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CONTENT

PART I: ACTUAL ISSUES IN MODERN PEDAGOGY

JEL: A20

DIFFERENCES IN THE ACADEMIC PERFORMANCE AND BEHAVIOUR OF STUDENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER BASED ON PREVALENT SUBTYPE OF THE CONDITION

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Abstract: *Attention Deficit Hyperactivity Disorder (hereinafter – ADHD) is a disorder with a very high prevalence in the children. The syndrome is characterized by issues in relation with lack of attention, hyperactivity and impulsivity. Owing to the nature of these problems, children face great difficulties at school, which demands great levels of attention, adherence to specific rules and large periods of stillness. Hence, low academic results and behavioural troubles are occurred very commonly in students with ADHD. The disorder can be divided on three subtypes depending on the dominant symptoms: Inattentive, Hyperactive-Impulsive and Combined subtype. The purpose of this study was to investigate the difficulties of 54 students (26 belonged to the Inattentive subtype, 9 to the Hyperactive-Impulsive subtype and 19 at the Combined subtype) with ADHD in the school environment and investigate the hypothesis that there are differences in academic achievement and behaviour based on the subtype of the disability. Application of subjective (teacher opinions) and objective (standardized tests) academic performance and behaviour measurement research instruments was made. The analysis of the results indicates that the subtype of the condition affects the behaviour and the academic performance of students with ADHD to a certain extent.*

Keywords: *ADHD, Inattentive subtype, Hyperactive-Impulsive subtype, Combined subtype*

INTRODUCTION

Individuals with Attention Deficit/Hyperactivity Disorder (ADHD) usually present inattention issues (they cannot keep focus for large periods of time), hyperactivity (they need to move even in situations or contexts that is considered inappropriate) or impulsivity (they find it difficult to control spontaneous behaviour when it is expected to do so).

Depending on the dominant symptoms, the Diagnostic and statistical manual of mental disorders (APA, 1994) subcategorize the disability in three subtypes: Inattentive (when the main symptoms are associated with lack of attention), Hyperactive-Impulsive (when the main symptoms are related to hyperactivity and/or impulsivity) and Combined subtype (when main symptoms include inattention and hyperactivity-impulsivity).

Since the school requires specific type of behaviour, long periods of stillness and attention during the teaching hours, students with ADHD face great difficulties in it (McConaughy et al, 2011).

These complications result in presenting behavioural issues and weaknesses in academic performance. Depending on the prevalent symptoms of the syndrome, there can be differences among students who belong to different subtype of ADHD (Gaub & Carlson, 1997; Milich, 2001).

RESEARCH AIMS

No matter the subtype of ADHD, individuals with the disorder share common problems regarding their academic performance. In addition, they regularly display unacceptable behaviour in the school environment.

Considering their differences in their dominant characteristics, children who belong to different subtypes of ADHD, might have also variances in these problematic areas. Therefore, this study tries to find out if there are differences based on prevailing subtype of ADHD, in terms of academic performance, behaviour and gender.

RESEARCH METHODOLOGY

Primary education teachers participated in this study. Their selection was random, with the rule of having at least one student with ADHD. Detailed instructions for the proper use of the research tools were given. The study used subjective (teacher opinions) and objective (standardized tests) academic achievement measures with the intention of determining the nature of the issues that students with the disability face in the school environment. The study examined the academic performance, behaviour and gender of the children. The sample included 54 students of the second and third grade of Greek primary schools with the condition.

Table 1 shows the gender and the subtype of the children who formed the sample.

Table 1

Sample of the study (gender and subtype)

Subtypes of ADHD	Gender				Total	
	Boys		Girls			
	f	%	f	%	f	%
Inattentive subtype	16	40	10	71.4	26	48.1
Hyperactive-Impulsive Subtype	7	17.5	2	14.3	9	16.7
Combined subtype	17	42.5	2	14.3	19	35.2
Total	40	100	14	100	54	100

Source: estimated by author

METHOD OF ANALYSIS

In order to collect the appropriate data, teachers had to apply specific research tools in the students with the disorder:

- *Diagnostic test*: The developmental level in basic pedagogical areas of the students was investigated. It had quantitative scales (memory of numbers, copy of shapes, memory of pictures, memory of shapes, graph distinction, vowels recognition and synthesis of vowels) and qualitative scales (common sequences, visual-motor coordination and perception of left and right).

- *Observing behaviour record forms*: The frequency of unacceptable behaviour of the children that was in relation with the symptoms of the disability at each hour of the school curriculum.

- *Performance forms in basic modules of the school curriculum*: These forms measured the performance of students in Language, Mathematics and Study of Environment.

- *Performance forms in learning areas in Language and Mathematics*: Academic performance in learning areas of Language (writing, spelling, reading skills, comprehension of text and oral expression) and Mathematics (use of mathematical symbols and arithmetic operations and ability to solve simple mathematical problems and make mental calculations) was recorded.

- *Performance forms concerning general attitude towards the courses of Language and Mathematics*: The teachers evaluated five aspects of academic performance and behaviour in the school. These areas were preparation for class assignments, class participation, classroom work, interaction with classmates and appropriate behaviour.

- *Greek Rating Scale for ADHD*: These questionnaires were completed by the teachers for each child. The aim of this diagnostic tool was to generate a DSM-IV evaluation tool based on the DSM IV criteria, which is considered to be very accurate (DuPaul et al, 2016; Kalantzi-Azizi et al, 2005). This research instrument also contains two subscales for inattentiveness and hyperactivity-impulsivity (each subscale has nine relevant questions).

The statistical processing of data was made with SPSS 26.0. Means (M) and standard deviations (SD) were produced and Bonferroni correction was used in multiple comparisons.

RESEARCH FINDINGS

The results from the observing record forms clearly show that there is statistically significant difference in the incidence of student's disruptive behaviour in the most days of the school week, depending on the subtype of ADHD they belong. In fact, this variation is caused by the difference presented between children with the Inattentive and the Hyperactivity-Impulsivity Subtypes (students with hyperactivity and impulsivity issues present higher incidence of inappropriate

behaviour than inattentive children). Furthermore, the examination of the gathered data from the Greek Rating Scale for ADHD showed that there is a statistically significant correlation between the classification into subtypes of ADHD and the sex of the children. It was found that girls are much more prone to belong to the Inattentive subtype than boys. On the other hand, boys are much more likely to belong to the Combined subtype. It was concluded, there is a statistically important variance in the Subscale for Hyperactivity-Impulsivity due to gender (boys display a much higher score compared to girls, which means that boys who belong in this subtype have more severe symptoms than girls of the same subtype). On the contrary, no statistically significant difference was found in the total scale for ADHD and the Subscale of Inattentiveness in the results of boys and girls.

As concerns the academic behaviour, the other research tools offered evidence, that there was no statistically significant difference in any of the quantitative scales of the diagnostic test, depending on the subtype of the children with the syndrome. On the contrary, statistically significant difference depending on the subtype of ADHD was found in the performance of students in the course of Study of Environment. The variance was caused between children with the Inattentive Subtype and those with the Combined Subtype (the first ones had better performance than those belonging to the Combined Subtype).

However, the overall performance in Language and Mathematics did not vary between the three subtypes of the condition. The analysis of the data from the assessment forms in Language and Mathematics indicated that there is no statistically significant difference depending on the subtype of ADHD in any learning areas of Language and Mathematics with the exception of making mental calculations in Mathematics (Inattentive students are better than hyperactive-impulsive students in this area).

The conclusions from the performance measurement investigation forms in Language and Mathematics are mixed. In Language, there was statistically significant difference caused by the subtype of ADHD in preparation for class assignments and appropriate behaviour (inattentive children had better preparation and behaviour than

hyperactive-impulsive children) and not in interaction with classmates and classroom work.

As far as it concerns Mathematics, it was proved that there was statistically significant variance based on the subtype of ADHD in preparation for class assignments, appropriate behaviour and classroom work (inattentive children had better preparation than children with both inattentive and hyperactivity-impulsivity issues and presented better classroom work and appropriate behaviour than hyperactive-impulsive individuals) and not in their interaction with classmates.

SUMMARY AND CONCLUDING REMARKS

The results indicate that the subtype of the students with ADHD is associated with the gender. Girls with ADHD often belong to the Inattentive subtype, while boys frequently belong to the Combined subtype. Moreover, boys with hyperactivity-impulsivity complications have more serious symptoms than girls of the same subtype.

In terms of behaviour, children in the Hyperactive-Impulsive subtype have higher prevalence of unwanted behaviour that those in the Inattentive subtype. The overall academic performance was not found to vary across the various subtypes of the disorder. The same conclusion applies for the performance in learning areas in Language and Mathematics. However, there seems to be differences based on the subtype of ADHD, in some aspects of the general attitude towards the two modules.

The findings show that the subtype of the condition has effect on the behaviour and to some extent in the academic performance of children and it also associates with the gender of the students. Teachers should consider these conclusions, so as to adjust their teaching methods according to the students' needs. Furthermore, this study targets at encouraging more researchers to investigate the effect of each subtype of ADHD in academic performance and behaviour in bigger samples.

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JEL: A20

STUDENTS' SELF-REGULATION LEARNING IN ONLINE-LEARNING PROCESSES

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***Abstract**: Covid-19 pandemic reality forced a high educational system in Albania to develop the teaching in distance through the support of the Internet-based technologies. The contemporary ways of learning that technology offers found a wide use in online-learning environments. The purpose of this study is to examine students' self-regulation learning in online-learning processes. This learning form will be treated specifically in relation to metacognitive skills, time management, environmental structuring, persistence and help seeking, which play a very important role in involving students productively in online learning. The quantitative method has been employed in this study. The sample included in the study consists of 310 students belonging to both bachelor and master programs obtained from two universities in two Albanian cities. Questionnaire administration is held online. The findings of the study showed that students, although they have good skills related to the self-regulation in online-learning, they still need further development this way of academic interaction and behaviour. The findings of this study can help students, teachers, researchers, policymakers and other stakeholders. Further studies will be conducted to develop a contemporary form of learning.*

***Keywords**: students, self-regulation learning, online learning, metacognitive skills, universities, Albania*

INTRODUCTION

The rapid development of information and communication technology (ICT) has affected the quality of the educational process. Applying ICT properly improves and develops both the teaching and learning process. The implementation of e-learning as one way of applying

modern information technology has created a stimulating and positive climate for many changes in educational system in common. Thus, e-learning can reasonably be called a catalyst for change in higher education (Dragan at el, 2019). Students use e-learning in a variety of forms and ways (organization and presentation, web browsing, email, social networking sites, and so on).

Online-learning is one of the modern ways helping in the realization of the learning process. The purpose of this study is to examine student's self-regulation learning in online-learning. Various studies have shown that this form of learning is just as effective as traditional learning. Alsaaty, Carter, Abrahams, and Alshameri (2016) compared traditional education with online-learning in their research. Their study showed that a high percentage of the students have assimilated more information during face-to-face classes (not online), but they positively perceived their overall online experience, even though they have encountered difficulties while using e-learning platforms (ibid).

Online education can undoubtedly offer new learning environments that make learning accessible and support students in developing competencies, skills, and attitudes (Vlachopoulos, Sangrà, and Cabrera, 2012). In e-learning environment, students are responsible for their own activities and have to take part actively in the self-management of learning process. The self-regulated learning is an ability to understand and control learning environment and thoughts in pursuit of attaining a long-term goal.

LITERATURE REVIEW

Nowadays e-learning provides a dynamic, interactive and nonlinear learning environment for learners. According to Marinescu (2007), e-learning approach has the following advantages: e-learning is not only a long-distance learning process, but also an actual meeting, individual or collective tutoring, a regrouping and a concrete physical presence sequential and temporary, of course; it circulates a huge amount of knowledge with a high updating degree; it makes the educated person in the position to work intensely, by himself/herself, through unilateral concentration to solve specific problems; it respects the personal working rhythms, each learner managing his/her own obligations and

the time necessary to accomplish them. To these advantages Ilie, and Frăsineanu (2019) have added the following advantages. E-learning has simple and flexible logics, it saves time; it is accessible and mobile, it uses different forms of content (video clips, dynamic presentations, forums and discussion charts), it is presented in modules, it can be both synchronous and asynchronous, it uses modern methods and learning means, it facilitates learning management and self-management, it has a large capacity storage and it capitalizes on the external links, power-point slides, audio and video documents, etc. On the other side, also students had to face challenges. Focusing on students' perspective on e-learning, this study identified that among the main challenges that students encountered were accessibility, connectivity, lack of appropriate devices, and social issues represented by the lack of communication and interaction with teachers and peers (Aboagye et al, 2020). Effective online education consists of online teaching and learning, boosting of several research works, principles, prototypes, theories, ethics, and appraisal of benchmark concentrations on quality online course design, teaching and learning (Hodges et al, 2020). This process also consists of adequate strategic preparation, trust establishment, thinking in processes, amalgamation and reinforcement of all parties involved, separate, collaborative and organizational knowledge (Cameron, and Green, 2019).

Self-regulation is the ability to organize one's behaviour, emotions and thoughts in pursuit of attaining a long-term goal. Specifically, according to Shuy & TEAL staff (2010), self-regulated learning consists of three components: cognition, metacognition, and motivation. The motivation component has also been supported by Liaw, and Huang (2007), who proved that learning motivation can be stimulated by establishing an effective interactive online-learning environment, promoting students' self-regulated learning. Meanwhile, according to Zhao, and Chen (2016) the satisfaction played a key role for e-learning success and self-regulation. SRL appears to be important for learners in online-learning environments that afford high learner's autonomy level and low levels of teacher presence (Lehmann, Hähnlein, and Ifenthaler, 2014). In the forethought phase, learners are involved in task analysis processes and self-motivation beliefs. Next, the phase of

performance takes place. In this phase, learners are involved in self-control processes and self-observation. The third phase is self-reflection. In this phase, both self-judgment and self-reaction occur. These phases repeat in a cyclical manner throughout the learning process.

METHODOLOGY

The method used to accomplish the goal of this study is quantitative methods of collecting and data analysis. The population selected in this study are university students. The sample selection are 310 students studying in Tirana University and University Aleksander Moisiu in Durres. 60.3% of students in this study belong to bachelor programs and 39.7% of them belong to master programs. The questionnaire used for this study is a self-regulated online-learning questionnaire adapted from Jansen, et al (2017). This questionnaire contains a combination and adaptation of all questionnaires that measure all aspects of self-regulated learning. The survey questions are structured and measured with the help of Likert scale (Always, Very often, Sometimes, Rarely, Never). It also collects demographic data to give a more complete picture of the sample included in the study. The data collection from administration was conducted online through the questionnaire. The selection of students involved in the study is random. Data processing was carried out with the help of IBM SPSS. Data analysis is statistically descriptive.

RESULTS

Students' metacognitive skills in online learning

This students' skills were measured through the eight statements which are reflected in *Figure 1*. During the analysis we referred mainly to the higher density for each of the measured statements. Regarding the statement *"I think about what I need to learn before starting an assignment in an online course"*, it was noted that the highest density is in the graph that shows that the majority of students (41.9%) always think about what they need to learn before starting online-course. Regarding the statement *"I make myself questions about what should be studied before embarking on a study to develop online course"*, it was highlighted that the majority of students 33.5% often ask themselves this question.

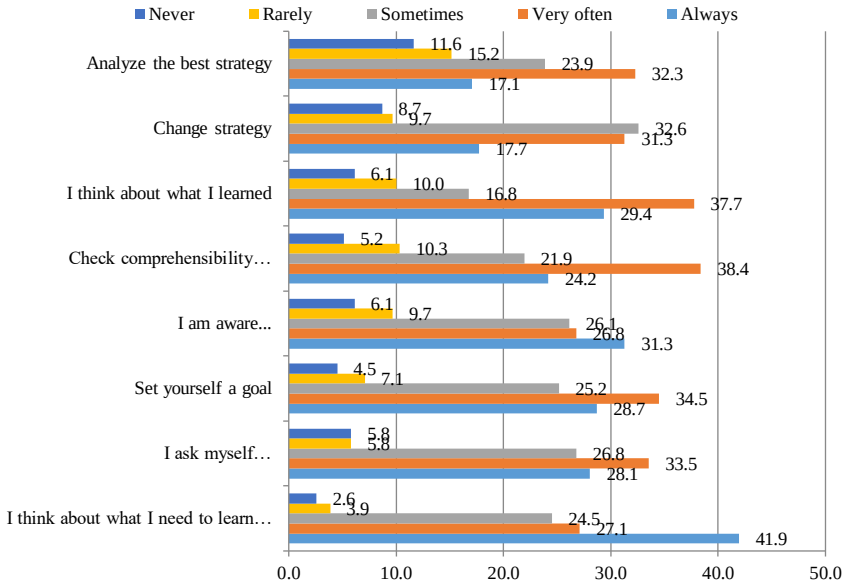

Figure 1: Metacognitive skills in online-learning

Source: presented by author results of own researches

While another part of the substantial (28.1%) said they always ask themselves. Students were also asked about setting a goal to manage study time for online-courses. The highest density is found in the answers 34.5% (very often) and 28.7% stated that they always set a goal to manage the study time for online-courses. Regarding the statement *"I am aware of the strategies I use when studying for online courses"*, it was noted that the highest percentage (31.3%) appeared in the answer *"I am always aware of the strategies I use"*. Students were asked whether they ask themselves regarding the comprehensibility check of the courses they attend online. Most of them (38.4%) stated they do very often and 24.2% stated they check comprehensibility always. At the same time, the study participants were asked if they think about what "I have learned after completing the tasks given in the online course". The highest density of answers (37.7%) consider it very often and 29.4% stated that they always think about what they have learned after completing the online-course. Respondents were also asked about changing strategies, when they do not make progress in online-learning and 32.6% declared that they sometimes change strategies while 31.3%

declared that they change strategies very often. Students were asked if they found themselves analysing the most useful strategies while studying online-courses. Higher densities of 32.3% participants have to answer more often and 23.9% answered sometimes. According to the analysis presented above, it is possible to conclude that most of students possess cognitive skills to manage themselves in the online-learning environment.

Time management and environmental structuring

Another important element of self-regulation learning in online-learning is time management. The data analysis has highlighted the difficulty encountered by students in maintaining a regular study program for the courses they take online. 31% of respondents showed that they sometimes encounter difficulties while 26.8% showed very often, 21% always encounter difficulties while 16.1% sometimes and only 5.2% never encounter difficulties for the courses they take online. Data analysis also showed that a significant proportion of students do not spend much time on online-learning. 31% of students affirmed they do sometimes, 25.5% answered "never", 22.6% answered "rarely", 14.8% of them very often and only 6.1% of students affirmed always. Referring to this analysis, it is possible to conclude that students feel difficulties with their time management and this consequently hinders the quality of their online-learning.

A huge significance has the choosing affordable online access and facilitating environment which supports effective self-regulation in online-learning. Most of the students declared that they choose a suitable place when they involved in online learning to avoid losing concentration. Thus, 44.5% of respondents said "always", 21% replied "more often", 24.2% do it "sometimes" and 4.2% declared "rarely". While they also claimed that they choose a suitable place to study the materials obtained online and most of them know what the teacher expects from them to learn in the online-course.

Persistence

Persistence also affects the self-regulation in the learning process. Several statements were made to measure this behaviour. In the analysis below, we will also focus mainly on the higher density of

responses given to each statement. Students were asked if they force themselves to focus on the case, when they get bored while staying in online-learning. Most of them (37.7%) stated "very often" and 25.2% declared "sometimes" force themselves to concentrate. Meanwhile, the study showed a significant percentage 7.7% (N = 24) who never forces themselves to concentrate. When students reach the point or the moment, when they start to lose concentration during online-learning, 37.7% of respondents stated "very often" and 27% stated that they always make a special effort to maintain concentration. The sample taken in the study was also asked if they try to work well even if they do not like online learning. 39% of them stated, they always try to work well and 31.9% stated, they often try to work well even when they do not like online-learning. If it happens that learning materials are tedious, difficult and uninteresting, students answered they manage to continue working until they finish this online-course. 36.1% of them stated that they always continue to work and 30% of students said that they continue to work very often until the online-course is over. In connection with the missing interest for online-learning, 33.5% of respondents stated "more often" and 30.3% of them said they always try to push themselves to rise the interest, in case they lose it. *Figure 2* shows that the highest density is mainly relate to the answer "very often" which is accompanied by "always" and "sometimes". It means that students have developed the behaviour of persistence to organize themselves in online-learning.

Help seeking

Both collaboration and coordination between students effectively support the learning process in order to understand online materials better. At the same time, help seeking is another important element that helps to better understand students' self-regulation in online-learning. 28.7% of students who were part of the study stated that they sometimes ask other students who are part of the study about things they do not understand during the online-learning. However, 10.6% of respondents indicated that they never ask other classmates or other students about things they did not understand. Referring to this result, it is understandable that a high number of students (39.3%) do not cooperate with each other in case they struggle with online-materials.

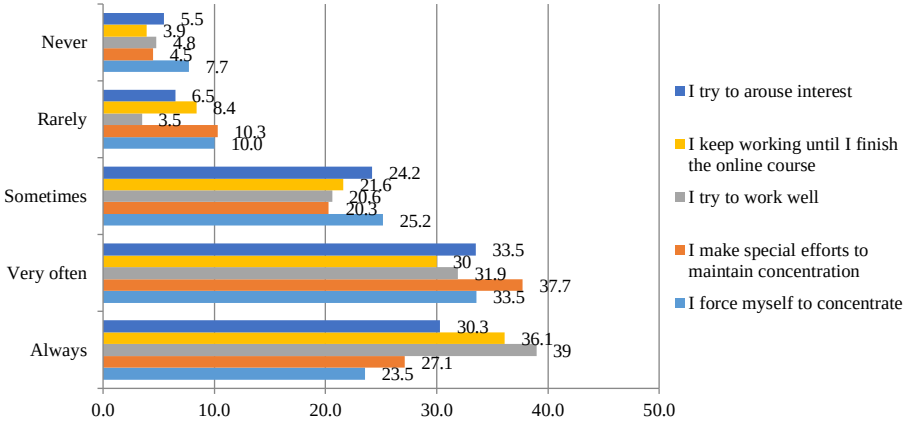

Figure 2: Persistence in online-learning

Source: presented by author results of own researches

Students were also asked about sharing problems related to online-learning among peers. Data analysis revealed, 28% of them answered "always", 27.7% answered "sometimes", 21.9% replied "very often", 11.9% do it "rarely" and 10.3% of students stated that they never share and solve the problem of online-learning with their classmates. It is seen, mostly students share online-learning problems with each other.

Regarding the insistence to ask for the help to understand online-course lecturers better, 35% of respondents declared that sometimes they ask for the help, while 17% stated that they always ask for the help; 17% stated that they ask for help very often and 10.3% stated that they are never persistent for it. Thus, the highest density is in the answer "sometimes" they ask for help from lecturers. At the same time, the highest students' density (29.7%) takes place in the answer "sometimes" regarding the control of the materials they receive online with each other. To understand better collaboration level, the question was put, whether the students ask their peers about their performance in online-learning. Students' response revealed that 28.1% of them stated "sometimes", 27.7% are "very often", 21.3% are "always" and 10.3% stated that they never communicate with classmates to learn more about their performance. Figure 3 shows that the density of answers on the help seeking is concentrated around the answer "sometimes" which is accompanied by "very often" and "always".

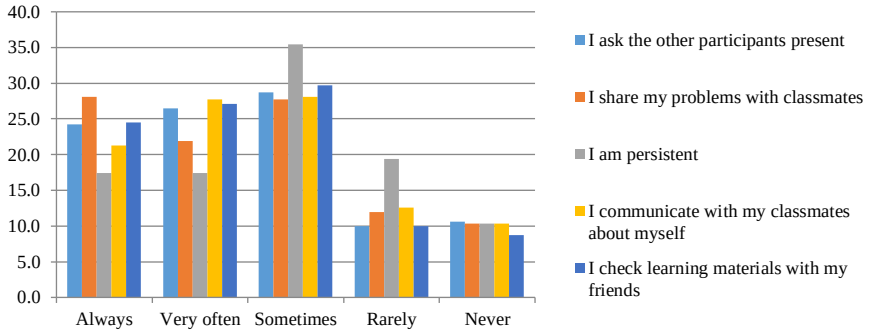

Figure 3: Help seeking for online-learning

Source: presented by author results of own researches

CONCLUSIONS

Self-regulation learning is an important element that supports online-learning. Students are responsible for their own activities and have to take part in the management of learning process more actively. This study found that students possess cognitive skills to manage themselves in online-learning environment. They have also developed the behaviour of persistence to be organized in this environment. To support their learning and to avoid losing concentration, they choose a suitable place to engage in online-learning.

Difficulties were mainly identified with the component of time management. Students had significant difficulty to manage their time well in order to be part of online-learning. This factor is important, because it affects their effective participation in the learning process and their success in online-learning in common. Therefore, it is necessary to find a motivator to manage their time well to meet online-learning deadlines.

Both collaboration and interaction between students in their online-study support and develop the learning process. Our study found that seeking help element does not extend widely among students. Somehow, it shows indifference to the material learnt. It means, educators (professors, lecturers, and assistants, as well as educational software developers and coordinators in higher educational institutions) have to look for a way to rise collaborative behaviour between students to support their learner as much as possible in online-learning.

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PART II: ACTUAL ISSUES OF MACRO AND MICROECONOMICS

JEL: F13, O11

ECONOMIC EFFECTS OF TARIFFS ON THE CURRENT ACCOUNT BALANCE

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***Abstract**: Nowadays, international trade became more complicated. Trade attitudes between the countries depend on mutual benefits. However, tariffs are still the main tool used in the protectionism. Country are using them sometimes carefully, sometimes beneficial, and sometimes for purpose. The aim is to examine tariff restrictions in international trade, their economic consequences and effects to the current account balance of some advanced, emerging and developing OECD economies and their partners.*

***Keywords**: tariffs, OECD, tariff effects, current account balance, consequences*

INTRODUCTION

In the history of international economic relations, trade agreements based on mutual benefits are very important. Therefore, different trade forms, alliances and unions, bilateral and multi-trade agreements in the global world increase the efficiency of industrial and trade relations of the countries participating in international economic relations on a mutually beneficial basis. Since the main macroeconomic goal of advanced, emerging and developing countries is the economic growth providing, the setting of various mutually-beneficial trade agreements simplifies and encourage their dynamic development. However, both economic shocks and financial crises caused by unforeseen circumstances often occur and harm the deep interdependence of actual international

economic relations. Such shocks and distresses can arise from natural disasters, environmental change, climate change, crises and military conflicts. Due to the unpredictability of such events and their effects, it becomes necessary to ensure economic security on the national and international level. It should be based on economic protectionism in international trade relations. Therefore, the issue of restrictions as a main part of protectionism policy is relevant at the present stage of the development of international economic relations due to intensifying economic shocks, the demonstrative example of which is a world pandemic situation.

The pandemic, which has been officially declared by WHO on March, 11, 2020 (WHO, 2020) and continues until now, has reshaped the global economy shifting it from traditional contractual international trade relations towards the digital economy (Cucinotta and Vanelli, 2020). This led to devastating consequences for almost all manufacturing industries producing physical products and material-based services due to countries lockdowns, but less hit digital spheres and Internet-based businesses, i.e. digital marketing, banking and other Internet-based high-tech industries (Zimmerling, and Chen, 2021). The most significant impact was on the supply-chain and logistics sector since countries found themselves in a forced isolation situation during the pandemic based on the government directives (Gereffi, Lim, and Lee, 2021). Thus, the one of the main macroeconomic goals pursued by each country in the world – the economic growth – has turned into the economic recession all world economies. With differences in a time lag, each country faced the need to revise all previously negotiated agreements and reorient domestic economy to a localization (where it was maximally possible) in production and trade. As a result, this situation caused countries to strengthen restrictive measures concerning foreign trade partners.

The theory of international economic relations evidences, restrictive trading methods are considered controversially both in the scientific community, among economists-practitioners and politicians or policy-makers. On the one hand, the support of domestic producers strengthens the production and trade capacity of the country (Salvatore, 2012). On the other hand, it leads to inefficiency in the resource use and welfare loss (Krugman, and Obstfeld, 2015; Mankiw, 2016).

Therefore, our *aim* is to examine tariff restrictions in international trade, their economic consequences and effects to the current account balance of some advanced, emerging and developing OECD economies and their partners.

To achieve the goal, it is necessary to solve the following *tasks*: (1) to review the theories of free trade and protectionism in international trade; (2) to analyse statistical data reflecting the influence of trade restrictions on the current account balance of some advanced, emerging and developing OECD economies and their partners; (3) to make conclusions on the influential significance of tariff restrictions in international trade, their economic consequences and effects to the current account balance of some advanced, emerging and developing OECD economies and their partners.

METHODOLOGY

Secondary sources have been employed during the research. They include academic literature, research papers, analytical reports and presentations, datasets from world statistical services (OECD, 2021; IMF, 2021; WEF, 2021; HDI, 2021).

Theoretical methods used in this research include content-analysis of research papers and documents; comparative and logical-structural analyses of scientific and academic literature.

Critic analysis has been used to justify scientific opinions and authorial points of view. Evidential analysis has been implemented for making own conclusions and justifications based on scholars' opinions and findings. The systematic approach has been applied in the selection, systematization and analysis of scientific literature, as well as when expressing own thoughts.

Empirical methods employed in this research cover economic description, tabular and graphical interpretation of statistical data, times series analysis.

RESULTS

The most important type of trade restriction is historically been the tariff, which is considered as a tax or duty imposed on the goods and services that cross a national border. There are import and export duties, however, an attention is concentrated on the import tariffs due

to their world domination. The well-known classification of tariffs covers ad-valorem, specific, and compound. According to Salvatore (2012), all tariff policies effect on consumption, the product of trade and social outcomes. Tariffs on import lead to the strengthening of domestic producers' position giving the possibilities to be more competitive and rising their potential producer surplus. Nevertheless, consumers benefit decrease significantly because of domestic prices rising. Accordingly, consumer surplus decreases and as well as a choice of goods and services. Such restrictions limit import flow and have opportunity costs leading to a welfare loss. It happened because the domestic product which is costing higher in production causes inefficient resource employment destroying not only country trade efficiency but a world efficiency in a common.

In this connection, important is the Theory of Effective Protection. This theory states that tariff structure must be effective and based on the rate of effective protection calculated on the domestic value-added, or processing, that takes place in the concrete country. In turn, domestic value-added equals the price of the final goods minus the cost of the imported inputs going into the production of these goods (Gunnella, and Quaglietti, 2019). The nominal tariff rate is important to consumers (because it shows by how much the price of the final good increases as a result of the tariff imposition), the effective tariff rate is important to producers (because it indicates how much protection is actually provided to the domestic processing of the import-competing goods).

The information received from this calculation of formula (1) gives the possibility to estimate the percentage of trade protection decision-makers (Salvatore, 2012).

$$g = \frac{t - a_i t_i}{1 - a_i} \quad (1)$$

where g is the rate of effective protection to producers of the final commodity; t is the nominal tariff rate on consumers of the final commodity; a_i is the ratio of the cost of the imported input to the price of final commodity in the absence of tariffs; t_i is the nominal tariff rate on the imported input. The more this index is, the higher protection level for economy, who is following protective (defensive) policy.

Following this model, it is worth to mention destroying influence of rising tariffs, for example, in trade attitudes between the US and China (for these countries g calculation is over 50%). International trade between the US and China becomes less and less effective (Gunnella, and Quaglietti, 2019; Albertoni, and Wise, 2021).

Under the current world economic development, it is interesting the conclusion received by Stolper–Samuelson theorem, which postulates that increase in the relative price of goods as a result of tariff policy raises the return of the factor used in the production (Samuelson, and Nordhaus, 2012). It means the real return to the country's scarce factor of production will rise with the imposition of a tariff. These findings were verified by Barattieri, Cacciatore, and Ghironi (2018) on the bases of VAR model, who statistically proved results of international trade in Eurasian zone and South-African countries.

In practice, it is important to find the optimal tariff t^* using formula (2), which will maximize the net benefit resulting from the involvement of the countries' terms of trade against the negative effect resulting from a decrease in volume of trade possible (Salvatore, 2012).

$$t^* = \frac{1}{e-1} \tag{2}$$

where e is the absolute value of the elasticity of the trade partner's offer curve.

The gain to a country from the optimum tariff comes at the expense of the trade partner, who is likely to retaliate starting a “tariff war”. The retaliation process may continue until both countries will lose all or almost will lose from international trade. The risk is, however, that the trade volume may shrink to zero.

Interesting is methodology proposed by Anderson, and Neary (2004), who summarized existing models of measurements for restrictions in international trade and classified them into specific groups: trade-weighted average tariff, tariff dispersion, welfare-equivalent uniform tariff, import-volume-equivalent uniform tariff, trade restrictiveness index, true cost-of-living index. As well, they described domestic and foreign firms' behaviour in international trade with the help of math simulation, found the trade expenditure function,

offered method to highlight the influence of shadow prices and estimate the marginal cost of tariffs, welfare-improving tariff changes. The math principles and received equations enrich the protectionism theory from the point of its optimization in international economic attitudes.

Nowadays, in a globalized world, countries, being in isolation caused by the pandemic, are forced to defend their interests, sovereignty and provide the safety and well-being for own populations. Therefore, they are moving from a global economic model to an autarky model based on localization. In this regard, governments of many countries decide in favour of "strict protectionism", in particular in international trade. The main mechanisms of protectionism are customs policy, quotas policy, subsidization of export-oriented productions; establishment of administrative barriers, the adoption of restrictive measures at the legislative level (the most severe method is known as embargo) and establishment of trade barriers through standardization or certification of goods and services (WTO, 2020; Albertoni, and Wise, 2020).

However, in the modern world, China, as an emerging country (IMF, 2018) has globalized the economic world over the past 20 years by creating global supply chains while minimizing costs and optimizing logistics. This means that 82% of countries (Okubo, and Turkki, 2021) that represent advanced economies worldwide depend on Chinese outputs. Therefore, such a demonstrative dependence of advanced economies on promptly emerging China makes all production and service industries dependent, forcing countries to make trade agreements on cooperation for the long term (Melatos, Raimondos, and Gibson, 2019).

Nevertheless, as the global pandemic has shown in the event of force-majeure unforeseen circumstances, the supply chain disruptions and the slowing down of production and services led to a partial collapse of economy and financial distresses. In such conditions, unfortunately, immediate reprofiling and initiation of own supply chain are impossible. Moreover, this is an inevitable measure. Since the Chinese economy "capturing the economic value the world economies" is facing opposition and counter-forces, the situation aggravates in international trade and international relations forcing governments to take "hard" decisions and restrictive measures. One of the top-excesses observed in international relations is the so-called

“trade war” that has been going on for 5 years between China and the US. Although the term “trade war” is not scientific and legitimized, many scientific works are devoted to this topic with a discussion of various factors and consequences of its impact on the economic world (Li Sheng, Dmitri Felix do Nascimento, 2021).

In our opinion, the most exact and correct scientific definition of a “trade war” is given that it provides an economic rationale for the existence of barriers to trade (Melatos, Raimondos, and Gibson, 2019). Continuing the thought of scientists, it should be noted that a “trade war” is most likely manifested in active actions leading to restrictive measures in international trade, and the rigidity of these economic restrictions determines its status, which is similar to the term “war” from military science. For the US, the so-called “trade war” policy is not new, but rather a fairly traditional solution, which has a history of about 100 years (Mitchener, Wandschneider, and Hjortshøj O'Rourke, 2021).

Full history of trade wars with hierarchical consequences has been summarised in scientific book (Li Sheng, Dmitri Felix do Nascimento, 2021). Their work justifies all economic conflicts and their solutions. One of the demonstrative examples of such a war is the trade war after the US adopted the Smoot-Hawley tariff (1930). The legislation raised the average US tariff on dutiable imports by around 6 pp. In addition to strategically targeted tariffs, retaliation involved such non-tariff measures as quotas, boycotts and increased sales resistance to US goods. An example of the impact is a 33% decline in exports of automobiles and the retaliators' welfare gains from trade fell by roughly 8-17% (ibid).

Thus, in the framework of regional trade agreements described in the economic studies (Titievskaia, 2019), the history of severe restrictive measures is called “tariff wars”. Possible outcomes and gains as a result of “tariff wars” are assessed using game theory in scientific publication of Lloyd (1992). He recognised “tariff war” equilibrium as the solution of a two-person non-zero-sum game in which the countries or blocs are the players. As well, he analysed the optimal tariff for two countries (or two trading blocs) to maximise the welfare of members when each can retaliate repeatedly in a “tariff war”. This produced the result that both countries normally lose from

a tariff war, although the country initiating the war can gain. Moreover, Thompson (2013) found that if one country is substantially bigger than the other, it can expect to gain from retaliation – big countries win trade wars. They extended the model to three players. This introduces the possibility of different coalitions of two players (there are three possibilities with three players). The game becomes a two-stage game, the first stage being the choice of partner and the second the choice of optimal tariff for each player. The prospects of countries gaining from the formation of customs unions are greater with three players, and again the larger the union the more likely it is to gain (Titievskaia, 2019).

These game theory models can also be used to compare free trade areas, which do not have a common external tariff policy, with customs union which do. authors compare the advantages to two countries of forming either a free trade area or a customs union when there is a third country. They show that a customs union has two advantages in this context. It is a larger bloc for the purpose of setting optimal tariffs, and it internalises a "tariff externality" which exists when both members import the same good. The latter effect is due to the induced improvement in the terms of trade which benefits both countries when only one imposes a tariff on imports from the third outside country (Mann, 1987; Martins, Pinto, and Passamani-Zubelli, 2017; Freund, Maliszewska, Mattoo, and Ruta, 2020).

The problem of "tariff wars" in a history of international economic relations is a part of highest confrontations which happened due to misunderstanding of economic preferences from free trade and not realised capacity domestically used resources. However, referring to the modern scientific findings, sometimes tariff wars are the only mechanism possible to protect domestic economy from foreign intervention. Analysis of trade restrictions typically includes analysis of the main macroeconomic indicators belonging to the part of international trade. There are many methods and modern researches dedicated to the international trade effectiveness analysis, but statistically correct and relevant are given by WTO, IMF, OECD and The World Bank (2021).

WTO economic analysis of international trade is based on analytical indexes with an accent on international jurisprudence and

trade practices (WTO, 2012). Moreover, WTO gives the complete picture of international trade mapping with the help based on the WTO trade barometers methodology (WTO, 2019). These indicators are grouped into the following branches, viz. (a) Goods Trade Barometer and (b) Services Trade Barometer. Both branches indicate exports and imports flows, as well as financial and investment flows. Separate parts present statistic indicators in the following dimensions: (1) Merchandise trade; (2) Trade in services; (3) Tariffs; (4) Non-tariffs measures; and (5) Global value chains (WTO, 2019).

With developed scale, such barometer indicators are signalling about normal and dangerous trends, giving a forecast for international trade development in the short-run.

OECD statistics dedicated to the international trade, considers BoP (including current account balance, financial account and investment account). In addition, it visualizes the merchandise trade price index (MTPI), trade in value-added (TVA) and international trade in the services index (ITSI). Such grouping of international trade indicators in specific clusters gives a full picture of international trade development with retrospective and perspective analyses. In addition, OECD statistics widespread the information on trade restrictions. In particular, there are trade restrictiveness index (TRI), services restrictiveness index (SRI), tariff index and non-tariff restrictiveness index (OECD, 2019). This methodology includes the following restrictions: restrictions on foreign entry, restrictions to the movement of people, discriminatory measures, barriers to market competition and regulatory transparency. Despite deep and justified methodology of estimations and a wide range of data, these indexes have limitations in use, because they demonstrate only countries who are OECD-members and they are identified by using survey procedures.

In our opinion, The World Bank database is most filled with information available on international trade. It is obvious because The World Bank collects all important macroeconomic indicators, which reflect reliable information of economic health for each country (The World Bank, 2021). In particular, its data includes access to the economic and financial data in international trade, including comparative advantages of nations, ranking countries by export goods and services etc. Furthermore, The World Bank provides international

finance statistics indicating the financial sustainability of countries (The World Bank, 2021). And finally, there are many tables and charts dedicated to the tariff policy and specific visualization of the tariff and non-tariff barriers including currency forecast and dynamic changes are in FOREX market. Its statistic database includes a wide range of indicators (quarterly and annually, belonging to international energy indexes, fuel indexes, HighTech indexes, international tourism indexes, logistic performance index and terms of trade (World Bank, 2021). At the same time, its data include a set of tariffs indexes to the concrete branches of manufacturing and service. These data are presented in the form of tariff rates (%) and summarized indexes which help to compare countries worldwide. All indexes are visualized as well and presented in a table form. In addition, they include world indicators and world trends, which enable to show the position of each country on the background of the world tendencies.

Comparative economic analysis of international trade dynamics in separate advanced, emerging and developing countries

The comparative analysis is one of the most used in the practice. In the international trade, all of indicators are systematized by trade sectors and countries.

Referring to IMF (2016), all economies worldwide are divided into 3 statuses: advanced economies, developing and emerging. Although, this classification is quite specific and other official world institutions (OECD, World Bank and WTO, 2020) do not support it, dividing countries just to developed and developing. Here, we will use IMF classification. Advanced economies considered in this research are Australia, Canada, Germany, the UK and the US. Developing countries are Brazil, Columbia, Costa Rica, Turkey and South Africa. Emerging economies are considered here China, India and Russian Federation. Such a set of countries is chosen from the perspective of their comparability within a divided group and from the point of representativeness in the geographical placement. Also, our own interest to the international trade in chosen countries exists from the point of professional activity and research.

The comparative economic analysis is the sub-field of economic methodology which gives the possibility to identify, check and compare

different indicators referring to the same datasets (Greenlaw, Taylor, Shapiro, 2011). Comparative economic analysis of international trade includes collation and matching method including the main international trade indicators and their interpretations with the help of geographical and table presentations (Mankiw, 2016).

Current account trends

The current account is the main account of BoP which includes the balance of trade in goods, the balance of trade in services, income (inflow minus outflow) and current transfers (secondary income). The current account reflects a quantitative side of international trade (Krugman, and Obstfeld, 2015). It should be noted, that the current account can be with a surplus or with a deficit. A surplus occurs whenever a balance has a positive value, while a deficit is vice versa (Mankiw, 2016).

Balance of trade in goods is the most significant part of a current account in percentage, because it shows the value of physical trade. Balance of trade in services is the second part by importance, because it includes intangible assets' value in international trade. Income refers to the net inflow or outflow of money depending on where they have been earned. Current transfers refer to any monetary transactions from abroad which include non-earning: monetary gifts, foreign aid and other subsidization free of charge (Krugman, and Obstfeld, 2015). Based on the information given above, let us consider the statistics background of current account BoP chosen countries.

Based on statistics (OECD, 2021), a comparison of advanced economies with current-account indicators show the following trends (Figure 1):

- Australia always had a current account deficit starting from 2000 to 2018. Only in the pre-pandemic and pandemic period, Australia changed into the current account surplus (2019) which increased three times in 2020.

- Canada had since 2002 till 2008 surplus. But this trend has been changed in 2009 and till now Canada has a persistent trade deficit.

- Germany has a trade deficit in 2000-2004. This trend has been changed significantly in 2002 and till now Germany has an increasing trade surplus.

- The UK demonstrates a trade deficit along with all analysed periods. Only in 2001 and in 2019 country had a small surplus.

- The US always has a persistent trade deficit along with the whole history of its trading attitudes.

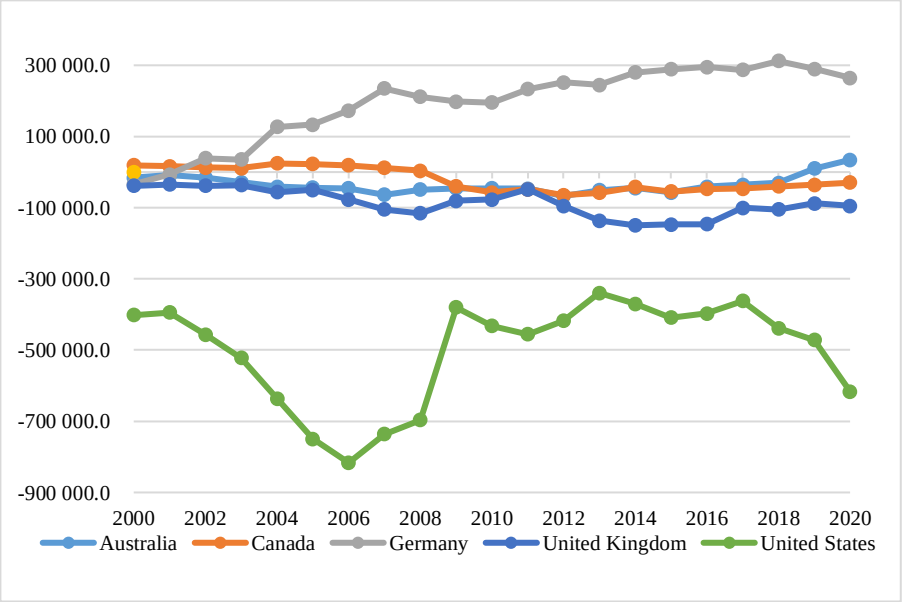

Figure 1: Dynamics of current account balance in advanced countries
Source: created by author based on OECD statistics database (2021)

Despite all the above-mentioned countries are advanced economies, they progress in different ways. For example, Germany keeps pace of trade on surplus, while the UK, the US, Australia and Canada feel convenient even with the trade deficits. The difference can be explained by different international trade strategy implemented by these countries. Germany is following an export-oriented strategy, while other countries are import-oriented.

The second group of countries (developing) reflects the following trends (Figure 2):

- Brazil does not follow constant strategy in international trade. Starting from the trade deficit in 2000, it cycles with up and down from 2008 till 2020.

- Colombia demonstrates persistent current account deficit from 2001 to 2020, which is characterized by means of chaotic trend without any system and predictability.

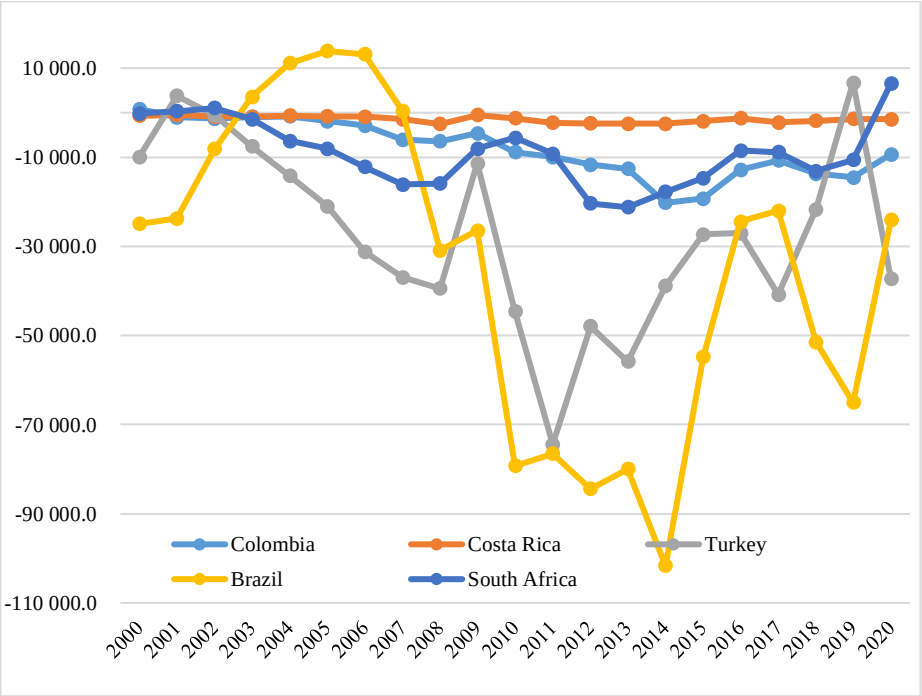

Figure 2: Dynamics of current account balance in developing countries
Source: created by author based on OECD statistics database (2021)

- Costa Rica, similarly to Columbia, has constantly changing current account deficit without any predictability.

- Turkey does not indicate consistency since 2000. Thus, in 2001 and 2019 it accidently became into the trade surplus, but the rest of considered time it stayed with increasing trade deficit, which has been on the peak in 2011 and 2020.

- South Africa, similarly to previous countries, does not demonstrate stability in international trade. Most of time, viz. 2000, 2003-2019 it fell into the current deficit, while 2001-2002 and 2020 a trade surplus appeared.

Unfortunately, all developing economies analysed, show absence of any strategy and tactic in international trade, but this situation is obvious, because developing countries depend on advanced and emerging economies, they are forced to follow international rules and WTO agreements negotiated illusory benefits for them with low standards.

Figure 3 shows comparing trends with emerging countries:

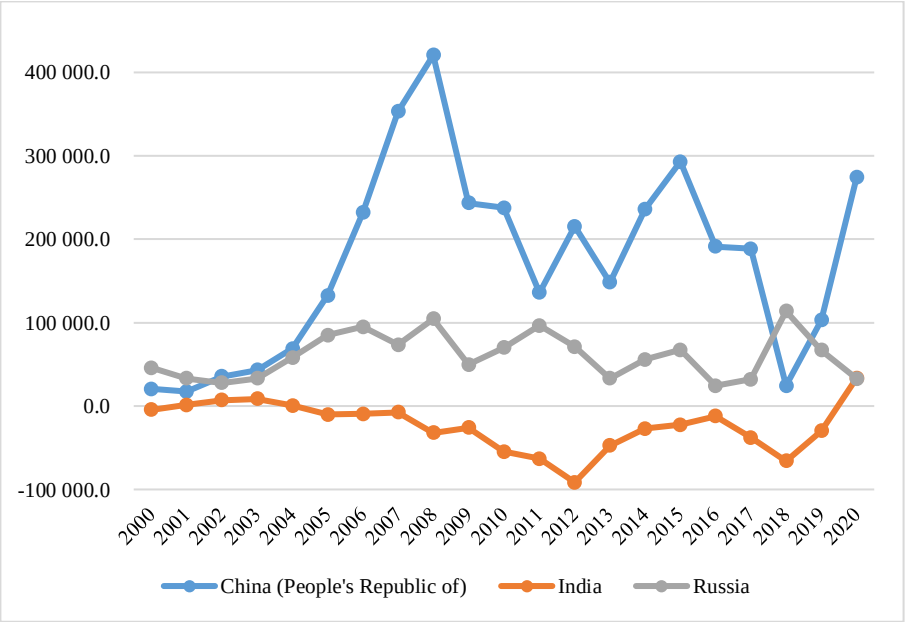

Figure 3: Dynamics of current account balance in emerging countries
Source: created by author based on OECD statistics database (2021)

- China demonstrates an impressive increase in a trade surplus since 2000 till now. Such an emerging situation was interrupted only in 2018, when the trade war between the US and China has been started. Repeatedly hiking tariffs hit Chinese economy significantly, but even then, economy demonstrates in 2020 twice increased trade volumes comparing with the per-pandemic periods.

- India doesn't demonstrate consistency and stability in international trade. Starting from the trade deficit in 2000 and emerging in 2001-2004, it fell again into the trade deficit from 2005 till 2019. However, India cardinally changed deficit to the surplus pushing international trade up in 2020.

- Russia constantly demonstrates trade surplus since 2000, however this trend is unstable that is explained by economic sanctions on the background of constantly depreciating rubble.

All of three described above economies are emerging, they have different strategies, as well as advanced economies. For example, both

China and Russia follow export-orientation, while India seems does not have any strategy at all.

Figure 4 shows the state of the balance for trade in goods in advanced economies and reflects the following trends:

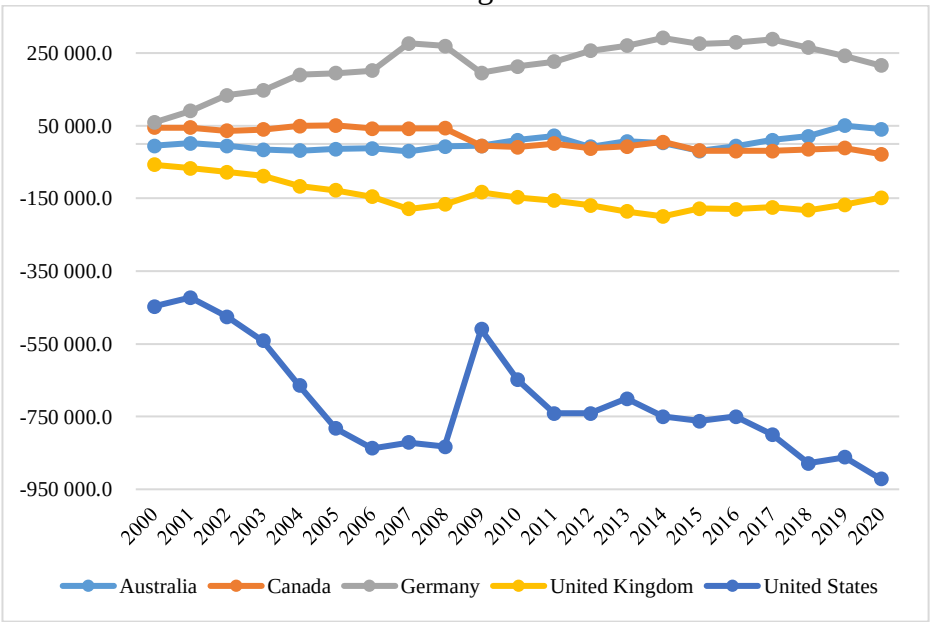

Figure 4: Dynamics of balance for trade in goods balance in advanced countries

Source: created by author based on OECD statistics database (2021)

- Australia experiences up and down within the business cycle. From 2000-2009, country had unstable fall and growth in trade deficit, trying to improve it till 2009. In 2010-2011 country went into a trade surplus, which charged in 2012 with deep fall, and improved in 2013-2014. Period of 2015-2016 was most unfavourable, when country has experienced a deepest trade deficit and since 2017 till now country improved and changed to a surplus for the trade in goods.

- Canada has been in a trade surplus since 2000 till 2008, which has become into the trade deficit in 2009. Such deficit can be considered as persistent excluding 2011 and 2014, where country shortly came in a surplus.

- Germany is constantly increasing trade in goods since 2000 till 2020 with insignificant small up and down. Till now, country expanded

trade in goods in 3.6 times.

- The UK is demonstrating a trade deficit in goods since 2000 till 2020. It can be said; such trade deficit is consistent and steady. The size of the deficit has deepened in 2.5 times from 2000 to 2020.

- The US during 2000-2020 had impressive by numbers trade deficit in goods, which is constantly grew. Its size increased since 2000 twice.

As the analysis above shows, advanced countries demonstrate absolutely different trading status and position in the trade of goods. If both the UK and the US are strongly depending on imports of goods, Germany is clearly export-oriented growing economy. Canada from 2009 turned to the import-depending country, probably, because of economies of scale and targeting competitive advantages in more valuable goods. Australia does not show any stability in trading policy, whereas become last 3 years in trading export strategy.

Comparative analysis of trade in goods (as the main part of current account for developing countries) is indicated in Figure 5 and reflects the following:

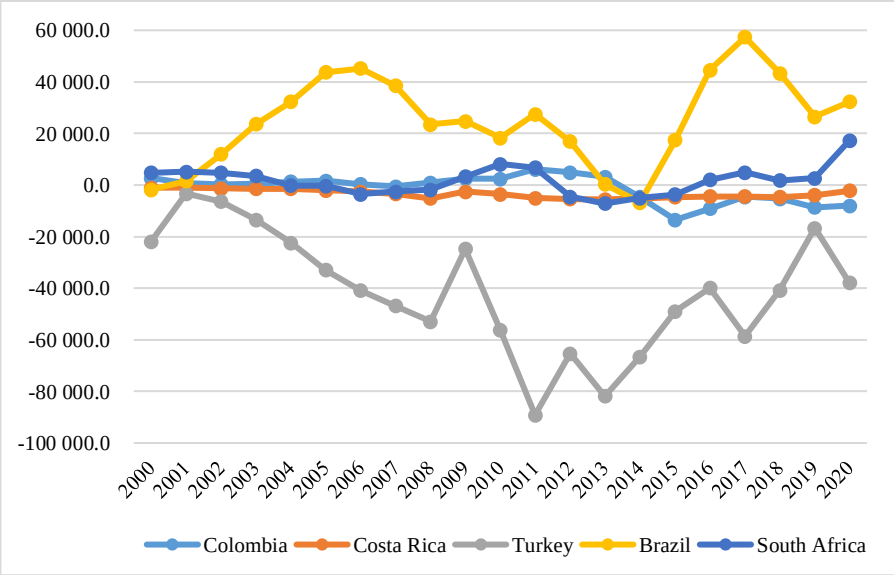

Figure 5: Dynamics of balance for trade in goods balance in developing countries

Source: created by author based on OECD statistics database (2021)

- Brazil is experiencing up and down in trade of goods since 2000. From 2001 to 2007 country shows its impressive growth in trade, in 2008-2013 it was sharp decline, in 2014 it changed to the trade deficit, from 2015 till now trade of goods is expanding.

- Colombia has no dominating trend in selling and buying goods since 2000. From 2002 to 2006, it showed diminishing trade surplus, in 2007 it decreased sharply to the deficit, from 2008 to 2013 it dynamically grew, from 2014 till now country experiences a trade deficit in goods, which is doubled comparing with previous surpluses.

- Costa Rica is constantly showing a trade deficit of goods since 2000 till 2020, but common tendency reflects its deep fall in 2008-2014 and improving trend in 2015-2020.

- Turkey is constantly experiences a trade deficit in goods, which is primarily has been improved from 2000 to 2002 and afterwards significantly fluctuates on the wide deviations.

- South Africa demonstrates cyclical fluctuations in the trade of goods. In 2000-2003, country had surplus, in 2004-2008 country fell into the trade deficit, in 2009-2011 country experienced the best position with surplus, in 2012-2015 again deep fall into the trade deficit, from 2016 till now country dynamically increases trade of goods surplus.

Referring to the situation described above, all developing countries except of Turkey show fluctuations within the business cycle in the trade of goods. Only Turkey is always experienced and still experiences sustainable trade deficit. Such trend leads us to the conclusion that developing countries are in a strict dependence on their trade partners within the group of developing countries, as well they depend on advanced economies' requests.

Figure 6 indicates comparative analysis of trade in goods in emerging economies and reflects the following trends:

- China demonstrates progressing dynamics in trade of goods since 2000 till 2020. It should be noted, that the trade in goods by China increased in 17 times from 2000 till 2020.

- India has always been in the trade of goods deficit. Even from 2000 to 2012 country has experienced deep fall in trade of goods, since 2013 till 2016 country has attempted to improve a trade deficit, in 2017-2019 country again experienced fall in trade of goods, in 2020

country demonstrated the level of trade reached in 2008 trying to move toward the balanced economy.

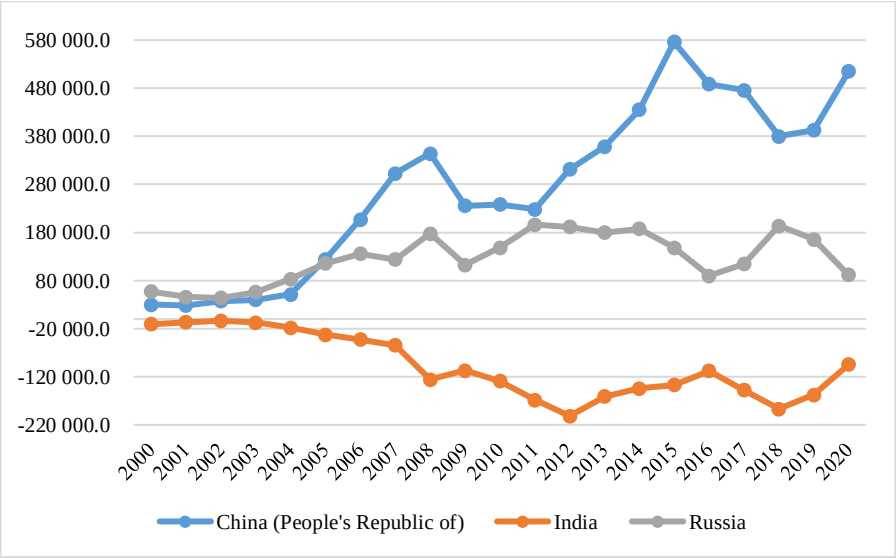

Figure 6: Dynamics of balance for trade in goods balance in emerging countries

Source: created by author based on OECD statistics database (2021)

- Russia has been in the trade surplus for goods during 2000-2020. However, this trend always experiencing up and down. 2018-2020 were unfavourable for Russia, show diminishing trend, probably, because of implemented economic sanctions.

Referring to the situation analysed above, despite emerging status of economy, China, India and Russia demonstrate absolute different strategies and positions in trading goods.

Thus, China keeps pace to the expanding growth, India is likely permanently import-dependent economy and Russia is moving towards its business cycle, which deepening by its political status worldwide.

Second by importance part of BoP is a trade in services balance. As service sphere today is developing quite rapidly worldwide, it occupied significant part in international trade as well. Common picture of service development is presented by means of comparative analysis below.

Figure 7 indicates trends of advanced economies and shows the following:

- Australia has no exact position in trade of services. In 2000-2003, country showed growing surplus, in 2004-2019 country fell into the trade deficit, the deepest point of which has been observed in 2013. Gradually, from 2014 to 2019 country decreased the trade deficit becoming in 2020 in strong position of trade exporters of services.

- Canada has always been in the trade deficit for services, deepest point of which has been reached in 2012. Since 2012, the country managed to reduce trade deficit till 2020 by 4 times.

- Germany shows persistent trade deficit in services since 2000 till 2019, which however, diminishing and became a surplus in 2020.

- The UK is traditionally-oriented in trade of services (e.g. education). Since 2000 till now it is observed significant grows in 5 times, which however has been disrupted in times of financial crisis during 2009-2010.

- The US traditionally demonstrates the surplus in trade of services, which is consistently increases from 2000 till 2020 in 3.2 times. The most peak in trade of services has been in 2018.

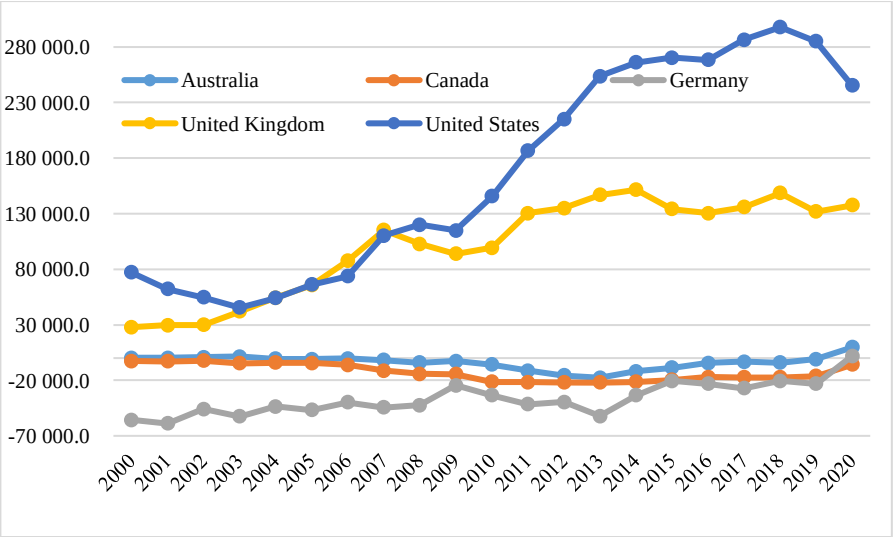

Figure 7: Dynamics of balance for trade in services balance in advanced countries

Source: created by author based on OECD statistics database (2021)

Summarizing the situation described above, it should be stated that advanced economies do not show equal strategies in trading services similarly to goods.

While the UK and the US are dynamically improving trading services, Canada and Germany prefer to import services. Only Australia again does not show stable preferences in trading services policy.

Figure 8 reflects trends in trade of services for developing economies and show the following:

- Brazil is considered as an economy depending on import from 2000 to 2020, however, the deepest fall was observed in 2014.
- Colombia shows persistent trading deficit in services from 2000 to 2020, the highest peak of which has reached in 2014.
- Costa Rica shows growing trend on trading services, which peak surplus is observed in 2019.
- Turkey demonstrates the trade surplus in services, which is consistently growing from 2000 to 2019 in 3 times due to its tourism-orientated economy, however, it was interrupted in 2020 due to pandemic.
- South Africa demonstrates the trade deficit in services along 2000-2020 except of 2003. The deepest fall of its deficit observed in 2010.

Due to the different service preferences, developing economies show different strategies.

While Brazil, South Africa and Colombia are strongly depending on the trade in services, then Costa Rica and Turkey are export-oriented in services sphere.

Figure 9 shows comparative analyses in trade of services for emerging economies and reflects the following:

- China, from country being depended from services, becomes in the deep trade with it, the peak of which was in 2008.
- India, in the opposite of China, from 2004 took a strategy to export-oriented country, which increased more than 40 times.
- Russia is the country with import-oriented strategy in service sphere, but this trend is consistently changing.

Thus, analysis of emerging economies shows difference in trading of services strategies. Both China and Russia are import-depending, while India is export-oriented.

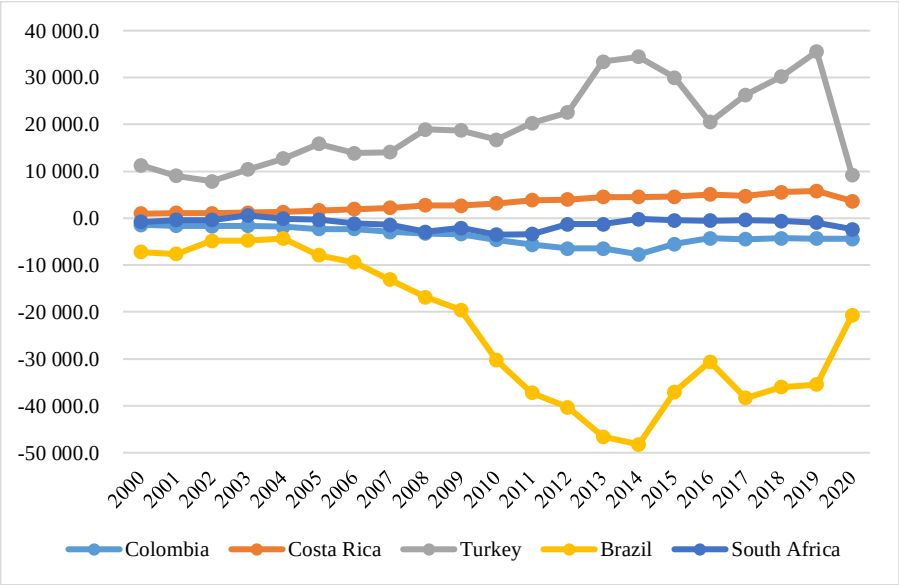

Figure 8: Dynamics of balance for trade in services balance in developing countries

Source: created by author based on OECD statistics database (2021)

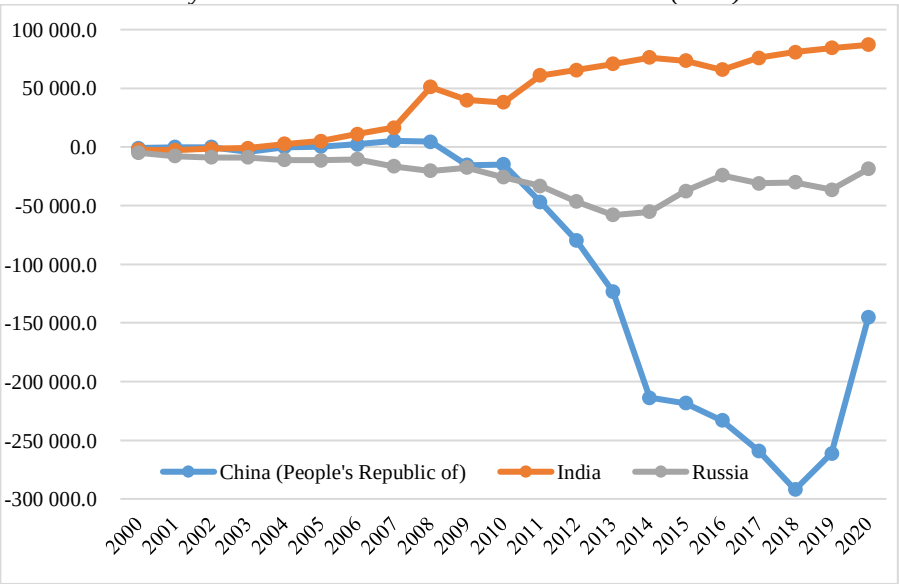

Figure 9: Dynamics of balance for trade in services balance in emerging countries

Source: created by author based on OECD statistics database (2021)

Trade profiles' analysis

This part is dedicated to description of trends each country in the world economy. It is considered around justification of country profile in the following fields: (a) Trade indicators; (b) Development indicators (Merchandize trade and service trade); (c) Tariff and non-tariff desk board; (d) Economic growth; (e) Export and import parameters; (f) World ranking (World Bank, WITS, 2021). Following this, we will consider world trade profiles of each country.

Advanced economies:

- Referring to the world average trade growth, Australia it shows exceeding status, but referring to the world GDP growth, it fluctuates depending on terms of trade. In 2000, country had 204 import partners, imported 4745 products and index of its export penetration was 11.58. At the same time, the number of export partners has been 219, exporting products 4589 and HH Market Concentration was 0.08. The main products of export include fuels (20,90%), animals (9.18%), and metals (9.90%). The number of tariff agreements 9 with weighted average 5.83%. Duty free tariff line share is 31.08%. Merchandise import rate 41.03% of GDP, while merchandise export rate 32.61% of GDP. Service import rate is 21.59% of GDP, while export in service rate is 19.43% of GDP. Country's growth in 2000 was 12.93%, while world growth 7.07% (World Bank, WITS, 2021).

As for 2019, Australia had Trading Across Borders Rank 106. In 2019, it had 216 import partners with 4317 import products, and index of its export penetration 13.10. At the same time, it had 211 export partners with 4118 export products. HH Market Concentration was 0.20. The main products of export include minerals (21.01%), fuel (18.93%), miscellaneous (19.42%). The number of tariff agreements 29 with weighted average 0.77%. Duty free tariff line share is 58.46%. Merchandise import rate 45.71% of GDP, while merchandise export rate 35.27% of GDP. Service import rate is 21.60% of GDP, while export in service rate is 24.11% of GDP. Country’s growth in 2019 was 2.74%, while world growth (-1.13%).

- In 2000, Canada had 210 import partners, imported 4924 products and index of its export penetration 16.20. At the same time, the number of export partners has been 208, exporting products 4658 and HH

Market Concentration was 0.64. The main products of export include transportation (24,04%), machinery and electronics (16.22%) and fuels (13.19%). The number of tariff agreements 10 with weighted average 1.13%. Duty free tariff line share is 54.61%. Merchandise import rate 83.04% of GDP, while merchandise export rate 70.24% of GDP. Service import rate is 38.68% of GDP, while export in service rate is 44.36% of GDP. Country's growth in 2000 was 8.46%, while world growth 7.07%.

As for 2019, Canada had Trading Across Borders Rank 51. There are 224 import partners with 4536 import products, and index of its export penetration 16.08. At the same time, it had 219 export partners with 4354 export products. HH Market Concentration was 0.51. The main products of export include fuels (22.11%), transportation (16.38%), machinery and electronics (10.80%). The number of tariff agreements 24 with weighted average 1.51%. Duty free tariff line share is 82.99%. Merchandise import rate 64.98% of GDP, while merchandise export rate 52.44% of GDP. Service import rate is 33.33% of GDP, while export in service rate is 31.64% of GDP. Country's growth in 2019 was (-0.03%), while world growth (-1.13%).

- Germany in 2000 had 215 import partners, 4904 imported products and index of its export penetration 44.28. At the same time, the number of export partners has been 216, exporting products 4767 and HH Market Concentration was 0.05. The main products of export include machinery and electronics (29.90%), transportation (19,63%) and miscellaneous (13%). There are no tariff agreements; weighted average 2.29%. Duty free tariff line share is 51.31%. Merchandise import rate 61.53% of GDP, while merchandise export rate 53.99% of GDP. Service import rate is 30.68% of GDP, while export in service rate is 30.85% of GDP. Country’s growth in 2000 was 1.88%, while world growth 7.07%.

As for 2019, Germany had Trading Across Borders Rank 42. There are 231 import partners with 4497 import products, and index of its export penetration 39.03. At the same time, it had 232 export partners with 4413 export products. HH Market Concentration was 0.04. The main products of export include machinery and electronics (27.80%), transportation (20.01%), chemicals (12.86%). There are no tariff

agreements, weighted average 1.83%. Duty free tariff line share is 58.16%. Merchandise import rate 87.99% of GDP, while merchandise export rate 70.54% of GDP. Service import rate is 41.10% of GDP, while export in service rate is 46.89% of GDP. Country's growth in 2019 was (-2.52%), while world growth (-1.13%).

- The US in 2000 had 217 import partners, 4919 imported products and index of its export penetration 45.75. At the same time, the number of export partners has been 222, exporting products 4911 and HH Market Concentration was 0.08. The main products of export include machinery and electronics (39.37%), transportation (13.57%) and miscellaneous (11.56%). The number of tariff agreements 13 with weighted average 2.10%. Duty free tariff line share is 49.59%. Merchandise import rate 25.04% of GDP, while merchandise export rate 19.91% of GDP. Service import rate is 14.35% of GDP, while export in service rate is 10.69% of GDP. Country's growth in 2000 was 5.79%, while world growth 7.07%.

As for 2019, The US had Trading Across Borders Rank 39. There are 223 import partners with 4529 import products, and index of its export penetration 40.62. At the same time, it had 223 export partners with 4529 export products. HH Market Concentration was 0.05. The main products of export include machinery and electronics (22.39%), transportation (16.72%), fuels (12.15%). The number of tariff agreements 26 with weighted average 13.78%. Duty free tariff line share is 52.42%. Merchandise import rate 26.31% of GDP, while merchandise export rate 19.65% of GDP. Service import rate is 14.58% of GDP, while export in service rate is 11.73% of GDP. Country's growth in 2019 was (-0.46%), while world growth (-1.13%).

- The UK in 2000 had 217 import partners, 4876 imported products and index of its export penetration 37.02. At the same time, the number of export partners has been 217, exporting products 4786 and HH Market Concentration was 0.06. The main products of export include machinery and electronics (33.59%), miscellaneous (14.16%) and chemicals (11.13%). There are no tariff agreements; weighted average 2.72%. Duty free tariff line share is 49%. Merchandise import rate 52.13% of GDP, while merchandise export rate 37.57% of GDP. Service import rate is 26.93% of GDP, while export in service rate is

25.20% of GDP. Country's growth in 2000 was 4.49%, while world growth was 7.07%.

As for 2019, The UK had Trading Across Borders Rank 33. There are 228 import partners with 4507 import products, and index of its export penetration 32.66. At the same time, it had 228 export partners with 4481 export products. HH Market Concentration was 0.05. The main products of export include machinery and electronics (21.51%), transportation (15.24%), chemicals (12.75%). There are no tariff agreements; weighted average 1.72%. Duty free tariff line share is 55.5%. Merchandise import rate 64.29% of GDP, while merchandise export rate 41.20% of GDP. Service import rate is 32.69% of GDP, while export in service rate is 31.60% of GDP. Country's growth in 2019 was (-2.97%), while world growth (-1.13%).

Developing economies:

- In 2000, Brazil had 188 import partners, 4659 imported products and index of its export penetration 10.46. At the same time, the number of export partners has been 198, exporting products 4264 and HH Market Concentration 0.08. The main products of export include transportation (14.62%), machinery and electronics (13.16%) and food (11.27%). There was 1 tariff agreement; weighted average 12.69%. Duty free tariff line share is 0.99%. Merchandise import rate 22.64% of GDP, while merchandise export rate 17.36% of GDP. Service import rate is 12.45% of GDP, while export in service rate is 10.19% of GDP. Country's growth in 2000 was 7.76%, while world growth 7.07%.

As for 2019, Brazil had Trading Across Borders Rank 108. There are 219 import partners with 4257 imported products, and index of its export penetration 12.58. At the same time, it had 227 export partners with 4183 export products. HH Market Concentration 0.12. The main products of export include vegetables (18.43%), fuels (13.45%), and minerals (11.72%). The number of tariff agreements 64 with weighted average 7.97%. Duty free tariff line share is 17.24%. Merchandise import rate is 28.98% of GDP, while merchandise export rate is 22.27% of GDP. Service import rate is 14.65% of GDP, while export in service rate is 14.32% of GDP. Country's growth in 2019 was (-2.14%), while world growth (-1.13%).

- Columbia had 190 import partners, imported 4546 products and index of its export penetration 4.17. At the same time the number of export partners has been 149, exporting products 3300 and HH Market Concentration 0.26. The main products of export includes fuel (43.08%), vegetables (17.45%) and chemicals (7.62%). There were 2 tariff agreements; weighted average 10.96%. Duty free tariff line share is 2.76%. Merchandise import rate 32.67% of GDP, while merchandise export rate 24.61 (percent of GDP). Service import rate is 16.75% of GDP, while export in service rate is 15.92% of GDP. Country growth in 2000 was 4.78%, while world growth 7.07%.

As for 2019, Columbia has changed world rank 159. There are 201 import partners with 4196 import products, and index of its export penetration 5.76, at the same time 187 export partners with 3357 export products. HH Market Concentration is 0.15. The main products of export include fuels (54.78%), vegetables (14.41%), stone and glass (5.66%). Number of tariff agreements 66 with MFN 2.92 %. Duty free tariff line share is 74.45%. Merchandise import rate 37.71% of GDP, while merchandise export rate 28.48% of GDP. Service import rate is 21.91% of GDP, while export in service rate is 15.80% of GDP. Country's growth in 2019 was (-2.67%).

- Costa Rica in 2000 had 152 import partners, imported 4338 products and index of its export penetration 3.05. At the same time, the number of export partners has been 117, exporting products 2555 and HH Market Concentration 0.28. The main products of export include machinery and electronics (38.64%), vegetables (24.20%) and textile and clothing (7.65%). There were 5 tariff agreements; weighted average 3.7%. Duty free tariff line share is 54.87%. Merchandise import rate 86.9% of GDP, while merchandise export rate 81.87% of GDP. Service import rate is 43.78% of GDP, while export in service rate is 43.11% of GDP. Country's growth in 2000 was (-2.6%).

As for 2019, Costa Rica has changed world rank – 168. There are 192 import partners with 4070 import products, and index of its export penetration 3.57, at the same time 150 export partners with 2988 export products. HH Market Concentration 0.15. The main products of export include miscellaneous (32.56%), vegetables (25.40%), food (11.94%). Number of tariff agreements 22 with weighted average

1.62%. Duty free tariff line share is 64.14%. Merchandise import rate 66.02% of GDP), while merchandise export rate 45.23% of GDP. Service import rate is 32.23% of GDP, while export in service rate is 33.79% of GDP. Country growth in 2019 was 5.03%.

- Turkey in 2000 had 173 import partners, imported 4662 products and index of its export penetration 12.01. At the same time, the number of export partners has been 186, exporting products 4391 and HH Market Concentration 0.08. The main products of export include textile and clothing (36.43%), machinery and electronics (12.16%), metals (10.62%). There were 14 tariff agreements with weighted average 2.38%. Duty free tariff line share is 55.99%. Merchandise import rate 42.35% of GDP, while merchandise export rate 30% of GDP. Service import rate is 22.47% of GDP, while export in service rate is 19.88% of GDP. Country growth in 2000 was 0.69%.

As for 2019, Turkey has changed world rank 122. There are 212 import partners with 4401 import products, and index of its export penetration 23.79. At the same time, 220 export partners with 4308 export products. HH Market Concentration 0.03. The main products of export include transportation (16.29%), textile and clothing (15.80%), machinery and electronics (15.21%). Number of tariff agreements 28 with weighted average 3.13%. Duty free tariff line share is 69.36%. Merchandise import rate 62.68% of GDP), while merchandise export rate 51.37% of GDP. Service import rate is 29.94% of GDP, while export in service rate is 32.74% of GDP. Country's growth in 2019 was (-0.82%).

- South Africa in 2000 had 214 import partners, imported 4752 products and index of its export penetration 12.30. At the same time, the number of export partners has been 210, exporting products 4690 and HH Market Concentration 0.05. The main products of export include metals (17.11%), miscellaneous (15.80%), fuels (10.17%). There were 4 tariff agreements with weighted average 5.27%. Duty free tariff line share is 43.67%. Merchandise import rate 51.44% of GDP, while merchandise export rate 43.76% of GDP. Service import rate is 24.28% of GDP, while export in service rate is 27.16% of GDP. Country growth in 2000 was 11.35%. As for 2019, South Africa has changed world rank 164. There are 232 import partners with 4482

import products, and index of its export penetration 12.15. At the same time, 223 export partners with 4460 export products. HH Market Concentration 0.07. The main products of export include stone and glass (17.28%), minerals (15.21%), transportation (13.63%). Number of tariff agreements 9 with weighted average 5.37%. Duty free tariff line share is 66.53%. Merchandise import rate 59.20% of GDP, while merchandise export rate 56.21% of GDP. Service import rate is 29.35% of GDP, while export in service rate is 29.85% of GDP. Country's growth in 2019 was (-2.48%).

Emerging economies:

- China in 2000 had 185 import partners, imported 4840 products and index of its export penetration 31.10. At the same time, the number of export partners has been 204, exporting products 4798 and HH Market Concentration 0.13. The main products of export include machinery and electronics (29.25%), textile and clothing (19.81%) and miscellaneous (10.78%). There were 3 tariff agreements; weighted average 14.67%. Duty free tariff line share is 1.73%. Merchandise import rate 39.41% of GDP, while merchandise export rate 39.15% of GDP. Service import rate is 18.52% of GDP, while export in service rate is 20.89% of GDP. Country growth in 2000 was 12.80%.

As for 2019, China has changed world rank 5. There are 215 import partners with 4425 import products, and index of its export penetration 48.14, at the same time 215 export partners with 4423 export products. HH Market Concentration 0.06. The main products of export include machinery and electronics (43.51%), miscellaneous (10.84%), textile and clothing (10.43%). Number of tariff agreements 25 with weighted average 2.53%. Duty free tariff line share is 30.04%. Merchandise import rate 35.84% of GDP, while merchandise export rate 32.06% of GDP. Service import rate is 17.34% of GDP, while export in service rate is 18.50% of GDP. Country's growth in 2019 was (-3.51%).

- India in 2000 had 174 import partners, imported 4441 products and index of its export penetration 16.74. At the same time, the number of export partners has been 212, exporting products 4501 and HH Market Concentration 0.07. The main products of export include textile and clothing (26.32%), stone and glass (19.57%) and chemicals (9.43%). There were 2 tariff agreements; weighted average 23.36%. Duty free

tariff line share is 6.12%. Merchandise import rate 26.90% of GDP, while merchandise export rate 20.05% of GDP. Service import rate is 13.90% of GDP, while export in service rate is 13% of GDP. Country's growth in 2000 was 7.94%.

As for 2019, India has changed world rank 87. There are 210 import partners with 4356 import products, and index of its export penetration 26.78. At the same time, 226 export partners with 4442 export goods. HH Market Concentration 0.06. The main products of export include chemicals (14.93%), fuels (13.78%), stone and glass (12.73%). Number of tariff agreements 22 with weighted average 6.59%. Duty free tariff line share is 18.24%. Merchandise import rate 39.55% of GDP, while merchandise export rate 28.24% of GDP. Service import rate is 21.14% of GDP, while export in service rate is 18.41% of GDP. Country's growth in 2019 was 0.71%.

- Russia in 2000 had 179 import partners, imported 4731 products and index of its export penetration 8.46. At the same time, the number of export partners has been 176, exporting products 4413 and HH Market Concentration 0.04. The main products of export include fuels (50.77%), metals (16.19%), miscellaneous (12.66%). Merchandise import rate 68.09% of GDP, while merchandise export rate 57.72% of GDP. Service import rate is 23.03% of GDP, while export in service rate is 44.06% of GDP. Country's growth in 2000 was 22.03%.

As for 2019, Russia has changed world rank 147. There are 224 import partners with 4426 import products, and index of its export penetration 11.59, at the same time 198 export partners with 4385 export products. HH Market Concentration 0.04. The main products of export include fuels (51.95%), miscellaneous (13.73%), metals (8.80%). Number of tariff agreements 8 with weighted average 5.34%. Duty free tariff line share is 31.62%. Merchandise import rate 49.07% of GDP, while merchandise export rate 39.68% of GDP. Service import rate is 20.76% of GDP, while export in service rate is 28.71% of GDP. Country's growth in 2019 was (-3.49%).

CONCLUSION

Modelling the tariffs impact on the current account balance, it was discovered by means of regression simulations. Dependent variable (Y) is the main factor which development we choose. In our case, the

current account balance has been chosen, because we discuss the changes made especially to the current account prediction ability. Independent variables (xi) are factors the average tariff rate AHS, its Implementing tariff lines, i.e. AHS tariff lines, most favourable nation tariff rate, i.e. MFN and MFN total tariff lines. Range of chosen x_i is tariff determinants. To establish a comprehensive analysis, dataset of the World Bank and OECD have been used for the period of time 2000-2019 with chosen countries from advanced, developing and emerging economies. Modelling of current account balance led to the following conclusions: the current account balance depends on above-mentioned variables CA = 1,34 ASH tariff lines – 1,14 ASH + 0.72 MFN tariff lines – 0.75 MFN + δ_u, where δ_u is unexplained variables. A set of statistics tests done explain the relative reliability the model received and show inverse dependence of the current account balance of the tariff rates increase, while it shows a proportional dependence on the number of tariff lines. It gives the hope, that chosen countries have to move towards the tariff elimination (at least decreasing) but widening the products (services) tariff lines to be more precise with the estimation of possible benefits for them. Interesting and quite disruptive is the equation from the perspectives of emerging countries, as they have chosen absolutely different ways of development.

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JEL: B15

THE CONTOURS OF A POST-PANDEMIC SOCIETY

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Abstract: *Current global pandemic has posed new challenges to the Blue Planet. Coronavirus has shown that the rich and the poor, the weak and the powerful are the same for virus. Positive contours: humanism, talent, progress. Negative Contours: Selfishness. Pride, arrogance. The former French Prime Minister Edouard Philippe said during the pandemic: If life changes, it will change for worse.*

Keywords: *pandemic, society, contours, humanism, science*

INTRODUCTION

A new human worldview providing common space for everyone and for everything is developing in the world.

MATERIALS AND METHODS

Speaking about pandemic Pope Francis (2020) I noted: "This is the moment to see the poor. Jesus says we will have the poor with us always, and it's true. They are a reality we cannot deny. But the poor are hidden, because poverty is bashful… To "see" the poor means to restore their humanity. They are not things, not garbage; they are people... We can't settle for a partial welfare policy".

As Pope (2020) says, "On the one hand, it is essential to find a cure for this small but terrible virus, which has brought the whole world to its knees. On the other, we must also cure a larger virus, that of social injustice, inequality of opportunity, marginalisation, and the lack of protection for the weakest".

In the words of UN Secretary-General Antonio Guterres (2020) "There is more than enough food in the world to feed our population of 7.8 billion people. But, today, more than 820 million people are hungry.

And some 144 million children under the age of 5 are stunted – more than one in five children worldwide. Our food systems are failing".

According to the comments on the inaugural address of the US 46th President Joseph Biden (Kipiani, 2021), one of the clear focuses of the US economic policy over the next four years would focus on the "middle class", regular care for American families, and not just in times of crisis.

The Catholicos Patriarch (2018) of Georgia notes, that "On the one hand, human rights must be protected and, along with that, the traditional values, spiritual-cultural and intellectual potential should be developed". In a pandemic, the governments saw the need for self-sufficiency, and the dependence on others became unprofitable. Local production and the revival of agriculture have become the number one priority for all countries, including Georgia.

True freedom is there, where unemployment is not a problem and people do not fear of lack of food. Contemporary American Economists Campbell R. McConnell and Stanley L. Brue (2000) point out that the stress of losing a job can be compared to the stress of arrest or death of a family member.

There are not enough resources on earth for everyone to live in prosperity, therefore, someone's prosperity means someone's hardship. About 97% of the earth's income is in the hands of a handful of billionaires. The world population seems too large to Malthus and his followers, who threaten us with the spread of the worst epidemics (Mankiw, 2008).

In China, out of 1 billion 430 million population about 800 million are employed. In 2015, they repealed the law that prohibited having more than one child. In India 60% of population escaped poverty.

Unlike Malthus, the scientists argue different. Harvard University professor Gregory Mankiw (2016), the former chairman of the U.S. Presidential Economic Advisory SAO, considers population as one of the major factors of productivity. More population means more scientists, more engineers and more workforce. By means of proper use of population even surplus production can be achieved.

Economists and social scientists are constantly arguing about the impact of the population growth on society. Most clearly this impact

is reflected in the increase of the workforce. Large population means to have more workforce for production of goods and services. Besides, it means to have more consumers of the goods produced. English economist Malthus (1798) formulated an opinion that "may be history's most chilling forecast. Malthus argued that an ever-increasing population would continually strain society's ability to provide for itself. Mankind, he argued, would forever live in poverty" (Mankiw, 2008). According to Malthus, the population growth could be stopped by misery and vice. Mankiw (2016) noted that "Attempts by charities and philanthropists to alleviate poverty were counterproductive, he argued, because they merely allowed poor to have more children placing even greater strains on society's productive capabilities".

Fortunately, Malthus's forecast turned out to be far from reality. "The world population has increased about sevenfold Over the last two centuries, but the average living standards are much higher. Because of economic growth, chronic hunger and malnutrition are less common now than they were in Malthus's days. Famines occur from time to time, but they are more often the result of income unequal distribution or political instability than the inadequate production of food" (Mankiw, 2016).

The basis of human society, its driving force is the progress of human mind, science, civilization. The progress of society is a regular process. It is based on objective economic laws and progress. No one can change them. The human knowledge is developing leading to more complex, perfect, effective, multi-productive forms. The leading role of theoretical knowledge as the basis for the implementing innovations and policy making is clearly seen.

One of the methods of reviving our economy in a pandemic situation is to return to the public sector and define its role as part of the strategic, long-term and conceptual investment process. According to Marina Mazzucato (2013), a professor at University College London, United Kingdom, it is necessary to debunk the myths about who creates value and where the wealth comes from.

After the global crisis of 2008, it became clear that the public sector should be actively involved in the economy to stimulate economic growth. In the modern period, the problem of the public sector is

considered by some economists to be an important issue of economic theory. According to Columbia University Professor, Nobel Laureate Joseph Stiglitz (2015), healthcare, defence, education, social security, welfare issues, tax reform require continuous attention.

Our lives are in many ways subject to the influence of public activities. In a mixed economy, part of the economic activity is carried out by private firms, and part by public sector. Besides, the government changes the directions through various regulations, taxes, and subsidies. Government regulation of the economy has significant influence on production, employment, labour productivity, price levels, and resources (McConnell, and Brue, 2008).

The market economy is imperfect. It is far from the harmony it is attributed to and the ability to regulate everything.

The market system has many drawbacks reflected in negative quantitative and qualitative results of economy. The market system is characterized by saturation directed to a certain group of buyers satisfying their needs. On the one hand, it is characterized by a flexible adaptive production that can meet the greatest needs of consumers, and on the other hand, it is unable to cope with the vital problems of the society. The cyclical nature of market economy can lead to social and economic tension (Kharitonashvili, 2008). Government must stabilize the disturbed equilibrium (Kharitonashvili, 2016). It must be able to develop its domestic and foreign economic policy so that not to be dependent on the economic strength of others. It must have its own production and thereby be economic subject (Kharitonashvili, 2016).

Population growth and urbanization causes serious problems for environment. Both production and consumption of large amount of wealth can lead to an increased pollution of air, water and soil. Government must be on guard against pollution of the environment to prevent ecological catastrophe in the country (Lemonjava, 2005).

In a pandemic and afterwards, the role of the state is greater. In February 2021, the Government of Georgia decided to reform the state-owned enterprises.

RESULTS AND DISCUSSION

In a post-pandemic society, the talented people are expected to come to power causing gradual large-scale transformation in society.

Dictatorships and totalitarian regimes are going to be a thing of the past. It is important to take care of future, to put forward the issues environmental, significantly to change the approach to education (Bell, 1973). Theoretical knowledge as the basis for the introduction of innovation and policy making should have a leading role. Society is ruled by meritocracy. Meritocracy means the management of society by the most talented [ibid]. As Georgian romantic poet Grigol Orbeliani says, "Let talent have an ample opportunity, and respect the dignity", we strive for that.

French thinker H. Saint-Simon (1948) considered the progress of the mind, science, civilization to be the driving force of human society. Saint-Simon believed that the philosophers, scientists were capable to build or destroy public relations. He considered that the scholars were important for their foresight since the science allows us to foresee the future; scientists can predict the future; the philosopher stands on the peak of thought looking at the world as it is and as it should be. The philosopher is not only an observer, but also an actor. He is a first-rate actor in the moral world because human society is governed by his worldview.

As Albert Einstein (2021) said, "Imagination is more important than knowledge". Education should teach people endurance, adaptation. These skills will become key in a post-pandemic society. "There's no challenges without a crisis. It's in a crisis where we can show the best of us". The main thing is the right mind and great effort. As Socrates says, "In every person there is a sun. Just let them shine". The higher education is basic, because the energetics of the educated people is in humanism. Dreaming is not enough to build a country – the reason is necessary. Humanism is destined just for the educated. The uneducated is fed only by the "invisible hand." Everything disgusting comes from ignorance (Lao Tzu). According to Georgian writer and public figure Ilia Chavchavadze (1837-1907), one may have a secondary education, but good upbringing is a must.

It is necessary to strengthen the economic role of the state - the "visible hand" is necessary. The metaphor of the "invisible hand" must be forgotten. Unrestricted competition as a moral value must be stopped. As D. Wilson, a professor at the University of Birmingham

says, it is to regulate corporate social life (Sy, Wilson, 2018).

In a postpandemic society, both rich and poor should have their own space leading to pluralism. All the citizens must feel the benefits of economic growth rather than individuals. Businessman will never become a good government official because the businessmen are just concentrated on their own profit. Government officials should be elected from among the educated people. With bad laws and good civil servants, it is still possible to govern. But with bad civil servants even the best laws will not help (Otto von Bismarck, 1815-1898).

CONCLUSION

Positive contours: humanism, talent, progress.

Negative Contours: Selfishness. Pride, arrogance.

The former French Prime Minister Edouard Philippe said during the pandemic: If life changes, it will change for worse.

But still there is optimism. Unrestricted competition as a moral value must be stopped. Corporate social life needs regulation – says Wilson (2018), Professor at the University of Birmingham.

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INTERACTIVE ELECTRONIC TEXTBOOKS – ADVANTAGES AND ELABORATION RULES IN HIGHER EDUCATIONAL INSTITUTIONS

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Abstract: *Interactive electronic textbooks (IET) are still underestimated in higher education institutions. The purpose of this study is to analyse the main advantages of IET and some of the rules for their elaboration in higher education institutions. To achieve this goal, an IET on "Human Resources Audit" was developed, which provided an opportunity to indicate the advantages of IET over traditional book textbooks and to specify some basic rules for their elaboration. This publication contains part of the results of a study funded by the targeted subsidy for R&D of UNWE under contract NR&DNI-13/2019 on the topic: "Research, elaboration and introduction of innovative methods in the learning process".*

Keywords: *interactive electronic textbooks, innovative methods, training*

INTRODUCTION

"Modern and up-to-date training is unthinkable without the development of electronic tools. They must be for the benefit of both the teacher and the student" (Karavasileva, J., 2020, p. 39). "The purpose of the materials intended for training in a digital environment is to increase the quality of the visual, sound perception through colour and dynamics. For this purpose, presentations, animations, educational games, videos, electronic textbooks and other multimedia elements are used." (Karavasileva, 2020). IET contain all this.

MATERIALS AND METHODS

There is an understanding that IET are insufficiently in-depth, distract readers with their visual effects and are suitable primarily for children. This is the reason why IET are still underestimated by some teachers in higher education. However, IET found a "path to the heart" for both students and innovative teachers in higher education. The reason for this is the number of advantages of IET over traditional ones. Among the significant advantages is their lower price. Between 2006 and 2016, textbooks used in higher education increased in price by 73% (Senack & Donoghue, 2016). While IET could be acquired at a lower cost than book textbooks.

IET are innovations in training. Their use in the learning process "is a necessity stemming from the needs of today's young people as well as the needs of universities" (Dineva, 2019).

One way to realize the benefits of IET is to understand their nature and to elaborate them competently.

I believe that, in its essence, IET include hyperlinks, clicking on a word in the text and finding a definition of it, usually at the end of the text, and at the same time contains additional interactive features that in addition to enhancing perception, help to make the text easier and faster to learn, facilitate its memorization and reproduction and stimulate interest in reading.

The implementation of the above-mentioned research project includes the elaboration of IET. In the process of elaboration of IET for the discipline "Human Resources Audit" the essential points that should be considered in this process were indicated. These include: the type of software for elaboration of IET (elaboration of your own or buying ready-made); formation of the structure and content of IET; copyright of interactive features.

In the process of research, the well-known scientific methods are used: analysis, synthesis, interview, induction, deduction.

RESULTS

Results related to the advantages of interactive electronic textbooks over traditional book textbooks

Based on the results obtained from the study, I believe that among the advantages of interactive electronic textbooks over traditional

paper textbooks are: lower purchase price; lower rental price; possibility to purchase individual chapters of the textbook, easier updating of the information in the textbook; shorter time for publishing a textbook with updated content, nature conservation.

Lower purchase price. The price of IET is lower than textbooks. Evidence for this claim can be found on Amazon. The difference in the price of a colour paper textbook always exceeds the price of IET, which is also colourful.

Lower rental price. The rental of IET is done through online access for a certain period of time. In this case, the rental price is lower, because it avoids the postage costs that are inevitable when renting book textbooks.

Opportunities to purchase individual chapters from the textbook. The various IET platforms provide an opportunity to purchase individual chapters of the textbook. Unlike traditional book textbooks, where this is not possible.

Easier updating of learning content. IET are developed in software that allows new content to be added quickly and easily.

Shorter time to publish a textbook with updated content. When updating the IET, it takes minutes for it to be published. Unlike the updated book textbook, which requires reprinting, which involves not only more time but also higher costs.

Nature conservation. Nature conservation. The use of IET will reduce the consumption of paper and the destruction of trees for the purpose of printing book textbooks.

Results related to the basic rules for elaborating interactive electronic textbooks

As a result of the research related to the elaboration of IET, I believe that the basic rules for elaboration are related to: software with which IET will be developed and the place where they will be published; IET structure; interactive functions in the content of IET; research of students' wishes; copyright of the visual effects used in IET.

Selection of software used for the development of IET and a platform for their publication. Often, the software on offer is open source, but in reality, this is only at first glance. In reality, the software

is open source, but for the individual elements in the textbook (such as an interactive test, etc) licenses must be paid for their use. These licenses are too binding because they have to be renewed every year. And in this regard, some of the platforms for the creation of IET require payment for the service related to reading the textbook.

For example, the amount is one if 10 people have access to the textbook and different if 100 people have access. Sometimes the amount is paid once, but there are cases in which it must be renewed every year. There is also software that require payment for the development of IET, but access is free for users. It is enough to download the application on which the textbook was developed. In this regard, developing your own platform and software for IET for higher education institution or the use of ready-made platforms is a choice that every higher education institution must make. The main rule here is to think about the competitive advantage of the higher education institution.

IET structure. IET, as well as traditional textbooks, must have a certain structure. According to the accepted requirements, usually the content of the textbook includes: introduction, main goals, main part on a specific topic, keywords, questions for self-preparation, used literature. The main rule here is that the texts should be short but meaningful.

Interactive functions in the content of IET. The specific features of IET are associated with a significantly greater presence of visual elements, which for the most part is mobile. In addition, in IET, in connection with the self-preparation of students, tests are applied, which at the time of reading provide an opportunity for automatic completion and assessment of the result. The basic rule here is that interactive features to support the content, not distract it.

Study of students' desire. As mentioned, the structure of any textbook, whether IET or a traditional book textbook, is approximately the same. It is more important when developing IET to study the needs of students, such as what they would like to find in the textbook, what will facilitate the perception of the study material, what they would like to have more (for example, more self-preparation tests, more case studies, gamification, video tutorials and more).

Copyright of the interactive functions used in the textbook. The purest option is for the teacher to develop self-used IET, such as: videos, creating your own photos, Power Point presentations with music and / or voice recording. Of course, this will be possible for teachers who have the necessary resources or for higher education institutions that have a recording studio. There are other opportunities that teachers could use, such as free photos, gifts, animation, music, which can be used when the textbooks that the teacher offers are not sold, but are free.

Another possibility is for the university to purchase various interactive elements and create a library of interactive elements for teachers to use. A third option is for teachers themselves to purchase interactive elements at their own expense and use them in their interactive e-textbooks, again respecting copyright, depending on how they offer their textbooks (free or paid).

CONCLUDING REMARKS

The main conclusions that can be made based on the results of the study are related to: the universal advantages of IET; IET are a source of competitive advantage; IET will influence the choice of potential students; risks of access to interactive electronic textbooks; risks of incompetent development of the interactive electronic textbook.

Universality of the advantages of IET. The presented advantages of IET over traditional book textbooks are universal and apply not only to IET, which are used in higher education, but in the educational process in general (preschool preparation, primary school, secondary school, continuing education).

IET are a source of competitive advantage. The choice that higher education institutions have to make between their own software and a IET platform or the use of ready-made software and platforms must also be related to the competitive advantage. Would higher education institutions want to offer textbooks in formats in which the competition also offers? Of course, this decision will depend on the financial condition of the university, because the creation of a platform, as well as the development of software for IET development, only for a specific higher education institution requires a trained team of computer specialists, programmers with innovative thinking.

Their salaries are usually above the national average. The larger the number of teachers, the more computer specialists will be needed to provide technical support to teachers, which will undoubtedly affect the budget of the higher education institution. It is good to keep in mind that IET will influence potential students to choose a higher education institution. In this sense, IET will be a source of competitive advantage for higher education institutions.

Risks for access to IET. In places where the internet connection is unreliable, students will have difficulty accessing IET.

Risks of incompetent development of IET. Interactive textbooks are useful only when the application of the traditional structure of the textbook and the support of the content of the teaching material with interactive elements are in sync. Disrupting this synchronization by overloading the textbook with interactive elements, some of which may be interesting but not synchronized with the content, will reduce the benefits of the interactive textbook. This means that teachers must be professionally prepared for the development of IET.

Despite the still existing distrust of IET, it can be concluded that given the advantages of IET, they will find increasing application in the educational process of higher education institutions.

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