

THE IMPACT OF THE NEW GLOBAL REALITY ON THE EUROPEAN INTEGRATION PROCESS: THE CASE OF THE REPUBLIC OF SERBIA¹

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ABSTRACT

The acquisition of full membership for the Republic of Serbia in the European Union depends on a large number of factors. The combined and synergistic effect of these factors has made the process of Serbia's accession to the European Union extremely uncertain in terms of date and final outcome. The new reality, including the COVID-19 pandemic, U.S. isolationist policies during President Trump's tenure, the strengthening of China and Russia, and Britain's exit from the EU, has made this process even more uncertain. In this context, it is crucial to identify and prioritize key factors that affect or could affect the process of Serbia's accession to the European Union, in order to evaluate the possible outcomes of this process. To solve problems of this level of complexity and uncertainty, it is necessary to apply an interdisciplinary approach of the appropriate level of complexity. Therefore, this paper is an extension of previous research (Krstic et al, 2018; Mimovic et al, 2019) based on the defined research goal, but incorporates a complex, network model called the Analytical Network Process, which included new circumstances that determine what is colloquially called the *new reality*. All calculations in the paper were performed using the software package *SuperDecisions* as computer support for the Analytical Network Process.

Keywords: European integration; global change; forecast; new global reality; date of EU accession; Analytical Network Process; Republic of Serbia; European Union

1. Introduction

The world is changing at a rapid pace like never before. Changes in the environment affect both individual and group preferences, which directly affect the perception and degree of understanding of these changes. Entire nations are facing great existential temptations caused by huge changes in the environment. We need, as never before, a global consensus on the key issues of survival, a universal value system, climate change and long-term goals of humanity. We need appropriate forecasting models that will be able to incorporate the complexity of sudden changes and their consequences.

¹The paper is the result of research on the project *Contemporary challenges of economic development of the Republic of Serbia*, funded by the Faculty of Economics, University of Kragujevac.

In the past six years, Serbia has opened 18 negotiation chapters in the EU accession negotiations and temporarily closed two (Chapters 25 and 26). In 2020, Serbia did not open a single new chapter, partly because of domestic political reasons, which was Serbia's responsibility and partly due to foreign policy circumstances, which were the EU's responsibility. In any case, in order for Serbia to open a new chapter, all member states must give their consent. However, gaining the status of a full member of the European Union does not only depend on how quickly the reforms and harmonization of regulations in the Republic of Serbia adapt to the legal heritage of the European Union, nor on how satisfied other countries are with the progress of the Republic of Serbia as a candidate. The world is changing rapidly; new geostrategic centers of power are emerging, old ones are disappearing, and the extent to which both the EU and potential members adapt to these changed circumstances, will determine not only the European perspective of Serbia and the Western Balkans, but also the future of the EU itself. The benefits of EU membership are well-known. It provides significant benefits to Serbia and other potential member states by encouraging regional cooperation, strengthening democracy, ensuring more rights and freedoms for citizens, contributing to peace and stability, strengthening the position of states in international relations and improving the well-being and living standards of their citizens. For the EU, enlargement offers an opportunity to create a stronger, more secure and larger Union, despite the internal and external crises it faces. External factors, such as the migration crisis, the rise of extremism, and the penetration of China and Russia's geostrategic use of soft and hard power have a major impact on the Western Balkans region and how the EU member states view it. The influx of immigrants to European borders, especially the Western Balkans region, has led to a nonhomogeneous response from some member states and a crisis of confidence. China's rise has been in the making for a long time; China's foreign direct investment rose from 1 billion euros in 2008 to 35 billion euros in 2016, and in 2017, the U.S. National Security Strategy described China as a "revisionist force." The origins of the pandemic in China and its subsequent attempts to minimize the damage caused at the very beginning of the pandemic have only intensified this existing trend. EU-China relations were delicate even before the pandemic, but European Commission President Ursula von der Leyen announced a new diplomatic era, which she called "challenging", that may have been inevitable, given the growing hostility in US-China relations. Increasingly tense transatlantic relations between the EU and the U.S. have also been further complicated by the pandemic. Trump's arrival in office marked the beginning of a turbulent period that culminated in an aggressive U.S. customs policy and the introduction of several tariffs on European exports in 2018. Meanwhile, the EU-Russia relationship has been delicate for some time, with Russia considered a partner until 2014. The relationship, although "difficult", became more difficult with the later annexation of parts of Ukraine, the EU's military support to the Syrian government and accusations of cyber attacks and the increased disinformation campaign in Europe. Increasingly frequent accusations that Russia wants to increase Europe's dependence on Russian gas with its energy policy have further polarized the European Union. It is estimated that the rapprochement between Russia and China is likely to have negative implications for the EU. On the other hand, the COVID-19 pandemic caused an exogenous shock that has tested the resilience of European integration. Analysis of the early stages of the global pandemic showed the following:

- A new chapter of strategic and systemic rivalry with China has opened up as the EU has struggled with internal solidarity and become prey to a global war of narratives led by China and the U.S.;
- The strategic gap in transatlantic relations has widened because the United States has not shown global leadership, further eroding European confidence through the "America first" approach;
- Strengthening of strategic challenges coming from Africa, where the potential health crisis will coincide with a significant economic downturn (Koenig & Stahl, 2020).

The European Union is at a crossroads. Uncoordinated national responses threaten major European institutions, but the crisis is also an opportunity to advance integration and strengthen EU goals (Bongardt & Torres, 2020; Bonomi et al, 2020). In Europe, the pandemic crisis has revealed numerous failures in crisis management, such as a lack of preparedness, solidarity, and slow responses (Roloff, 2020). The corona virus crisis has illustrated the fragility of European common goods such as the single market, the Schengen Agreement, and even Economic and Monetary Union (EMU) if national measures are incompatible or insufficiently coordinated. These are all challenges that the EU is currently facing, and the future of the EU will largely depend on the way it will respond to them, including how it handles the enlargement policy, which is primarily focused on the so-called Western Balkans countries. The EU remains by far the largest trading partner of the Western Balkans, accounting for 69.4% of total merchandise trade in 2019 (82.9% of total exports and 61.8% of total imports). Since 2009, trade has grown by 129.6%. EU companies are the largest investors in the region, accounting for 73% of foreign direct investment (European Commission, 2020). They are therefore the main external driver of growth and jobs in the region. On the other hand, as many times before in the past, the Balkans are a place where the interests of great countries clash, in this case, the EU, Russia, China and the United States. What is the place of Serbia, as a part of the Western Balkans, without whose integration Europe cannot be complete, as the President of the NATO Parliamentary Assembly, Paolo Ali, once emphasized; and, if it still exists, if it is not only declarative, what is the European perspective on Serbia?

The paper is structured as follows: the second part of the paper includes a review of the literature in which forecasting problems are solved using the Analytic Network Process. The third part of the paper describes the prediction problem, with reference to the research from 2018 and published in 2019, and constructs an appropriate model. The results of the model are presented in the fourth part, with a comparative analysis in relation to the forecasting model from 2018 (Mimovic et al, 2019) and with a brief discussion, and the last part includes the concluding observations, work limitations and guidelines for future research.

2. Methodology and literature review

The ANP method (Saaty, 2001) has a wide application in solving decision-making problems in conditions of risk, uncertainty, dynamics and complexity. One of the important areas of application of the ANP method, in addition to evaluating performance and solving the problem of choice in conditions of uncertainty, is prediction, i.e.,

evaluation of alternative future outcomes based on the distribution of their probabilities. Mimovic (2012) showed that the ANP can be used very successfully to structure the influence of various factors on the final outcome of the forecasting process with the example of predicting the sale of a new Fiat 500L car model. ANP sales forecasting was performed by Voulgaridou et al. (2009) who predicted the sales volume of a new product (new edition of the book), as well as Shih et al. (2012) who investigated the sales volume of printers in Taiwan. Ozorhon et al. (2007) applied the ANP to predict the impact of international construction joint ventures. Using the ANP model, the authors examined the key impact factors of these joint ventures and concluded that the most important determinants of their success are partner relationships, structural factors, and partner cultural coherence. The ANP has proven to be a good model for predicting the probability of failure of construction companies in Turkey, including internal and external factors that determine the current business situation of the company and the links between them (Dikmen et al, 2010), and as a model for predicting future sustainability specifications (Eraki & Shoura, 2019), predicting dental diseases (Radyshevskaya & Andreichicova, 2010), etc. In the field of economic forecasting, the ANP method has been used to predict the probability of a financial crisis (Niemira & Saaty, 2004; Saaty & Vargas, 2006, 2013), to predict economic recovery (Blair et al., 2010; Azis, 2010), business forecasting (Mu, 2004), etc. Interesting research by Adamus (2010) and Saaty & Vargas (2013) was conducted in connection with the forecast of Poland's entry into the euro area, which resulted in the optimal alternative for Poland being late entry (after 2011), as well as predicting the date of Serbia's entry into the European Union (Mimovic et al., 2019). Political problems are also common in the application of the ANP method. Saaty and Vargas (2006, 2013) applied the ANP to predict possible ways to overcome the China-Taiwan conflict and the U.S. response to North Korean nuclear threats. In relation to the AHP, the ANP method allows each decision to be presented in the form of a network rather than as a strict hierarchy. Hierarchical decisions can be subjective and predetermined due to the imposed structure, while matrix decisions, whose structure includes dependencies and feedback, represent a more realistic world, which makes the ANP method a more efficient tool than the AHP for practical decision making (Saaty, 2001b). In addition, the ANP is successfully applied in many areas of forecasting, as it allows quick inclusion of feedback and easy comparison with actual results. However, it is also necessary to consider the disadvantages of this method, such as high complexity, manifested in a potentially large number of comparisons in general; cluster comparisons can often be vague and confusing and the decision-making process is longer than with the AHP method.

3. Problem description and structuring of the ANP model

For a better understanding of the nature of the research subject, as well as the goal of the research, keeping in mind the dramatically changed circumstances in the environment, we first provide a description of the problem from the perspective of 2019, presented in the form of an ANP model (Figure 1, Mimovic et al., 2019).

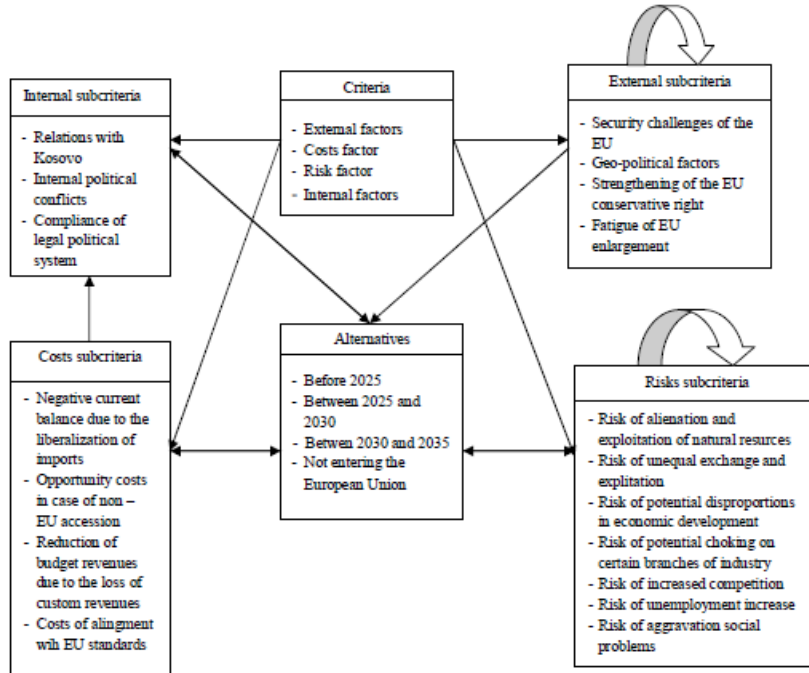


Figure 1 ANP model for evaluation of alternative outcomes of Serbia's EU accession process (2019)

Table 1
Probabilities of achieving alternative outcomes of Serbia's EU accession process (2019)

Alternatives	Normalized	Benchmarking	Rank
Before 2025	0.425020	1.000000	1
Between 2025 and 2030.	0.191682	0.450995	3
Between 2030 and 2035.	0.200024	0.470624	2
Not entering the European Union	0.183274	0.431213	4

Source: Author's assessments

Table 1 shows that in 2019 the highest probability of realization, according to the authors, was the entry of Serbia into the EU by 2025 (42.5%), followed by entry of Serbia into the EU between 2030 and 2035 (20%), between 2025 and 2030 (19.17%), and the probability that Serbia will not join the EU was 18.32%. The obtained results indicated a clear commitment to join the EU at that moment, with the assessment that if the accession does not take place by 2025, it will certainly not be in the time immediately after that, but closer to 2030. It should also be emphasized that the authors jointly evaluated and made comparisons of model elements by pairs. The alternative approach was that each of the authors would independently make estimates and then calculate the geometric mean, which is one of the common approaches for calculating final priorities in situations where there are multiple decision makers (Saaty & Peniwati, 2008; Mu & Pereyra-Rojas, 2018).

In the meantime, primarily on a global level, there have been changes of a tectonic nature, with unforeseeable consequences for the world as a whole, and thus for the internal conditions in Serbia and the countries of the region. We will list the most significant ones, in the author's opinion, that have an evident influence on the processes of European integration, and which because of their internal and external interdependencies, will be included in the model.

1. ***Brexit.*** The exit of Great Britain, the former "empire in which the sun never sets", a permanent member of the UN Security Council and the nuclear power, from the European Union, monopolized the EU's attention during a time when it was least desirable due to the COVID-19 pandemic, and intensified the EU identity crisis. This diminished the EU's influence, and thus its attractiveness from the outside, and emphasized the internal and otherwise present aversion to its further expansion and the need to redefine the conditions of accession. In this sense, the scenarios first went from several concentric, homogeneous circles of countries, classified according to the level of economic and political development with the founding countries of the EU in the center and candidate countries in external circles, also classified into multiple circles. Due to resistance within the Union, the members who joined later and felt discriminated against abandoned the French President Macron's idea to open chapters in clusters. However, after several years of wandering and seeking answers to how to proceed with the EU, the countries came to a consensus that the Western Balkans must be included in the European Union, primarily for strategic, geo-political reasons, in order to prevent the growing influence of China and Russia in that area. The process of joining, by opening and closing the prescribed chapters in order to have systemic harmonization, is a very slow process which has led to the strengthening of populism and the formation of soft autocracies, the so-called stabilitocracies, in the candidate countries. The length of the process also created time and space for the influence of other great players in these countries. This created the need for some kind of incentive to speed up the integration process; therefore, at the beginning of 2021, the French president presented the idea of opening chapters by clusters. However, Britain's imperial ambitions, its own long-term global goals (trade, defense, intelligence, etc.) as well as the desire to be present in the Balkans have never disappeared and cannot be ignored in this analysis.

2. ***Isolationism in the United States.*** The European Parliament in its resolution of 11-25-2020, stressed the need to consolidate and strengthen EU-US cooperation in an unstable international environment, based on mutual respect and a common agenda in defense of multilateralism, international law and common democratic values. The arrival of Donald Trump into power in the United States marked America's return to traditional values and its turning inward in accordance with the mantra "America in the first place." This scenario has already been seen in history at the beginning of the 20th century, which is otherwise characteristic of a Republican administration. Trump's unorthodox behavior, including the split from the Trans-Pacific Trade Agreement, insistence on a larger allocation of NATO budget funds for joint defense, withdrawal from the Paris Climate Agreement, unilateral withdrawal from the nuclear agreement with Iran despite opposition from other guarantors, and trade war with China, all led to weakening of international institutions, reduced the role of the U.S. in Europe and the Middle East, and changed the perspective through which the American administration has viewed regional problems such as Syria, Libya, the Balkans. The results of the last U.S. elections and the

return of Democrats to power, with the election of President Joseph Biden, suggest a change of course and a return to liberal-globalist values and foreign policy guidelines, which cannot be without influence on events everywhere in the world, even in the Western Balkans, in light of the perspective of its European integration. On the other hand, whether the United States will understand that the world is no longer the same as it was, unipolar, but multipolar, is a key question that will determine not only their destiny, but the destiny of the whole world.

3. ***Strengthening of China.*** The European Parliament's resolution of 11-25-2020 noted the strengthening of the assertive public diplomacy of the People's Republic of China around the world after the outbreak of COVID-19 in an effort to fill the political vacuum created by U.S. isolationist policies and to establish itself as a dominant global player with alternative governance. The United States and the People's Republic of China are the two largest economies in the world, both in nominal terms (GDP) and purchasing power parity (PPP). The United States is nominally at the top, while China has been at the top in terms of purchasing power parity since 2014 when it overtook the United States. Combined, the countries shared 40.75% and 34.27% of the total world GDP in nominal terms in 2019. The GDP of both countries is huge compared to the third-ranked countries of Japan (nominally) and India (PPP). The difference in terms of per capita income between China and the United States is very large since China's population is four times the size of the US. The per capita income of the United States is 6.38, or 3.32 times higher than the Chinese nominal, or PPP. The United States is the eighth richest country in the world, while China is in 72nd place. According to the PPP, the United States is in 12th place, and China is in 75th place. However, in the 21st century, the People's Republic of China is emerging as a new global player by expanding its power primarily through the economy with huge, politically unconditional direct investments and favorable and unlimited loans, and strengthening its military and political power. The New Silk Road, or the Silk Road, as the most important Chinese project in the country's history is called, will enable the creation of two trade routes that will connect China with the rest of the world. The new route, which is land and coastal, will pass through 60 countries from Europe, Asia and Africa. The complete infrastructure which includes the construction of ports, roads and power plants, will cost China around one thousand billion dollars. The New Silk Road is often compared to the Marshall Plan, but is also seen as Beijing's attempt to win over financially dependent vassal states. Criticism of Beijing's largest project has focused on the political, economic and strategic effects, while much less attention has been paid to business prospects. The Republic of Serbia is certainly interested in China's efforts to position itself more firmly in Europe, more precisely to penetrate northwestern Europe. In this context, we should look at large Chinese investments in infrastructure projects in the Western Balkans as well as earlier in Greece (port of Piraeus and a 35-year concession) as the soft belly of Europe, which will obviously have political consequences and cannot be left out of the analysis of Serbia's European integration. China's growing global economic influence and the economic and trade policies it maintains have significant implications for the United States and are therefore of great interest to Congress. Although China is a large and growing market for U.S. firms, its incomplete transition to a free market economy has resulted in economic policies considered detrimental to U.S. economic interests, such as its industrial policy and the theft of U.S. intellectual property. All this has led to a complete focus on the distant Pacific and the identification of China's main strategic rival in the future on a

global level by the American administration. However, the new American administration has made moves that suggest a return to the Kissinger doctrine when it comes to China, a strategic competitor with whom it will have extreme competition, but not conflict. China is the biggest geopolitical test and the only country that has the power to seriously question America's ability to shape a global system of "rules, values and attitudes," according to Antony Blinken, the US secretary of state, adding "Our relationship with "China will be competitive when necessary, partner when possible and rival when necessary."

4. **COVID-19 pandemic.** The European Parliament, in its report of 11-25-2020, emphasized that the global outbreak of the COVID-19 pandemic in a changing international environment is a risk multiplier and catalyst for change in the global order. It also emphasized the fundamental importance of strengthening the EU's internal resilience, developing new partnerships and strengthening its multilateral vision globally. Strengthening geopolitical competition in the new geopolitical environment has far-reaching consequences for EU foreign policy, which confirms the need for a more effective EU security policy, strengthening the Euro-Atlantic partnership to combat future pandemics and other major international challenges, while respecting universal values, such as multilateralism and the rule of law.

The end of 2019 marked the beginning of an epidemic of a new corona virus (SARS-CoV-2), first observed in Wuhan, China (Wang et al., 2020). COVID-19, a disease caused by SARS-CoV 2, represents a spectrum of symptoms ranging from mild to severe, often with asymptomatic presentation (Huang et al., 2020). The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020, and to date, more than 106 million have been infected and two million and three hundred thousand people have died worldwide. This greatest plague that has befallen humanity in the last 100 years, not counting the Second World War, has changed the world in several ways, affecting primarily human health, way of life and the economy, both on a micro level and globally. The economic consequences of the pandemic are yet to be assessed, but it is certain that in addition to these material consequences, the psychological and social ones will leave a mark long after the pandemic's end. The political consequences are reflected in the recomposition of global relations. Some of the world's powers, such as China and Russia, have used the incompetence of Western governments and their ineffectiveness in fighting the corona virus to demonstrate their own superiority. For example, in the first-phase of pandemic relief process they delivered protective masks, gloves and other equipment, developed a corona virus vaccine and distributed it unconditionally. In this way, the pandemic altered the daily political routine, including the traditional promotion and insistence of Western countries of liberal-democratic values and their use for criticism and control of global competitors, and instead they became a tool for political struggle and repositioning of global power. Particularly at the very beginning of the pandemic, the European Union reacted inconsistently and chaotically with mutual distrust among member states, ad hoc closing of borders, and continued long-term lock downs as a way to fight the virus. Vaccine procurement demonstrated all of the weaknesses of the complicated mechanism for decision-making, which led to growing dissatisfaction among the population and a wave of protests. The EU has been shown to be slow to act in times of crisis, and its size and complexity often lead to delays in decision-making. Hence, the

COVID-19 pandemic is a factor that should certainly be taken into account in the context of the future of the EU enlargement policy.

We should also not forget Russia as a global player and with whose policy the EU policy is inextricably linked. In its resolution, the European Parliament notes that Russia's systematic attempts to re-impose itself as a global player have geopolitical and geoeconomic dimensions. Russia threatens to undermine the unity of the European Union, and to position itself in the Western Balkans, occupying the vacant space created by the indecision of the EU and its fatigue from further enlargement. Strengthened by the viral diplomacy of the COVID-19 pandemic, the struggle of narratives and aggressive propaganda, Russia is taking assertive steps to promote its geopolitical agenda internationally. With this in mind, in addition to the internal and external interdependencies identified in the 2018 model, the new model in 2021 includes the following links and influences of these factors: a) the alternatives are compared in relation to the above factors because it is evident that each of them has an impact on the status and dynamics not only of Serbia's EU accession process, but also on EU enlargement policy in general, as part of its foreign policy; b) Serbia's relations with the United States, China, Russia and Kosovo are compared with each other, given that Serbia's foreign policy in recent years in relation to the EU and Kosovo is based on a policy of balancing with the world's largest powers. Hence, the following dependencies have been identified: Serbia's relations with the United States, Russia and Kosovo are compared in relation to the factor of Serbia's relations with China; Serbia's relations with China, the United States and Kosovo are compared in relation to the factor of Serbia's relations with Russia; Serbia's relations with Russia, China and Kosovo are compared in relation to the factor of Serbia's relations with the United States; Serbia's relations with Russia, China and the United States are compared in relation to the factor of Serbia's relations with Kosovo. These are compared by determining which of the two observed factors is considered more important, or has a greater impact, in relation to the factor of Serbia's relations with Kosovo; c) The COVID-19 pandemic and the UK exit are compared in relation to the EU Security Challenges factor, in terms of answering which of these two factors is more important from the point of view of the EU Security Challenges factor. The inclusion of these factors, as well as their mutual influences with accompanying implications, led to the need to form a new model, shown in Figure 2.

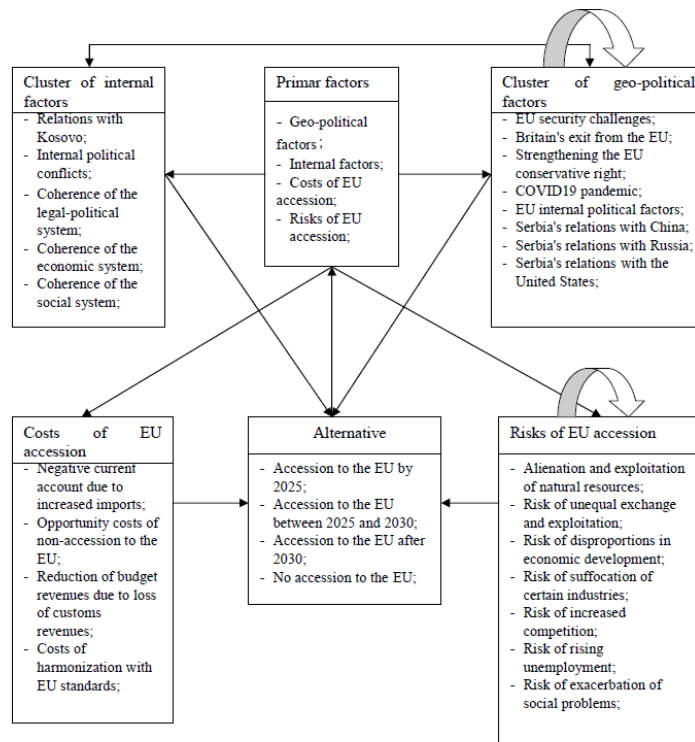


Figure 2 ANP model for evaluating alternative outcomes of Serbia's EU accession process (2021)

4. Model results

Figure 2 presents the ANP model of evaluation of alternative outcomes of the process of Serbia's accession to the EU, where three outcomes are defined in terms of entry timing, and the fourth outcome excludes this possibility. The structure of the model consists of clusters, elements and connections within and between the outcomes. Table 3 shows the relative importance of the criteria in the model. It is estimated that the criterion of geo-political factors (weight coefficient is 0.64299), followed by internal factors (0.15291), cost factors (0.12939) and risk factors (0.07471) has the greatest relative importance in relation to the main goal of the model. This result could be interpreted as the final outcome of the process of Serbia's accession to the EU is most influenced by the factors on which the Republic of Serbia has the least influence, and as such have the greatest importance. This significance is greater than three years ago, which is understandable when considering the newly created circumstances on the global level that have been discussed. Also, the shift of focus and relative importance of the remaining three factors is noticeable, when compared with the values from three years ago (Figure 3). Tables 4 - 7 show the relative importance of sub-criteria within the criteria, i.e., the cluster to which they belong. Thus, among the elements of the cluster, internal factors are estimated to have the greatest relative importance, in the context of European integration, with the sub-criterion of relations with Kosovo (0.82379), which is significantly higher than the value three years ago (0.31503). China and Russia's interest in the Western Balkans,

heightened by indecision, disorientation and what could be called fatigue from EU enlargement, and the somewhat more favorable geostrategic circumstances that occurred with the coming to power of the Trump administration and could be characterized as a simple shift of focus of American foreign policy, led to the re-actualization of the Kosovo issue, which was reflected in the internal political situation in Serbia, as an instrument of political struggle.

The cluster of geo-political factors, unlike three years ago, included factors that reflect the new geostrategic circumstances through the prism of whose relations it is necessary to observe the process of European integration of Serbia. The greatest relative importance in this cluster is the sub-criterion of Serbia's relations with the United States (0.24668), followed by Serbia's relations with Russia (0.23521) and Serbia's relations with China (0.22535), which is understandable, given the political balance in this triangle and Serbia's support from Russia and China in the UN Security Council on the issue of Kosovo, which is most closely related to European integration. It is estimated that other factors are not crucial from the point of view of the model goal. Among the sub-criteria of the cost criterion, opportunity costs of non-accession to the EU has the highest relative importance (0.60863), which is slightly less than three years ago (0.69). Among the risk factors, the sub-criterion alienation and exploitation of natural resources (0.28002) has the highest relative importance, which is a significant shift in focus compared to 2018, when the highest priority was the risk of exacerbation of social conflicts (0.23). This may indicate an awakened and more developed environmental awareness of the citizens of Serbia. The obtained priorities of alternatives, shown in Table 8 are interpreted in terms of the probability of realization of the selected alternatives. We see that the highest estimated probability of realization in 2021 has an alternative outcome and 2035 (21.64%), compared to 19.16% and 23.21% for Serbia's accession to the EU after 2030, compared to 20% in 2018 (Figure 6). Unlike in 2018, when the obtained results showed a clear commitment to join the EU with the assessment that if accession does not take place by 2025, it will certainly not be in the time immediately thereafter, but closer to 2030, the results obtained by the analysis in 2021 indicate that all outcomes have approximately the same probability of realization.

Table 2
Relative importance of the ANP model cluster for the evaluation of alternative outcomes of Serbia's EU accession process

Clusters	Relative importance of the clusters
Cluster of internal factors	0.0647
Cluster of geo-political factors	0.5666
Costs of EU accession	0.1843
Risks of EU accession	0.1843

Inconsistency 0.06504

Table 3
Relative importance of primary factors in relation to the main goal of the model

Criteria	Relative importance of the criteria
Geo-political factors	0.64299
Cost factors	0.12939
Risk factors	0.07471
Internal factors	0.15291

Inconsistency 0.04435

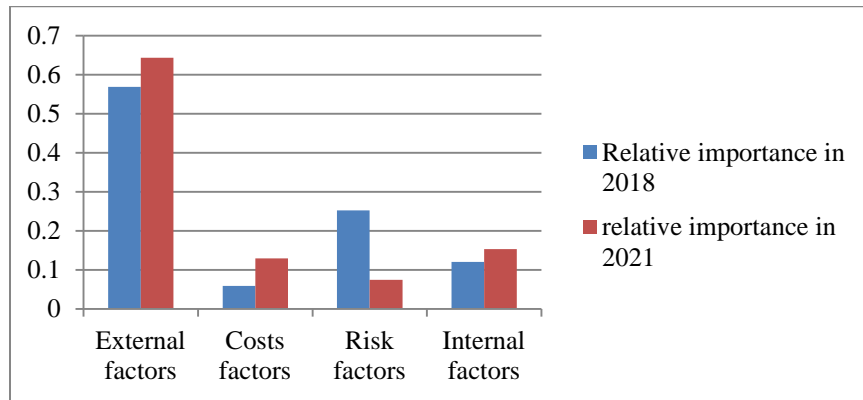


Figure 3 Comparative overview of the relative importance of the criteria in 2018 and 2021

Table 4
Relative importance of the sub-criteria of the criterion internal factors

Name	Normalized by cluster
Relations with Kosovo	0.82379
Internal political conflicts	0.01748
Coherence of the legal-political system	0.08592
Coherence of the economic system	0.03735
Coherence of the social system	0.03546

Source: Author's assessments

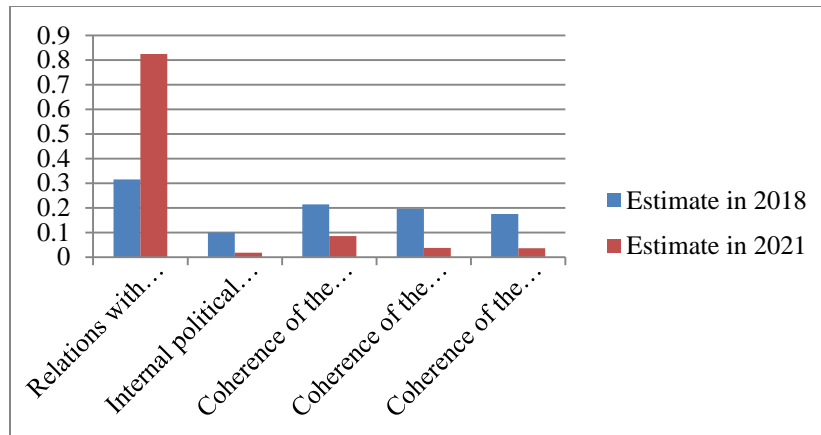


Figure 4 Comparative overview of the relative importance of cluster elements internal factors in 2018 and 2021

Table 5
Relative importance of the sub-criteria of the criterion geo-political factors

Name	Normalized by cluster
EU security challenges	0.09685
Britain's exit from the EU	0.08754
Strengthening the EU conservative right	0.04785
COVID-19 pandemic	0.03937
EU internal political factors	0.02115
Serbia's relations with China	0.22535
Serbia's relations with Russia	0.23521
Serbia's relations with the United States	0.24668

Source: Author's assessments

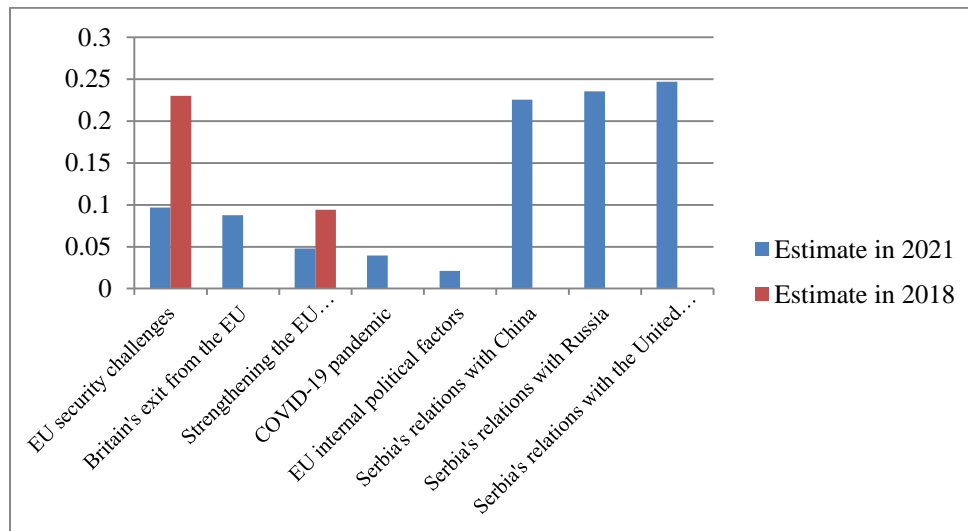


Figure 5 Comparative overview of the relative importance of cluster elements geo-political factors in 2018 and 2021

Table 6
Relative importance of the sub-criteria of the criterion cost factors

Name	Normalized by cluster
Negative current account due to increased imports	0.20850
Opportunity costs of non-accession to the EU	0.60863
Reduction of budget revenues due to loss of customs revenues	0.10679
Costs of harmonization with EU standards	0.07609

Source: Author's assessments

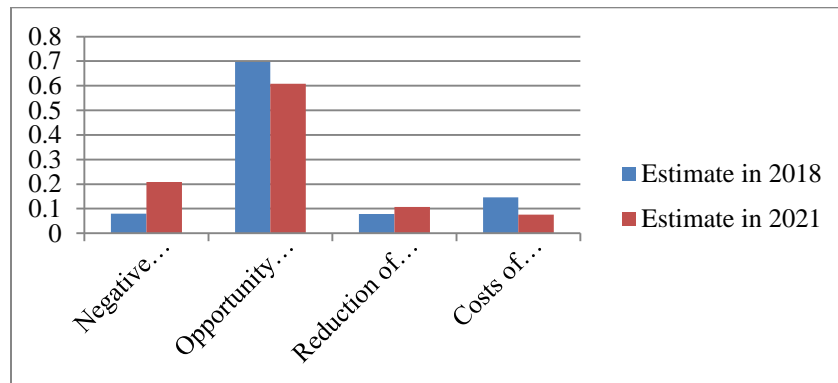


Figure 6 Comparative overview of the relative importance of cluster elements cost factors in 2018 and 2021

Table 7
Relative importance of the sub-criteria of the criterion risk factors

Name	Estimated in 2021
Alienation and exploitation of natural resources	0.28002
Risk of unequal exchange and exploitation	0.04696
Risk of disproportions in economic development	0.03231
Risk of suffocation of certain industries	0.08902
Risk of increased competition	0.17507
Risk of rising unemployment	0.19501
Risk of exacerbation of social problems	0.18160

Source: Author's assessments

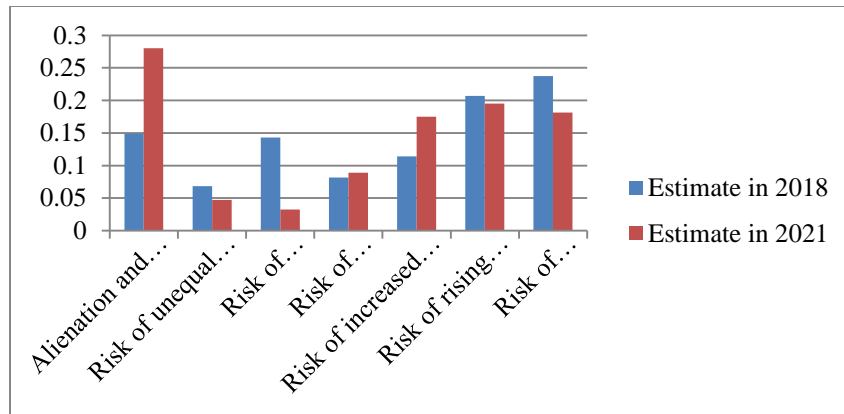


Figure 7 Comparative overview of the relative importance of cluster elements risk factors in 2018 and 2021

Table 8
Probabilities of achieving alternative outcomes of the process of Serbia's accession to the EU (2021)

Alternative	Normalized	Benchmarking	Rank
Accession to the EU by 2025	0.26687	0.9379	2
Accession to the EU between 2025 and 2030	0.21643	0.7606	4
Accession to the EU after 2030	0.23217	0.8159	3
No accession to the EU	0.28453	1.0000	1

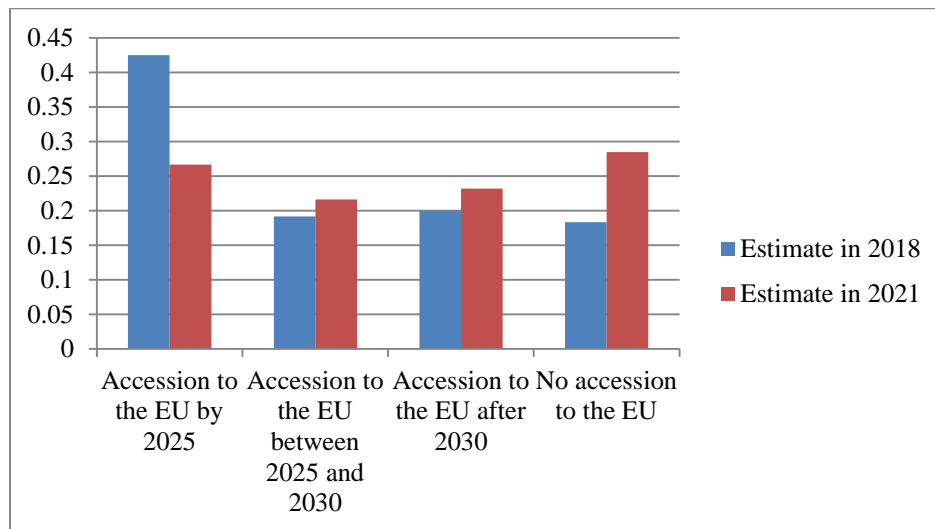


Figure 8 Comparative presentations of the probabilities of achieving alternative outcomes of the process of Serbia's accession to the EU in 2018 and 2021

The prediction goal and the obtained results indicate a high level of uncertainty present in the prediction process, which only confirms the need for additional analysis of the sensitivity of the results to changes in the values of key model parameters in order to obtain a more complete and comprehensive target value estimate. A sensitivity analysis of the results by changing the level of significance of higher level elements, i.e., parent elements, can more or less significantly affect the order of importance and evaluation of the observed options, showing the performance of alternatives in terms of each criterion, as well as how sensitive these alternatives are to changes in the importance of criteria. Thus, from Figure 9 it can be seen that an increase in the relative importance of the Kosovo relations criterion from 0.0001 to 0.9999 affects the probabilities of alternative outcomes to some extent. The probability of no EU accession increases from 12.77% to 46.80% and the probability of expected entry by 2025 slightly decreases from 28.91% to 24.08%. Slightly more sensitive to the changes in the relative importance of the sub-criteria relations with Kosovo are shown by the remaining alternative outcomes, whose probability of realization decreases to a greater extent. The probability of joining the EU decreases between 2025 and 2030 from 26.12% to 16.39%, but from 2030-2035 it decreases from 32.18% to 12.71%. The obtained results differ substantially from those derived from the model predicting Serbia's accession to the EU (Mimovic, et al., 2018), where the sub-criterion relations with Kosovo has essentially no impact on Serbia's accession to the EU in terms of deadlines if other assumed interdependencies remain unchanged. We now see that this factor has gained importance for the aforementioned reasons, and reduces the likelihood of other outcomes. However, given the maximum probability of outcomes that there will be no EU accession (46.80%), in the case of maximum relative importance, the factor relations with Kosovo may slow down EU integration, but is not key to stopping it (Figures 9 and 10). How can these results be explained and understood? First, the observed model is more complex than the 2019 model, including several new factors and feedback networks of influence between them, which are the result of existing interdependencies. In addition, in the meantime, there have been several events and circumstances that have radically affected the importance of relations with Kosovo in Serbia's EU accession process. This primarily refers to the evidently different view of the American administration, which is more flexible and leans toward solving the problem of Kosovo's unrecognized independence. It also refers to the somewhat more relaxed attitude of Brussels, i.e., the EU, which resulted in less pressure and deadlines for resolving the Kosovo problem. Although, lately, there have been noticeable attempts to intensify the resolution of this issue, especially through bilateral negotiations with the strongest European countries. This, as well as the complicated political situation in the world, has given Serbia more room for political calculations and bargaining, and left as an option the possibility for Serbia to decide not to join the EU in the case of lost outcome, i.e., getting nothing and losing everything regarding Kosovo. In any case, when it comes to relations with Kosovo, the outcome depends on Serbia to a large extent, which is not the case with some other factors and circumstances. Thus, if we look at the impact of the change in the relative importance of the relations with the United States sub-criterion, the increase in the relative importance of this sub-criterion leads to a slight increase in the probability that Serbia will not join the EU. This can be understood in light of the fact that the United States, as the creator of Kosovo's so-called independence, is one of the key actors who create policy in the Western Balkans and whose influence must be counted on in political planning. However, it is in the interest of

the United States that Serbia is not under the influence of China and Russia. Analysis of the impact of changes in the relative importance of relations with China and Russia gives very similar results, a slight increase in the probability of non-entry into the EU, up to just over 30% and stable trends in the probability of other outcomes, while the impact of changes in the relative importance of the EU Internal Policy sub criterion is insignificant. Similar sensitivity analyses of the solution can be performed for other sub-criteria in the model. Since an element can directly and indirectly affect another element, and by its influence also a third element, any such possibility and its influence on the final result should also be considered (Azis, 2003).

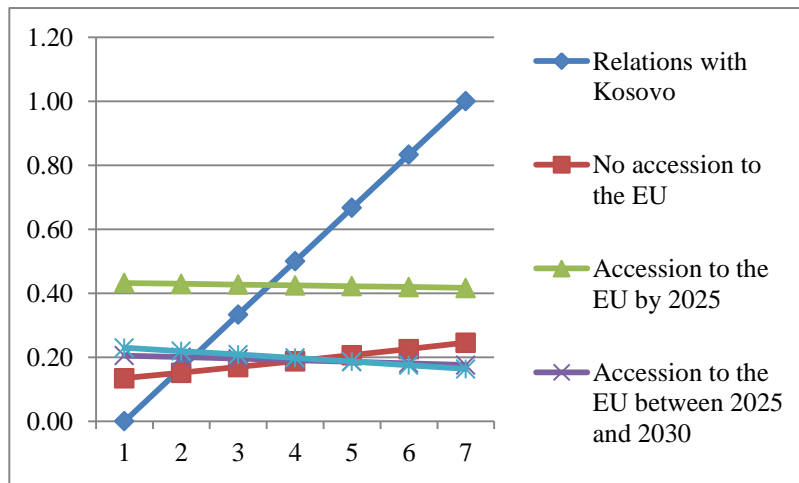


Figure 9 Impact of the change in the relative importance of the sub-criteria relations with Kosovo on the development of the probability of achieving alternatives (2019)

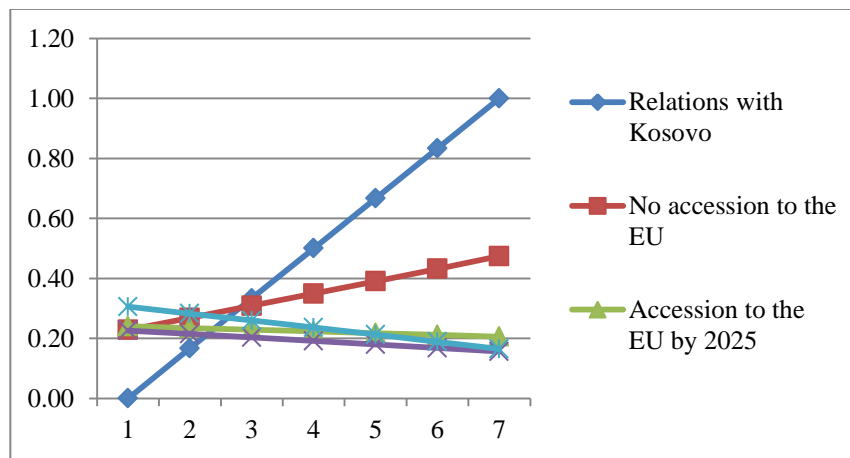


Figure 10 Impact of the change in the relative importance of the sub-criteria relations with Kosovo on the development of the probability of achieving alternative outcomes (2021)

Having the above in mind, it can be concluded that the circumstances in the world have changed dramatically in a short time, and have had unforeseeable consequences, especially for small countries such as Serbia. The lack of consensus on key global issues between the world's most powerful countries has dramatic consequences for the policy and positioning of small countries. Although the unresolved status of the former province of Kosovo has so far been perceived by the public as a key obstacle to Serbia's accession to the European Union, the results of this and previous research indicate a synergy of complex influences of various internal, regional and global factors. Therefore, this analysis has shown that the unresolved status of Kosovo cannot be viewed in isolation from other identified factors. Within only two years, the perception of the accession process and its dynamics has changed significantly, both within the EU public and the Serbian public, with both sides, despite declarative statements, clearly tired of this story.

5. Conclusion

The paper analyzes whether and in what way global and regional circumstances such as the COVID-19 pandemic, Brexit, the strengthening of China and Russia, as well as political instabilities and the U.S. administration's disorientation in the new global reality, affect the dynamic of Serbia's EU accession process to the European Union. Special attention is paid to relations with the former province of Kosovo, as well as the structural weaknesses of the European Union.

Although in theoretical-methodological and applicative terms, the paper is an extension of previous research, the fact that the time dimension is included imposed a *conditio sine qua non* dynamic, an interdisciplinary approach which is crucial in the context of completely new circumstances on a global scale. Observing real problems from different time distances provides a source of new information, and the coordination and synthesis of the preconditions are created for their comparative analysis and better strategic decision making.

A complex multi-attribute decision-making methodology known as the Analytical Network Process was used to include and prioritize relevant factors that define Serbia's geostrategic position, the mutual influences of the factors, and prioritize alternatives identified in the form of indicative dates for EU accession or inability to complete the process.

The results of the model showed significantly different results than the research conducted in 2018. This can be partly explained by the redefinition of the structure of the model resulting from the introduction of new elements and their interdependencies as well as their impact on model alternatives. However, a certain shift in the political focus in the international politics of the Republic of Serbia is also a reason according to the authors.

Geostrategic factors still have the highest relative importance (64%); however, this factor has higher relative importance than four years ago when it was just over 50%. The relative importance of the influence of cost factors as well as the influence of internal factors has increased, which is understandable given the political situation in the country. The importance of the influence of risk factors has decreased. It is estimated that the

relative importance of the sub-criteria relations with Kosovo is large (82%) because of the intensifying and updating of the resolution of the status of Kosovo, and the determination of the EU and the new U.S. administration to raise this issue ad acta. On the other hand, the outcome of the prediction seems to have changed substantially, but not only in terms of the probability of realization and the rank of alternatives. Four years after the first survey, the highest probability of realization (28%) is the outcome no entry into the EU, which is almost identical to the probability of realization for the alternatives entry into the EU by 2025 (26.81%), entry into the EU after 2030 (23%) and EU accession between 2025 and 2030 (21%). Therefore, the conclusion in relation to the previous survey, when it stated "that Serbia will either join the EU by 2025, or will not join this union at all", could now read that it is certain that it will join the EU because the cumulative probability of achieving joining the EU at any time is 72%, while the probability that it will not join the EU is 28%.

At the time of writing, it appears that the new circumstances are in Serbia's favor for the accession process, especially considering that the European Commission has adopted a new methodology for the EU enlargement process as suggested by France. This methodology includes strengthening mutual trust and more precise formulation of commitments by both the EU and the Western Balkans as a whole, stronger political orientation and engagement at the highest levels, grouping negotiation chapters into six thematic clusters and greater clarity on what the EU expects from enlargement countries at different stages of the accession process.

A sensitivity analysis also yielded interesting results. The growth of the relative importance of the factor relations with Kosovo affects the probability of achieving an alternative outcome. There is the alternative no entry into the EU, but it does not reach 50% (maximum of 48%), while the probability of achieving other alternative outcomes decreases slightly. The sensitivity analysis with the influences of other key factors, such as relations with the U.S., Russia and China, leads to a similar conclusion, with the growing relative importance of these factors it is more likely that Serbia will not join the EU. However, but although the alternative no entry has the highest probability of realization, that probability is relatively small (less than 50%), so in the long run, there is reason for optimism regarding the final outcome of the accession process.

The relative importance of the EU's internal factors shows that this influence is almost non-existent. The conclusion is then that success and timing of entrance into the EU depends primarily on Serbia, and their strategic commitments. Bearing in mind that a large number of factors and their network of influences had to be taken into account for serious analysis, the theoretical, methodological and practical implications of applying the Analytical Network Process can be considered in order to predict the final outcome of Serbia's EU accession process.

The theoretical implications are reflected in the fact that the effective ability of the Analytical Network Process to conceptually and creatively include all identified relevant, qualitative and quantitative factors from the prediction context has been confirmed. The presentation of the use of the ANP predictive model in the field of European integration, which is extremely complex and uncertain, confirms its ability to be a good support in the forecasting process. In situations characterized by pronounced complexity and uncertainty, prediction methods based on econometric models do not give satisfactory

results. Social justification is reflected in the possibility of using research results to redefine existing or make new strategic decisions in the stabilization and association process.

The limitations of the research are related to reduced accuracy, lack of information and increased bias when applying qualitative prediction methods. Also, for certain clusters and sub-criteria it is possible to identify and assess more complex networks of influence in the model and analyze in more detail the indirect influences between individual factors and their influence on the final result. Given the limited cognitive capacities of the decision makers, this can certainly affect the growth of subjectivity in the model results. Significant objectivity could be achieved by including a group of experts in areas relevant to the European integration process in the process of comparing elements of the model by pairs. When the individual rankings of alternatives and their probabilities of realization are obtained, a geometric environment can be used to determine the unique and objectified ranking of alternative outcomes and a better assessment of their probability of realization. Also, the fact that clusters cover only some negotiating chapters may have an impact on the results obtained.

REFERENCES

Adamus, W. (2010). When shall Poland enter the euro zone? Decision making with the ANP. *The School of Business, 1*, 31-52.

Azis, I.J. (2003). Analytic Network Process with feedback influence: A new approach to impact study. Prepared for a seminar organized by the Department of Urban and Regional Planning, University of Illinois at Urbana-Champaign, in conjunction with the Investiture Ceremony for Professor John Kim, 1-22.

Azis, I. J. (2010). Predicting a recovery date from the economic crisis of 2008. *Socio-Economic Planning Sciences*, 44(3), 122-129. Doi: <https://doi.org/10.1016/j.seps.2010.03.003>

Blair, A. R., Mandelker, G. N., Saaty, T. L., & Whitaker, R. (2010). Forecasting the resurgence of the US economy in 2010: An expert judgment approach. *Socio-Economic Planning Sciences*, 44(3), 114-121. Doi: <http://dx.doi.org/10.1016/j.seps.2010.03.002>

Bongardt, A. & Torres, F. (2020). Lessons from the coronavirus crisis for European integration. *Intereconomics, Review of European Policy*, 55(3), 130-131. Doi: <https://doi.org/10.1007/s10272-020-0883-3>

Bonomi, M., Merja, A., Toglhofer, T. & Reljić, D. (2020). Make or break moment: EU enlargement in Southeast Europe in pandemic times. *Policy paper*, Friedrich Ebert Stiftung, 1-29.

Coronavirusdisease (COVID-19). Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

Dikmen, I., Talat, B., Ozorhon, B., & Egilmezer Sapci, N. (2010). Using analytic network process to assess business failure risks of construction firms. *Engineering, Construction and Architectural Management*, 17(4), 369-386. Doi: <http://dx.doi.org/10.1108/09699981011056574>

Eraqi, A. & Shoura, W. (2019). A model proposed for the prediction of Future sustainable residence specifications using Analytical Network Process. *International Journal on Environmental Science and Sustainable Development*, 109-126. Doi: <http://dx.doi.org/10.21625/essd.v4i3.681>

European Council. (2015). Normalisation of relations between Serbia and Kosovo, Chapter 35: Other issues. *Conference on Accession to the European Union–Serbia–Brussels*, 30 November 2015, 1-8.

European Commission. (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. 2020 *Communication on EU Enlargement Policy*, Brussels, 1-66.

European Parliament resolution of 25 November 2020 on the foreign policy consequences of the COVID-19 outbreak. Available at: https://www.europarl.europa.eu/doceo/document/TA-9-2020-0322_EN.html

Huang, C., Wang, Y. & Li, X. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*, 395(10223), 497–506. Doi: [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5)

Hulle, J., Kaspar, R. & Moller, K. (2013). Analytic network process - An overview of applications in research and practice. *International Journal of Operational Research*, 16(2), 172-213. Doi: <http://dx.doi.org/10.1504/IJOR.2013.051788>

Jayant, A., Paul, V. & Kumar, U. (2015). Application of Analytic Network Process (ANP) in business environment: A comprehensive literature review. *International Journal of Research in Mechanical Engineering & Technology*, 5(1), 29-37.

Kheybari, S., Fariba, M. & Farazmand, H. (2020). Analytic network process: An overview of applications. *Applied Mathematics and Computation*, 367, 1-35. Doi: [10.1016/j.amc.2019.124780](https://doi.org/10.1016/j.amc.2019.124780)

Krstic A., Savic, J. & P. (2018). Forecasting the accession of the Republic of Serbia to the European Union by using the Analytic Network Process, XIII Balkan Conference on Operational Research, BALCOR 2018, 25-28 May, Belgrade, Proceedings, 262-269

Koenig, N. & Stahl, A. (2020). How the coronavirus pandemic affects the EU's geopolitical agenda. Policy paper, Hertie School, Jacques Delors Centre, 1-16.

Mimovic, P. (2012). Application of analytical network process in forecasting automobile sales of Fiat 500 L. *Economic Horizons*, 165-176. Doi: [10.5937/ekonhor1203165M](https://doi.org/10.5937/ekonhor1203165M)

Mimovic, P., Krstic, A. & Savic, J. (2019). Serbia joining the European Union: an ANP model for forecasting date. *International Journal of the Analytic Hierarchy Process*, 11(1), 2-19. Doi: <http://dx.doi.org/10.13033/ijahp.v11i1.616>

Mu, E. (2006). A unified framework for site selection and business forecasting using ANP. *Journal of Systems Science and Systems Engineering*, 15, 178–188. Doi: <https://doi.org/10.1007/s11518-006-5006-6>

Mu, E. & Pereyra-Rojas, M. (2018). *Practical decision making using Super Decisions v3. An Introduction to the Analytic Hierarchy Process*. Springer.

Niemira, M. P. & Saaty, T. L. (2004). An analytic network process model for financial-crisis forecasting. *International Journal of Forecasting*, 20(4), 573-587. Doi: [10.1016/j.ijforecast.2003.09.013](https://doi.org/10.1016/j.ijforecast.2003.09.013)

Ozorhon, B., Dikmen, I. & Birgonul, M. T. (2007). Using analytic network process to predict the performance of international construction joint ventures. *Journal of*

Management in Engineering, 23(3), 156-163. Doi: [https://doi.org/10.1061/\(ASCE\)0742-597X\(2007\)23:3\(156\)](https://doi.org/10.1061/(ASCE)0742-597X(2007)23:3(156))

Radyshevskaya, T.N. & Andreichicova, O.N. (2010). Use of analytic network process in forecasting occurrence of dental diseases, *Journal of VolgSMU*, 33(1), 44-47.

Roloff, R. (2020). COVID-19 and no one's world: What impact for the European Union? *Connections QJ*, 19(2), 25-36. Doi: <https://doi.org/10.11610/Connections.19.2.02>

Saaty, T.L. & Kearns, K. P. (1985). *Analytical planning: The organization of systems, The Analytic Hierarchy Process Series, Vol. IV*. Pittsburgh, PA: RWS Publications.

Saaty, T. L. (1999). Fundamentals of the analytic network process. *Proceedings of the 5th International Symposium on the Analytic Hierarchy Process*, 12-14.

Saaty, T. L. (2001a). Analytic Network Process. *Encyclopedia of Operations Research and Management Science*, 28-35.

Saaty, T. L. (2001b). Decision making with the analytic network process (ANP) and its "super-decisions" software the national missile defense (NMD) example. *ISAHP 2001* Berne, Switzerland, 365-382.

Saaty, T. L. (2001c). *Decision making with dependence and feedback: The ANP*. Pittsburgh, PA: RWS Publications.

Saaty, T. L., & Vargas, L. G. (2006). *Decision making with the Analytic Network Process. Economic, political, social and technological applications with Benefits, Opportunities, Costs and Risks*. Springer US.

Saaty, T.L. & Peniwati, K. (2008). *Group decision making: Drawing out and reconciling differences*. Pittsburgh, PA: RWS Publications.

Saaty, T. L., & Vargas, L. G. (2013). *Decision making with the Analytic Network Process. Economic, political, social and technological applications with Benefits, Opportunities, Costs and Risks*, 2nd edition. Springer US.

Shih, H. S., Lee, E. S., Chuang, S. H. & Chen, C. C. (2012). A forecasting decision on the sales volume of printers in Taiwan: An exploitation of the Analytic Network Process. *Computers & Mathematics with Applications*, 64(6), 1545-1556. Doi: <https://doi.org/10.1016/j.camwa.2011.12.082>

Vargas, L. G. (1990). An overview of the analytic hierarchy process and its applications. *European Journal of Operational Research*, 48(1), 2-8. Doi: [https://doi.org/10.1016/0377-2217\(90\)90056-H](https://doi.org/10.1016/0377-2217(90)90056-H)

Voulgaridou, D., Kirytopoulos, K., & Leopoulos, V. (2009). An analytic network process approach for sales forecasting. *Operational Research*, 9(1), 35-53. Doi: <http://dx.doi.org/10.1007/s12351-008-0026-2>

Wang, C., Horby, P., Hayden, F. & Gao, G. (2020). A novel coronavirus outbreak of global health concern. *Lancet*, 395(10223), 470–473. Doi: [https://doi.org/10.1016/s0140-6736\(20\)30185-9](https://doi.org/10.1016/s0140-6736(20)30185-9)