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INSTITUTIONAL ECONOMICS AND ECONOMIC DEVELOPMENT

Abstract

This research deals with the relationship between economic quality of institutions and economic development. For obtaining the value quantification of institutional quality, we measured rankings of 138 most important national economies based on three pillars of competitiveness, and we used Gross national product per capita to measure development. We applied Spearman`s rank correlation coefficient based on these two parameters for measuring the relationship between ranking of national economies. There is no doubt that a strong direct relationship was recognised. The value of the result lies in the identification of institutional economics as the major cause for different development levels of certain countries. This implies that in case of value measurement of our country, also the most efficient tool would be to put focus on increase of institutional quality.

Key words: institutional economics, economic development, rank correlation.

JEL classification: A13, K 23, K25.

ИНСТИТУЦИОНАЛНА ЕКОНОМИЈА И ПРИВРЕДНА РАЗВИЈЕНОСТ

Апстракт

Ово истраживање се бави везом између квалитета институционалне економије и привредне развијености. За квантитативну оцену квалитета институција смо израчунали ранг 138 најзначајнијих националних економија на бази три стуба конкурентности, а за меру развијености смо користили бруто национални производ по глави становника. Везу између рангирања националних привреда по ова два параметра смо самеравали користећи Спирманов коефицијент ранга. Неоспорно је утврђена снажна директна веза. Вредност резултата је у идентификацији институционалне економије као главног узрока различите развијености појединих зе-

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*маља. Из тога произилази да би и у случају наше земље најделот-
ворније било акценат ставити на подизање квалитета институ-
ција.*

*Кључне речи: институционална економија, привредна развије-
ност, корелација ранга.*

Introduction

One of the most everlasting and fundamental issues of macroeconomics is economic development. Most authors undoubtedly assume this as alpha and omega of economics. On the other hand, society also expects economists to contribute to economic development. Taking into account the fact that human needs have no limit and they must consistently be satisfied in every increasing scope and range, all this is completely logical and predictable. Economic development is always beyond sufficiency. There is and there will be an increasingly strong and steady demand for welfare and services. Beyond any doubt, the practice appears to be an evidence indicator that has a possibility to reach this.

The population of all countries, whether rich or poor, has priority to achieve higher rate of economic development. Not only is this vital in the circumstances of economic crisis, but it is also urgently required in the era of prosperity. Briefly, economic development has always been in the centre of attention and interest of almost all members in any community.

This was the main motive and initiator of the development of economics as a science. Economists have always endeavoured to recognise and explain the way in which economy works in order to provide economic system development with increasing efficiency and with the final aim, which is to enhance prosperity. Following this growth, economics has been at its best during the last 200-300 years through so-called classical and neoclassical school.

The greatest historical economic growth remarked this period, particularly since the end of the 17th century until the second half of the 20th century when these theories were perfectly complete and had a dominant role. However, after this period, certain economic problems appeared and there was a need for further development of economics, for the purpose of solving these problems. As it usually happens, the beginning of the transformation was based on criticism of neoclassical economic school, and as unlikely as it may seem, on denial of its initial principles. "The quality of economic and political institutions was believed to be external for a long time, and macroeconomic stability and accumulation of human capital were known as an important guideline of growth ...." (Krstić et al., 2018, p. 9)

Institutional economics emerged from these processes, and its growth started by detecting the drawbacks of existing paradigm and attempts to revitalise macroeconomic theory through identifying and solving the problems that were neglected during the era of classical and neoclassical economics. Institutional economics appeared in this way and after a while, it was followed by new institutional economics.

Development of Institutional economics began and its first phase had roots in criticism of basic principles of neoclassicists. That is entirely common and represents the first and crucial step to the development of any science. It is not easy to take it, but in the intellectual sense it is not the hardest step. As a process, criticism itself is not the most demanding phase

that can sometimes be even intellectually acceptable. It is very hard to deny this phase, and the critic can often feel privileged to be part of a political opposition leader in a democratic society. In fact, almost no one is able to deny the reliability of his belief. However, shortly after that, the new theory faces problems that require further necessary steps to be taken.

After critical consideration of the hitherto dominant theory, the second step includes building of coherent alternative, or to be more precise, the process in which a new content complements economics. Our assumption here refers to the development of methodological apparatus, in fact, of indicators that can serve as a tool to define and quantify the quality, precisely, performances of economic institutions in a specific society. Economists determined certain parameters for assessment and measuring economic growth before institutionalists, so institutionalists need to define their own parameters as well.

The third step refers to empirical testing of the importance of new inventions. To be more precise, given the fact that we define the indicators of institutional economics, their relationship with economic development of particular economies containing listed institutional capacity should be identified and possibly measured. Indeed, this is not simple. Some parameters are very complex for measurement, no certain statistic tracking exists, etc. But, regardless of the unbiased methodological difficulty that every science experiences, particularly a new one, if it has tendency to survive and develop further, it needs to undertake these necessary steps.

Everything previously mentioned inspired us to formulate the aim of our research, which is: to make an attempt to define the relationship between the institutional quality of the economic system and economic development. To what extent does the quality of institutional economics affect economic development? Does building and operating of institutions mean "residual" in macroeconomics, as it used to be believed, or is it a significant factor? We believe that this research will respond to the questions.

Theoretical background

As previously mentioned, institutionalism took the first steps at the beginning of the last century in the form of criticism of initial base of neoclassical economies (Gligorijević, 2014). The second phase, which happened at the end of the 20th century, meant the beginning of peculiar integration accompanied by neoclassical economics and building of the categorical apparatus of this relatively young science which has been called a new institutional economics since then.

We conclude that this contemporary institutional economics took the second essential step to the development of the young science. It incorporated institutionalism into the neoclassical economic paradigm. It also described institutions as a dynamic endogenous element of economic development and promoted fundamental categorical apparatus in order to study them.

Institutionalists have been loyal to their initial assumption that technology is a fundamental economic element (Leković, 2010). They do not deny efficient market system and its importance. On the contrary, "… highly competitive markets encourage institutional transformation, "(Wasilewski & Wasillewska, 2019, p. 31). The government was implemented only in economics by Institutional economics, as an inevitable and crucial element in building macroeconomic results. "Putting the spotlight in their research of economic issues on the

status of organization and control, namely, formation and reform of authority structure, institutionalists fully study economics, pointing out the importance of institutions such as laws and legal norms, property, contracts and corporation regulated by authority. Accordingly, the authority encompasses the control of the prices established by a company, but excludes their limits. According to institutionalists, economics does not represent a neutral mechanism, but the making decision process in which individual economic parties struggle so hard to reach a better status and business results. Economics is more than just a market to them. Economics means institutions that create the market whose development depends on them and they affirm market efficiency" (Leković, 2010, p. 8).

Consequently, we reach the first and fundamental question which institutionalists have been interested in since the very beginning, and that is the problem which refers to authority and property. Economics does not rely on neutral economic laws, however, the analysis of real economics should include complex authority system whose framework must not be exceeded. The key point if any economic system is similar to that one in Marxism, property rights over means of production. The answer to the question who the owner is and how the property rights are regulated and secured is of a great importance. Since the beginning point of this movement growth of macroeconomic concept, institutionalists consider this as the most significant question. This is the base for building the complete construction of an economic system that designs the framework within which the whole economy operates under those who control the market.

Associated with institutionalists, as previously mentioned, not only do institutions represent a significant endogenous element of the economy, but they are also a very dynamic factor at the same time. Permanent process of the vital long-term trait of institutional development and its formalisation through perplexing and legal system development is noticed. This certainly depends on the impact and role the country has in the development of human society due to the fact that all the regulations were inherently formed as informal (conventional norms, Custom Law, ethics...), after that it turned into legal norms. However, in spite of this tendency, informal structures will always be present. "Formal structures are rigid, but informal rules and models of behaviour and communication value networks, ideas, expectations and personal agenda are established within their framework" (Bogićević, 2018, p. 42).

To sum up, property institution is a set of social norms that regulate the utility of limited resources, and they can be of a material and non-material nature as well. Not only does this institution use, but it also enjoys the income derived from that property and alienates the property and/or assigns it on a temporary basis. The institute of private property that proved its superiority over the other modalities is believed to be the essential prerequisite for economic efficiency in this contemporary world. This efficiency is first and foremost based on the exclusive right of the owner to appropriate property income and on taking the consequences of possible negative business results. The regulation of rights to permanent or temporary property assignment, jointly with taking the consequences, contributes to the most possible rational use of property, in fact, economic resources.

In addition to the property issue, the next pillar of institutional economics is contract complexity that is proceeded to property relation issues in a natural way. A contract is an agreement of interested parties and it refers to depicted subject on property, flow of goods, doing the service and other aspects of doing business and prosperity as

a whole. Interested parties agree on the will for cooperation in the contract and this has legal effect. Nevertheless, the contract also covers contractual obligations and their enforcement, in fact, breach of contract penalties. This enforcement may involve the third party, which is usually the state, but it can also be the result of self-regulation in respect of smart contracts.

The instrument that guarantees the contract terms to be respected must indicate that failure to respect terms of the contract is not worth the risk of penalties, which means that if the breaching party fails to fulfil the contract obligations, they suffer the consequences in terms of profit and deception of another contract party. Thus, performance success of this second pillar of economic institutions depends on enforcement efficiency which ensures that contract terms are respected. This enforcement may appear in various forms, yet it can generally be classified into several categories:
1. Physical force
2. Expropriation of property
3. Damage to Reputation

It is obvious that in the analysis of the institutional economic impact on economic development, smart contracts do not have a bad effect in practice. Contemporary practice requires more significant contract terms whose fulfilment must be guaranteed by a third party, commonly governmental or non-governmental organisations (association, legislature and so on). Considering the fact that fulfilment of terms in such contracts is of a great importance for the economy, the parties that ensure the fulfilment of contract obligations are becoming increasingly important as well. In reality, it is the government and the quality of its judicial system. This implies that apart from penalties for the breaching party, it is also essential to know how fast and probable is its efficient enforcement.

Except for the property and contracts, the third pillar of institutional economics refers to transaction costs. This issue had completely been neglected until institutionalists appeared. In the analysis neoclassicists relied on the belief that these costs were not, in fact, real at all. In order to define the concept of transaction costs, it is necessary to clarify what transaction means in institutional economics. Transactions primarily refer to the performance of specific activities that are aimed at exchange of various material and non-material welfare and services. Transaction inevitably and invariably means transfer of property ownership right over the transaction subject between participants of this process. From a legal point of view, transaction includes the contract whose terms are aimed at preventing or minimising possible disputes between business participants.

In other words, any transaction consists of three elements: conflict of interest between the participants, their mutual dependency and implementation or establishment of particular system due to business performance. The last mentioned matter means transaction regulation through institutional agreement, which is an essential requirement to perform it.

"The mere fact that resources have limitations, requires specific measures to be taken for the purpose of protecting them, however, this strongly demands certain costs. Because of this, each economy has particular alternative costs that act as the value of the necessary quantity of welfare which must be left behind by an economic party for purpose of property ownership protection, as well as the guarantee that contract terms

will be respected, namely, the costs relating to exchange and/or proprietary security rights appear. This concerns the presence of transaction costs that reduce the framework of mutually beneficial exchange" (Leković, 2010, page 129).

Such costs, along with economic development, show a tendency to increase, therefore the purpose of institutional development is to reduce them. This can also be applied to exchange in the market framework and to inter-company exchange with the same problems.

Costs can appear in different forms: finding a business partner (1), defining (2), measurement (3), performance (4), opportunistic behaviour (5) and control (6). In other words, this includes a wide range of costs and that range is not primarily associated with the welfare and service development, but with the domain of exchange and the quality of institutions. The obstruction of trade here can be compared to mechanical abrasion. More developed institutions deliver reducing transaction costs and bringing economic results closer to the theoretical optimum predicted by neoclassical economics.

As we elaborated three basic frameworks of institutional economics that highly affect economic development, we need to give a brief summary of economic development which is one of the most essential macroeconomic issues. First of all, it is of a great importance to outline that growth and development are not the same. Growth is a narrower term that is primarily quantitative in nature. It treats economic progress as the increase of output within one economy. Development is a more complex term, to which growth is the most important prerequisite and part of it, but it contains quality contents, and the most significant place is traditionally in possession of economic structure reform. Furthermore, the aspect of distribution, as well as the attitude to natural resources should be integrated in order to conduct the entire analysis on the development of one country. Moreover, one of the traits of development is a high rate of employment and widely spread economic relationships at the international level.

We can summarise that publications of institutional economics and economic development are truly rich, however, there are still some interests of economic science that have not been studied yet. With reference to institutional economics, the impression is that the system for quality measurement of some social communities has not been developed yet in this sense. For this reason, quantification, assessment and ranking of existing countries is complicated from this point of view. In terms of economic development, circumstances are better, although drawbacks are also present. Namely, regardless of the more developed system of indicators, statistic volume is still unsatisfactory on a global scale. Thus, the lack of reliable and efficient data complicates analyses and further progress of economic development theory.

Research Methodology and Hypotheses

In regard to the subject of our research, which would be a global relationship between the quality of institutions and the level of economic development, this task is yet to come, as this subject has not been investigated enough. The assumption that more prosperous institutions are in favour of economic development arises, but is that so? Even though the relationship exists, what is it like and what is its intensity like? In order to make an effort to answer these questions, our first point must be the test of particular

research hypothesis. Our fundamental hypothesis (H0) is that the quality of institutions and the level of economic development have no significant mutual relationship.

In order to test the validity of introduced hypothesis, we need to start from the available data. In the process of resource selection, our main idea was to rely on respectable long-term editions at a global level. Our choice was a traditional annual report of World economic forum (WEF) relating to competitiveness in the world.

"The report on global competitiveness", covers numerous countries and indicators, gives a complete analysis of competitiveness of any observed economy in an absolute sense according to value of indicators, as well as in a relative sense, providing comparison to other countries. Its universality reflects in the fact that it synthesises in its framework more than a half of results covered in the report of the World Bank (WB) "Doing Business".

12 pillars of competitiveness are constructed here through data combination. These pillars can be grouped in three sections, yet they altogether create a synthetic global index of competitiveness (GCI). The basic factor of competitiveness consists of the following pillars: Institutions, Infrastructure, Macroeconomic stability and Health care and Primary education. The efficiency factor includes the following pillars: Higher education and training, Efficiency of the goods market, Labor market efficiency, Financial market sophistication, Technological readiness and Market size. Finally, the inventiveness factor consists of only two pillars, namely: Business process sophistication and Innovation (Martin, et al. 2010, p. 9)

Institutions are the first and one of the most significant pillars of global competitiveness. It is estimated that in Basic requirements of competitiveness of an economy, institutions have equal impact like the other three pillars, which means 25%.

The impact of Public institutions is essential. Thus, they cover three fourths of the pillar structure, whilst the rest refers to Private institutions.

We have to emphasise that among over a hundred indicators which are observed by WEF on the highest level of pillar decomposition, six of them were taken from the report "Doing Business", which confirms that the report on terms and conditions of doing business is to a great extent integrated into Global competitiveness report. The following indicators are concerned:

1. Security of investors
2. Tax rate in total (% profit share)
3. Enterprise establishment (number of procedures)
4. Enterprise establishment (time)
5. Employee resigning costs
6. Law security index (of debtors and creditors).

We can conclude that the Report of WEF is indeed the most quality review of competitiveness of global economies, including business requirements in each economy. We selected the following indicators of institutional economics from the report and they simultaneously represent competitiveness factors, which are: institutions, welfare market efficiency and labour market efficiency. It is important to highlight here that institutions primarily refer to property and contract issues, whilst welfare and market efficiency and labour market efficiency mostly refer to transaction costs issues.

With reference to the level of economic development, we chose the indicator of gross national product per capita, calculated in accordance with the current exchange rate of American Dollar. We are aware of the fact that economic development issues are complex, and that development can be tracked through many indicators, however, we had to choose one indicator, commonly known and widely accepted. It is more important to choose the

methodology of measuring quality of national economic institutions. In regard to development indicators, we had to be careful about the data availability for the biggest part of observed economies. It is also significant to point out that calculation based on the current exchange rate does not affect comparison between countries, it has nothing to do with timespan, but with the milestone of one year (2018). This time we can neglect two main disadvantages of such display of development degree, and that is non-treating of economic dynamics and division of national income. We will use these data from the database of WB that are the most thorough. In this manner we will examine the relationship between economic development and quality of institutional economics illustrated in the WEF Report for 2018, and this report covers 140 most significant global economies.

We will explain one more methodological remark. During the process of result analysis and global economy performances, in our opinion only relative dimensions are reasonable, but not individual quantity indicators and quality evaluation. This occurs because terms such as economic development and quality of economic institutions have no their own personal practical maximum or minimum. The value of any economy viewed from any of these four aspects is reasonable only in comparison to other economies. Therefore, it is the rank of each economy that is vital, not the value of the indicator itself.

Results and Discussion

The subject of our research is identifying the relationship between two synthetic indicators which are economy ranking according to quality of institutions and economic development. Nevertheless, here we face the problem of a universal indicator, which is ranking in accordance with institution quality, considering the fact that we mentioned we were going to use three measures on this point. As we have the rank for each of the three indicators individually, we decided to do the calculation for each country. Then, we performed ranking starting from the smallest amount (the country containing the most advanced institutions), until the one with the biggest amount (the country containing the least developed institutions). In this way, we obtained the results given in Table 1. Apart from this illustration of institutional development, or precisely said, parallel with it, we showed the condition of economic development in the analysed countries according to the data of the WB for the same year (GNI p.c. Atlas method – current US$).

Table 1: Country ranking based on institutional and economic development

Country	Development of Institution Ranking	Rank Based on GNI p.c.	Country	Development of Institution Ranking	Rank Based on GNI p.c.	Country	Development of Institution Ranking	Rank Based on GNI p.c.
Albania	52	79	Ghana	67	100	New Zealand	2	23
Algeria	130	84	Greece	86	37	Nicaragua	110	101
Angola	138	92	Guatemala	94	80	Nigeria	104	103
Argentina	108,5	51	Guinea	123	120	Norway	17	2
Armenia	44	81	Haiti	134	121	Oman	53	44

Country			Country			Country		
Australia	15	11	Honduras	91	99	Pakistan	124	109
Austria	19	14	Hong Kong	4	13	Panama	73	47
Azerbaijan	42	85	Hungary	76	46	Paraguay	95	74
Bahrain	34	32	Iceland	21	4	Peru	68	68
Bangladesh	120,5	105	India	77	102	Philippines	64	88
Belgium	24	17	Indonesia	56,5	87	Poland	49	48
Benin	111	119	Iran	133	75	Portugal	29	33
Bolivia	129	92	Ireland	16	8	Qatar	32	6
B&H	117	73	Israel	25	22	Romania	48	54
Botswana	69	64	Italy	51	25	Russian F.	71,5	27
Brazil	115,5	60	Jamaica	56,5	78	Rwanda	46	123
Brunei	38,5	26	Japan	14	19	Saudi Arabia	55	34
Bulgaria	58	61	Jordan	75	82	Senegal	81,5	112
Burkina Faso	102	126	Kazakhstan	47	63	Serbia	62	69
Burundi	135	132	Kenya	66	107	Seychelles	35	43
Cambodia	106	113	Korea	45	27	Sierra Leone	127	129
Cameroon	79	110	Kuwait	81,5	24	Singapore	1	9
Canada	13	18	Kyrgyz R.	96	114	Slovak R.	67	38
Chad	140	125	Lao	105	97	Slovenia	30	31
Chile	26	45	Latvia	38,5	40	South Africa	65	72
China	60	58	Lebanon	113,5	65	Spain	40	28
Colombia	85	70	Lesotho	90	113	Sri Lanka	115,5	84
Congo	119	106	Liberia	120,5	128	Sweden	12	10
Costa Rica	50	53	Lithuania	36,5	39	Switzerland	6	1
Cote d'Ivoire	108,5	108	Luxembourg	9	3	Tajikistan	70	117
Croatia	80	49	Macedonia	93	76	Tanzania	103	116
Cyprus	27	29	Malawi	101	131	Thailand	63	67
Czech Republic	43	36	Malaysia	22	55	Trinidad &Tobago	83,5	41
Denmark	8	7	Mali	128	120	Tunisia	107	90
Dominican R.	78	66	Malta	28	30	Turkey	87,5	56
Ecuador	118	71	Mauritania	136	115	Uganda	97	127
Egypt	125,5	95	Mauritius	41	52	Ukraine	83,5	96
El Salvador	113,5	89	Mexico	92	59	United Arab E.	23	21
Estonia	20	35	Moldova	74	94	United Kingdom	7	19
Eswatini	99	86	Mongolia	71,5	91	United States	3	5
Ethiopia	122	122	Montenegro	36,6	62	Uruguay	59	42
Finland	10,5	15	Morocco	87,5	93	Venezuela	137	50
France	31	20	Mozambique	131	130	Viet Nam	98	98
Gambia	100	124	Namibia	54	77	Yemen	139	118
Georgia	33	83	Nepal	125,5	118	Zambia	112	111
Germany	10,5	16	Netherlands	5	12	Zimbabwe	132	104

Source: Authors, acc. to Schwab, K (Eds.). (2018) and WB

Since the value of element marks that we are analysing (institutional economics and economic development) is shown by their rank in qualification list, in order to determine the degree of relationship between figures, we will use the correlation of ranking. Determination of rank correlation is mostly based on Spearman`s rank-order correlation, where d_i represents distinction between the order and i -element.

$$r_s = 1 - \frac{6 \cdot \sum_{i=1}^{n} d_1}{N \cdot (N^2 - 1)} \tag{1}$$

We highlight that in the process of country ranking based on quality of institutional economics, countries with the same value appear, so in that case the rank is defined as an arithmetic environment of numeric figures of the places that the country would take in the order of country listing if their rank was different.

Table 1 shows that the number of the analysed countries is 138, so the value of rank-order correlation is as follows:

$$r_s = 1 - \frac{6 \cdot \sum_{i=1}^{n} d_i}{N \cdot (N^2 - 1)} = 1 - \frac{6 \cdot 520844,46}{138 \cdot (138^2 - 1)} = 0,8018 \tag{2}$$

The value of 0,8018 shows a high direct dependency, which means that the increase of the quality of institutional economics leads to a considerable increase of gross national income per capita.

The value of determination coefficient is:

$$r_s^2 = 0,8018^2 = 0,6429 \tag{3}$$

Which indicates that 64,29% of economic growth variables can be explained through variations in institutional economics, and 35,71% represent the consequences of other factors.

In any case, economists that deal with institutional economics in current conditions are not surprised at these results. It is they who confirm the significance of the analysed aspects within this framework for the purpose of economic development. This supports the perception that experts have clearly seen and experienced while examining social reality in this framework.

The problem that we think stills exists is a relatively underdeveloped apparatus of methodology used for measuring the quality of institutional economics and its consistent application to most global economies performed by authoritative organisations. This deficiency is not the obstacle instead of it is more the challenge to a further development of this field following this method. Other macroeconomic sciences that originated a long time before this one encounter the same difficulty. Is it not the same case with the economic development issue?

Here we endeavoured to perform the quantification and relationships between institutional development level and economic development. We used ongoing data available to the biggest part of the global economy and they were collected and analysed by the most respectable international organisations. We consider it as maximum at the moment, as well as the challenge for the purpose of further progress in this fascinating field of a great importance.

In our opinion, this paper contributes to domestic macroeconomic publications in terms of quantification of the importance of institutional economics for the purpose of economic development at a global level. On the other hand, if there is anything enriching the theory,

that can be applied to the practice in our environment. Namely, if we proved that the variation within economic development with the result of two thirds could be explained through the variation of economic institutions, can this not be the guideline for founders of the economic system and policymakers of economic policy? Is it not then imperative to examine the theory which implies that the development of our economy is, by far, driven by investment, where foreign direct investments are highlighted?

Conclusion

We elaborated the essence of institutional economics and its primary categorical apparatus. We discovered relatively underdeveloped practice of wider quantification assessment and ranking of institutional economics and its development at a global level. Consequently, the complexity of relationship determination between institutional economics and economic development in a broader sense emerges here. Filling in this gap was the objective of our research. The aim was to offer the idea of development level measurement of institutional economics and to find the evidence for the relationship of this phenomenon with the level of economic development.

To measure institutional development, we created another indicator, integrating three pillars of WEF competitiveness, however, in order to measure economic development, we used the WB data of GNI p.c. for 2018. In this manner, we ranked global economies relying on the two criteria, then we used Spearman`s rank-order correlation. We determined the value of 0,08018, which shows highly direct dependency. This implies that the increase of the quality of institutional economics leads to a significant increase of gross national income per capita. The value of determination coefficient is 0,6429. This shows that 64,29% of economic development variations can be explained through variations in institutional economics, and 35,71% belong to the consequences of other factors. The research findings clearly illustrate that the initial hypothesis has not been proven. On the contrary, the relationship between the quality of institutional economics and the level of economic development is highly important and direct.

The research findings are basically evident and they represent quantification on a broad sample with numerous parameters. But, this does not show that such research should be ceased here. Our opinion is that this research is nothing more than a small contribution to the initiative concept. Three questions are essential in this phase. The first question refers to the lack of the data referring to a great number of national economies. For this reason, we analysed 138 countries, although we are aware of the fact that their number exceeds these figures. Regardless of the fact that the analysed countries represent dominant and the biggest part of global economy, territory and population in every sense, more precise results require larger capacity of countries, even though this would not primarily affect the final result.

Secondly, the need to work on methodological apparatus improvement for quantification of institutional economics and its development is obvious, as well as economic development itself. All this would enlarge the base that was available to us in this research. Finally, to reach maximum effect of the research issues, it would be useful to apply as long period of time as it is possible for marked indicators and this period would be timespan of 10 years.

We did this research for two main reasons which we estimate reasonable, taking into account contemporary domestic economics. First of all, we get the impression that

institutional economics does not take the place it deserves in Serbian economic framework, we consider it is almost neglected. In our opinion, this is a disadvantage due to its introduced relationship with economic development. The second reason for dealing with this subject refers to encouragement of new theoretical efforts to objectivise and quantify the quality of institutional economics as much as possible.

As economic development in our country has not been developed enough, we strove to draw attention of economic policy representatives to possible solutions. It is obvious that the development of economic institutions is neglected, and that subvention parties of direct investment have no option for the position of the economic development leader.

References

Bogićević, M. B. (2018). Pokušaj sistematizacije teorije organizacije XX veka in Anali Ekonomskog fakulteta u Subotici, Vol. 55, br. 41/2019, 037-054

Bromley, D. W (2006). Sufficient Reason: Volitional Pragmatism and the Meaning of Economic Institutions. Princeton University Press.

Galbraith, J. K. (1973). Power & the Useful Economist in American Economic Review 63,1–11.

Gligorijević, N. (2014). Institucionalne promene u funkciji unapređenja efikasnosti privrede. Neobjavljena doktorska disertacija, Ekonomski fakultet Univerziteta u Nišu, Niš, Srbija.

Ivković, D., & Knežević, V. (2019) Korporativno upravljanje, Fakultet za menadžment, Sremski Karlovci

Knežević, V., Ivković, D., & Vujičić, S. (2013): Competitiveness and Development of National Economy in Economic Analysis, No 1-2/2014,111-127

Krstić, B., Krstić, M., & Đekić, I. (2018) Sustainability of Development and growt – crisis, distribution of income and inequality in Economic and sustainable development, Vol.2, br.1/2018, 1-12

Leković, V. (2010). Institucionalna ekonomija. Kragujevac, Ekonomski fakultet Univerziteta u Kragujevcu

Martin, I., Blanke, J., Hanouz, D., Geiger, T., & Mia, I. (2010) The global competitiveness index: Beyond the global economic crisis in The global competitiveness report 2010-2011 Geneva: World economic forum, 9

Samuels, W. J. (2007), The Legal - Economic Nexus, Routledge

Schmid, A. Allan. (2004). Conflict & Cooperation: Institutional & Behavioral Economics, Blackwell.

Schwab, K. (Eds.). (2010). The global competitiveness report 2010-2011 Geneva: World economic forum, Retrieved January 12, 2020, from http://www.weforum.org/reports

Schwab, K. (Eds.). (2018). The global competitiveness report 2018 Geneva: World economic forum, Retrieved January 12, 2020, from http://www.weforum.org/reports

Stefanović, Z. (2012). Politička ekonomija globalizacije – modeli kapitalizma i institucionalna evolucija, Niš, Ekonomski fakultet Univerziteta u Nišu

Wasilewski, A., & Wasilewska, A. (2019) Financing the research and development activity for the agri-food sector and rural areas in Western Balkan Journal of Agricultural

Economics and Rural Development, Vol. 1, br.1(1-84), 29 – 41

Živković,A., & Ristić, K. (2019) Analysis of the functional domain of doctrinal approaches in monetary theory and policy, in Ekonomika, Vol. 65, october-december 2019, № 4, P. 53-62, doi:10.5937/ekonomika1904053Z

World Bank (2019) Doing business 2019, Retrieved January 12, 2020, from: www.doingbusiness.org

World Bank (2019) www. https://data.worldbank.org/indicator, Retrieved January 12, 2020.