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PRELIMINARY REPORT

The Competitiveness and Gender Equality Overview of Serbia, Montenegro and Croatia in 2019

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A B S T R A C T

Competitiveness has always been substantial component of sustained and durable economic growth. This article presents a comparative analysis of competitiveness and gender equality of countries in Western Balkans region - Serbia, Montenegro and Croatia with reference to a correlation between the competitiveness and gender equality level of EU member states including Serbia and Montenegro. Competitiveness level is measured by Global Competitiveness, Doing Business and Economic Freedom Index. Gender equality level is measured by Gender Equality Index. There are some areas where some improvement is needed to increase the level of competitiveness and gender equality. Based on results of the analysis, Serbia is more competitive than Montenegro and Croatia in 2019, mainly due to solid doing business practices and level of freedom in economic terms. Croatia is second placed country, followed by Montenegro. Regardless of their competitiveness ranking, significant progress will be needed in terms of innovation capacity development, rule of law and fiscal policy. Serbia has also slightly higher level of gender equality than Montenegro and Croatia but significantly lower level than EU member states average. Also, it is determined that higher levels of competitiveness are largely followed by higher levels of gender equality in EU member states, including Serbia and Montenegro.

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KEY WORDS: *competitiveness, gender equality, index, Western Balkans region, comparative analysis*

Introduction

In a rapidly changing global economic environment, competitiveness is even more significant in achieving economic prosperity and better country's living standard. Krugman (1997) defined competitiveness as another way of expressing productivity and stated that a country's capacity to improve its living standard depends almost entirely on its ability to increase its productivity. In this regard, competitiveness is one of the key factors in achieving sustainable economic growth. However, Krugman believed that the obsession with competitiveness was a "misguided and harmful" approach, especially since focusing on competitiveness could diminish the quality of economic policy-making processes and contribute to the wrong choice of economic policies (Hassett, 2012).

Significant scope of Organization for Economic Cooperation and Development work is related to the background and framework of competition policy, as well as to how competition authorities can develop through academic work to improve their effectiveness (OECD, 2019). Also, competition is an important process forcing companies to become more efficient and to have a greater offer of products and services at lower prices, which leads to increased consumer well-being and allocative efficiency, thereby incorporating the concept of "dynamic efficiency" based on which companies engage in innovation and drive technological change and progress (Khemani & Shapiro, 1993).

The country competitiveness also depends on the innovation of its economy. One of the key determinants of economic innovation is the country's innovation system, which denotes a network of public and private institutions which activities and interactions determine the emergence, import, continuous innovations improvement. On the other hand, according to the research by Cvetanović and Sredojević (2012), improving the country's innovation capacity is an important premise for establishment of country's innovation structure. Scientists and policy makers broadly agree that the green economy should be given priority in defining a sustainable economic growth strategy, because it represents an important support for economic growth, investment and competitiveness (Radović Marković, Nikitović & Jovančević, 2015).

Nowadays, the gender equality issue is also a substantial challenge and it seems that there are even more obstacles on that path due to numerous demands placed by the modern age. In particular, development of information technologies has contributed to increasingly difficult achievement of countries competitiveness. Many countries have adopted certain strategies for encouraging and developing women's entrepreneurship with defined action plans and strategic goals. However, in many cases, strategies are only documents that prove that some action has been taken on improving gender equality, while addressing specific challenges on gender equality largely remains in the shadow of other political and economic issues.

This article presents a comparative analysis of competitiveness of Serbia, Montenegro and Croatia based on the values of Global Competitiveness Index, Doing Business Index and Economic Freedom Index as well as analysis of gender equality level based on the value of Gender Equality Index for 2019. Based on the values of the competitiveness indexes and pillars for each country, there are areas with low or high levels of competitiveness and gender equality. In this regard, a null no. 1 hypothesis states that competitiveness and gender equality measured by these indexes for 2019 is higher for the EU member states (in this case for Croatia), than for the countries that are still in the EU negotiation process (in this case for Serbia and Montenegro). Also, null no. 2 hypothesis states that there is a significant correlation between competitiveness and gender equality level in EU member states, including Serbia and Montenegro in 2019.

The WEF Global Competitiveness Report for 2019 presents economic growth outlook for 141 countries through the Global Competitiveness Index (GCI) and includes about 99% of world’s GDP. In line with measured values, guidelines are set out to achieve economic growth that is crucial for improving living standards in countries. In addition, the report describes the link between competitiveness, shared prosperity and environmental sustainability in a way that indicates that it is possible to achieve competitiveness, inclusion and transition towards more sustainable systems simultaneously. A leadership approach and proactive economic policies are needed to be implemented to achieve a new inclusive and sustainable system.

In 2018, a significant revision of the former WEF methodology was carried out to assess the competitive position of the economies, regarding names, positions, structure and methodology of calculation of indicators, organized in 12 so-called pillars of competitiveness which relate to functioning of institutions; establishment of infrastructure, ICT level, macroeconomic stability, health system development, skills development, product and labour market issues, financial system in general, market magnitude, business dynamics and innovation capacity level (Schwab, 2019). Last year's change in methodology affected a number of indicators used to monitor the 12 pillars of competitiveness (instead of the previously used 114, last year were used 98, 64 of which are completely new), as well as a different classification of indicators within the pillars and sources for data collection.

Due to new fundamental changes in functioning of national economies with the advent of the fourth industrial revolution, the so-called principles were introduced that dominate multiple factors and refer to resilience, agility, innovative ecosystems and people-centered approach. The aim of change in methodology was to significantly increase the objective comparability of global competitiveness indexes between countries and to reduce excessive fluctuations in values, influenced by last year's realized values. The method of grouping countries into stages of development was abolished.

The value of index for measuring global competitiveness is currently includes 103 indicators obtained through data from international institutions, but especially from specific survey. The pillar values of competitiveness and indicators within the pillars were transformed from 0 to 100, with 0 being the lowest and 100 being the highest grade. All factors have a similar impact on the competitive position of the economy, regardless of income level so that each pillar could be a potential trigger of competitiveness (Tanasković & Ristić, 2015).

The World Bank Group's Doing Business Index is based on the principle that economic activity benefits from clear and coherent rules that introduce strong protection of property rights, facilitate dispute resolution and provide protection against abuse in cooperation of contracting parties. Such rules are much more effective in promoting economic growth and development when they are effective, transparent and accessible to those who are targeted. The power and inclusiveness of rules also have a decisive influence on how societies distribute benefits and finance the costs of development strategies and economic policies.

The Doing Business project, which was launched in 2002, analyzes domestic SMEs and measures the regulations that apply to them throughout their life cycle (Doing Business, 2019). The Doing Business Index measures business regulation in small and medium entreprises that are in the largest city in each of the 190 countries.

Doing Business for 2019 targets ten areas of business regulation included in score and ranking related to easiness of business procedures. By scores[2], countries are compared relative to benchmarks which reflect implementation of the best regulatory practice for each indicator.

On the other hand, ranking based on ease of doing business score can only point out changes of regulatory environment relative to other countries (World Bank Group, 2019). The Doing Business team with expert advisers, composes a questionnaire which data are subjected to a number of rounds of verification, that can be subject to many ex-post revisions or expansions of collected data. (Doing Business, 2019).

Within the methodology of the Doing Business project, property rights protection and contracts have a significant impact on investment, exchange and economic growth. In this way, the positive connection between judiciary's functioning and investment is highlighted. Countries are competing in attracting foreign investment, so it is crucial to have an institutional framework that will provide a supportive investment environment. In this regard, strengthening the rule of law contributes to a more favorable business environment, as it creates a climate of stability and predictability, where business risks can be rationally assessed (Golubović, 2019).

The Heritage Foundation's Economic Freedom Index is based on four key aspects of the economic and entrepreneurial environment that are typically monitored by the country's executive authorities in terms of adequate policy implementation of rule of law, government size, regulatory efficiency and open markets.

Based on assessment of conditions in these four aspects, the index measures 12 specific components of economic freedom, each rated on a scale from 0 to 100. The score of these components of economic freedom are calculated using multiple variables that are equally weighted and whose

[2] In 2019, the name "distance to frontier score", or "distance to the border", was changed to "ease of doing business score" to better reflect the basic idea of the measure - a value that indicates the country's position in adopting regulatory best practice. The procedure for calculating this result remained unchanged.

average represents the total value of country's economic freedom index. Then, the average of these scores is calculated, using equal weights, to calculate the final score of economic freedom in the country. The profiles of countries presented by the index provide examples from the real environment, i.e. the effect of executive authority policies on the economic welfare of individuals and households. Economic policies that have impact on the increase of economic freedom are usually associated with greater economic and social progress. From total of 186 countries in the 25th edition of the 2019 Index, 180 are fully rated and ranked (Index of Economic Freedom, 2019).

Countries with substantial economic freedom also have higher level of political stability and income with greater social mobility conditions and labor environment with high innovation and experimentation capacity. Countries with lower level of economic freedom are at a lower range of development of economic and social background (Miller, Kim, & Roberts, 2019). If the growth of a country is based on innovation, economic freedoms are crucial for advancing economic growth, i.e. economic institutions that allow economic freedoms are crucial for economic growth of such countries (Begović, 2019).

The experience of highly developed countries shows that clusters are an effective instrument for strengthening the competitiveness of industrial enterprises, while clustering enhances the competitiveness of industry on international level by increasing productivity, innovation and starting new businesses (Mićić, 2010).

Growth in a number of employees and companies in the region is almost completely positively correlated with GDP growth. The perfect correlation exists in the interdependence of clusters, attractiveness of business environment and quality of government service. The analysis also indicates the great importance of investing in science and innovation capacity. These indicators show that growth of research and innovation investment has a great impact on GDP growth of the region (Vuković, 2013).

Research Results

According to the WEF Global Competitiveness Report, countries in the Western Balkans region have been positively evaluated in terms of product, labor and financial market effectiveness. Although there has been the lowest unemployment rate on record in these countries, there is still uncertainty about its future developments, with GDP per capita of about 29% of Germany's GDP. Although there are positive results in the market and in adopting skills in the region, significant progress is needed in creating a favorable environment for improving competitiveness. (World Economic Forum, 2019).

The highest value of Global Competitiveness Index was recorded for Croatia (61.9), slightly lower for Serbia (60.9) and Montenegro (60.8). Serbia is ranked 72nd of 141 countries in the 2019 rankings, seven positions lower than last year (65), due to progress made by some countries. For Serbia, achieving a certain degree of competitiveness of the national economy is one of the requirements for becoming a fully-fledged member state of the European Union. Achieving a higher level of competitiveness of the domestic economy is the basis for the realization of the so-called domestic soft power[3] (Bubanja, 2019). Among the countries in the region, according to the new methodology, the highest increase in the index value was recorded by Croatia by 1.8 points, thus improving its ranking by five places (63). Despite increasing its GCI value by 1.2 points, Montenegro is ranked two places lower (73) than in last year's ranking.

In total value of the index for Croatia, the highest value was achieved for the pillar of macroeconomic stability, which was mostly contributed by a stable level of inflation. In total value of the index for Serbia and Montenegro the highest value was recorded for the pillar health. On the other hand, within the index for Croatia and Serbia the lowest value was realized within the pillar the ability to innovate, where significant progress is needed in area of R&D for Serbia, i.e. interaction and diversity (of workforce) for Croatia. The lowest value for Montenegro was recorded in the market size pillar mostly due to the low level of GDP measured by purchasing power parity, expressed in billions of dollars.

Compared to values measured for each pillar, Montenegro had an advantage over Serbia and Croatia in seven pillars of competitiveness, i.e. in institutional quality and information techology level, skills, product and labor market, financial system and business dynamics; Croatia has been most successful in infrastructure, macroeconomic stability and health and Serbia in market size and innovation capacity. All three countries had poor results in their innovation ability. However, according to Despotović,

[3] The term "soft power" was introduced by Harvard University professor Joseph Ney in the early 1990s, which he defined as the ability to influence international relations through culture or ideology.

Cvetanović & Nedić (2014), there was not statistically significant correlation of innovation and national competitiveness for countries lower income level. On the other hand, it was found that for small countries in transition there is a significant link between openness to foreign trade and their level of competitiveness, and that the link between openness on the export side is far stronger than the link between openness on the import side and competitiveness (Tešić, 2013).

Serbia has made the largest progress in pillar value of business dynamism due to improvement of administrative requirements and entrepreneurial culture, as well as a slight improvement in pillars of infrastructure, financial system and market size comparing to 2018. Lower values were recorded in pillars of health, product market and ICT adoption, where the largest decline was recorded. Montenegro has made the biggest progress in value of information technology adoption pillar and some progress in quality of institutions, infrastructure, skills, financial system, market magnitude, level of business dynamics and innovation ability. Lower values were realized in pillars of product market and health, where the greatest decrease was recorded compared to the previous year. Finally, Croatia has made by far the largest progress in value of macroeconomic stability pillar due to stability in inflation and debt dynamics, as well as some progress in infrastructure, digital infrastructure, labor market and financial system. A more efficient role of state owned institutions and improvement in tax, monetary and investment policies is needed to mitigate negative effects of globalization.

Serbia as well as other countries in transition, should define an adequate strategy in terms of responding to challenges of world economic trends to facilitate the convergence to level of income of developed countries. In the forthcoming period, the key goals of economic and development policy are achieving macroeconomic and market stability, sustainable economic growth based on industrial gains and exports, increased employment, reducing external debt and negative balance of foreign trade.

Development policy should shift investment to enterprises engaged in production and exports of higher-level production by targeting sectors that will mostly contribute to stable and dynamic economic development and increase competitiveness of country (Aničić J, Aničić D. & Kvrgić, 2019). Although index results are published for each pillar individually, they have substantial impact on each other and vulnerabilities in one pillar often have an impact on other pillars (Kamenković & Lazarević Moravčević, 2018).

Serbia has the highest score of World Bank Doing Business Index (73.49), slightly lower than Montenegro (72.73) and Croatia (71.4). Serbia is ranked 48th in the 2019 ranking of 190 countries, with score that is for 0.36 better compared to last year's, but the ranking is for five places lower. There was a slight decrease in index values by 0.45 and 0.3 for Montenegro and Croatia and a decrease in ranking by eight (50) and seven places (58), respectively. The cross-border trade parameter showed the best performances in the total index value for all three countries. On the other hand, Serbia has the lowest value obtained for parameter protection of minority investors, Montenegro and Croatia for supply of electricity and obtaining loans, respectively.

Serbia was more successful than Montenegro and Croatia in starting a business and granting building permits, mainly due to smaller number of procedures and shorter period for their implementation.

Montenegro has the best performances in three parameters, namely in giving loans, paying taxes and resolving bankruptcy proceedings. Croatia was most successful in electricity supply, registration of property rights, protection of minority investors, cross-border trade, as well as contract execution. Compared to values of competitiveness pillars for 2018, Serbia has made the biggest progress in giving building permits, as well as some improvement in starting business, electricity supply, registering property procedures, tax payment, and settling bankruptcy proceedings. Montenegro has made the biggest progress in procedures for giving building permits and a slight progress in electricity supply and property registration. Weaker performances were realized in bankruptcy resolution and starting business, where the largest decrease was recorded.

Finally, Croatia has made the biggest progress in electricity supply, as well as a slight improvement in asset registration, tax payment and bankruptcy resolution. Substantially weaker performances were realized in giving building permits, and slightly lower in starting a business procedures and minority investors protection. No parameter value decrease was recorded for Serbia.

In terms of business conditions of Western Balkans region, including Serbia, Montenegro and Croatia, as European Union member state, in period from 2006 to 2018, based on three indexes, ranking of countries and adoption of best practices, the Western Balkans economies have made significant, but not yet enough progress in creating favorable business conditions in observed period of time. Based on indexes for the Western Balkans countries and Croatia, being a member state of EU does not mean having more favorable business conditions than those existing in countries non-members of this regional economic integration (Cvetanović, Nedić & Despotović, 2019).

Serbia has the highest value of Heritage Foundation's Economic Freedom Index for 2019, higher than Croatia and Montenegro. Serbia is ranked 69th in the 2019 ranking of 186 countries with an Economic Freedom Index score of 63.9. The overall result increased by 1.4 points, with significant improvements in fiscal policy, business freedom and government spending, but also a weakening of trade freedom score value and judiciary’s efficiency. Serbia is ranked 34th among 44 countries in the region of Europe, and its overall result is below the regional, but above the world average. In the forthcoming period, slower progress is expected in public administration reform and privatization of state-owned enterprises in the electricity, communications and natural gas sectors, so deeper institutional reforms are needed to modernize the tax administration, reduce corruption and strengthen the judicial system.

Montenegro is ranked 92nd with an Economic Freedom Index value of 60.5. The total score decreased by 3.8 points compared to last year, with a sharp decline in score value of fiscal policy pillar and slightly better results in freedom of work, public sector integrity and property rights protection. Montenegro is 39th out of 44 European countries and its total score now is below the regional and world average. Croatia ranks 86th in the 2019 rankings with an economic freedom index of 61.4. The total score value increased by 0.4 points compared to 2018, with a sharp improvement in fiscal policy and a weakening in judicial efficiency. Croatia ranks 38th among 44 countries in Europe, with its overall score below the regional but above world average (Index of economic freedom, 2019).

Serbia has the poorest performances in fighting against corruption. Montenegro has the lowest score value in fiscal policy pillar, given the budget deficit averaging 6.5% of GDP in 2017, 2018 and 2019 as well as 67.5% of public debt in GDP. Croatia’s lowest performances were realized in managing general government expenditure, due to government spending amounting to 47.1% of GDP also in 2017, 2018 and 2019. Remaining challenges refer to political instability and public sector debt levels that make government spending on health and pensions fiscally unsustainable (Miller, Kim, & Roberts, 2019).

Corruption has a negative and substantial impact on starting new businesses and this impact is much more pronounced in countries characterized by less developed regulatory environment. Corruption is the most dominant in areas where the largest number of administrative procedures are necessary for starting a business, such as obtaining construction permits, registering property and obtaining electricity connections (Lepojević, Ivanović Djukić & Stefanović, 2019).

Montenegro has better performances than Serbia and Croatia in fight against corruption, judicial efficiency, business freedom, monetary freedom and tax burden. Croatia has the best performances in property rights protection, trade and financial freedom, so as Serbia in general government expenditure and fiscal policy. Serbia and Montenegro were equally successful in freedom of doing business and at the same time better than Croatia, while Montenegro and Croatia recorded the same values in freedom of investment and achieved higher index values than Serbia.

Compared to Economic Freedoms Index for 2018, Serbia has the largest improvement in fiscal area and a slight improvement in doing business freedom, expenditures management, protection of property rights level as well as in lower the level of corruption. Lower results were realized in trade freedom, as well as slightly lower results in judicial efficiency, monetary freedom and business freedom. There was no change in investment and financial freedom. Serbia improved somewhat the area of rule of law and significantly more the size of public sector. However, there was some deterioration in open markets and regulatory efficiency, where further work is needed to improve country performance.

Montenegro has the largest improvement in index value of business freedom, while slight increase was realized in strengthening the fight against corruption, protection of property rights and judiciary's efficiency, as well as in business freedom. However, a significant drop in index value was realized in fiscal policy. The decrease of value was realized in general government expenditure as well as in monetary freedom. Based on 2019 index values for Montenegro, slight improvement was noted in rule of law area. Croatia has the largest progress in fiscal policy, as well as a slight improvement in fight against corruption, protection of property rights, general government expenditure and tax burden, in business and work freedom.

The decrease of index value was realized in judiciary's efficiency, as well as a slight weakening of performances in fight against corruption and monetary freedom. There was an improvement in size of public sector pillar according to all sub-indicators (general government expenditure, tax burden, fiscal policy). The decrease of value was realized in trade freedom, while the values in investment and financial freedom remained unchanged.

By comparing institutional development of Croatia and selected EU member states with corresponding economic growth, the authors indicated that there is significant room for quality improvement of institutions in Croatia and stated that progress in the field of property rights protection, especially rule of law, would contribute to higher economic growth rates and that institutions and clear and unambiguous and fair rules are linked to economic growth (Buterin, Olgić Draženović & Jakovac**,** 2018).

Despite increasing competitiveness in Western Balkans economies, there is still a clear gap between this region and the EU-11. This statement is supported by company surveys, which indicate that one of the biggest impediments to business is unfair competition from informal sector, while other significant obstacles include corruption, obtaining electricity and access to financing (Radović Marković, 2019).

Gender equality of Serbia, Montenegro and Croatia is analyzed through Gender Equality Index from 2019, based on data from 2017. The calculation methodology of this index includes measuring the country's performance in six domains of work, money, knowledge, time, power and health. The value of the index is shown on a scale from 1 to 100, where 1 represents complete inequality and 100 represents complete gender equality. Since its first edition in 2013, Gender Equality Index provides a complex value that measures gender equality and, based on the EU policy framework, monitors gender equality improvement. It points out both improved areas and areas for gender equality enhancement to make some changes that could provide better living environment (EIGE, 2019).

According to the Gender Equality Index for 2019, Serbia achieved a score of 55.8, which is significantly below the EU member states average of 67.4 (the calculation also included Great Britain, which was still EU member state at the time of data collection). Serbia has achieved a slightly better index score than Montenegro and Croatia. There will be required substantial improvement in many areas to improve gender equality. Serbia recorded by far the weakest performance in the domain of power. In this case, the domain of power implies political (ministers, members of parliament and regional assemblies), economic (members of boards in the largest companies and supervisory board or board of directors and board members of central bank) and social power (board members of research funding organizations, publicly owned broadcasting organizations and Olympic sport organizations).

Although poor performance was noted for almost all domains, it seems that the highest degree of gender equality in Serbia, Montenegro and Croatia has been achieved in health system. This area refers to health status (individual health perception, life expectancy at birth and years of healthy living life at birth), behavior (smoking and harmful drinking and physical activity and/or consummation of fruits and vegetables) and access to health care (population with needs for medical examination and dental examination already met).

Certainly, the fact that the percentage of women entrepreneurs in the Republic of Serbia is growing is encouraging. Research conducted a few years ago indicated the participation of the female population in the total domestic entrepreneurship from only 15 percent, while last year this percentage increased to 34 percent. In research from 2019 conducted for the fourth time in a row by the auditing consulting company Ernst & Young, among the 115 entrepreneurs who run successful, fast-growing companies in the Republic of Serbia, only 23% were female.

Although the ratio of women to men entrepreneurs continues to benefit men, the number of women entrepreneurs is increasing year by year. The most substantial impediments that women face when starting a business are sources of financing regarding the fact that they belong in a smaller group of property owners and therefore have more difficulties to obtain credit support. However, there is a significant shift when it comes to women's entrepreneurship so that is a strong resource new employment (Chamber of Commerce of Serbia, 2019).

The Gender Equality Index score for Montenegro is 55. According to data for 2019, 24% of companies are owned by women, which was inconceivable ten years ago. In Montenegro in 2011 there were only 3 021 companies which had female majority ownership, and in 2019 that number increased to 6 996 (Chamber of Commerce of Montenegro, 2019). However, other countries have the lowest level of gender equality in power and the highest in health area. The index value for Croatia is 55.6. Although the values of the index for these three countries are approximately the same, Croatia has significantly better score than the other two countries in domain of money and slightly worse in knowledge and power.

In this case, the domain of money refers to financial resources (mean monthly earnings (PPS) and mean equivalised net income (PPS)) and economic situation (not at-risk-of-poverty and income allocation). The area of knowledge here refers to attainment and participation (tertiary and formal/non-formal education) and segregation (tertiary students, health and welfare, humanities and arts). According to the data from Women in Adria for 2019, 22% of companies in Croatia are 34% owned by women, i.e. 2.63 male-owned companies per one female-owned company and 1.9 male-owned companies per woman.

However, the number of women represented not only in business but also in public and political life is growing slowly and hard, i.e. the situation within the legal profession is as follows: from 70% of female judges in the judiciary, but none of them were presidents of the Supreme Court; from 70% of female lawyers, none of them was the Attorney General; although 50% are female lawyers in legal profession, none of them was president of the Croatian Bar Association, and since the founding of the Faculty of Law in Zagreb in 1776 year, there have been only two female deans (Deloitte&Touche, 2019). The bulk of this unpaid work continues to fall on women and that makes it harder for them to juggle work and personal life, which impacts on their earning potential and the well-being of the women themselves and their family and friends. The topic of work-life balance affects both women and men and is a top priority for the EU and this is why we chose it as this year's thematic focus of the Index (GEI, 2019).

Correlation Analysis of Competitiveness and Gender Equality for EU Member States Including Serbia and Montenegro in 2019

Correlation analysis of competitiveness and gender equality level was determined by using the SPSS Statistics program, i.e. correlation examination method in evaluating the strength and direction of linear correlation between these two variables in a sample of 30 countries (EU member states, including Serbia and Montenegro). This analysis included these countries because the Gender Equality Index doesn't cover all countries covered by the Global Competitiveness Index for 2019.

The correlation between competitiveness and gender equality was analyzed using the Pearson Linear Correlation coefficient. Preliminary analyzes were performed to prove the fulfillment of the assumptions linked to normality, linearity and homogeneity of variance. There is a strong positive correlation between competitiveness and gender equality calculated (r = 0.883, n = 30, p <0.01) with higher levels of competitiveness largely followed by higher levels of gender equality in a sample that includes EU member states, Serbia and Montenegro.

Figure 1: Results of correlation analysis

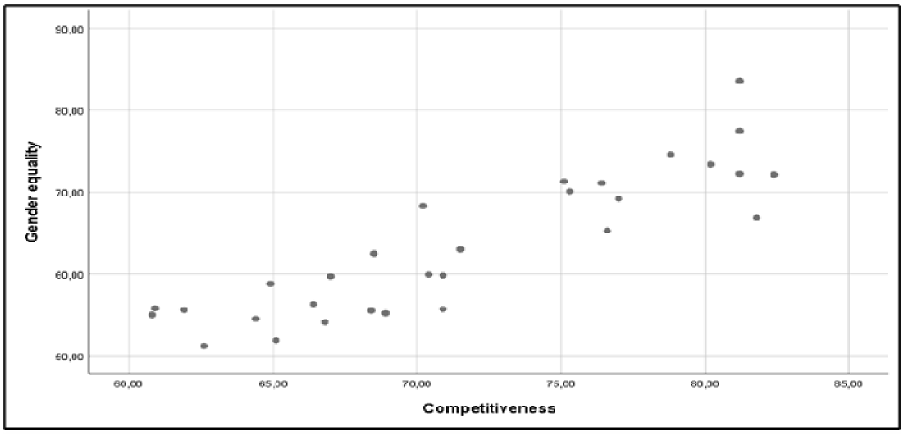
Correlations

		Competitiveness	Gender equality
Competitiveness	Pearson Correlation	1	,883**
	Sig. (2-tailed)		,000
	N	30	30
Gender equality	Pearson Correlation	,883**	1
	Sig. (2-tailed)	,000	
	N	30	30

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Statistics

Figure 2: Correlation curve



Source: SPSS Statistics

The coefficient of determination represents how much a part of the variance of two variables represents the so-called common variance, i.e. how much a part of the variance of one variable is explained by the variance of the other. In this case, this coefficient was calculated by squaring the

Pearson correlation value of 0.883 (0.883x0.883=0.779), i.e. competitiveness of EU states including Serbia and Montenegro explains almost 78% of their gender equality according to the values of indexes for 2019, which is a significantly high share of the common variance obtained.

Conclusion

The comparative analysis of competitiveness and gender equality in 2019 indicates that the null no. 1 hypothesis which states that the competitiveness and gender equality in 2019 is higher for the EU member states (Croatia), than for the countries that are still in the EU negotiation process (Serbia and Montenegro), can be rejected. Based on the values of Doing Business Index and Economic Freedom Index for 2019, Serbia is more competitive than Croatia and Montenegro. Also Serbia has slightly greater gender equality than Montenegro and Croatia. Croatia has the highest value of Global Competitiveness Index, while Montenegro has the lowest level of competitiveness country, mostly due to lower values of Global Competitiveness Index and Economic Freedom Index compared to the other two countries.

In 2019, Serbia is the most competitive country in cross-border trade, starting business procedures and fiscal policy. Significant progress will be needed in fight against corruption and improving the judicial effectiveness, as well as in developing the innovation capability. In order to make progress in EU accession process, Republic of Serbia needs to ensure full implementation of key reforms and regulations, especially in judicial reform, fight against corruption, public administration reform, institutional independence, media reform, anti-discrimination and minority protection (MFA, 2020). Montenegro showed the highest values in cross-border trade, tax burden and free trade level, but further progress will be needed in market and innovation development, as well as in general government expenditures reduction.

As part of the negotiations with the EU, Montenegro has not opened only Chapter 8 (Competition). It's needed further human capital and labor market development. Local companies have to strengthen efforts to increase international competitiveness for durable growth. Montenegro have to develop access to networks and facilitate business entities the use of digital technologies (European Commission, 2019).

In 2019, Croatia was the most competitive in developing cross-border trading and trade freedom, but also in achieving macroeconomic stability. The lowest levels of competitiveness were measured because of poor innovation capability, high levels of corruption as well as general government expenditure. Croatia, as an EU member state, is part of the EU internal market, which is based on 'four freedoms' of goods, people, services and capital. However, based on 2019 Economic Freedom Index values, Serbia has better performances than Croatia in business freedom, labor, monetary freedom, fiscal policy as well as in judicial efficiency. The analysis indicates that all of three countries should make substantial progress in fight against corruption, judicial effectiveness improvement and general government expenditures reduction, regardless of being an EU member country.

Although poor performance was noted in almost all domains regarding gender equality, it seems that the highest degree of gender equality in Serbia has been achieved in the field of health, as in the other two countries. However, there will be needed significant improvements in domains of political, economic and social power. Also, higher levels of competitiveness are largely followed by higher levels of gender equality in EU member states including Serbia and Montenegro in 2019. That means the null no. 2 hypothesis which states there is a significant correlation between these variables in these countries in 2019 can be confirmed. Regarding the selected sample of countries, the more competitive country becomes, it has the better outlook to achieve higher gender equality levels.

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