

# Financial Globalization in the Emerging Balkans

### Mehmed Ganić

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Exploring Financial Trends on the Eve of EU Membership



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### Foreword

The contribution offered by the book is undoubtedly useful and essentially original, as it aims to enhance a rather modest literature on the impact of financial globalization and integration on the economies and financial markets of the emerging economies of the Balkan countries. Additionally, it certainly provides a valuable enhancement of the contemporary literature regarding the above processes in the context of the post-soviet European countries and other transition economies. The issues related to the impact of financial globalization and integration on the macroeconomic developments across both advanced and emerging economies and their capital markets remain a topical concern in the contemporary financial economics.

Overall, the book addresses important and topical issues pertaining to broad phenomena taking place in the contemporary financial markets and their impact on the transition economies of the Balkan countries which remains largely unexplored in the international literature and thus attempts to fill this apparent gap. The above features allow to expect that the book should offer a reasonable shelf-life sustained by the potential interest from the part of both academics and practitioners.

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### **ABBREVIATIONS**

ARDL Autoregressive Distributed Lag

B&H Bosnia and Herzegovina

BCBS Basel Committee on Banking Supervision

BIS Bank for International Settlement

BTI The Bertelsmann Transformation Index

CAR Capital Adequacy Ratio

CB B&H Central Bank of Bosnia and Herzegovina

CBA Currency Board Arrangement CEE Central and Eastern European

CEFTA Central European Free Trade Agreement
CIS The Commonwealth of Independent States

EBRD European Bank for Reconstruction and Development

ECB European Central Bank
EU European Union

EUR Euro

FDI Foreign Direct Investment FPI Foreign Portfolio Investment

FTA Free Trade Agreement FX risk Foreign Exchange Risk GDP Gross Domestic Product

GDPPC Gross Domestic Product Per Capita

GFC Global Financial Crisis

IFI International Financial Integration IMF International Monetary Fund

KAOPEN Capital Openness

MNC Multinational Corporation

### xii ABBREVIATIONS

NPLs Non-Performing Loans

ODA Official Development Assistance

OECD Organization for Economic Cooperation and Development

RWA Risk Weighted Asset

SAA Stabilization and Association Agreement

SEE South East Europe

SFRY Socialist Federal Republic of Yugoslavia

SOE State-Owned Enterprise STCAP Stock Market Capitalization

UNCTAD The United Nations Conference on Trade and Development

U.S. United States of America
USD The United States dollar
WDI World Development indicator
WTO World Trade Organization

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### CHAPTER 1

### Introduction

**Abstract** The introduction highlights the trends that lead to cross-border capital expansion, changes in global financial landscape and growing internationalization of finance.

**Keywords** Cross-border capital expansion · Emerging Balkans · Internationalization finance

This book explores the culmination of financial trends in the age of financial globalization and improves its understanding that has rapidly transformed the role of global financial industry. At the same time, the book provides a solid foundation for understanding dramatic process financial globalization, where the financial industry in the emerging Balkans experienced more significant changes than at any other time in its history, in the process becoming increasingly internationalized. Although national economies have territorial borders, a process of financial liberalization from the 1980s onward eliminated the restriction on cross-border capital movement. The pace of cross-border capital expansion has increased over the last two decades and has significantly influenced the sphere of the real economy. Besides globalization, there have been some additional global mega trends, affecting financial markets to develop dynamically. During that time a global economy has undergone its profound transformations.

Markets are deregulating, the power and control of the government are decreasing, while the volume of financial transactions has grown rapidly.

Dating back to the end of the Bretton Woods system, the question of financial globalization has been on the forefront of national and international economic debate. It is, therefore, natural that this debate intensifies in this quarter of the new century, all the way to an analysis of financial trends during the age of globalization. With the advent of globalization, Western economic thought and the financial system it sired dominated financial practices worldwide. By the same token, this same Western influence has important implications for reforming the global financial system. This is evident from the recent meltdown of world financial markets. In light of these momentous events, a challenge developing economies face is how to cope with the difference and disparity in financial markets, attracting foreign direct investment (FDI) and portfolio investment and how to close the economic gap with developed economies. Also, the financial landscape is substantially changed and a number of new financial intermediaries and financial instruments of various types are growing while no doubt the world became more financially integrated. Generally, in many countries worldwide the financial service industry is undergoing significant structural and regulatory changes and has experienced rapid growth in recent years. Thus, referring to the background of above this book address issue related to the emerging Balkans stand in terms of financial development compared with benchmark of advance transition and mature economies. Having in mind that most of the countries of the region were part of the social system they share a similar economic pattern and integration in the global financial flows. It then highlights issues related to the financial development through the transition process to present.

There has been increased interest in researching the emerging Balkans, including investigation of the transition of countries in the region to market-oriented economic systems, and analysis of the changes in the size, and structure of their financial landscapes. Until recently, the region was excluded in systematic empirical examination. The region's level of economic and financial development lags behind the New EU members, more so in comparison with the fifteen old EU-15. Studies of the economies in this region find that there are underdeveloped financial markets in more infant stage and related problems only partially understood that are impeding the development of these economies. Still, the Balkan region is well integrated into the European Union (EU) through the process of regional cooperation and EU approximation. There has been a significant increase in the region's trade with the EU. In line with this trend, banking sectors converged toward EU standards with substantial foreign ownership of EU-based banks from Austria, Germany, Italy, and Greece. Equally, Kosovo and Montenegro unilaterally introduced euro as de facto domestic currency and their sole legal tender, while the national currencies of Bosnia and Herzegovina (B&H) and Bulgaria are linked to the euro.

Dating back decades now, the Balkan region has been going through a rough period of economic and financial times that, however, is changing for the better recently. Therefore, notably this book, in the first instance, explores the emerging Balkans in the ages of financial globalization with growing internationalization finance and widespread liberalization capital flows. More elaborately, the book examines financial trends and development of eight countries in emerging Balkans defined to include: Albania, B&H, Bulgaria, Croatia, Montenegro, North Macedonia, Serbia, and Romania.

Building on the forgoing background, this book addresses issues related to the emerging Balkans in terms of financial development, compared with the benchmark of advanced transition and mature economies. Chapter 2 examines a set of the performances embedded in the rise and fall in the economic activities of the transitional economies, covering the key process of economic reforms, privatization, deindustrialization, and liberalization on the road toward a market economy. Bear in mind that most of the countries in the Balkan region were part of the socialist system and therefore share similar economic pattern of financial integration in the global financial flows. Going further, Chapter 3 highlights issues related to the growing impact of financial globalization, global trade, and FDI flows in selected developed and developing countries, using a combination of cross-sectional and event-study analysis to find differences among regions. In addition, the chapter explores patterns of private capital flows to the countries in the emerging Balkans and challenges of financial globalization for the region, in particular.

Moreover, Chapter 4 brings the focus onto the recent trends in the export and import structures and Intra-Balkan trade liberalization and cooperation through the transition process and on the eve of EU membership. It than analyzes the level of trade openness in the emerging Balkans, recent changes in its foreign trade relations and trade composition with the EU and the rest of the world. Particular attention is given

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to the trade intensity and trade propensity of CEFTA 2006 members. Chapter 5 assesses progress made in banking development by exploring trends in financial intermediation and competitiveness of the banking sector as well as those areas in which the reforms are likely to fall short. Then the chapter develops a composite index of banking stability by using the method of empirical normalization and indicators of financial soundness. Chapter 6 examines the causal linkage between stock market development and economic growth in 12 CEE countries by employing the autoregressive distributed lag (ARDL) bounds testing approach both in the short run and long run. The study recommends that national governments should further stimulate reform of financial markets due to the fact that stock markets in the region exist for at least 20 years, now and that their financial systems are banking oriented. Chapter 7 discusses and critically examines financial trends in the emerging Balkans and changes in its financial landscape. It portrays changes in the size, structure, and financial landscape of the financial system inspired and provoked by changes on the eve of EU membership. Finally, the book ends with discussion of the major determinants of financial integration facing the emerging Balkans in Chapter 8. The variations in the level of IFIs in the emerging Balkan economies are also empirically examined by employing panel data analysis.



### CHAPTER 2

# Emerging Balkans and Its Recent Experience with Transition

Abstract This chapter seeks to achieve three purposes. First, it provides the history and evolution of the transition experiences of different countries in the emerging Balkan region, guided by the key questions that have been raised in the debate about collapse of the socialist bloc in the early transition years. Second, the chapter examines the performances of the transitional economies during the periods of the fall and recovery of economic activities encompassing the key processes of economic reforms, privatization, deindustrialization, and liberalization on the road toward a market economy. Third and finally, the chapter discusses the similarities and differences of economic development among the 19 transition countries, using the analytic tool of cluster analysis divided into three different clusters.

**Keywords** Transition process · Emerging Balkans · Economic liberalization · Privatization · Institutional reforms · Cluster analysis

### 2.1 Introduction

The late 1980s and early 1990s witnessed the collapse of state socialism and regimes as well as failure of the model of centrally planned economy in Central and East European (CEE) region, including former Yugoslavia,

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Czechoslovakia, along with regimes in Soviet bloc countries. Thus, through the restoration or acquisition of sovereignty, in the territories of the former socialist bloc, 22 countries emerged. These emerging economies in CEE embarked on economic transition to a market-oriented economy. Within this transition path, there are some marked economic differences between transition economies, as a result of the rigidity of the earlier economic system and the geopolitical and geo-economic position of CEE region.

# 2.2 Transition to a Market Economy: Reality or Necessity?

The Balkan countries are known to have a long and very intertwined history, and the fall of the Berlin Wall greatly influenced the dramatic changes in the political and economic landscape in this part of Europe. During the 1990s, series of political upheaval, inherent tensions and armed conflicts launched by Serbia with a plan to create a "Greater Serbia" led to the breakup of the Socialist Federal Republic of Yugoslavia (Herman and Peterson 2007). During the wars of 1990–1995, the entire region experienced economic collapse with the economic costs measured in billions US dollars (USD). For instance, total war damage in BiH was estimated between USD 50–70 billion, and the economic cost of destroyed production capacity between USD 15–20 billion (Wei and Khaled 1997).

After the devastation of war, reconstruction efforts in B&H and Kosovo took place slowly. In last two decades, a remarkable development was achieved. However, due to the extent of destruction as well as difficulties arising because of complicated political structure in some countries (B&H, North Macedonia) the region's recovery has been slower than in other places in former Yugoslavia. One of the reasons for Slovenia's exception is its previous orientation toward the West European market (Mencinger 2017). At any rate, the war in the former Yugoslavia in the early 1990s had a significant impact on the lack of reforms, while successive economic reforms failed to produce stability and growth compared to other CEE economies. During the last two decades, the region went through significant economic and political changes because 1990s was a lost for the region. Majority of these countries adopted socialism as their political system, and all of them, except Albania, Bulgaria, and Romania, were part of SFRY. This destructive conflict put economic transformation

of those countries on hold and more countries of the region only effectively restored their transition in the early of 2000s. More importantly, with the exception of Serbia, the rest of the analyzed countries, reached their pre-transition level of GDP of 1990 only subsequently, with Albania reaching that level in 2000, Romania in 2002, Bulgaria and Croatia in 2005, Montenegro in 2008, North Macedonia in 2012, and B&H in 2016 (Ganić and Omerhodzic 2018). Over the past two decades, countries in the region have undergone major systemic-economic reforms, that is, neoliberal transformation, toward a market economy. The first wave of economic reforms in the entire region began with the process of privatization of state-owned enterprises, price liberalization, market deregulation, and opening to international markets to improve recovery hampered by the Balkan wars from 1990 until 1995. The aim of this policy shift was to introduce and build market economy laws starkly different to the rules of a planned economy. However, this phase of economic reform was characterized with hyperinflation, steep declines in gross national income and rising unemployment, altogether leading to deteriorating quality of life for citizens (Uvalic and Cvijanovic 2012). Economic performances during the 1990s were weakened while economic growth rates declined and failed to create new jobs opportunities. The progress made in the institutional reforms and investing in capacity building through political and national consensus led the entire region toward European integration for EU membership. Since 2003, when the Thessaloniki Stabilization and Association Summit was held, each country has been moving step by step toward EU membership by satisfying its obligations under the stabilization and association process and framework. Meanwhile, Romania and Bulgaria (2007) and Croatia (2013) became full members of the EU, North Macedonia (2005), Montenegro (2010) and Serbia (2012) and Albania (2014) were awarded candidate status by EU, while B&H continues its status as potential candidate for EU membership.

In the early 1990s, many of the transition countries suffered a severe transition crisis. The transition crisis led to a sharp decline in production, consumption, employment, and the quality and standard of living of the masses as a whole. Given that transition countries vary in the sizes of their populations, marked by trends of growth and contraction, the sample from the 19 transition countries are classified in two groups (Table 2.1).

The first group of six countries, namely, North Macedonia, Montenegro, Slovenia, Czech Republic, Slovak Republic, Armenia, and Azerbaijan, experienced population growths. The second group of

Table 2.1 The economic development indicators and population of transition countries

	Population (in thousands)		GDP in current prices in bln USD		GDPPC		Unemployment rate		Industry (% of GDP)*	
	2000	2018	2000	2018	2000	2018	2000	2018	2000 2018	
Albania	3129.2	2882.4	3.48	15.1	1127	5268	16.57	12.3	19.40 21.30	
B&H	3750.0	3320.0	5.5	20.1	1468	6065	25.66	18.4	19.37 24.45	
Bulgaria	8170.9	7025.0	13.15	65.1	1609	9273	16.22	5.21	22.68 23.76	
Croatia	4430	4160.0	21.7	60.9	4850	14,910	16.06	8.43	24.36 20.35	
North	2034.9	2082.9	3.77	12.7	1854	6084	32.20	20.7	21.41 23.56	
Macedonia										
Montenegr	o 613.56	627.81	0.98	5.53	1627	8844	30.47	15.2	21.2615.93	
Serbia	7516.3	6982.4	6.54	50.6	870	7847	12.60	12.7	30.77 25.48	
Romania	22,443	19,446	37.25	239.6	1660	12,302	6.97	4.19	30.2628.97	
Hungary	10,211	9775.8	47.21	157.9	4625	16,162	6.56	3.71	26.98 25.39	
Poland	38,259	37,797	171.8	585.6	4493	15,421	16.31	3.85	28.88 28.62	
Slovenia	1988.9	2073.9	20.3	54	10,201	26,124	6.92	5.11	30.47 28.43	
Czech Republic	10,255	10,630	61.65	245.3	6012	23,079	8.76	2.24	33.87 32.19	
Slovak Republic	5388.7	5446.7	29.17	105.9	5413	19,442	19.06	6.54	29.42 30.13	
Armenia	3069.5	2951.7	1.91	12.43	623	4212	11.05	17.5	n.a 24.98	
Ukraine	49,176	44,622	31.26	130.8	636	3095	11.71	8.80	30.81 23.29	
Moldavia	2923.8	2706	1.28	11.4	354	3227	8.46	2.98	19.15 22.68	
Azerbaijan	8048.6	9939.8	5.27	46.9	655	4722	11.80	4.90	42.54 52.21	
Belarus	9979.6	9483.4	12.7	59.7	1277	6290	12.00	4.76	33.48 31.27	

Note Industry (including construction), value added Source The World bank (2019), United Nations Development Programme (2018)

thirteen countries, namely, Albania, B&H, Bulgaria, Croatia, Serbia, Romania, Hungary, Poland, Armenia, Ukraine, Moldova, Belarus, and Georgia, stagnated or experienced a population decline in the period under review (see Table 2.1). The downward trend and the negative migration balance in a number of countries was evident after the collapse of the socialist bloc caused by long-term emigration (magnified in the late years of transition), low fertility rate, and the consequences of deindustrialization.

From the 1990s, the economy of the region experienced rapid changes because the major industries have contracted or disappeared

due to a sharp reduction of business activities in industry. The results of the research indicate the existence of relative deindustrialization in many transition countries (ten out of nineteen countries), followed by a reduced share of industry—added value in GDP (2000–2018) and sectoral shift from industry to service sector. Compared to 2000, in 2018, the contribution of Industry to GDP growth declined in ten countries, namely, Croatia, Montenegro, Serbia, Romania, Hungary, Poland, Slovenia, Czech Republic, Ukraine, and Belarus. Of course, not all transition countries experienced an industrial decline in GDP. To the contrary, the remaining nine countries in the sample experienced an increase in the share of industry in their GDP (see Table 2.1).

In 2018, the industrial sector contributed between 15.93% (Montenegro) and 52.21% (Azerbaijan) to the GDP. Also, Slovak Republic, Czech Republic, Poland, Romania, Belarus have a larger industry sector than their neighboring countries. Although countries in the emerging Balkan share similarities in many aspects, there are important differences that need to be pointed out. As demonstrated in the table above, compared to advance CEE economies all countries in the region, with the exception of Croatia, had low GDP per capita high unemployment rate although the Commonwealth of Independent States (CIS) countries are facing the same problem as well. Economic disparities between advanced transition countries and the rest of the transition countries were huge in the early transition years as well as toward the end of the transition period. An overview of the regional average of GDP per capita for the sampled countries reveals that difference in the level of economic development across the countries is stark, more so across the emerging Balkan countries. As Table 2.1 shows, in 2018, GDP per capita for Croatia at 14,910 USD, and Romania at 12,302 USD far exceeded that of Albania 5268 USD; B&H 6065 USD; and North Macedonia 6084 USD. Data in Table 2.1 illustrate that, between 2000 and 2018, all sampled countries registered significant increases in GDP per capita. In the achieved level of economic development, the sample contains a heterogeneous mix of countries with different levels of development from 3095 USD for Ukraine to 26,124 USD for Slovenia. There is a visible imbalance in the level of economic development measured by GDP per capita across the sampled countries. For instance, advanced CEE countries have the highest GDPs, followed by emerging Balkan countries, while, excepting Belarus, CIS countries recorded dramatically lower GDPs and continue to fail behind the rest of the transition countries.

Moreover, the first and most obvious change in the transition period came to the fore in the area of labor market and rise in unemployment. The structure of unemployment shows several characteristics, taking into account structural features of labor market in the transition and posttransition period (Ganić 2019). First of all, regional differences are becoming increasing apparent among selected countries. For instance, between 2000 and 2018, unemployment was reduced in practically all countries, excepting Armenia, Georgia, and Serbia. The highest reduction took in Montenegro, Slovak Republic, Poland, Bulgaria, and North Macedonia. Second, unemployment remains largely stagnant in many countries while the share of long-term unemployment (more than a year) in total unemployment is very high. Third, the social groups most exposed to unemployment are young people with little education and experience, older workers, people with disabilities, and those with health problems, and in some countries, ethnic minorities. According to World Bank (WDI) data, advanced transition countries like Slovenia, Hungary, Poland, and the Czech Republic have low unemployment rates, although countries like Moldova, Azerbaijan, Belarus do even better with unemployment rates of less than 5% (see Table 2.1). In contrast, some countries in the emerging Balkan region register considerably high unemployment rates. These include North Macedonia (20.7%), B&H (18.4%), Montenegro (15.2%), and Serbia (12.7%).

# 2.3 LIBERALIZATION, DEBT, AND EXTERNAL (IM) BALANCES

The countries in emerging Balkan share a number of common characteristics, such as common heritage, at similar stages of economic development, and common set of political challenges and Euro-Atlantic aspirations for their membership in NATO and EU. Five out of eight of these countries are not yet EU members, but are in the process of seeking accession. The three countries—Bulgaria, Croatia, and Romania—which are already EU members have trodden the same development path, by implementing economic and systemic reforms, with the aim of transiting from centrally planned to a market-oriented economy. In fact, more or less all countries of the region started the transition process later than other CEE economies, thereby affecting their economic and political setting. As the reforms began in the 1990s, during a period of major turmoil in the Balkans, access to foreign capital was necessary to finance a relatively

large current account deficit. However, the level of foreign capital inflow was affected by regional political instability and uncertainty, which made many investors reluctant to invest. There are certain challenges that transitioning countries face when it comes to attracting financing. Thus, it is critical to study the sources of financing and to understand what can be done to stimulate increased revenue.

The transition process was typically followed by implementing a set of different policy reforms measures, including price and trade liberalization, financial and monetary sector reforms, and restructuring. However, the early years of transitions have witnessed rise in public debt, trade deficit, and inflation rate. The economic growth of region was highly unstable, such that countries like Croatia and B&H experienced sharp decrease in economic growth. But, since the end of the 1990s, the region made strides toward macroeconomic stability, leading to better economic performance, higher earnings, and improved standards of living. For instance, two countries—Serbia and North Macedonia—opened up for export and accomplished visible gains. The other countries followed this trend of entering new markets and opening up for receipt of capital inflow. Traditionally, the EU has been the largest trade partner of the region and continues to absorb 72% of Western Balkan exports and 58% imports in 2018 (Eurostat 2019). The next structural change in the region led by liberalization was large-scale privatization. Since during socialism, companies under state ownership during the period of socialism needed to privatize to transform themselves to market economies.

Although emerging Balkan countries share similarities in many aspects, key differences also exist among them that need to be pointed out. Table 2.2 displays an evolution of the selected economic indicators between 2000 and 2017 for emerging Balkan countries. The profile of external debt shown in Table 2.2 shows that Montenegro recorded the highest rate of external debt stock to GDP (145.3%), although B&H (85%), Serbia (83.3%), and Croatia (81.8%) are facing the same problem as well. On the other hand, in 2018, Bulgaria at 69% and Romania at 55% had the lowest rate of external debt stock to GDP across the region, which is to be expected, given their higher level of economic development. The financial markets of all countries are not well developed and they mostly rely on the external debt. While between 2000 and 2017 Bulgaria and Serbia experienced a decrease in the level of external debt, during the period under review, the levels are high and rising in the rest of countries.

**Table 2.2** Evolution of the selected economic indicators

	Country	2000	2005	2010	2017
External debt stock,	Albania	31.29	25.91	46.08	77.06
as a percentage of	B&H	46	60	82	85
Gross National	Croatia	58.28	80.9	n.a.	81.8
Income	North Macedonia	40	48.5	56	79
	Serbia	177	59	80	83.3
	Montenegro	n.a	31.79 (2006)	110.2	145.3
	Romania	30.4	41	70.5	55
	Bulgaria	93.6	62	102	69
The general	Albania	-7.77	-3.46	-3.52	-1.39
government	B&H	-4.64	0.76	-4.06	1.81
deficit/surplus as a	Croatia	-5.49	-3.7	-6.50	0.80
percentage of GDP	North Macedonia	2.38	0.21	-2.41	-2.74
	Serbia	-0.17	1.05	-3.49	1.37
	Montenegro	-1.44(2002)	1.41	-4.87	-6.91
	Romania	-4.60	-0.80	-6.90	-2.60
	Bulgaria	0.50	1.00	-3.10	1.10
Savings-investment	Albania	-6.7	-8.94	-11.4	-7.07
gap	B&H	-11.06	-10.19	-7.9	-2.29
	Croatia	-2.04	-8.67	-3.03	3.63
	North Macedonia	-1.53	-6.57	-8.20	-6.07
	Serbia	-4.47	-16.7	-4.30	-4.12
	Montenegro	-15.85	-9.48	-20.6	-16.06
	Romania	-3.89	-9.65	-5.45	-3.12
	Bulgaria	-6.32	-11.8	-0.51	8.07
Current account	Albania	-4.49	-7.10	-11.4	-7.5
balance	B&H	-7.19	-16.4	-6	-4.3
as a percentage of	Croatia	-2.32	-5.46	-1.5	5.4
GDP	North Macedonia	-2.73	-2.55	-2.1	-0.9
	Serbia	-1.7	-8.8	-6.4	-5.3
	Montenegro	n.a	-8.5	-20.6	-15.7
	Romania	-3.6	-8.7	-5.1	-3.2
	Bulgaria	-5.3	-11.3	-1.9	3.64

Source IMF/WEO (2019), Eurostat (2017), countries internet sites and own calculations

Accordingly, the least indebted country is Bulgaria while Montenegro is the most indebted (Table 2.2).

In fact, a rise of external debt has reached such worrying levels in Montenegro (145.3%) that some commentators see it as the main factor that hinders country's prospects of joining the EU. Exploring trends

of general government deficit/surplus is important when assessing fiscal positions in the emerging Balkan countries.

Accordingly, we compare general government balance as percentage of GDP between 2000 and 2017. These developments shown in Table 2.2 reflect some cross-country divergence in general government balance position. For instance, between 2000 and 2010, general government deficits (or net borrowing) decreased only in Albania and B&H, while Serbia, Croatia, and Romania experienced increases in government deficits. Most of the deteriorations in the countries analyzed took place after the latest global financial crisis, when government net borrowing rose faster than government lending to finance deficits in current and capital accounts. At the end of 2017, four countries acted as net lenders with government deficit: B&H, Croatia, Serbia, and Bulgaria. During the period under review, countries like Albania, Montenegro, and Romania have also seen persistent government deficits. The gross net borrowing requirements in Montenegro were 1.44% in 2002, 4.87% in 2010, and 6.91% in 2017 resulting the highest public deficits in the region (Table 2.2). Traditionally, the entire region has witnessed levels of domestic savings insufficient to finance the higher levels of investment and economic growth they plan for their citizens. From the perspectives of saving investment and macroeconomic soundness, all countries in the region, with the exception of Croatia and Bulgaria (in 2017), suffer from negative differences in terms of savings-investment gap. It might be explained by the fact that a shortage of domestic savings is covered with import of foreign savings in financing domestic investments. The official data shown in Table 2.2 show that in three countries—B&H, Serbia, and Romania—between 2000 and 2017, the gap between savings and investment was nearly closed. In contrast, in 2017, Montenegro registered the highest negative gap between savings and investment, measuring over 16% of GDP, an excessively high number. Also, a high negative savings-investment gap was found in Albania, at 7.07% of GDP, and North Macedonia, 6.07% of GDP, compared to B&H at 2.29% of GDP, Romania at 3.12% of GDP, and Serbia at 4.12% of GDP. Some other data related to link between current account balance and the process of liberalization in the early of 2000s uncover persistent external imbalances for the region. Between 2000 and 2005, current account deficit showed an increasing trend for the entire region that coincided with the movement to market economies in the early 2000s. Excepting for Croatia and Bulgaria that, in 2018, generated current account surpluses, the rest of

the countries are highly reliant on imports than on exports. For more than 15 years, Albania, B&H, Serbia, North Macedonia, Montenegro, and Romania have been running persistent current account deficits. Nevertheless, the good news is that some countries from the region of which B&H, North Macedonia, and Romania come to mind, experienced decline of current account deficit, significantly narrowed compared to 2000. In contrast, Montenegro is the only country with the current account deficit that in recent years (Table 2.2). Significant challenges still lie ahead. First of all, there is no political support for finishing structural reforms while corporate governance reform is waiting for realization. Second one, endemic corruption and organized political crime more and less are present in every country of the region. Disadvantage for most of the countries is complicated regulations for establishing and building business under the rising political uncertainty in some countries that undermine business. The lack of appropriate business infrastructure and their market is not of the significant size.

### 2.4 Privatization and Institutional Reforms

The process of privatization started in the 1990s, but in many countries even before the fall of communism, especially in the countries of the former Yugoslavia. Between 1990 and 2000, successful transition countries focused on the "first generation of reforms"—privatization, maintaining macroeconomic stabilization, trade, and liberalization of foreign investment. In parallel, the "second generation of reforms" was implemented. This involved creating a conducive environment for domestic and foreign investors to enhance the protection of property rights and contracts, an effective justice system, modern tax system, public sector reform, harmonized fiscal and monetary policy, developing efficient banking system and financial markets, promoting private-public partnership (especially in infrastructure projects), regulating labor markets, reducing the level of the gray economy and corruption, and minimizing political stability—all of which increase a country's credibility and reduce the risk of potential investments (Bajec et al. 2010). In the meantime, the EU's granting of membership to eight Eastern European transition countries and two Mediterranean countries between 2004 and 2007 lent added impetus to the economic development of those countries. The strategies of privatization varied from country to country, as different countries adopted different methods of privatization, depending on their

economic ideologies. For instance, given that Yugoslavia had developed a special form of so-called social ownership, the member countries were in a relatively unique position after the dissolution of Yugoslavia. Attempts at privatization in many former Yugoslavia states were hampered by the onset of the war, a factor responsible for the portrayal of these states as "late starters." They had to decide upon the way of transforming this type of ownership (Uvalic 2010). Some countries in former Yugoslavia like Slovenia and Croatia began privatizing much earlier than the rest that didn't begin to privatize large state-owned enterprises (SOEs) until the end of 1990s. In B&H, Serbia, and Montenegro, privatization was suspended until 2000 due to war and sanctions imposed by the international community against Serbia and Montenegro. There were two possible approaches at the time: first, transforming social ownership into state ownership, after the corporatization transferring the stocks into the state-owned funds and then finally privatizing the companies, the approach referred to as indirect privatization. The second, direct approach to privatization entails distributing or selling the stocks after corporatization (Hadzic 2002). Among many other countries, Bulgaria followed a privatization technique of direct sales (primary method) and vouchers (secondary method), while Romania followed employee buyouts (primary method) and direct sales (secondary method). In 2000, progress to functional market economy in the individual transition countries varied significantly across the six different areas (see Figs. 2.1 and 2.2). By using an approach developed by the European Bank for Reconstruction and Development (EBRD) that compares transition countries in various areas of economic reform with factors like competition policy, trade and forex system, price liberalization, small-scale privatization, largescale privatization and governance and restructure of enterprises, we assess transition progress at the level of these six economic sectors. The lowest score (1) indicates minimal progress in building market economies, while the highest score (4+) represents the standard of developed European countries or the standards of a functioning market economy. The reform scores of the EBRD indicators for 29 transition countries indicate progress has been made in all six different areas. Figure 2.1 shows the average score for transition progress made by 29 transition countries as well as the emerging Balkans region in 2000. Nearly all small-scale firms have been privatized (3.8) while privatization of large-scale enterprises is in progress in all countries in the emerging Balkans. Bulgaria and Croatia achieved high scores and more score points on progress in 2000 toward

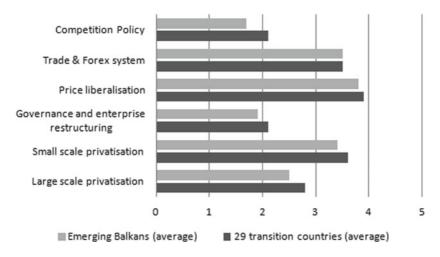


Fig. 2.1 Assessing progress in economic reforms in 2000 (Source Author's calculation on the EBRD data [EBRD Transition Report 2014])

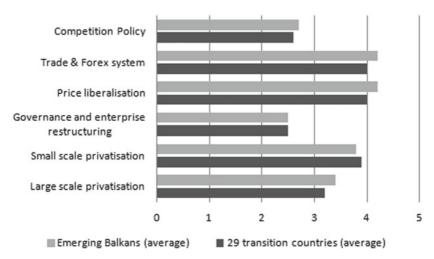


Fig. 2.2 Assessing Progress in economic reforms in 2014 (Source Author's calculation on the EBRD data [EBRD Transition Report 2014])

establishing a functioning market economy in the area of price liberalization (3.8), small-scale privatization (3.4), and trade and forex system (3.4). Their average transition score of 3.4 was the highest and at a faster pace than in Serbia and Montenegro (2.0) with the least progress.

The next area in which reforms are relatively slow in progress is large-scale privatization (2.5). It can be explained the fact that small-scale privatization occurred in the initial stage of privatization where smaller SOEs were easier to sell. The least progress has been made in the field of structural reforms in governance and enterprise restructuring (1.9), and competition policy (1.7). Also, Fig. 2.1 shows that the average transition score (for all six transition indicators) of emerging Balkan countries lags behind average of 29 transition countries. However, since 2001, progress toward a functioning market economy has increased with respect to these countries (Fig. 2.2).

The region implemented relatively easily the liberalization of prices and trade and forex system and conducted the rapid sale of most state-owned companies through small-scale privatization while some progress have been made toward sustainable market economy in the rest of the transition areas.

For instance, reforms in some area of governance and enterprise restructuring (from 1.9 in 2000 to 2.5 in 2012), competition policy (from 1.7 in 2000 to 2.6 in 2012), and large-scale privatization (from 2.5 in 2000 to 3.4 in 2012) failed to be completed and clearly lagged behind price liberalization (from 3.8 in 2000 to 4.2 in 2012), small-scale privatization (from 3.4 in 2000 to 3.8 in 2012), as well as trade and forex system (from 3.4 in 2000 to 4.2 in 2012). Additionally, the ranking shows that the Emerging Balkan region was near or above the average of 29 transition countries across all six indicators, except small-scale privatization. More precisely, B&H (3.1), Serbia (3.3), and Montenegro (3.3) are the only countries that lagged behind the average scores of the EBRD indicators for the region due to starting economic reforms late.

Next, one of the most important features of progress in privatization is the increasing role of the private sector in generating GDP. Today, the private sector is an important part of the economy of many transition economies. When it comes to the emerging Balkan countries, excepting B&H and Serbia, the rest of the countries have reached or even exceeded the average share of the private sector in the GDP of many OECD countries, namely, between 70 and 75%. In B&H and Serbia, the private sector accounted for 60% of the country's GDP (Table 2.3). In 2009, Albania

Table 2.3 Indicators privatization in the emerging Balkans

	Year	Privatization revenues (cumulative, in percent of GDP)	Private sector share in GDP (in percent)	Private sector share in employment (in percent)
Albania	2004	11.4	75.0	80.0
	2009	16.0	75.0	83.0
B&H	2004	2.6	50.0	na
	2009	na	60.0	na
Bulgaria	2004	18.0	75.0	69.0
_	2009	24.3	75.0	76.0
Croatia	2004	14.6	65.0	66.0
	2009	17.4	70.0	70.0
North Macedonia	2004	13.8	65.0	55.0
	2009	21.2	70.0	65.0
Montenegro	2004	na	na	na
· ·	2009	na	65.0	54.0
Serbia	2004	7.7	na	na
	2009	23.1	60.0	na
Romania	2004	5.5	70.0	58.0
	2009	na	70.0	69.0

Source The EBRD Transition reports 2004-2012, different issues

and Bulgaria ranked as the most privatized countries in the emerging Balkan region with a share of private sector of 75% of the country's GDP, followed by Croatia, North Macedonia, and Romania, each with 70%.

In contrast, B&H and Serbia lagged behind the above-mentioned countries with the least privatized economies and share of private sector from 60% of their respective country's GDP. Albania was far and away one of the top privatized countries in the region with a share of employment generated by private sector of 83.0% of total employment. It is followed by Bulgaria (76%) and Croatia (70%), compared to the rest of the transition countries with lower figures. In 2009, Bulgaria, North Macedonia, and Serbia ranked as the best three countries by total privatization revenues above 20% of their GDP. In contrast, Albania, B&H, and Romania registered more limited figures and progress. This part of this chapter aims to examine success or failure of the transition process three decades later and compares them to the outcomes of institutional and economic performances. A slightly more complex methodology (with arguably better results) is provided by the Bertelsmann Transformation

Index, a joint project of the Bertelsmann Stiftung and the Center for Policy Research at the University of Munich.

The Bertelsmann Transformation Index (BTI) measures a global progress of transition process toward market economy, by assessing the level of socioeconomic development, monetary and fiscal stability, private property, the strength of the economy in market-based competition, a functional private sector, and the quality of political management in 128 developing countries where transformation is taking place. BTI indicator for the measurement of transformation toward democracy and a market economy is ranked on a scale from 1 (lowest grade) to 10 (best grade). An overview of progress in economic transformations between 2006 and 2018 for 19 European transition countries is provided in Table 2.4. Looking at the countries' economic transformation trends, we can see that a group of advanced European transition countries, namely, Hungary, Slovenia, Czech Republic, Slovakia, and Poland, achieved the best scores, placing themselves at the top as the states that have made the most successful move to a market economy.

The most significant progress has been made in the area of market organization as well as in competition and monetary and fiscal stability. The high scores for these two criteria imply that emerging Balkan countries successfully implemented reforms to control exchange rate policy and maintain monetary and fiscal stability. Also, Bulgaria, Romania, and Croatia scored higher than other emerging Balkan countries in practically all seven criteria relevant for assessing progress toward a market economy.

There are some countries that have seen significant improvements in their overall economic rank in 2018, compared to 2006. For instance, the highest progress was found in Moldavia (+22), Georgia (+17), Albania (+17), Serbia (+13), B&H (+5), North Macedonia (+7), each of which state showed a particularly positive development and improvement in the transformation toward a market economy. In contrast some other countries experienced a deterioration in their overall economic rank. Compared to the BTI 2006 results, these developments are particularly worrisome for countries (though outside the Balkan region) like Azerbaijan (-18), Ukraine (-16), Hungary (-12), and Armenia (-6). Similarly, the results over time show countries like Armenia, Ukraina, Moldavia, Azerbaijan, Belarus, Georgia where transformation to a functioning market economy is limited.

Table 2.4 Indicators of progress toward market economy

	Level of socioeconomic development		Organization of the market and competition		Monetary and fiscal stability		Private property		Economic performance		Ranking economic status	
-	2006	2018	2006	2018	2006	2018	2006	2018	2006	2018	2006	2018
Albania	5.0	6.0	6.3	8.3	5.0	7.5	6.0	7.0	4.0	6.0	47	30
В&Н	6.0	6.0	7.0	7.8	8.5	8.0	6.0	7.5	7.0	5.0	41	36
Bulgaria	6.0	7.0	8.5	8.5	9.0	9.0	8.5	8.5	7.0	6.0	19	17
Croatia	8.0	7.0	8.8	9.0	9.5	8.0	8.5	8.0	8.0	7.0	12	14
North Macedonia	6.0	6.0	6.8	8.5	9.0	8.0	7.0	8.5	6.0	6.0	33	26
Montenegro	n.a	7.0	n.a	8.5	n.a	7.5	n.a	8.0	n.a	6.0	n.a	23
Serbia	6.0	6.0	6.0	8.3	8.5	8.0	6.0	7.5	7.0	6.0	37	24
Romania	6.0	7.0	8.0	8.8	9.0	9.5	8.5	8.5	8.0	8.0	18	16
Hungary	9.0	8.0	10.0	8.5	8.5	7.5	10.0	8.5	8.0	8.0	7	19
Poland	8.0	8.0	9.8	9.9	9.5	9.0	9.0	10.0	8.0	8.0	10	8
Slovenia	10.0	10.0	9.0	9.3	10.0	9.5	9.5	9.0	8.0	8.0	1	4
Czech Republic	9.0	10.0	10.0	10.0	9.5	10.0	9.5	9.5	8.0	9.0	5	1
Slovak Republic	9.0	9.0	9.0	9.5	9.5	9.5	10.0	9.0	9.0	8.0	7	10
Armenia	4.0	4.0	6.5	6.3	9.0	7.5	7.0	7.5	8.0	6.0	41	47
Ukraina	6.0	5.0	6.8	6.8	8.5	7.0	6.5	6.5	8.0	6.0	27	43
Moldavia	3.0	4.0	5.0	7.0	6.5	7.5	5.5	7.0	5.0	4.0	82	60
Azerbaijan	5.0	4.0	5.0	4.3	7.0	6.0	5.0	4.5	6.0	5.0	67	85
Belarus	7.0	7.0	4.8	4.8	3.5	5.0	2.5	3.5	5.0	4.0	74	77
Georgia	4.0	4.0	4.5	7.3	9.0	7.5	5.0	6.5	6.0	6.0	64	47

Source Bertelsmann Transformation

# 2.5 Transition Development (Dis)Similarities: A Cluster Analysis

Overall, emerging Balkan countries have made reckonable progress in the transition to a functioning market economy. One of the aims of this section is also to conduct a cluster analysis in 19 European transition economies and examine their transition development disparities in terms of the degree of their homogeneity over time between 2000 and 2018. The choice of cluster analysis is justified by the fact that most of the analyzed economies shared similar economic characteristics in the early years of transition. The scope of the disparity assessment across European

transition and post-transition countries covers a set of major economic indicators that characterize their economic development, such as: GDP in billion USD, GDPPC, industry (including construction), value added (as a percentage of GDP), exports of goods and services as a percentage of GDP, FDI as a percentage of GDP, investment as a percentage of GDP and unemployment rate. By using Ward's method and squared Euclidean distance (to measure similarity), hierarchical cluster analysis grouped the observed countries into some clusters. Then, on the obtained results K-means clustering is performed. Accordingly, the selected countries are grouped to analyze the dynamics of major economic indicators through dissimilarity measures of major economic indicators (Table 2.5). Firstly, the differences in economic development across three groups of countries were calculated by the Kruskal-Wallis test at the level of significance (a = 0.05).

The results show that the following variables: GDP in billion USD (in all three subperiods), GDPPC (in all three subperiods), exports of goods and services as a percentage of GDP (between 2011 and 2018 and between 2008 and 2010), and income inequality (in all three subperiods) were found to be statistically significant (p < 0.05). Accordingly, a matrix for cluster analysis is created by the above-mentioned indicators. In the case of the rest of the variables, i.e., industry, unemployment, and FDI, there are no observable statistically significant differences in

**Table 2.5** The Kruskal-Wallis test statistics for the clusters

	2000-200	7	2008-201	0	2011-2018		
Variables	χ2	<i>p</i> < <i>t</i>	$-{\chi^2}$	<i>p</i> < <i>t</i>	$-{\chi^2}$	<i>p</i> < <i>t</i>	
GDP in bln USD	6.48	0.04	6.22	0.04	6.24	0.04	
GDPPC	12.08	0.00	12.12	0.00	12.14	0.00	
Industry (including construction), value added (% of GDP)	1.43	0.48	1.82	0.40	2.95	0.22	
Exports of goods and services as percent of GDP	4.64	0.09	6.79	0.03	8.28	0.01	
FDI as % GDP	0.69	0.70	4.6	0.10	4.77	0.09	
Income inequality	12.08	0.00	11.96	0.00	11.96	0.00	
Unemployment rate	3.49	0.17	1.05	0.59	1.35	0.50	

Source Author's calculations

all three subperiods. Different methods of hierarchical clustering were performed, but the best interpretable solution was obtained by Ward's method (Ward 1963; Lance and Williams 1967) with squared Euclidean distances because it creates a small number of clusters with relatively more countries. In the first step, the optimal number of clusters is examined using a dendrogram. Figures 2.3, 2.4, and 2.5 show the dendrograms obtained by the Ward's method in three different sub-periods. There are divergent trends across all the sampled countries where option with two clusters is acceptable after employing the Ward's method with squared Euclidean distances between clusters. Figure 2.3 presents the results of countries' hierarchical clustering based on our statistically significant variables.

Distance between each cluster was obtained using the Ward's method. Between 2000 and 2007, the highest rate of the similarity measured by squared Euclidean distances was found between Armenia and Georgia than between B&H, North Macedonia while Belarus joined this group. Next closest is Croatia and Slovakia. In the first subperiod, the distance between countries from Cluster 3 (Albania, Armenia, Azerbaijan, Ukraine, Moldova, Serbia, B&H, Belarus, Georgia, North Macedonia)

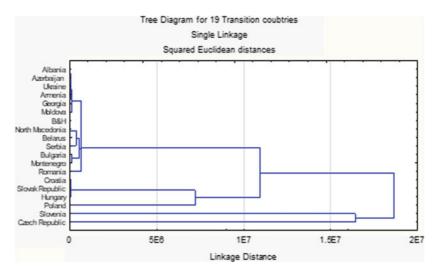


Fig. 2.3 Dendrogram of clusters between 2000 and 2007 (Source Author's calculations)

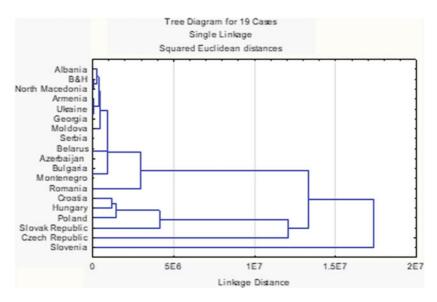


Fig. 2.4 Dendrogram of clusters between 2008 and 2010 (Source Author's calculation on the World Bank database)

is closer than the distance between countries from Cluster 2 (Bulgaria, Romania, Montenegro, and Poland) and Cluster 3 (Czech Republic, Hungary, Slovak Republic, Croatia, and Slovenia). However, countries from Cluster 1 and Cluster 2 perform better in terms of GDP in billion USD, GDPPC, and income inequality. In contrast, the highest rate of the dissimilarity was found between Slovenia and Czech Republic. The obtained results for a subperiod between 2008 and 2010 and subperiod 2011 and 2018 show also that the countries from Cluster 1 and Cluster 2 and Cluster 3 maintained almost the same characteristics for the set of analyzed economic indicators (Fig. 2.4).

The highest rate of the similarity in this subperiod was found between Serbia and Belarus than between Bulgaria and Montenegro. The disparities between B&H and North Macedonia were increased. In the last subperiod, between 2011 and 2018, Ukraine and Moldova recorded the lowest distance and the highest rate of the similarity than Serbia and Belarus, followed by Croatia and Hungary, Armenia and Georgia, B&H, and North Macedonia (Fig. 2.5). The highest distance and dissimilarity

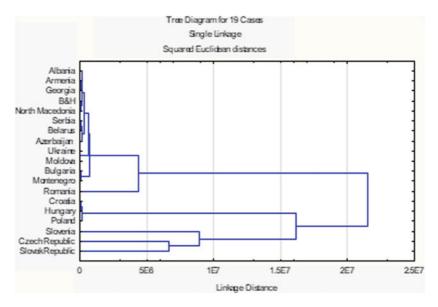


Fig. 2.5 Dendrogram of clusters between 2011 and 2018 (Source Author's calculation on the World Bank database)

was found between Slovakia and Czech Republic and Slovenia joined this group latter. Based on the results presented above, K-means clustering was performed to refine the results obtained by the hierarchical clustering.

Table 2.6 shows the classification of countries into three clusters by the K-means method and the distance to the cluster center for each country within the corresponding cluster for three subperiods. Increased distancing from the cluster center means that concrete observation is far from a given cluster.

Furthermore, Cluster 1 (five countries), Cluster 2 (four countries), and Cluster 3 (ten countries) obtained by the K-means method are almost consistent with Cluster 1, Cluster 2, and Cluster 3 obtained by the Ward's method. In the second subperiod, we found that Serbia, Azerbaijan, and Belarus are no longer in Cluster 3 but instead are ranked in Cluster 2. Also, Poland is not longer in Cluster 2, but now ranked in Cluster 1.

In the third subperiod, Cluster 1 covers 6 countries (Croatia, Slovakia, Hungary, Poland, Slovenia, and Czech Republic) obtained by the K-means method. It is also consistent with Cluster 1 obtained by the

Table 2.6 Results of K-means clustering

	Between 2000 2007	) and	Between 2008 2010	8 and	Between 201. 2018	l and
	Cluster membership	Distance	Cluster membership	Distance	Cluster membership	Distance
Albania	3	50.08	3	143.18	3	161.4
B&H	3	256.11	3	405.21	3	443.67
North Macedonia	3	252.82	3	339.93	3	329.64
Serbia	3	517.66	2	295.69	2	365.13
Armenia	3	277.94	3	85.99	3	95.76
Ukraine	3	182.06	3	197.59	3	405.68
Moldova	3	421.95	3	445.66	3	434.18
Azerbaijan	3	99.52	2	353.78	2	508.94
Belarus	3	288.95	2	300.63	2	284.19
Georgia	3	288.71	3	164.12	3	6.18
Bulgaria	2	573.28	2	114.59	2	164.38
Montenegro	2	431.86	2	76.07	2	46.19
Romania	2	123.62	2	764.37	2	956.47
Poland	2	1127.81	1	1270.12	1	1270.12
Croatia	1	907.87	1	876.7	1	1344.23
Hungary	1	1079.36	1	1280.74	1	1260.91
Slovenia	1	2254.27	1	2778.89	1	2368.56
Czech Republic	1	724.06	1	1205.54	1	1237.96
Slovak Republic	1	990.65	1	111.13	1	263.04

Source Author's calculation on the World Bank (2019) database

Ward's method separated into a separate cluster. The new EU members: Croatia, Slovakia, Hungary, Poland, Slovenia, and the Czech Republic are included into the group of advanced countries, while the remaining two countries Bulgaria and Romania are included into Cluster 2. Between second and third subperiods the analyzed countries maintained their status in the corresponding clusters without any changes.

#### 2.6 Conclusion

Emerging Balkan countries reformed their economic policies and more slowly implemented reforms at different speeds and vigor in different countries, compared to some advanced CEE countries like Poland, Czech Republic, Hungary, and Slovenia. Even before the start of the transition, these more advanced countries were significantly more closely linked to the market-oriented economies in Western Europe.

This occurrence enabled the more advanced CEE countries to accomplish more rapid progress on their move toward a market oriented economy, enjoyed stable political conditions and the economic growth. On the contrary, the Balkan region as a whole has made a modest progress toward becoming a functioning market economy. The persistence of very high unemployment remains a major cause of problems for more than two decades. Also, the economic indicators of the region are significantly weaker in comparison with the advanced European transition economies while wide economic differences persist among analyzed countries. This suggests that the transitional development disparities need to be tackled, including the key economic reforms and further privatization.

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#### CHAPTER 3

## Financial Globalization

Abstract This chapter considers the growing impact of financial globalization, global trade and FDI flows in selected developed and developing countries, using a combination of cross-sectional and event-study analysis to find differences among regions. Also, worldwide Gross Stock of Foreign Assets and Liabilities are explored and their trends in a global economy are outlined by assessing the degree of cross-border capital flows in transition economies both in comparison with benchmark Euro area and over time. The chapter also looks the key analyze of the recent pattern of private capital flows to the emerging Balkans region.

**Keywords** Financial globalization · Gross Stock of Foreign Assets and Liabilities · Private capital flows

#### 3.1 Introduction

Within the last few decades, financial globalization is one of the most bandied vocabularies in the world of finance. The large cross-country capital flows now easily move through the global financial markets, motivated primarily by a search for higher yields. Additionally, over time, the significance of national borders has declined to the point of irrelevance with the expansion of cross-capital flows. The key actors in the globalized financial markets are multinational corporations (MNCs) and large "financial conglomerates" that now operating globally. Also, there have been some additional global trends in business motivated by the search for higher rates of return which impel many companies to diversify risk internationally. For instance, in the 1960s, financial market across the world experienced an important transformation, which has never been seen before. In particular, the economy had been flooded with huge amounts of US dollars. The economy was extremely productive, which led to falling profitability among the productive entities. So business was on the lookout for more profitable investment possibilities rather than the productive sphere. Additionally, in the 1970s, there was a massive increase in the prices of oil, which led to an abundance of petrodollars flowing around the pipelines of the banking system. Short History of Financial Globalization

The modern world of the finance is characterized by the expansion, and the deepening of the world's capital markets and global investors. In the 1980s, the process of globalization began to substantially change the image of the world of finance as we knew it. In recent decades, financial globalization has made significant progress, bringing many important benefits, but also causes of the financial crisis and creating new risks and challenges for financial players (Häusler 2002). However, recent two decades witnessed a significant increase in the number of operations in the financial markets caused by the increased possibility of profiting from operations with financial instruments (Das 2006).

The financial globalization policies that have been implemented in the developing countries since the 1970s and the outcomes of these policies in the process are one of the most debated issues of financial structure today (Boughton 2002). After the 1980s, foreign access to many markets worldwide has been liberalized. Additionally, entry of international financial groups in other countries has been facilitated by developments in technology and communication channels, which have been hampered by restrictions and obstacles in capital movements. Through these developments, international capital movements have rapidly moved away from their traditional position and gained a different function. Although globalization was an object of commentary and analytical attention in the 1960s, by the 1980s, the attention grew rapidly. There have been number academic studies investigating the effects of globalization on the growth of the global economy (Dollar 1992; Sachs et al. 1995; Edwards 1998).

Along with globalization, there are many new concepts that have entered our lives, among them global market, global product, global company, global manager, global culture, global politics, global capital and it is possible to expand them (Turan 1994).

### 3.2 Goods, Services, and Financial Flows

The world economy has changed in its structure and in nature. For instance, cross-border capital movements become the driving forces of the world economy rather than trade relations. Openness to the world market affects the development of financial markets and institutions, the growth of international trade, and increasing the global interdependencies among national economies. In contrast, financial closure is characterized by a smaller volume of foreign trade, higher costs of raising capital, the additional costs of analysis of investment, and inefficient allocation of capital. Generally speaking, financial integration creates a new, single market, which integrates national financial markets into one single global financial market. Overall, however, the expansion of cross-border capital flows, facilitated by liberalization, has followed the rise of foreign trade flows and international trade as a major catalyst to development. In this regard, Evans and Hnatkovska (2014) discuss how expansion of global capital flows in the 1970s and 1980s marked a major turning point for spectacular growth in international capital markets.

Galindo et al. (2002) explain financial globalization as a process of expansion, integration, and diversification of international capital flows. Dramatically falling of customs duties and other trade and capital barriers led to an increase in the volumes of international trade, but also in the volume of global capital flows. Liberalization of economic flows significantly contributed to the establishment of this new global economic architecture, as indicated by a number of concrete indicators. Especially noticeable is the rise of the world trade and its participation in world GDP. Figure 3.1 highlights certain characteristics of global trade and flows between 1990 and 2015. For instance, total trade growth rates have grown faster than world GDP between 1992 and 2010 while trade growth was weak between 2010 and 2015, the result of similar weaknesses in the current regime of the global economy (Fig. 3.1). The geographical distribution of global FDI flows remains characterized by the dominant role of developed countries, but also an increasingly important role of

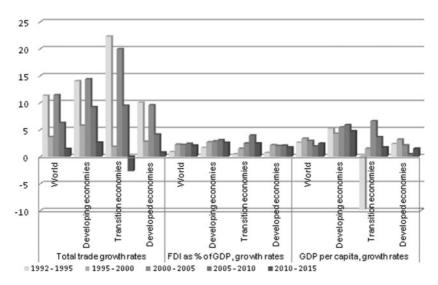


Fig. 3.1 Global trade and FDI flows (*Source* Author's calculation on UNCTAD [2018] data)

developing countries and transition countries, suggesting close integration into the international financial system. In such circumstances, all three groups of countries: Developed countries, developing countries, and transition countries have found a way to achieve a continuous increase in FDI inflows by supporting the further growth of internationalization finance across the world. In addition, the share of FDI in GDP rose steadily, reaching a high point in 2007 for all three groups of countries.

Moreover, as a result of the globalization and internationalization of the world economy, FDI flows along with international trade have contributed to economic growth. Figure 3.1 validates this view as it depicts a rise of trade in goods and services and GDP grow rates by regions in three subperiods. Furthermore, United Nations Conference on Trade and Development (UNCTAD) data on FDI inflows showed the tendency to significantly exceed the growth rate of real GDP in all three regions, and they have been much stronger than trade flows. Their dynamic growth was extremely abrupt, as portrayed in Fig. 3.1 for a series of different time intervals. For instance, all regions recorded similar levels of average FDI growth above 2% of GDP between 2010 and 2015, with

the exception of developed economies (1.72% of GDP). Comparison of average flows of world trade between two subperiods (2010–2015 and 1992–1995) suggests that trade flows were reduced by about 7.9 times.

As noted previously, the lowest growth rate of trade was found in developed countries and transition countries. Another noticeable feature of Fig. 3.1 is that in the period under review, FDI flows tended to grow by about 2.3 times. Examination of the share and increase of FDI flows recorded in transition economies and developed countries confirm this general trend.

#### 3.3 THE KEY TRENDS

The last decade of the twentieth century was marked by the high mobilization and concentration of international capital flows, leading to rapid integration of emerging economies into the global financial system. These have been much talk in recent years about borrowing. International capital mobility is certainly a fundamental feature of globalization of finance, both in developed and developing countries. It takes one of two basic forms: Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI). Goldstein and Razin (2006) found that the inflow of FDI into developing countries is significantly higher than the inflow of FPI.

On the other hand, in the case of developed countries, certain empirical studies have found that the difference in deviations (volatility) between the FDI and FPI flows is much lower than for developing countries (Lipsey 1999). In contrast, Ganić and Mamuti (2016) uncover a low share of portfolio investments in the structure of capital flows in the Western Balkan region which suffered from portfolio outflows in midcrisis and post-crisis periods. Although gross stock of foreign assets and liabilities for emerging markets and other developing economies grew markedly in the last three decades, Ganić and Mamuti (2016) found them to be considerably lower (in absolute terms) than in advanced economies.

In recent few decades, there have been changes in the relative importance of different geographic regions. Coincidentally, FDI and portfolio equity have seen increasingly significant components of investment in emerging economies. However, according to data shown in Table 3.1 debt still accounts for more than half of total external liabilities. Moreover, share of debt as a dominant forms of new capital flows almost halved between 2006 and 2011. Total portfolio investments in the advanced

Table 3.1 Worldwide Gross Stock of Foreign Assets and Liabilities, 1980-2015, Annual Average

Time span	1980–1990	1991–2000	2001–2005	2006–2011	2012-2015
All selected countries (bln. USD)	139,032	245,051	421,295	1050,467	916,217
Share of Equity	6.55	11.4	16	14	15.1
Share of FDI	17.1	18.5	20.3	19.6	25.8
Share of Debt	72.8	65.3	59.5	52.7	45.2
Share of Other	3.55	4.8	4.2	13.7	13.9
Advanced Economies (bln. USD) <sup>a</sup>	119,287	186,625	373,934	916,851	773,249
Share of Equity		13	16	14	15.6
Share of FDI	18	18	19	18	24.7
Share of Debt	72	99	61	55	47.2
Share of Other	8	ĸ	4	13	12.5
Emerging Markets (bln. USD) <sup>b</sup>	17,285	53,922	43,175	120,684	129,866
Share of Equity	8	∞	14	17	12.9
Share of FDI	13	20	28	32	31.8
Share of Debt	77	62	44	37	34.2
Share of Other	_	10	14	14	21.1
Emerging Balkans (bln. USD) <sup>c</sup>	0	0605	0872	3310	2642

Time span	1980–1990	1991–2000	2001–2005	2006–2011	2012-2015
Share of Equity	0	2.2	1.2	1.6	1.7
Share of FDI	0	8.4	23.7	33.2	34.7
Share of Debt	0	9.62	57.2	47.30	45.5
Share of Other	0	8.6	17.9	47.3	18.1
Other Developing Economies (bln. USD) <sup>d</sup>	2460	3899	3314	9622	10,460
Share of Equity	0.28	0.5	4.6	10	7.5
Share of FDI	15.10	18.8	22.2	33	38.2
Share of Debt	77.20	72.3	56.5	35	33.9
Share of Other	7.42	8.4.	16.7	22	20.4

bCurrent Emerging Market Economies: 23 countries (according to IMF classification, 2016): Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, 'Emerging Balkans Economies: 8 countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, North Macedonia, Montenegro, Romania, and <sup>4</sup>Advanced Economies. 19 advanced industrialized countries employed in the sample are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Italy, Japan, Netherland, Norway, Portugalia, Espana, Sweden, Switzerland, UK, and USA and the United Arab Emirates

d Other Developing Economies: 30 countries—Algeria, Bangladesh, Bolivia, Cameroon, Costa Rica, Dominican Republic, Ecuador, El Salvador, Fiji, Gana, Guatemala, Honduras, Iran, Jamaica, Kenya, Malavi, Mauritius, Nepal, Nigeria, Papua New Guinea, Paraguay, Senegal, Sri Lanka, Tanzania, Togo, Trinidad and Tobago, Tunisia, Uruguay, Zambia, and Zimbabwe Source Author's elaboration based on Lane and Milesi-Ferretti (2007)

economies increased twofold with much of the increase taking place between 2001 and 2005 as well as the share of the category "other." For emerging markets, FDI inflows and portfolio investments grew rapidly increasing on average from 16% between 1980 and 1990, compared to 49% between 2006 and 2011. More than any other, this fact helps to explain intensifying the merger and acquisitions process, the privatization of state-owned companies, and the liberalization of the stock market by the mid-1990s. Therefore, over the last three decades, the share of the category "other" in gross stock of foreign assets and liabilities (category "other" includes financial derivatives and total reserves, minus gold) have increased almost fourfold, with much of the increase taking place between 2006 and 2011. Two main conclusions have emerged from our comparisons by regions. The first one is that for advanced economies and the emerging Balkan countries, debt financing remaining the most important source of inflow, while FDI and portfolio investments in equity securities now account for over half of total inflows in the emerging markets. The second conclusion is that investment portfolio in equity securities accounted for almost 17 percent of inflows in emerging economies (2012–2015), compared to 10% for other developing economies, portraying the underdevelopment of their stock markets. For instance, the share of debt in gross foreign assets and liabilities decreased in all analyzed economies from 72.8% (between 1980 and 1984) to 52.7% (between 2006 and 2011). Moreover, in advanced economies the share of debt in gross stock of foreign assets and liabilities are more than other regions, while FDI inflows frequently been lower in recent years. Similarly, the emerging Balkan region shows a greater preference for debt financing although share of FDI in gross stock of foreign assets and liabilities is also significant in recent years.

An equally important determinant in the process of the deepening of financial integration and globalization across the world is capital account liberalization. Das (2004) found that the process of liberalization of capital accounts and deregulation financial sector are key determinants of financial globalization. As highlighted by Masson (2001), capital market integration has become another important feature of globalization that has expanded in recent years. In recent decades, particularly since the beginning of the 1980s, there was an increase in financial openness with the massive liberalization of capital accounts in advanced developed countries, namely the USA, the U.K, Germany, and France (Versluysen 1988). Relating to this influence, it has become important to measure capital

account openness. The Chinn-Ito index (KAOPEN) is mostly used for measuring capital account openness. Its value expressed in indexes ranges between 0 and 1. The value of the index closer to 1 indicates that the country is very (financially) open (Chinn and Ito 2006). As Table 3.2 shows, between 1980 and 1990, a fully liberalized capital and financial account has been most pronounced in advanced developed countries, like the USA, Germany, and Japan. In contrast, CIS countries have a small value of Financial Account Liberalization Index, which indicates a high degree of imposed control and restrictiveness of capital flows (Chinn-Ito index 0.26 in the period between 2011 and 2017). Similarly, many EU transitional and Latin American countries have little capital controls (the average value of Chinn-Ito index is 0.75 in the period between 2011 and 2017). Instructively, the EU transition countries, along with many Latin American states, pursued aggressive Financial Account Liberalization.

 Table 3.2 Financial Account Liberalization Index (average)

	1980-1990	1991–2000	2001-2010	2011–2017
USA	1	1	1	1
UK	0.96	1	1	1
France	0.39	0.91	1	1
Germany	1	1	1	1
Japan	0.97	0.97	1	1
China	0.07	0.13	0.16	0.16
EU transition countries	n.a.	0.43	0.70	0.75
Latin America	0.35	0.50	0.72	0.66
CIS countries	_	0.26	0.27	0.26

Note The Chinn-Ito index (KAOPEN) is an index measuring a country's degree of capital account openness. The values are weighted averages

Latin America: (Argentina, Brazil, Bolivia, Chile, Columbia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela)

CIS countries: Azerbaijan, Belarus, Georgia, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Russian Federation, Tajikistan, Tajikistan, Turkmenistan, Ukraine, Uzbekistan, \*\* Chine from 1984

EU transition countries: Albania, Czech Republic, Slovak Republic, Estonia, Latvia, Hungary, Lithuania, Croatia, Slovenia, N. Macedonia, B&H, Bulgaria, Poland, Romania

Source Author's calculation, based on the Chinn-Ito index (Journal of Development Economics, 2006) http://web.pdx.edu/čito/Chinn-Ito\_website.htm

# 3.4 International Capital Flows Into the Emerging Balkan Countries

The significance of certain forms of international capital movements has changed over time. However, these movements remain the most essential indicators of financial integration or financial globalization. International capital flows in countries in the emerging Balkans experienced serious development challenges followed by slow and volatile growth as well as a decline in official development assistance ODA official flows. Also, the small size of their economies together with relatively limited activities in those economies coupled with political instability are among the factors that impair inflows of foreign capital into these Balkan economies and constrain their access to international capital markets. At the beginning of the transition period, debt financing and bank lending to governments and/or the private sector was the predominant share of total international capital movements and financing of the economies of emerging Balkans. In spite of some changes in international capital movements, debt financing and bank lending remained as the dominant type of external financing in many of these Balkan countries. In fact, in the decade before the global financial crisis GFC, FDI flows played a more important role than foreign portfolio investment, although it still lags behind debt financing. Figure 3.2 displays the composition of international capital flows in the emerging Balkan states. Due to underdeveloped

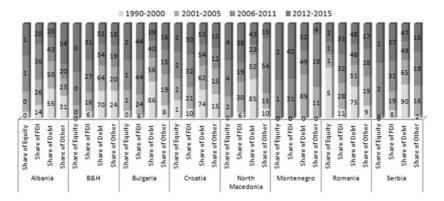


Fig. 3.2 The composition of international capital flows in the emerging Balkans region in % (*Source* Author's elaboration on Lane and Milesi-Ferretti dataset)

financial markets, debt financing is still the main form of inflow of foreign capital in many countries, including B&H, Croatia, North Macedonia, Montenegro, Romania, and Serbia. Between 1991 and 2000, 79.6% of total international capital flows 79.6% was in the form of debt financing, compared to 45.5% between 2012 and 2015.

In contrast to the above-mentioned countries, FDI inflows are the most important source of capital inflows in Bulgaria, and "other" international capital flows in Albania. Moreover, in countries, such as B&H, Bulgaria, North Macedonia, Montenegro, Romania, and Serbia, FDI flows and portfolio investments in equity securities increased markedly in the decade after the GFC. Cross-border bank lending remained a dominant form of international capital flows, but with average flows below those in the period between 1990 and 2000. Following some years of expansions, in the period before the GFC, FDI flows declined slightly in Albania and Croatia, between 2012 and 2015. The structure of international capital flows is heterogeneous across the region. Between 1990 and 2015, primary forms of capital movements and sources of financing were debt financing (51%) and FDI inflows (31%), while the share of foreign portfolio investments in equity securities, at about 2%, was negligible. Furthermore, portfolio investments in equity securities in the emerging Balkans have proved volatile, and their share of the overall market is still relatively small. In two countries, Albania, and B&H, the number is below 1%, while in four countries, Serbia, Romania, Montenegro, and Bulgaria, that number is below 2%, thus playing a lesser role in capital flows. On the other hand, FDI flows have become an increasingly significant components of capital flows in all emerging Balkan countries. They grew rapidly overtime, increasing their share in total international capital flows from an average of 8.5% between 1990 and 2000 to 35% between 2012 and 2015. Next, the geographical distribution of total international capitals flows between 1991 and 2015 reveals that Croatia (20.2%), Bulgaria (19.9%) and Romania (36.7%) together account for close to 77% of the total, followed by Serbia (12%), B&H (4.6%), North Macedonia (2.6%), Albania (2.5%), and Montenegro (1.8%). International capital flows in the emerging Balkans region grew rapidly from 94.14 billion USD (2000) to 580.95 billion USD (2015). However, the summarized statistics indicate a high heterogeneity among emerging Balkan countries. Going further, in the wake of the GFC, a noticeable decline occurred in international capital flows. Between 2008 and 2009, that decline in total international capital flows took place in B&H, Croatia, North Macedonia, and Serbia.

In other countries, the decline was followed in post-crisis period but it didn't affect changes in total international capital flows. Instructively, in the last five years at the level of the region, total international capital flows decreased by 21%.

# 3.5 Are Emerging Balkan Countries Different from Other States?

Over the last few years, FDI has been appreciating at a steady rate. The inflow of foreign direct investment in the entire region has been distributed throughout various industries. All industries in the emerging Balkan region have a significance level which can be derived from the absolute total strength of the national economy. Each industry has seen various forms of FDI, mainly because foreign enterprises have invested a significant amount of capital into existing companies that conduct businesses within that respective industry. The overall FDI has been increasing at an annual basis, with projected increases predicted in the near future. The rapid economic development, accompanied by the EU integration process, tops the Albanian government's agenda. Instructively, in the 2000s, Albania experienced the highest rates of FDI growth in Europe, relative to the size of the domestic economy and weathered the financial crisis then relatively well. One study done by Gjançi (2014) investigated the position of FDI inflow and its contribution to Albania's economic growth. The researcher found a positive and statistically significant longterm relationship between FDI flows and economic growth. Similarly, two other studies conducted by Berberi (2013) as well as Vangjeli and Abazi (2014) also found another statistically positive relationship between FDI and economic growth in Albania.

Between 2000 and 2004, many state-owned companies in Albania were privatized, leading to large inflows of FDI into the country. After this period, FDI inflows into Albania were attracted mostly by changes in tax regulations and Greenfield investments in the energy sector.

Thus, FDI inflows kept an upward trend until 2009. Thus, besides the fact that the GFC was affecting the world, it didn't have much influence on Albanian economy. Still, after the 2009 the remittances from Albanians living abroad decreased, a factor which had a negative effect on FDI inflows, compounded shortly by the crisis in Greece and Italy.

The economic potential of B&H is limited by its specific constitutional structure, dependent position in the international community (á

la international protectorate). B&H comprises multiple elements: ten Cantons in the Federation of B&H, fellow entity Republika Srpska, and the self-governing District of Brčko. Because of its limited sovereignty and its past heritage, including the period under socialist Yugoslavia, B&H lacks an intrinsic potential for rapid economic development. Thus, FDI flows weren't registered until 1997. Over the past several years, political instability, slow progress in structural reforms, and the financial joined together to hamper the attractiveness of the country for international investors (Ganić 2013). Austria, which is ranked as the first country in the past couple decades, gained its top ranking because of its investment in B&H amounting to a total of about 1.36 billion euros. The main contribution that Austria has made toward B&H, which has resulted in such high FDI inflow is the involvement of commercial banks and related financial institutions like insurance companies. Croatia has played a major role in the FDI of B&H, similar to Serbia which comes in third place at roughly 1.03 billion Euros, mainly due to their large enterprises like supermarkets and service and manufacturing-based corporations. The remaining industries responsible for the FDI destinations within B&H are real estate, trading, financial services, tourism, transportation, and other fields of economic activities (CBBH 2019). The notable thing about the first three contributors to Bosnian FDI records in the last couple decades is that they add up to almost half of the total FDI within B&H. These countries have played a major role in foreign direct investing into B&H, because they equalize the rest of the entire world in this category meaning that B&H's economy has been highly affected by the foreign direct investments of Austria, Croatia, and Serbia.

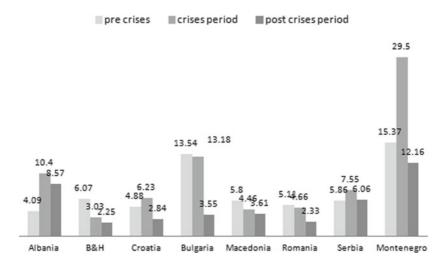
With a population of about 2 million people, North Macedonia was one of the least developed republics of former Yugoslavia. FDI inflows into the country were low at the end of 1990s, but constantly grew from the early 2000s onward. In 2001 major telecommunications operations in North Macedonia were privatized and contributed to an increase in FDI in that period. North Macedonia had this constant increase in inflows of FDI in pre-crisis time and decline of FDI in the wake of the GFC. Since then, FDI inflows mostly have been attracted by Greenfield projects, including free economic zone projects.

Both Serbia and Montenegro were the leftovers of Yugoslavia, and kept existing as one country for a certain period until 2006 when they finally split into separate countries. Between 1992 and 1995, the United Nations imposed an economic embargo on the two then one country

since they were mostly blamed for the wars in B&H and Croatia. After the sanctions were lifted, FDI flowed into the country and maintained an upward slope until 1997 and subsequently, when FDI inflow experienced a sharp decrease. In 2000, Serbia and Montenegro implemented major political and economic changes, which affected positively inflows of FDI. The destinations of foreign direct investment in respective industries, such as banking, manufacturing, telecommunication, real estate, trading, as well as services, such as tourism, transportation, among others, throughout Serbia and Montenegro accumulate to the overall significant foreign direct investment which plays a major role to their economies.

Carstensen and Toubal (2004) assess that, in the past decade, there has been a remarkable increase of FDI inflow in the countries of the CEE region. This growth is accompanied by further integration of these countries into the EU, as well as the elimination of the FDI barriers and the acceleration of the transition processes. For instance, since 2000, Romania has become one of the most attractive investment locations in the transition countries, next after Poland and the Czech Republic. According to National Bank of Romania (2014), from 2004 onward, FDI inflows in Romania have risen sharply, with the largest investors coming from Austria (Erste Bank and OMV), France (Gaz de France and Orange), followed by the USA (Ford), Great Britain (Vodafone), Hungary (MOL), Italy (ENEL) and Finland (Nokia). In pre-crisis period, FDI inflows in Serbia increased significantly and maintained an upward slope because of privatization of some state-owned companies as well as the entry of well-known private foreign companies and banks, such as FIAT, Telenor, Michelin, Gazprom, Intesa Sanpaolo, and so forth. It led to a peaking of FDI inflows in 2006. In the period between 2005 and 2007, Serbia and Montenegro were leaders in FDI inflow among countries in the emerging Balkans (IMF 2008). Montenegro proclaimed independence from Serbia on 3rd June of 2006 and became attractive to investors because of its stable monetary policy, and the commitment of its government to create a friendly business environment for investors.

One important point to keep in mind is that FDI flows to the countries in the emerging Balkan region grew rapidly in the pre-crisis period from 2000 to 2007, before falling back in the crisis and post-crisis period, as B&H, Bulgaria, Croatia, North Macedonia, and Romania exemplified. Comparison of FDI trends over the years shows noticeable change in the pre-crisis and post-crisis period as indicated in Fig. 3.3. For instance, the share of FDI in GDP for the emerging Balkan region showed an



**Fig. 3.3** FDI trends in emerging Balkans (*Note* Pre-crisis period [2000–2007], crisis period [2008–2009], post-crisis period [2010–2018]. *Source* Author's elaboration on The World Bank data)

average increase of 7.59% in the pre-crisis period, up to 9.88% in crisis period, before falling back to 5.17% of the GDP in the post-crisis period. Some countries like Albania, Croatia, Serbia, Bulgaria, and Montenegro reached their maximum as largest recipients of FDI flows in the region measured by percentage of GDP. Montenegro attracted FDI in finances, tourism, energy, and health care, but experienced a sharp decline in the post-crisis period. This is in juxtaposition with B&H, North Macedonia, and Romania, which experienced FDI contraction and declines during the crisis and the post-crisis period and never reached the pre-crisis trend. Instructively, Albania, Croatia, Serbia, and Montenegro experienced an upward trend in FDI inflows, which continued during the crisis period, but declined in the post-crisis period. The plausible conclusion then is that countries in the Emerging Balkan region attracted foreign investors, mostly by the privatization of state-owned companies and that they received less investment, compared to advanced transition countries.

The importance of FDI flows to the emerging Balkans region is shown in Table 3.3. In making a comparison across countries, Bulgaria, Romania, Serbia, and Croatia attracted more FDI than B&H, North

Table 3.3 FDI Inflow per capita for the countries in emerging Balkans

	Cumulative inflow FDI per capita (2005–2017) in USD	Inflow FDI per capita 2017 (USD)	Foreign direct investment, net inflows between 2005 and 2017 (BoP, current USD in billion)
Albania	4243.95	355.67	12.35
B&H	2093.76	131.74	7.74
Croatia	7327.16	494.60	31.31
Serbia	5070.58	410.06	36.78
N. Macedonia	2419.43	182.89	5.01
Montenegro	14,457.97	899.78	8.94
Bulgaria	7404.23	308.37	55.21
Romania	3855.97	303.97	78.79

Source Author's elaboration on the World Bank (2019) database

Macedonia, Albania, and Montenegro. Based on the information in Table 3.3, there is heterogeneity across the countries regarding FDI per capita. However, Cumulative FDI inflows on a per capita basis showed a diverging trend across countries where FDI inflows fluctuate continuously. Between 2005 and 2017, Montenegro was the largest recipient of FDI inflows per capita in the region (14.458 USD) followed by Bulgaria (7.404 USD), Croatia (7.327 USD), while B&H (2.094 USD) and North Macedonia (2.419 USD) attracted the lowest levels of inflow FDI per capita.

Although Montenegro is the largest recipient of FDI inflows per capita and ranked first, Romania and Bulgaria remain the largest FDI destination in the emerging Balkans region in absolute terms, attracting over 78 billion USD and 55.21 billion USD, respectively.

These two countries are still the top investment destination in the region despite the decline in FDI flow in recent years. However, Bulgaria received less FDI in comparison with 2005 reaching only 53% from 2005. FDI inflows fell in B&H, Romania, and Bulgaria while in the rest of countries remained stable and increased moderately. Overall, FDI inflows to the region declined almost 60% to 1.94 billion USD (2017) from 4.6 billion USD in 2008.

On the contrary, between 2005 and 2017, North Macedonia and B&H received the lowest level of FDI inflows at 5.01 billion USD and

7.74 billion USD, respectively, while Albania increased FDI inflows by almost 4 times. More FDI inflows Emerging Balkans region attracted from the EU countries led by low prospect of association with or membership in the EU (UNCTAD 2018). However, major weaknesses remain. One is unstable political system and complicated regulations for establishing and running business (Estrin and Uvalic 2016; Ganić and Hrnjić 2019). The development of infrastructure is very low and relatively insignificant or non-sizable market. Another key issue surrounding the emerging Balkans region is the question of the common perception of highly corrupted governments (UNODC 2011). Also, the region suffers badly from bureaucracy, inadequate respect for the rule of law, and permanent political tensions. Regional and global competition is fierce, while administrative and non-transparent barriers make the whole process costly and time-consuming for existing companies to expand their business or exit the market.

#### 3.6 CONCLUSION

The changing global financial landscape has challenged the traditional approaches to addressing access to capital flows. The process of privatization and transition in the region was marked with significant growth opportunities in capital flows and openness of local markets. The analysis of capital flows leads to the conclusion that debt financing and bank lending remained as the dominant type of external financing in most of the emerging Balkan countries while portfolio flows have been the most volatile component of capital flows. The region attracted foreign investors, mostly by the privatization of state-owned companies where much of FDI inflows originated from EU countries.

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#### CHAPTER 4

# New Regionalism and the Emerging Balkans: Regional Trade Integration and EU Accession Process

Abstract This chapter analyzes the level of trade openness in the emerging Balkans, recent changes in its export competitiveness, trade composition, and trade pattern with the EU and the rest of the world. More precisely, it examines the beneficial effects of trade liberalization, intraregional trade, and trade relations in the region with the EU. Then, Chapter 4 assesses the influence of the intraregional integration on the economy, recent trends in the export and import structures and effectiveness of the MoU trade liberalization initiative and CEFTA 2006 trade cooperation as well as compares CEFTA members by the trade integration index. Moreover, the chapter employs two indicators: trade intensity and trade propensity to explore whether trade between CEFTA 2006 members and EU is more or less than the CEFTA 2006 region does on average.

**Keywords** CEFTA 2006 · Intraregional integration · Trade integration index · Trade intensity · Trade propensity

#### 4.1 Introduction

There are two general topics in Chapter 4. Firstly, it focuses on the issue of trade integration process and preparations for joining the EU. Secondly, it analyzes the changes in the trade patterns across Balkan countries and explains the similarities, differences, and trade linkages between the CEFTA members and the EU.

# 4.2 Trade Liberalization and Regional Integration

The concept of trade liberalization in its broadest sense implies the implementation of legal regulations toward the reduction or the complete abolition of customs and non-custom restrictions in international trade. Trade liberalization is usually seen to have a positive effect on both the import and export sides. However, the economic rationale is that exports significantly depend on access to major markets. For example, in the case of a less developed country, liberalization may lead to higher growth of imports than exports and deterioration of the country's trade balance (Santos-Paulino and Thirwall 2004).

Indeed, trade liberalization has been seen as part of the process of political stabilization and encouragement of regional economic cooperation for countries in the region in the late 1990s as part of the process of political stabilization and encouragement of regional economic cooperation initiated by the international community, especially the EU.

Furthermore, the establishment of a FTA in the Southeast Europe was strongly supported by the EU. Also, to facilitate the process of accession of the Western Balkans to the EU, regional cooperation is seen as one of the formal conditions of the stabilization and association process (SAP) held in May 1999.

Soon after the armed conflict in the region, the interest of the international community to promote post-conflict stabilization and greater economic cooperation with the region has increased significantly (Solioz 2007). To foster regional trade integration, in 2001 seven countries of the region (B&H, Bulgaria, Albania, North Macedonia, Moldova, Romania, Serbia, and Montenegro) have negotiated and ratified mutual bilateral free trade agreements (FTAs) strengthened by the Stability Pact Memorandum of Understanding. In the following years, it was enlarged to include Moldova and Kosovo.

Albania, North Macedonia, and B&H top the list with eight bilateral FTAs in Southeast Europe (SEE), followed by Croatia, Bulgaria, Montenegro, Moldova, Romania, and Serbia with seven and Kosovo with three FTAs each. Interest in creating FTAs began in the mid of 1990s initially with Romania, Moldova, Serbia, Montenegro, and North Macedonia. By 2004, the rest of the SEE countries joined the trend with 32 FTAs being negotiated and concluded.

A bilateral FTAs network has been in place since December 2004 in Southeast Europe (SEE) and is increasingly being used to pursue trade and investment liberalization in this part of Europe. For instance, North Macedonia, Serbia, and Montenegro have been implementing their FTA since October 1996, and this agreement about trade liberalization has been fully liberalized during subsequent negotiations in 2005. Similarly, North Macedonia and Croatia revised their initial FTA (1997) in July of 2002 (European Commission 2006).

In order to stimulate regional integration and development of the Balkans, the EU granted unilaterally asymmetric trade concessions to the Balkan countries in 2000, known as autonomous trade measures (ATMs). It allowed the region quota tariff-free access to the EU market for 95% of products. However, due to problems in the implementation and complication to administer of large number FTAs by the customs authorities in the region, the idea was to replace the existing network of many bilateral trade agreements with setting up a single free trade agreement. In fact, Croatia has proposed that this FTA be subsumed under the already existing Central European Free Trade Agreement, CEFTA. However, since that most countries of Southeast Europe did not meet the conditions required by the Declaration of Poznan for accession to CEFTA, in 2005 a new declaration on the conditions of admission to CEFTA was adopted in Zagreb, the Zagreb Declaration, which redefines (or mitigates) the conditions of admission in the new CEFTA.<sup>2</sup> In addition to the relaxed conditions of membership, the original CEFTA has undergone significant changes.<sup>3</sup> It is a reason why this agreement, signed

<sup>&</sup>lt;sup>1</sup>Council Regulation (EC), No. 2007/2000 (November 2000), amended by Regulations 2563/2000 and 2487/2001.

<sup>&</sup>lt;sup>2</sup>Agreement on Amendment of and Accession to the Central European Free Trade Agreement (https://cefta.int/legal-documents/).

<sup>&</sup>lt;sup>3</sup>The original CEFTA (1993) included the Visegrad group countries and enlarged with Slovenia (1996), Romania (1997), Bulgaria (1998), and Croatia (2003) to prepare for

by new members from Southeast Europe, is abbreviated as CEFTA 2006 (or often the new CEFTA). The 2006 CEFTA was signed in 2006 (in force since 2007) between eight Southeast European countries: Albania, B&H, Croatia, Montenegro, Moldova, North Macedonia, Serbia, and Kosovo (UNMIK). Since Romania and Bulgaria joined the EU, they are no longer part of the CEFTA. Also, for the same reason, Croatia left the CEFTA 2006 membership (in mid-2013) after becoming the EU member, so that today the new CEFTA has seven parties. Fully liberalized intraregional trade in the region is seen as the main goal of the CEFTA 2006. Its implementation seeks to promote the region to be more attractive for trade and investment and to allow the country's members to have equal access and to be part of larger marketplace (Pjerotić 2008). Additionally, it was a first step on the EU's road map to further the eastern enlargement and prepare the countries for their future EU membership. To facilitate the gradual establishment of a FTA between the region and the EU, the agreement includes and clears dispute settlement procedures. Also, it is fully in line with World Trade Organization's (WTO) rules and the EU procedures and regulations. The main intention of the international community is to help non-WTO member countries easy to adjust to global trade's rules. Not surprisingly, a higher level of economic integration has been seen among six out of eight emerging the WTO members in the Balkans-Albania (2000), North Macedonia (2003), Montenegro (2012), Bulgaria (1996), Croatia (2000), and Romania (1995). The remaining two countries: B&H and Serbia are in the last stage of negotiations and WTO accession. After achieving WTO membership, most countries in the region have amended and improved their existing laws and procedures to bring them in line with EU law and regulations. In the context of the integration process, WTO membership is also one of the conditions for entering the European integration processes, especially in the EU and the CEFTA. All European transition countries are oriented toward acceleration of the process of their integration within EU and follow the EU enlargement agenda (Table 4.1).

This is especially true for countries in the emerging Balkans where its relationship with the EU is rapidly developing. For instance, Bulgaria, Romania, and Croatia already became new EU members, while remaining countries enjoy an EU candidate status, except B&H and Kosovo

the EU accession. It became as a model for the next wave of bilateral trade deals in the neighboring countries of the SEE region.

Table 4.1	Trade integration proces	sses and preparations	for joining the EU
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Country	EU ac	cession process				Entry
	Entry into force of SAA	EU candidate status granted	The chapters closed to the EU negotiations	Signed EU accession treaty	Full membership	into force of CEFTA
Albania	2009	2014	none	(?)	(?)	2007
В&Н	2015	None—(submitted in 2016)	(?)	(?)	(5)	2007
North Macedonia	2004	2005	none	(;)	(})	2007
Montenegro	2010	2010	three	(?)	(?)	2007
Serbia	2013	2013	two	(?)	(?)	2007
Kosovo	2016	None	(?)	(?)	(?)	2007
Bulgaria	1993	1997	All	2005	2007	1998
Croatia	2005	2004	All		2007	2003
Romania	1993	1997	All	2005	2013	1997

Note SAA—stabilization and association agreement between the EU and countries in preparations for joining the EU

Source EU commission and CEFTA

with their status as potential candidate countries. In this light, such an orientation of European transition countries toward reform is quite understandable. The recent experiences have shown that economies in transition share some common characteristics—economic collapse and transition recession in the early years of transition, strong inflationary pressures, high fiscal deficits, banking crises, rising unemployment, privatization models burdened with numerous conflicts of interest, nepotism, and nonmerit appointments. Back in the early 1990s, at the time of the European Community, attitudes toward potential accession to Euro-Atlantic integration and the European Community were much more restrictive. However, in the years that followed, these attitudes toward EU integration began to change significantly.

### 4.3 Trade Performance Indicators

The period between 2001 and 2007 is seen as period of rapid trade expansion in the emerging Balkans. A deepening and widening economic integration toward the EU also implies that the region needs to adjust its

economic and trade policy according to the EU strategy. Since 2000, the EU has provided trade concessions to the CEFTA members to strengthen regional economic integration and access to the EU market through reduced tariffs and increase trade flows in goods and services (Daskalov and Mladenov 2000).

Generally, between 2001 and 2018, international trade activities have increased in all countries of the emerging Balkans. But, three new EU members dominate the emerging Balkans' trade flows (Table 4.2). For instance, measured by export per capita, Croatia, Romania, and Bulgaria recorded levels of growth more than their neighboring countries. In 2018, Bulgaria's exports per capita were 4144.66 EUR, Croatia's 3717.56 EUR, and Romania's 3546.33 EUR (Table 4.2). In contrast, export per capita in Albania (848.43 EUR), Montenegro (586.13 EUR), and B&H (1836.25) grew significantly less than other countries in the region, below 2000 EUR.

Also, in 2018, import per capita has varied across the countries where Croatia, Romania, and Bulgaria remain the main importers with total import per capita above 4000 EUR. Generally, the region still accounts to display a very low share of imports and exports in GDP. Data about the share of exports in GDP in 2018 indicate that Bulgaria (66.94%) and

**Table 4.2** Trade performance indicators, 2018

	Merchana	dise export	t	Merchani	lise import	<del>:</del>	Export
	per capita (EUR)	Share of exports in GDP (%)	Average annual growth 2001–2018	per capita (EUR)	Share of imports in GDP (%)	Average annual growth 2001–2018	coverage of imports in % (average)
Montenegro	586.13	42.88	5.39	4100.00	66.73	10.19	24.42
Albania	848.43	31.68	12.37	1691.29	45.4	7.13	34.46
Bulgaria	4144.66	66.94	10.45	4396.85	64.31	9.22	77.47
Romania	3546.33	41.64	10.27	4267.66	44.85	10.2	76.86
Croatia	3717.56	50.52	6.56	6101.22	51.36	5.56	54.44
Macedonia, North	3085.58	60.34	10.31	3684.62	72.9	9.32	64.74
Serbia	2502.72	50.78	13.86	3525.81	59.29	10.14	56.91
B&H	1836.25	40.59	10.33	3076.56	55.78	6.18	46.85

Source Author's calculation on the EUROSTAT database, National statistics

North Macedonia (60.34%) were above the rest of the countries with a significantly higher share of exports in GDP, followed by Serbia (50.78%) and Croatia (50.52%).

Moreover, there are significant differences across the countries related to export and import activities (Table 4.2). For instance, the average rate of exports and imports (annual % growth) between 2001 and 2019 (column 4 and column 7) in the emerging Balkans have been fairly similar, above 5%. This indicates that the region economically opened itself rather rapidly. In the reference period, the study finds that exports grew by an average annual rate of 13.86% in Serbia, followed by Albania (12.37%) and Bulgaria (10.45%). They have been the fastest growing countries as a result of much lower starting points than the rest of the countries. On the import side, Montenegro (10.19%) and Serbia (10.14%) are two countries with the highest recorded average annual growth rates over the same period. During the last two decades, the coverage ratio of imports by exports is still low in some countries (Montenegro and Albania). For instance, it varies between 24.42% (in Montenegro) and 77.47% (in Bulgaria). In the case of three countries (Albania, Montenegro, and B&H), the coverage of imports by exports was below 50%.

Deepening trade flows in the region has evolved considerably as can be seen when comparing the pre-crisis and post-crisis periods (Table 4.3).

**Table 4.3** Compound growth rates of import and export between 2001 and 2019

	Compound ¿	growth rate	import	Compound ¿	growth rat	e export
	Pre-crisis period	Crisis period	Post-crisis period	Pre-crisis period	Crisis period	Post-crisis period
World	5.60	1.28	2.90	5.68	1.55	2.86
Albania	10.82	-0.96	2.54	12.61	8.22	6.36
Croatia	9.16	-10.22	4.87	8.17	-2.51	5.27
Bulgaria	15.27	-8.78	4.20	13.16	0.51	4.57
Romania	16.67	-6.09	5.17	12.72	3.39	4.87
B&H	9.54	-5.70	2.57	14.80	1.95	3.80
Serbia	16.12	-6.76	5.81	19.07	-0.36	8.4
Montenegro	19.73	-13.47	4.25	11.7	-7.71	-2.35
Macedonia, North	10.61	-4.03	5.91	9.60	-2.19	7.98

Source Author's calculation, WTO/International Trade Statistics

A compound growth rate of imports and exports in the emerging Balkans indicates a substantial increase in their volume leads to the trade liberalization process in the pre-crisis period.

As given in Table 4.3, in the pre-crisis and post-crisis periods, trade in the emerging Balkans has been growing faster than in the rest of the world. The highest growth rate of exports in the pre-crisis period is found in Serbia (19.07%), followed by B&H (14.80%) and Bulgaria (13.16%), figures that remain as historical highs.

Similarly, the highest growth rate of imports in the pre-crisis period is found in Montenegro (19.73%), followed by Romania (16.67%) and Serbia (16.12%), which has greatly increased its importance in the region. Montenegro, Croatia, North Macedonia, and Serbia have all recorded a dramatic fall of exports in the crisis period while exports from the rest of the countries also experienced a reduction and were lower as compared to the pre-crisis period.

Also, all emerging Balkan countries recorded dramatic fall of imports in the crisis period. The emerging Balkans suffered from the impact of the global crisis as many regions across the world. Revealingly, countries' imports started to fall faster than exports and continued to fall sharply over the crisis period in all emerging Balkan countries, which were also hit hard during global financial crisis. The main contributor that explains such a dramatic fall of trade flows in the wake of crisis was the decline of demand and GDP leads to significant changes in countries' terms of trade. Data in the post-crisis period reveal that again trade displays an upward trend, where both exports and imports see recovery, although their trade flows slowed as compared to the pre-crisis period.

In the post-crisis period, Serbia (8.4%), North Macedonia (7.98%), and Albania (6.36%) recorded the average highest growth rates of exports. On the other hand, especially in B&H and Montenegro, export rates have not increased as much. On the import side, there are also some variations among the individual countries. North Macedonia, Serbia, and Romania showed an increasing trend on the import side (above 5%), while Albania and B&H lag behind. More countries caught up with their pre-crisis level of imports in 2011, with a positive trend in that direction.

### 4.4 Intra-Balkan Trade Liberalization: CEFTA 2006

The strengthening of economic integration between the Western Balkans and the EU is critical to increase the attractiveness of the regional market and its potential for further trade expansion and trade deepening. The CEFTA 2006 primarily seeks to achieve full trade liberalization in the region for manufacturing products where about 90% of agriculture products are largely liberalized (Handjiski et al. 2010). It also promotes the liberalization of investment services, non-tariff barriers, as well as the protection of intellectual property rights and patents. The signing of CEFTA 2006 also had a strong marketing aspect for the region as it highlights a greater importance for foreign investors. An important difference in relation to the original CEFTA (1992) is the lower level of economic development and political stability of Southeast Europe. Also, these countries have varying rates toward their eligibility to join the EU, which further complicates the integration process. However, given the prospect of membership in the EU, this agreement is sometimes seen as being essential to do business in the EU, providing some perspectives on the signatories of CEFTA 2006 to duplicate the experiences of the original CEFTA (1992) and its founding members, now having become EU members. The increase of the market potential and the abolition of customs duties and other export barriers are often mentioned as the benefits of the CEFTA 2006 to its members. It is especially important that the region builds closer ties with the EU and ultimately achieves accession. The EU supports the processes of the region's trade integration and its efforts toward trade liberalization as a powerful means of support for promoting growth and development. In addition, the region might be a more attractive place to do business for large investors and private companies than it was only a decade ago. After five years of experience in trade liberalization, the signatories of CEFTA 2006 have decided to improve their trade cooperation. It was expected that the signing of CEFTA 2006 can contribute to an increase in both intra-regional trade and international trade. However, soon it failed due to the weak economic cooperation, low competitiveness of domestic products among its trade partners (Crudu et al. 2018). In fact, before the CEFTA 2006 was established, mutual trade cooperation among its members was very small as compared to the share of its member's trade with the EU. But over the years, intraregional trade between members of CEFTA 2006 began to grow gradually.

Share of countries in reporting Party Exports in %           Intra-CEFTA         20         19         22         20         16         17         17         17         17           EU market         67         70         64         66         69         67         68         68         70           The rest of the         13         11         14         14         15         16         15         15         13           world         Share of countries in reporting Party Imports in %           Intra-CEFTA         17         17         11         10         10         9         9         9           EU market         57         56         59         59         58         58         59         59         58           The rest of the         26         27         30         31         32         32         32         32         33					_	_	_		_		
Intra-CEFTA       20       19       22       20       16       17       17       17       17         EU market       67       70       64       66       69       67       68       68       70         The rest of the       13       11       14       14       15       16       15       15       13         world       Share of countries in reporting Party Imports in %         Intra-CEFTA       17       17       11       10       10       9       9       9         EU market       57       56       59       59       58       58       59       59       58         The rest of the       26       27       30       31       32       32       32       32       33		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
EU market       67       70       64       66       69       67       68       68       70         The rest of the rest of the rest of the rest of the language       13       11       14       14       15       16       15       15       13         World         Share of countries in reporting Party Imports in %         Intra-CEFTA       17       17       11       10       10       9       9       9         EU market       57       56       59       59       58       58       59       59       58         The rest of the       26       27       30       31       32       32       32       32       33	Share of countrie	rs in rep	orting	Party E	xports i	n %					
The rest of the 13 11 14 14 15 16 15 15 13 world Share of countries in reporting Party Imports in %  Intra-CEFTA 17 17 11 10 10 10 9 9 9 9 EU market 57 56 59 59 58 58 59 59 58  The rest of the 26 27 30 31 32 32 32 32 33	Intra-CEFTA	20	19	22	20	16	17	17	17	17	8
world       Share of countries in reporting Party Imports in %         Intra-CEFTA       17       17       11       10       10       9       9       9         EU market       57       56       59       59       58       58       59       59       58         The rest of the       26       27       30       31       32       32       32       32       33	EU market	67	70	64	66	69	67	68	68	70	66
Intra-CEFTA     17     17     11     10     10     10     9     9     9       EU market     57     56     59     59     58     58     59     59     58       The rest of the     26     27     30     31     32     32     32     32     33		13	11	14	14	15	16	15	15	13	26
Intra-CEFTA     17     17     11     10     10     10     9     9     9       EU market     57     56     59     59     58     58     59     59     58       The rest of the     26     27     30     31     32     32     32     32     33	Share of countrie	s in rep	orting	Party I	mports	in %					
The rest of the 26 27 30 31 32 32 32 33 33	-	_	-	-	_		10	9	9	9	13
	EU market	57	56	59	59	58	58	59	59	58	63
world	The rest of the world	26	27	30	31	32	32	32	32	33	24

Table 4.4 Share of countries in reporting Party Exports and Imports

Source Author's elaboration on CEFTA statistic data

The EU is its largest trading partner with the largest volume of imports and exports over 60% (Table 4.4). Revealingly, the share of intraregional imports is lower than the share of intraregional exports in all years except in 2019. Also, the share of intraregional imports has a declining trend from 17% (2010) to 13% (2019), compared to 24% (2019%) in the rest of the world and 63% (2019) in the EU.

An overview of intraregional trade CEFTA 2006, trade with the EU, and the rest of the world between 2010 and 2019 is given in Table 4.4.

Next, as given in Table 4.4, the share of intraregional exports in the total, between 2010 and 2019, declined from 20% to 8% compared to 13% (2010) and 26% (2019) in the rest of the world and 67% (2010) and 66% (2019) in the EU. It means that share of intraregional exports from year to year experienced decline. On the contrary, available data show that exports from the region to the rest of the world grow rapidly.

In fact, in terms of intraregional exports and imports, the region has a low growth rate while the share of imports and exports with the rest of the world and the EU has over 85% of the total. More specifically, the data in Table 4.5 shows some intraregional trade relationships between CEFTA 2006 partners (2018).

Although Montenegro and Kosovo seem to be the most integrated countries measured by their imports from and exports to the rest of the CEFTA 2006 members, the largest share of intraregional exports to total exports was found in Serbia (31.66%) and Albania (21.56%), followed by North Macedonia (19.86%), Kosovo (16.99%), Montenegro (15.56%),

Table 4.5 Share of intraregional export/import to total export/import (%, 2018)

Import	Albania	$B$ $\circ$ $\sim$ $H$	North Macedonia	Montenegro	Serbia	Kosovo	Moldova	Total intra.r.export/total export
Export								
Albania		0.28	1.29	0.64	0.81	18.53	0.01	21.56
В&Н	0.45	(21:0)	(5.55) 1.35 (0.77)	1.54	7.73	2.32	0.06	13
North Macedonia	2.74 (1.49)	1.02		0.34	3.76	11.91	0.09	19.86
Montenegro	1.80	3.37	0.49		4.59	5.29	0.02	15.56
Serbia	2.58	10.52 $(10.74)$	4.00 6.76	4.63 (15.05)	_	9.16 (11.62)	0.77	31.66
Kosovo	8.68 (1.39)	1.12 (0.10)	3.85 (0.38	0.85	2.47 (0.12		0.02	16.99
Moldova	0.01	0.05	0.03	0.06	0.08	0.04		0.27
Total intra.r.import/total import	(5.53)	(11.92)	(8.01)	(20.96)	(4.16)	(19.32)	(0.63)	

Source Author's calculation on CEFTA trade statistics

and B&H (13%). In contrast, intraregional exports seem to be the least important for Moldova (0.27%).

Among these countries, it seems that Kosovo is the largest export destination (18.53% of the total) for Albania while its exports to other CEFTA 2006 partners are only 3.03% of the total. On the other hand, Albania is the largest export destination (8.68%) for Kosovo. Similarly, Kosovo is the largest export destination (11.91%) for North Macedonia, while its exports account for 7.95% of the total export to other CEFTA 2006 partners.

On the imports side, Montenegro (20.96% of the total), Kosovo (19.32% of the total), and B&H (11.92% of the total) are the largest intraregional importers. On the contrary, the regional market seems to be less important as an import base for Albania, North Macedonia, Serbia, and Moldova because their intraregional imports to total imports account below 10% of the total. Among countries, Montenegro's imports come mostly from Serbia (15.05% of the total) and B&H (4.76% of the total), while the bulk of Kosovo's imports comes also from Serbia (11.62% of the total) and Albania (6.18% of the total).

Within the CEFTA 2006 region, it seems that there are two subregions that prefer to trade with each other due to historical, social, and cultural ties. The first sub-region is North Macedonia, Albania, and Kosovo, while second one is B&H, Serbia, and Montenegro that prefer to trade with each other rather than to trade with the remaining CEFTA 2006 members. In fact, data in Table 4.5 shows that most regional countries are not highly dependent on intraregional import or export. Still, trade relationships between CEFTA 2006 partners are more intensive with the EU and the rest of the world than the intraregional trade flows.

## 4.5 Are Trade Linkages Among CEFTA 2006 Members Strong?

Trade linkages between the CEFTA members and the EU got strengthened during the last two decades. Therefore, it is interesting to reveal the growing trade orientation between the two regions. For the analysis of trade linkages between the two regions, it is important to consider the coefficients of the importance of mutual trade. Accordingly, an analysis of trade intensity and propensity of CEFTA countries with the EU-28 and CEFTA 2006 region was performed. For analysis, the following transition countries are included: Albania, B&H, Montenegro, North Macedonia, Moldova, Serbia, and Kosovo (UNMIK). All of these countries show an undisguised aspiration to join the EU in the near future. The study follows the model used by Wittich (2005) in her research and employs two indicators: trade intensity and trade propensity to explore whether trade European transition countries with the EU are more or less than the CEFTA 2006 region does on average. Intensity of trade with the regions i and j may be expressed as follows:

$$I_{ij} = (x_{ij}/x_i)/(m_j/m_{w-1})$$
(4.1)

where

 $x_{ij}$  Is country (i)'s export to the region (j)  $x_i$  Is total country (i)'s export i  $m_j$  Is total imports of the region (j)

 $m_{w-1}$  Is world imports (net, less for region (i)'s import).

The index of propensity to export to trade partners

$$GDP_{ij} = (x_{ij}/GDP_i)/(mS_j/m_{w-1})$$
 (4.2)

where  $x_{ij}/\text{GDP}_i$  denotes a country (*i*)'s trade openness.

Trade intensity and trade propensity indices in 2010 and 2018 for seven CEFTA 2006 countries are given in Table 4.6. There are some differences between our estimates and Wittich's (2005) because her study was conducted between 1996 and 2004 with differences in membership while our research covers a period after CEFTA 2006 was established. Although trade linkages between CEFTA 2006 countries and the EU-28 market are high (index 1, above), the study finds that the intraregional linkages are still very strong. In fact, it shows that each of these countries is an important source of exports to the others because the intensity index within CEFTA 2006 countries takes two-digit values (see Table 4.6). In 2000, the CEFTA countries' trade with all of the CEFTA members showed high trade intensity with the exception of Moldova. Moldova is specific, due to the lesser geographical proximity to the region than other former Yugoslav countries and Albania.

The index of trade intensity for most analyzed countries shows two-digit values revealing their over-reliance on intraregional trade (Table 4.6). Moreover, in 2018, available figures show that Albania together with Kosovo and Moldova recorded a rise of intraregional trade

Table 4.6 Indices of the intensity and propensity trade of CEFTA 2006 members

	EU-28		CEFTA 2006	
	2010	2018	2010	2018
Intensity to trade with th	e region			
Albania	4.79	5.93	27.46	54.21
B&H	4.76	5.48	60.51	45.68
Serbia	3.92	5.08	75.45	55.69
N. Macedonia	4.28	6.27	77.35	31.87
Montenegro	2.69	3.12	115.06	114.55
Kosovo	3.06	2.31	60.43	131.57
Moldova	5.20	2.69	14.81	26.26
Propensity to trade with a	the region			
Albania	0.89	1.46	37.97	54.36
B&H	0.04	0.05	81.34	102.44
Serbia	0.04	0.05	68.31	108.53
N. Macedonia	0.05	0.07	103.67	156.30
Montenegro	0.73	0.66	31.09	24.37
Kosovo	0.01	0.01	19.25	15.82
Moldova	0.04	0.02	63.93	67.6]

Source Author's calculation on UN Comtrade database; national statistics for Moldova, Montenegro, and Serbia in 2010

in subsequent years reaching the index value of 54.21, 131.57, and 26.26, respectfully. In 2018, North Macedonia was ranked first among CEFTA members in terms of trade intensity to the EU-28 with an index of 6.27, followed by Albania (5.93) and B&H (5.48). On the contrary, Moldova and Kosovo decreased their trade intensity to the EU-28 and increased their intensity to CEFTA members. This reveals that trade between most CEFTA members and the EU-28 countries continues to grow and increase. However, with the exception of Kosovo and Moldavia, the remaining CEFTA 2006 members recorded a decline in the intensity of intraregional trade and a rise of intensity in trade with the EU markets during the last decade. The value of trade intensity indices with CEFTA 2006 declined in B&H, Serbia, North Macedonia, and Montenegro, with rise in export to the EU-28 market.

For instance, in North Macedonia, the index is still high (31.87%, in 2018); however, it declined drastically compared to 2010 (77.35%). In 2018, the results suggest that North Macedonia and Moldova were

the least integrated countries in the region. It seems that intraregional trade is showing signs of weakening and that the analyzed countries open up to wider world markets. In fact, in trade with the EU-28, propensity index increased its value in Albania, B&H, Serbia, Moldova, and North Macedonia and decreased in trade with Kosovo and Montenegro. Trade propensity with the CEFTA 2006 members also increased in Albania, B&H, Serbia, North Macedonia, and Moldova and decreased in Montenegro and Kosovo. Revealingly, except Kosovo, Montenegro, and Moldova, the rest of the CEFTA 2006 members increased in propensity to trade with the EU-28. Generally, data on propensity indices indicate an increase in propensity to trade with both regions (the EU-28 and CEFTA 2006).

Next, the study measured the regional trade integration level of CEFTA members. For the sake of assessing how integrated CEFTA countries are in the region, we employ the modified individual trade integration index (ITII) developed by Lamsal (2019). It is expressed as follows:

$$TII_{i} = \frac{1}{n} \sum_{m=1}^{n} (E_{xi} + I_{mi}) / (E_{xt} + I_{mt})$$
(4.3)

where

 $TII_i$  as the trade integration index,  $E_{xi}$  as the intraregional export, and  $I_{mi}$  as the intraregional import in the equation are expressed as the sum of the country's imports from and exports to other CEFTA members,  $E_{xt}$  and  $I_{mt}$  are expressed as the sum of exports of the country to all nations around the globe, and n is number of integrated countries.

The TII trend and data given in Table 4.7 reveal some differences in integration levels between CEFTA members. In fact, in 2010, we found that former Yugoslavia countries have the highest trade integration scores between 14 and 40% and between 9 and 30% in 2018. On the contrary, the most weakly integrated CEFTA 2006 members: Moldavia and Albania have an overall intraregional trade integration score below 10% (in 2010). Although Albania is only country to increase the level of intra-trade in the region between 2010 and 2018, it is relatively low with a score of 11% (Albania). However, as given in Table 4.7, in 2018, there was a weakening of trade relations and a downward trend in integration among CEFTA 2006 members over the years. For instance, in 2018, the highest integrated countries of the region are also Montenegro (30.1%) and Kosovo

**Table 4.7** Comparison Trade Integration Index by CEFTA members

	2010	2018	Change in 2010–2018
CEFTA members	1	2	3 = (2 - 1)
Albania	0.08	0.11	0.03
B&H	0.15	0.14	-0.01
Serbia	0.14	0.11	-0.03
N. Macedonia	0.16	0.09	-0.07
Montenegro	0.40	0.30	-0.1
Kosovo	0.33	0.27	-0.06
Moldova	0.01	0.01	0
$\mathrm{TII}_i$ (CEFTA)	0.21	0.17	-0.04

Source Author's calculation on the CEFTA 2006 dataset

(27.6%) while the rest of the countries cannot be considered to be well integrated into the region. Montenegro and Kosovo seem to be more trade integrated among themselves than the rest of the members with the rate of integration at about 30%.

#### 4.6 CONCLUSION

The emerging Balkan region remains the sub-region with significant growth in trade volume and openness of domestic markets. As in the rest of the European transitional countries, the region continues to experience rapid growth of trade flows where the share of the imports and exports with the rest of the world and the EU comprises over 85% of the total trade flows. Generally, intraregional integration among CEFTA 2006 members is mainly based on historical and cultural ties. Excluding Albania, the remaining countries spent almost five decades as a part of Single County despite some tragic periods of conflict in the early 1990s. However, the significantly higher level of integration across countries is a consequence of the special ties based on ethnicity and traditional production interdependence. Furthermore, in recent years, the research finds that the intensity of trade within the CEFTA 2006 region declines in most countries (except Kosovo, Moldova, and Albania) and rises in the export to the EU-28.

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#### CHAPTER 5

# Road to Success: Balkans Banking in Transition

Abstract This chapter does several things at once. First, it examines progress made in the process of banking privatization and transformation of ownership as well as the Balkan region's experience with its reorientation and restructuring. Second, it assesses progress made in banking development by exploring trends in financial intermediation and competitiveness of the banking sector as well as current configuration of the loan and deposit markets. Third, it discusses banking soundness and stability in the region. Overall, the aim of this chapter is to develop a composite index of banking stability by using the method of empirical normalization and indicators of financial soundness. The chapter ends with an assessment of the banking stability in countries in the emerging Balkans.

**Keywords** Banking privatization · Composite index of banking stability · Banking intermediation · Banking competition and concentration

#### 5.1 Introduction

In the early 1990s, European transition countries started the process of structural transformation of former state economies into a market economy (Dobrinsky and Havlik 2014). One way in which transition countries have tried to achieve their transformation is to promote reform

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of the banking sector and its transformation from mono-bank system to two-tier banking system. History shows that in all cases of successful privatization of state-owned banks, the State plays a proactive role, be it in building new institutional arrangements, in reforming and changing rigid laws and banking policies, or in reforming banking regulatory environment. The experience of the European transition countries in the 1990s showed that a process of restructuring and rehabilitation banking sector has begun to address the problem of nonperforming loans of inefficient state-owned enterprises. In the meantime, a central bank in the most transition countries was established with all the characteristics it has in a market economy with reorientation of its traditional functions (Wagner 1998). In reforming the banking sector, two concepts came into play. The first had to do with rehabilitating existing banks, with recapitalizing and privatizing existing commercial banks as the most prominent feature of such rehabilitation. The second concept involved the creation of liberal and administrative structure for the establishment of new private banks. Both of these concepts spelled a gradual approach to changes in the banking landscape.

#### THE REGION'S EXPERIENCE WITH BANKING TRANSITION

The complexities associated with the process of privatization were related to the overall process of economic transition, restructuring and enhancing reform in developing countries initiated in the early 1990s. This implies that privatization is also an important determinant in the success of the entire process of restructuring and reorientation of the financial and banking sector in the transition countries as an integral process of economic reforms to promote generation of savings and allocation of investments. It is not surprising that privatization of banks affected improving efficiencies of banking operations, and was in many ways a successful story by stopping poor practice of non-economic credit allocation. The problem of inefficient and insolvent banks emerged in the former socialist countries, where state-owned banks were dominant lenders in the public sector. Seen from this perspective, the key problem was evident in many undercapitalized state-owned banks burden with the holding high percentage of nonperforming loans (NPLs) on their balance (Enoch et al. 2002). By the same token, a process of privatization in the CEE from the 1990s is one of the most important economic processes

in Europe. This emphasis on changing the banking sector structures is closely tied to the need to increase a share of newly emerging private banks. In addition, the privatization of the banking sector has proven to be the most important. Within the past ten years or so, the banking sector in the CEE has remained the predominant part of the financial system as a whole. It has undergone transition from being completely state-owned to mixed where private banks play a leading role with share in total assets over 90% the banking sector. The last three decades have seen a dramatic transformation in the emerging Balkans where the region experienced a welcome surge in growth in the years immediately after 2000s. There have been efforts to maintain political stability, recover the domestic economic activities and reform processes that should play a leading role on their road to the EU. However, a road toward the EU for five out of eight countries in emerging Balkansis still full of dangers and threats. This discussion moves next to a brief survey of the region's experience with banking transition, including the challenges and successes related to that experience. More or less, the evidence shows that banking sector in the transition economies has undergone transition from State ownership and rigid control over banking activities in the first half of the reform era, between 1990 and 1998, to being market-oriented in the second half. Before then, the banking sector was a weak, relatively underdeveloped and shallow, the result of inherited problems from the previous economic system (Tang et al. 2000). Taking everything together, many factors had a disincentive effect on the financial sector in early transition. In light of this, during 1990s efforts to reform the banking sector have been hampered by either internal weaknesses or external causes. As the transition progressed, all weaknesses became apparent. For instance, the business environment of CEE countries was characterized by relatively high inflation rates, and instability of the monetary system, with the result that poorly-regulated financial flows led to frequent crisis events in the 1990s (Stubos and Tsikripis 2005).

A common feature of the CEE transition countries is that they avoided radical financial sector reform in the first phase of transition. Instead, these countries have seen a partial transformation of the former mono-bank into a two-tiered banking system. However, the restructuring of banks was not accompanied by the restructuring of companies. Even more, in many CEE countries, commercial banks continued to lend troubled companies. Such unsound banking practices and significant risk management weaknesses at banking institutions led to several banking crisis in Bulgaria and

the Czech Republic. Poland offers a good example because the changes in that country paralleled the process of reforms and restructuring of banks and companies (Tang et al. 2000).

In Albania, banking sector reform, initiated in the early 1990s, has been marked by a low level of financial intermediation and some weaknesses in banking regulatory framework. In parallel, there was a problem the existence of uncontrolled financial and speculative pyramid schemes (Ponzi's schemes) led to collapse of the Albanian economy in 1997 (Jarvis 2000). These results teach the lesson of a gradual and methodological approach to restructuring the banking sector in the post-crisis period as a better avenue. The post-crisis regulatory reform and introduction of new banking regulations in line with the Basel standards significantly strengthens bank capital requirements and banking supervision. The capital adequacy ratio (CAR) in 2002 remained high 31.5% at level above the required minimum of 12%. Also in 2002, a deposit insurance system was introduced in Albania. In the first phase, a deposit insurance coverage limit was set up to \$5,000 which ultimately represented another significant pillar toward restoring confidence in the banking sector. Although the CAR in 2006 was still high at level 18.10%, a banking sector decreased the share of non-performing loans in total loans to 3.1%, compared to 42.6% in 2000. Revealingly, the Albanian banking sector remained unchanged in terms of number of banks as well as ownership structures (90% foreign-owned banks and 10% domestic private banks) between 2008 and 2012 (Albanian Association of Banks 2012).

Bulgaria was one the first country to undertake changes and break up with traditional socialist-era mono-bank system. With implementation of a two-tiered banking system, in 1987, there is a clear division of responsibility and competence of the Central Bank and regional banks. Seven new commercial banks established as joint-stock companies to serve the industry structure, remained under state control. However, their lending practices and business led to serious cases of unethical business practices and financial irregularities. The lack of effective regulation has enabled banks, especially state-owned ones, to continue the unsound practice of granting loans to inefficient enterprises in their portfolio failing to pay back loans on time, because they were under the influence of politicians. For instance, it is estimated that the total losses of the banking sector in Bulgaria amounted to about 15% of GDP, and it became insolvent by the end of 1995 (Tang et al. 2000). Faced with a liquidity problem, many banks borrowed money from the Central Bank of Bulgaria, which

refinanced and overprinted money to meet troubled banks. This ultimately had a detrimental effect on confidence of the national currency and its devaluation, while the country's inflation rate climbed to a staggering 1000% (the EBRD 1997). Facing bankruptcy, with the support of the IMF, the Bulgarian government was forced to implement structural reforms. Besides this, in 1998, Bulgaria introduced a currency board arrangement(CBA), followed with a package of other measures needed to address control of financial flows, and the supervision and regulatory shortcomings of banks, including controlling the privatization of the remaining financial institutions. In 2003, a government restored trust in the banking sector, and new banking and supervisory regulations were adopted in accordance with the principles of the Basel Committee (IMF 2015). Also, the CAR of banking sector was 22.2% at level above the required minimum of 12%.

Unlike other countries in the region, the privatization of the banking sector and its reform in Romania has been somewhat slow in changing. Between 1990 and 1999, there was a low level of financial intermediation and the high level of bank's concentration. For instance, the four largest banks in Romania controlled over 65% of total banking assets under control of state-owned banks. However, with the privatization of the two largest state-owned banks (BRD and Bank Post), the ownership structure of banking sector was changed, such that about 85% of banking assets are privately owned (IMF Country Report 2001). More importantly, the presence of foreign ownership in the banking sector of Romania grew and significantly increased from 14.3% share in total banking assets (1998) to 56.3% (2002), while the shared domestic private ownership decreased from 9% (1998) to 3.2% (2002). Still, the high share of non-performing loans remained an important challenge. The structure of banking sector underwent major changes. For instance, at the end of 2002, 24 out of 39 were foreign-owned. On the other hand, state-owned banks' market share in total banking assets has fallen sharply from 75.3% (1998) to 5.9% (2006).

North Macedonia started its era of banking sector reform with the aim of rehabilitating and privatizing existing state-owned bank. In 1995, with the enactment of the Law on Rehabilitation and Restructuring of Banks, the banking sector started its process rehabilitation relatively late. The law focused on financial restructuring, including the write-off of bad loans and addressing complex issues of liability based on old foreign currency savings, including the reconstruction of the largest state-owned

bank (Stopanska Banka). The legislative intervention was appropriate and timely. By 2001, North Macedonia unveiled a slew of packing regulations that modernized its banking sector, consistent with EU regional directives and international standards. But these changes came at a huge price. On average, the costs of rehabilitating were large, among the highest in the world, with 42.3% of GDP (1995), and increase to 48.5% of GDP after the recapitalization of Stopanska banka (Radzic and Yuce 2008). In the meantime, major state-owned banks burdened with non-performing loans and loan losses have been cleaned up.

In Serbia, the reform of the banking sector started relatively late because of ten years of isolation, when a strategy for bank restructuring was adopted in May 2001. After a detailed analysis of the financial statements by monetary authorities in Serbia, 23 commercial banks were closed, including four of the largest state-owned ones (Beogradska Banka, Beobanka, Investbanka, and Jugobanka which controlled about 70% of the total banking assets) initiating bankruptcy proceedings in 2000 (Mamatzakis et al. 2005). In 2007, restructuring of banks has led to increase of foreign-owned banks up to 70% of total banking assets. The reform of the financial sector in Serbia also led reducing the average annual positive interest rate from 79.5% (2000) to 17.5% (2003), and the negative one from 35.3% (2000) to 11.2% (2003). Moreover, the number of banks in Serbia decreased to 43 (2004), of which 11 were foreign-owned, 18 private domestic-owned, and 14 were majority stateowned banks. Much of bank privatizations took the form of sale of shares in the existing state-owned banks acquired through debt conversion and through recapitalization (Palić 2007).

In Croatia, the regulatory reform and the entry of new private banks, particularly foreign banks, were led by the country's independence. Episodes of banking crisisbetween 1998 and 1999 led to the failure of 14 banks. Seven banks went bankrupt, and no new banks were established (Kraft et al. 2004). In 1998, 60 commercial banks (98.5% of total assets) and 36 savings banks (1.5% total assets) operated in Croatia (Table 5.1). At the same time, most of them were privately-owned. As a result of the entry of foreign banks (first wave), the total number of banks have seen a significant decline from 56 to 42 banks (2002). The initiated changes in the ownership structure have led to an increase of foreign bank participation and decline state-owned banks and private banks. In the second wave, the share of foreign-owned banks in 2002 reached over 90% total banking assets (Galac 2005).

Table 5.1 Trends in banking intermediation and transformation of ownership

Country	Year	Number of banks (foreign-owned)	Asset share of foreign-owned banks (in percent)	Domestic credit to private sector (in percent of GDP)	Household loans to GDP
Bulgaria	1998	34 (17)	32.5	12.2	2
	2002	34 (26)	75.2	18	3.7
	2006	32 (23)	80.1	47.4	16.6
	2017	25 (13)	77	50.61	20.1
Romania	1998	36 (16)	51.3	13.9	n/a
	2002	31 (24)	52.9	10.1	3.8*
	2006	31 (26)	87.9	26.3	11.2
	2017	23 (16)	77	26.51	13.4
Croatia	1998	60 (10)	39.9	41.2	12.9
	2002	46 (23)	90.2	50.2	23.8
	2006	33 (15)	90.8	68.7	38.2
	2017	25 (15)	90.1	57.37	36.93
Albania	1998	10 (8)	14.4	3.6	n/a
2	2002	13 (12)	45.9	6.3	n/a
	2006	17 (14)	90.5	21.7	4.6
		. ( )			(2005)
	2017	16 (13)	78	35.7	10.7
B&H	1998	53 (9)	1.9	3.2	n/a
	2002	40 (21)	76.7	11.8	10
:	2006	32 (22)	94	25.2	19.6
	2017	23 (16)	86	58.31	27.8
North	1998	23 (6)	11.4	15.7	1.2
Macedonia	2002	20 (7)	44	17.7	2.4
200	2006	19 (8)	53.2	31	9.6
	2017	15(11)	75	50.1	22
Serbia	1998	104 (3)	0.5	n/a	n/a
	2002	50 (12)	27	16.9	n/a
	2006	37 (22)	78.7	18.9	n/a
	2017	29 (21)	76	40.34	18.71
Montenegro	1998	n/a	n/a	n/a	n/a
Womenegro	2002	10 (n.a)	16.9	8.05	n/a
	2006	10 (8)	91.9	39.4	17.3
	2017	15 (9)	79	48.67	n/a

Source EBRD, Transitional Report 2010, European Banking Federation and NCBs reports

Finally with respect to B&H, in the past twenty years, the banking sector in the country has come a long way to its current state of recovery through radical reforms. The number of banks fell above half between 1998 (53 banks) and 2006 (32 banks) led by different legal and business implications during reform's process (Table 5.1). In fact, the banking sector experienced decline of number of banks, thanks to processes imposed by competition, such as mergers, acquisitions, and consolidation of banks. These general trends have changed significantly the structure of the banking sector. There were improvements in the institutional framework while the overall performance of the banks in B&H improved and achieved a significant growth (Ganić 2014). Today, the banking sector is concentrated, dominated by several foreign banking groups, such as: Raiffesen Bank, Uni Credit Bank, Intesa Sanpaolo Bank, Sberbank, NLB bank group. The discussion below provides some important features related to changes in the banking ownership structure. As shown in Table 5.1, in many countries in the emerging Balkan, state-owned banks dominated the banking sector in 1998, where the government had equity with majority owner of more than two-thirds banks assets. For instance, the share of assets held by state-owned banks was high in B&H (74%), Serbia (90%), Albania (78%), North Macedonia (75%), and Romania (75.3%) of total banking assets. However, over the years, many commercial banks in the region were privatized while new foreign banks entered the markets. It can be seen that there are differences between banking ownership structure across the countries between initial stage of transition (1998) and mature stage of transition (2006). Table 5.1 also shows that foreign banks hold substantial investment in the emerging Balkans. The presence and dominant role of foreign-owned banks in emerging Balkan is visible in all banking systems (in 2017) as follows: in Bulgaria 25 foreign-owned banks out of 13 total, in Romania 16 out of 23 total, in Croatia 15 out of 25 total, in Albania 13 out of 16 total, in B&H 16 out of 23 total, in North Macedonia 11 out of 15 total, in Serbia 21 out of 29 total, in Montenegro 9 out of 15 total.

Similarly, assets held by foreign-owned banks to total accounts between 75% in North Macedonia to over 90% in Croatia. In 2017, Croatia (90.1%) and B&H (86%) are the countries with the highest penetration rate of foreign banks in the region followed by Montenegro (79%), Albania (78%), Romania and Bulgaria (77%), Serbia (76%), and North Macedonia (75%).

For instance, foreign-owned banks represent a sizable share of banking assets in Serbia (78.7%) due to late of process privatization. However, in Serbia (2000) over 90% of banking assets were under control of stateowned banks. Also, the reference period is characterized by a tendency to reduce the number of banks and consolidate the banking sector. It is revealing that the structural changes achieved in the banking sector of emerging Balkans (consolidation, change of ownership structure) are accompanied by an increase in the volume of services and acceleration of credit growth. The ratio of domestic credits to the private sector (relative to GDP) has expanded and increased from 3 to 10 times in the period under review, as a result of low starting level of financial intermediation and a market potential for new foreign banks. Moreover, by countries, the ratio of domestic credits to the private sector grew from 12.2 (1998) to 50.61 (2017) in Bulgaria, from 3.6 (1998) to 35.7 (2017) in Albania, and from 3.2 (1998) to 58.31 (2017) in B&H. In the same vein, household loans as a share of GDP rose significantly. In fact, in 2017, the ratio of household loans to GDP accounted for 20.1% in Bulgaria, 13.4% in Romania, 36.93% in Croatia, 27.8% in B&H, 22% in North Macedonia, and 18.71% in Serbia. These numbers signify substantial progress in comparison with the initial stage of transition. The trends in banking ownership transformation demonstrate that Croatia achieved the best results in selected indicators. This is not surprising, given that the differences in the structure of lending are associated to a country's level of economic development. Banking Sector Development.

#### 5.3 Banking Sector Development

Overall, today, the Balkan region can be viewed more as "bank-based" systems than as "market-based" systems (Knight 1998). Over the transition period, only a few countries, such as Bulgaria and Croatia, established banking systems that look like the ones in developed countries. Figure 5.1 shows that, between 2000 and 2018, countries in the emerging Balkan maintained a relatively high degree of heterogeneity. In 2018 alone, bank assets relative to GDP ranged between 34.05% in Romania and 76.15% in Croatia. There are some differences across new EU countries and the rest of the countries in the emerging Balkans regarding progress in banking development.

Measured by bank assets relative to GDP, Croatia and Bulgaria witnessed progress in banking development somewhat higher than in

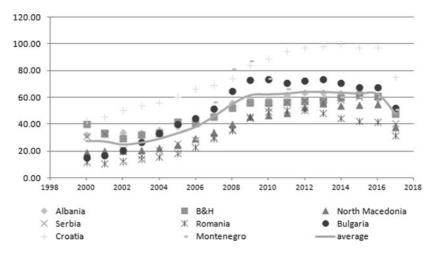


Fig. 5.1 Total Bank assets, % of GDP (Source Author's elaboration on the World Bank data, Global Financial Development Database (GFDD), National CBs)

other countries in emerging Balkans. Moreover, banking development in Croatia and Bulgaria experienced higher level of saturation, compared to the rest of countries, with the least banking development found in Romania. The share of bank assets in the national gross domestic product is continuously increasing in many countries of the region, with few exceptions like Romania and Albania. Excepting Croatia, the level of financial intermediation in the rest of the countries is still low, almost three times as low as the average of the euro area (Fig. 5.1). However, this trend conceals divergent trends in terms of bank concentration ratio (Fig. 5.2).

While it experienced low level until 2000s, it has been rising since than 2005 onward. Equally importantly, the level of banking concentration and competition varies greatly among countries in the region, as measured by GDP. To measure the competitiveness of the banking sector, the indicator of bank concentration (%) is employed as share of assets held by three largest banks (Fig. 5.2).

The indicator of bank concentration shows that the countries in emerging Balkans are generally high concentrated, although the decline in concentration over time is found in almost all countries.

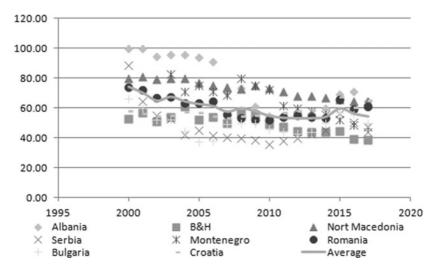


Fig. 5.2 Bank concentration (%) (Source Author's elaboration on the World Bank data, Global Financial Development Database (GFDD), National CBs)

Over a 17-year period, the weighted average of bank concentration for eight of countries in emerging Balkans decreased by 19.74%, from 74.17% (in 2000) to 54.43% (in 2017). However, cross-country analysis uncovers important differences in the intensity of bank concentration between 2000 and 2017. The data show that the average value of the analyzed indicator varies from a range of 48.03% for Serbia to 76.4% for Albania. Revealingly, at the end of 2017, the level of bank concentration in Croatia remains high with 65.26%, while the least concentrated banking sector was B&H with 38.43%. In recent years, a declining trend in the level of bank concentration has been documented, with a high of 64.33% in Albania, 64.75% in North Macedonia, and 65.26% in Croatia. Another useful indicator for measuring the development of the banking sector is the ratio financial system deposits to GDP (Fig. 5.3). The highest of this value was found in Romania with 125% in 2009, and Croatia with 72.3% in the same year. In contrast, the lowest value was found in Serbia, because of years of hyperinflation in the mid-1990s when Serbia was hurting erosion and melting of deposits, and the decline of confidence in the banking sector (Zivkovic 2005).

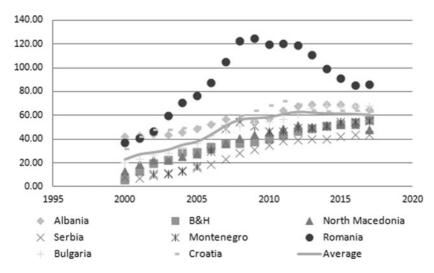


Fig. 5.3 Financial system deposits to GDP (%) (Source Author's elaboration on The World Bank, World Development Indicators [WDI])

Similarly, in 2017, B&H, Montenegro, North Macedonia, and Serbia showed declining trend and significantly lagged behind Albania, Bulgaria, Croatia, and Romania. The next important feature of all countries in emerging Balkans is related to private credit growth rate to GDP rates and its rapid expansion. From 2000 onward, the banking sector of the countries in this region recorded a more intensive development and credit expansion (Ganić 2013). As Fig. 5.4 shows, the process of financial intermediation varies across the countries. While Serbia, Albania, Montenegro, and North Macedonia recorded low initial levels of financial intermediation, Croatia, in contrast, reached the highest level of financial intermediation. More elaborately, Croatia, B&H, and Bulgaria reached a highest ratio of financial intermediation more than the average among countries in the emerging Balkans.

Only these three countries reached the ratio of financial intermediation over 50% of GDP, with Croatia registering 60.5% of GDP, Bulgaria 52.7% of GDP, and B&H 53.17% of GDP. These were more than levels of financial intermediations in the early years of the transition process: 26.75% of GDP in 2000, compared to 45.1% of GDP in 2017. The remaining countries experienced lower levels of financial intermediations

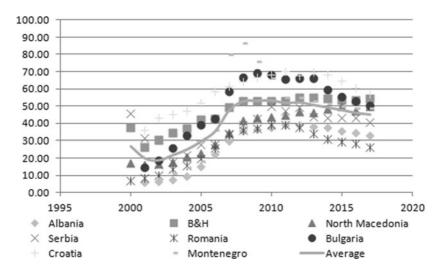


Fig. 5.4 Bank credit to the private sector as percent of GDP (*Source* Author's elaboration on The World Bank, World Development Indicators [WDI])

below 50%. Revealingly, three countries from our sample experienced a six-year episode credit boom (i.e., Albania, Romania and Croatia). During the crisis period, majority of the countries experienced private credit to GDP ratio below trend. Revealingly, the structural changes made in the banking sector of selected countries, especially consolidation, and change in ownership structure, were accompanied by an increase in the volume of services and the introduction of new products. Due to low initial level of financial intermediation and "catching up" process, many of the countries studied countries experienced episodes of excessive credit growth. During the period under review, the average ratio of financial intermediations almost doubled. In sum, banking intermediation in emerging Balkan countries still lag in relation to the European average and remains relatively uncertain.

#### 5.4 Banking Soundness and Stability

To implement macroprudential policy successfully, it is necessary to identify risk that may undermine banking stability. A single model for comprehensively measuring financial stability and systemic risks does not

yet exist. The existing financial stability indicators reflect concern about stability of a particular sector or segment of the financial market. Because of this impediment, composite indices constructed by combining individual macroeconomic, financial and other indicators into one single index, are widely used in the literature. For many years now, researchers have used this composite financial indicator. One of the first and most known composite indicators for assessing financial strength of the banking sector is the financial strength index developed by Central Bank of Turkey (2008). This financial strength index was developed by applying the variance-equal weights method of the six sub-indices. Similarly, Kočišová (2014) constructed the banking stability index based on four sub-indices using a method comprising empirical normalization and variance-equal weights. In North Macedonia, the banking stability index was developed by Petrovska and Mihajlovska (2013). The two scholars used a set of key financial soundness indicators by employing method of empirical normalization adjusted by statistical normalization.

The aim of this section is to develop an aggregate index of banking stability that will be used to analyze and compare financial stability assessments in the banking sectors in the Balkan countries that form the object of this book. The index of banking stability used in this study also adapts the methodology of International Monetary Fund (2015), studies done by Kočišová (2014), as well as by Petrovska and Mihajlovska (2013), the Central Bank of Turkey (2008), mixed with traditional FSIs and method of equal weighting across indicators.

The aggregate stability index is developed as a weighted sum of selected Financial Soundness Indicators developed by the IMF (capital adequacy, asset quality, earnings and profitability, liquidity and exposure to FX risk) where all indicators are given the same weight (20%). This implies that all indicators of financial soundness are "worth" the same in the composite banking stability index where the indicators are scaled and passed through process adjustment and final aggregation. It will be employed to measure financial stability and gauge trends of banking problems in emerging Balkan countries between 2006 and 2017. In constructing the index, specific characteristics and risks related to small and open economies were taken into account. By using the method of empirical normalization where the indicators' values range between 0 (signifying weakest value of indicator or higher exposure to risk) and 1 (signifying the strongest value of indicators or lower exposure to risk) this book follows the basic formula of normalization process as done by

Petrovska and Mihajlovska (2013):

$$I_{t}^{n} = \frac{I_{it} - \max(I_{i})}{\max(I_{i}) - \min(I_{i})}$$
(5.1)

where  $I_t^n$  refers to the normalized indicator, i at time t,  $I_{it}$  refers to the value of the indicator i at time t,  $\max(I_i)$  and  $\min(I_i)$  are the respective worst and best values of each indicator.

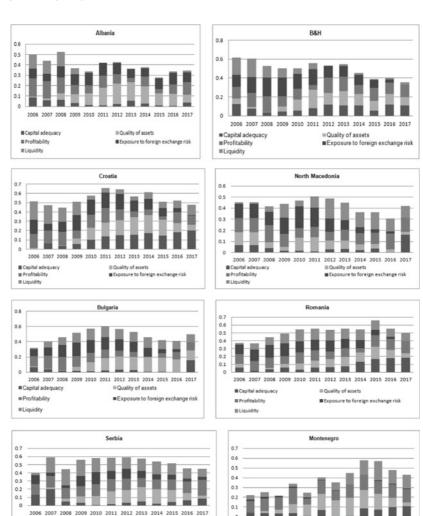
In their respective pre-crisis period, B&H, Albania, and Croatia had the most stable banking sector measure by index of banking stability. By the individual components of the banking stability index, it seems that these three countries registered a good score influenced by high value of liquidity (Albania, B&H, and Croatia), high profitability (B&H, Croatia), and low exposure to FX risks (B&H, Croatia). As shown in Fig. 5.5, it can be noticed in pre-crisis period the CAR tend to decrease because of the credit expansion of banks in selected countries. In contrast, Bulgaria, Romania, and Montenegro managed to maintain stable banking sectors in the region.

One of the reasons is poor quality of assets (Montenegro, Romania, Bulgaria), low liquidity position (Montenegro, Romania, Bulgaria), and high exposure to FX risks (Montenegro and Bulgaria). In general, higher lending expansion and growth should be followed by higher capital requirements. However, this was not the case in the most countries in the emerging Balkan states.

It was particularly obvious in 2007, when credit growth was accompanied by a reduction in the CAR, leading to an increase in the vulnerability of the banking sector. Revealingly, in crisis period, most of the countries in the region maintained their banking stability well, including Montenegro, where the banking sector was at least stable. All the rest of the countries, including Romania, Bulgaria, Serbia, and North Macedonia, stabilized their banking sectors. This was due to progress on various fronts, including high liquidity (Romania, Bulgaria, Serbia, and North Macedonia), profitability (Bulgaria, Romania, North Macedonia), and good FX risk management. In the crisis period, by contrast, the value of capital adequacy component was modest in the most countries, including Albania, B&H, and Croatia. A further fall and deterioration in the ratio of total capital of banks to total loans also indicates the possible vulnerability of the banking sector in the region during the crisis period.

■ Profitability

**■Liquidity** 



**Fig. 5.5** Banking stability index and its components by selected countries (*Source* Author's calculations on the Financial Stability Indicators (FSIs)-IMF data, National CBs)

■ Exposure to foreign exchange risk

■ Capital adequacy

■ Profitability

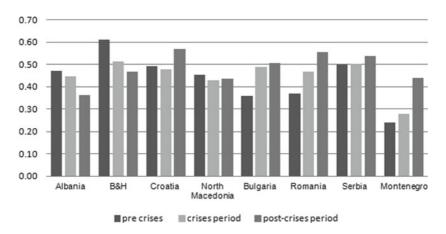
**■** Liquidity

2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

■ Exposure to foreign exchange risk

Moreover, in the post-crisis period the banking sector of selected countries in the emerging Balkans was well capitalized, with a CAR above its minimum requirements. For instance, the required CAR was 12% in Albania, Bulgaria, and Romania, mostly due to the bad experience with episodes of financial crisis, which more or less covered most of these countries during the 1990s. Next to the post-crisis period, for many countries in the emerging Balkan region, the finding was a low value of asset quality component (except in Bulgaria), while increase in CAR affected growth of banking stability index in B&H, Croatia, North Macedonia, Bulgaria, and Romania. Also, Albania and B&H registered low value of liquidity component in the banking stability index. In Serbia, Montenegro, and Albania, contribution of profitability affected growth of their banking stability index. Compared to other countries, profitability in Bulgaria and Croatia was lower, but ultimately turned positive and satisfactory. Next, this analysis covers three stages trends in banking stability in the pre-crisis, crisis, and post-crisis period (Fig. 5.6).

The first stage covers the period from the end of 2005 until 2007, when the average index value is 0.13 higher relative to its average for the entire period. In the pre-crisis period, the index value reached 0.50 or above only in Serbia and B&H. In fact, the index value



**Fig. 5.6** Trends in banking stability in pre-crisis, crisis, and post-crisis period (*Source* Author's calculations on the Financial Stability Indicators (FSIs)-IMF data, National CBs)

suggests that the most stable banking sectors are found in B&H (0.61), Serbia (0.50), Croatia (0.49), Albania (0.47), and North Macedonia (0.45), while remaining nominally stable in Bulgaria (0.36), Romania (0.37), and Serbia (0.24). Figure 5.6 shows that, with the exception of Bulgaria, Romania, and Montenegro, financial stability in the rest of emerging Balkans was negatively affected by the global economic crisis that occurred between 2008 and 2009. Although in the crisis period, Bulgaria and Romania improved their banking stability, some countries in the region recorded fall in the index value. For instance, in comparison to pre crises period some changes in the index value were found in Bosnia and Herzegovina (0.51), Croatia (0.48), Albania (0.45), and North Macedonia (0.43). In contrast, the banking stability index of Montenegro climbed to 0.28 in crisis period, representing a 0.4 increase from pre-crisis conditions (the banking stability index was 0.24 in pre-crisis period). In the post-crisis period, top emerging Balkan performers in terms of the banking stability were Croatia (0.57), Romania (0.56), Serbia (0.54), and Bulgaria (0.51). In contrast, Albania ranked as least stable with an index value of 0.36.

#### 5.5 Conclusion

Trends and levels of banking development in the Balkan region are not different from those in the rest of transition countries. After a difficult transition period and banking crisis at the end of 1990s, the banking environment in the region has improved, significantly. In all of the emerging Balkancountries, the banking sector experienced large changes followed by entry of new players and declining state ownership. The foregoing leads to the plausible conclusion that ownership changes in banking systems of the region in two last decades have affected the visible aspect of banking business. The banking sector is considered consolidated, internationalized, well developed, and adequately capitalized.

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#### CHAPTER 6

### Does Stock Market Development Cause the Economic Growth? A Panel ARDL Bounds Testing Approach

Abstract This chapter investigates the causal linkage between stock market development and economic growth in 12 CEE countries (B&H, Croatia, Bulgaria, Romania, Serbia, Montenegro, Hungary, Poland, North Macedonia, Slovenia, Slovakia, and Czech Republic) by employing the autoregressive distributed lag (ARDL) bounds testing approach and Granger causality for the time period 2000-2018. Moreover, in order to examine this nexus, the chapter aims to determine whether the stock market development in these countries causes growth. The study concentrates on the examination of the long-run relationship by utilizing the F test statistics and short-run relationship (the Wald test). The evidence proves that the long- and short-run relationship was found only in Slovenia, where cointegration exists, while the causality between the variables was not found in the rest of the CEE countries. These findings may be due to the fact that the efficient alternative (banking) channels of finance are more utilized in the CEE countries as opposed to the less developed capital markets.

**Keywords** Stock market development · Growth · ARDL bounds testing approach · Granger causality · CEE countries

#### 6.1 Introduction

The last two decades have shown a positive contribution of finance to the growth in many developed countries. Accordingly, it has received more attention in the contemporary literature concerned with finance and growth. However, the focus was given almost exclusively on the banks as financial institutions, ignoring the existence of a positive contribution of stock market development to the growth. The existence of the linkage between the capital or equity market(s) development and growth in existing research did not show sufficient evidence to draw conclusion about the nature of this relationship in emerging countries. It is for that reason that the previous researches provided mixed evidence and have failed to support the finance-led growth view. For instance, for developed countries, the findings of empirical studies indicate the existence of positive linkage between capital or equity market(s) development and growth, while the results of recent empirical researches for developing countries are fairly ambiguous about the nature of this relationship. Finance contributes a great deal of economic activity in various forms. In addition, these contributions are not seasonal and they are expected to be long-term or permanent activities that lead to economic growth in many instances. Finance contributes to the national economy in various forms but these contributions might be viewed simply in two forms: (1) in the form of providing better access to capital (supply-side effects) and (2) demand-side effects where economic growth would create demand for stock and other financial instruments (Patrick 1996).

This chapter has the aim to bring more light to the background of stock market development-growth nexus in 12 of the CEE countries. Various studies in the literature have been extensively analyzed and discussed the existence of the stock market development-growth nexus. This chapter, among other things, seeks to explore whether the causation is derived from the stock market development to growth, or to the contrary, from growth to stock market development. The existing studies typically utilized panel data models and analysis of cross-sectional data, but only few studies concentrated on the examination of causal relationship between stock market development and growth in transition countries. This chapter postulates that this relationship is insufficiently empirically explored in the transition countries, especially in more of the CEE countries, but also in many other neighboring transition countries. There is a little empirical evidence that confirms or refutes the causality

between financialization and economic growth because more empirical studies examined a positive and negative link between them. Even more, there are at least two important contributions of this research to the present body of literature. Firstly, no studies were found, which explored the above-mentioned causality in both short run and long run, in the emerging Balkan and beyond transition countries. Accordingly, it extends the stock market development-growth nexus discussion. Secondly, the results of this study provide insights into the case of the CEE countries where capital market is insufficiently developed. Having in mind that any given level of capital or equity market(s) development in the region exists for at least 20 years, now, and that their financial system markets show different level of efficiency, it seems appropriate to approach this issue, now. The Granger test is selected because it can provide useful information on whether some recent trends in the stock market development may improve current and future growth rate movements, and vice versa.

#### 6.2 Literature Review

There are numerous studies about the finance-led growth view. They are generally found all over the world and specifically in developed economies. The pioneer studies that examine a link between finance and growth are performed by McKinnon (1973), Shaw (1973), and recently King and Levine (1993). Similarly, some research studies conducted by Demirgüç-Kunt and Levine (1995) and Levine and Zervos (1998) have been exploring the effects that financial development may have brought upon the economic growth. Furthermore, Atje and Jovanovic (1993), in their research, confirmed long-run finance-growth nexus, while Loayza and Ranciere (2006) confirmed the financial intermediation and growth nexus in the long run. Recent empirical researches held divergent views concerning the financial developments and growth. One view proposed by Demirgüç-Kunt and Levine (1995), Levine (1997, 2005) raised importance of the level and size of the stock market development on growth, while Rousseau and Wachtel (2000) and Shahbaz et al. (2008) provided the evidence of the stock market liquidity on per capita output and the growth, respectfully. The liquid market can potentially encourage diversification among investors and make it easier for companies to access capital markets. In addition, Asteriou and Spanos (2019) examined 26

European countries between 1990 and 2016 and found that the financial development promotes the economic growth in the pre-crisis period, while in the post-crisis period it hindered the economic activity.

Also, the other study conducted by Shen and Lee (2006) investigated the impact of the financial development on GDP per capita growth, in 48 countries. It is considered that stock market development is positively affected the economic growth and they are positively related, while banking development was found to be negatively associated with the growth. The second view stipulates that the economic growth can be explained by the improvements in financial intermediation and vice versa, in which both are endogenously determined (Greenwood and Jovanovic 1997). One other study performed by Tang et al. (2007) revealed that stock markets and economic growth have supportive relationship only in four (e.g., China, Singapore, Philippines, and Taiwan) out of 12 Asian countries. Also, their study only found a bidirectional causality in Malaysia, China, Indonesia, Hong Kong, and Thailand. By contrast, a third view, introduced by Mayer (1988), Stiglitz (1989), Harris (1997), Naceur and Ghazouni (2007), and Zhang et al. (2012), failed to find a supportive contribution of stock markets and financial development to growth. Even more, according to the authors, their relationship is unimportant and insignificant, for the growth. Similarly, Filer et al. (1999) found a little evidence about the causality direction from stock market development to economic growth in the lower-income countries. Furthermore, the research of Fink et al. (2004) was concentrated on the examination of the bond-growth link in 15 European countries, in addition to the USA and Japan. The data were tested on Granger causality, from Q1 of 1994 to Q1 of 2003. The findings revealed that causalities run from corporate bond to economic growth and from public sector bond to the economic growth.

Also, similar researches concentrated on the stock markets-growth link in European transition and post-transition countries are relatively scarce. One of the reasons is the lack of data and short time series because most capital markets exist for at least 20 years, now. Also, with the effects of financial liberalization, the relationship between financial development and economic growth led to change in the financial markets structure, especially in the bank-oriented financial system. Stock markets' development becomes a discussion topic with the increasing financial integration, including certain financial indicators and examination of their relationship to the economic growth. One of the main differences between developed

countries of Western Europe and the CEE countries is that the financial system of developed countries is largely dominated by the capital markets, while it is being dominated by the banking sector in transition countries where capital markets tend to remain undeveloped. The results of the research conducted for the CEE countries by Winkler (2009) revealed that the economic growth is determined by the structure of the national financial system. Namely, he explored the role of the domination of foreign banks in the CEE countries and their link with transition of financial crisis to the CEE region. This study concluded that it led to the slowdown in the real economic activity. Ganić et al. (2016) failed to confirm the statistical significance of finance deepening on the growth in B&H by employing ARDL model. Moreover, Fink et al. (2005) examined nine EU accession and new EU countries utilizing panel data between 1996 and 2000. The evidence of promotion from domestic credit expansion and bond markets to the growth has found it to be statistically significant, while the effect of private credit and stock market capitalization on the growth was found to be statistically insignificant. Similarly, Fink et al. (2009) empirically explored 18 developed and nine EU accession countries, between 1996 and 2000. However, there no significant impact of the stock markets on the economic growth in nine EU accession countries was found, which was being explained by their relative underdevelopment. Halkos and Trigoni (2010) generally showed no evidence or did not find mixed evidence of both, finance and growth, in terms of their causality in 15 EU countries between 1975 and 2005. More precisely, the authors found a causal relationship between finance, monetary policy, and growth, only in the long run. On the contrary, they could not reveal any tangible evidence regarding their strong linkage in the short run.

By extending this view, Cojocaru et al. (2012) empirically explored a link between financial development and economic growth in the former communist CEE and CIS economies, between 1990 and 2008. The results that they obtained indicated that the economic growth can be stimulated and promoted by the banking loans, thus confirming the role and importance of the financial intermediation in the economic development. Furthermore, Caporale et al. (2014) used a dynamic panel model to explore link between the financial development in ten new EU members divided into three homogenous groups, between 1994 and 2007. The results indicated that relatively underdeveloped credit and stock markets led to the limited effects on the growth due to the lack of the financial depth. Ayadi et al. (2013) conducted one of the similar studies for the

period from 1985 to 2009, utilizing a sample of northern and southern Mediterranean countries in the examination of the finance-growth link. Revealingly, the findings failed to confirm the positive association of the banks' loans and banks' deposits with the economic growth. However, on the other side, the capital market size and liquidity are found to be significant growth promoters.

Some similar researches additionally explored the causality of financegrowth link. They showed that there is a two-way causal relationship between the financial development and growth (Ozturk 2008; Al-Yousif 2002; Hassan et al. 2011; Yildirim et al. 2013). For instance, Yildirim et al. (2013) conducted, between 1990 and 2012, an asymmetric causality test based on Granger and Yoon's study (2002) on a sample of new EU members (e.g., Bulgaria, Hungary, Lithuania, Latvia, Poland, and Romania) and at that time potential EU members (e.g., Croatia, Russia, Turkey, and Ukraine). In particular, positive and negative shocks were separated into financial indicators and positive and negative growth rates by examining the causality between them. The study's findings indicate that there are differences between countries where bidirectional causality exists only in Hungary and Croatia. Between 2004 and 2007, Prats and Sandoval (2020) explored the link between stock market capitalization and GDP in 10 CEE countries using a cointegrated vector autoregressive (VAR) model. They found two-way causality link, especially in five countries (Bulgaria, Hungary, Latvia, Romania, Slovakia, and Slovenia). One other study done by Carp (2012) failed to find a strong stock market capitalization-growth link due to the lack of stock market development and illiquidity in Romanian economy.

#### 6.3 MODEL SPECIFICATION

The sample covers 12 European transition and post-transition countries. It must be noted that Albania does not formally have available stock exchange data. The period between 2000 and 2018 is conditioned by the availability of data for the most analyzed countries. Given the relative size of the analyzed sample, the choice of ARDL approach is justified with the small study's sample sizes (Pesaran and Shin 1999; Pesaran et al. 2001).

In this study, the stock market is proxied with the stock market capitalization as percentage of GDP is used as a proxy variable for the stock market development, whereby GDP growth rate is being used as a proxy

for the economic growth. Following previous researches related to the examination of the stock market capitalization-growth link, both variables are selected and employed to provide a contribution about discussion and examination of their validity in the CEE region. Testing the stationarity and order of integration of variables is performed by unit root tests. Potential presence of serial correlation in data leads to the conclusion to use the ADF test. Acceptance of the null hypothesis of the ADF test determines the existence of a unit root and non-stationarity, while its rejection indicates the absence of a unit root and the stationarity of the variable. In addition, the ADF test (Dickey and Fuller 1979) allows to examine the next regression as follows:

$$\Delta y = \mu + \beta Y_{t-1} - \sum_{j=1}^{p} \alpha_j \Delta Y_{t-j} + \varepsilon_t$$
 (6.1)

If  $\beta = 0$ , there is a unit root

$$H_0 \dots \beta = 0 \text{ vs. } H_1 \dots \beta \neq 0$$
 (6.2)

where  $\Delta$  refers to the difference operator with p-lags, t-time period, p-number of lags, and  $\varepsilon_t$  denotes a stationary random error, which adjusts the error of correction. A more suitable version of the ADF test, which eliminates the effect of autocorrelation of errors, was developed by Phillips and Perron (Phillips 1987; Phillips and Perron 1988). Accordingly, testing of stationarity and order of integration variables will be additionally conducted by using Phillips and Perron test (PP test). Furthermore, to test direction of the causality between both variables, the Granger causality test is applied. It makes sense to look for the direction of causality, only in the period in which there is a connection between both variables. Initially, the null hypothesis is set up with the aim to examine whether one variable does cause the other variable in the Granger's sense.

The null hypothesis cannot be rejected if the p-value is greater or equal to the significance level (e.g., p-value = 1, 5, and 10%) and vice versa, where the null hypothesis is rejected and the alternative hypothesis is accepted. It explains that the variable of interest does not Granger cause another variable and vice versa, respectfully. It can be expressed as follows:

$$H_0 \dots \alpha_1 = 0; H_1 \dots \alpha_1 \neq 0$$
 (6.3)

This can be further expressed by the following equations:

$$y_{t} = \beta_{0} + \sum_{i=1}^{N} \beta_{k} Y_{t-k} + \sum_{i=1}^{N} \alpha_{t} X_{t-1} + \varepsilon_{t}$$
 (6.4)

$$X_{t} = \gamma_{0} + \sum_{i=1}^{N} \gamma_{k} X_{t-k} + \sum_{j=1}^{N} \delta_{t} Y_{t-1} + v_{t}$$
(6.5)

where

 $X_t$ —GDP growth

 $\Upsilon_t$ —stock market capitalization as % of GDP

*i*—number of lags and *N*—optimal number of lags,

*t*—time period, and

 $v_t$  and  $\varepsilon_t$  are mutually uncorrelated white noise errors.

In addition, the influence of selected variables was observed using the autoregressive distributed lag (ARDL) model introduced by Pesaran et al. (2001) and Pesaran and Shin (1999). The advantage of using this approach is its wide applicability due to the inclusion of I(0) or I(1) variables, in the same equations. Accordingly, the study run ARDL model in two steps.

The first step begins with the examination of whether cointegrating relationship exists between the stock market development and growth. The second one is to examine the existence of long-run equilibrium relationship. The ARDL model is a least squares regression model that contains dependent and explanatory variables. The initial ARDL model can be written as follows:

$$y_t = \alpha + \sum_{i=1}^p y \gamma_{t-1} + \sum_{j=1}^{q_j} X'_{j,t-i} \beta_{j,i} + \varepsilon_t$$
 (6.6)

The cointegration regression form of the ARDL model is obtained by rewriting the Eq. (6.6) into differences and substituting long-term coefficients. In examining a finance-led growth view, an empirical model is created to analyze the impact and contribution of the stock market development to the promotion of the economic growth in selected CEE countries. The model presented in this chapter is based on the assumption about a finance-led growth view developed by King and Levine (1993), and can be presented in the following form:

$$\Delta GDPGR_{t} = \alpha_{0} + \beta_{1}GDPGR_{t-1} + \beta_{2}STCAP_{t-1}$$

$$+ \sum_{i=1}^{k} \delta_{1i}\Delta GDPGR_{t-1} + \sum_{i=1}^{k} \delta_{2i}STCAP_{t-1} + \varepsilon_{t}$$
 (6.7)

$$\Delta STCAP_{t} = \theta_{0} + \lambda_{1}STCAP_{t-1} + \lambda_{2}GDPGR_{t-1} + \sum_{i=1}^{k} \Phi_{1i}\Delta STCAP_{t-1} + \sum_{i=1}^{k} \Phi_{2i}GDPGR_{t-1} + \mu_{t}$$
 (6)

Where  $\Delta$  is a first differencing operator,  $\mu$  and  $\epsilon$  reffer to white noise disturbance error terms,  $t = 1 \dots T$  denotes time or period of study.

Next, F test is utilized to test the existence of long-run equilibrium relationship between stock market development and economic growth,

Where  $H_0: \delta_1 = \delta_2 = 0$  is tested against

$$H_1 \dots \delta_1 \neq \delta_2 \neq 0 \tag{6.9}$$

Further, the results of F bound test are based and compared with the critical value provided by Narayan (2005) due to small time span rather than Pasaran et al. (2001).

#### 6.4 Empirical Findings

Before testing the level of integration among the selected variables, the research should conduct some statistical tests and determine their stationarity. In fact, to determine the level of integration of both variables, the ADF unit root test and PP-test are employed. The results of ADF and PP tests for levels and first differences are given in Table 6.1.

The null hypothesis of non-stationarity for the variables GDPGR and STMCAP is rejected for seven (e.g., Romania, Croatia, Bulgaria, Czech Republic, Slovenia, Hungary, and Poland) out of 12 countries and both fulfill all assumptions of ARDL model. For instance, the findings indicate non-stationarity for GDPGR at level (I(0)) in Serbia, Bulgaria, Slovenia, and Hungary, as well as for a variable STMCAP in Slovenia and Hungary. However, after first differenced the both tested variables are stationary and the ARDL model for the cointegration test can be used. On the contrary, the rest of the five countries (i.e., B&H,

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Table	6. I	ADF	mnt	root	test

	ADF tes	st statistics			PP test st	atistics		
	GDPGR	2	STMCAI	•	GDPGR		STMC	AP
	I(0)	<i>I(1)</i>	I(0)	<i>I(1)</i>	<i>I(0)</i>	I(1)	<i>I(0)</i>	<i>I(1)</i>
В&Н	-1.43	-3.08**	-2.08	-1.96	-2.44	-6.42***	-2.42	-2.79*
Serbia	-1.47	-4.49**	*-2.68*	-2.69*	-2.54	-11.00***	-1.70	-2.41
Montenegro	-2.15	-4.30**	*-2.15**	* -1.46	-3.83**	-11.82***	-1.71	-2.42
N.	-2.91*	-3.89**	*-2.05	-2.55	-3.52**	-7.09***	-1.15	-3.20**
Macedoni	ia							
Croatia	-2.76*	-4.69**	*-2.66*	-3.67***	-3.04*	-5.43***	-2.02	-3.14**
Bulgaria	-2.26	-3.06**	-2.62*	3.37**	-2.10	-3.92***	-1.82	-2.7*
Romania	-2.26	-3.63**	*-2.41	-3.43**	-3.08**	-6.92***	-1.98	-3.43**
Slovenia	-2.39	-4.65**	* -1.85	-3.32**	-2.79*	-8.72***	-1.47	-3.09**
Slovakia	-2.72	-4.42**	* -2.56	-2.55	-3.13**	-10.8***	-2.01	-2.59
Hungary	-1.67	-3.81**	* <b>-1.86</b>	-3.260*	-2.50	-6.22***	-1.87	-3.60**
Czech Republic	-2.37	-3.77**	*-3.69**	-3.25**	-2.69*	-6.02***	-1.6	-3.25**
Poland	-2.97*	*-4.95**	*-2.61 *	-5.04***	-2.72*	-7.87***	-2.77	*-8.41**

Note \*,\*\*,\*\*\* refer respectively to 10 %, 5% and 1 % significance Source Author's calculation

Montenegro, North Macedonia, Slovakia, and Serbia) were dropped from the further econometric analysis and causality examination due to the different integration orders of the variables and their non-stationarity.

Moreover, the study finds the cointegration relationship between stock market capitalization and GDP growth rate only in Slovenia (Table 6.2). However, the long-run equilibrium relationship between the stock market capitalization and GDP growth rate came out to be inconclusive, in Croatia, Bulgaria, Hungary, Czech Republic, Romania, and Poland. Also, the estimated ARDL model has found some evidence, in the abovementioned countries, that did not pass some diagnostic tests. For instance, Poland has a problem with serial correlation and misspecification model, Bulgaria with heteroscedasticity, and Hungary with serial correlation.

Furthermore, although the findings imply a long-run relationship, added testing was conducted for both variables. In addition, there is strong evidence for the cointegration of both variables measured by F-statistics. For instance, F-test statistics value for Slovenia (10.04) is larger than the critical value defined by the upper bound of the critical value. It indicates the existence of the strong cointegration relationship between stock market capitalization and GDP growth rate. Consequently, the null

	F-bounds test	Selected model	Conclusion	LM test	Heteroscedasticity test χ <sup>2</sup> White	Ramsey – RESET test
Croatia	6.291	ARDL(1,1)	Inconclusive	0.275 (0.5999)	16.40 (0.0590)	1.29 (0.3174)
Bulgaria	4.308	ARDL(1,1)	Inconclusive	0.148 (0.7000)	17.24 (0.0450)	1.28 (0.3187)
Slovenia	10.04***	ARDL(1,1)	Cointegration	2.594 (0.1073)	12.28 (0.1980)	0.56 (0.6489)
Hungary	3.219	ARDL(1,1)	Inconclusive	5.917 (0.0150)	7.08 (0.6291)	1.28 (0.3193)
Poland	5.555	ARDL(1,1)	Inconclusive	5.085 (0.0241)	5.04 (0.8312)	8.21 (0.0021)
Czech Republic	5.917	ARDL(1,1)	Inconclusive	1.665 (0.1969)	9.31 (0.4089)	0.74 (0.5467)
Romania	4.692	ARDL(1,1)	Inconclusive	$2.847 \\ (0.0916)$	16.30 (0.0609)	0.66 (0.5917)

 Table 6.2 Cointegration test (ARDL Bounds Testing Approach)

Note \*\*\* indicates significant at 1% at level. The critical values are taken from Narayan (2005). Critical values (k=3), Table III, unrestricted intercept and no trend. Significance: lower bounds I(0), 5.333 (1%), 3.710 (5%), and 3.008 (10%); upper bounds I(1), 7.063(1%), 5.018 (5%), and 4.150 (10%)

hypothesis of no-cointegration is rejected for Slovenia in favor of the alternative hypothesis. It means that in short run, STMCAP has causal effect on GDPG (at the 1% statistical significance) while GDPG does not have causal effect on STMCAP at all (Table 6.3).

Given the p-value and Wald  $\chi^2$  test statistics, this study reveals a short-run unidirectional Granger causality effect running from the stock market capitalization to the growth (at the 1% significance level). The research

Table 6.	3 (	Granger
causality	test	results

	Slovenia
Estimated short-run coefficients	
$\Delta(\text{STMCAP}) \Rightarrow \Delta \text{ (GROWTH)}$	13.70,581***
$\Delta(GROWTH) \Rightarrow \Delta(STMCAP)$	2.898,229
Estimated long-run coefficients	ŕ
$\Delta \varepsilon \Rightarrow \Delta(GROWTH)$	0.43,582
$\Delta \varepsilon \Rightarrow \Delta (STMCAP)$	2.90,050*

Note \*,\*\*\* refer respectively to 10 %, and 1 % significance Source Author's calculation

findings for Slovenia are in line with some studies conducted by Atje and Jovanovic (1993), Shen and Lee (2006), and Tang et al. (2007).

However, for the rest of the countries in the emerging Balkans, his study's findings confirm the findings of the early studies for the region conducted by Carp (2012), Yildirim et al. (2013), and Fink et al. (2009) with the conclusion that there is no significant impact at all of the stock markets' developments on the economic growth in the most CEE countries due to their relative underdevelopment.

#### 6.5 Conclusion

This research explored the stock market capitalization-growth link in 12 CEE countries by employing the ARDL bound model. It has shown that at this stage, the stock market development leads to the economic growth only in Slovenia. The evidence of cointegration implies that there is a short-run causal relationship from the stock market capitalization to GDP growth (unidirectional) as well as in the long run. But, in the long run, the causal relationship in one direction from the stock market capitalization to the GDP growth was found to be weak at 10% statistical significance level. However, it must be noted that at 1% statistical significance level there is their strong evidence in the short run. Generally, in the rest of the CEE countries, the F-critical value of bound test suggests that there is no evidence about the stock market capitalization-growth link, neither in the short run nor in the long run. But, the situation is not the same in all CEE countries under the study, where no existence of cointegration in the remaining countries is explained by weak and underdeveloped financial markets in the region.

Even more, it indicates that the impact seems insignificant and negligible. These findings may be due to the fact that the efficient alternative (banking) channels of finance are more used in the CEE countries than less developed capital markets. Also, the stock market development in the region exists for at least 20 years, now, and their financial systems are banking oriented.

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#### CHAPTER 7

## Recent Financial Sector Developments

Abstract This chapter reviews the financial indicators that shape financial development in the emerging Balkans countries. It employs four indicators: Structure-Activity (S-Activity), Structure-Size (S-Size), Finance-Activity (F-Activity), and Finance-Size (F-Size) to measure levels of financial structure and to determine whether the financial system in the CEE and emerging Balkans are still bank-based or if some changes and progress has been made toward a market-based system. It then examines several indicators of development in the financial sector with a particular focus on the structure of financial intermediaries, financial euroization, and financialization.

**Keywords** Structure financial system · Bank-based system · Financial euroization · Financialization

#### 7.1 Introduction

There has been a significant economic and political change in the emerging Balkans region in the past two decades. Most of the countries in the region were socialist except for Albania, Bulgaria, and Romania which were communist countries. Market-oriented reforms and economic transition were not easy to achieve in the socialist and communist countries of

the region. Market-oriented reforms came after periods of high political instability and war at the beginning of 1990s. These events had an adverse effect on economic progress in these countries, and put their economic transition on hold. Capital inflows in the emerging Balkans region were mostly directed toward traditional sectors such as manufacturing and banking from continental Europe. Due to incomplete structural transformation, growth seemed better than it actually was. Joining the EU has been a major policy goal for all countries of the region. Some emerging Balkan countries such as Bulgaria (2007), Romania (2007), and Croatia (2013) have already joined the EU. Serbia and Montenegro have formally opened negotiations on a few chapters related to EU membership, while Albania and North Macedonia have become official EU candidate countries. The tight monetary policy adopted by all of the emerging Balkans countries helped bring stability. The monetary policy of the countries of the region was anchored via exchange rates that were more-or-less fixed. The euro has been the reference currency in these countries. Some countries as Bulgaria and B&H operate under a currency board arrangement (CBA) while Montenegro is euroized, and the other remaining countries in emerging Balkans (Albania, North Macedonia, Serbia, Croatia) have managed floating exchange rate systems which nonetheless are still closely connected to the euro (Barisitz 2004).

#### 7.2 THE STRUCTURE OF THE FINANCIAL SYSTEM

Historically, the financial systems of most transitioning countries have been predominantly banking oriented. However, the current financial systems have become more and more diversified via new non-banking financial intermediaries that have accelerated securities trading and external financing which has resulted in a better balance between different financial intermediaries. However, this alone has not enough. Changes are constantly taking place within the institutional structure of the financial market and electronic revolution in banking (Friedman 2000). Any country's economic development depends on the development and diversification of its financial system which requires a mixture of financial intermediaries and financial markets. Hermes and Lensink (2000) argue that financial system types also effect a range of supporting institutions that help markets operate effectively (financial intermediaries, regulatory and supervisory institutions as well as government policy). Knight (1998) states that banks in transition countries are the main players in the financial market. They are almost exclusively the suppliers of loans that finance

productive investments. On the other hand, stock markets are generally underdeveloped and play minor role. For the purposes of measuring the financial structure in CEE countries, we follow the methodology of Levine (2000) and Beck and Levine (2001) and employ the financial ratios that they used. Namely, we employ four financial structure ratios, two as financial structure indicators and two financial development indicators, as follows:

- 1. Structure-Activity (S-Activity) measures the logarithm of stock market's activity of relative to that of banks.
- 2. Structure-Size (S-Size) measures the logarithm of stock market capitalization and bank assets/GDP.
- 3. Finance-Activity (F-Activity) measures the level of financial sector activity in a given country. It is expressed as the logarithm of the relation between stocks traded to GDP and domestic credit to private sector to GDP.
- 4. Finance-Size (F-Size) is used to alternative measures of financial structure and its activity. It is expressed as the logarithm of the relation between stock market capitalization and domestic credit to private sector to GDP. Generally, these ratios are an invaluable analytical tool for measuring financial structure. The aim is to determine whether the financial system in the CEE and emerging Balkans region has remained "bank-based" or if some changes and progress has been made toward a more market-based system. Figure 7.1 shows that the financial systems in all analyzed countries are predominantly bank-based. If we use the Structure-Size (S-Size) indicator, one can see that Slovakia, North Macedonia, and Bulgaria have predominantly bank-based systems whose markets are much smaller than those in other countries.

On the other hand, Croatia and Serbia have seen a rise in stock market activities, especially between 2005 and 2008, and continue to grow. This might be explained by the fact that by 2007, market capitalization increased exponentially thanks to very low starting points; emerging Balkans countries are still at a very early stage when it comes to developing capital markets. As shown in Fig. 7.1, Structure-Size (S-Size) does not vary significantly across selected countries. Even more, the banking sector is a major channel of the financial system just as it was in the early years

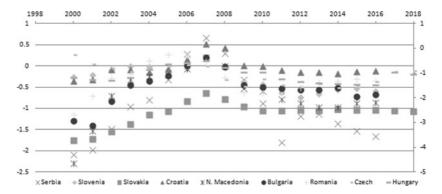


Fig. 7.1 Structure-Size (S-Size) ratios for selected transition countries (*Source* The author's elaboration on Global Development Finance Database and the World Bank 2019)

of transition. Additionally, we use an alternative measure of the financial structure (S-Activity) to assess whether the financial systems in transition countries are pre-dominantly bank-based systems or not (Fig. 7.1). Levine (2002) argues that measuring the financial structure with the S-Activity ratio is a more appropriate predictor of economic growth than S-Size. By exploring the country-specific financial structure indicators in the sample, one can see that all these countries still have a predominantly bank-based system. This may help account for why all these countries have very small and underdeveloped stock markets. In terms of the financial structure, we could not find much heterogeneity in their financial systems even though there were various dimensions of financial development. Indeed, as seen in Fig. 7.2, the S-Activity ratio values for Croatia, Serbia, and Slovenia are smaller than in other countries.

This reveals that certain progress has been made toward a market-based system in these countries while the financial systems of Slovakia, North Macedonia, and Bulgaria remain dominated by foreign banks. F-Activity and Finance-Size are considered as financial development indicators. The main difference between these two indicators is that the ratio finance activity measure of stock markets activities and activities of financial intermediaries while Finance-Size measure of the size the stock markets and financial intermediaries (Fig. 7.3).

A look at these cross-country statistical analyses reveals that the level of financial sector activity varies across countries by assessing the F-Activity.

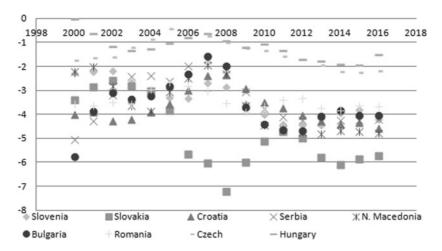


Fig. 7.2 Structure Activity ratios for selected transition countries (*Source* The author's elaboration on Global Development Finance Database and the World Bank 2019)

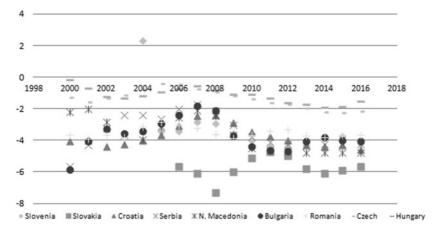


Fig. 7.3 Finance activity ratios for selected transition countries (*Source* The author's elaboration on Global Development Finance Database and the World Bank 2019)

More importantly, our analysis of F-Activity ratio reveals that the two most developed financial markets are the Czech Republic and Hungary, while the most underdeveloped markets with the most limited F-activity was Slovakia. In contrast, the financial sectors of the Czech Republic and Hungary are more developed because they were among the first transition countries underwent the necessary macroeconomic and market reforms during the early transition period. They have also drawn many benefits from their early accession into the EU which has facilitated in furthering their market integration. However, this has not been the case with all new EU members as illustrated by the cases of Slovakia, Bulgaria, and Romania (Fig. 7.3). When F-Size is analyzed, some heterogeneity is noticed. We found that in some selected countries commercial banks continue to dominate financial markets despite the growing role of some non-bank financial institutions in channeling of savings to investment. Although the capital markets in transition countries have experienced growth in the precrisis period, they have seen deterioration in the post-crisis period. A short overview of the capital markets of selected countries reveals that these markets do not fully serve those purposes. In fact, in transition countries, domestic capital markets are generally underdeveloped and in infant stage, placing little importance on the financing of their national economies when compared with developed countries. Furthermore, domestic capital markets lack liquidity which makes financing their national economies more expensive and thus are rarely used (Claessens et al. 2000). In terms of market size, Fig. 7.4 illustrates that the F-Size ratios among selected countries are quite comparable. Some countries from the sample have experienced significant growth over this period (with the exception of Slovenia and Slovakia). A positive growth trend in Finance-Size ratios was experienced in all countries in the pre-crisis period (between 2000 and 2008). As shown in Fig. 7.4, Croatia's capital market reached an unexpectedly high share of market capitalization in GDP (83.44%) while market capitalization ratio declined below 40% in the post-crisis period.

Very low value of market capitalization developments indicates that capital markets in the selected countries of the emerging Balkans region are still in an infant stage. They were established to facilitate ownership transformation and their convergence process toward the EU is far from complete. Other than Croatia's capital markets, markets in the emerging Balkans region are more underdeveloped and less liquid compared to the Euro area countries. The exchanges mostly have been used through the mass privatization of SOEs. The highest value of market capitalization

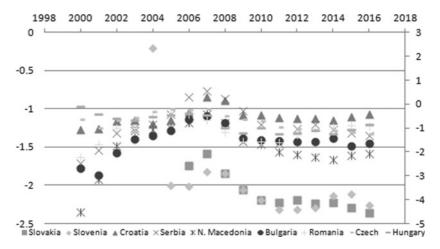


Fig. 7.4 Finance-Size ratios for selected transition countries, between 2000 and 2016 (*Source* The author's elaboration on Global Development Finance Database and the World Bank 2019)

has been experienced in Croatia, followed by the Czech Republic and Hungary. However, the stock markets have failed to be a serious alternative to bank lending and are far below those in the developed market economies.

#### 7.3 Financial Intermediaries Structure

The evolution of financial markets in the emerging Balkans region has been very slow and has undergone significant transformations since 1990s. These transformations have allowed for transition from the monobanking characteristic for the centralized economy of former Yugoslavia, to a two-tier banking system. At the same time, these transformations have been interrupted by political in-fighting, war, and economic problems. As time has gone on, it has become obvious that in the initial stages of the transition process, the financial sector was very weak, underdeveloped, and had poorly enforced financial contracts. It reflected the region's limited socio-economic development as well as problems inherent from the banking sector during the socialist era (Tang et al. 2000). Although endemic problems remain, there have been many changes since the

collapse of socialism that have brought positive change. The early reform process has led to the formation of a financial system that is largely dependent on the banking sector which is dominated by banks from Austria, Germany, and Italy.

The leading role of commercial banks within the finance industry is higher than in transition countries than in the EU countries. However, the importance of institutional investors in transition countries has grown, especially in Croatia where pension reform introduced compulsory pension insurance based on individual capitalized savings. Pension funds are still considerably small when compared with its potential for growth in the future. The reform of pension funds in Croatia was initiated in 2002 when a voluntary supplementary scheme for pension funds was established with open-end funds for employees and close-end funds for employers (Draženović et al. 2019). However, in the rest of countries in emerging Balkans, the pension fund industry still has not been restructured. While everyone recognizes the need for further reform, few moves have been made. Indeed, when we look at the cross-country overall structure of the financial system (Table 7.1) some changes in the relative share of the assets of individual financial intermediaries can be seen.

For instance, between 2005 and 2016, the share of financial institutions assets held by banks in total assets account for between 75 and 91%

**Table 7.1** Share of bank and non-bank financial institutions assets in total financial system assets

	institution	d by bank fin is as % of to system assets		financial assets as %	l by non-ban institutions 6 of total system assets	ık
	2005	2010	2016	2005	2010	2016
Albania	75.2	85.7	91.3	24.8	14.3	8.7
B&H	77.3	84.3	87.8	22.7	15.7	12.2
Bulgaria	64	92.94	82.93	36	17.07	17.07
Croatia	80.1	77	70.8	19.9	23	29.2
North Macedonia	91	89	84.75	9	11	15.25
Romania	90.9	91.3	93.7	9.1	6.3	6.3
Serbia	84.76	91.7	91.1	15.24	8.3	8.9
Montenegro	n.a	n.a	92.02	n.a	n.a	7.98

Source NCB reports, different issues

with the exception of Bulgaria. Interestingly, the share of financial institutions assets held by non-banks over the years has grown only in Croatia and North Macedonia, while in other countries the share of financial institutions assets held by banks accounted over 80% of their total assets.

Insurance companies are ranked as the second largest financial institution in the emerging Balkans countries. Once again, Croatia is an exception where the share of financial institutional assets held by pension funds controlled 14.6% of the total at the end of 2016 (The World Bank 2016). Their share in total financial system assets has more than doubled in the last eleven years. Croatia again was an exceptional case where insurance companies are the third largest financial institution controlling 7% of total assets. The insurance sector of Croatia has the largest base while Montenegro's base is the smallest. Interestingly, according to World Bank data, Croatia's insurance sector is ten times larger than Montenegro's. Sharp differences can be observed in the cases of North Macedonia, Albania, B&H, Montenegro, and Serbia with the average ratio of assets of insurance industry to GDP around 5% while in Croatia this number has exceeded 14% for several years now. The "least" significant group of financial institutions regarding of assets are investment funds. The investment fund industry was established through the process of mass privatization and the transfer ownership of assets while mutual funds are still in an infant stage. Commercial banks remain the most popular financial institutions and are the dominant source of financing for the domestic economy and population. A small share in the assets of the financial sector is held by the insurance sector which is dominated by non-life insurance that does not provide money for investment but only covers damage as well as the minimum private pension insurance, which holds most of the money in the form of government bonds. The insurance sectors of the emerging Balkans countries are largely undeveloped although they are slowly growing in each of these markets. In recent decades, the financial industry of the countries of the emerging Balkans has gone a long way from radical reforms and resistance to the most significant changes. Data in Table 7.1 shows that the financial systems of all transition countries are dominated by banks with heterogeneity, ranging from 70.8% in Croatia to 93.7% in Romania (2016). The structural imbalance in favor of commercial banks is not surprising since all transition countries have entered into the transition process without capital markets and with the insurance industry as the only part of the non-banking sector.

#### 7.4 Financial Euroization

Euroization is the term used to describe the situation when a foreign currency is replacing a nation's domestic currency. Looking closely banking development there is a large part FX denominated loans and deposits in total. The countries in the emerging Balkans are known for being highly euroized (Országhová 2015). The euroization of deposits, loans, and liabilities is examined by using FX denominated loans in percentage of total loans, FX denominated liabilities in percentage of total liabilities, and the FX denominated deposits in percentage of total deposits. There are some differences in the levels of deposit and credit euroization across the emerging Balkans economies. Past experiences with high inflation and monetary instability have proven to be a key reason for losing confidence in domestic currency's which has led to the rise of euroization in all countries of the region (Barisitz 2004).

In the post-transition period, the emerging Balkans region experienced a rise of inflation rates in the early of transition, and has retained a higher average level of euroization of deposits in their banking systems. In the region as a whole, between 2002 and 2017, the average share of FX loans to total loans was of 62.9%, while the average share of FX deposits to total deposits 50.6% of total, in most cases denominated in the euro. A series of armed conflicts in the early of 1990s and early 2000s, including the aggression in B&H, Croatia and Kosovo by Serbia and the conflict in North Macedonia, slowed down the process of transition. Overall, the region also experienced a period of hyperinflation in the early 1990s which lead to an expansion of euroization. In fact, between 1990 and 1994, the common currency of the Former Yugoslavia (dinar) experienced one of the longest periods of hyperinflation in the world. In 1994, the dinar was pegged to the Deutsche Mark (DEM), but it was officially devaluated again in 2000, after the Kosovo's conflict (Fabris et al. 2004). At that time, both Montenegro and Kosovo decided to make their monetary systems independent from Serbia. In the case of Kosovo and Montenegro, euroization was officially implemented primarily from political reasons (Fabris et al. 2004). The euroization in the region was further intensified because of a large number of migrants working in the euro area.

This section explores the level of the euroization of deposits, loans, and liabilities in selected countries in emerging Balkans. Looking across the countries, euroization of deposits shows some differences before and

after global financial crisis (GFC). As shown in Table 7.2, two countries: Albania and Serbia experienced stronger euroization of deposits than its peer countries. More specifically, in the pre-crisis period, the average ratio of FX deposits in Serbia amounted to the 63.85%, then it was increased to 72.25% in the wake of crisis, and reached 73.38% after the onset crisis.

The first point to note is that in post-crisis period Serbia (73.38%) and Croatia (66.83%) have been the most significantly euroized countries with the highest level of FX deposits. The second thing here to note is that Albania also experienced a rise of FX deposits especially after the period of high inflation and volatility of exchange rates. However, in Serbia the ratio of FX deposits to total deposits in the pre-crisis time (33.26%) was followed with rise on the onset crisis (43.84%) and 49.48% in the post-crisis period. At the same time, the situation is quite different in Croatia.

At least three separate periods related to deposit euroization are found in Croatia. The first one is the pre-crisis period of relatively high of FX deposits (68.22%). However, more severe de-euroization trends occurred between 2008 and 2009 (63.7%), with the post-GFC recoveries. Across the emerging Balkans countries considered in the study, North Macedonia has experienced the most volatile level of FX deposit. Namely, the average ratio of FX deposit raised from 24.1% (1999) to 56.3% (2001), which was a year of insurgency in the country. The next year, the average ratio of FX deposit fell to 49.6%, experienced a recovery in 2003 (71.8%), and again decline to 44.5% in 2007. However, since 2009, there has been a trend of de-euroization deposits in North Macedonia in which levels have fell to the same levels as they were at in the pre-crisis period. When it comes to Serbia, 2001 to 2005 was marked by a rise in the average deposit euroization ratio (68.23%) and a decline between 2006 and 2007 (65%). It began to rise again in the post-crisis period (73.38%). Overall, the average deposit euroization ratio has tended to increase during the GFC (72.25%). In the post-crisis period, a trend of further deposit euroization has been less affected in Albania, Croatia, Serbia, and B&H, and it remained relatively high. On the contrary, the decline in deposit euroization was found in North Macedonia, Romania, and Bulgaria. For instance, Romania has experienced a 7.54% decline in FX during the crisis period, and from 2008 onward only 1.92% decline. Bulgaria and North Macedonia also experienced similar trends in de-euroization deposits during the crisis and post-crisis period.

Next, Table 7.2 shows a trend of credit euroization among the emerging Balkans countries. In the post-crisis period, FX loans in Albania,

 Table 7.2 Indicators of financial euroization

	FX loans to	X loans to total loans		FX liabilities to total	ies to total liabi	lities	FX deposits	EX deposits as % of total deposits	eposits
	Pre-crisis	Crisis period	Post-crisis	Pre-crisis	Crisis period	Post-crisis	Pre-crisis	Crisis period	Post-crisis
Serbia	71.95	73.1	71.30	73.25	74.00	76.59	63.85	72.25	73.38
Albania	74.57	71.4	62.92	42.23	48.70	52.13	33.26	43.85	49.48
Croatia	71.88	68.85	71.25	76.77	77.55	71.28	68.2	63.7	66.83
N. Macedonia	56.75	58.55	49.50	50.25	57.75	52.62	51.28	51.25	45.9
Romania	54.98	58.95	54.50	44.80	43.25	42.27	44.33	36.80	35.28
Bulgaria	48.18	58.1	55.19	55.72	60.65	57.10	46.20	44.25	42.00
B&H	68.37	73.6	63.86	63.22	69.35	63.48	46.65	43.00	44.96

Source Author's elaboration on IMF data

Serbia, B&H, and North Macedonia experienced declines. Interestingly, in all of the emerging Balkans countries, the ratio of FX loans has occupied a high percentage of total loans (over 50%), but its dynamic is considerably volatile in both the pre-crisis and post-crisis periods. In Albania between 2002 and 2017 over 74% of bank loans were denominated in foreign currency; 71.4% in the crisis period and 62.92% in the post-crisis period. However, there was a slight increase in the percentage of FX loans at the onset of GFC, and then a decline after the onset of the GFC. The euroization of loans continued to rise in Croatia in the postcrisis while it declined in the rest of countries during the same times. Additionally, Croatia experienced declines of FX loans in the wake of the crisis (68.85%), and a rise in the post-crisis period (73.86%). On the contrary, B&H experienced a rise of FX loans in the crisis period (73.6%) and a fall in the post-crisis period (63.86%) making this rating different from the pre-crisis level. The ratio of credit euroization remains relatively high in Serbia and Croatia after the crisis period and might present a problem for financial stability in the selected countries. Generally, in the post-crisis period more than 50% of bank loans remain denominated in foreign currency in all emerging Balkans countries (with exception of North Macedonia which holds ay 49.5%). The growing importance of FX loans might be explained by the high convergence of domestic currencies with the euro, as well as with the differentiation of domestic interest rates against foreign countries which allowed for lower costs when borrowing in foreign currency. In Croatia, the cause of credit euroization is due to a high degree of deposit euroization; however, different historical events in the political, economic, and financial sphere have also been a contributing factor. In addition, borrowing in foreign currencies was represented in countries with fixed exchange rates system, in particular currency board arrangement countries (Bulgaria and B&H), given that the possible risks related to FX loans were considerably lower.

Moreover, Table 7.2 shows that the share of FX liabilities increased strongly in Serbia and Croatia; more than 70% of total liabilities. Serbia and Croatia are considered highly euroized countries. On the contrary, Romania (44.8%) and North Macedonia (50.25%) show the lowest values of the ratio in comparison with the other countries. The overall FX liabilities trend in Serbia was high and continued to rise in the post-crisis period. In Albania, in the pre-crisis period FX liabilities reached 42.23%, continued to increase to 48.7% in the crisis period and 52.13% in the post-crisis period. In Croatia, the share of FX liabilities declined between

the pre-crisis period (77.55%) and post-crisis period (71.28%). The rest of countries such as B&H, Bulgaria, and North Macedonia have experienced the same trend regarding the rise of euroization liabilities. As Table 7.2 reveals, Romania is a little different than the other cases because a trend of liabilities' de-euroization was recorded at the onset of the crisis (43.25%) and a rise in euroization occurred in the post-crisis period (42.27%). However, the ratio remained lower than in pre-crisis period (44.8%).

#### 7.5 Financialization of Financial Sector

In the last two decades, there has been an increasing level of financial deepening in the advanced economies. In fact, financial deepening is often used interchangeably with the term financialization in the debate about nature and the evolution of finance over the past few decades. In fact, Epstein (2005) argues that financialization occurred as result of the growing dominance of financial markets, financial institutions, financial and financial elites in the modes of managing the economy and its most important institutions, both nationally and internationally. Similarly, Sawyer (2014) defines the phenomena of financialization as related to expansion of financial markets, the deregulation of the financial industry, the birth of a whole set of new financial institutions and services, the dominance of finance over the feasible economy, and the general dominance of finance over other aspects of society. In the case of the emerging Balkans, the definition of financialization refers to the dominance and increase of the importance of foreign-owned institutions through its control over total assets, housing loans as % of GDP, growth in the share of financial activities in total value added. Also, financialization has greatly influenced some trends as follows: a rapid growth of household debt and a rapid expansion of the financial sector over to the real economy (Ganić et al. 2017). Since the late 1990s, transition economies have attracted foreign capital in the finance (banking) sector. These facts led foreign banks to acquire the banking sector of transition economies during the privatization process. The low degree of financial deepening and the great financial potential of the emerging Balkans region represented a lucrative opportunity for foreign banking groups to easily position them in the market. In the short term, it has allowed foreign banks to become the leading source of financial intermediation in the emerging Balkans countries. The profile of the banking industry of emerging Balkans is rapidly changing, driven primarily by rise of the share of foreign bank assets in

total assets. At the end of 2006, this share ranged from over 80% of the total assets in Bulgaria and Romania, to over 90% in Croatia, Montenegro, B&H, and Albania (Fig. 7.5). Below these ratios, with a share of foreign bank assets of 69.1% (2006) in total assets is Serbia because of the slow pace of the privatization process in the late of 1990s. A decade later, the share in assets held by domestic banks of the emerging Balkans was below 20% with the exception of Serbia and Bulgaria. The increase in the share of financial activities in total value added is also one of the indicators of financialization in the countries of the emerging Balkans countries. Across the region the value added of the financial sector to the GDP increased between 2000 and 2018.

In 2018, Croatia (6.1%), Bulgaria (6.8%), Montenegro (4.9%), and B&H accounted for the highest amounts of financial activities in total value added while other countries of the region (Albania, Serbia, Romania, and North Macedonia) are lagging behind (Fig. 7.6). They accounted for the lowest amount of financial activities in total value added. It is interesting that the trend of financialization of the emerging Balkans region was not hit hard by the global recession generated by the GFC. With the exception of Albania (2.8%), North Macedonia (3.23%),

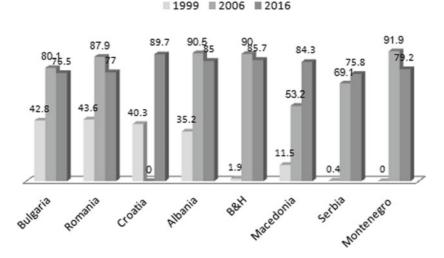


Fig. 7.5 Share of foreign bank assets in total assets (%) by countries (*Source* EBRD Transitional Report, different issues and Nation CB reports)

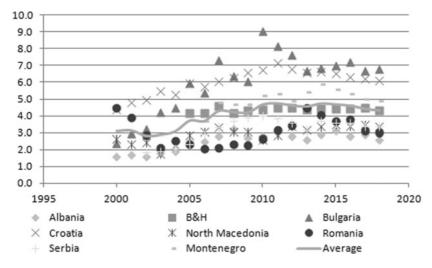


Fig. 7.6 The total share of finance as % of total value added (*Source* Author's elaboration on EUROSTAT data)

and Serbia (3.57%) the other remaining countries from the region actually increased their levels of financialization in the post-crisis period between 2010 and 2018.

Moreover, the next two indicators of financialization are typically based on increased household borrowings and rises in a country's external debt. In the balance sheet of commercial banks, household loans take a central role and represent the fastest segment of total loans. Accordingly, the rise of indebtedness of households in post-socialist countries has already been recorded and is followed by the process of financial liberalization and with the entry of foreign banks. One can see that, household borrowings and demand for loans grew considerably in the emerging Balkans countries between 2000 and 2016 and were very strong while easy access to credit made households to borrow more (Fig. 7.7). Comparing the data for countries in emerging Balkans between 2000 and 2017, we found the expansionary rise of household borrowings and demand in all analyzed countries. The average rise of household borrowings and demand for loans is the most evident in Bulgaria, B&H, Montenegro, and Croatia. We also found a trend in the rise of household indebtedness

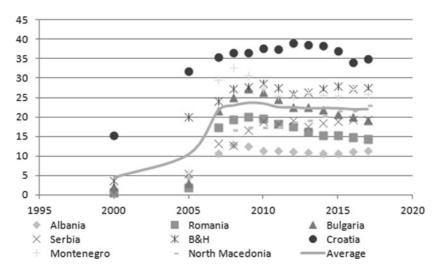


Fig. 7.7 Loans to household as % of GDP, 2000–2017 (Source Author's elaboration on NCBs of countries in emerging Balkans)

in other remaining countries in emerging Balkans, but with somewhat less intensity (Fig. 7.7).

In fact, in 2017 the loan to household ratio grew rapidly and reached over 20% of GDP in North Macedonia (22.9%), B&H (27.5%), Montenegro (26%), and Croatia (35%). In contrast, in countries such as Albania and Romania, the loan to household ratio is lower, 11.5% and 14.4% of GDP, respectively, over the same period. In all countries of the region, only in Albania, North Macedonia, and Serbia was the ratio of household debt to GDP higher in 2017 than in 2006. On the other hand, in B&H, Bulgaria, Croatia, Montenegro, and Romania household debt to GDP stagnated due to recessions and as a result was generally lower than in the pre-crisis period (Table 7.3).

Additionally, based on the level and trends of household debt, our set of countries may be classified in two groups. The first group of countries includes: Albania, Montenegro, North Macedonia, and Serbia where we found a rise in household indebtedness, both as percentage of GDP and also per capita. We found that in a second group of countries (Croatia, B&H, Romania, and Bulgaria) there was a fall of household indebtedness as % of GDP, but *not* in per capita terms. Debt-to-income ratios have

Table 7.3 Trends of household indebtedness in the emerging Balkans

Country	Househoi billion)	Housebold loans (in institution)	ı EUR	Housebold (in %)	Household indebtedness/GDP (in %)	ss/GDP	Indebted (in EUR	Indebtedness per capita (in EUR)	a pita	Household debt-to-income	d ıcome ratı	so
	2006	2012	2017	2006	2012	2017	2006	2012	2017	2006	2012	2017
Albania	0.85	1.07	1.25	10.7	11.2	11.5	268		435.3	06.0	0.97	1.10
Bulgaria	6.63	9.41	10	21.6	22.6	19.8	875		1,413	2.58	3.29	2.46
B&H	2.9	3.47	3.6	26.1	25.9	22	692		1,038	2.34	2.15	2.33
Croatia	15.37	17.1	15.2	35.4	39.1	33	3,567		3,650	5.50	5.43	4.38
N. Macedonia	1.13	1.810	2.2	13.6	18.6	22	553	878	1,094	2.15	2.58	2.80
Montenegro	0.79	1.029	1.24	29.6	25.2	26	1,269		1,988	4.06	3.33	3.88
Serbia	3.83	5.68	7.6	13.3	18	20.7	518		1,084	1.49	2.01	2.56
Romania	19.8	23.64	26.1	17.2	17.6	15.9	937		1,332	2.63	2.50	2.49

Source Author's calculation (debt- to-income ratios) on data Central banks of selected countries, statistical offices

been rising in Albania, North Macedonia, and Serbia since 2006, while in Croatia, Romania, and Montenegro these same ratios have been falling. Croatia has had the highest debt-to-income ratio throughout the period while Albania's debt-to-income ratio was the lowest (Table 7.3).

Household indebtedness to GDP varies throughout the emerging Balkans region. Interestingly, in all countries (except Romania and Albania), household debt reached 20% or higher due to the rapid rise in borrowing and the extraordinary credit boom over the past decade. However, some countries as Albania, Romania, North Macedonia, Serbia, B&H, and Bulgaria still have room for additional household borrowing with debt only below 25% of GDP. As of 2017, the ratio for Croatia was 33% and 26% for Montenegro. Croatia, Romania, and Bulgaria have the largest household loan markets, while Albania, B&H, Montenegro, and North Macedonia have the lowest and continue to significantly lag behind the aforementioned countries. The trend of rising household borrowing has been evident over the last eleven years as a result of consumer spending increases and a credit boom (especially in the pre-crisis period). Since 2006, household debt per capita begun to increase and rise above its previous levels in Albania, B&H, Montenegro, North Macedonia, and Serbia. Croatian household suffer from higher levels of indebtedness, over 3 times higher than in B&H, Serbia, and North Macedonia, while Albania had the lowest level of indebtedness per capita. Indebtedness per capita in Croatia reached 4008 EUR (2012), but because of the recession it fell to 3650 EUR (2017).

### 7.6 Macroprudential Policy in the Aftermath of the Recent Global Financial Crisis—The Region's Experiences

The rapidly implemented financial liberalization has contributed to the emergence of a large number of financial crises. In response to these crises, the minimum capital threshold (and other parts of the financial sector) has been uniformed with the aim to improve the banking regulatory environment, especially in the emerging market economies. The financial sector in the Balkan countries is characterized by the strong dominance of the European foreign banks in the countries' banking sector while non-banking sectors remained still relatively undeveloped. In addition, over 95% of the total banking shareholders's capital is in foreign hands. As a

result of the privatization process, the inflows of FDI underwent fundamental changes since the early 2000s. The regional banking sector in the pre-reform period had relatively little experience with risk assessment while financial markets operated at a very low level or did not even exist. In the meantime, during post-reform period the banking sector deepened significantly driven by the credit growth and access to the international financial markets (International Monetary Fund 2015). Macroprudential policies in the European transitional countries are mostly driven by the need to manage excessive credit expansion, especially in the pre-financial crisis period. In these countries, macroprudential policies and measures are applied less than in developed EU countries due to the structure of their financial sector and the overall level of financial development in the region. The adopted macroprudential policies and measures to address the financial stability concerns differ between the countries (Öztunc and Wech 2017). In continuation, in the Balkan region, heterogeneity macroprudential policy tools, institutional settings and the different levels of activism are visible in pre-crisis, crisis, and post-crisis periods. As shown in Table 7.4, all emerging Balkan countries increased the utilization of macroprudential measures in post-crisis period. The percentages indicate the intensity of usage of macroprudential instruments in place in the precrisis, crisis, and post-crisis periods. Montenegro is the only country that did not utilize any macroprudential measures in the pre-crisis period. For instance, it indicates that the average MPI in Montenegro starts at 0 in pre-crisis period and ends at 1.87 in post-crisis period. Generally, on average, in post-crisis period, Serbia and Romania applied 4.5 and 4.12 instruments, respectively, while it was measured the lowest in North Macedonia and Montenegro with 1.12 and 1.87, respectively. In postcrisis period, except in Bulgaria, MPI was comparatively higher in the remaining countries of the region in comparison with the crisis period.

The increase in the utilization of the financial institutions-targeted instruments is more pronounced than the usage of borrower-targeted instruments in the pre-crisis, crisis, and post-crisis period across the considered countries. Except Serbia and Romania, the ratios that target borrowers (loan to value ratio cap and debt to income ratio) in the remaining countries of the region were neither adopted nor utilized, in crisis and post-crisis periods, respectively. In 2017, among the available instruments for the financial institutions targeted, Croatia (four instruments) and Serbia (five instruments) were the only countries that adopted and implemented four or more macroprudential policy instruments. They

Table 7.4 Intensity of using macroprudential policy measures

	Macroprudential index (MPI)	Borrower- targeted Instruments	Financial institution	Financial Macroprudential institution index (MPI)	Borrower- targeted	Financial institution	Financial Macroprudential institution index (MPI)	Borrower- targeted	Financial institution
	Pre-crisis period	Iristr witherus		Crisis period	instruments	,	Post-crisis period	Instruments	
	0.25	0	0.25	2	0	2	2.12	0	2.12
	1.87	0	1.875	æ	0	8	2.75	0	2.75
	1	0	1	1	0	1	1.75	0	1.75
	1.5	0	1.5	1.5	0	1.5	2.62	0	2.62
	1	0	1	-	0	7	1.12	0	1.12
Macedonia	e								
Montenegro	0	0	0	1	0	1	1.87	0:	1.87
	1.5	0.5	1	4	1	æ	4.5	1.25	3.25
	2.5	1	1.5	3	7	2	4.12	1.87	2.25

Source Author's elaboration on Cerutti et al. (2017) dataset

were followed by B&H, Bulgaria, and Romania with three instruments, and Albania, North Macedonia, and Montenegro with two instruments, respectively. Furthermore, none of the countries in the region managed to abolish any macroprudential instruments in the post-crisis period. The above data show that the macroprudential policies and measures to address financial stability concerns need to be continuously adjusted in order to maintain the stability of countries' national systems, as a whole. Also, the high degree of euroization in the countries of the region further complicates the successful conduct of the monetary policy, and thus increases the financial stability concerns regarding the outcomes of the implemented measures. In the following years, borrowed-based policies and implemented borrowed-based instruments that target borrowers are necessary because they neither adopted nor used in the most countries of the region.

#### 7.7 Conclusion

The financial systems of transition countries remain broadly bank-based, despite the fact that some progress has been made by non-banking financial institutions. Overall, in the region, the financial sector is still in the early stage of financial development. It is still adjusting to the needs of a market economy. For instance, the size of the financial sector in the emerging Balkans region is still largely lagging behind even the financial systems of advanced transition countries (the CEE countries) in terms of the presence of other financial intermediaries and scope of financial services. Despite some differences across the region the level of financial intermediation provided by institutions other than the banks remains very low. Also, the emerging Balkans' experience indicates that the financial euroization remains high in all observed countries. One of the reasons is due to a lack of strategy to ensure long-term exchange rate stability while a second reason is related to a lack of credible monetary policy.

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#### CHAPTER 8

# What Is Driving International Financial Integration in the Emerging Balkans?

Abstract This chapter seeks to examine the level of international financial integration (IFI) in the emerging Balkan economies. This chapter analyzes whether there are significant levels of IFI in the region and seeks to identify determinants of these phenomenons. The chapter aims to achieve two main goals. First one is to empirically analyze a wide array of variables that constitute IFI by employing panel data analysis and second one is to measure variations in the level of IFIs in the emerging Balkan economies between 2000 and 2016. In addition, the chapter looks at the cross-country differences regarding determinants affecting the financial integration. The findings revealed that countries in the emerging Balkans with a high enrollment rate of secondary education, high level of banking intermediation, and well-developed stock markets can contribute to the higher level(s) of IFIs.

**Keywords** International financial integration (IFI) · Panel data analysis · Financial development indicators · Emerging Balkans

#### 8.1 Introduction

IFI represents the process where one country's financial markets are closely integrated with other country's markets all over the world. Financial integration, overall, represents a chance for countries to share information between themselves, share the best practices between the financial institutions of different countries, and share technology ideas, all the way to enable the firms to raise and borrow funds directly from the international capital markets (Edison et al. 2002). The countries in the emerging economies' Balkan's region are still in the early stages of IFI, and current financial developments have shown the limited progress in financial integration. This chapter explores the determinants affecting IFIs (measured by a nation's foreign assets and foreign liabilities as share of GDP) and differs from previous studies because it focuses on the emerging Balkans that have been less explored. Accordingly, this research fills the academic literature gap addressing emerging Balkan economies. Even though abundant literature is available on the issue of IFI, the majority of studies are conducted in developed countries and recently in some other countries due to an increasing internalization of finance. Secondly, findings of this research serve as a way of documenting current level of IFI present in the emerging Balkan economies and provide a basis for the future studies on this topic in the region. The first part of the chapter concentrates on the literature review in the world and in the emerging Balkan economies. Following this, the methodology and econometric models are presented with the description of the variables included in the regression models. Lastly, in this chapter, determinants of IFI are examined, explored, and explained.

#### 8.2 Literature Review

Various studies in the literature looked into the determinants of IFI, as well as the economic impact of IFI on a country's economic development. Studies of the financial integration are fairly similar in their form and execution. Consequently, today, there is a considerable body of literature dedicated to the financial integration topic. Financial integration received scholarly attention in 1980s after one study conducted by Feldstein and Horioka (1980). Their study is famous in this field and found its place in different renowned economic journals. They argued that the high

mobility of the international capital and its association with investment and savings lead to high levels of financial integration.

Research of Agenor (2001) was concentrated on the benefits and costs of IFI. They compared 28 developing countries by using harmonized data for the years 1980-1998. The country's level of IFI proxied with FDI inflows was found to be determined by the real GDP per capita and degree of trade openness. However, some other explanatory variables, such as the rate of return on foreign asset (as measured by real LIBOR rate), the domestic rate of return on domestic investments, and the country's economic prospects (as measured by the rate of growth of real GDP), as well as the real exchange rate volatility, have shown to be statistically insignificant. In continuation, large capital inflows with a short-term investment horizon can increase domestic investment levels. However, their long-term impact is very limited, or even statistically insignificant, if they are intended to finance speculative and low-quality domestic investment (Agenor 2001). Many other empirical studies utilized Agenor's research when evaluating the impact of the selected macro-financial variables in the explanation of the country's variation in IFI. For instance, Portes and Rey (1999), Eichengreen (2001), Alfaro et al. (2004), Volz (2004), Vo (2005), and Aizenman and Pinto (2011) can be listed as the research additions to these studies. Further research of the financial integration (Vo 2005; Eichengreen 2001) found statistically significant evidence about the relationship between portfolio investment and levels of indicators of financial integration. More relatedly to this study, Lane and Milesi-Ferretti (2006) investigated well-developed financial systems in the OECD countries. Their database called "External Wealth of Nations" included the revision of the previous methodology and changes in the composition of international financial position (IFS).

There have been some studies in the academic literature related to the measuring of the IFI levels in transition countries. These studies were generally inspired from studies performed by Alfaro et al. (2004), Lane and Milesi-Ferretti (2003), Vo (2005), Garalia and Othmania (2015). Alfaro et al. (2004) investigated the various links among FDI, financial markets, and economic growth in 71 countries using the cross-country data. More relatedly to this study, in their study, Lane and Milesi-Ferretti (2003) empirically explored determinants underlying the variations in IFI over time and across countries. They collected data from 18 OECD countries. Vo (2005) extended the research developed by Alfaro et al. (2004) and proposed a more detailed set of new measures and new database on IFI in 79 countries.

IFI continues to receive increasing attention in many European transition counties, as well. It is most studied in advanced CEE countries in the early of 2000s and less in the rest of the European transition studies. Some other studies (Voronkova 2004; Volz 2004; Kučerová 2009; Derado 2009; and Ganić 2020) examined the existence of IFI determinants in European transition and post-transition countries. Their findings revealed some differences and variations in IFI levels across the countries. For instance, Ganić (2020) provided some evidence about variations and differences among macro-finance variables in the examination of the level of IFI in 13 European transition and post-transition countries. Due to the lack of developed financial markets and disparity between two sub-regions, his study revealed that determinants of IFI for European post-transition countries are not relevant for the European transition countries (Table 8.1).

#### 8.3 Methodology and Data

Numerous researchers turned to using dynamic panel data analysis, cross-country analysis in their researches related to IFI. However, identifying and measuring variations in the level of IFI is not an easy task. The research has to be designed carefully and numerous other determinants have to be taken into consideration. It is rather difficult to use any already completed secondary datasets for this type of research, since the level of IFI can be influenced by many factors. In order to detect determinants and the level of IFI, the research must observe whether there are differences related to the financial structure across the emerging Balkan economies (e.g., Albania, B&H, Bulgaria, Croatia, North Macedonia, Romania, Serbia, and Montenegro). The study covers the period between 2000 and 2016. Selection of a time period as well as a sample of countries is determined by the availability of data.

IFI is proxied with nation's foreign assets and foreign liabilities as share of GDP. The study follows research conducted by Lane and Milesi-Ferretti (2006) by employing panel data analysis. The variables of IFI included in the econometric models followed research performed by Lane and Milesi-Ferretti (2006). The data for eight of the emerging Balkan countries were sourced from the following databases: lnGDPPC, education level (the enrollment rate of secondary education), infl (inflation-consumer prices, annual), the ratio of domestic credit to

 Table 8.1
 Summary of the related literature

Author(s) and Year of Study	Major findings
Portes and Rey (1999)	The study used gravity model for 14 countries to explain international transaction in financial assets for the period 1989–1996. The results that they obtained indicated that a geographical component plays the important role in international financial flows. Further, with a variable market size in source and destination country, trading costs are very important in explanation of gross transaction flows
Vo (2005)	His research explored the determinants of international financial integration by covering 79 countries (e.g., 32 developed and 47 developing countries) for the period 1980–2003. The study revealed that IFI is determined and explained by trade integration, banking intermediation, and the level of economic development (GDP growth)
Lane and Milesi-Ferretti (2003)	There are some highlights in determinants that led to accelerate IFI in the OECD countries. One suc study conducted by Lane and Milesi-Ferretti (2003) analyzed variations in the financial integration across 18 OECD countries between 1978 and 2001. The set of employed variables in their study as trade openness, GDP per capita, tax policy, and market capitalization is shown as statistically significant to explain variations in IFI. Furthermore, increasing degree of trade openness and stock market developments (measured by stock market capitalization) is shown as the most statistically significant variables in the determination of international cross-holdings of foreign asset and liabilities
Vo and Daly (2004)	The research found that economic growth in developing countries does not accelerate due to cross-border capital flows (although it is shown that the inflow of capital into the country is determined by the economic growth). Some other variables employed in regression models, such as trade credit, transport costs, and insurance of goods, are also provided evidence to be significant determinants of financial markets integration

(continued)

Table 8.1 (continued)

Author(s) and Year of Study	Major findings
Volz (2004)	The study examined the level of IFI between the new EU members and old EU members as well as a level of their convergence. They reached the conclusion that a foreign bank penetration is one of the crucial variables in the determination of the level financial integration across the members. However, the structure and level of IFI are still different in the old and new EU members
Kučerová (2009)	Between 1994 and 2006, she examined international financial position of the eight new EU members by using harmonized data. The study finds that deepening of foreign trade and economic development leads to further integration of financial market in new EU members
Derado (2009)	Derado (2009) examined 11 European transition countries using cross-country panel analysis between 1995 and 2007. The study reveals that financial integration is influenced by trade integration, the "internationalization" of the banking sector, and formal relations with the EU. On the contrary, a few variables as economic development and population are not found as statistically significant and they are shown to be les relevant
Garalia and Othmania (2015)	Garalia and Othmania (2015) conducted one of those studies for the period from 2006 to 2012, in the MENA region. They used a regression analysis in their research to prove that IFI is determined by trade integration, economic development, and financial development. They also failed to confirm taxation policies, inflation, and education as statistically significant variables in the promotion of IFI in the MENA region

(continued)

GDP (DCREDIT) are obtained from the World Bank/WDIs, Privatization obtained from EBRD indicators, and KaOpen (Capital Openness) data are sourced from Chinn.I to index and the size of stock market, StkCap (Beck et al. 2013). Trade openness (TRO) data are drawn from Eurostat database, while tax rate data are sourced from the KPMG. The explanatory variables for evaluating their impact on the IFI in the regression models may be divided into macroeconomic and financial market

Table 8.1 (continued)

Author(s) and Year of Study	Major findings
Ganić (2020)	Empirically explored the level of variations in IFI between seven European post-transition (e.g., Croatia, Bulgaria, Romania, Slovenia, Czech Republic, Poland, and Slovakia) and six European transition countries (i.e., Albania, B&H, Montenegro, North Macedonia, Serbia, and Turkey). The study uses GMM dynamic panel approach to examine whether private credit market and stock markets are relevant in the determination of IFI. However, the results indicate that private credit markets, financial freedom, financialization, and stock markets are significant drivers of IFI in the European post-transition countries but not in the European transition countries

Source Author's compilation

development variables. In addition, several control variables are used in a model as follows: LnGDP per capita growth (annual percentage), infl (inflation), tax rate, trade openness, and privatization. As mentioned above, the economic development is proxied with lnGDP (GDP per capita growth). Following the early researches conducted by Lane and Milesi-Ferretti (2003) and Kučerová (2009), a variable of economic development is expected to have a positive impact on the IFI levels. In addition, the inclusion of inflation variable is based on the evidence of numerous previous studies that the inflation rate is one of the measures of reliability and credibility of economic policy and country risk. For instance, low inflation rate implies a positive effect on the level of IFI (Vo and Daly 2007). The variable of trade openness measures trade openness of any country and may be a good predictor in explanations of IFI. It is expressed as the ratio of export plus import divided by the GDP. Numerous recently conducted studies conducted by Kučerová (2009), Vo (2005), Vo and Daly (2004), and Derado (2009) have confirmed the existence of a positive link between financial integration and trade integration. Aizenman and Noy (2006) found evidence that trade openness leads to the growth of financial flows and consequently stimulates the trade growth. Similarly, Rajan and Zingales (2003) suggest that the trade deficit is strongly correlated with degree of financial openness. In fact, high trade openness ratios of the country to world markets can lead to more cross-border financial transactions. A positive impact of trade openness is expected to influence the degree of IFI. A variable of privatization is included in the regression based on the common sense, as well as a theoretical background that suggests that the privatization programs are one of the drivers of the growth in foreign assets and liability positions of any country (Lane and Milesi-Ferretti 2003). Accordingly, it is supposed that more privatization projects can lead to more capital flows by deepening financial integration. Furthermore, in the line with Prasad et al. (2003) and Vo (2005) who postulated that high educational quality tends to be highly integrated into the international financial flows, in this study's model, it is expected that this variable positively impacts the level of financial integration (i.e., better educational systems lead to greater levels of financial integration).

Another variable that might positively affect the IFI levels is country's tax policy. For instance, low corporate tax rates, including low tax burden, stimulate and encourage FDI inflows and lead to transfer of financial assets (Vo 2005).

The second group of indicators (i.e., Financial Market Development Indicators) comprises variables such as KaOpen (Capital Openness data are sourced from Chinn.I to index), the size of stock market (StkCap), and domestic credit as a share of GDP (DCREDIT). Above-listed variables of financial market developments might be crucial for the determination of IFI. They are chosen to show the best possible way in which the countries' market structure could operate. It is expected that both variables lead to higher country's level of financial integration (Vo 2005). Both variables showed a significant impact on the level of IFI (Portes and Rey 1999; Vo 2005; Lane and Milesi-Ferretti 2003; Ganić 2020). Revealingly, Ganić (2020) found mixed results for European transition and European post-transition countries. The panel data models are specified and structured following Baltagi (2008). It may be estimated as follows:

$$IFIGDP_{it} = \alpha_i + \beta' x_{it} + u_{it}$$
 (8.1)

where IFI expresses IFIGDP<sub>it</sub> is a proxy for IFI of country i in year t,  $x_{it}$  denotes K x 1 vector of explanatory variables for country i in year t,  $\alpha$  denotes intercept, coefficient  $\beta$  is a K x 1 parameter vector, and  $u_{it}$  is the usual disturbance term.

The second model allows the intercept to have different values in the cross-section and may be estimated as follows:

$$IFI_{it} = \alpha + \beta' x_{it} + u_{it}$$
 (8.2)

Each country is allowed to have its own intercept, which captures timeinvariant country's features.

The third panel data model extends the previous one by imposing control for common time effects for all eight countries in the sample.

$$IFI_{it} = \alpha + \gamma_t + \beta' x_{it} + u_{it}$$
 (8.3)

where  $\gamma_t$  is the time-specific effect.

The final model includes both time-variant country's features and common time variations as follows:

$$IFI_{it} = \alpha_i + \gamma_t + \beta' x_{it} + u_{it}$$
 (8.4)

Following Petersen (2009), who explained that fixed effects in data series bias standard errors downward, it can be accounted for potential error correlation by using clustered standard errors and/or fixed effects.

## 8.4 FINDINGS AND DISCUSSION

The summary of descriptive statistics was prepared to observe the trends, the minimum, mean, and maximum values of the observations. By looking at the number of observations, since not all data were available for every year and for every country, the data are considered as unbalanced.

The summary findings of descriptive statistics are given in Table 8.2. The highest degree of IFI (3.82) was found in Montenegro (2015) with the lowest (0.77) in Romania (2002). The mean of financial integration in the sample is 1.50, while the standard deviation between the countries in the sample is 0.38. It indicates that there is no high heterogeneity across the countries related to IFI. Next, the mean value of GDPPC for the selected countries is 8.64%, while the maximum value was 9.60% (Croatia, 2008) and the minimum value was 7.75% (Albania, 2000).

These values are in accordance with this research's expectations, due to differences in the economic development level of each country and their EU membership status. The values for the stock market development show that the mean value for countries in the region was 23.73%,

 Table 8.2
 Panel summary statistics

Variable		Mean	St. deviation	Min	Max	Observ.
IFI	Overall	1.53	0.69789	0	3.820697	N = 136
	Between		0.380526	1.081258	2.095727	n = 8
	Within		0.59951	-0.56859	3.252108	T = 17
STKCAP	Overall	23.73	22.08298	0.204757	86.6456	N = 99
	Between		23.60061	7.906692	75.31096	n = 7
	Within		13.27023	-1.84744	70.08699	T-bar= 14.14
KAOPEN	Overall	0.52	0.321794	0.046985	1	N = 122
	Between	1	0.281433	0.083608	0.819088	N = 8
	Within		0.211075	-0.13939	0.880699	T = 15.25
TAXRATE	Overall	14.34	4.869579	9	25	N = 136
	Between		3.150243	11.35294	20.03765	n = 8
	Within		3.868456	10.04147	25.68853	T = 17
GC	Overall	0.12	0.323381	0	1	N = 136
	Between		0	0.117647	0.117647	n = 8
	Within		0.323381	0	1	T = 17
EDU	Overall	87.4	6.627614	66.4433	98.57139	N = 116
	Between		5.707877	78.51466	93.83558	n = 8
	Within		3.894191	75.33033	97.6136	T-bar = $14.5$
Infl	Overall	6.29	13.05332	-1.6	94.87	N = 136
	Between		5.255615	1.990176	15.48941	n = 8
	Within		12.08476	-7.81407	90.43593	T = 17
lnGDPPC	Overall	8.64	0.4318279	7.757026	9.600956	N = 136
	Between		0.418602	8.175081	9.481294	n = 8
	Within		0.178928	8.213861	8.895511	T = 17
TRO	Overall	90.68	18.10373	37	134.53	N = 136
	Between		12.6388	74.3	111.1671	n = 8
	Within		13.67251	53.38889	118.8171	T = 17

(continued)

<b>Table 8.2</b> (	(continued)	
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Variable		Mean	St. deviation	Min	Max	Observ.
PRIVAT	Overall	3.18	0.576438	1	4	N = 125
	Between		0.486864	2.359333	3.9175	n = 8
	Within		0.35361	1.822347	3.557013	T = 17
DCREDIT	Overall	39.70	17.13959	4.74	70.11	N = 132
	Between		11.45873	25.52765	58.90188	n = 8
	Within		13.34295	4.8736	63.86941	T-bar = $16.5$

Source Author's Calculations

while minimum value of 0.20 was found in North Macedonia (2000). In Albania, there is no operative stock market. The overall standard deviation of the stock market capitalization to GDP is 22.08 percentage points and highest across all variables. It indicates that there is high heterogeneity across the countries, which are in accordance with the expectations that countries differ in the level of their respective stock market development. A small standard deviation for a variable privatization (0.58), along with an average coefficient of 3.18, shows that all countries in the region, over time, have opened their domestic markets to foreign investors and have made significant progress in the privatization. The average across the observations for proxy variable of the ratio of domestic credit to GDP was measured at 17.14. It indicates that banking intermediation is low, around 17% of GDP for the selection of countries.

The minimum value of the ratio of domestic credit to GDP was measured at 4.74% of GDP (Albania, 2000), while its maximum value came out to be 70.11% of GDP (Croatia, 2011). Additionally, the variables included in the regression models are checked for possible multicollinearity. The results for given variables are given in Table 8.3.

As given in Table 8.3, among almost all pairs of explanatory variables, there does not appear to be problem in multicollinearity with the exception of the correlation between the variables "edu" and "lnGDPPC" for the overall sample (0.64 seems rather high in this particular case). Although a variable education was dropped, the results did not change significantly, as well as when both variables ("edu" and "lnGDPPC) were used in the regressions, alone. Furthermore, the multicollinearity was

Table 8.3 Correlation matrix between explanatory variables

	StkCap	KAOPEN	TAXRATE	CC	EDU	INF	lnGDPPC	TRO	PRIVAT	DCREDIT
StkCap	1.0000									
KAOPEN	0.1495	1.0000								
TAXRATE	-0.189	0.0015	1.0000							
CC	0.181	0.1642	-0.2201	1.0000						
EDU	0.381	0.1345	0.0447	0.1342	1.0000					
INF	-0.24	-0.3091	0.3045	-0.052	-0.065	1.0000				
InGDPPC	0.437	0.4071	0.3513	0.1290	0.6385	-0.228	1.0000			
TRO	0.146	0.4600	-0.4291	-0.024	0.0355	-0.400	0.0814	1.0000		
PRIVAT	0.028	0.4663	0.0108	0.116	0.1944	-0.500	0.5313	0.5027	1.0000	
DCREDIT	0.563	0.4448	-0.2365	0.252	0.5917	-0.261	0.5981	0.3816	0.2482	1.0000

Source Author's Calculations

tested by the variance inflation factor (VIF). The study finds its value to be 2.67 and concludes that the observed pair of explanatory variables does not have multicollinearity. To compare FE and RE estimators, the Hausman test is used. The Hausman test statistics show that the null hypothesis is rejected at 5% level. Consequently, it favors FE model over RE model (Chi-square statistic: chi2 (10) =43.95 with prob. 0.0000) for identifying the determinants of IFI. The Hausman test indicates that FE is the best model for this dataset. In order to obtain accurate R-squared values, and adjusted coefficient of determination, the FE for all countries under observation was included.

The regression equation for Model 2 has a relatively moderate R-squared; hence, it has relatively moderate explanatory power. R-squared "between" countries has a value of 0.65 and explains the variations within individual countries over the reference period. Its value is lower than the size of the "R-squared within," because the models employ an unbalanced panel data. Standard deviation of the regression is 0.15 and the ratio of the estimated variance addressing the individual effects on the variances of the overall error came out to be 62% (rho = 0.62). The value of rho coefficients in FE model shows that 62% of the variation is explained by the influence of fixed effects (M2). Variations of the individual effects explained 78.25% of the variation it (R-sq: within = 0.78), while the variations of time effects explained 65.40% of the variation t (Table 8.4).

The findings of Model 2 reveal that the variables StkCap, GC, DCREDIT, and PRIVAT determine statistically significant variations in IFI. In addition, the findings of the estimated Model 2, as measured by  $\beta$  coefficient, clearly indicate the intensity of the impact of these variables on the financial integration. In fact, a 1,000.00 EUR increase in StkCAP will ceteris paribus cause an increase in IFI level of 3.6 EUR; a 1,000.00 EUR increase in DOMCRED will increase the level of IFI by 19.8 EUR; and 1,000.00 EUR increase in the privatization revenues will increase IFI by 369.9 EUR.

Also, in Model 3 and Model 4, some variables such as StkCap (only in Model 4), DCREDIT, KAOPEN (only in Model 3), GDPPC growth (only in Model 3), PRIVAT, GC, EDU, and INFL (only in Model 3) have shown to be statistically significant with different statistical significance at 1, 5, and 10%. On the contrary, two variables tax rate and TRO have shown to be statistically insignificant (Table 8.4). The dependent variable IFI (in Model 3 and/or Model 4) is strongest determined by

Table 8.4 Regression results

Variables	Model 1 (RE)	Model 2 (FE)	Model 3 (one-way effect)	Model4 (two-way effects)
StkCap	0.0,013,978	0.0,036,114	0.0,005,946	0.00,552 [2.24]***
DCREDIT	0.0,200,394	0.0,198,647	0.0,207,451	0.014,929
	[8.74]***	[4.92]***	[7.90]***	[2.52]**
KAOPEN	-0.3,949,041	0.0,586,731	-0.3,889,014	0.1,328,259
	[-4.73]***	[0.48]	[-5.28]***	[1.50]
GC	-0.0,797,556	-0.1,009,523	0.2,847,633	0.3,485,354
	[-1.25]	[-1.76]*	[2.02]**	[-1.69]*
Privat	0.2,995,431	0.3,699,091	0.2,913,506	0.3,235,135
	[4.87]***	[2.55]**	[5.14]***	[2.31]**
TRO	0.002,252	0.0,005,485	0.00,231	0.0,007,081
	[1.13]	[0.28]	[1.28]	[0.46]
EDU	0.020,519	0.0,169,249	0.0,189,991	0.0,140,727
	[3.65]***	[2.34]	[3.74] ***	[2.51]**
lnGDPPC	-0.25,496	-0.5,005,454	-0.2,609,967	-0.6,791,884
	[-2.23]**	[0.94]	[-2.42] **	[-1.39]
INF	0.003,346	0.0,019,694	0.005,378	0.0,035,703
	[1.65]	[-0.52]	[2.81] ***	[2.17]
TAX RATE	0.001,823	0.0,131,559	0.0,000,476	0.0,070,915
	[0.26]	[1.47]	-[0.01]	[-0.60]
C	0.0,490,638	1.977264	0.0,274,398	3.526,088
	[0.07]	[0.50]	[0.04]	[0.99]
sigma_u	0	0.19,634,148	0	0
sigma_e	0.15,369,385	0.15,369,385	0.1,111,402	0.1,111,402
rho	0	0.6,200,559	0	0
R-squared	0.8401	0.7210	0.9099	0.9574
R-squared within	0.7188	0.7825	0.8499	0.9128
R-squared between	0.9695	0.6540	0.9707	1.0000
F test one-way effect			26.56 (0.0000)	
F test two-way effects			,	84.78 (0.0000)

 $\it Note \, ^{***}, \, ^{**}$  and  $^{*}$  are statistically significant at 1%, 5%, and 10% levels, respectively  $\it Source \, Authors' \, Calculations$ 

the variables: StkCap, DCREDIT, KAOPEN, Privat, EDU, and INFL (at 1% level); GDPPC and GC (at 5% level), as this study proves. Accordingly, it highlights that relaxed capital controls, macroeconomic stability, the rise of the population enrolling into secondary education, and financial deepening are seen as the main drivers of the international financial flows in the emerging Balkans. The similar findings were found in recent studies conducted by Lane and Milesi-Ferretti (2003) and Vo (2005). In other words, if any country from the sample has less stringent capital controls, an increase of enrollment rate in the secondary education and increase in banking intermediation and the stock market development may lead to the rising international financial integration. On the other hand, this study found the existence of a negative statistical relationship between the variables GDPPC growth and IFI. Its findings related to the above-mentioned variables are not in line with numerous previous studies conducted by Volz (2004), Agenor (2001), Lane and Milesi-Ferretti (2003), and Derado (2009). In continuation, its findings indicated that variable GDPPC growth exerts statistically significant negative influence on IFIGDP in Model 2, Model 3, and Model 4. One of the reasons for that is that the emerging Balkan countries have not yet reached the standards of the economic development equivalent to those of industrialized countries. Furthermore, the large scope of privatized enterprises and low potential government revenues from privatization revealed that domestic investors have played a crucial role in the process of privatization, while the lack of foreign investors caused a smaller share of foreign revenues from the privatization and its share in foreign assets.

In the third model of period effects, only the years 2002, 2003, 2004, 2006, 2007, 2011, 2013, and 2014 indicated insignificance. In Model 4, except for Romania and Croatia, the model seems significant for all other countries. Furthermore, study's findings found that selected variables tax rate and TRO were not necessarily the decisive factor for IFI. One of the possible explanations is that the most countries have achieved the macroeconomic stability and reduced tax rates by offering similar competitive tax rates. Also, opening of borders to the international trade is no longer systematically associated with net capital inflows that increase involvement in IFI. Countries may be very open to international trade, but the net effect on the financial integration was found to be statistically insignificant.

## 8.5 Conclusion

This empirical research seeks to show the relevance of selected economic and financial development variables to explain variations in IFI in different, emerging Balkan countries. In order to achieve the intended results, the empirical research was conducted by employing panel data analysis. The research covered the sample comprising eight selected emerging Balkan countries. The results of the research showed that the emerging Balkans are at an early and infant stage of international financial integration and remain very underdeveloped. Contrary to the developed countries, the emerging Balkans made modest progress in the financial integration. Also, the capital markets in the region are still underdeveloped with low market capitalization, lack of market liquidity, and lacking depth of the financial market. In comparison with the developed countries, the emerging Balkan region has lower value of international assets and liabilities as a percentage of GDP. Finally, the financial system of the emerging Balkan region is characterized with an underdeveloped financial sector, with low market capitalization as a share of GDP. The findings revealed that a country with a high enrollment rate of secondary education, high level of banking intermediation, and sound stock market development can contribute to its higher level of the international financial integration. However, dynamic growth of the financial integration shows that taxation policy and trade openness are somewhat less important in explaining rise of the financial integration. In continuation, by looking at the transition pattern of selected countries, it can be concluded that there is one type of homogeneity resulting from the bank-centric financial system. The lack of influence of other variables in determination of the financial integration of the emerging Balkan countries can be explained by the low level of participation of foreign investors, low levels of investment culture, and insufficient economic growth. These research findings have important implications for policymakers, regulators, and all market actors in the selected countries to work harder and encourage greater participation in the international financial flows.

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