

Economic freedom and growth: exploring statistical significance of the relationship in the balkan economies

Selami Xhepa

FACULTY OF ECONOMY AND INFORMATION TECHNOLOGY, EUT

Abstract

Enhancing economic freedom remains a key policy objective of the reforms that Balkan economies are engaged in, particularly after ending of the conflicts and the start of Stabilization and Association Process. The assumption is that enhancing economic freedom will produce high economic growth and improve prospects for higher standards of living for citizens. Therefore, the question of determining the relationship between economic freedom and economic growth has attracted attention of a number of researchers and a number of working papers have tried to explore on the issue. In this paper I try to investigate this relationship between economic freedom, decomposed in his ten dimensions, and economic growth, welfare effects and business development through the capital formation index.

Key words: *economic freedom, economic growth, welfare.*

Some theory

Understanding the process of economic development and factors behind the prosperity of some nations and backwardness of others has been an area of extensive research work by economists and social sciences. Classic economic theory holds that countries can exploit the growth potential by making full use of his resources and use of better technology. However, such an assumption cannot explain why developing countries remain underdeveloped, although the potential in terms of resources is high. Therefore, developmental economists have been looking for an explanation analyzing economic and political institutions, specifically asking how

institutions affect growth and how do better institutions arise.

Throughout history, academic thought followed Adam Smith thesis that free nations grow and develop faster than the less free ones. Economic freedoms, as freedom of conducting transactions, freedom of property and strong economic institutions, have strongly been correlated with economic growth. History and evidence provide clear testimony supporting this thesis.

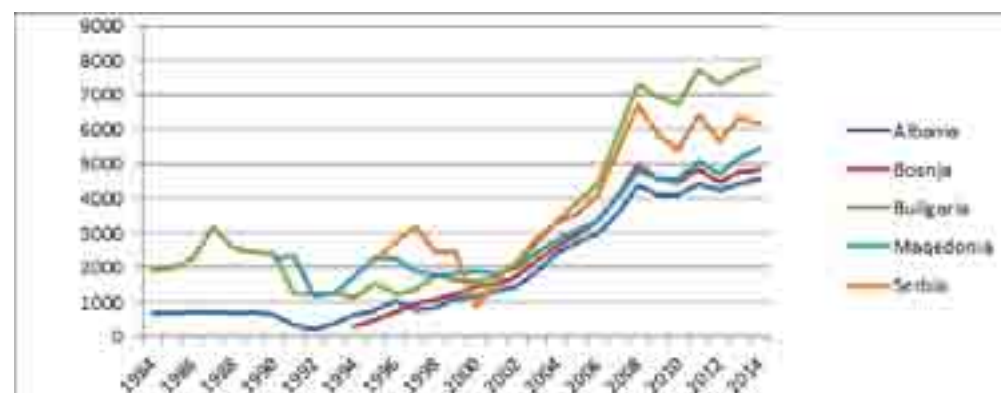
Prof. Gwartney (2004) brings evidences from historical data that free countries grow faster, and that there are higher FDI per worker, higher productivity, less poverty and more equal income distribution, improved living conditions, healthier democracy, etc. He was the creator of the Fraser Institute Index of economic freedom and in his research using data for the period 1980-1994, he found that GDP per capita in freer countries grew at an annual average rate of 2.4%, while in less freer countries at a negative 1.3%.

Cross country data shows that improvements on the index of economic freedom are associated with higher income growth. However, China's rating for economic growth is an exception from the rule: the country had the highest growth while being still relatively repressed in terms of financial markets, business freedoms and corruption (Congsheng, 2011).

Regressing economic growth against an index of economic freedom allows us to quantify that relationship. Furthermore, we look at each individual component of the index in order to estimate which of the variables plays a more important role.

Economic and political freedom in the Balkan has produced high economic growth. Balkan economies were the least developed prior to democratic changes and Albania being the most isolated ones was the poorest. Data from the World Bank shows that starting from early 2000, when the conflict in the Balkan ends, GDP per capita increased on a much higher rate than before. Albania in particular, shows a flat level of GDP per capita before the country opened up. Starting from 2000, the region improved substantially during the last 15 years.

GRAPH 1: GDP per capita, PPP current USD



Identifying the measures to be used

There are three well known indexes developed by three organizations measuring the degree of economic freedom: Heritage Foundation Index of economic freedom; Fraser Institute economic freedom of the world index and Freedom House freedom of the world index. We use Heritage Foundation Index because the index, in addition to quantifying macroeconomic stability, government size and the rule of law, is accompanied by qualitative assessments of the research teams on the institutional capacities the countries have to strengthen and enhance country's economic freedoms.

Economic freedom is described as freedom from government involvement in economic decisions, macroeconomic stability in business environment, trade and financial market state of development, security of property rights and freedom from corruption. Each of these dimensions has received considerable attention from the research. The definition of economic freedom is based on a libertarian approach to the role of government in economic management and therefore it can be attacked on such grounds. However, this is the only measure we have to quantify relationship between economic freedom and growth and the one used in this article.

In this exercise we use the Heritage Foundation Index of economic freedom¹ to measure and compare the progress of Balkan economies. The main research question is: has economic freedom worked in the Balkan economies? Which of the main components of economic freedom (business freedom, trade, labor, sound money, government, and corruption, financial and fiscal freedoms) has been more important for growth? This will help focus attention of reform agenda in the areas which can deliver fast and meaningful results.

But first I review the index over years, using Germany as benchmark country and Croatia as the first country of our region to join the EU.

Enhancing freedoms in the region: how individual countries are performing in terms of reforms?

The Heritage index provides data for the period 1995-2016, covering a relatively long period of two decades of transformation, although for Macedonia,

¹ There are a number of methodological issues related to the use of indexes, mostly due to aggregation problems (from 50 questions that are used, they are grouped in ten indexes and aggregated in a one number index), quality of research teams and subjective evaluation of quality of institutional reforms, etc. However, we assume the error to be systematic and therefore the degree of confidence of analysis to be acceptable.

Montenegro and Serbia data covers the period 2002-2016, reducing the number of observations. However, we have to note the peculiarities of Albania, which started transition from the conditions of a much closer economy compared to relatively open economies of ex-Yugoslavia. Therefore, the first decade of Albania's transition can be considered as the one of preparing the ground for a serious reform agenda starting from the early 2000. Political realities of the Balkan related to the dissolution of ex-Yugoslavia had a substantial impact on the economy and society, keeping countries below the world average in terms of economic freedom (from mostly unfree to moderately free).

Data of table 1 provides a summary of statistics of the index and its components for the five countries included on the analysis: Albania, Macedonia, Montenegro, Serbia and Croatia.

For the whole period of the analysis, the mean of the index is 58.5 and media 59.2, with a standard deviation 6. The highest level of freedom is on the fiscal freedoms, reflecting low level of fiscal burdens in the regional economies compared with the world average and developed economies. Important progress has also been made in trade liberalization and business freedoms, reflecting improving business conditions for entry and operation of investors. Countries also reflect a stable macroeconomic environment, reflected in the high level of monetary spending, which measures the stability of price level and sustainable currency exchange rate policies.

TABLE 1: Economic Freedom index: Descriptive Statistics

Descriptive Statistics	Nr	Mean	Median	Min	Max	SD
Overall Index	78	58.5	59.2	43.5	68.6	6.0
Business Freedom	78	62.4	60.2	40	81	9.8
Trade Freedom	78	75.5	78.1	56	88.4	10.8
Fiscal Freedom	78	82.3	83.5	59.3	92.8	8.4
Government Spending	78	54.5	50.8	22.9	89.2	18.1
Monetary spending	78	74.5	79.0	22.1	90.7	13.1
Investment Freedom	78	58.3	60.0	10	80	14.9
Financial Freedom	78	55.1	55.0	30	70	12.0
Property Rights	78	34.8	30.0	30	50	5.9
Freedom from corruption	78	31.9	34.0	10	50	11.4
Labor Freedom	55	56.7	56.2	0	92.3	19.7

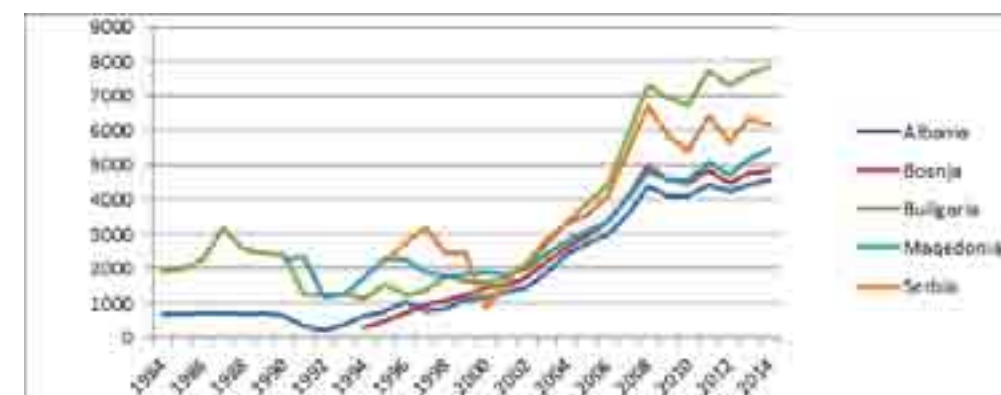
Two critical areas of lack of reforms are property rights and freedom from corruption, on which the region remains largely unreformed.

In order to measure the gap of the each individual country with one core EU country, Germany, we present some charts of each indicator to visualize the gap between the region and EU.

The following graph 2 clearly indicates that Albania performed much better than all the countries included in the comparator group till 2010, with Macedonia being much closed to Albania and overpassing Albania from this period on. Macedonia seems the most reformed economy in terms of enhanced economic freedoms. Distance to Germany narrowed over years. By end of 2016, region remains in average 9.3 points below the level of economic freedoms of Germany, from -55 points below that level by early 2001. This is an indicator that decade of 2000 has been a decade of important economic reforms, particularly with ending of conflict situation in ex-Yugoslavia.

What is striking is that Croatia still remains the lowest performing country in terms of economic freedom, although is the only EU member country in the group and the richest in terms of GDP/capita. The second observation is that Macedonia has been the fastest reforming country in the region, particularly from 2010 on. The third observation is that from 2012, the countries are falling behind or stagnating in terms of reform, widening the gap with Germany.

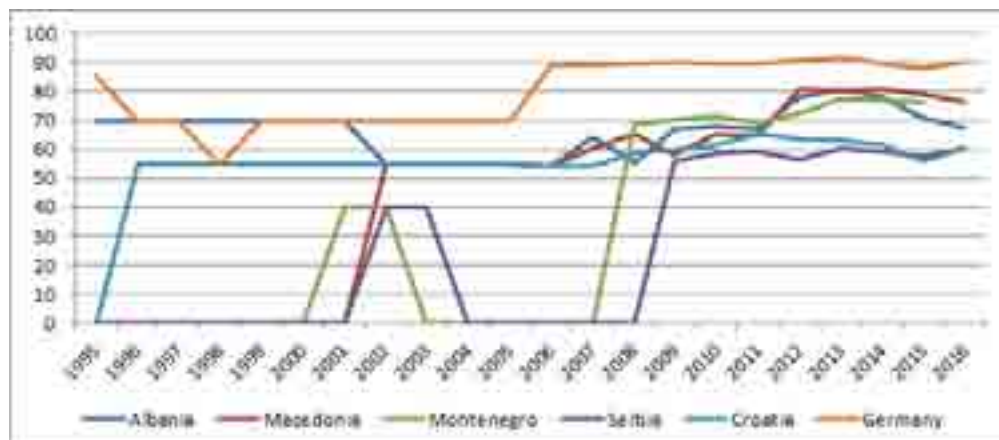
GRAPH 2: Overall score of Economic Freedom



Looking at individual components of economic freedom, we can again observe that Serbia and Croatia remain the least free countries comparatively; business freedom in Albania deteriorates starting from 2013 while Macedonia remains the freest country in business freedom. All countries are negatively impacted by two key component of the index: freedom of property rights and freedom of corruption. All countries are 37 points below the level of Germany (Albania being 46 points far away from that level) in terms of freedom of corruption and around 51 points below in property rights. These two single variables keep all economies of the region repressed and penalize economic growth.

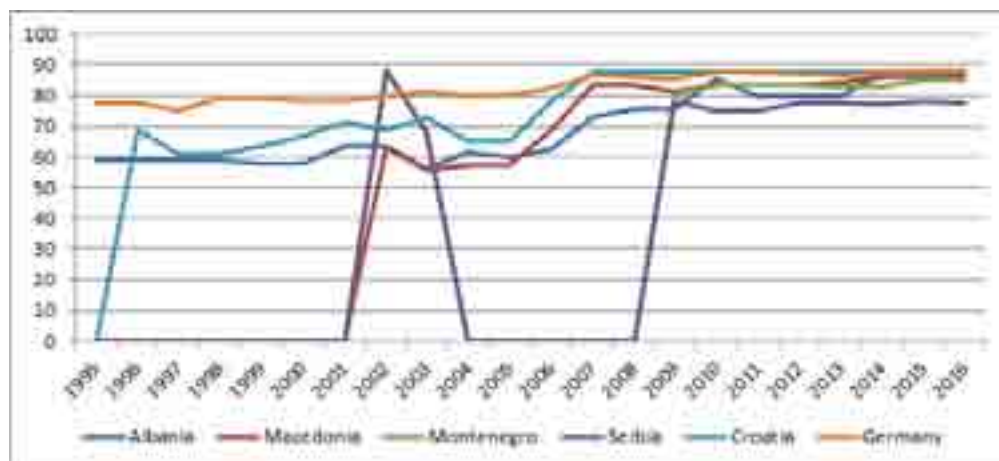
Business freedom is the efficiency of legislation with regard to the ability to start, operate and close a business. From a methodological point of view the index is based on ten subcomponents referring to procedures and costs of establishing, operating and closing a business.

GRAPH 3: Business freedom index



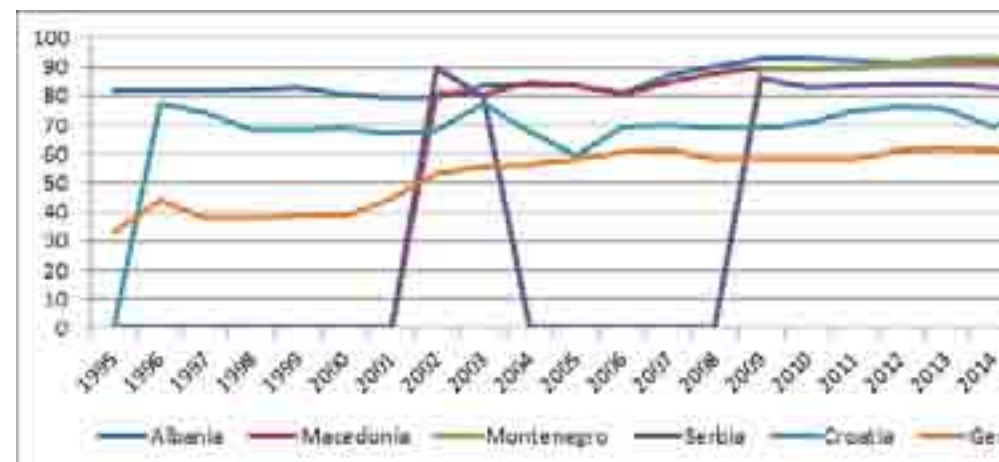
Trade regime is largely open and almost all countries converge, with some minor exceptions of Serbia

GRAPH 4: Trade freedom



Fiscal freedom measures tax burden (personal income tax rate, corporate tax and tax revenues as % of GDP), each one having the same share (1/3) in the composite index. Fiscal freedom is higher in poorer countries, such as Albania and Montenegro and lowest in richer countries. From this perspective, it seems Balkan economies are competitive in tax burden.

GRAPH 5: Fiscal freedom



Freedom of government spending is built around the idea that low government spending (less than 30% of GDP) improves business opportunities and helps private sector growth. It is clear the index is biased towards developing economies and as the graph shows, Albania scores the highest followed by Macedonia. This index is very controversial since the government spending could be critical to improve business environment and address social challenges of unemployment and widespread poverty.

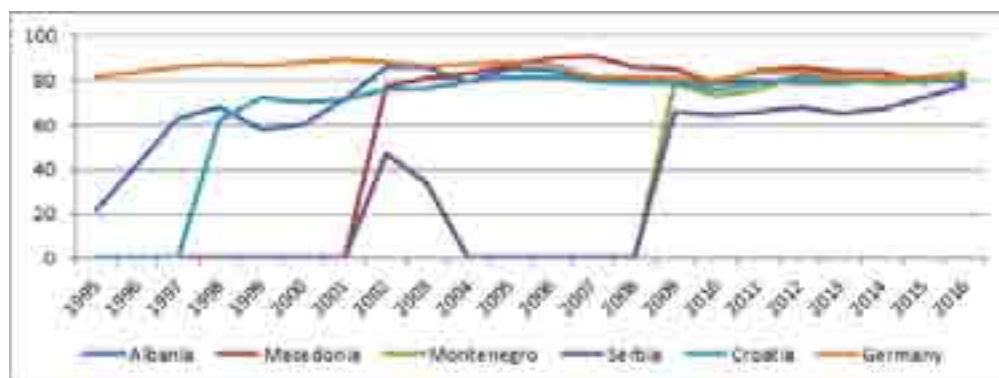
GRAPH 6: Freedom of government spending



Monetary spending is based on the principle that maintaining low and stable price levels helps economic growth and the index refers to price developments in the last three years. Although the situation has been unfavorable in the early years of transition, starting the second decade and particularly since 2008 a

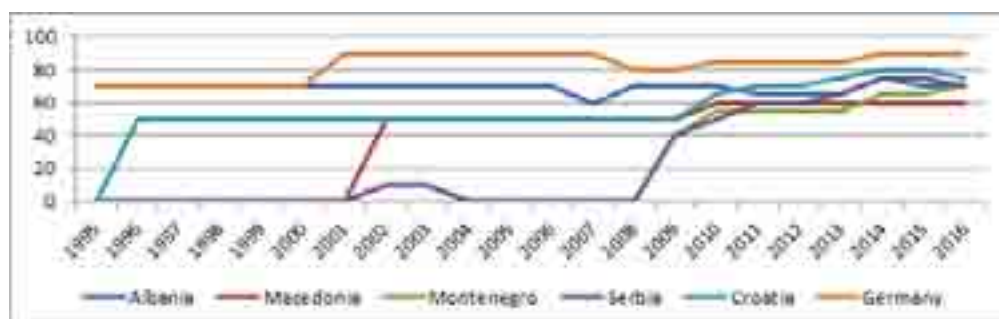
clear convergence process is observed. Convergence of price levels with core EU countries is a sustained process during the last decade.

GRAPH 7: Freedom of monetary spending



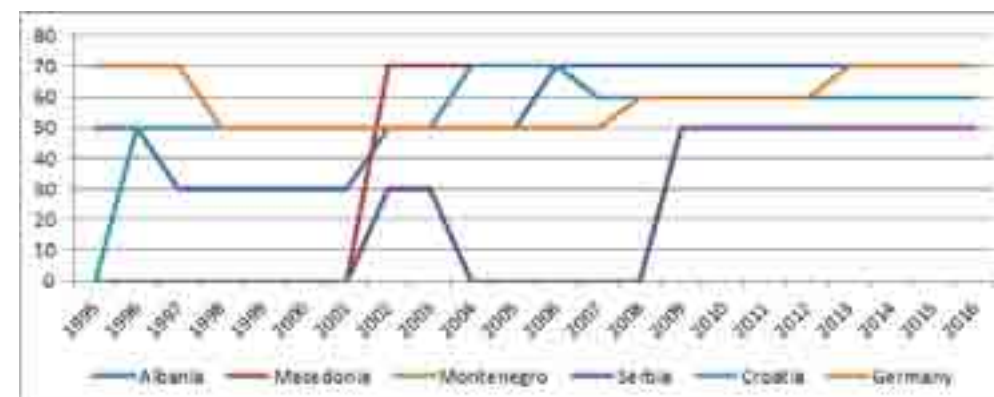
Investment freedom improves starting from 2008; however, Albania scores higher than all comparator group of countries, with Croatia overtaking from 2011 and Serbia from 2014. The index measures the restrictions to entry and operation of foreign investment.

GRAPH 8: Freedom of Investment



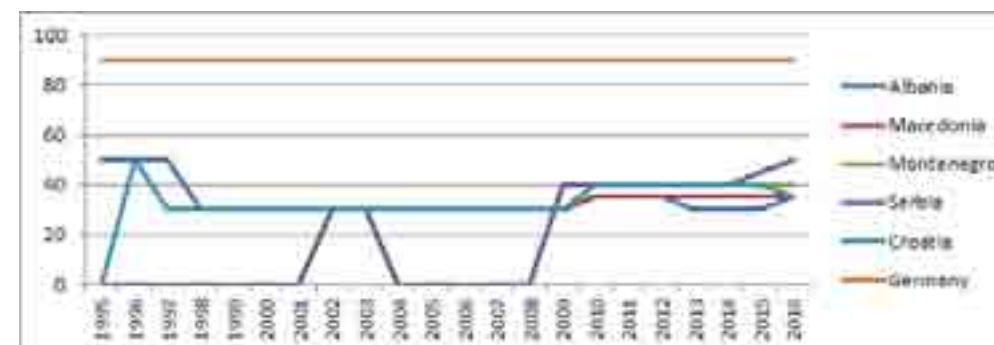
Financial freedom measures the level of government interference in the operation of financial markets, in terms of credit constrains and allocations, price of money, limitations to ownership, foreign entry etc. Again Albania ranks high but the picture seems mixed. During the last years we see a convergence with EU, except for Serbia which remains comparatively closed.

GRAPH 9: Financial freedom



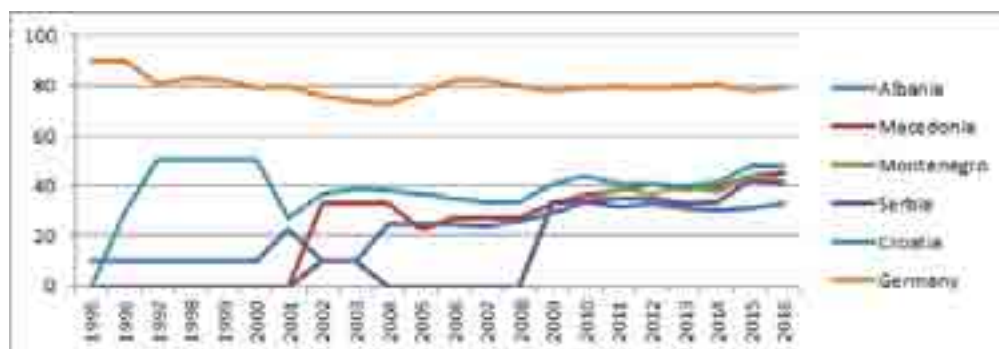
Property rights remain the most important impediment to economic growth and there has been no progress made since the beginning to transition. The index measures the degree to which countries legislation protect property rights and efficiency of judiciary in dispute settlement.

GRAPH 10: Property rights



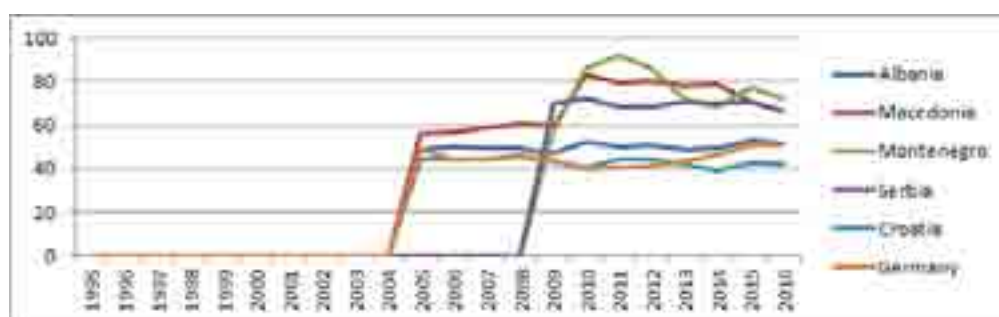
Freedom from corruption represents one of the key challenges for the region. As the graph shows, although there are some slight differences, with Croatia being ahead of other countries, we are still far behind the advanced economies and Albania being the most corrupted country in the group.

GRAPH 11: Freedom from corruption



Labor market is characterized by a high degree of freedom and flexibility, compared with rigid practices on the EU.

GRAPH 12: Labor market freedom



Overall, most of economies of the region are today as mostly free and in many respects they are as free as German economy, in terms of labor, monetary, fiscal and financial freedoms. However, corruption, property rights and business and investment freedoms remain important on the agenda of reforms. Particularly property rights and corruption are the top priority areas for major improvements.

Economic freedom indicators will be regressed against some macroeconomic indicators selected to measure the impact of freedoms, namely the GDP growth, GDP per capita, as a proxy for the welfare and gross capital formation as a proxy for the impact of freedom on business development. Descriptive statistics of these data is presented at Table 2.

TABLE 2: Macroeconomic indicators, Descriptive Statistics

Descriptive Statistics	N	Mean	Median	Min	Max	SD
GDP Growth	86	3.1	3.6	-12.1	13.5	4.3
GDP/Capita (PPP, current \$)	88	10,159.6	9,801.3	2809.0	21,635.1	4,724.0
Gross fixed capital formation, % GDP	84	21.7	20.1	11.1	40.5	7.4

For the whole period of the data sample (1995-2014) we find a 3.1% average annual growth rate of the economies of the region. There is a high variation in terms of GDP per capita, ranging from a low of 2,809 USD\$, PPP, to 21,635.1 USD\$, PPP, with Albania being on the low end and Croatia being on the high. On average for the whole period, the whole region stands at 31% of GDP per capita of Germany. Extreme volatility characterizes also other macro variables, FDI and gross fixed capital formation. Albania registered the highest GDP growth, by an annual average of 5.2% and Croatia the lowest growth by 2%. On average, the region has attracted over a billion USD in FDI, but there is a high volatility and variation across countries.

Economic freedom, economic growth, business development and welfare effects of freedom

Next we investigate a group of questions related to growth and welfare. More specifically we try to answer: How has economic growth being related to economic freedom? Which of the components of the index is strongly related to growth and business/entrepreneurship performance? How much economic freedoms are related to welfare? Have long term growth prospects been improved through higher capital formation?

We use three variables to study this relationship: GDP growth, GDP/capita (in PPP, \$), and gross capital formation % of GDP. The last indicator is a proxy for the level of entrepreneurship and business development. Explanatory variables are the index of economic freedom and its components. Table 2 presents the correlation coefficient between the variables.

TABLE 3: Matrix of Correlation coefficients

Correlation coefficients	1	2	3	4	5	6	7	8	9	10	11
1. Overall Index	1.00	0.71	0.51	0.59	0.18	0.67	0.59	0.55	0.16	0.42	0.42

2. Business Freedom		1.00	0.28	0.51	0.14	0.22	0.51	0.15	0.28	0.17	0.47
3. Trade Freedom			1.00	0.28	-0.12	0.27	0.02	0.25	0.18	0.45	0.43
4. Fiscal Freedom				1.00	0.52	0.09	0.08	0.03	0.16	-0.17	0.48
5. Government Spending					1.00	-0.07	-0.07	-0.04	-0.33	-0.50	-0.16
6. Monetary spending						1.00	0.40	0.65	-0.24	0.51	-0.18
7. Investment Freedom							1.00	0.30	0.32	0.21	0.01
8. Financial Freedom								1.00	-0.17	0.45	-0.59
9. Property Rights									1.00	0.13	0.46
10. Freedom from corruption										1.00	0.18
11. Labor Freedom											1.00

Data on the matrix of correlations reveal that overall economic freedom scores high with business freedom and monetary spending, somewhat strong relationships are scored with investment freedom, fiscal freedom, and trade freedom. What is surprising is the very low impact of government spending, corruption, property rights and labor market freedom on the overall economic freedom index, with a correlation coefficient of less than 0.4. Freedom from corruption shows a high negative correlation with government spending, but the indicator performs poorly with all other dimensions of economic freedom. On the other hand, government spending is negatively but poorly correlated with almost all dimensions of economic freedom, consistent with the idea that high government size hurts growth. Other studies also find a negative relationship between size of government and growth (Carlsson, Lundsrom, 2001). On the other hand the direction of causation of government size with economic growth is the opposite: large governments are a product of economic development. Only developed economies can sustain high levels of government investments and public services.

A more formal, rigorous relationship is established through a regression analysis. Most studies regress economic growth with economic freedom; however, some researchers found that changes on the index of economic freedom are of higher importance than the level of index. There has been a long discussion on which of the variables to use in the regression analysis. De Haan et al (2006) criticize the use of both variables and advocate the use of the level of index of economic freedom. But, the use of the change in the index seems a reasonable solution, particularly for countries which have a long way to go in the reform process.

While for countries being on top and therefore no major changes can be expected could be justifiable to use just the level of index, for the Balkan economies the level and change in the index values, can yield better results. Therefore, we will use on the analysis both the level and the changes on that level to measure the relationship.

TABLE 4: Regression results: Fixed Effect

	(Model 1)	(Model 2)	(Model 3)
	GDP_growth	ln_gdpcap	ln_capform
Overall_ind	0.726*	-0.0431*	0.0113
	(1.92)	(-2.55)	(0.61)
Bus_freed	-0.00621	0.00446**	0.00342*
	(-0.17)	(2.68)	(1.88)
Trade_fred	-0.0655	0.0182***	-0.00106
	(-0.89)	(5.50)	(-0.29)
Fiscal_fre~m	0.0249	-0.00293	-0.00438
	(0.28)	(-0.74)	(-1.02)
Gov_spending	-0.122*	0.00538*	-0.00103
	(-2.38)	(2.34)	(-0.41)
Monet_spend	-0.160**	0.00377	0.00223
	(-2.81)	(1.48)	(0.80)
Invest_freed	-0.0537	0.0104***	-0.00481*
	(-0.89)	(3.83)	(-1.63)
Fin_freedom	-0.0410	0.00807***	-0.00121
	(-0.82)	(3.63)	(-0.50)
Propert_fr~d	-0.327**	-0.0135*	-0.00688
	(-2.70)	(-2.49)	(-1.17)
Corrupt	-0.186*	0.00762	0.00250
	(-1.99)	(1.82)	(0.55)
Labour_fre~m	-0.0236	0.00665***	0.000443
	(-1.09)	(6.86)	(0.42)
_cons	8.208***	8.981***	2.941***
	(5.32)	(131.60)	(39.56)
N	130	131	131

t statistics in parentheses; * p<0.05, ** p<0.01, *** p<0.001

Results of the regression show that economic freedom has produced positive results for economic growth and has contributed to welfare improvement for the citizens. However, the model does not explain capital formation and private sector development.

Initial conditions, captured constant of the regression, are large and significant, indicating that achieving high economic growth and improving prosperity for the citizens, requires that countries maintain economic freedom for a long period of

time. This conclusion is reinforced by the fact that differences among countries are found to be important.

Other important insights we can get from the data of the regression are that some dimensions of the freedom have produced better results for economic growth. In particular macroeconomic stability, stable trade and investment regimes, have been positively related to growth and welfare. On the other hand, high levels of corruption and low level of protection of property rights have been key impediments to enhancing growth prospects and welfare for the citizens. Enhancing business freedom has produced good opportunities for self-employment, which is shown by the significance of the index with GDP/capita and capital formation and this shows that economic freedom has not been working for the big companies only. On the contrary major beneficiaries to economic freedom have been entrepreneurship citizens.

Conclusions

This study shows that Balkan economies have entered a process of economic reforms with the aim of enhancing economic freedom. Although there is a large variation among countries in terms of progress of reforms, all countries included in the analysis are clearly lacking behind in terms of progress of anticorruption and strengthening property rights.

In average, the region remains below the world average index of economic freedom for the period in consideration. Experience and research results show that for countries to gain the benefits of economic freedom, they should maintain stable institutions and open and free business regimes for long periods of time.

Economic freedom has been important not only for the interests of big business, but it has been a vital force to improving material conditions for the population. This clearly supports the conclusion that economic freedom works for all and not in the favor of some interest groups.

Finally, fighting corruption and strengthening property right regimes, could produce enormous benefits both for economic growth and business development. The region has a long way to go to transform itself from a moderately free into a free region in terms of economic and business freedoms.

References

- Andreas Bergh & Martin Karlsson, 2010, Government size and growth: accounting for economic freedom and globalization, *Public Choice* 142 (2010).
 Carlsson, Lundsrom, 2001, "Economic Freedom and Growth: Decomposing the Effects", WP nr 33, Goteborg University

- Claudia, R. Williamson and Rachel L. Mathers *Economic Freedom, Culture, and Growth; PUBLIC POLICY, ENTREPRENEURSHIP, AND ECONOMIC FREEDOM*, Steven F. Krefl and Russell S. Sobel; *Cato Journal*, Vol. 25, No. 3 (Fall 2005)
 Congsheng Wo, "Economic freedom, economic growth and China", *The Chinese Economy*, vol. 44, nr.5 September 2011.
 De Haan and J E Sturm, 2000, "On the relationship between economic freedom and economic growth", *European Journal of Political Economy* 16: 215-41
 ECONOMIC FREEDOM AND ECONOMIC GROWTH IN MENA COUNTRIES; *Asian Economic and Financial Review*, 2014, 4(1):105-116;
 Fredrik Carlsson and Susanna Lundström, 2001, *Economic Freedom and Growth: Decomposing the Effects*, Working Paper in Economics no. 33 January 2001;
 Janina Šeputienė; 2007, *The Evolution of Economic Freedom and its Relationship with Economic Growth in the European Union Social Research / Socialiniai tyrimai*. 2007. Nr. 2 (10), 161-168
 JAC C. HECKELMAN;2000; *ECONOMIC FREEDOM AND ECONOMIC GROWTH: A SHORT-RUN CAUSAL INVESTIGATION*, *Journal of Applied Economics*, Vol. III, No. 1 (May 2000), 71-91;
 John W. Dawson, 2003, *Causality in the freedom-growth relationship*, *European Journal of Political Economy* Vol. 19 (2003) 479 – 495;
 James Gwartney and Robert Lawson, 2004, *Ten Consequences of Economic Freedom by*; NCPA Policy Report No. 268 July 2004;
 Jakob de Haan and Jan-Egbert Sturm, 1999; *The Benefits of Economic Freedom A Survey*;
 Ken Farr, Richard A. Lord, and J. Larry Wolfenbarger, 1998, *ECONOMIC FREEDOM, POLITICAL FREEDOM, AND ECONOMIC WELL-BEING: A CAUSALITY ANALYSIS W*; *Cato Journal*, Vol. 18, No. 2 (Fall 1998)
 Mohammad Javad Razmi, 2013, *The Effect of Trade Openness and Economic Freedom on Economic Growth: the Case of Middle East and East Asian Countries*, *International Journal of Economics and Financial Issues* Vol. 3, No. 2, 2013, pp.376-385; ...
 NICLAS BERGGREN; *The Independent Review*, v. VIII, n. 2, Fall 2003; *On the relationship between economic freedom and economic growth*,