



The Level of Development - Students' Perceptions and Beyond: The Case of Balkan Countries

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Abstract: *This paper investigates the level of development in Balkan countries through comparison of the common development indicators. A starting point is the perception of the level of economic development by a group of first year economics students at the Faculty of Economics, Business and Tourism in Split, Croatia. With the students typically not being aware (familiar) of how rich (poor) their country is, this study provides a deeper investigation of the level of development of Croatia and compares it with several countries from the neighborhood. The investigation employs commonly used indicators of economic development - GNI (Gross national income) per capita as usually reported by the World Bank, but also takes into account additional indicators like HDI (Human development index) and life satisfaction indicator. Overall, the study provides an interesting review and comparisons between countries and resolves some misperceptions that are typically present in general public.*

1. INTRODUCTION

The public's understanding of economic indicators is, arguably, vital for a well-functioning society. However, in spite of the commonly established fact that their understanding is extremely low, research on this topic is very scarce (Runge & Hudson, 2020). There are, of course, considerable differences in economic knowledge among different groups of population. One would assume that students of economics, for example, would perform better than the average nonprofessional does, in assessing the economic stance of a country. Our own 20-year experience in teaching economics at the Faculty of Economics, Business and Tourism in Split, however, shows that even students sometimes struggle with understanding the relative position of a country in the world income distribution. This paper, therefore, overviews the level of economic development of Balkan countries through common development indicators, and contrasts them with students' perception of economic development.

As noted by Brandts et al. (2022), more often than not, general public views of the economy are at odds with reality, i.e. with the data as well as theory. They, therefore, label these conditions as misconceptions. Following Bensley and Lilienfeld (2017), they go on to argue that these misconceptions, which represent behavioral and mental processes refuted by psychological research, can be applied to other fields of science also. Analogously, misconceptions exist in economics as well, whereby widespread opinions about the state of the economy can conflict with the empirical evidence. It is important to be aware of these misconceptions, and work on their refute, as they may lead to sub-optimal economic policies. Hopkins (2012), similarly, notes that, in the US, public opinion and presidential approval depend primarily on perceptions of the economic performance, rather than on the actual performance. Despite information on key economic variables being readily available in everyday life, perceptions of economic performance often

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deviate from the actual values. Along the same lines, [Hauser and Norton \(2017\)](#) argue that lay-people's perceptions about the economic stance of a country can affect their attitudes toward various economic matters, even though they can be false. [Hauser and Norton \(2017\)](#) particularly focus on misperceptions of inequality, and find that people tend to underestimate the degree of inequality that exists in their country. In exploring what determines these perceptions, they identify three key factors. First, people tend to generalize, and believe that whatever exists in their immediate surroundings can be applied to the whole economy. Second, the extent of media coverage of a certain topic has a large effect on people's perceptions. Lastly, people who accept hierarchies are more likely to accept higher levels of inequality. A largescale study by [Runge and Hudson \(2020\)](#) investigates the public understanding of economics and economics statistics in the UK, and finds that people typically assess economic issues from their personal economic situation, and that the national economy is something abstract to them. GDP, in particular, is found to be a rather uncomprehensive measure, with less than 50% of the British public being able to define it. Participants in focus groups in this research could not see the connection between the performance of their personal economy and economic performance at the state level.

When it comes to economic indicators, the difference between perception and reality, be it by lay public's or economics students', therefore, seems to be significant and worth exploring. This paper attempts at investigating this issue further by presenting official data on various indicators of development, thus creating a basis for objective valuation of the relative economic positions of selected countries.

The paper is organized as follows. Section 2 presents students' (mis)perception of economic development. Empirical data on the typical indicators of economic development across Balkan countries is presented in Section 3. Directions for future research are discussed in Section 4. Concluding remarks are outlined in Section 5.

2. THE LEVEL OF DEVELOPMENT – STUDENTS' PERCEPTIONS

The level of economic development is an important topic in economics, but it also stands as a subject of great interest and importance in the general public. This comes only natural as it is directly connected with the standard of living people around the world enjoy in their countries. Unfortunately, despite the enormous technological advances and all the economic successes that man has achieved resulting in historically high productivity, the world is still faced with huge inequalities around the globe. While in some countries people live in prosperity and huge wealth, the number of people and countries living in extreme poverty in the least developed parts of the world is stubbornly high and resistant. World Bank is among the institutions that deal with the issue of economic development, strongly recognizing the need to help people around the world rise from poverty. As an institution that investigates these important issues, the World Bank classifies countries into four groups using the indicator GNI (Gross National Income) *per capita*, calculated using the World Bank Atlas method. These four groups of countries are as follows:

1. High-income economies (Rich economies) – a GNI *per capita* of \$13,205 or more in 2021.
2. Upper middle-income economies – a GNI *per capita* between \$4,256 and \$13,205.
3. Lower middle-income economies – a GNI *per capita* between \$1,086 and \$4,255.
4. Low-income economies (Poor economies) – a GNI *per capita* of \$1,085 or less in 2021. (see <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups> for more details).

A snapshot from the World Bank country classification (available at <https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2023>) presented below, pictures nicely the dispersion of countries and world regions by income levels (by the level of economic development).

World Bank country classification by income level

GNI per capita in US\$ (Atlas methodology)

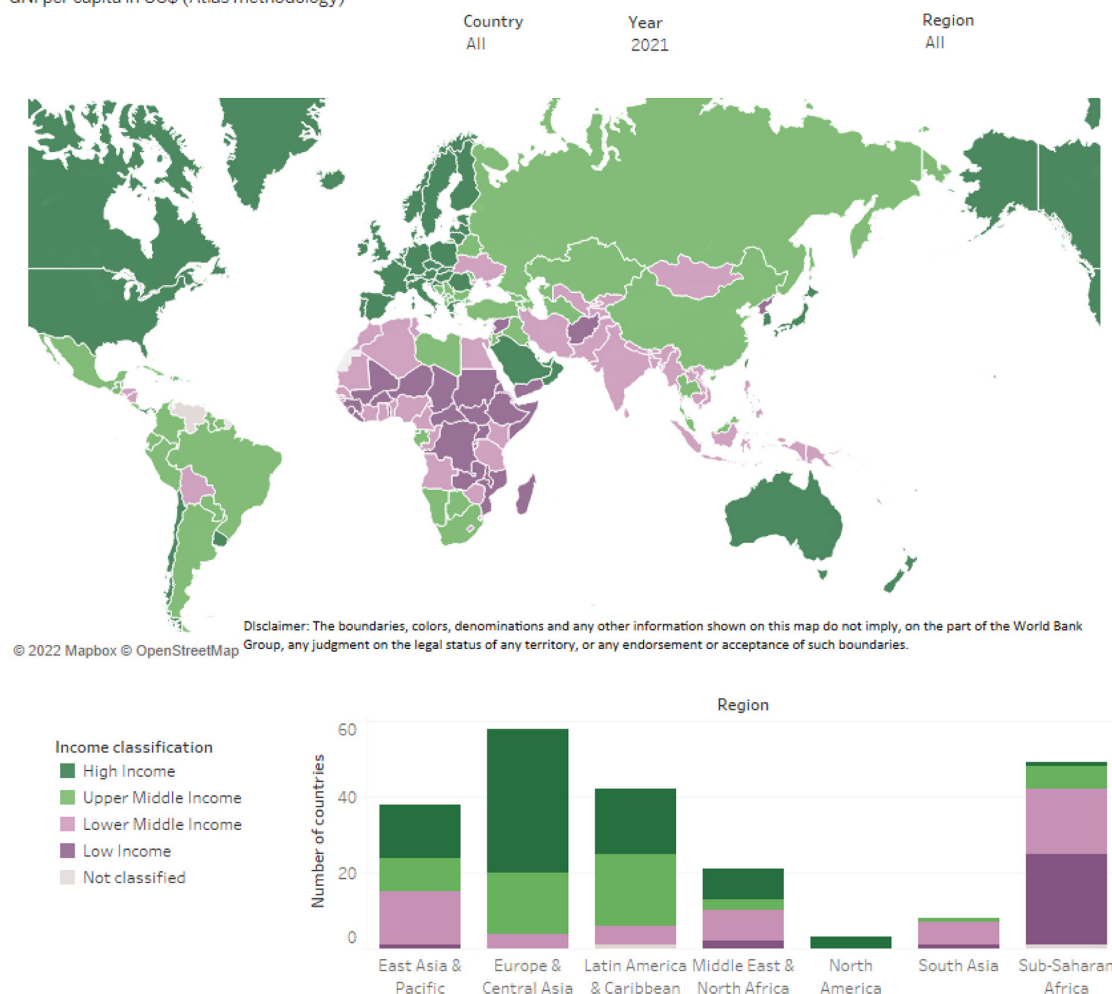


Figure 1. World Bank country classification by income level

Source: World Bank (<https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2023>)

Figure 1 nicely presents the differences in the income level between the countries in the world. As can be seen, the rich economies (high-income countries) are situated in North America, Europe and the Pacific. The poor economies (low-income countries) are mostly in Sub-Saharan Africa and Asia. To provide a comparison, the GNI *per capita* in, for example, Norway is 84090 US\$ in 2021, whilst the same indicator in Congo stands at 580 US\$, suggesting that GNI *per capita* in Norway is 145 times higher than the one in Congo. Indeed, this difference is gigantic. This difference in GNI *per capita* represents a huge gap in productivity levels and consequently will be reflected in the standards of living people in these countries enjoy.

Using this World Bank classification of countries across the four groups, we investigated as to what first year students at the Faculty of Economics, Business and Tourism in Split, Croatia believed to which group a specific country belonged. This interview (an online game) was conducted

using the Kahoot platform which is often used in playing games with students using their mobile phones. In general, these sorts of games make lectures much more interesting and keep the students more engaged and interested in the topics being discussed. To provide honest and objective answers students were allowed to use nicknames of their choice so that they can participate freely without worrying what their fellow students or teachers will think of their answers. This online game was conducted in December 2021 among first-year undergraduate economics students. The game was played by 100+ participants. A question was posed to 10 countries and students had to pick one answer. One example of the question posed is: “According to the World Bank classification of countries which classifies countries in 4 groups Switzerland belongs to...” and the offered answers included the classification explained above (high income-countries, upper middle-income countries, lower middle-income countries and low-income countries). The students were asked to decide on ten countries as follows: Switzerland, Austria, Congo, Germany, Norway, China, Croatia, USA, Angola and India. The results of this game are presented in Table 1 below.

Table 1. Students’ responses about the level of development across different countries

	Switzerland	Austria	Congo	Germany	Norway	China	Croatia	USA	Angola	India
Participants	100	92	101	102	101	102	104	99	95	100
Correct answer	69	29	48	74	58	25	6	76	37	36
% correct answer	69.00	31.52	47.52	72.55	57.43	24.51	5.77	76.77	38.95	36.00
Group as classified by WB	HI	HI	LI	HI	HI	UPI	HI	HI	LMI	LMI
Most believed	HI	UMI	LI	HI	HI	HI	LMI	HI	LI	LMI
	69	56	48	74	58	72	75	76	47	36
Most believed %	69.00	60.87	47.52	72.55	57.43	70.59	72.12	76.77	49.47	36.00

Notes: HI – high income (rich) country; UMI – upper middle income country; LMI – lower middle income country; LI – low income (poor) country

Table 1 reveals many interesting findings. It appears that the first year undergraduate students guessed (answered) most correctly (i.e. with the highest percentage of correct answers) mainly in the group of the richest economies those being USA, Germany and Switzerland with the percentages 76.77%, 72.55% and 69%, respectively. To take USA as an example, the data in the table reveal the following. USA is classified by World Bank in the group of high income (rich) countries. 76 out 99 students (76.77%) correctly answered that USA belongs to the group of high income countries. Among the countries for which the students answered least correctly (i.e. with the lowest percentage of correct answers) are Austria, China and Croatia with percentages 31.52%, 24.51% and 5.77%, respectively. In the case of Austria, World Bank classified this country in the group of high income (rich) countries, while only one third of students correctly recognized this fact. An interesting finding is also that only one quarter of students classified China correctly, i.e. in the group of upper middle income countries (as classified by World Bank). The lowest percentage of correct answers is, interestingly, in the case of Croatia. World Bank classifies Croatia as a high income (rich) country. Only 5.77% of students classified Croatia correctly as a rich country. What appears to be most interesting from these data is that it was Croatian students that classified their own country the least correctly. We repeat: only 5.77% of students were familiar with the fact that Croatia is classified by the World Bank as a rich economy. This suggests that there seems to exist a huge misperception about the level of economic development by Croatian students. Interestingly, this misperception is identified among economics students which are expected to be more familiar with economic matters in society. One has to pose the question of what would the percentages be among, for example, law students or the general public. This immediately invites another, detailed investigation across different professions, or even the general public, not only in Croatia but possibly across different countries which would allow interesting comparisons. The

reader would probably by now start considering the question of how representative the sample under investigation is and whether any strong conclusions may be drawn from a sample of 100 first-year undergraduate students. While this concern, and possible criticism, admittedly, is easy to understand, let us state that we only use this investigation as a starting point to highlight the need to explore the economic facts concerning economic development further, and familiarize society with these important issues. Indeed, low awareness (or consciousness) about economic reality strongly questions the ability of people to make individual or social choices correctly.

Another interesting part of Table 1 reveals which group most of the students (and in which percentage) believed a country belonged to. Attention should be dedicated to those countries in the table where the students' beliefs and official World Bank classifications did not match. This will typically be the case where the least correct answers by students were given (i.e. the countries with the lowest percentage of correct answers). The first country where we can notice this mismatch is Austria. While Austria is classified by World Bank to be a rich (high income) country, only one third of students responded in this vein. Most of the students (60.87%) believed Austria belonged to the upper middle income group. China is also an interesting example but the students' answers here went in the opposite direction, i.e. students believed that China is more developed (has a higher income *per capita*) than is actually the case. Thus, World Bank classified China in the group of upper middle income countries, whilst most of the students (70.59%) believed (wrongly obviously) China belonged to the group of high income (rich) economies. Of particular importance for this study is the Croatian case. As outlined above, the percentage of correct answers was by far the lowest, with only 5.77% of students correctly identifying that Croatia is a rich economy by World Bank classification. This misperception is further exacerbated by the percentage of students believing that Croatia belonged in one of the below-rich income groups. 72.12% of students responded that by World Bank classification Croatia belonged into the lower middle income group, two income classes below the actual income class. These wrong perceptions clearly invite a much broader investigation, probably more of a sociological sort of study being adopted. For the purpose of present study, we use this as a starting point which invites the investigation as to what the actual level of development in Croatia is (apparently different from what is usually thought if the data at hand are to be trusted) and how it ranks to some of the neighboring countries. In the rest of this study we, thus, focus on investigation of the relative level of economic development in Croatia and some Balkan countries, compared to the rest of the world.

3. EMPIRICAL DATA

In this section, we investigate and present graphically the data on various development indicators. We start with the GNI *per capita*, that is used by the World Bank when classifying the countries across the four income groups (i.e. by the level of economic development). We present the data for Croatia, and in order to allow comparison we also include other Balkan countries (by applying the geographical criterion this would include the following countries: Albania, Bulgaria, Bosnia and Herzegovina, Greece, Kosovo,³ Montenegro, North Macedonia, Serbia, Slovenia and Romania). We use the latest year available, which is 2021.

Figure 2 provides interesting insights into economic development of Balkan countries using the GNI *per capita*, the indicator used by World Bank to classify countries across the four groups explored earlier. The countries which have their GNI *per capita* above the red dashed line are classified by the World Bank as high income (rich) economies. These would include

³ Under UN Security Council Resolution 1244/99.

Slovenia, Greece, Croatia and Romania. The remaining countries are classified as upper middle income economies (above the blue full line and below the red dashed line). Out of the 11 Balkan countries presented in Figure 2, Slovenia appears to have the highest GNI *per capita*. Greece ranks second, whilst, interestingly, Croatia is ranked third, lagging behind Slovenia and Greece only. We in particular focus on Croatia here, as we used the survey of Croatian students as a starting point for our investigation. Thus, not only Croatia is classified as a high income country, but it also ranks pretty well among the other Balkan countries, outperforming all countries except Slovenia and Greece. Romania and Bulgaria, even though being EU members longer than Croatia, are also behind Croatia. Although the typical perception by people in Balkan countries is that they live in dire economic circumstances, the data in Figure 2 appear to suggest none of the countries would be classified as a poor economy by the World Bank. Apparently it is the case that none of the countries would be classified as a lower middle income economy.

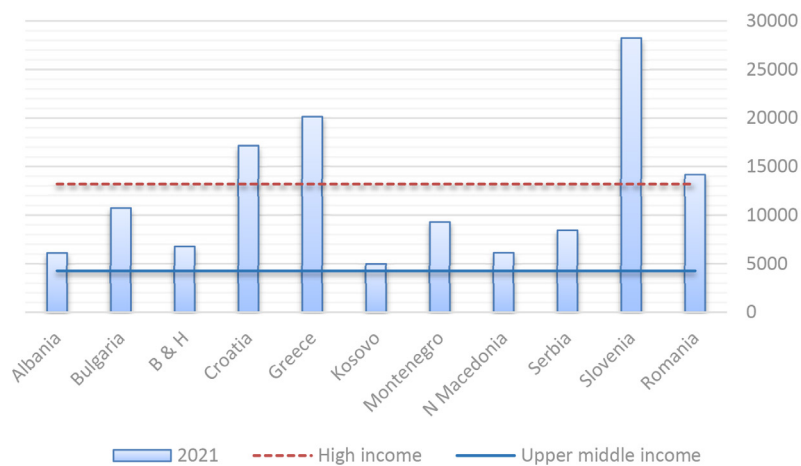


Figure 2. GNI per capita across selected countries (in US \$)

Source: World Bank WDI

Economists are, of course, aware that comparisons between countries should also take into account different price levels of goods and services across countries. To that end, the indicators (e.g. GDP *per capita* or GNI *per capita*) may be modified and used in their PPP (purchasing power parity) versions. We present GNI *per capita* in PPP form in Figure 3 below.

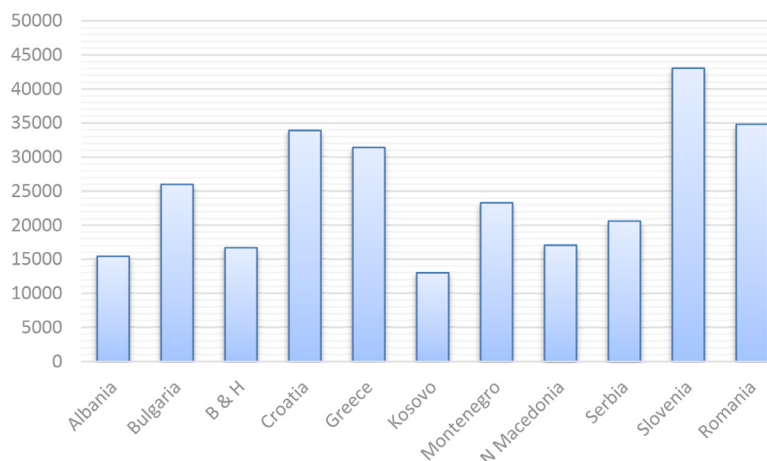


Figure 3. GNI per capita (PPP) across selected countries (in US \$)

Source: World Bank WDI

Figure 3 reveals that the differences among countries are less pronounced when PPP data are used. Expectedly, with the PPP modification in all the countries GNI *per capita* is at significantly higher levels. Slovenia ranks first again, whilst Romania follows. Croatia is again in third place, with Greece weakening its position and being ranked only fourth. Kosovo⁴ remains at the bottom even with this modification to the GNI *per capita* indicator.

In order to provide somewhat broader perspective on economic development and to account for some of the criticisms of the GDP (or GNI) data we include additional indicators in our analysis (for criticisms of GDP as a measure of wellbeing see for example Stiglitz et al., 2009; Fleurbaey, 2009; Fraumeni, 2022). Namely, economic development is defined by Encyclopedia Britannica as “the process whereby simple, low-income national economies are transformed into modern industrial economies” (Krueger & Myint, 2022). It is often used interchangeably with GDP *per capita*, even though these two terms are not the same. Namely, GDP *per capita* measures economic performance of a country and is useful for making cross-country comparisons of average living standards. However, it also entails some weaknesses. For example, GDP *per capita* does not take into account income distribution, informal economy, ecological and health issues, life satisfaction, etc. Overall, it does not reflect a nation’s welfare. The term economic development goes beyond GDP *per capita*, in that it additionally accounts for poverty reduction and income redistribution. One of the key indicators that measure economic development is Human Development Index (HDI).

HDI incorporates three main dimensions of human development: health dimension (measured by life expectancy at birth), education dimension (assessed via mean of years of schooling for adults aged 25 years and more, and expected years of schooling for children of school entering age) and the standard of living (measured by gross national income *per capita*). Overall index results from the aggregation of the above-listed three dimensions using geometric mean. The overall index (column 1), the three dimensions (columns 2a, 2b, 3 and 4), as well as the HDI rank (column 5) out of 191 countries, are given in Table 2.

Table 2. Human development index for selected countries in 2021

	(1)	(2a)	(2b)	(3)	(4)	(5)
	Human Development Index (HDI)	Life expectancy at birth	Expected years of schooling	Mean years of schooling	Gross national income (GNI) <i>per capita</i>	HDI rank
Country	Value	(years)	(years)	(years)	(2017 PPP \$)	
	2021	2021	2021	2021	2021	2021
VERY HIGH HUMAN DEVELOPMENT						
Slovenia	0.918	80.7	17.7	12.8	39,746	23
Greece	0.887	80.1	20.0	11.4	29,002	33
Croatia	0.858	77.6	15.1	12.2	30,132	40
Montenegro	0.832	76.3	15.1	12.2	20,839	49
Romania	0.821	74.2	14.2	11.3	30,027	53
HIGH HUMAN DEVELOPMENT						
Albania	0.796	76.5	14.4	11.3	14,131	67
Bulgaria	0.795	71.8	13.9	11.4	23,079	68
Bosnia and Herzegovina	0.780	75.3	13.8	10.5	15,242	74
North Macedonia	0.770	73.8	13.6	10.2	15,918	78
World	0.732	71.4	12.8	8.6	16,752	

Source: <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>

⁴ Under UN Security Council Resolution 1244/99.

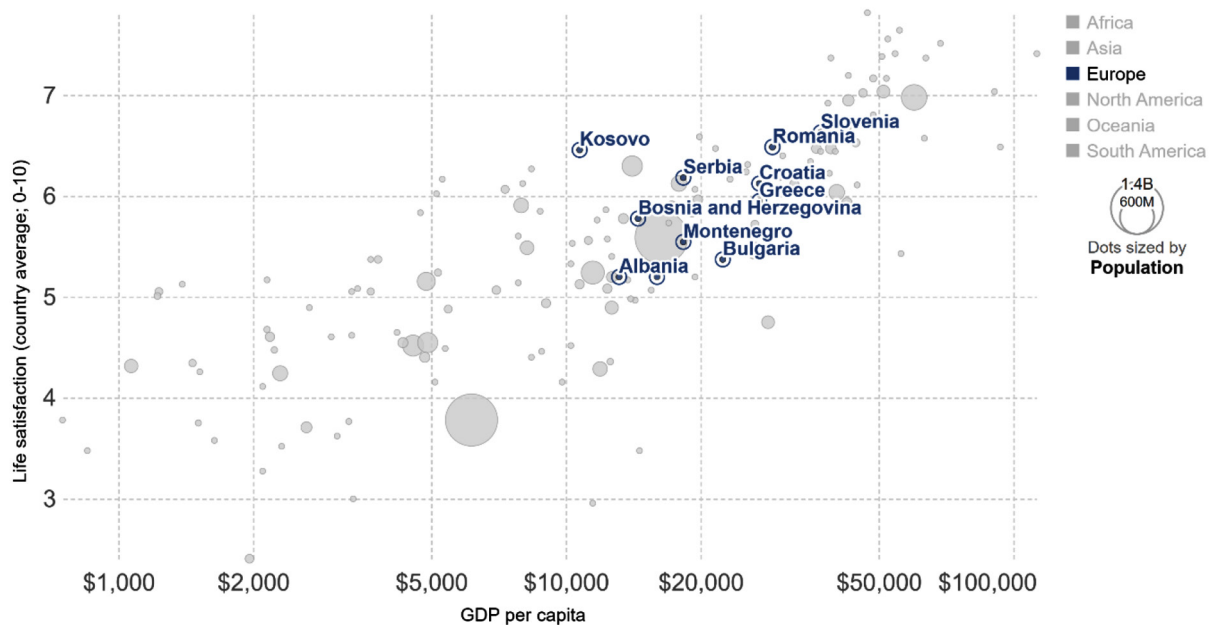
The United Nations Development Programme (UNDP), in addition to publishing the data on HDI, categorizes countries into four categories depending on the level of human development achieved. As can be seen from Table 2, of the Balkan countries in our sample, Slovenia, Greece, Croatia, Montenegro and Romania pertain to the category of Very high human development. Albania, Bulgaria, Bosnia and Herzegovina and North Macedonia are listed in the category High human development. Neither of the countries in our sample pertains to the groups: Medium human development and Low human development. As for the HDI components, the analyzed Balkan countries mostly pertain to high-levels of development in each of the three components.

Finally, acknowledging the fact that high income and/or level of development need not necessarily reflect one's wellbeing, i.e. subjective feeling of satisfaction with one's life, we also look at the life-satisfaction data. Quality of life or life satisfaction indicators typically measure how people evaluate their life as a whole by asking them to rate their satisfaction with life on various scales. These are often used in addition to GDP as an indication of the overall wellbeing in a country. Figure 4 shows the relationship between GDP *per capita* and self-reported life satisfaction in our sample of countries in 2020⁵.

Self-reported life satisfaction vs GDP per capita, 2020

The vertical axis shows the national average of the self-reported life satisfaction on a scale ranging from 0-10, where 10 is the highest possible life satisfaction. The horizontal axis shows GDP per capita adjusted for inflation and cross-country price differences.

Our World
in Data



Source: World Happiness Report (2022); Data compiled from multiple sources by World Bank
OurWorldInData.org/happiness-and-life-satisfaction/ • CC BY

Figure 4. Self-reported life satisfaction vs GDP per capita in 2020

Source: Ortiz-Ospina and Roser (2013)

Figure 4 depicts a clear positive relationship between the two variables, suggesting that in countries with higher GDP *per capita* people report higher levels of life-satisfaction. Moreover, the levels of reported life-satisfaction are high in our sample of countries relative to the rest of the world, with all the countries being above level 5. Figure 5 further shows that once a trend line is added to

⁵ The data was not available for 2021.

the above scatter gram, a following picture emerges. The dots that represent Kosovo,⁶ Bosnia and Herzegovina, Serbia, Croatia, Romania and Slovenia are all above the trend line, suggesting that people in these countries have a subjective feeling of satisfaction with life that is greater than their GDP levels would suggest. In Albania, North Macedonia, Montenegro, Bulgaria and Greece, on the other hand, one's life-satisfaction is less that one would expect looking purely at GDP numbers.

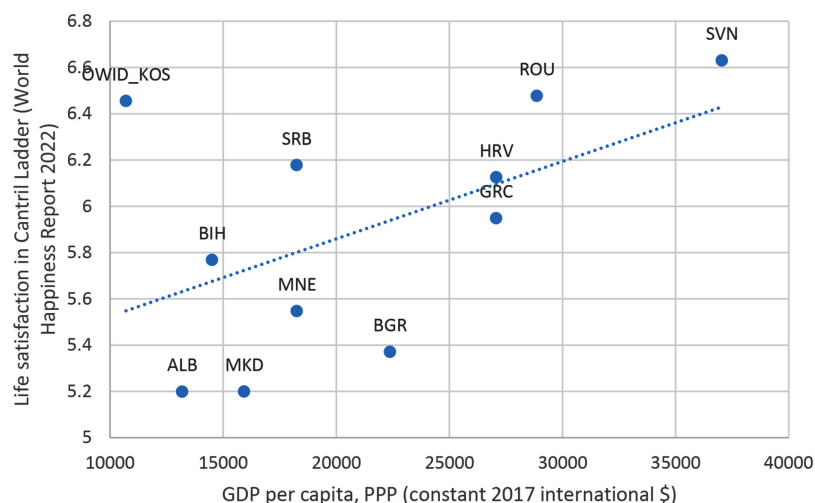


Figure 5. Relationship between self-reported life satisfaction and GDP per capita in 2020 in selected Balkan countries

Source: Ortiz-Ospina and Roser (2013)

Overall, therefore, there is no reason to perceive the observed Balkan countries, and Croatia in particular, as relatively under-developed. More precisely, the data shows that Croatia is ranked as high-income country (according to the World Bank classification); a country with a very high level of human development (according to UNDP classification) and a country with high levels of life satisfaction.

4. FUTURE RESEARCH DIRECTIONS

Level of development and the related standard of living is one of the most important issues in people's life. Given its huge importance, the misperception related to the standard of living people enjoy in their countries comes as a big surprise. While this issue of misperception of development has been present in economic literature, it certainly deserves more attention. One direction for future avenues of research is provided in our study. In particular, we would suggest a broader line of inquiry to be followed with a much higher number of respondents being interviewed about the level of development. In addition to economics students, it would be interesting to investigate students' perception across different scientific disciplines. Additionally, it might be interesting to broaden the country coverage to explore if there are significant differences in students' perception of development among economics students in Croatia and the neighboring countries.

5. CONCLUSION

This paper investigated the level of development across Balkan countries. A starting point for the investigation was the (mis)perception of economic development by a group of first year economics students at the Faculty of Economics, Business and Tourism in Split, Croatia. The

⁶ Under UN Security Council Resolution 1244/99.

typical misperception motivated a deeper investigation of the level of development of Croatia and comparison with countries from the Balkan neighborhood. The investigation of the common indicators of economic development like GNI *per capita*, as well as additional indicators like HDI indicators and life satisfaction, suggests that objectively people in Croatia and the neighboring Balkan countries live relatively good lives. This, in particular, holds for Slovenia, Greece, Croatia and Bulgaria which are classified by the World Bank as rich economies. Other investigated countries are classified as upper middle income economies. By HDI indicators these countries also fare relatively well, being classified as countries with either very high or high human development. Overall, the study provides an interesting review and comparisons between countries and resolves some misperceptions that are typically present in general public.

References

- Bensley, D.A. & Lilienfeld, S. O. (2017). Psychological Misconceptions: Recent Scientific Advances and Unresolved Issues. *Current Directions in Psychological Science*, 26(4), 377–382.
- Brandts, J., Busom, I., Lopez-Mayan, C. & Panadés, J. (2022). Dispelling Misconceptions in Economics. *Journal of Economic Psychology*, 88, 1-19.
- Fleurbay, M. (2009). Beyond GDP: The Quest for a Measure of Social Welfare. *Journal of Economic Literature*, 47(4), 1029-1075.
- Fraumeni, B. (2022). Gross domestic product: Are other measures needed? *IZA World of Labor* (available at: <https://wol.iza.org/uploads/articles/609/pdfs/gross-domestic-product-are-other-measures-needed.pdf>) (<https://doi.org/10.15185/izawol.368.v2>)
- Hauser, O. P. & Norton, M.I. (2017). (Mis)perceptions of Inequality, *Current Opinion in Psychology*, 18, 21-25.
- Hopkins, D. J. (2012). Whose Economy? Perceptions of National Economic Performance During Unequal Growth. *Public Opinion Quarterly*, 76(1), 50–71.
<https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2022-2023>
<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>
- Krueger, A.O., & Myint, H. (2022). Economic development. *Encyclopedia Britannica*, 14 Oct. 2022, <https://www.britannica.com/topic/economic-development>. Accessed 27 October 2022.
- Ortiz-Ospina, E. & Roser, M. (2013). Happiness and Life Satisfaction. Published online at [OurWorldInData.org](https://ourworldindata.org). Retrieved from: '<https://ourworldindata.org/happiness-and-life-satisfaction>' [Online Resource, details on GDP and happiness available at: <https://ourworldindata.org/grapher/gdp-vs-happiness>, accessed November 5th 2022]
- Runge, J. & Hudson, N. (2020). Public Understanding of Economics and Economic Statistics. ES-coE Occasional Paper 03
- Stiglitz, J. E., Sen, A. & Fitoussi J. P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress. Paris: Commission on the Measurement of Economic Performance and Social Progress, 2009.
- UNDP (United Nations Development Programme). (2022). Human Development Report 2021-22: Uncertain Times, Unsettled Lives: Shaping our Future in a Transforming World. New York. Available at: <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI> [accessed November 5th 2022]