put a larger share of the society into poverty, increase inequality and worsen political stability (UN, 2022).

Inflation has become a severe current issue, prompting central banks worldwide to take measures, particularly in the aftermath of Russia's invasion of Ukraine in February 2022. This event has destabilized global energy supply chains and markets, given Europe's high dependence on Russian energy, namely gas and oil. Comparing gas prices in Europe between August 2020 and August 2022 reveals a tenfold increase, surging from roughly 35 €/MWh to about 350 €/MWh. The economic repercussions of inflation driven by soaring energy prices vary from country to country, depending on the energy intensity of production and the availability of domestic energy resources. For instance, developing countries, such as Kosovo, deal with limited access to financial means, a lack of domestic energy resources, and unreliable energy infrastructure, leading to a more pronounced surge in relative energy prices than developed countries. Naturally, this aggravates the challenges households and industries face in these countries.

8.3. Investment in energy infrastructure: a large financial burden for developing countries

Among many technical constraints in managing a highly complex energy system, financial affordability is another constraint to economic growth and social development. The affordability of energy hinges on the long-term efficiency of the entire energy supply chain, including generation, transmission, and distribution capacities, as well as the effective functioning of energy markets. The electricity generation costs depend highly on the fuel used to power the plants. For example, electricity systems with a large share of power plants that run on low-cost fuels typically have lower generation costs on average compared to systems that rely highly on high-cost fuels. Furthermore, well-maintained and efficient transmission and distribution capacities reduce network losses, which then contribute to lower energy costs. This, in turn, helps countries in strengthening their competitiveness. Nevertheless, maintaining an efficient energy system with low costs requires a large-scale investment.

Ensuring the security of electricity supply requires substantial investments in the infrastructure of electricity systems, much of which are considered sunk costs. These systems are characterized by large expenses for both initial investment and ongoing maintenance in generation, transmission, and distribution capacities. Achieving a balance between generation and consumption and considering their geographical dispersion is crucial for grid stability. Additionally, effective management of a modern electricity system with a large share of renewable energies necessitates investments in ancillary capacities such as smart meters, storage facilities, digitalization, payment systems, among others (Eberhard & Dyson, 2020), alongside the presence of well-functioning and competitive energy markets.

Investments in energy infrastructure are generally undertaken to enhance system reliability, meet demand, and provide high-quality energy services for a long time, given the long lifespan of such investments. Therefore, plans to invest in expanding or modernising existing capacities are done years in advance. This is necessary given the high level of coordination between generation, transmission, and distribution to keep electricity demand and supply balanced and ensure the security of supply at any time.

Unfortunately, developing countries like Kosovo generally have poor energy systems marked by significant network losses and frequent unplanned power interruptions. To improve this situation, they require substantial investments in infrastructure improvement. However, they encounter numerous challenges in obtaining the necessary financial means for these energy infrastructure investments due to the high country risk, which impacts their credit rating (UN, 2023). Countries with low credit ratings and weak political and macroeconomic stability typically face higher financing costs for their energy projects. The investment costs of implementing such energy projects are subsequently reflected in high energy bills for industries and households, which is then associated with adverse macroeconomic effects. For these reasons, Kosovo has struggled over the past two decades to advance investment projects to modernise and construct new generation and distribution capacities. However, depending on outdated energy facilities has rendered the security of supply highly unstable, resulting in significant economic and social costs. Kosovo stands as an example of this challenge.

8.4. Transition towards renewable energy systems

Scientists agree that climate changes manifested in long-term shifts of temperatures and climate patterns result from human economic and social activities driven by high usage of fossil fuels (e.g., coal, gas, and oil). Combustion of fossil fuels generates not only usable energy but also negative externalities in the form of greenhouse-gas emissions. What humans have used to drive economic growth in the last two centuries contributes to environmental degradation and societal harm, posing a threat to the degrowth movement (Paulson, 2017). Around 75% of greenhouse gas emissions come from the energy sector (Climate Watch, 2023). Therefore, the energy sector is currently experiencing a transition as part of human efforts to alleviate climate change. In the last two decades, governments have been implementing various policies to push forward their green agendas, which plan a shift from fossil fuel-based energy systems to renewable energies (e.g., wind, solar, geothermal, etc.).

Energy transition means more than replacing emissions-intensive parts of the existing energy infrastructure with renewable energies. Energy transition requires large investments in various ancillary energy services (e.g. high scale storage, demand response, modern transmission and distribution capacities, etc.) due to the stochastic nature of generation from renewable energies. Additionally, it calls for a shift in consumer behaviour to align with the inherently unpredictable nature of renewable energy generation. Hence, modern energy systems, heavily relying on renewable energies, face challenges in balancing energy generation and consumption. In contrast to the past, where generation has followed consumption patterns, in modern energy systems with large shares of renewable energies, households and businesses need to adjust energy consumption, such as stopping or shifting industrial production, to destress the energy system. In addition, energy transition needs to be supported by integrating regional energy markets to reap the benefits of the geographical diversity of dependent renewable energies. However, the integration of markets requires very high investments in interconnection capacities and coordination of energy policies between countries. Since Kosovo aims to join the EU, the next section illustrates the transition of European energy markets and outlines what has been done and still needs to be accomplished in Kosovo to align with EU energy and climate policies.

8.5. The energy and climate policy in the EU – implications for Kosovo

Until the end of the 90s, most EU member states were dominated by vertically integrated incumbent national companies with full ownership and management control over generation, transmission, distribution, and retailing. Since then, the EU has been pursuing establishing a European internal energy market that enables free energy flow across EU member states without physical and administrative barriers. As a result, European energy markets have undergone significant transformations. These include liberalization, unbundling, market integration, and the integration of renewable energy sources. This is expected to contribute to competition, affordability, and efficiency in European energy markets.

8.5.1. The EU internal energy market

Although many countries have limited energy resources, they benefit from relatively easy access to energy due to the well-established global energy supply chain infrastructure, made possible by regional and global trade of energy sources among developed and developing countries. In the last decades, globalization and integration of energy markets have been deepening and broadening following the adoption of a wide range of energy policy measures that put into the centre the role of free global and regional energy markets in allocating energy resources (Harris, 2001). The European Commission (EC) paved the way for establishing the European internal energy markets by adopting directives 96/92/EC, 03/54/EC, and 09/72/EC. Subsequently, EU member states have been actively realigning their national energy policies to align with a unified EU energy policy, thereby facilitating the establishment of an internal European energy market.

As mentioned above, with harmonization, deregulation, unbundling of vertically integrated energy suppliers, and liberalization, open European energy markets are expected to enhance efficiency, improve reliability, and ensure the security of supply with competitive prices. Empirical studies show that unbundling of vertically integrated energy suppliers significantly impacts investment in interconnection capacities (Gugler et al., 2013). Gugler et al. (2018) show in a very comprehensive study that investment in cross-border infrastructure and harmonization of different systems of energy exchanges (e.g., market coupling) has fostered energy exchange, price convergence, and energy market efficiency in the EU, where the energy prices in average show a significant drop. Therefore, unbundling incentivizes investments in interconnection capacities directly and indirectly. It promotes market integration, competitiveness, and efficiency.

In the EU, the first directive of the single electricity market (96/92/EC) was adopted in 1996 and defines the common rules for the internal electricity market. This directive was followed by two subsequent directives in 2003 (03/54/EC) and 2009 (09/72/EC). Pollitt (2019) provides a summary of these directives.

- Directive 96/92/EC found the base for unbundling and establishing competitive wholesale and retail markets by the end of 1999. With this directive, third parties got access to transmission and distribution networks, including cross-border trade, and the retail market for competition with big (industrial) customers was liberalized. In addition, member states that decided to account unbundling and keep vertically integrated monopolies were obliged to publish separate accountings for generation, transmission, and distribution to disable cross-financing.
- Directive 03/54/EC has strengthened the role of wholesale markets and liberalized retail markets. At the same time, member states still running with vertically integrated monopolies with separate accountings were obliged to run separate business units for generation, transmission, and distribution, known as legal unbundling. This directive paved the way for establishing national regulatory authorities. The regulators must be independent from other governmental bodies and responsible for regulating and determining natural monopolies' charges, namely transmission and distribution operators.
- Directive 09/72/EC establishes the Agency for Cooperation of Energy Regulators (ACER), the EU regulatory body for electricity and gas. ACER is responsible for fostering cooperation among national regulatory authorities and ensuring that market integration (i.e., cross-border trading) and the implementation of legislation in the EU member states align with the EU energy policy objectives and regulatory frameworks.

All measures implemented by EU member states strongly emphasize the role of energy markets and market-based security of supply, where affordability, reliability, fair market access, high level of consumer protection, and incentives to invest in new generation capacities and grid expansion are guaranteed. Following the new energy policies, national incumbent monopolies are unbundled and vertically disintegrated, citizens and businesses of most EU member states have the option to choose their supplier, competition is introduced in the wholesale markets, cross-border trade is not more under the control of bilateral contract between national monopolies, and integration of markets is increasing (European Court of Auditors, 2023; Pollitt, 2019; Gugler & Haxhimusa, 2019; Zachmann, 2008). However, although the goal of the EC was to achieve full market integration by 2014, this goal is still not reached because of complex legal architecture with directives and network codes, weaknesses in governance, incomplete market surveillance, and delays (European Court of Auditors, 2023).

Kosovo has been consistently making efforts, though not always achieving success, in aligning its legal system with the EU. Following the above energy directives, the Law on Energy Regulator (2004/9) established the national regulatory authority in Kosovo, the Energy Regulatory Office (ERO). At the same time, the Law on Electricity (2004/10) established the Transmission Network Operator of Kosovo (KOSTT), which later in 2005 is, registered as a single business unit that is legally unbundled from the incumbent energy supplier, Kosovo Energy Corporation (KEK). Subsequently, in 2010, KOSTT achieved full independence from the incumbent, KEK.

In 2013, the distribution sector underwent privatization through a consortium comprised of Turkish and French companies, Çalik Holding and Limak, leading to the establishment of Kosovo Electricity Distribution Services (KEDS). With this final step, Kosovo fully unbundled the electricity system's generation, transmission, and distribution components. While large industrial consumers can choose their suppliers, the liberalization of the electricity market still needs to be accomplished, allowing households and small companies to choose their suppliers.

Concerning market integration, by the end of 2020, KOSTT and the Albanian TSO will have started to operate the joint block. The first auction of cross-border capacities between Kosovo and Albania was launched on this occasion. The Albanian Power Exchange (ALPEX) was also established to enhance the efficiency of energy markets. ALPEX is the joint energy exchange for Albania and Kosovo and commenced operations this year. This development marks a significant stride towards introducing competition in the wholesale electricity market.

8.5.2. Carbon pricing: the EU ETS

Burning fossil fuels in the form of coal, gas, and oil releases carbon dioxide into the atmosphere, which has been locked away for thousands of years. The extensive utilization of fossil fuels results in negative environmental externalities, leading to climate change since the planet cannot absorb the greenhouse gases emitted by industrial activities. Since markets failed to address environmental pollution, countries have used various options to solve this issue.

Economic theory hints that market-based solutions, such as internalizing the cost of externalities by setting a price equal to the marginal social costs of pollution (e.g., carbon tax), would require polluters to bear the cost of their negative environmental impacts (Pigou, 1920). Economists generally agree that pricing externalities are the best market-based environmental mechanism for abating emissions compared to other policies, like subsidies, bans, and regulations, employed by many countries in addressing climate change (Metcalff, 2009). The newest empirical studies bring evidence for this (e.g., Gugler et al., 2021). Metcalf (2009) broadly discusses the effectiveness of various climate policies in combating climate change. In addition, some scholars argue that given the urgency in speeding up the energy transition process and reaching carbon neutrality, a combination of various policies (e.g., carbon tax, subsidies, and bans) is necessary (Hepburn et al., 2020).

Although the EC was not very effective in fully harmonizing the energy and climate policy across member states, it was successful in establishing the first and largest multinational greenhouse-gas Emissions Trading System that covers all EU member states (EU ETS). The EU ETS is a cap-and-trade system which follows these steps:

- A cap on permitted emissions is first determined, and then permits are issued to the size of the cap. In this sense, polluting the environment becomes a scarce good.
- Polluters (e.g., coal, gas, and oil power plants) buy permissions through auctions or receive a limited number of free permissions, which they can trade with one another. Therefore, firms with high emissions-abating costs must buy certificates from firms with low emissions abating costs. Thus, the cap-and-trade system ensures that firms do abate emissions with the lowest marginal costs of abatement while total emissions are capped.

- The cap on emissions is reduced over time to ensure emissions fall and the permit price increases. Hence, it puts incentives in place to reduce emissions through investment in low-emission technologies and innovation.
- Revenues from the sale of permissions are collected by member states. These funds are used to support innovation in low-carbon technologies and the energy transition.

The EU ETS covers these sectors: electricity and heat generation, energy-intensive industry sectors, including oil refineries, steel works, and production of iron, aluminium, metals, cement, lime, glass, ceramics, pulp, paper, cardboard, acids, and bulk organic chemicals.

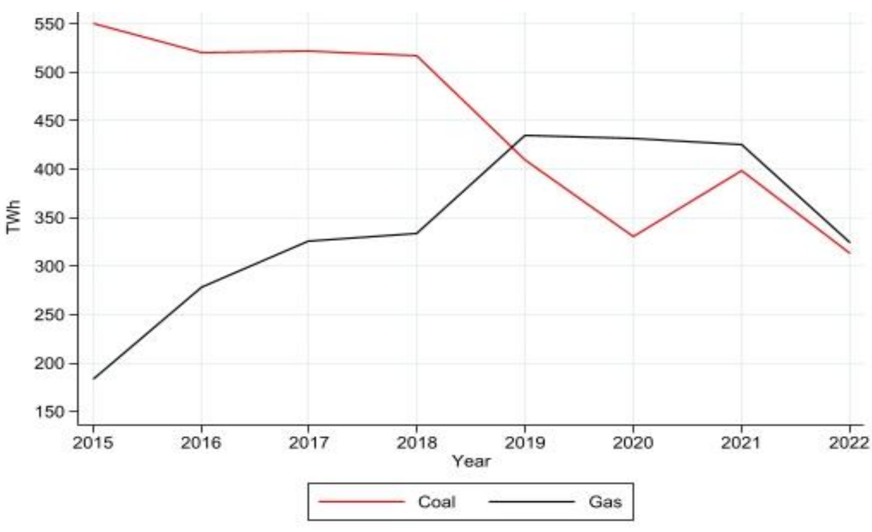
The level of the EU ETS price plays a crucial role in determining the extent to which the EU ETS effectively provides the proper incentives to support a timely and efficient transition towards green energy systems. However, the EU ETS failed to provide sufficient incentives for investment in low-carbon technologies due to historically low EU ETS prices (Figure 8-1). When the EU ETS was introduced in 2005, the average EU ETS price was relatively high, exceeding 25 €/tCO_2. Unfortunately, it dropped below 7 €/tCO_2 in 2008 and remained at that level until mid-2017. The literature acknowledges that, among other factors, the deep and prolonged economic downturn following the financial crisis, feed-in tariffs for renewable energies, and the large quantity of emission allowances may have contributed jointly to the low EU ETS prices (EC, 2013; Newell et al., 2012). Since mid-2017, EU ETS prices have been gradually increasing, ranging between 80 €/tCO_2 and 100 €/tCO_2. These price levels are widely recognized as sufficiently high to facilitate the replacement of high carbon-intensive coal power plants with relatively low carbon-intensive gas power plants and to incentivize investment in low-carbon technologies (OECD, 2021).

In terms of emissions from electricity generation, a reduction in emissions in the short run can be achieved by replacing coal power plants with gas because burning gas is less emission-intensive than coal. With permit prices on the EU ETS, the marginal costs of coal power plants increase more than those of gas power plants. Gugler et al. (2021) show that the most efficient gas power plants begin replacing the least efficient coal power plants at permit prices of around 15 €/tCO_2 equivalent.

Figure 8-1. Monthly EU ETS prices, 05.2005-10.2023 (investing.com).

However, as Figure 8-1 illustrates, EU ETS prices were not at that level for an extended time, resulting in high coal usage in the European electricity markets until the end of 2017, when the EU ETS prices began to rise. Since 2018, as Figure 8-2 shows, coal electricity has declined, and gas and renewable energies have filled the gap.

Figure 8-2. Coal and gas electricity generation in the EU, 2015-2022 (ENTSO-E, 2023).



The Energy Strategy of Kosovo 2022-2031 highlights the importance of introducing carbon pricing. According to it, by 2025, Kosovo will start imposing a tax on emissions by implementing a national emission trading system (ETS), ensuring that polluters internalize the external pollution costs. This is expected to incentivize innovation and investment in green technologies (e.g., renewable energies). Moreover, by 2031, the Kosovo ETS is planned to be integrated into the EU ETS. Implementing the Kosovo ETS is the only way to alleviate the carbon cost burden that domestic firms may face when exporting to the EU following the EU's new policy with the Carbon Border Adjustment Mechanism (CBAM). The CBAM serves as a tool to correct the competitive disadvantages faced by EU companies from the EU ETS and address the issue of carbon leakage. This occurs when EU companies relocate to countries with lower or no taxes on emissions to avoid paying environmental levies.

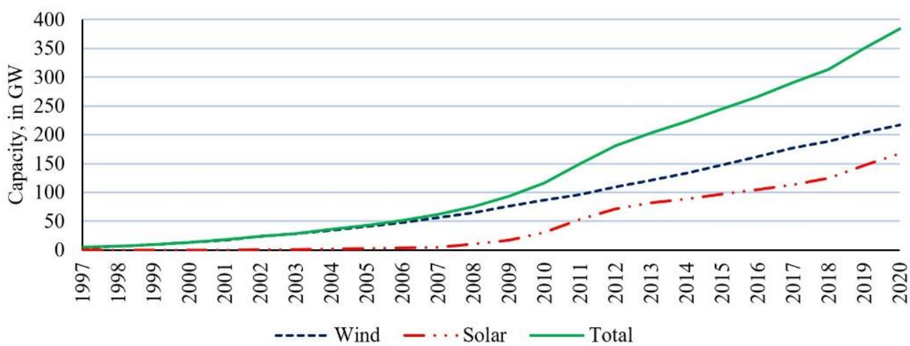
It is important to note that Kosovo heavily relies on coal for over 90% of its electricity demand, with hydro, wind, and solar technologies together accounting for the remaining 10% (ERO, 2023). Given this energy mix, implementing carbon pricing is unlikely to yield immediate reductions in emissions. However, from the long-term perspective, investment in green technologies (e.g., in any form of renewable energies like wind, solar, geothermal, etc.) is expected to be substantially incentivized, enabling the first steps towards reduction of emissions of Kosovo`s energy, industrial, and household sectors.

8.6. Development of renewable energies

The development of renewable energies from the EU member states was primarily based on support schemes (e.g., feed-in tariffs). Germany implemented the first support schemes (i.e., feed-in-tariff) for renewable energies in 1991. Only in 1996, the EC with the "Energy for future: renewable sources of energy" and the first renewable electricity directive, 2001/77/EC, put the first ambitious to cover 12% of consumption by renewable energies by 2010. The second renewable electricity directive, 2009/28/EC is implemented in 2009. This directive sets national mandatory targets for 20% of energy consumption to be covered by renewable energies and for 10% of energy consumption in transport to be covered by renewable energies by 2020.

The increasing cost-competitiveness of renewable energies has made possible a large amount of progress in numerous renewable energy projects in the EU since 2010. A report from REN21 (2019) shows that between 2010 and 2020, wind onshore investment projects have become cheaper than coal, gas, and nuclear projects in many countries. As a result of several support schemes for renewable energies and increasing cost-competitiveness of wind and solar, since 1997, wind and solar capacities increased from about 5GW and 0.1GW to about 220GW and 170 GW, respectively. Together, they now account for about 400GW, with Germany paving the way. Figure 8-3 shows these developments. The substantial investments made to expand renewable electricity generation capacities have led to significant progress in wind and solar generation, bringing them closer to coal and gas in electricity generation. According to a report by Ember (2023), the share of wind and solar power in the EU's electricity generation mix reached 22% in 2022, the first time this share exceeded that of gas. In addition, Ember (2023) reports that electricity generation from coal dropped from about 30% in 2000 to about 16% in 2022. For the first time, more electricity was generated by wind and solar than by coal in 2019.

Figure 8-3. Wind and solar capacities in Europe between 1997 and 2020 (BP, 2021)

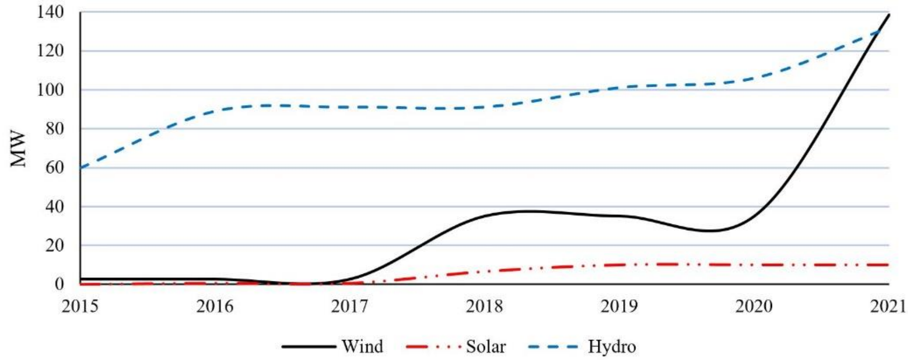


In 2018, the Renewable Energy Directive 2018/2001/EU was enacted. This directive put new targets for EU member states, where 32% of energy consumption must be covered by renewable energies by 2030. In addition, with this directive, projects in renewable energies from renewable energy communities and large investors are treated equally from support schemes. This directive enables renewable energy communities and the self-consumption of renewable energy.

In 2022, the EC presented the REPowerEU Plan. This was in response to the difficulties in ensuring the security of the energy supply resulting from the global energy market disruption caused by Russia's invasion of Ukraine. This plan is focused on saving energy, generating clean energy, and diversifying the energy mix. As part of this plan, in 2023, the EC agreed to increase the 2030 target to at least 42.5% while aiming to reach 45%. This new energy policy of the EU aims to increase the share of various renewable energy sources in the generation mixes to diversify the energy sources and move toward a carbon-neutral economy.

In the last decade, following the practices of the EU member states and aiming to align its energy policy with the EU, Kosovo has implemented its first support schemes for RES. Figure 8-4 shows that under these support schemes, the first wind capacity of 1.35 MW was installed in 2010, followed by a solar capacity of 0.1 MW in 2015 (ERO, 2023). By 2020, there were about 140 MW of wind and 10 MW of solar capacity. However, following the war in Ukraine, recent developments indicate a strong interest by private investors and households in solar and wind capacities. According to ERO (2023), it is processing a long list of requests for permissions to invest in these capacities, with 42 MW of solar capacities approved by ERO in 2022 alone. According to the Energy Strategy of Kosovo 2022-2031, Kosovo is dedicated to investing in renewable energies and diversifying its generation mix, whereby by 2031, around 35% of electricity consumption will be covered by RES, with a target installation of about 1200 MW capacity, with 50% wind and 50 % solar. However, this strategy does not promote a technologically neutral energy policy as it specifies the technologies and their respective capacities. Instead, this decision should be made by investors, who need to analyze the net profit and return on investment in renewable energies. This analysis should consider the potential for investment in any form of renewable energy, covering aspects such as spatial planning, geographical distribution, and grid bottlenecks that might arise from spatial and time disbalances between generation and consumption.

Figure 8-4. Wind, solar, and hydro capacities in Kosovo between 2015 and 2021 (ERO, 2023)



However, despite its dedication to achieving a carbon-neutral energy system, Kosovo, which heavily relies on lignite (above 90%), faces the challenge of balancing the need to ensure security of supply, affordability, and emissions reduction. A stable electricity supply with affordable prices is necessary for Kosovo industries and households, but the Energy Strategy 2022-2031 clearly states that Kosovo is committed to achieving this while working on reaching its environmental goals.

8.7. Security of supply in Kosovo

The two operational lignite power plants, Kosova A (432 MW) and Kosova B (528 MW), constructed in 1970 and 1984, stand as the largest polluters in Kosovo. These facilities suffered from a lack of proper maintenance and mismanagement during the state repression of Slobodan Milosevic between 1990 and 1999. Unfortunately, this situation was not rectified by the United Nations Interim Administration Mission in Kosovo (UNMIK) management team after 1999. Factors like financial mismanagement and inadequate investment have rendered these facilities unreliable and outdated. This period has been marked by lengthy and unplanned power interruptions, resulting in substantial losses for industries and, thus, welfare.

Shortly before the declaration of independence in February 2008, the power supply situation significantly improved, thanks to better management of lignite generation facilities and the transmission and distribution grid. However, the situation with the security of supply is still not as good as in other neighbouring countries. The World Bank Doing Business database reports data on the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI) for Kosovo, Albania, Serbia, North Macedonia, and Austria. Figures 8-5 and 8-6) depict the SAIDI and SAIFI from 2014 to 2019, respectively. Unfortunately, there are no data available before 2014. According to both SAIDI and SAIFI, Kosovo has made significant improvements in ensuring the security of supply over the years, but it has not yet reached the level of Serbia, a neighbouring country with the best performance in the region. Only Albania exhibits a worse performance than Kosovo.

Figure 8-5. SAIDI (World Bank, 2023)

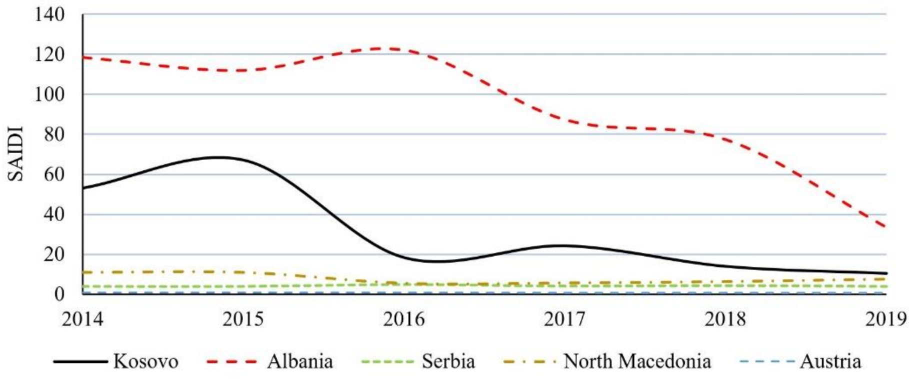
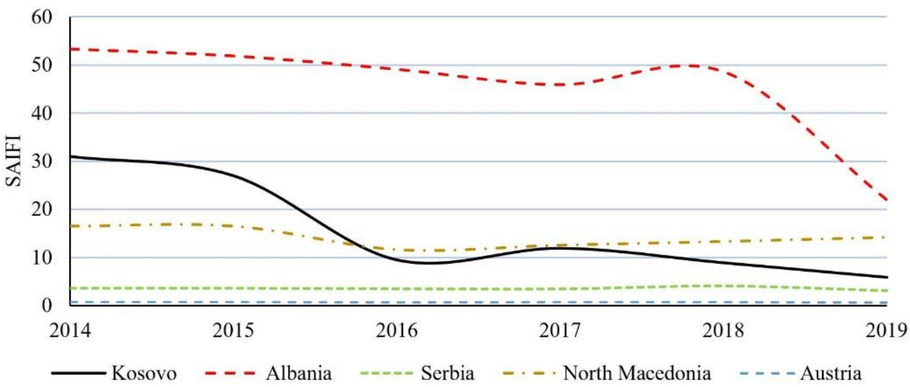


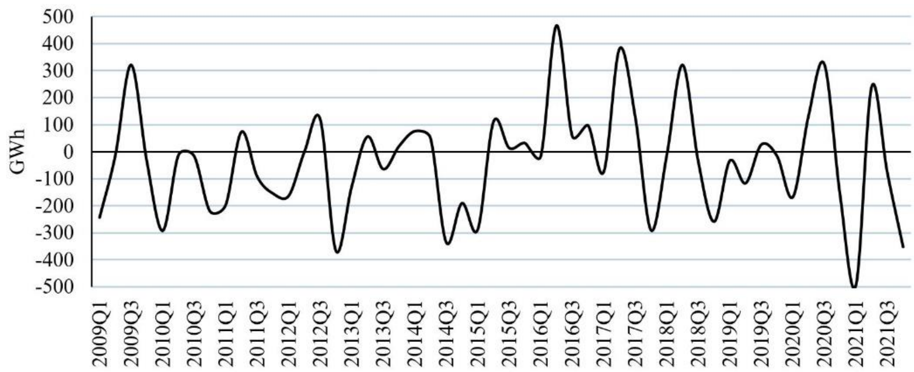
Figure 8-6. SAIFI (World Bank, 2023)



The observed improvement can be attributed to various reforms implemented to enhance the electricity system's stability, ranging from unbundling to the privatization of the distribution system operator. However, security of electricity supply is still very fragile, since the SAIDI (SAIFI) in Kosovo is 10.42 (5.89) in 2019, while in Austria it is only 0.63 (0.61). This is a result of the lack of adequate generation capacity to meet the demand at any time and outdated distribution grid.

In Figure 6, we can observe the quarterly net electricity exports from 2009 to 2021. Between 2009 and 2014, Kosovo's electricity system experienced a large gap of approximately 75 GWh between generation and consumption, which is closed by imports. As depicted in Figure 8-7, the situation significantly improved between 2015 and 2019, eliminating the gap between generation and consumption. It is important to note that between 2009 and 2021, in the first and fourth quarters, Kosovo experienced an average deficit in generation of about 151 GWh. This implies that, especially during the winter months when temperatures drop, Kosovo is able to keep lights on only through imports.

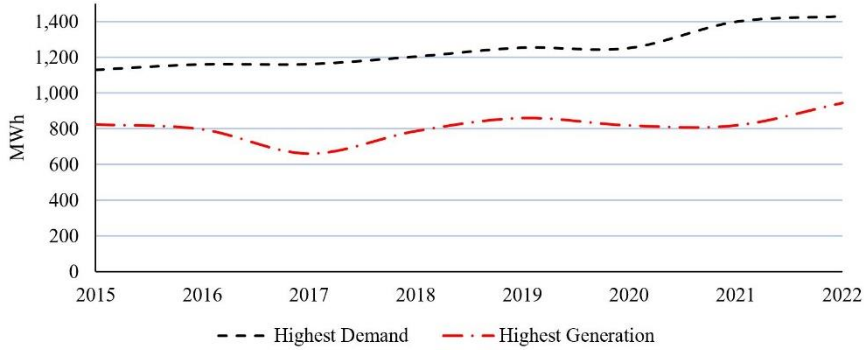
Figure 8-7. Quarterly net electricity exports of Kosovo (Kosovo Agency of Statistics).



It is important to note that as long as generation does not meet demand at any time, the electricity system cannot ensure a stable electricity supply. Figures 8-8 present an intriguing perspective to better understand the fragility of Kosovo's electricity system. It illustrates specific hours during which the system is under significant stress due to insufficient generation to meet demand. Figure 7 highlights a large gap of around 500 MWh between peak demand and peak generation, with demand reaching 1429 MWh on January 22, 2022, at 23:00 (ERO, 2023), while the maximum generation that capacities could support at this hour is 946 MWh. Hence, figures 6 and 7 make clear the lack of system adequacy in Kosovo.

Nevertheless, this study aims to illuminate additional facets of energy and its relationship with the economy and environment, including the specific energy-use sectors. Understanding energy intensity is crucial. It quantifies the amount of energy needed in kilowatt hour (kWh) to generate a single unit of GDP (e.g., 1 Euro) and the environmental impact resulting from energy consumption in generating this economic value. This will be the focus of the forthcoming section.

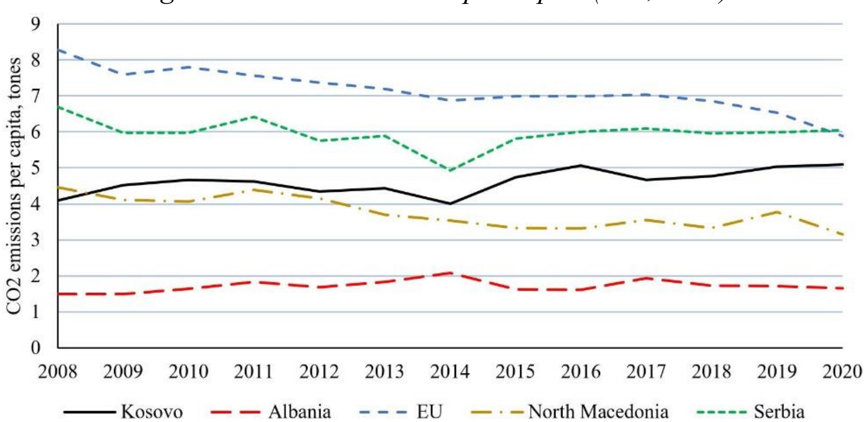
Figure 8-8. Peak demand and generation at specific hours of the year (ERO, 2023).



8.8. GDP, energy utilization, and pollution

According to the International Monetary Fund (IMF), the GDP per capita in the EU was approximately eight times greater than in Kosovo in 2020. Specifically, Kosovo's GDP per capita stands at around 4298 USD; in the EU, it reaches approximately 35490 USD. This disparity in living standards, as indicated by GDP per capita, is also reflected in the CO_2 emissions per capita, as shown in Figure 8-9 for Kosovo, Albania, the EU, North Macedonia, and Serbia. Given that fossil fuels dominate the EU's energy mix, the EU's high living standard is naturally associated with high CO_2 emissions per capita. Exploring deeper into GDP and CO2 emissions per capita dynamics reveals a different narrative. Between 2008 and 2020, the GDP per capita in Kosovo increased by 1272 USD, while in the EU, it increased by 1154 USD. However, regarding CO_2 emissions per person, Kosovo witnessed a 24% surge, escalating from 4.1 to 5.1 tons, while the EU recorded a 29% decline, dropping from 8.3 to 5.9 tons.

Figure 8-9. CO2 Emissions per capita (IEA, 2023)



The substantial disparity in GDP per capita and the rise in CO_2 emissions per unit of GDP between Kosovo and the EU can be attributed to Kosovo's outdated industrial infrastructure and power generation facilities. Therefore, it is essential to show some insight into the energy consumption by key sectors in Kosovo and the EU to see which sectors drive energy consumption and emissions. Figure 8-10 illustrates the percentage share of final energy consumption across Kosovo's three key sectors (industry, services, and residential) from 2012 to 2020. It shows that the residential sector's percentage share of energy consumption is very stable, with a slight increase during this period. When comparing the percentage shares of the service and industry sectors in 2012 and 2020, it is evident that the percentage share of the industry sector has dropped by about 5% points, which is compensated by the service sector, which is gaining more importance in the last years with firms offering call centre services and software engineering products. What can be noticed is the large share of about 56% of energy that is attributed to the residential sector in 2019. This means that about 44% of energy is consumed by other sectors, which primarily contribute to job creation. Figure 8-11 shows the energy consumption by sectors for the European Economic Area (EEA) in 2019. In stark contrast, in the EEA, we observe a significantly low percentage share of energy consumption from the residential sector, accounting for only about 26%. This implies that approximately three-quarters of the energy is used by sectors (i.e., industry, services, and agriculture) that contribute a relatively higher value to the economy, which translates to additional jobs and welfare.

Figure 8-10. The percentage share of final energy consumption by three main sectors in Kosovo from 2012 to 2020 (Kosovo Agency of Statistics).

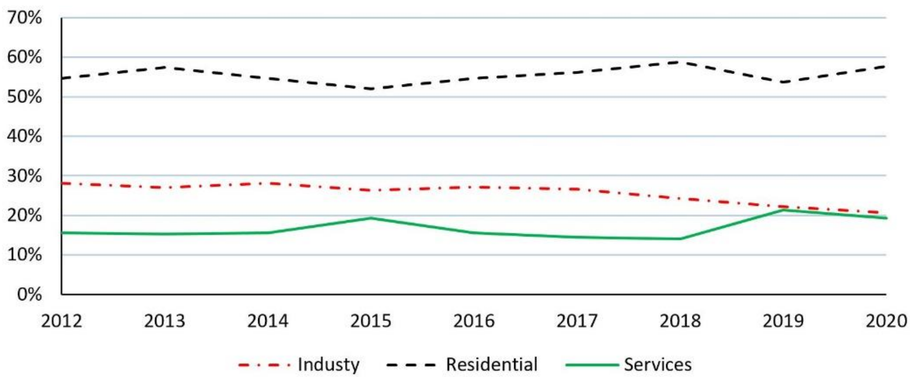
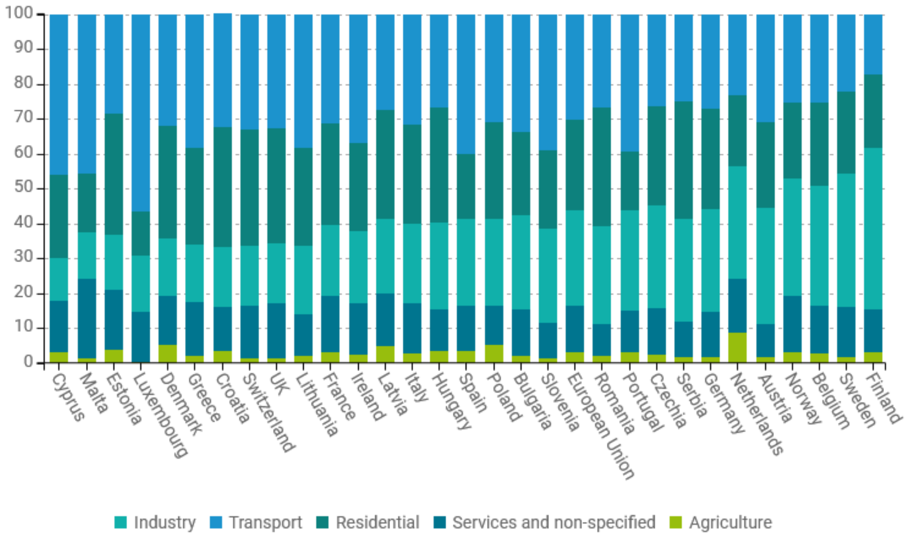


Figure 8-11. The percentage share of final energy consumption by sector by EEA members in 2019 (ODYSSEE-MURE, 2021)



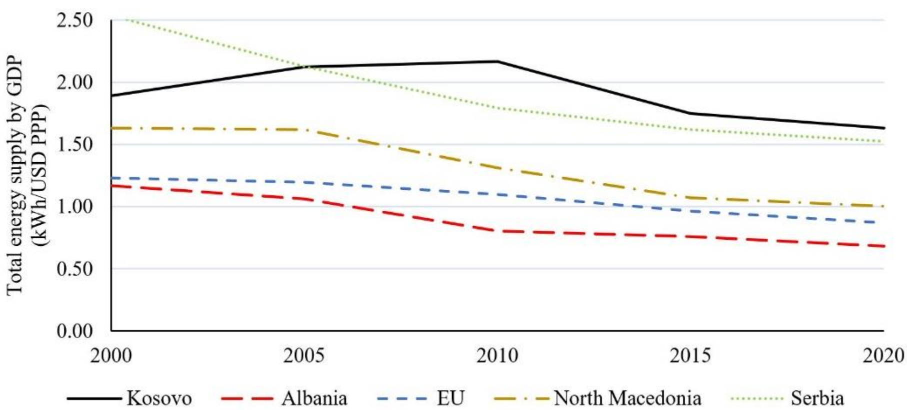
Another significant metric is the energy intensity of GDP. In Figure 8-12, we show the energy intensity levels of Kosovo, Albania, the EU, North Macedonia, and Serbia. Kosovo lags not only behind the EU but also its neighbouring countries. Specifically, Kosovo consumes almost twice as much energy (1.63 kWh) as the EU average (0.87 kWh) to produce one USD of GDP per capita. Despite being at a disadvantage compared to the EU, Kosovo has reduced its energy intensity of GDP by 25%, decreasing from 2.12 to 1.63 kWh/USD PPP between 2005 and 2020.

In contrast, the EU experienced a more significant reduction of 36%, lowering its energy intensity from 1.12 to 0.87 kWh/USD PPP over the same period. So, in 2005, Kosovo used 1.77 times more energy than the EU to generate one unit of GDP per capita. By 2020, this ratio had increased to 1.87 times. Indeed, this underscores a growing competitiveness gap between the EU and Kosovo.

These facts signify a notably low level of energy efficiency in Kosovo, prompting policymakers to urgently consider implementing measures that encourage companies and households to adopt more energy-efficient technologies and appliances, replacing highly energy-intensive ones. The Energy Strategy 2022-2031 underscores the significance of enhancing energy efficiency in Kosovo. The national objective is to reduce its final energy consumption by 1877 thousand tonnes of oil equivalent (ktoe) or

21.8TWh by 2031. This marks a targeted reduction of 21% compared to the business-as-usual scenario. Since the residential sector consumes about 55% of total energy, the Energy Strategy 2022-2031 focuses on savings in the heating sector. This will be realized through advancements in the energy efficiency of buildings and the development of district heating. However, a drawback of this strategy is the exclusion of the industrial sector. Considering Kosovo's notably high energy intensity of GDP and very energy-intensive industry characterized by outdated technologies, it is imperative to have a clear plan for promoting energy efficiency in both the industry and service sectors.

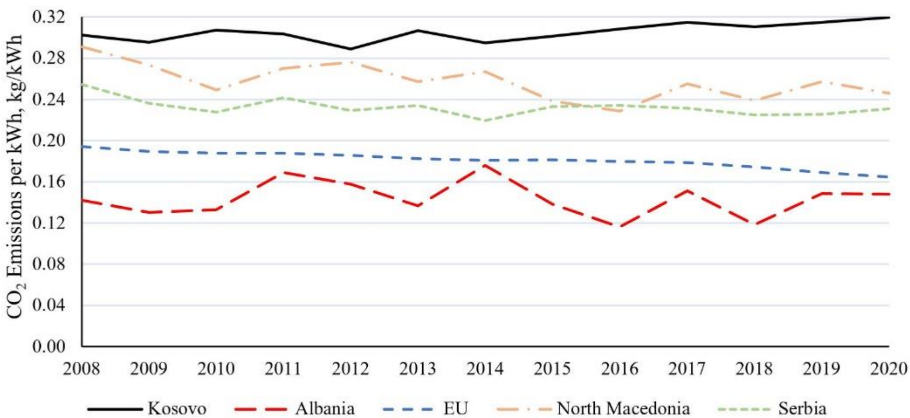
Figure 8-12. Energy intensity of GDP - kWh/USD 2015 PPP (IEA, 2023).



As mentioned in the Energy Strategy 2022-2031, public and private sectors are grappling with significant challenges in building human capacities capable of handling tasks ranging from the simplest to the most complex related to the energy transition. In the EU, improvements in energy efficiency partly stem from transitioning from the industrial sector to the service sector. Additionally, there is a shift within industries towards less energy-intensive production methods and products. The question is whether the Kosovo labour market can facilitate this transition level, enabling the Kosovo economy to enhance its energy efficiency and competitiveness and create new job opportunities. Unfortunately, the Energy Strategy 2022-2031 stands alone without being embedded into a broader national strategy that aligns the energy sector with other vital national sectors, like education and the labour market. The alignment of strategies among critical economic sectors in a country guarantees the efficiency, efficacy and productivity of public policies, such as those related to energy and climate.

Indeed, the combination of CO_2-intensive electricity generation and a high energy intensity of GDP shows a compelling picture of the associated social and environmental costs. Figure 8-13 illustrates the emissions intensity of energy in terms of CO_2 emissions per kWh (CO_2/kWh).

Figure 8-13. CO2 Emissions per unit of energy (kg/kWh) (IEA, 2023)



Kosovo exhibits a significant environmental challenge, primarily due to its heavy reliance on coal-generated electricity, resulting in remarkably high emissions intensity. Additionally, the relatively high level of energy intensity of GDP indicates lower energy efficiency (as seen in Figure 11). Unfortunately, there have been no improvements in environmental indicators between 2008 and 2020, exacerbated by ageing coal power plants in Kosovo that continue to pollute more over time. Consequently, the emissions intensity gap between Kosovo and the EU and its neighbouring countries has widened. The EU has witnessed a 15% reduction in emissions intensity, from 0.194 kg/kWh to 0.165 kg/kWh, while Kosovo has experienced a 6% increase, rising from 0.302 kg/kWh to 0.320 kg/kWh, during the same period. Put differently, in 2008, the CO_2 emissions intensity per kWh was 1.55 times greater in Kosovo than in the EU. By 2020, this figure has risen to 1.94 times higher.

As previously discussed, Kosovo struggles with a deficient generation capacity and an unreliable energy system, primarily attributed to outdated generation and distribution facilities. Mainly during periods of low temperatures in winter, Kosovo relies on energy imports from neighbouring countries to keep the lights on. Until 2021, the country could import electricity at relatively modest prices, ranging between 30 and 50 €/MWh.

However, by the end of 2021, as energy prices skyrocketed, fluctuating between 250 and 650 €/MWh, Kosovo encountered financial strain in importing sufficient electricity to ensure security of supply, especially after a decline in domestic generation by 500 MWh. Consequently, in response to this decline in generation associated with the surge in electricity prices in the European wholesale markets, Kosovo spent approximately 27 million Euros on electricity imports in the last week of 2021.[1]

This places an immense financial burden on Kosovo's society. The high level of energy consumption and the substantial need for electricity imports can also be traced back to remarkably low energy efficiency. As previously mentioned, unlike the EU, Kosovo consumes nearly double the energy to generate a single unit of GDP. Hence, with the acceleration of energy prices, the relative increase in energy costs for Kosovar producers and households surpasses that of their European counterparts, further compounding Kosovo's economic challenges.

8.9. Discussion and conclusions

Resilient energy systems are vital for the socioeconomic development of countries. In line with the energy transition, the EU member states are gradually decarbonizing their energy-generation capacities by replacing fossil fuels with renewable energies. In addition, the best framework to achieve both allocation and dynamic market efficiency is through deregulation, liberalization, competition, and market integration.

Energy systems predominantly relying on renewables struggle with high volatility. This underscores the urgent need for investments in the modernization and expansion of transmission and distribution networks and the promotion of market integration. In addition, replacing fossil fuel capacities and expanding and modernizing networks presents a significant technical and economic challenge for developing countries like Kosovo and developed countries. Countries compete to provide a secure electricity supply while offering competitive prices to their industries to attract potential investors. Striking this balance is crucial for maintaining economic competitiveness. Therefore, countries around the globe are looking for optimal ways of transitioning energy.

Unlike its neighbouring countries and EU member states, Kosovo faces significant challenges in its journey towards decarbonization. First, it

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1 We employed electricity import data in Kosovo and wholesale electricity price data in Hungary to determine the expenses incurred from imported electricity. During this period, Hungarian wholesale electricity prices served as the benchmark for Kosovo.

struggles to attract investors with easy access to financial markets. Second, its generation mix is dominated by coal with high-intensity emissions. Third, outdated and unreliable generation capacities result in a volatile power supply. Fourth, ensuring the security of supply, particularly during winter months, is difficult without imports. Fifth, the distribution network is outdated and overstressed by rapid urbanization, lacking a comprehensive development plan. Sixth, its economy exhibits a very high energy intensity, twice as much as the EU average. Seventh, there is a deficiency in qualified human resources to manage these processes effectively. Eighth, there is a noticeable lack of political determination to drive forward the green agenda, primarily due to concerns about the high costs of energy transition that households and industries would, in the end, bear. The Energy Strategy 2022-2031 acknowledges many of these challenges. However, it lacks a clear strategy for managing the costs associated with energy transition to mitigate the impact on Kosovo's industries' competitiveness.

Kosovo is considering implementing carbon pricing. Given the factors mentioned above, introducing carbon pricing without first promoting energy efficiency, particularly in the industrial and residential sectors, would pose a significant challenge in having widespread social acceptance. Indeed, carbon pricing stands as the optimal solution for encouraging investment in energy efficiency. It achieves this by incentivizing (1) transitions within industries towards less energy-intensive production processes and products; (2) shifting from the industrial sector to the service sector, which typically are energy efficient and has higher labour intensity; (3) encouraging innovation, and (4) promoting investment in renewable energy sources.

A smooth energy transition is manageable when qualified human resources can manage complex engineering and economic processes. Kosovo must integrate its energy strategy into a broader national strategy that harmonizes the energy sector with spatial planning, education, industry, and the labour market. Without a well-structured and integrated strategy and plan for energy transition, Kosovo's industry will experience a more pronounced increase in energy prices compared to the EU. Consequently, this will result in a loss of competitiveness for the industries in Kosovo.

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CHAPTER 9

EXPORT POTENTIAL OF THE MINING SECTOR IN KOSOVO

Azem Rexhaj, Justina Shiroka-Pula, Besnik A. Krasniqi

Abstract

The Republic of Kosovo is rich in mineral resources, representing a significant potential for economic development. Lignite, lead, zinc, silver and gold minerals, nickel and cobalt and silicate minerals, iron-nickel, bauxite, manganese, magnesite, etc., can be singled out. The rational mining and adequate management of these resources can support sustainable economic development and the creation of jobs, significantly improving the social and environmental conditions. Of all the minerals that Kosovo possesses, which have been exploited for export in the last two decades, there are metal minerals (Pb-Zn-Ag, Au, Ni-Co) in unsatisfactory quantities, while it has not yet been possible to start mining some other metals minerals that have potential. The chapter aims to conclude that Kosovo has the potential to increase the export of mineral resources, but to do that, it requires concrete decisions to implement existing legislation and make necessary legislative changes and improvements to enable more efficient functioning of the mining sector, which would have a positive impact in the attraction of foreign investments and increase the export.

Keywords: Mineral resources. Export. Mining legislation. Mining Strategy. Sustainable Development.

9.1. Introduction

The Republic of Kosovo is rich in mineral resources, representing significant potential for the country's overall development (e.g. Lignite, lead, zinc, silver and gold minerals, nickel and cobalt and silicate minerals, iron-nickel, bauxite, manganese, and magnesite). The rational mining and adequate management of these resources can support sustainable economic development and the creation of jobs, significantly improving the social and environmental conditions.

In order for the mining of mineral resources to increase and to contribute to the growth of export and economic development, it is necessary to make concrete decisions to attract investors in the mining sector and, if necessary, a review of mining legislation, mining policies, mining strategy and very important for monitoring the implementation of policies and legislation, eliminating barriers in the state institutions that must perform their work in such a way that the country is attractive for bringing in local and foreign investors. Currently, of all the minerals that Kosovo possesses, the following are mainly being mined: Metal minerals (Pb-Zn-Ag, Au, Ni-Co), Energy minerals (Lignite), Non-metal minerals (andesite, limestone, basalt, dunite, shale, sand and gravel, quartz sand, marl, clay, etc.) (Annual Report, ICMM, 2021).

Due to various problems, not all mineral materials that have potential use, such as magnesite, bauxite, marl in Kline, etc., are mined. Regulation of the mining sector in Kosovo is essential as it is seen as one of the sectors with the highest potential for economic development and attracting foreign investments.

Regulation of this sector is a complex task too. Existing legal and institutional framework capacities play a crucial role in developing this sector towards a friendly trend towards the private sector and foreign investors (Rexhaj 2022). The efficiency and functionality of this sector require review and analysis of some other sectors as the mining sector is associated with many other areas, such as spatial conflict issues (infrastructure, settlements, blocking criteria) in general. In this context, special attention should be paid to the analysis of property issues and their connection with the mining sector, respectively, with the rights and obligations of the parties in the mining sector and possible difficulties that may pose different limitations in terms of ownership for the mining sector.

Property issues may be concerning and negatively impact the efficiency and functionality of the sector in cases when property is essential for conducting mining activity, which is usually the case. Ownership over mining resources is crucial and may be an obstacle to the proper usage of minerals and foreign direct investments. Furthermore, issues with many consents required to be obtained by companies interested in operating in mines and minerals are an additional obstacle to the efficiency of this sector. In this regard, Kosovo legislation has had a few collisions that negatively impact the development of mining (Rexhaj 2022). Implementation is of particular significance in all fields, and in this chapter, we analyse how the lack of harmonization of norms and implementation may impact the efficiency of such an important sector.

The chapter is organised as follows. In the first section of this chapter, we present the mining potentials of the Republic of Kosovo. Next, we review the literature that discusses the obstacles that affect the development of the mining sector. Then, we provide an overview of the exploitation of mineral resources in the Republic of Kosovo in the last two decades, especially in the last five years. Finally, we elaborate on the critical changes and development of the mining sector's development and export growth. The chapter ends with some conclusions.

9.2. Sustainable mining of mineral resources as a prerequisite for export growth

The territory of the Republic of Kosovo is characterized by numerous natural assets such as minerals, water, forestry, and agriculture, among others (Elezaj, 2008). However, there are often conflicts in priorities for their use, conservation through national parks, preservation for future generations, community benefits and environmental protection (Mazor, 2012). Moreover, there are many dilemmas about whether to try to process the minerals domestically or to export them as semi-products because both one and the other have their advantages and disadvantages (Kelmendi, 2012).

Sustainable mining of mineral resources is a concept with broad use worldwide, which first began to be used in the late 1960s (Dubinski, 2013). After increases with great dynamics in the use of resources and severe damage to the environment, the World Commission on Environment and Development in the United Nations came out with the document published in 1987 with the theme "Our Common Future". In recent years, many studies and strategies have been prepared by EU institutions, such as the European Commission, that have financed the preparation of many studies and strategies related to the sustainable mining of natural resources and the setting of priorities in their use. In that presented paper in the European Parliament, "Towards a Thematic Strategy on the Sustainable Use of Natural Resources", it is concluded that natural resources provide the basis for the three pillars of sustainable development: **economic, social and environmental.** However, it is found that natural reserves can be reduced by exploitation, and this can harm future economic and social development. Furthermore, how resources are used may reduce the quality of the environment to the extent that it may threaten ecosystems and the quality of human life (European Commission, 2003).

Even in the other project of the European Commission, "Analysis of the key contributions to resource Efficiency" compiled by BIO Intelligence Service in collaboration with Social Ecology Vienna University of Klagenfurt, it is clearly emphasized that Natural Resources are the basis for economic development and prosperity, which provide raw materials, energy, food, water and land, as well as social and environmental services. Nevertheless, in any case, it is found that their use is not sustainable because the use of resources has increased environmental degradation, pollution, global warming, ecosystem degradation, and biodiversity. Therefore, to reduce the negative impact from the use of resources, we must be more efficient in using the resources we have (European Commission, 2011).

However, the preservation of mineral resources for future generations is a topic that must be treated carefully because, based on innovation at the global level, as well as global warming, there are many resources that today can be contributors to economic development in the future they can be replaced by other minerals, such as the case of replacing Lead ore with Lithium for the production of batteries, or the case of reducing and limiting the burning of coal, both of these resources that Kosovo possesses with abundance. However, the importance of their use has decreased significantly.

Mineral resources have always aroused people's interest as an excellent opportunity to get rich from mother nature. However, on the other hand, there are positive examples in the world where some country rich in mineral resources has taken advantage of this situation and achieved economic growth, emerging from extreme poverty and entering the group of developed countries. The most surprising feature of economic developments in the last century was that, in many cases, economies rich in mineral resources showed a slower trend of economic growth than countries that did not have significant mineral resources. In any case, the state appears as the sovereign of mineral resources, and its role in using these resources is decisive. The way the state or government structures position themselves towards mineral resources affects the fate of the resources: will mineral resources become a pillar and generator of the fastest economic development, or will they become a factor of stifling development, proving the attribute "the curse of minerals" (Sh. Kelmendi, F. Azemi, 2012). Depending on the form of their management, institutional policies also have a positive or negative impact on economic development (Mikesell, 1998). Based on a study "Natural Resources and Economic Growth: A Meta-Analysis" (Havranek, Tomas; Horváth, Roman; Zeynalov, Ayaz, 2015), it is found that there is no consensus regarding the impact of natural resources on economic growth from the studies analyzed by them, they find that 40% of the studies say that natural resources have a negative impact on growth, 40% find that they have no impact at all on economic growth and only 20% find that natural resources have a positive impact on economic growth (Havranek, Tomas; Horváth, Roman; Zeynalov, Ayaz, 2015).

Even Kosovo has different theories and proposals about using mineral resources. One group of experts proposes that we preserve the mineral resources for future generations, while the other group of experts proposes that the mineral resources begin to be exploited from now on. The second group of experts justifies their proposal because the Republic of Kosovo must first reach a certain level of economic development. Once it is reached, the mining level can be reduced because if some resources remain underground, their value will decrease due to global warming; therefore, the importance of their use will decrease or may be stopped entirely (e.g. the use of coal). Kelmendi et al. (2012) state that as long as the mineral resources remain underground and unused, they will be considered a passive asset, or we can also name it "an asset without value".

The importance of this work is considered to be great because Kosovo does not have a high level of economic development, and the economic development in the future is also based on the best possible management of mineral resources. As a result of various geological processes, Kosovo is rich in mineral resources, where energy resources and those of non-ferrous metals present significant potential for overall development. Minerals include lignite, lead, zinc, silver and gold minerals, nickel and cobalt silicate minerals, and geological construction materials including various aggregates, but also iron-nickel, bauxite, manganese, magnesite and many considerable amounts of non-metallic, industrial minerals. However, despite all these mineral assets, Kosovo is one of Europe's countries with the lowest economic development. The rational use of these resources can support a faster and more sustainable economic and social development of the country by increasing exports and improving the country's trade balance.

9.3. Industrial policies promoting export and competitiveness of the country

In the Republic of Kosovo, the mining sector is regulated following European standards, in which case, the Mining Strategy 2012 - 2025 (MED, 2012) adopted by the Assembly of the Republic of Kosovo as one of its main objectives has the sustainable use of mineral resources. However, even though the legislation and the strategy are in harmony with European standards, there is still much work to be done to reach these standards in implementing the legislation and the strategy.

Therefore, the prerequisites for a sustainable use of mineral resources are:

- Drafting of adequate legislation which envisages sustainable use as a minimum condition.
- Application of the highest environmental management standards.
- Adopting an open, transparent and inclusive approach to development.
- Communicating regularly with all stakeholders.
- Providing benefits is shared equitably
- Ensuring optimal use of raw materials
- Reducing energy use and waste generation
- Recycling and development of new products from waste materials
- Early planning for the closure of mines/quarries
- Combating corruption.
- Implementation of legislation and implementation of contracts and
- Combating informal economy.

Although the basic principles of sustainable development will remain valid, how they are implemented will evolve with changing needs. It is in our present and future interests to achieve the optimal balance between mining and quarrying, community needs and the environment to ensure that we maintain the minerals required for economic growth while leaving adequate resources without an accompanying burden of environmental damage (BGS, 2004).

9.4. Institutional Framework of the Mining Sector

Several public institutions with various functions and responsibilities govern Kosovo's mining sector (Figure 9-1). The analysis of the institutional framework below shows a functional division of responsibilities between the institutions involved in exercising competencies in the mining sector. Under this functional division, regulatory and strategic/planning responsibilities are mainly focused on the Government and the Ministry of Economy, while administrative and supervisory responsibilities are principally deployed at the Independent Commission for Mines and Minerals. With this, it can be said that two independent pillars, the executive and regulatory pillars, govern the mining sector, and both are linked to the Kosovo Assembly, which is reporting legally and politically.

Figure 9-1. Mining Sector - Institutional and Regulatory Setup[1]

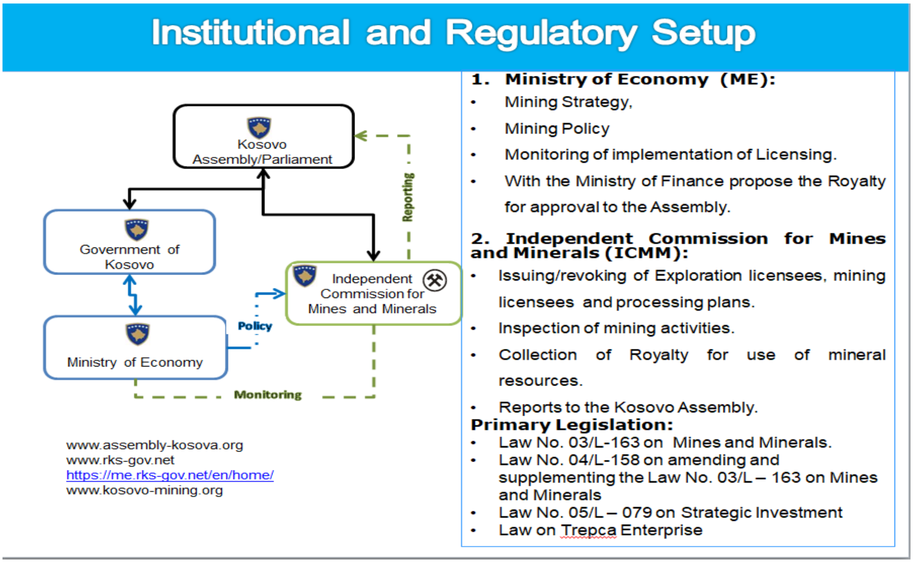
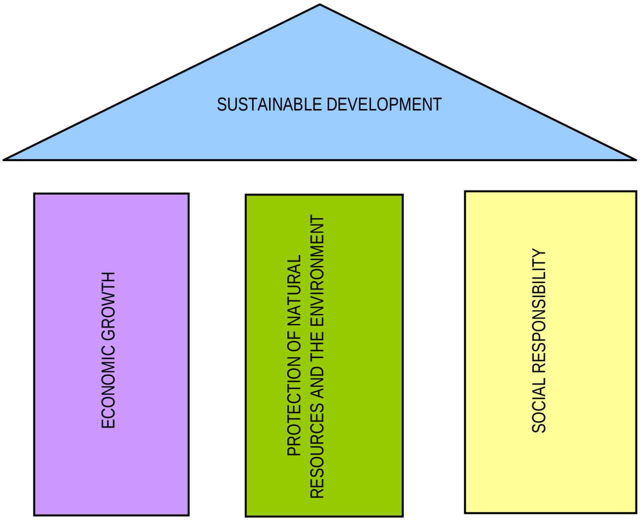


Figure 9-2 The elements that create the term "sustainable development" (Dubinski, 2013)



1 Article 14, REGULATION No. 06/2020, (GRK), 2020

The implementation of sustainable development means the integration of activities in the following three main areas respectively (Figure 9-2):

- Technical and economic activities that ensure economic growth
- Ecological, ensuring the protection of natural resources and the environment.
- Social means caring for employees in the workplace and community development in the mining environment.

9.5. Mining Potential of the Republic of Kosovo

9.5.1. Mineral Resources

A complex geological construction characterizes the territory of the Republic of Kosovo. This is evidenced by the large number of geological formations from the oldest to the present day. The diversity of formations, intrusive and effusive activity, effects of sedimentation and tectonics have influenced the formation of many types of minerals and important sources of energy, metallic and non-metallic mineral resources in the territory of the Republic of Kosovo (Figure 9.4, ICMM, 2015).

Figure 9-3. Kosovo mines map (ICMM, 2015)

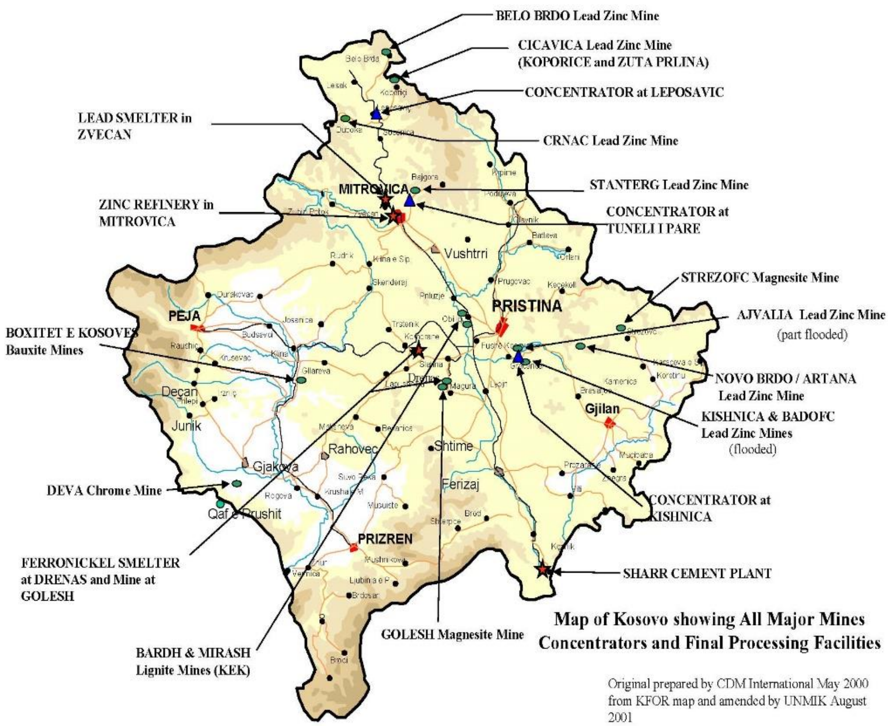
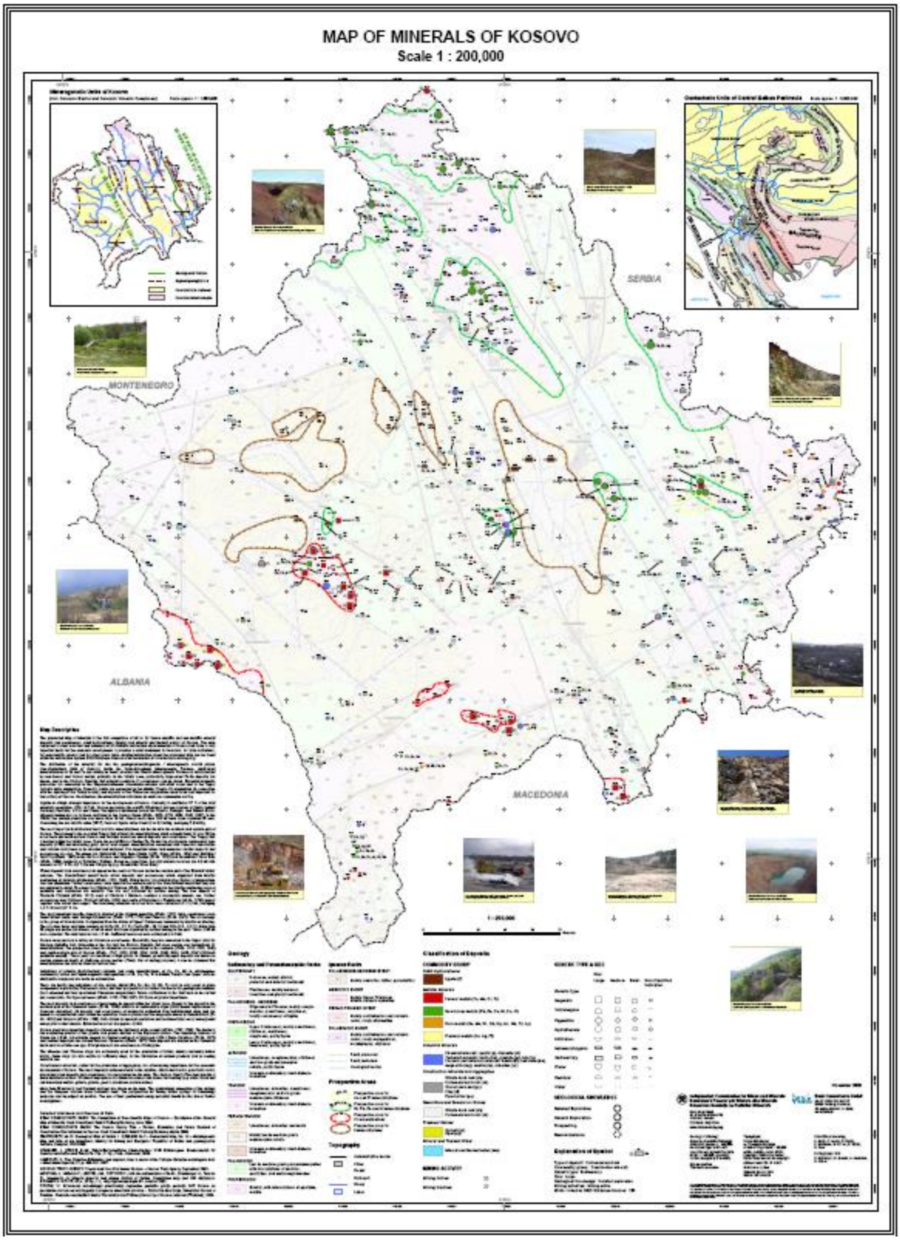


Figure 9-4: Kosovo mines map (ICMM, 2020)



9.5.2. Energy Minerals

Based on research so far and the status of mineral energy reserves, the Republic of Kosovo has significant reserves of lignite-type coal and a small amount of radioactive minerals in its territory (MED, 2012). Coal (Lignite) is Kosovo's most essential energy resource, supplying about 97% of the country's electricity production. The most critical coal-bearing basins are Kosovo Basin, Dukagjini, and Drenica (Figure 9-5).

Figure 9-5. Coal bearing basins of Kosovo (Inkos Institute, 2007)

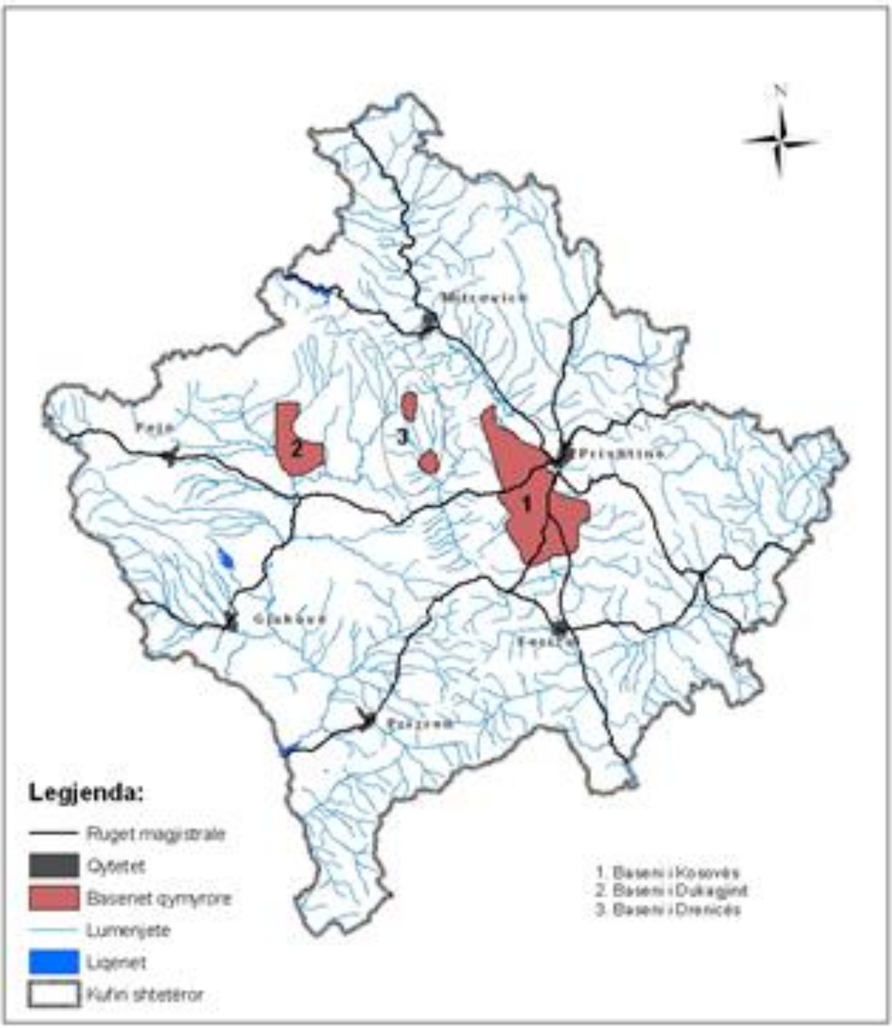


Table 9-1 reports the estimated lignite resources throughout Kosovo.

Table 9-1. Coal reserves in the Republic of Kosovo (Inkos Institute, 2007)

Coal bearing basins	RESERVE (s)		
	Geological	**Balance**[2]	**Off-balance3**[3]
Kosovo	10, 091, 000.000	8,772,000,000	1,319,000,000
Dukagjin	2, 244, 830.000	2,047,700,000	197,130,000
Drenica (Skenderaj)	106, 631.000	73,188,000	33,443,000
Total	**12,442,461,000**	**10,892,888,000**	**1,549,573,000**

9.5.3. Metal Minerals

Lead (Pb), **Zinc** (Zn) and **Silver** (Ag) - The most important deposits and occurrences of lead and zinc are found in the so-called "Trepça Metallurgical Belt", which lies in the northeastern part of the Republic of Kosovo, starting from Leposaviq to Gllama (Gjilan). The length of the belt is over 80 km, while the average width is about 30 km (MED, 2012).

In the Republic of Kosovo, we distinguish a certain number of developed mines (key mines) and many previously estimated but undeveloped resources. Developed (key) mines are: "Trepça" mines in Stantërg, Hajvalia, Badofc, Kizhnica, Artana, Bellobërda and Cërnac.The most critical occurrences and resources (previously explo-red and estimated) are: Melenica, Zjaqa, Magjera, Gjidoma, Tërstena, Rashan, Vidishiq, Mazhiq and Gumnishta in the area of Stantërg, Quka e Batllaves in the southeast of Podujeva; Kaltrina and Perroi i Ngjyrosur in the Artana area, as well as Kallugjerica and Gomile, in the northern part of Kosovo. Intensive research is needed for the zinc and lead resource in Crepula, southwest of Mitrovica, as previous research has given favorable results.

2 Balance reserves are those reserves where the calorific value of coal is over 5,450 kJ/kg

3 Off-balance reserves are those reserves where the calorific value of coal is below 5,450 kJ/kg

Main locations

Stantërg - The geological-tectonic construction of the metallogenic area of Stantërg and its surroundings is complex, with the presence of massive bodies of sulfite ores of economic importance, where the Pb / Zn ratio is about 1.4 (Mining Strategy of the Republic of Kosovo for the period 2012 - 2025, MED, 2012). Table 9-3 reports the data on reserves according to locations in the Stantërg region.

Table 9-2. Reserves by location in the region of Stantërg (MED, 2012)

No.	Mine - Locality	Ore quantity (t)	Quality (%)		Ag (g/t)	Metal (t)		(kg)
			Pb	Zn		Pb	Zn	Ag
1.	Stantërg	20,754,000	4.02	4.02	76.0	834.311	674.505	1,577,304
2.	Melenica	2,552,000	5.80	5.80	85.0	148.016	107.184	216.920
3.	Magjera	600.000	3.80	3.80	72.0	22.800	18.000	43.200
4.	Mazhiq - Maja Madhe	1,500,000	3.30	3.30	60.0	49.500	42.000	90.000
5.	Gjidomë - Mazhiq	2,000,000	3.30	3.30	60.0	66.000	56.000	120.000
6.	Rashan - Trstene	2,500,000	3.30	3.30	60.0	82.500	70.000	150.000
7.	Zjaqë	5,175,000	2.83	2.83	16.0	146.453	112.815	82.800
8.	**TOTAL**	**35,081,000**	**3.85**	**3.85**	**65.0**	**1,349,579**	**1,080,504**	**2,280,224**

The Stantërg mine with the surrounding deposits has reserves of about 35 Mt, or expressed through the amount of metals in the ore, 1,349,579 tons of lead, 1,080,504 tons of zinc and 2,280,224 kg of silver, and currently represents one of the most important sulfite ore potentials of Pb and Zn in the region (Trepça, 2012).

Reserves/resources in the main resource sites viewed in total

As a whole, the deposit of Trepça cannot be reported cumulatively through a table. Based on the latest data, to reflect the real geological potential of Trepça, physical data collection was done from the locations shown in Table 9-4.

As can be seen from the table data, the Stantërg mine participates in the total reserves of Trepça with 59.80%, while in the total amount of metals (Pb+Zn), it participates with 47.43%, which is understandable when considering the intensive mining of ore from this mine in the past eight decades. The mining complex of Artana, Hajvalia and Kishnica accounts for 27.34% of the total reserves, while with the amount of metals (Pb+Zn), it participates with 35.02%. The mines of the area of Leposaviq participate only 12.86% in the total reserves of Trepça, while in the total amount of metals, the participation reaches 17.54% (Trepça, 2012).

Table 9-3. The main deposits of Lead-Zinc (silver) with the main reserves (Trepça, 2012)

Location	Ore (t)	Pb (%)	Zn (%)	Ag(g/t)	Pb (t)	Zn (t)	Ag (kg)
Stantërg	35,081,000	3.85	3.85	65.0	1,349,579	1,080,504	2,280,224
Cërnac/BB/Gom	7,544,227	6.85	5.07	96.13	516.645	382.373	725.256
Complete Artana/ÇB	16,037,227	4.67	6.52	89.91	749.354	1,045,444	1,441,879
TOTAL	**58,662,569**	**4.46**	**4.28**	**75.81**	**2,615,578**	**2,508,321**	**4,447,359**

In addition to basic metals (lead and zinc), the ores of the metallogenic area of Trepça are characterized by a high silver content, mainly concentrated in the lead concentrate. The ores of Trepca also contain other metals such as gold (Au), Bi (bismuth), Cd (cadmium), Se (selenium), Te (Tellurium), In (indium), Ge (germanium), etc. However, their balancing, concentration and separation are not done in the concentrates phase but are possible only in the metallurgical treatment of the concentrates. The composition of gold in the ore is not balanced, but all the deposits themselves contain this metal, which is extracted in the final stage of metallurgical processing, with the refining process. It is estimated that the average gold content in the ore is 0.8 gr/t.

Nickel (Ni) and Cobalt (Co) - The exploration of nickel silicate minerals in the territory of Kosovo dates back to 1958, when the first mineralizing occurrences of nickel were determined in the territory of Gllavica, near the magnesite mine in Magura. Two open-pit mines operate within Ferronikel company: Gllavica and Çikatova (Dushkaja, Suka) (MED, 2012). **The Gllavica nickel silicate mine is located s**outhwest of Prishtina at about 20 km. The Gllavica nickel deposit lies in the Golesh peridotite massif on the eastern side of the Gllavica hill. The direction of the extension of the source is approximately North-South at a length of 1,050 m. The mineral-bearing area lies on peridotites in the form of a cover and has an area of about 32 ha. The "Gllavica" nickel deposit belongs to the silicate deposits of the alteration crust. The formation of the deposit is related to the formation of the serpentinite alteration crust (MED, 2012). **The nickel silicate mine "Çikatova e Vjetër"** is located in the region of the peridotite massif of Dritan (Dobroshevc), the municipality of Gllogoc. It is 20 km from Prishtina, towards the west, and 12 km from the deposit of Gllavica.

There are two deposits (mineral bodies) in the "Çikatova e Vjetër" nickel mine,: "Dushkaja" and "Suka". The geological reserves in the two mines (Glavicë and Çikatova) are estimated to be about 13 Mt with an average composition of nickel 1.31% and cobalt 0.06%.

Bauxite - The bauxite-bearing region is part of the massif of ultrabasic rocks of Rahovec. Bauxite deposits are located in Gremnik Mountain, 5 to 10 km southeast of Klina. Bauxite mineralization in this region is associated with Upper Cretaceous carbonate deposits at the Turonian-Maastrichtian level. Kosovo bauxite belongs to the group of ferro-bauxites because they have a high iron content, which is considered harmful to the electrometallurgical benefit of Al metal. The bauxite reserves are about 2.7 Mt, while the limestone reserves are about 40 Mt (Boksitet e Kosovës, 2006).

Iron-nickel, chromium, manganese and copper - Several small iron deposits have been identified in Kosovo, which are presented in detail in the Mining Strategy of the Republic of Kosovo (MED, 2012). Chromium - Chromium exploration has been carried out in many localities in Kosovo, while the concentration of exploration was in the ultrabasic massifs of Gjakova, Rahovec, Luboten, Brezovica, Golesh, Dobroshevc, etc. (MED, 2012). Several companies have carried out exploration, and an area of the former mine of Deva has been declared an Area of Special Mining Interest. According to a government decision, a tender may be announced to seek investors under the PPP Law, as specified in Article 18 of the Law on Mining and Minerals. Chromium has been mined in almost all regions of its appearance. In Kosovo until 1991, when its mining stopped, 1.02 Mt of chromium ore was mined (MED, 2012).

Manganese (Mn) - The most important deposit of Mn, according to the data of the Trepça complex, is found in the area of the existing mine of Artana, where Mn-Fe mineralization has been formed through the alteration of Pb-Zn mineral. The estimated manganese resources in this place are about 5 million tons of ore, with a content of about 22% Mn. Valorization of Mn ore from this location must be preceded by technical reviews of the condition and access possibilities to the closed

Mn mine, as well as programmatic research into the possibility and effects of Mn concentration from ore to concentrate, with flotation methods and with magnetic concentration methods (MED, 2012).

Copper (Cu) - Several occurrences and mineralization of copper exist. Basic exploration has included numerous territories in the Shari Mountains near Dragash (Okravno, Kukolan, Ovnishte), Bjeshket e Nemuna, Pashtrik, Junik, Rexhancë near Hani i Elezit, Karadak (Pidiq, Binaq, Çelik), Guri Kuq (Petkovic), Karavan Sali etc. Copper mineralization sites are associated with different metallogenic ages. In the western part of Kosovo, these mineralization sites are related to spilite-diabase-keratophy volcanism (MED, 2012).

9.5.4. Rare Metals and Rare Earth Elements and the gold group

In the southern parts of Kosovo, elements of rare lands have been discovered, as well as rare metals such as: arsenic, molybdenum, tin, tungsten and mercury. In the eastern part, the presence of antimony was found, while in the north, presence of mercury, antimony, arsenic, etc has been found. There are no more detailed data on these resources since the relevant geological research is missing.

Rare Earth Elements (REE) are found near Nebregosht and Manastirica. Geochemical analyzes have provided a spectrum of about 20 elements (niobium, lanthanum, cesium, scandium, zircon, etc.). The knowledge on REEs is insufficient for an assessment, due to few explorations (MED, 2012).

Gold (Au) - appears in paragenesis with ores of copper, lead and zinc, as well as pure (spontaneous) in alluvial deposits of rivers. Currently, gold and silver are extracted only from lead-zinc ores (MED, 2012).

Gold, which is related to lead-zinc mineralization and deposits, at the measurable level appears in Artana mine, where the gold content is greater and this mine is known as the place with the highest composition of gold in Kosovo. Gold resources at the Artana mine are estimated to be 2,700 kg.

According to the deposits, the following gold contents are estimated: Stantërg: 0.6 g/t, Bellobërdë: 0.7 g/t, Cërnac: 1.0 g/t, Hajvali: 0.5 g/t, Kizhnicë: 1.1 g/t, Badovc: 0.25 g/t, Artanë: 1.6 g/t, Crepulë: 0.13 g/t (Trepça, 2006).

9.6. Non-metal minerals

9.6.1. Industrial minerals

In addition to energy and metallic minerals, many non-metallic minerals are also important for the market economy.

Magnesite – the best-known magnesite deposit lies in the southern part of the Goleshi ultrabasic massif and is located near the village of Magure and Strezovc in Kamenice (XIM Strezoc and MIM Golesh, 2006). It also appears in the serpentine massif of Dubofc (Vushtrri).

Magnesite reserves in the Magura mine are about 2.4 Mt, and in the Strezovc mine, 1.7 Mt.

Kaolin - The largest deposit of kaolin is located in the southeast of Karaçeva e Ulët, east of Gjilan. The mine in Karaçeva e Ulët has been operating since 1965. In general, 372,000 t of ore were mined in Kosovo between 1970 and 1981. Estimated reserves of kaolin at the deposit in Karaçeva e Ulët are about 3.2 Mt (MED, 2012).

The Republic of Kosovo has four mineral fields with total kaolin deposits of about 14 Mm^3.

Two deposits (Badovc and Karaçeva e Ulët) can be ranked with the highest economic value.

Kaolin has been explored significantly in the past, but the economic limitations of these deposits have conditioned their limited use.

Halloysite - Halloysite is a clay mineral of the aluminosilicate type, with the empirical formula $Al_2As_2O_5(OH)_4$. It represents a mineral with good micro-structural properties and is characterized by high purity, enabling its use in pharmacy and the chemical industry. It was discovered in the lead-zinc mine area of Artana. Halloysite resources within the Artana lead-zinc mine are estimated to be about 2 Mt. The use of Halloysite cannot be seen separately from the production of ore in the Artana mine, so the project of the mining of this mineral, technically and economically, will be an integral part of the complex use of ore and minerals in the Artana mine.

Halloysite in Kosovo is one of the five places that can be exploited, while the other four are found in New Zealand, Turkey, China and Utah/USA. Current world production is estimated to be around 150,000 t/y. It is of great interest to continue the exploration of this mineral (Flotation Mine Kizhnica and Artana, 2006).

Bentonite and bentonite clays - Bentonite deposits mainly lie in the southeastern part of Kosovo. The Republic of Kosovo has seven mineral fields with total deposits of about 25 Mm³. However, further research on bentonites is recommended (ICMM, 2005).

Quartz, an industrial mineral of high quality and purity, is found in eastern, central and southern Kosovo. Strezoc, south of Binca, west of Bukovik and Debellde, are the most prevalent occurrences and locations. Quartz reserves in the Strezoc deposit are estimated to be 2.53 Mt, and in the Binca area, 3.1 Mt, while the Bukovik deposit (in the southeast of Kosovo) contains about 19 Mm³.

Kosovo has 33 quartz mineral fields with a total deposit of about 340 Mm³. However, the exploration level of quartz representations is low and requires additional research.

In the Republic of Kosovo, many other deposits of industrial minerals have been discovered that are of economic importance for mining and processing, and they are as follows: Asbestos, Diatomite, Talc, Sepiolite, Leucite (ICMM, 2005).

9.7. Areas of Special Mining Interest

The Government of the Republic of Kosovo 2008 announced 11 areas of Special Mining Interests (MEM, 2008)[4], which should be awarded by the Law on Mining and Minerals and the Law on Public-Private Partnership, respectively, through the competitive procedure. All these areas have the potential for attracting investors because they are areas with completed exploration and some with confirmed deposits. Over the years, the Independent Commission for Mines and Minerals and the Ministry of Energy and Mines have prepared the necessary documents to promote these areas, including their promotion at many conferences. However, from 2008 until today, no tender has been announced for granting licenses for these areas.

9.8. Mining of mineral resources (2018-2021)

9.8.1. Mining of mineral materials

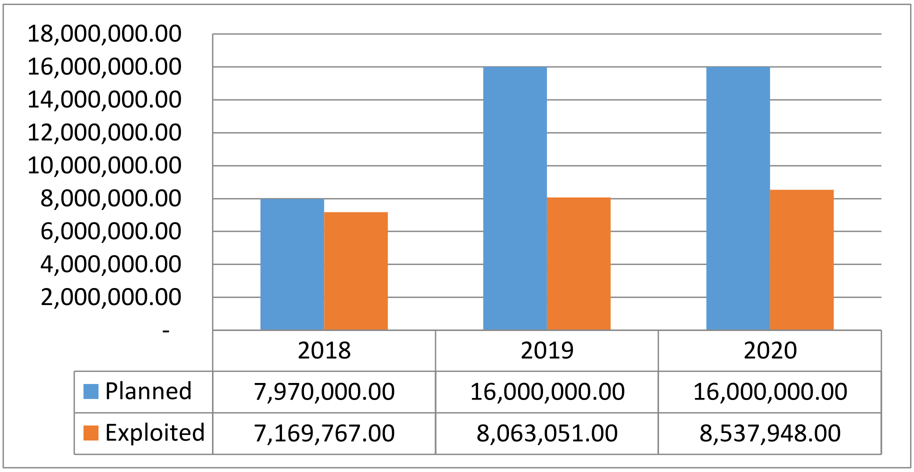
Based on the ICMM annual report submitted to the Assembly of the Republic of Kosovo in 2021 and in previous years, there is a discrepancy between planning and implementation for almost all mineral materials, a phenomenon expressed in the last two decades. Based on the analyses carried out by ICMM.

[4] Decision No. 1071 dated 02 July 2008, Ministry of Energy and Mines

9.8.2. Mining of energy mineral materials

Coal (lignite) is one of the most critical energy minerals because the electricity supply in the country almost entirely depends on this mineral. The estimated coal resources in Kosovo are around 12.5 billion tons, considered profitable from an economic perspective. Currently, at the ICMM, only "Kosovo Energy Corporation - KEK", which carries out lignite surface mining for the country's electricity production needs, is licensed.

Figure 9-6. The state of mined reserves of energy minerals (lignite) during the years 2018-2021 (ICMM, 2022)



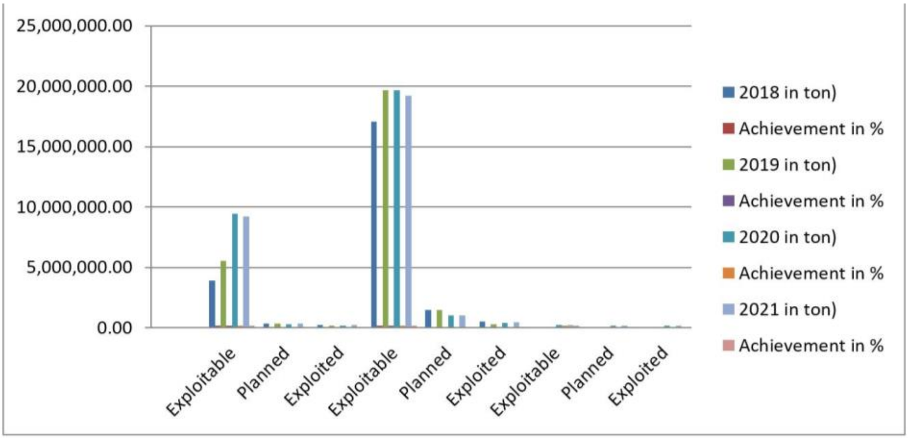
9.8.3. Mining of metal minerals

Mining metal minerals in the 2018 - 2021 period has not been carried out according to the plans foreseen by the enterprises. The reasons for the non-fulfilment of planning are among the most diverse and are related to management's lack of investment.

Table 9-4: The state of mined metal minerals in the licensed deposits in the period 2018-2021 (ICMM, 2022)

Mineral	Reserves	2018 (in ton)	Implement. in %	2019 (in ton)	Implement. in %	2020 (in ton)	Implement. in %	2021 (in ton)	Implement. in %
Pb-Zn	Extractable	3,900,036.80	68.29	5,522,041.80	56.13	9,466,096.30	66.88	9,204,202.30	69.74
	Planning	349,382.00		363,605.00		312,520.00		375,520.00	
	Mined	238,576.00		204,079.00		209,017.00		261,894.00	
Ni-Co	Extractable	17,062,913.77	36.84	19,652,290.24	20.81	19,681,857.03	36.42	19,226,615.03	43.56
	Planning	1,481,646.00		1,474,323.00		1,045,000.00		1,045,000.00	
	Mined	545,903.70		306,806.80		380,590.31		455,242.00	
Cr2O3	Extractable	0.00		0.00		249,664.80	634.47	233,009.18	432.61
	Planning	0.00		0.00		3,850.00		3,850.00	
	Mined	0.00		0.00		24,427.00		16,655.62	

Figure 9-7. Planning and mining of metal mineral reserves during the years 2018-2021 (ICMM, 2022)



9.9. Export of mineral resources in the Republic of Kosovo and related policy support

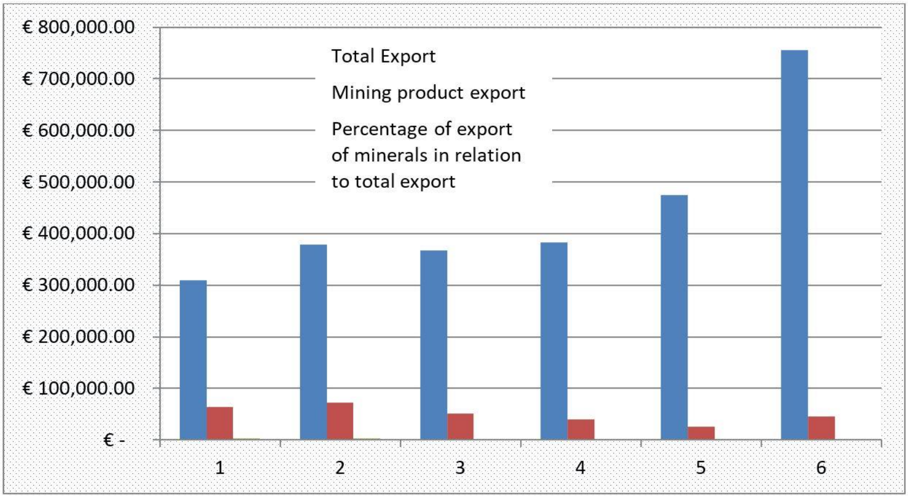
Based on the Statistical Yearbook of the Republic of Kosovo 2022 published by the Kosovo Agency of Statistics, it is observed that Kosovo's trade balance is negative. It is reported that there is a continuous increase in exports, especially in 2021, but the export of mineral products has not marked growth, although from time to time, there was a significant increase in the prices of minerals in the world market. Table 9-5 reflects the financial value of the export of mineral materials and the general export of the Republic of Kosovo from 2016 to 2021 Table 10-1).

It is essential to compare the total export and the export of minerals to be able to point out the importance of their export. Below is the ratio between the general export and the export of mineral resources presented in graphic form.

Table 9-5. Export of mineral products in relation to the general export 2016-2021 (000)

Year	2016	2017	2018	2019	20220	2021
Total exports	309,627.00	378,010.00	367,500.00	383,491.00	474,884.00	755,726.00
Export of mineral products	63,885.00	72,698.00	51,275.00	40,024.00	26,084.00	44,930.00
The percentage of the export of minerals in relation to the general export	21%	19%	14%	10%	5%	6%

Figure 9-8. The ratio between the export of mineral resources and the total export from 2016 to 2021



The export of mineral resources decreased in 2019, and then a significant decrease occurred in 2020. This decrease is related to the decrease in nickel production in Kosovo because, due to the high electricity tariffs, the company Feronikeli has been forced to stop production until more favourable conditions in the market are created.

Table 9-6 Type of minerals exported 2020 - 2021 (Kosovo Customs 2022)

Name of mineral	Net Kg	Value
2020		
Roasted iron pyrites	3,675,250.00	76,986.59
Aluminum ores and concentrates	24,000.00	1,440.00
Lead ores and concentrates	9,641,219.00	11,883,182.11
Zinc ores and concentrates	17,371,842.00	5,949,224.90
Chromium ores and concentrates	278,243.00	25,714.19
Granulated slag (slag sand) from iron and steel processing	1,358,685.00	464,324.80
Containing mainly aluminum	4,000.00	540.00
Others	49,398.40	61,899.32
Total	**32,402,637.40**	**18,463,311.91**
2021		
Roasted iron pyrites	4,220,360.00	90,393.88
Nickel ores and concentrates	24,670.00	666.09
Aluminum ores and concentrates	166,820.00	10,009.20
Lead ores and concentrates	9,527,285.00	14,389,012.61
Zinc ores and concentrates	65,636,440.00	10,789,329.04
Chromium ores and concentrates	1,881,424.00	252,025.59
Granulated slag (slag sand) from iron and steel processing	5,791,535.00	668,382.74
Others	44,820.00	71,287.61
Total	**87,293,354.00**	**26,271,106.76**

To onculde, the minerals that are exported from the Republic of Kosovo are lead concentrate, zinc concentrate, nickel concentrate, chromium concentrate, pyrite, iron waste, and processed nickel. So, most of the minerals are exported as concentrates, and it is known that the prices of the concentrates are significantly lower than their sale after smelting or processing. In mining policies, there is no state intervention or state support for mining enterprises in case they face the problem of increasing electricity prices, and also, there are no restrictions on the export of concentrate or their processing. In the list of mineral royalty adopted by the Assembly of the Republic of Kosovo, the mineral royalty is reduced by 10% if sold as a concentrate, while 20% if it is subjected to the smelting process. This has been done to support the company in processing minerals in the country.

9.10. Conclusions and Recommendations

Compared to its territory size, the Republic of Kosovo is rich in mineral resources, but in the post-war years, it has not been using the maximum benefit because many of the mines are closed or are working with deficient capacities, as well as the technology installed in these mines need to be renewed.

In the Republic of Kosovo, the mining sector is regulated following European standards, in which case, the Mining Strategy 2012 - 2025 adopted by the Assembly of the Republic of Kosovo as one of its main objectives has the sustainable use of mineral resources, but is facing obstacles in implementation. Even though the legislation and strategy are in harmony with European standards, much work is still needed to reach these standards in implementing the legislation and the strategy. The export of minerals has decreased in recent years due to the increase in the price of energy, while the government of the Republic of Kosovo has not foreseen any measures that would help subsidize energy to increase the production and export of materials.

The sustainable development of mineral resources is a great challenge even today, and it is addressed to mining companies, people of science related to mining, and many other institutions and organizations. At the same time, it is a prerequisite for developing the mining sector and increasing mineral product production.

From a policy perspective, we propose several recommendations to promote the export of minerals according to the best EU standards. Following the literature and best policy practices of the Government of the Republic of Kosovo, to increase the production of mineral resources, their export must announce credible actions for the rule of law and take swift action. Also, non-profitable state/social mining enterprises should be restructured, and instead of consumers of the state budget, they should become contributors to the state budget and positively influence economic growth. If we have a reliable rule of law, revenues from natural resource exports can be used as in the Norwegian Model. Thus, the main priority should be to find ways to reduce the extent of corruption within the state bureaucracy.

Mining projects require long-term sustainability and predictability, the quality and capacity of local policy, legal, fiscal and regulatory frameworks and the manner in which they are implemented over time. Therefore, it requires:

- establishing predictable and sustainable conditions for the development and operation of mining projects;
- ensuring they are aware of social and environmental impacts;

Maximizing the revenues they generate and ensuring that revenues are distributed and deployed strategically to drive long-term sustainable development beyond the mining projects' life cycle requires clear and systematic approaches to governance.

In order to implement the principles of sustainable use, it is essential to have "good governance" to achieve what is required:

Proper and appropriate drafting of the rules - developing standards, principles, policies, laws and regulations that are adequate in coverage and appropriate in detail to manage the requirements of a given functional area;

Effective implementation, monitoring and enforcement of rules - ensuring that stakeholders and institutions, both inside and outside governments, have the right skills, resources and information to effectively implement, monitor and enforce policies, laws and regulations; and

Transparency - promoting governance arrangements that consider the views of relevant stakeholders - individuals and citizen groups - and provide them with opportunities and information to hold decision-makers accountable for their behaviour, the rules they make and how these rules apply.

It is in our present and future interests to achieve the optimal balance between mining and quarrying, community needs and the environment to ensure that we extract sufficient minerals required for economic growth while leaving behind sufficient resources for the future without an accompanying burden of environmental damage.

The Republic of Kosovo should prepare mining policies that support the sustainable mining of mineral resources by giving them an advantage in the final processing in Kosovo for the mineral resources that Kosovo has the largest amount and capacity for their use, while the minerals that are in small quantities are exported as semi-products due to the high cost of investment in processing facilities.

To prepare institutional policies that support professional development, respectively specific studies related to the mining sector and professional training in countries and companies proven for sustainable development, to have a framework for implementing projects, laws and international standards related to sustainable use. To harmonize the requirements for mining royalty and rent for use by many institutions and to unify only one royalty so that Kosovo is more attractive for attracting investments and reducing corruption.

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CHAPTER 10

EXPORT POTENTIAL OF THE ICT SECTOR IN KOSOVO: A POLICY PERSPECTIVE

Besnik A. Krasniqi, Liridon Kryeziu

Abstract

Developing export potential is crucial for countries like Kosovo as it influences national economic growth, sustainability, and socio-economic well-being and helps them integrate with global markets. Despite government attempts and donor support to boost exports, Kosovo still lags in trade balance. Weak institutional settings and slow progress in reforms have created uncertainty in doing business and discouraged firms from engaging in exporting activities. This chapter aims to analyse Kosovo's exporting potential from a policy perspective, with a particular emphasis on the Information and Communication Technology (ICT) sector. Through the analysis of the ICT sector, we show that despite challenges, firms in the ICT sector have become competitive in international markets over the years. Based on this analysis, our study provides policy implications for relevant stakeholders and institutions.

Keywords: Institutions, Exports, Competitiveness, ICT sector.

10.1. Introduction

A country's ICT sector's competitiveness is a significant indicator of its economic potential and growth prospects. A highly competitive ICT sector has the potential to attract foreign investment, promote innovation, and contribute significantly to the country's overall economic performance (World Bank, 2020). Additionally, it can create high-quality employment opportunities and increase productivity gains across the economy (Dutta and Mia, 2017). Various factors influence the level of competitiveness of a country's ICT sector, including infrastructure availability and quality, human capital, regulatory environment, and market conditions (World Economic Forum, 2019). For example, a country with well-developed broadband infrastructure and a skilled workforce is more likely to have a competitive ICT sector than one with inadequate infrastructure and a shortage of skilled labour (UNCTAD, 2019). The competitiveness of a country's ICT sector is a critical determinant of its economic potential and growth prospects (World Bank, 2020). Thus, governments must invest in infrastructure, foster innovation, and create a favourable regulatory environment to enhance the competitiveness of their country's ICT sector and ensure that it remains at the forefront of global technological advancement (World Economic Forum, 2019).

The competitiveness of a country's ICT sector from a policy perspective involves a variety of strategies and initiatives that aim to improve the competitiveness of its industries and businesses (OECD, 2018). These policies promote economic growth, create employment opportunities, and raise living standards (World Bank, 2021). One of the essential aspects of competitiveness policies is promoting innovation and technological progress, particularly in the ICT sector. This includes investments in research and development, protecting intellectual property, and establishing supportive regulatory frameworks (Porter, 1998; WIPO, 2020). Several studies and reports support the role of governments in promoting the competitiveness of their country's ICT sector. For instance, the World Bank (2016) highlights the significance of government investments in digital infrastructure, such as broadband networks, in increasing productivity and competitiveness in the digital economy. The study also underscores the importance of policies that encourage digital skills and literacy to ensure that workers can take advantage of the opportunities provided by the digital economy. Additionally, a European Commission study (2016) on the impact of government support for research and innovation in the ICT sector found that such support can positively impact the sector's competitiveness and innovation performance. The study suggests that targeted support, such as tax incentives and grants, can encourage private-sector investment in the ICT sector and promote innovation.

The valuable role of export promotion programs in achieving superior performance in foreign markets for business managers is emphasized (Catanzaro and Teyssier, 2021). However, economists' understanding of gains from trade highlights the uncertainty surrounding the extent to which, when, and why such programs should benefit individual countries, particularly in situations where all countries engage in such programs, and how such programs impact trade partners (Sørensen, 2020). Governments worldwide prioritize the generation of exports, and many programs aim to increase the propensity of small companies to export (Weaver et al., 1998). Small and medium-sized enterprises (SMEs) have traditionally played a crucial role in local economies, but their role in international trade is evolving (Weaver et al., 1998). The range of export promotion programs available in many developing countries demonstrates policymakers' commitment to stimulating export growth. However, awareness of their availability is a prerequisite for firms targeted by such programs to use them effectively (Ahmed et al., 2002). Scholarly interest in the impact of export promotion programs on the exporting performance of firms in emerging and developing economies is growing. These studies emphasize the importance of export promotion programs for firms' export performance (Cruz, 2014; Broocks and Van Biesebroeck, 2017; Munch and Schaur, 2018; Rusmevichientong and Kaiser, 2009).

The aim of this chapter is two-fold. Firstly, to analyze the competitiveness of Kosovo's rapidly growing ICT sector and examine the institutional barriers hindering its progress. Secondly, to offer policy recommendations to enhance the ICT sector's competitiveness. This chapter is structured into three main sections. The first section presents a comprehensive review of existing studies that explore the impact of institutions on competitiveness, with a particular emphasis on the ICT sector. In the second section, an overview of the ICT sector in Kosovo is provided. Finally, the third section presents policy recommendations and concludes the competitiveness of the ICT sector in Kosovo.

10.2. Literature Review

The level of competitiveness of a country's ICT sector is a topic of interest for scholars and policymakers worldwide. Factors such as infrastructure, human capital, regulatory environment, and market conditions are essential in determining the competitiveness of a country's ICT sector. By identifying these key factors, policymakers can develop targeted strategies to enhance the competitiveness of the ICT sector in their respective countries. For instance, a study by the Organisation for Economic Co-operation and Development (OECD) found that countries with favourable regulatory environments, well-developed infrastructure, and a skilled workforce tend to have more competitive ICT sectors (OECD, 2019). Similarly, a report by the World Bank highlighted the importance of digital innovation and entrepreneurship in enhancing the competitiveness of the ICT sector (World Bank, 2019). Governments can play a critical role in improving the competitiveness of their country's ICT sector by implementing policies that promote innovation, investment, and skills development. For example, a report by the International Telecommunication Union (ITU) highlighted the importance of public-private partnerships in driving the ICT sector's competitiveness (ITU, 2018).

Various international indices rank countries based on the competitiveness of their ICT sectors. For example, the Global Competitiveness Index (GCI) published by the World Economic Forum includes an ICT readiness sub-index, which assesses the quality of a country's ICT infrastructure, the level of ICT adoption, and the regulatory environment (World Economic Forum, 2019). Similarly, the Digital Economy and Society Index (DESI) published by the European Commission measures the digital performance of EU countries based on various indicators, including connectivity, human capital, and digital public services (European Commission, 2021). The level of competitiveness of a country's ICT sector is a crucial determinant of its economic potential and growth prospects. Governments must invest in infrastructure, foster innovation, and create a favourable regulatory environment to enhance the competitiveness of their country's ICT sector and ensure that it remains at the forefront of global technological advancement.

The level of competitiveness of a country's ICT (Information and Communication Technology) sector is a topic of interest for scholars and policymakers worldwide. Factors such as infrastructure, human capital, regulatory environment, and market conditions determine the competitiveness of a country's ICT sector. By identifying these key factors, policymakers can develop targeted strategies to enhance the competitiveness of the ICT sector in their respective countries. For instance, a study by the OECD found that countries with favourable regulatory environments, well-developed infrastructure, and a skilled workforce tend to have more competitive ICT sectors (OECD, 2019). Similarly, a report by the World Bank highlighted the importance of digital innovation and entrepreneurship in enhancing the competitiveness of the ICT sector (World Bank, 2019).

Governments can play a critical role in improving the competitiveness of their country's ICT sector by implementing policies that promote innovation, investment, and skills development. Other studies highlighted the importance of public-private partnerships in driving the ICT sector's competitiveness (ITU, 2018). Various international indices rank countries based on the competitiveness of their ICT sectors. For example, the Global Competitiveness Index (GCI) published by the World Economic Forum includes an ICT readiness sub-index, which assesses the quality of a country's ICT infrastructure, the level of ICT adoption, and the regulatory environment (World Economic Forum, 2019). Similarly, the DESI published by the European Commission measures the digital performance of EU countries based on various indicators, including connectivity, human capital, and digital public services (European Commission, 2021). The level of competitiveness of a country's ICT sector is a crucial determinant of its economic potential and growth prospects. Governments must invest in infrastructure, foster innovation, and create a favourable regulatory environment to enhance the competitiveness of their country's ICT sector and ensure that it remains at the forefront of global technological advancement.

Institutions are defined as “the rules of the game in a society or, more formally, are humanly devised constraints that shape human interaction” (North, 1990:3). These institutions can be divided into formal and informal. In this section, we focus on formal institutions, which consist of government actions and behaviour through its policies, which encourage or discourage entrepreneurial activities at a country level (Hitt, 2016; Peng, 2003). In particular, property rights contractual enforcement and fiscal policy are institutional settings constraining or enabling export potential at a country level (Sobel and Coyne, 2011). These institutional settings are crucial for transition economies characterized by frequent changes and uncertainty (Ahlstrom and Bruton, 2010; Bowen and De Clercq, 2008). Exploring a country’s exporting potential is crucial to analysing which, how, when, and to what extent institutions matter (Peng and Khoury, 2008; Krasniqi and Desai,2017).

Several studies show that the extent to property rights and contractual enforcement derived from the quality of formal institutions is directly related to a country’s ability to become more competitive (Araujo et al., 2016; Ngo et al., 2016; Shinkle and Kriauciunas, 2010). These are critical as the more these institutional settings are predictable, the more it increase the country’s exporting potential and becomes more competitive in international markets. Krasniqi and Desai's (2017) cross-country study suggests that the judiciary and court system's functionality and the uncertainty regarding regulatory policies, corruption and anticompetitive laws and regulations determine firm exporting performance. Furthermore, structural reforms are integral to increasing a country’s ability to compete in international markets, reflecting the firm's ability to compete. These structural reforms include the liberalization of the economy, improvement of governance structure such as property rights protection, contractual enforcement, building laws and regulations that encourage competition in domestic market and exporting activities (Cuervo-Cazurra and Dau, 2009). Below, we briefly review the literature on the importance of property rights, contractual enforcement, and fiscal policy for a country’s exporting potential.

Property rights are “the rights of individuals over their labour and the goods and services they possess” (North, 1990, p. 33). At the same time, contractual enforcement is essential as it is necessary for firms' economic activities (Gow and Swinner, 2001). The extent to which property rights and contracts are enforced and protected determines firm competitiveness, encouraging productive entrepreneurship and leading to market efficiency (North, 2006; Peng, 2003). Protection of property rights is essential as they determine who owns the property and to whom it is being transferred s (Burki and Perry, 1998). The extent to which these institutional settings are enforced is related to the efficiency of courts at the country level. The inability of courts to enforce and protect property rights and contractual effacement leads to higher transaction and transformation costs, which increases uncertainty in doing business (North, 1990). Scholars maintain that weak protection of property rights discourages firms' investments (Yano et al., 2013), influences firm growth (Keefer and Knack, 1997; Estrin et al., 2013), discourages firms from increasing their capabilities and becoming more competitive (Bowen and De Clercq, 2008)

Fiscal policies have been challenging in transition economies as they discourage competitiveness and export activities (Shirokova and Tsukanova, 2013; Fliess and Busquets, 2006). This is due to the opportunistic behaviour of the government and consistent changes in laws and regulations (Puffer et al., 2010; Ahlstron and Bruton, 2010). Studies show that the more favourable fiscal policy at the country level, the higher the ability of firms to compete in international markets. This source of firms' ability to compete in international markets is related to low cost from taxes, in particular the exemption of firms from raw materials and technology used (Kryeziu and Coskun, 2018; Coskun et al., 2022; Coşkun et al., 2022; Makhmadshoev et al., 2015).

10.3. The importance of competetivness promotion policies

Formal institutional settings combined with Export Promotion Programs (EPP) are essential for countries to increase their exporting potential. The growing body in the literature acknowledges the impact of EEP on exporting performance (Francis and Collins-Dodd, 2004); (Freixanet and Churakova, 2018; Sraha, 2015; Wang et al., 2017). These exporting promotion programs influence export competitiveness and, as a result, increase exporting performance (Traiyarach and Banjongprasert, 2022; Jalali, 2012); (Haddoud et al., 2017).) through export-related resources and capabilities (Leonidou et al., 2011). Studies indicate that exporting promotion programs positively impact SMEs' export performance (Malca et al., 2020). These programs also support SME exporting performance through firm capabilities, particularly the ability to export and risk management practices (Catanzaro and Teyssier, 2021). These EEPs contribute to long-term macroeconomic influence on export promotion and general equilibrium mechanisms (Sørensen, 2020). Furthermore, the liability of smallness and foreignness and the experimental knowledge SMEs face, EEP programs through trade missions encourage SMEs to increase their international activities in international markets (Spence, 2003). Comi and Resmini's (2020) study shows export propensity and intensity are higher when EEP assists firms. Likewise, EEP programs help firms to improve export marketing competencies (Freixanet and Churakova, 2018).

The knowledge that trade-mobility-related programs are essential as firms increase their experimental knowledge, reflecting on their exporting performance (Malca et al., 2020). These programs are essential as they help firms understand foreign markets, identify opportunities, build networks, understand risk in international markets and the valuable knowledge they gain regarding the foreign markets. This is also carried out by participating in trade shows and gaining experience communicating with possible distributors. Likewise, EPP programs are crucial as financing these international activities re critical, helping firms access resources, minimize the risk and increase the export support services, which positively reflects on their internal capabilities (Catanzaro and Teyssier, 2021).

The perception regarding the usefulness of EEP is essential, as it increases the interaction of firms with international markets. According to Ahmed et al., 2002, this is carried out when firms participate in export training programs and the extent to which EEP officials share information about foreign markets. In this vein, scholars acknowledged the importance of factors such as awareness, availability, and accessibility among private-sector firms that have the potential to increase their presence in international markets (Ayob and Freixanet, 2014; Coudounaris, 2018)

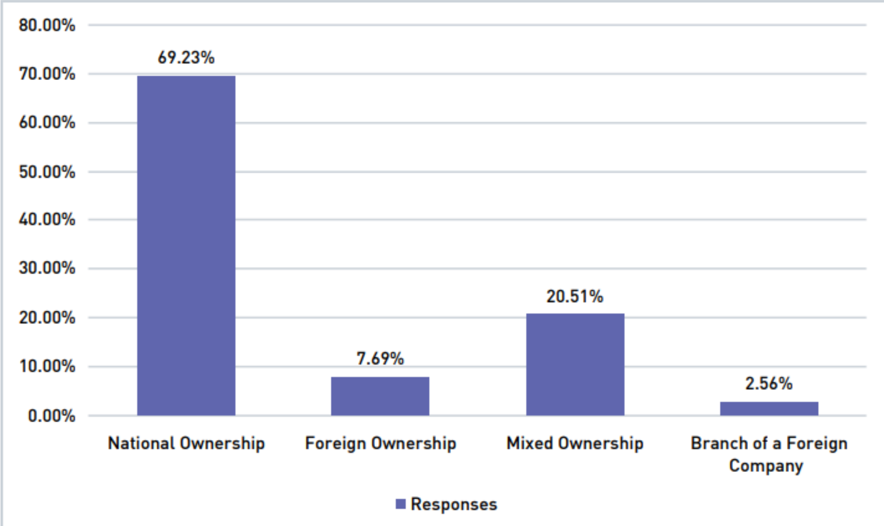
10.4. The Competitiveness of the ICT Sector

The rapid technological change, the digitalization of private companies, and the need to adapt to the current situation have created momentum for the ICT sector, which is considered the fastest growing with the potential to become competitive in international markets. As a result, the ICT sector has become the government’s top priority (Patricolo, 2018). Micro-small and medium-sized enterprises (MSMEs) dominate the ICT sector, and according to estimates in 2015, 571 firms were registered in the ICT sector. According to STIKK, 120 IT companies employ 3,000 IT professional programmers. The number of employees in this sector has doubled in the last few years (IFME 2020). In Kosovo, the ICT industry consists mainly of small and medium-sized companies with restricted capabilities for big projects and initiatives. As the market is small, companies that become too large for competition have had to create new entities to remain leaders in the market. Consequently, the economy and sector growth in the region do not support the emergence of big industrial-scale enterprises that can effectively compete in the local and global markets (Shaipi and Xërxa, 2014).

Based on the Economic Reform Program (ERP) in a 2019-2021 report, 571 businesses in Kosovo are registered and have primary ICT activity. According to estimates, most ICT businesses are micro and small businesses, where 84.5% are micro businesses, 12.7% are small, 2.4% are medium, and 0.4% are large enterprises (GoK, 2021). The ICT sector's potential is also related to its sub-sectors, which are considered to have a high potential to export and find niche markets. Firms in these sub-sectors provide heterogeneity of services such as Software development, engineering services, network and system operations, e-procurement, business process outsourcing (BPO), mobile applications development, digital marketing, postproduction enhancement (media), telemarketing and support centres (call centres), ICT consulting, and cyber security (STIKK, 2014; PwC, 2020). Furthermore, IT firms have built capabilities in software testing (ISTQB) and IT security (ISO 27000). As a result, they have built a competitive advantage by focusing on technical know-how, sector know-how, horizontal know-how, cultural knowledge, prices they provide, and knowledge of languages (STIKK, 2021).

The services that these firms provide range from: Professional services, Software/Business Consulting Services, Networking and Telecommunication HW and SW provider, ICT Services and Auditing, System Integration and Implementation, Cloud Services, Cybersecurity, Digital Marketing, Software and Hardware / IT Services and Automation, and education, as part of Programming School and Tech Education through Franchising (STIKK, 2021). These firms have adopted the latest technologies, including Big Data used by 39.29 percent, Artificial Intelligence 35.71 percent, Cognitive Cloud Computing at 35.71 percent, Blockchain 17.86 percent, and VR/AR 10.71 percent. Whereas IT firms has adopted technologies such as: Web tech stack, Tech and Programming, Geographical Information Systems, CAD, Penetration Testing, Gamification and IoT. And the most common programs used by IT firms are JavaScript, HTML, XML, HTML/CSS, Java, Angular, React, PHP,.NET, C#, nodejs, Python, PL/SQL, MVC, C++, C, Swift, Flutter (STIKK, 2021).

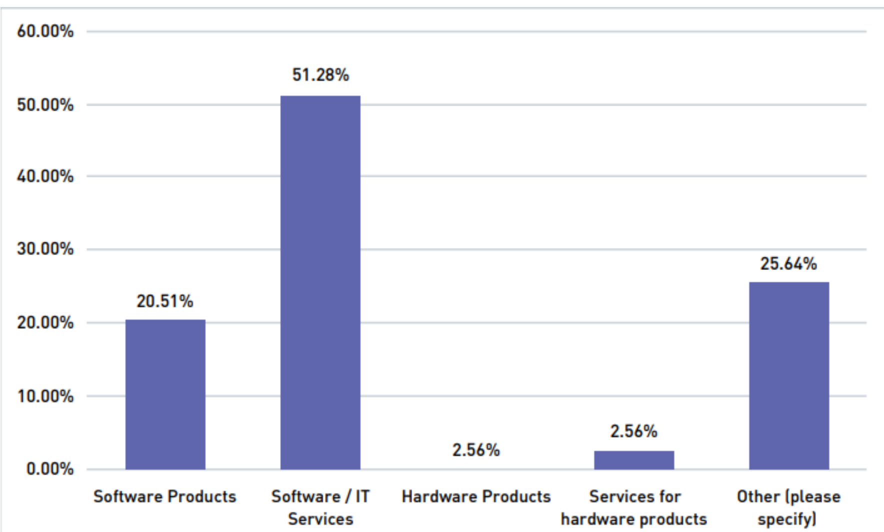
Figure 10-1. ICT Firms Ownership Type



Source: STIKK

ICT ownership type (Figure 10-1) is dominated by domestic ownership at 69.23 percent, mixed ownership at 20.51 percent and foreign ownership at 7.69 percent. Only 2.56 percent of ICT firms are branches of foreign companies. ICT firms that provide the primary services (Figure 10-2) are Software/ IT services at 51.28 percent followed by other services 25.64 percent and software products at 20.51 percent.

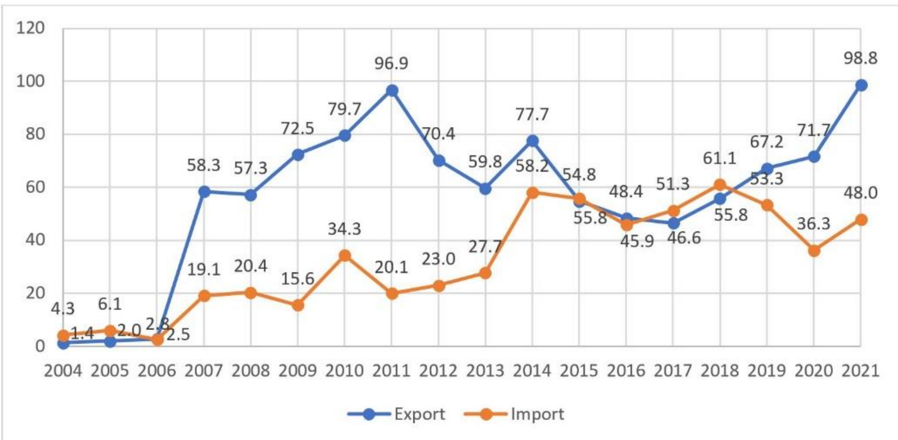
Figure 10-2. Products and Services provided by ICT Firms



Source: STIKK

According to estimates reported in Figure 10-3, there is a positive trade balance between importing and exporting ICT services with 50.8 million euros. In 2021, Kosovo reached a record of 98.8 million Euro, while imports of ICT reached 48 million Euros. The exports include transactions such as telecommunications, computer, and information services. ICT firms in Kosovo are export-oriented companies, where 91 percent of companies export their products and services (STIIK, 2018).

Figure 10-3. Exports and Imports of ICT Services

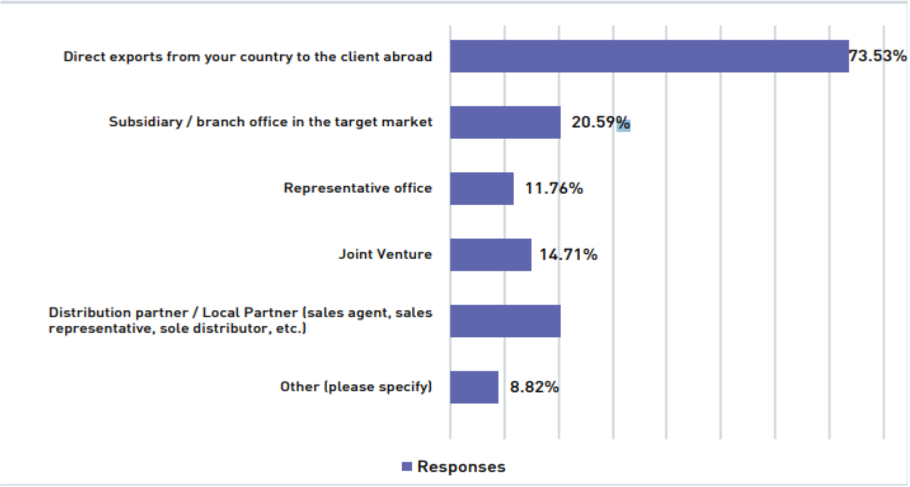


Source: Author's calculation, Central Bank of Kosovo

The number of export-oriented firms in 2018 has increased by over 74 per cent. These estimates show that the average of companies already in exporting activities is 75 percent, indicating that only 25 percent of companies offer their products and services nationally. Among the companies that export 73.53 percent are direct exporting companies, subsidiaries are 20.59 percent, distribution partners 20.59 percent, joint ventures 14.71 percent, and representative offices are 11.76 percent (Figure 10-4).

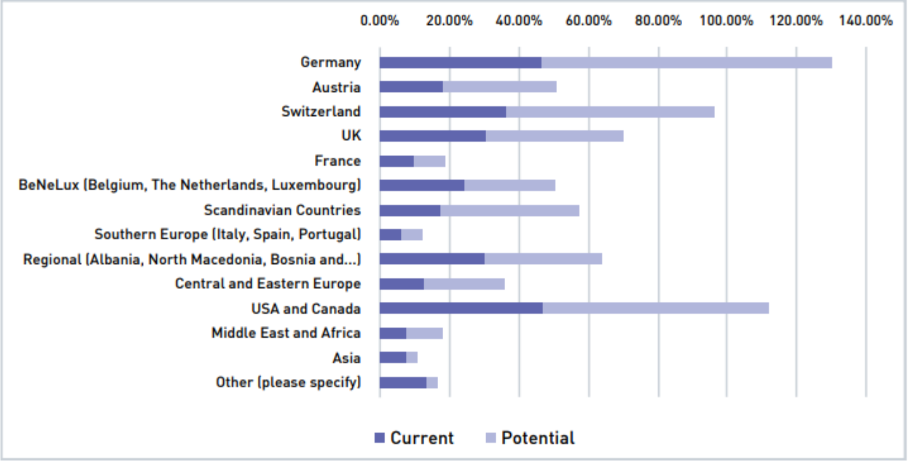
Exporting modes (Figure 10-4) are mainly characterized by direct exports, where 73.53 percent of firms use this exporting mode, followed by subsidiaries with 20.59 percent and joint venture with 17.71 percent. Countries that mainly export ICT firms are dominated by European countries, followed by the USA and Canada, and in the region. However, generally speaking, ICT firms export to countries on all continents, and they evaluate that all countries are the exporting partners. Countries that ICT companies export currently are Germany, the USA, Canada, Switzerland, and the UK (Figure 10-5). Figure 10-5 also shows that ICT firms are competitive as they export to several countries, which countries are seen as potential exporting partners in the future.

Figure 10-4. Exporting Modes of ICT Firms



Source: STIKK

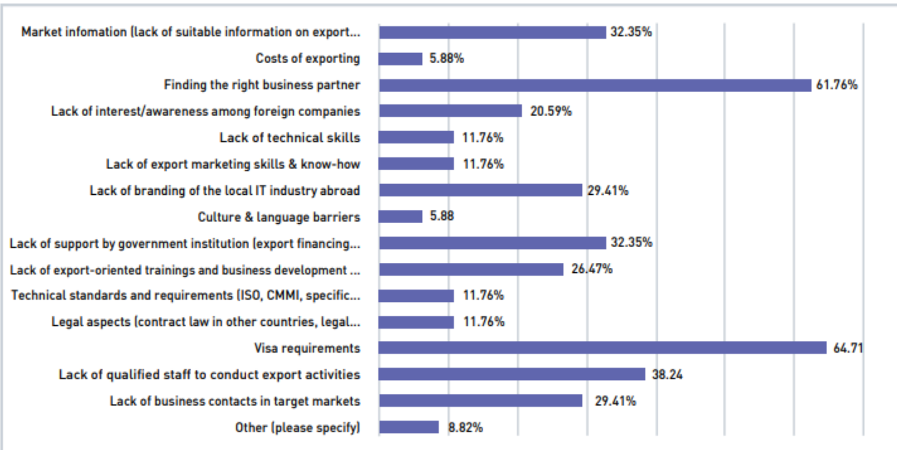
Figure 10-5. Exporting Partners and Potential Exporting Partners



Source: STIKK

Figure 10-6 shows that ICT firms face several exporting barriers, such as the lack of information about international markets followed by visa requirements and the lack of institutional support derived from weak institutional and legal frameworks. Other barriers are related to the firm competencies to adapt to the competitiveness in international markets, such as the lack of skills and qualified human capital, which are the main barriers for firms.

Figure 10-6. Barriers to export



Source: STIKK

Kosovo adopted several strategies to improve the competitiveness and ability of firms to compete in international markets. The export promotion under the Private Sector Development Strategy 2013-2012 program aims to promote investments and increase the competitiveness of sectors, develop the capacities of SMEs, and achieve sustainable competitive advantage and higher value of exports. This strategy aims also to support SME product development production capacity and encourage SME's moderate plants and technology to integrate into global value chains in line with the EU market. Furthermore, another government strategy, namely National Development Strategy 2016-2022, aimed to improve the quality of standards for productive activities, transition into higher value-added activities and facilitate connection to value chains across industries. This also includes the promotion networks and cluster associations based on several components (OECD et al., 2019).

The shortage of skilled workers has significantly hindered the long-term development of the industry, limiting the level of quality services that local companies can provide both domestically and internationally. One of the primary challenges facing the sector is the insufficient availability of educational and professional programs that provide employees with contemporary and high-quality knowledge that aligns with global standards. This shortage of skilled labour is one of the primary barriers to the overall growth of the sector and the expansion of service exports (Shaipi and Xërxa, 2014).

The ICT sector, however, faces barriers to growing and improving knowledge and its competitive abilities. The challenges of the ICT sector are related to the lack of trust between entrepreneurs and researchers, red tape, and the lack of stimulation of the private sector to become more proactive in R&D and gain a competitive advantage (World Bank,2013). Furthermore, the sector faces challenges in developing innovation capabilities by failing to connect the education system and research institutions to improve innovation capabilities through technology transfer, absorption, and innovation. There is also a lack of advanced policy incentives that do not encourage the private sector in R&D, including the lack of infrastructure and human capacity in doing research, including the lack of monitoring and evaluation (World Bank, 2013). Besides these constraints, STIKK faces barriers in terms of the lack of a skilled labour force and inability of the supply side to meet the demand side expectations. This is also related to the inability of higher education institutions to provide a skilled labour force (STIKK, 2021).

10.5. Conclusions and Policy Implications

Kosovo's ICT sector has proliferated in recent years and can potentially be a key driver of economic growth and development. However, several institutional and other barriers need to be addressed to realize the sector's potential fully, especially in exports. One of the leading institutional barriers is the lack of a supportive regulatory framework, particularly regarding property rights and contractual enforcement, making it difficult for firms to operate efficiently and compete in the global market. Fiscal policy also poses challenges, particularly in terms of high taxes and limited access to finance, which hinder the growth and competitiveness of the sector. Furthermore, the lack of a supportive regulatory framework, corruption, and political instability are additional institutional barriers hamper the sector's growth and export potential.

Another significant barrier is the shortage of skilled labour in the ICT sector, which limits the sector's ability to expand and compete globally. There is a need to invest in education and training programs that will provide the necessary skills and knowledge to meet the demands of the rapidly evolving sector. Furthermore, the limited access to funding, especially for start-ups and small and medium-sized enterprises (SMEs), is also a significant challenge for the sector. To overcome these barriers, there is a need for policy interventions that promote institutional reforms to enhance property rights protection, contract enforcement, and a supportive regulatory environment. Furthermore, the government should invest in education and training programs to address the shortage of skilled labour in the sector. To address this issue, it is necessary to invest in improving the quality of education and training in the ICT sector. This could involve partnering with industry leaders to develop specialized training programs, providing financial incentives for students to pursue careers in ICT, and offering more support to businesses to recruit and retain skilled employees. Additionally, providing better access to financing for SMEs and start-ups can help to foster innovation and growth in the sector.

In conclusion, while Kosovo's ICT sector has significant potential for growth and competitiveness, several institutional and other barriers need to be addressed to realize its full potential fully, especially in exports. Addressing these barriers requires a comprehensive policy approach that includes institutional reforms, investment in education and training, and better access to financing for SMEs and start-ups. By addressing these challenges, Kosovo's ICT sector can significantly contribute to economic growth and development.

The competitiveness of the ICT sector in transition economies can be enhanced through various policy implications. Some of the key policy implications are:

- Encouraging investment in R&D to improve the competitiveness of the ICT sector. This can be done by providing tax incentives, grants, and other forms of financial assistance to firms and research institutions.
- Promoting education and training in the ICT sector by focusing on the skills required from the demand side. Therefore, institutions need to promote education and training in the ICT sector to develop a skilled workforce that can drive innovation and competitiveness. This can be done by providing subsidies for education and training programs and collaborating with educational institutions to design and implement relevant curricula.

- Institutions must establish a favourable regulatory environment encouraging innovation, competition, and entrepreneurship in the ICT sector. This can be done by reducing bureaucratic barriers, streamlining business registration and licensing procedures, and protecting intellectual property rights. Likewise, adopting a legal framework to encourage innovation and, competition and entrepreneurial activities in the ICT sector is crucial. This can be done by reducing bureaucratic barriers, streamlining business registration and licensing procedures, and protecting intellectual property rights.

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