

Assessing Financial Resource Capability on Insurance Claims Management in Nigeria: The Moderating Role of Information Technology

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Abstract

This study examines the extent to which financial resource capability impacts claims management in the Nigerian insurance industry and also attempts to determine if this process is moderated by information technology. Given the numerous litigations arising from claims default, the Nigerian insurance sector has earned itself a bad reputation with the consequent customer apathy. However, it is also noteworthy that most of these insurance companies do not appear to possess the financial capacity to meet claims obligations as they arise, perhaps, due to low capitalisation, poor risk assessment and solvency constraints. The research is a quantitative design that utilises the survey strategy. It is predicated on a philosophical foundation of positivism and ontological orientation of objectivism. 17 insurance companies were included in the study using the stratified sampling technique. 280 questionnaires were distributed to the 17 sampled companies out of which 235 were returned and found usable for the study. Data was analysed using the Andy Hayes Process v3.3 for regression. Findings from the study revealed that financial resources and information technology have statistically significant relationship with claims management but the relationship between financial resources and claims management is not significantly moderated by information technology.

Key words:

Financial capability, claims settlement, information technology, payment systems, moderation.

JEL Classification: G22, O33

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Introduction

Claims handling in the Nigerian insurance industry leaves much to be desired as this aspect of the industry value chain is, perhaps, the major factor militating against the growth of the sector. Claims settlement has been described as the mirror through which the public sees the credibility of the entire insurance industry (Damodar, 2017). Due to poor claims payments history, the Nigerian insurance sector has earned itself a pariah industry status resulting in low patronage and customer apathy (Barbington-Ashaye, 2014). When individuals and corporate organisations obtain insurance policies to mitigate their risks against the unforeseen, they hope for prompt and stress-free indemnity in order to recover from an unexpected loss when they do occur. However, when the insurer fraudulently or deliberately declines liability for claims payment, such

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an insured person or organisation will not only refuse to do any form of business with an insurance company but may discourage other people from doing so (Damodar, 2017). Claims settlement is the lifeblood of insurance business as this has a lot to do with their reputation. Daniel (2013) opines that failure to settle claims promptly has impacted negatively on insurance business in Nigeria.

Financial capacity is, perhaps, the most crucial resource an insurance company requires to survive and perform its obligation to the insuring public which is to settle claims when they do occur. Every organisation requires a strong financial background which may include equity capital and other forms of short and long term finance (Owu-alah, 1996). For an insurance company, premium earnings constitutes a large portion of the funds they require for normal business operations and claims settlement. This perhaps, explains why risk assessment and risk pricing are very important determinants of survival of insurance companies (Isimoya, 2013). It is instructive to note that any firm operating in the industry that cannot settle claims promptly is supposed to be sanctioned by the regulatory authorities, although this may be far from reality in the Nigerian situation (Ujunwa & Modebe, 2011).

Information technology is a major business enabler in every industry, including insurance. With improved adoption and utilisation of information technology, every aspect of insurance transaction along the value chain can thus be enabled for better performance (Deloitte, 2017). For instance, payments for premiums by customers can be automated or made online while claims settlement can easily be boosted by online transactions which will eliminate unnecessary delays and improve customer experience. Other areas where information technology can be applied in the insurance value chain includes product development, sales and distribution, new business underwriting and customer care (PwC, 2003). The business value that any organisation can derive from information technology that may culminate in improved corporate performance is well documented in the literatures as no modern organisation can survive without embracing information technology (Cakmak & Tas, 2012; Obradovic, Ebersold & Obradovic, 2015; Powell & Dent-Micallef, 1997; Singhal, 2014).

Statement of the Problem and Research Gap

The Nigerian insurance industry cannot be said to be a major contributor to the nation's economy due to its poor performance. The industry accounts for a paltry 0.12 percent of gross domestic product [GDP] (Daniel, 2014), insurance penetration rate is 0.3 percent (Swiss-re Sigma, 2016) while insurance density is \$6.2 (Agboola, 2019). In a country with estimated population of 206 million people (Worldometer, 2020), there are only 3 million people having any insurance policy of some sort (Agboola, 2019). The inability of the sector managers to develop the market is, perhaps, due to the damaging image and reputation it has earned for itself as a result of frequent claims delays, payment defaults or outright avoidance of claims liability (Babington-Ashaye, 2014; Gbede, 2003). Poor claims management characterises the industry as most claims requests cannot be met expeditiously either due to financial constraints or unnecessary delays in claims settlement due to manual methods of claims processing. The low levels of solvency and inability to acquire relevant information technology infrastructure that can improve efficiency and effectiveness in the claims management process calls for urgent attention to save the industry from collapse. Most previous studies have tended to

concentrate on claims fraud, inadequate capital and lack of skilled personnel (Ajemunigbohun, S.S., Isimoya, A.O. & Ipigansi, P. M., 2019; Oke, 2012) as the major cause of poor insurance claims management in Nigeria without considering the impact of financial capacity and the role of information technology in enhancing the claims management process. This research is, however, conducted to fill this gap by examining the extent to which financial resource capability impacts claims management and also to determine if the relationship between financial resource capability and insurance claims management in Nigeria is moderated by information technology.

1 Methodology

1.1 Theoretical Framework and Literature Review

a. Theoretical Underpinning: Strategic Choice Theory

The theory of strategic choice can be credited to the work of John Child (1972). Harney (2016) posits that prior to the early 1970s, the way enterprises were understood was highly deterministic and functional in nature without consideration for the agency function of management. The benefit of the theory is predicated on the amount of discretion management has in charting a strategic direction for the organisation (Child, 1997). Strategic choice theory has become more relevant due to the ever-changing nature of the global environment in which businesses operate. Harney (2016) believes that while the traditional role of management is well appreciated and documented, the concept of strategic choice in its contemporary form came to the fore with the work of Kochan, McKersie and Cappelli (1984). The authors opine that managerial discretion was highly required through strategic choice in understanding the dynamics of the operation of industrial relations and human resources management practices.

An overriding significance of strategic choice as a management theory is derived from its ability to bring managerial agency and corporate decision-making more succinctly into the managerial equation. Because managerial discretion is crucial to how an organisation chooses to compete in the marketplace, strategic choice is a necessity for making such high profile decisions. In view of whether an insurance company chooses to build its financial resource capability by further enabling it with information technology to meet its claims obligations is a strategic choice that is at the discretion of senior management hence this theory is relevant to this study.

b. Literature Review

Building Financial Resource Capability

Financial resource is one of the key organisational resources that are required for business start-up, survival and growth. Every business enterprise requires money to produce and deliver value for their customers. In order to achieve this, a strong financial capacity must be built to enable the company hire and maintain a talented work force, acquire physical and technological assets and provide outstanding goods and services

that customers desire. Enz (2008) opines that organisations that are financially strong and stable can respond quickly and authoritatively to new business opportunities, withstand threats from the environment and gain competitive advantage. Although financial resources cannot be said to be unique, rare or difficult to imitate, the possession of strong financial power is a veritable basis of achieving competitive advantage. Harrison (2003) however avers that a company requires a powerful and steady cash flow, low gearing or levels of corporate debts, strong credit rating, access to reasonably low-interest capital and a good reputation for credit worthiness. Highly profitable organisations with low leverage and high levels of liquidity are investors' choice. In hypercompetitive environments, financial resources are required to wage battles against powerful competitors.

Building a powerful resource capability by an insurance company starts from capitalisation. It is instructive to note that the Nigerian insurance industry is grossly undercapitalised which explains why it is a poor performer in the global insurance business (Babington-Ashaye, 2014; Kuye, Adebisi & Ehiorobo, 2020). Czartoryski (2019) opines that the entire industry capitalization is N300 billion which translates to \$833 million. This amount is too meagre to cover multi-billion oil and gas businesses hence a paltry 30 percent of oil and gas insurance is presently covered by local insurers while 70 percent is taken abroad mostly to European and American insurers thus leading to capital flight (Agboola, 2019).

Another major source of income for insurance companies which, perhaps, forms the backbone of claims payment is premium incomes. Premium is the money paid by an insured after taking up a policy to enter into an insurance contract. The total amount of insurance premium written in Nigeria in 2015 was \$1,420 million consisting of \$974 million for nonlife and \$446 million for life insurance. This amount accounts for 0.03 percent contribution to global premium receipts for 2015 (Swissre-Sigma, 2016). South Africa dominates Africa's insurance market accounting for \$46 billion out of the total \$64 billion premium earnings for the whole continent and contributing 1.01 percent to global insurance premiums (Soares, 2017). It is therefore not surprising that insurance companies in Nigeria lack the capacity to pay claims promptly and meet other financial obligations due to their weak financial capacity. However, for any player in the industry to achieve competitive dominance, it must build its available sources of finance into a capability that is unrivalled by the competition. The decision to build any major resource into a capability for competitive advantage is a strategic choice that is the prerogative of senior management.

Claims Management

A Claim has been described as the heartbeat of insurance as it is regarded as the moment the insurer honours its obligation in the insurance contract entered into with the insured. Asokore and Nwankwo (2010) opine that a claim is the demand made by the insured person on the insurer to pay indemnity under a policy. Vaughan and Vaughan (2008) aver that an insurance claim is a notification to an insurer that payment is due for an amount of money agreed upon as stated under the policy. Isimoya (2000) argues that claims payment is the sole reason for the existence of insurance firms as they are legally bound to honour claims settlement in accordance with the terms of the policy. When a loss situation occurs, the insured is awakened to the reality that he/she has

taken some preventive measures to mitigate the loss and hence would have to turn to the insurance firm for payment of indemnity as agreed under the policy. Kuye *et. al* (2020) notes that customer experience on the modalities employed by the insurance firm during claims processing and payment constitutes the most important factor defining the relationship between insurer and the insured.

Claims expenses, perhaps, account for the highest cost burden of insurance companies hence no insurer can afford to toy with the claims handling function (Angima & Mwangi, 2017; Bates & Atkins, 2007). For effective claims management, precautionary measures to prevent or minimize loss must be undertaken by the insurer. Also, before claims are paid, the insurer should ensure that the insured did what was required of him to minimize loss when the insured event occurred (Fernandez, 2009; Isimoya, 2000). Effective claims management has significant impact on an insurance company's bottom-line as it has implications for costs and customer acquisition and retention (Angima & Mwangi, 2017; Michael, 2008; Rose, 2013; Yusuf & Dansu, 2014). Claims represent a huge liability for insurance companies as they are expected to indemnify any insured person or organisation in case an insured event occurs.

Insurance companies are duty bound to investigate the circumstances leading to a loss before making any claims payment to avoid being defrauded. Claims fraud abound in the insurance industry worldwide either as sole operators or syndicate fraud which has led to huge losses in the industry (Ajemunigbohun, Isimoya & Ipigansi, 2019). Kuria and Morange (2014) believe that fraud is an omission or intention by a person to gain an undue advantage through dishonest dealings by knowingly hiding, suppressing, misrepresenting, destroying, non-disclosure of material facts relevant to a transaction and abusing financial responsibility or the position of trust occupied by the official. Singh, Parekh, Indge, Bali and Torpey (2011) opine that fraud in the insurance industry range in level of severity from *slightly exaggerated claims to deliberate acts such as staff-induced fraud, brokers and agents-related third-party fraud, insurance applicants and surrender of policy or claimants. When fraud occurs, it weakens the financial capacity of the insurer and undermines its ability to indemnify genuine claimants and underwrite lucrative contracts.*

An efficient claims management system is required to ensure that a model for effective fraud prevention, detection and control is put in place by an insurance company. It also requires that proactive measures are taken to deal with genuine claims, minimize unnecessary costs, handle claims expeditiously, reduce delays and disputes, minimize the costs of litigation and make robust plans for prompt settlement of claims (Ajemunigbohun *et al.*, 2019; Angima & Mwangi, 2017; Leverty & Grace, 2012).

Information Technology

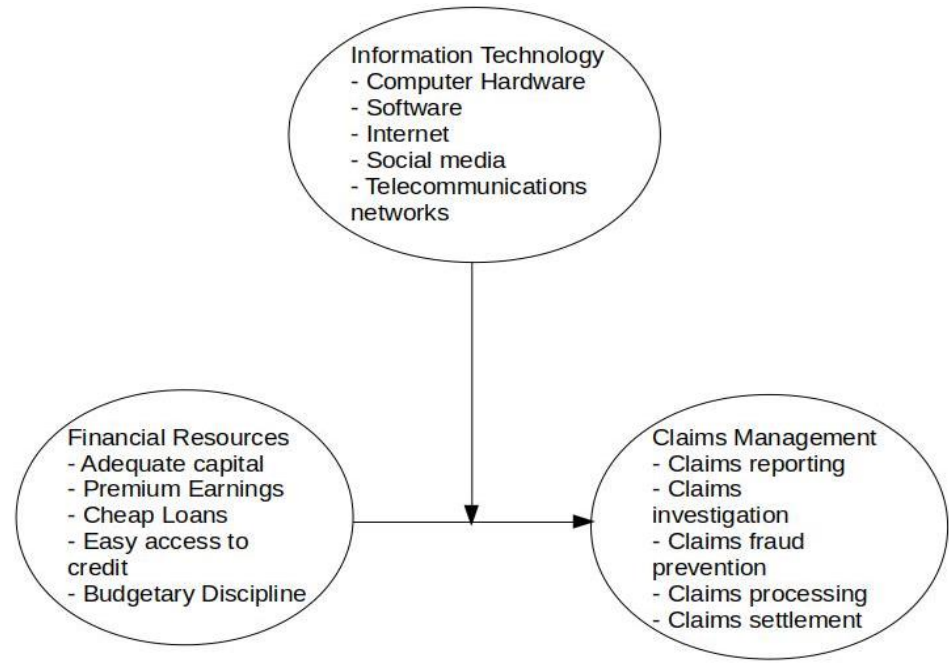
The business value of information technology (IT) is perhaps well established in every business operation and has thus become a major differentiating factor for firms jockeying for market share and competitive advantage. O'Brien (2003) posits that information technology is a computer-based information system that combines computer hardware and software, the internet and other telecommunications networks to convert data into information as may be required by end-users and for business application. Obradovic *et al.* (2015) observe that much of the increase in global productivity in the

last decade can be attributed to improvements in information and communications technology. Several studies have been carried out to establish the strategic advantages of information technology usage in business firms. For instance, Cakmak and Tas (2012) believe that information technology enables an organisation to minimise costs and maximise revenues and therefore, a veritable avenue of attaining a desired level of competitive advantage. IT enhances operational efficiency and effectiveness and can be used to orchestrate the strategy a business may adopt to compete in the marketplace (McFarlan, 1984). Information technology can be incorporated into the major activities of a company's value chain to create or improve sustainable competitive advantage (Mata, Fuest & Barney, 1995; Porter & Millar, 1985; Singhal, 2014). Claims can be handled faster as online platforms for interacting with the customer as well as conducting investigation and analyzing data regarding similar cases are automatically provided by internet search engines. Artificial intelligence which has become the new game changer in every industry can easily be applied to enhance faster, more accurate and reliable claims processing (Deloitte, 2017; Scor, 2018; Shabbir & Anwar, 2015). Payment systems are made easier through electronic banking and other fund transfer capabilities that are internet-enabled.

Conceptual Model

The conceptual model shows the relationship between financial resources (predictor variable) and insurance claims management (dependent variable) while information technology is depicted as the moderating variable.

Figure 1 Conceptual Model



Source: Author (2020)

1.2 Research Objectives, Methodology and Data

Aim and Objectives of the Study

The main aim of this research is to assess the impact of financial capability on claims management in the Nigerian insurance industry. Specifically, the study intends to:

1. evaluate if any relationship exists between financial capability and claims management; and
2. determine if information technology moderates the relationship between financial capability and claims management in the Nigerian insurance industry.

Research Questions

In order to address the objectives, the following research questions are presented:

1. Does any relationship exist between financial capability and claims management in the Nigerian insurance sector?
2. To what extent does information technology moderate the relationship between financial capability and insurance claims management in Nigeria?

Research Hypotheses

3. Ho1: There is no significant relationship existing between financial capability and claims management of insurance companies in Nigeria.
4. Ho2: The relationship between financial capability and insurance claims management is not moderated by information technology.

Research Design

The research adopts a quantitative cross-sectional survey design based on the positivist philosophy and an ontological orientation of objectivism. The reason for the choice of this design is due to the fact that data relating to this study are empirically testable for proof and verification.

Sources of Data, Sample Obtained and Data Collection Technique

The data for this study was obtained from 17 insurance firms sampled from the 56 registered underwriting firms in Nigeria using the stratified sampling technique to obtain samples that included 4 life insurance companies, 10 non-life insurance firms and 3 composite insurance companies. A questionnaire divided into three parts with items to measure level of acquisition of financial resource capability makes up the first section. The second part consists of items measuring knowledge, adoption and usage of information technology while the third part consists of items measuring claims handling, processing and settlement by insurance companies. A total of 280 questionnaires were administered to the senior staff of these companies out of which 235 were returned and found usable.

Description of Variables

The variables of interest in this study are one dependent (Claims Management) and one predictor variable (Financial Resources) while Information Technology was adopted as a moderating variable.

Data Analysis Technique

Data for this study was analysed using the Andrew Hayes Process Approach v3.3 for measuring interactions between variables in regression. This method adopts the grand mean centring which is a process of transforming a variable into deviations around a fixed point. It is usually very important to centre variables when trying to establish interactive effects between two or more independent variables as it makes the b s for lower-order effects very easy to interpret. Thus, when the Andrew Hayes Process tool is applied, centring is automatically effected with SPSS (Statistical Package for the Social Sciences). Consequently, it is easy to determine the effect of the predictor at the mean value of the sample and the average effect of the independent variable across the range of scores for the other predictor.

Model Specification

The regression model for the interaction effect between the exogenous variable (Financial Resources) and the moderator (Information Technology) is given thus:

$$Y_i = (b_0 + b_1A_i + b_2B_i + b_3AB_i) + e_i \quad (1)$$

$$\text{ie. Claims Management} = (b_0 + b_1FR + b_2IT_i + b_3 \text{ Interaction}_i) + e_i \quad (2)$$

where b_0 = intercept, b_1 = represents the relationship between claims management and financial resources when information technology is zero. And b_2 represents the relationship between claims management and information technology when financial resources is zero; b_3 is simply the interaction between the two predictor variables while e_i is error term.

2 Analysis and Discussion

The model summary in Table 1 shows that $R = .56$ which indicates a positively strong and significant relationship between financial resources and information technology. R^2 which is the measure of the variability in the endogenous variable explained by the predictors is about .32 and all significant at .0000.

Table 1 Showing the Model Summary of the regression analysis

R	R-sq	MSE	F	df1	df2	p
.5644	.3186	.6000	35.9995	3.0000	231.0000	.0000

Source: Author's computation (2020)

Table 2 shows the regression analysis for the independent variable (Financial Resources) and the moderator (Information Technology). From the analysis, it can be deduced that $b = .0189$; 95% CI $[-.0565-.0943]$; $t = 91.2433$, $P = .6213$ which is an indication that the relationship between financial resource capability and claims management in the Nigerian insurance industry is poor and not significantly moderated by information technology. Also, that 0 lies between the lower and upper limits of the confidence intervals equally shows non-significance of the interaction between financial resources and information technology.

Table 2 Showing the Model Coefficients of the Regression Analysis

	coeff	se	t	p	LLCI	ULCI
constant	4.7333	.0519	91.2433	.0000	4.6311	4.8356
FINANCE	.4521	.0549	8.2417	.0000	.3440	.5602
INFOTECH	.1738	.0501	3.4723	.0006	.0752	.2724
Int_1	.0189	.0383	.4947	.6213	-.0565	.0943

Product terms key:

Int_1 : FINANCE x INFOTECH

Table 3, which further shows the R-2 Change, indicates the additional variation in the dependent variable as a result of incorporating the moderator variable which is zero and non-significant.

Table 3 Showing the Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0007	.2447	1.0000	231.0000	.6213

Focal predict: FINANCE (X)

Mod var: INFOTECH (W)

Table 4 Shows the Linear Model of Predictors of Claims Management

	<i>b</i>	SE B	<i>t</i>	<i>p</i>
Constant	4.73 (4.63, 4.83)	0.052	91.24	$p < .001$
Finance (centred)	0.45 (0.34, 0.56)	0.055	8.24	$p < .001$
Infotech (centred)	0.17 (0.07, 0.27)	0.050	3.47	$p < .001$
Finance x Infotech	0.02 (-.05, 0.09)	0.038	0.49	$p = .62$

Note: $R^2 = .32$

Table 4 shows the linear model of the predictors. The summary table indicates that both financial resources and information technology have positive and statistically significant relationship with claims management (Finance, $b = .45$, $p < .001$; Infotech, $b = .17$, $p < .001$). However, the interaction effect between information technology and financial resources is a mere $.02$, $p = .62$ which reveals a non-statistically significant relationship.

3 Discussion

Results of the analysis carried out on the data reveal that there is a positive and statistically significant relationship between financial resources and claims management in the Nigerian insurance industry ($b = .45$; $P = .000$). Consequent upon this, H_01 which states that there is no significant relationship between financial resources and claims management is therefore rejected. In addition, H_02 which states that the relationship between financial resources and claims management is not significantly moderated by information technology ($b = .018$; $P = .6213$) is hereby accepted because even though there is a weak interaction effect, the relationship is not significant. From the model summary it can be deduced that both financial resources and information technology have a strong and statistically significant relationship with one another and with the dependent variable, $R = .56$, $P = .000$ while at the same time R^2 which is the degree of variability in the dependent variable explained by the predictors is $.32$ with F -ratio at 35.99 indicating a good model fit.

Given the above scenario it can be deduced that the Nigerian insurance industry has a long way to go in the adoption and application of information technology in its operations. This is consistent with the findings of Babington-Ashaye (2014) and Kuye *et. al* (2020) that both reveal that the poor performance of the insurance sector in Nigeria is partly attributable to the low adoption and usage of information technology. It is instructive to note that as at the present moment in 2020, there is no Nigerian insurance company that has deployed artificial intelligence in its operations (Kuye *et. al*, 2020). Even investments in the other forms of information technology has remained abysmally poor (Ujunwa & Modebe, 2011). Due to poor adoption of information technology in processing claims for clients, the claims settlement process is usually slow and mostly frustrating to the claimants thereby creating a sour relationship between the companies and their customers. This also, perhaps, explains the very negative perception of insurance business generally in Nigeria by the public who hardly voluntarily purchase insurance policies unless they are compelled to do so when it is compulsory.

Conclusion and Recommendations

This study was conducted to assess the relationship existing between financial resource capability and claims management in the Nigerian insurance industry and to determine if the relationship is moderated by information technology. 235 questionnaires were analysed using the Andy Hayes Process v3.3 for moderation. Findings from the research reveal that although there is a positive and statistically significant relationship

between financial resource capability and claims management, the relationship is, however, not significantly moderated by information technology. This finding is a clear indication of the low level of adoption and deployment of information technology in the operations of insurance companies in Nigeria. Given the poor claims settlement history in the Nigerian insurance sector, it is not surprising, therefore, that the industry's performance is abysmally poor with very low contribution to the nation's GDP.

Based on the findings of this research, it is hereby recommended that:

5. Insurance companies in Nigeria should invest more in information technology, especially artificial intelligence, to improve claims management and their overall corporate performance;
6. The insurance industry should strengthen their financial capability through re-capitalization and improved premium earnings in order to be able to meet claims obligations as they arise; and
7. Embrace the adoption of Solvency II which will make it mandatory for every operator in the industry to have the financial capacity to settle any claims that arises from the risks they underwrite.

Suggestion for Further Research: This study is a cross-sectional survey design for which data was obtained from only 17 out of 56 registered underwriting insurance firms in Nigeria. Perhaps, a longitudinal study incorporating more insurance companies outside the ones included in this study may produce a different result.

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Analysis of the Western Balkans Territories Using the Index of Economic Freedom¹

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Abstract

The aim of the paper is to assess the current state of economic freedom in the Western Balkans region using the Index of Economic Freedom. From the Western Balkans territories, the best rating in the observed period of 2010 – 2019 is achieved by the Republic of North Macedonia and the worst by Bosnia and Herzegovina. According to the 2020 Index of Economic Freedom, the region belongs to the group of moderately free economies. The investment and business environment of the Western Balkans is at a low level. The reason is poor law enforcement, corruption, organized crime, or the shadow economy.

Key words

Index of Economic Freedom, investment and business environment, region, Western Balkans

JEL Classification: F14, F19

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Introduction

Geographically, the Western Balkans region is an important trade and power cross-roads between East and West. The common goal of the EU and the Western Balkans is strong, stable and united Europe based on historical and cultural, geographical ties and common political, security and economic interests [the Council of the European Union, 2020].

The Western Balkans territories are among the poorest in Europe and their pace of convergence with European standards is slow. Due to unfavourable historical development, the economies of the Western Balkans are struggling with several problems such as high unemployment, corruption in government institutions, organized crime and shadow economy. In recent years, the region has achieved significant progress in the process of economic transformation, democratization and implementation of reforms.

Unemployment, the overall economic situation and corruption remain the main concerns of residents of the region. Lack of adequate work and nepotism are specified

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as two main barriers to employment. It follows that confidence in employers, whether private or public, is at a low level. Jobs are created in low-income sectors. Unemployment is also considered to be a major cause of social exclusion. Almost half of the population is dissatisfied with the security situation in the region [Regional Cooperation Council, 2020].

1 Methodology

The aim of the paper is to assess the current state of economic freedom in the Western Balkans region using the Index of Economic Freedom. In order to achieve the set objective, several general theoretical methods were used, especially methods of analysis, synthesis, induction, deduction and comparison. The Abstraction method was also used to disregard a number of less significant factors, relationships and facts in order to examine more closely the essential characteristics of the region as a whole.

The paper also analyses Kosovo, based on UNSC Resolution no. 1244/1999, and the opinion of the International Court of Justice on the declaration of independence of Kosovo. The most comprehensive source of information on the Western Balkans is the reports and publications of the EU institutions, the World Bank and the International Monetary Fund. Ministry of Foreign and European Affairs of the Slovak Republic annually publishes economic information about individual territories. Statistical databases of EU and the Western Balkans territories were used.

The main source of data used for research was the Index of the Economic Freedom 2020. The Heritage Foundation in cooperation with the editorial staff of daily newspaper The Wall Street Journal has been compiling the Index of Economic Freedom for twenty-six years. The measurement of economic freedom is based on examination of twelve quantitative and qualitative components grouped into four pillars (Fig. 1).

Fig. 1 Index of Economic Freedom



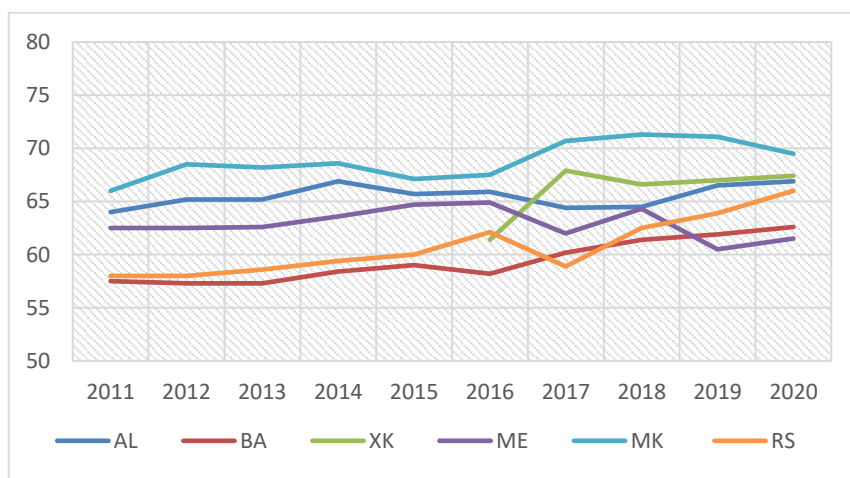
Source: own processing according to Index of Economic Freedom

Each of the twelve economic freedoms is rated on a scale from 0 to 100. The total score of a country is calculated as the average of the individual economic freedoms [Kittová & Steinhauser, 2018]. The Index of Economic Freedom is published at the beginning of a calendar year, the score for 2020 reflects the situation in 2019. In 2019, Hong Kong became the freest economy in the world, continuously at the first position since 1995. Singapore, New Zealand, Switzerland and Australia ranked in the top five in addition to Hong Kong.

2 Results and Discussion

Graph 1 shows the development of the 2011 – 2020 Index of Economic Freedom for Western Balkans. From the Western Balkans territories, the best rating in the observed period of 2010 – 2019 is achieved by the Republic of North Macedonia and the worst by Bosnia and Herzegovina. According to the 2020 Index of Economic Freedom, the region belongs to the group of moderately free economies.

Graph 1 Index of Economic Freedom 2011 – 2020



AL – the Republic of Albania, BA – the Republic of Bosnia and Herzegovina, ME – the Republic of Montenegro, MK – the Republic of North Macedonia, RS – the Republic of Serbia, XK – the Republic of Kosovo

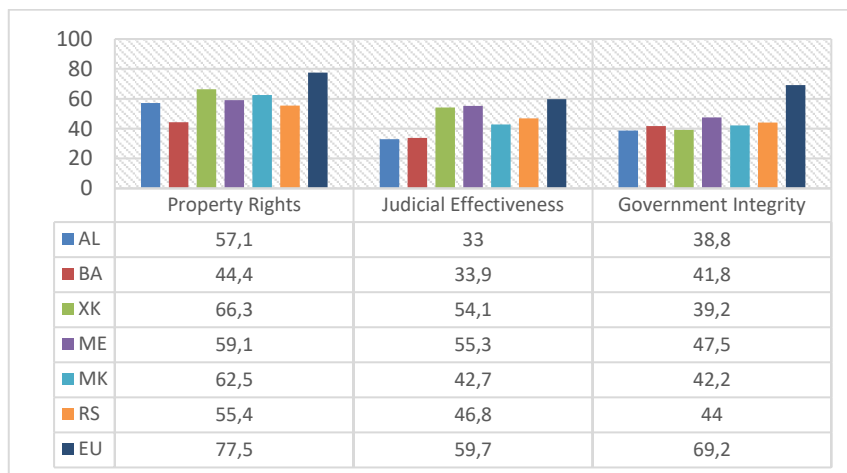
Source: own processing according to Index of Economic Freedom 2010 – 2020

According to the 2020 Index of Economic Freedom, the best score from the Western Balkans territories was achieved by the Republic of North Macedonia, ranking 51st out of 186 assessed economies. The total score of 69.5 decreased by 1.6 points compared to last year due to a decrease in the efficiency of the judiciary. Kosovo with the score of 67.4 became the 53rd freest economy. The score of the country increased slightly by 0.4 point year-on-year due to an improvement in the area of property rights.

The economic freedom score of Albania is 66.9, making it the 57th freest economy. The overall score increased slightly by 0.4 point year-on-year due to improvement in fiscal health. However, Albania fell by five positions in the ranking, reflecting the relatively better performance of other countries. Serbia is in the 65th place in the 2020 Index of Economic Freedom with the score of 66.0. The total score of the country increased by 2.1 points compared to last year. Bosnia and Herzegovina is in the 82nd place in the 2020 Index of Economic Freedom with the score of 62.6. In a year-on-year comparison, its overall score increased slightly by 0.7 point, which was helped by a sharp increase in the score for government integrity. The economic freedom score of Montenegro is 61.5, making it the 91st freest economy. Compared to last year, the country's overall score increased by 1.0 point, mainly due to the higher score of government integrity.

The "RULE OF LAW" pillar of the 2020 Index of Economic Freedom for Western Balkans is shown in Graph 2. This pillar assesses the protection of property rights, the independence and efficiency of the judiciary, and the integrity of the government indicators. According to the "RULE of LAW" pillar, the Western Balkans score is significantly below the EU average. Convincing progress regarding the rule of law in the Western Balkans remains a major challenge, often linked to the lack of political will, the continued existence of certain elements of state seizure, limited progress in the independence of the judiciary and increasingly challenging environment for civil society [European Commission, 2020a].

Graph 2 Index of Economic Freedom 2020 - RULE OF LAW



AL – the Republic of Albania, BA – the Republic of Bosnia and Herzegovina, ME – the Republic of Montenegro, MK – the Republic of North Macedonia, RS – the Republic of Serbia, XK – the Republic of Kosovo

Source: own processing according to Index of Economic Freedom 2020

Despite ongoing reform processes, protection of property rights in the Western Balkans remains weak. It is essential to ensure the independence, quality and efficiency of the judicial system [European Commission, 2018]. The judiciary is often under political

pressure and has a great number of unfinished cases. Insufficient funding of the judiciary is also a problem. There is widespread political interference in the media and their control. It is necessary to make an effort to ensure freedom of expression and the independence of the media throughout the region. Democratic systems in the Western Balkans are not functioning properly due to strong political polarization, limited democratic control function of the opposition in some cases and boycotts of elections and parliamentary work by the opposition [European Commission, 2020a].

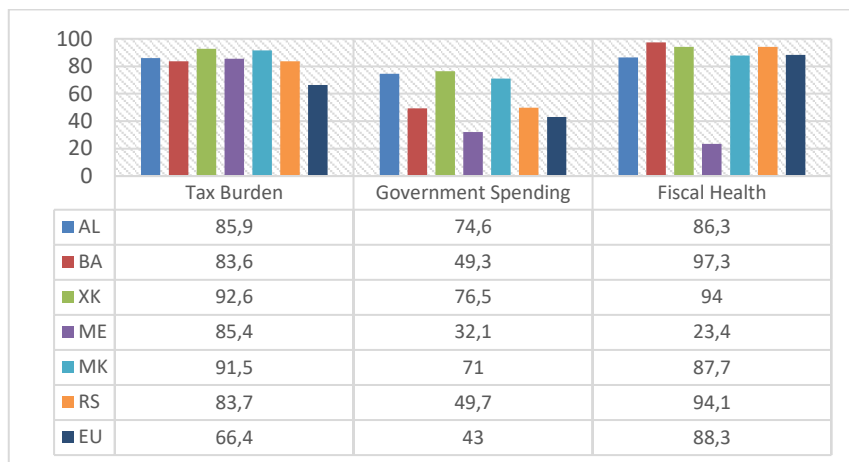
Public administration is plagued by inefficiency, corruption and nepotism. Corruption is one of the most significant threats to the region's democratic transformation and economic progress. In the Western Balkans, corruption is endemic, systematic, well-organized, rooted in government institutions, including the judiciary and the police. Public procurement is particularly prone to widespread corruption. High-level corruption and political corruption need to be tackled more clearly and consistently. As a part of the Euro-integration process, the Western Balkans territories have committed themselves to eliminating corrupt behaviour and manifestation of corruption in all areas of social life. They have confirmed their efforts by adopting a number of international law documents, such as the United Nations Convention Against Corruption.

The task of the Western Balkans is to strengthen prosecution structures specializing in the fight against corruption and organized crime. The spread of organized crime in the Western Balkans is linked to the period of the break-up of Yugoslavia. This was mainly due to economic stagnation and rapidly changing political situation. Growing poverty, the absence of the rule of law, inefficient justice and open fighting in some areas have fuelled the rise of organized crime. At present, the presence of organized crime in the Western Balkans is significant in terms of human, drug and weapon trafficking or the infiltration of crime into the political and economic system [European Commission, 2018]. Attention is also paid to cyber security and the fight against cybercrime.

Graph 3 shows the "GOVERNMENT SIZE" pillar of the 2020 Index of Economic Freedom for the Western Balkans. Within this pillar, the tax burden, government spending and fiscal health indicators are assessed. According to the "RULE of LAW" pillar, the Western Balkans score is approximately equal to the EU average. The exception is Montenegro, whose Government Spending and Fiscal Health scores are well below the EU average.

The tax burden for 2019 ranged from 23.3 to 37.9% of total domestic income, with Kosovo having the lowest and Bosnia and Herzegovina the highest. In Albania, the highest personal income tax rate is 23%, the highest corporate tax rate is 15%. In Serbia, the highest personal income tax rate is 10%, the highest corporate tax rate is 15%. The rates of personal and corporate income tax are the equal in Montenegro (9.0%). In the Republic of Northern Macedonia, Kosovo, Bosnia and Herzegovina, corporate and personal income tax is 10%.

The region's indebtedness gradually decreases. The average level of public debt in the Western Balkans territories was 48.08% of GDP in 2019. The region's indebtedness gradually decreases. In 2019, Montenegro had the highest public debt (72.1% of GDP), Kosovo had the lowest (17.0% of GDP). Table 1 provides an overview of public debt and inflation rate indicators in the territories of the Western Balkans in 2019.

Graph 3 Index of Economic Freedom 2020 - GOVERNMENT SIZE

AL – the Republic of Albania, BA – the Republic of Bosnia and Herzegovina, ME – the Republic of Montenegro, MK – the Republic of North Macedonia, RS – the Republic of Serbia, XK – the Republic of Kosovo

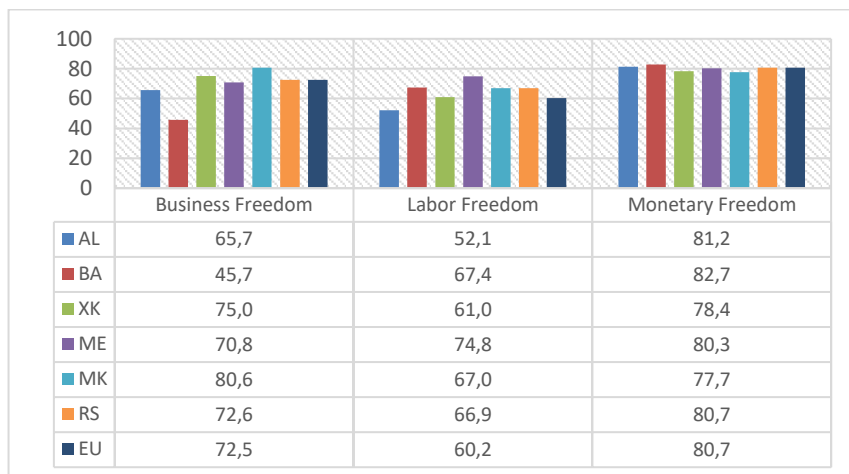
Source: own processing according to Index of Economic Freedom 2020

Tab. 1 Public debt and inflation rates in the territories of the Western Balkans in 2019

	Public debt (% GDP)	Inflation rates (%)
the Republic of Albania	68.6	2.0
the Republic of Bosnia and Herzegovina	37.0	1.4
the Republic of Kosovo	17.0	1.1
the Republic of Montenegro	72.1	2.6
the Republic of North Macedonia	39.5	1.5
the Republic of Serbia	54.3	2.0

Source: own processing according to Index of Economic Freedom 2020

Graph 4 shows the "REGULATORY EFFICIENCY" pillar of the 2020 Index of Economic Freedom for the Western Balkans. Within this pillar, the freedom of enterprise, labour market and monetary stability indicators are assessed. According to the "REGULATORY EFFICIENCY" pillar, the Western Balkans score is approximately equal to the EU average.

Graph 4 Index of Economic Freedom 2020 - REGULATORY EFFICIENCY

AL – the Republic of Albania, BA – the Republic of Bosnia and Herzegovina, ME – the Republic of Montenegro, MK – the Republic of North Macedonia, RS – the Republic of Serbia, XK – the Republic of Kosovo

Source: own processing according to Index of Economic Freedom 2020

The Western Balkans have significant untapped economic potential. The Western Balkans territories are sensitive to external influences, and the growth stimulation is based on significant international financial and technical assistance. Monetary and financial systems in the region are heavily dependent on the euro. Private sector development is essential for socio-economic development, regional integration, improvement of competitiveness and job creation. Small and medium-sized enterprises are extremely important, given that they account for 99% of all enterprises in the Western Balkans, generate around 65% of total added value in the business sector and account for 73% of total employment in the business sector [European Commission, 2020b]. In this context, it is appropriate to pay attention to the support of startups and small and medium-sized enterprises in strategic sectors of the Western Balkans, such as tourism and the digital sector.

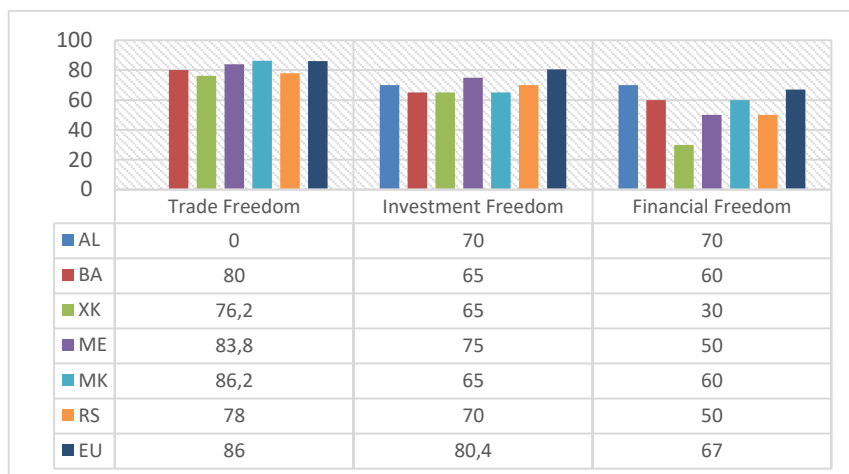
GDP growth is not sufficient to reduce the high unemployment rate, to ensure formal jobs or to reverse the trend of large-scale migration. The main reasons for emigration include poverty, unemployment and lack of opportunities. Pessimism, hopelessness, corruption and a lack of structural change are currently important factors supporting emigration. Making the labour market more efficient is one of the biggest challenges for the economic and social development of the region. Getting a job is a matter of connections, not knowledge and skills [Zubal'ová, 2017]. The average unemployment rate of the six Western Balkans economies was around 17% in 2019 [Eurostat, 2020]. Kosovo had the highest unemployment rate (25.6%) and Serbia the lowest (10.5%).

In 2019, the employment rate in the Western Balkans region rose to a historic high of 45.6% for the 15-64 age group. Jobs were generated mainly in the service sector, followed by construction and industry. Employment continued to decline in agriculture. In 2019, Kosovo had the lowest minimum wage in the Western Balkans (EUR 130 for

workers under 35 and EUR 170 for workers over 35). The highest minimum wage in 2019 was in Serbia (EUR 344.4).

The "OPEN MARKETS" pillar of the 2020 Index of Economic Freedom for Western Balkans is shown in Graph 5. Within this pillar, the trade freedom, freedom of investment and financial freedom indicators are evaluated. According to the "OPEN MARKETS" pillar, the Western Balkans score is slightly below to the EU average.

Graph 5 Index of Economic Freedom 2020 - OPEN MARKETS



AL – the Republic of Albania, BA – the Republic of Bosnia and Herzegovina, ME – the Republic of Montenegro, MK – the Republic of North Macedonia, RS – the Republic of Serbia, XK – the Republic of Kosovo

Source: own processing according to Index of Economic Freedom 2020

Foreign trade holds an important position in the Western Balkans economy, largely contributing to the economic growth and production of gross domestic product, and also forms a substantial part of foreign exchange revenue [Kašťáková & Ružeková, 2019]. The EU is the Western Balkans' largest business partner, accounting for 69.4% to 82.9% of total exports and 61.8% of total imports in 2019 [European Commission, 2020a].

The major share of the Western Balkans economy is represented by agriculture, textile industry, energy and construction, which do not produce products requiring usage of advanced technologies and education of employees. Albania and Montenegro depend on tourism. Kosovo is an extremely complicated economic area, the business environment of which has discouraging parameters for investors despite the positive results in 2019 [Ministry of Foreign and European Affairs of the Slovak Republic, 2020].

The investment environment in the Western Balkans is characterized by a weak level of the rule of law, insufficient enforcement of state aid rules, shadow economy, insufficient access to finance and low levels of regional integration. EU companies are the biggest investors in the region, providing 73% of foreign direct investment. They

are thus the main external driver of growth and jobs in the region. The growing business and investment activity of third countries in the Western Balkans often does not take into account socio-economic and financial sustainability or EU rules for public procurement. The banking sector in Western Balkans remains relatively stable.

Conclusion

According to the 2020 Index of Economic Freedom, the best score from the Western Balkans territories was achieved by the Republic of North Macedonia. Montenegro had the worst score. All the countries scored 61.5 - 69.5, the global average was 61.6 and the European regional average was 69.8. The main obstacle to greater economic freedom in the Western Balkans territories is the very poor performance of the rule of law indicators.

The Western Balkans territories are criticized especially for the lack of austerity measures by the government and public institutions, the inflexible labor market and the slow implementation of necessary reforms. Emigration of young people and the "brain drain" are considered to be key problems for the region. The Western Balkans received weak rating also for corruption, which is still at a high level. Robust results in the fight against corruption are needed to mitigate the real threats to democratic structures and for a stable and transparent business environment. High level and political corruption need to be tackled in a clearer and more consistent way.

The Western Balkans territories have received high rating for their level of trade freedom and stable public finance. The EU is the largest trading partner, a source of incoming foreign investments and a major destination for external migration. These close economic relations have been supported by, inter alia, the Stabilization and Association Agreements between the EU and individual territories of the Western Balkans, which also include provisions on a deep and comprehensive free trade area. Implementation of these provisions means the removal of customs and non-tariff barriers, liberalization of trade in services, extensive harmonization of trade, investment regulations and institutions.

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Development and Intensity of Mutual Trade between the Visegrad Group and the Russian Federation¹

Elena Kašťáková – Anabela Luptáková²

Abstract

Russian's position in the foreign trade relations of the Visegrad Group countries has a long history. Russian Federation is an important trading partner for them, especially in the import of energy raw materials. Poland is the most active trading partner for the Russian Federation within the Visegrad Group. In 2018, the three most exported items of the Visegrad Group to the Russian Federation were machinery and nuclear reactors, cars, and electrical machinery. Mineral fuels accounted for 85 % of the Visegrad Group imports from the Russian Federation. The trade intensity between the Visegrad Group countries and the Russian Federation in 2014 - 2018 was higher than one, except for the Czech Republic. That indicates that the Russian Federation has exported relatively more goods to Slovakia, Poland and Hungary than to the rest of the world.

Key words

foreign trade, trade intensity index, the Russian Federation, the Visegrad Group.

JEL Classification: F21, F14

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Introduction

The Central European region plays an extensive role in the integration grouping, within the regional grouping of the Visegrad Group has been operating for almost two decades. The Visegrad Group was originally founded on the 15th of February 1991, by three states (Hungary, Poland, and the Czech and Slovak Federal Republic = CSFR) in the city of Visegrad to agree on the resumption of mutual cooperation. The group was named Visegrad Three. In 1993, after the establishment of two separate republics, the Czech Republic and Slovakia, the group was renamed the Visegrad Four and consists of four countries: Hungary, Poland, the Czech Republic and Slovakia (V4) (Ministry of Foreign and European Affairs of the Slovak Republic, 2014).

The position of the Russian Federation in the foreign trade relations of the Visegrad Group countries has a long history as well as it is an important trading partner for them, especially in the import of energy raw materials. The Czech Republic has a specific position among the V4 countries and achieves a positive trade balance with the Russian

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Federation, which is unusual in comparison with other EU countries. The Russian-Ukrainian crisis, which began in late 2013, has resulted in the imposition of sanctions between the European Union and the Russian Federation. That weakened the mutual trade relations between the Visegrad countries and the Russian Federation to some extent. The energy sector remains a matter of interest, both from the EU perspective but also globally. For the V4 countries, the energy sector is of key importance, which Slovakia felt notably in 2009 during the gas crisis. The Visegrad Group represents a necessary transit region for Russian energy raw materials heading west to EU countries.

1 Methodology

This paper aims to examine the development and intensity of mutual trade between the V4 countries and Russia. Several theoretical methods were used, in the form of general methods (Abstraction, analysis, synthesis, deduction and induction). Special methods were used to clarify foreign trade data, for explicit and graphical display. At the same time, empirical methods were used, predominantly the comparison approach for comparing countries, regions and achieved results and a one-factor indicator of mutual trade evaluation.

The potential of mutual trade relations can be designated by the intensity of trade, which is measurable in international trade through the trade intensity index (TII). Trade intensity index is the ratio of the share of exports of country i to country j to the total exports of country i and the share of exports to country j to the value of total world exports. (World Bank, 2016). The calculation is based on:

$$TII_{ij} = (x_{ij} / X_{it}) / (x_{wj} / X_{wt}) \quad (1)$$

where:

x_{ij} – expresses the value of the first country's exports to the second country.

x_{wj} – expresses the value of the first country's total exports to the world.

X_{it} – expresses the value of world exports to the second country.

X_{wt} – expresses the total value of world exports.

The values can reach three variations. $TII = 1$, when the exporting country i exports to the country j the same ratio that belongs to the country j concerning its share in world imports. Furthermore, $TII > 1$, when it comes to trade flows in higher values than might be expected given the importance of the country in the world economy, i.e. country i exports to country j in a larger proportion than to the whole world. Or if $TII < 1$, then the trade intensity is lower than might be expected.

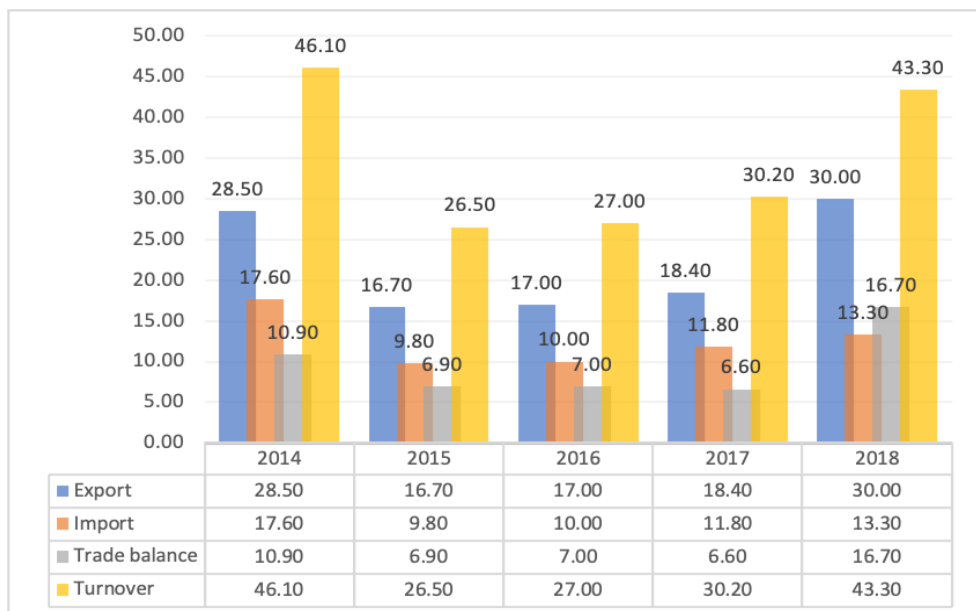
The source of this research was statistical data based on the International Trade Centre, which provided data for the analysis of mutual foreign trade between the V4 countries and the Russian Federation. The commodity structure of mutual foreign trade

was classified according to the nomenclature of the harmonized system. The research was limited to the period 2014 – 2018.

2 Results and Discussion

In the observed period from 2014 to 2018, mutual foreign trade had a fluctuating tendency. The highest values of goods exchange were reached in 2014. Subsequently, in 2015, there was a significant 42.5 % decline in mutual trade due to the Russian-Ukrainian crisis and gradually increased in the following years. The highest increase in 2018 was up to 43.3 % compared to the previous year, which was a result of higher world prices for energy raw materials. A significant part of mutual trade between Russia and the V4 countries was made of exports of Russian minerals, in the period under review it caused a positive trade balance from the Russian point of view. A detailed overview of the mutual exchange of goods in the years 2014 – 2018 is represented by graph 1.

Graph 1 Development of foreign trade of the Russian Federation with the V4 group in the years 2014 – 2018 (in bil. USD)



Source: Autor's own calculation according to International Trade Centre

However, it is also important to mention that the level of exports and imports is mutually influenced by the economic trend of preventing excessive imports and importing only necessary goods that countries cannot produce themselves or their production would be inefficient. At the same time, the size of the given business territory plays a certain role in terms of the sales market, consumer power, the economic situation and also the prevailing industrial focus of the country's economy (Jovanovic & Damnjanovic, 2014).

Territorial structure of the mutual trade

Within the Visegrad Four countries, Poland is the most active trading partner for Russia. Thanks to that, the V4 has a more significant representation in Russia's foreign trade from a territorial point of view. A detailed overview of the position of the V4 countries in the territorial structure of Russia's exports and imports in 2018 is shown in table 1.

Tab. 1 Position of V4 countries in the territorial structure of RF exports and imports, 2018 (in %)

	Export RF		Import RF	
	Share (in %)	Rank	Share (in %)	Rank
Slovakia	0.8	29	0.9	25
Czech Republic	1.1	19	1.6	14
Hungary	1.1	21	0.9	26
Poland	3.7	7	2.2	11
V4	6.7	-	5.6	-

Source: Autor's own calculation according to International Trade Centre

In terms of Russian export trade operations, Poland occupied 7th place with a share of 3.7 % and thus ranked among the TOP 10 export trade partners of Russia. The indicated proves Poland's stronger import activity and also its sharper trade dependence on Russia compared to the other V4 members. The aforementioned is broadly due to the disposition of a large consumer market. The Czech Republic followed Poland with a share of 1.1 %, then Hungary with the same share (1.1 %) and finally Slovakia (0.8 %). Hence, Slovakia plays the least level of significance for the Russia of all V4 countries in terms of the performance of export activities. Together, the V4 countries accounted for 6.7 % of Russian exports in 2018, which is still less than in Germany, the Netherlands and China.

As for Russia's import operations, in 2018 the Visegrad Group did not rank among the top 10 trading countries. Their share in Russian imports was 5.6 %. Russia exported the most to Poland (with a share of 2.2 %), followed by the Czech Republic (1.6 %) and Slovakia and Hungary with the same share of 0.9 %. Therefore, the V4 countries have the slightest significance for the Russian Federation in terms of import activities.

Poland dominated even in the case of Russia's position in the territorial structure of exports and imports of the V4 countries in 2018. Detailed overview of Russia's share and its rank in the territorial structure of V4's foreign trade is in table 2.

Tab. 2 The position of the Russian Federation in the territorial structure of exports and imports of the V4 countries, 2018

	Export V4		Import V4	
V4 Countries	Share RF	Rank RF	Share RF	Rank RF
Slovakia	1.9%	13	5.0%	6
Czech Republic	2.0%	13	3.2%	7
Hungary	1.5%	20	3.9%	9
Poland	3.1%	7	7.3%	3

Source: Autor's own calculation according to International Trade Centre

It can be seen from the above-mentioned table that in the area of exports of individual V4 countries, Russia had in 2018 the most important position in Poland, where it ranked 7th with a 3.1 % share. It was followed by the Czech Republic with a share of 2 % and the same placement as in Slovakia. In both cases, Russia reached 13th place, although the share of Russia in Slovak exports was slightly smaller and represented by 1.9 %. The last place within the V4 countries was taken by Hungary, whose share of Russia was only 1.5 %, with the 20th place of Hungary's export partners.

While analyzing imports, Russia's position was much stronger, in all V4 countries it was among the top 10 most important import partners. Russia had the best rank in Poland, where it placed 3rd with a share of 7.3 %. This was followed by Slovakia, the Czech Republic, and Hungary had the least dependence on Russian imports.

Based on the obtained data, we can state that in terms of the territorial structure of trade of Russia, there was a strong trade connection with Poland. The lowest level of business activities was recorded with Hungary and Slovakia. In Slovakia, however, it is important to take into account the size of the country and other factors that move it to a lower level compared to the other members of the V4. At the same time, a more significant trade dependence of the V4 countries in Russia was observed in terms of their imports of goods.

Commodity structure of the mutual trade

Commodity structure of trade of the V4 countries and Russia in 2018 sufficiently diverse. Commodities within exports and imports were also sufficiently different. Based on available data, in 2018 a significant share of V4 exports to Russia was made up of machinery and nuclear reactors, boilers (HS 84), which accounted for 27.7 %. In second place were cars (HS 87) with a share of 18.8 % and third place belonged to electrical machinery and equipment (HS 85) with a share of 12 %.

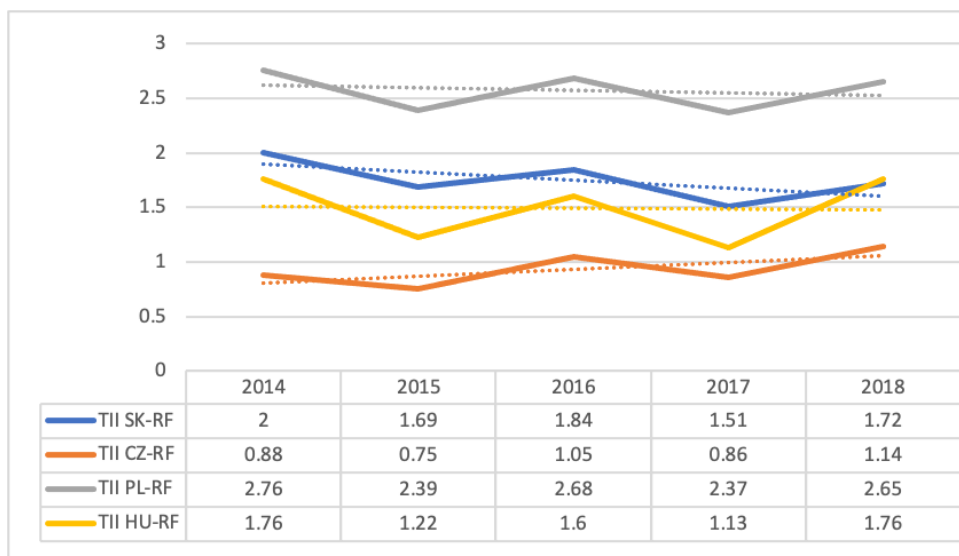
Together, these three established groups accounted for almost 58.5 % of V4 exports to Russia. Pharmaceutical products (HS 30) and plastics and plastic products (HS 39) followed, with the same share of 3.8% of total V4 exports to Russia.

In 2018, the V4 countries imported in value terms 30 billion USD from Russia. Mineral fuels (HS 27) accounted for the largest share of almost 85 % in imports of V4 from Russia. That indicates Russia's high dependence on exports, especially in terms of energy and minerals to these countries. The most important type of commodity were unspecified commodities (HS 99) with a share of 8 %, followed by iron and steel (HS 72) with a share of 4.7 %. Less significant items were inorganic and organic metal compounds (HS 28) and rubber and rubber products (HS 40), which accounted for less than 2 % of total V4 imports from Russia.

Intensity of the mutual trade

The degree of implementation of trade transactions between the V4 and Russia plays an influential role in mutual economic relations and their future development. A detailed overview of the development of the intensity of the Russian trade with the V4 countries in the years 2014 – 2018 based on the TII index is shown in graph 2.

Graph 2 Development of the trade intensity between the Russian Federation and the V4 countries in the years 2014 – 2018 with the trend line



Source: Autor's own calculation according to International Trade Centre

The values of the development of the intensity of trade relations between Russia and the Visegrad Group countries based on the TII index show that in the observed period Russia achieved a TII index value higher than 1 in each year examined with all countries except the Czech Republic. That means that Russia has carried out trade flows with a higher value than might be expected, given the importance of the country in the global economy. Russia has exported a relatively surpassing amount of goods to Slovakia, Poland, and Hungary than to the whole world, and thus these countries represent significant sales markets for Russia.

In terms of volatility of the achieved values, the most significant fluctuating tendency was observed in the examined period with Slovakia. With Poland, the TII index did not fall below 2 in the years under review. Therefore, we consider Poland to be Russia's strongest trading partner among the V4 members. With Hungary in 2014 and 2018, the achieved TII value completely coincided. With the Czech Republic, the intensity of Russian trade flows was significantly unstable. We can see that initially the value of the TII index, in 2014 and 2015 and also in 2017, was lower than 1 and thus the intensity of the business connection was at a lower level than could be expected. Only in 2016 and 2018, the TII exceeded the value of 1, when their mutual trade intensity visibly strengthened. Nevertheless, the Czech Republic was considered in this area as the country with which Russia has the weakest trade intensity within the V4.

The years 2015 and 2017 were comprehensively years of weakening foreign trade between the Russian Federation and the Visegrad Group. The indicated is connected with sanctions imposed on Russia, lower world prices for energy raw materials, which have caused a slowdown in the domestic economy, the devaluation of the Russian ruble, and a reduction in its exports to the European Union.

In addition to the development of trade intensity, the graph shows a prediction of the future possible values. Trend line representing the development with Poland and points to only a very slight decrease in trade intensity. The TII value should be around 2.5, which is considered positive. The trend line describing the intensity of the Russian Federation with Slovakia reached the steepest declining trend, with expected trade decline to the level of approximately 1.5. A similar situation took place in Hungary. Only with the Czech Republic, we can see a more significant increase and thus a positive development of trade intensity, from which we can assume the growth of mutual trade flows soon.

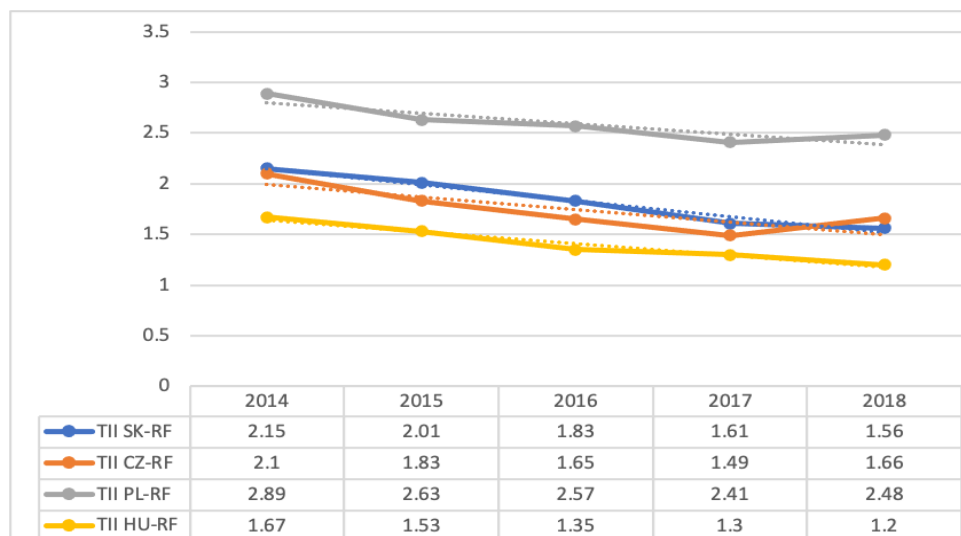
In the following section, we will examine the trade intensity from the perspective of the V4 countries with Russia. The detailed development is shown in the following graph 3.

The graph shows that all V4 countries, except Hungary, achieved a value of the TII index at least once higher than 2. A value lower than 1 was not reached in any of the studied countries. That indicates steady and more intensive trade flows compared to recorded data of Russian exports. Thus, selected V4 countries export a relatively higher amount of goods to Russia than to the whole world, and Russia acts as a valuable importer and their strong trading partner. The data from graph 3 does not show extreme fluctuations as in the previous data of trade intensity from the Russian point of view. The given development can be described as relatively stable.

The highest value of the TII index with Russia, which was higher than 2 during all studied years, was reached by Poland. That confirmed that in the period under review Poland was the largest trading partner among all V4 members. On the contrary, the lowest value of the TII index was in Hungary, which never reached the level of value 2.

All achieved values of TII of Hungary were lower in comparison with other V4 countries. Based on this fact, we can describe Hungary as the least intensive trading partner of Russia among the V4 countries. This also confirmed that the years 2015 and 2017 were accompanied by a weakening of international trade, which was also reflected in the relations between the Visegrad Four and Russia.

Graph 3 Development of the trade intensity of the V4 countries with the Russian Federation in the years 2014 – 2018 with the trend line



Source: Autor's own calculation according to International Trade Centre

Investors from the V4 countries have adapted to the crisis caused by the sanctions policy. In recent years, Russian investors have shown a steady interest in the V4 countries, which are geographically, culturally, politically and economically close. Russian companies are present in the V4 countries in the field of engineering, the financial sector, the energy sector, the fuel industry, metallurgy, and the chemical industry. (Kittová, 2020) Despite the trade policy restrictions introduced since the end of 2014, large Russian companies continue to invest in the V4 countries.

Conclusion

Based on this research on the development and intensity of mutual foreign trade between the V4 countries and Russia, we came to the following conclusions. Apart from significant participation in the foreign trade of EU countries, a certain dependence of the V4 countries' demand on Russia was demonstrated in the years 2014 - 2018. The ranking of the Visegrad Group countries in Russia's foreign trade is as follows: Poland, the Czech Republic, Hungary and finally Slovakia. From the point of view of the V4 countries, Russia had the most important position in Poland, then in the Czech Republic, Slovakia and Hungary. Within the framework of mutual trade cooperation, the V4 countries mostly exported machinery and equipment to Russia and imported energy raw materials.

The results of the research in the field of trade intensity also point to the existence of mutual intensity of foreign trade. From the point of view of the V4 countries a slight decrease in intensity is observed. On the contrary, Russia's intensity is slightly increasing. That can be explained by the fact that relations are sufficiently influenced by trade policy restrictions between the EU and Russia.

Trade and energy cooperation between the V4 countries and Russia is determined by the policy of ongoing sanctions between the EU and Russia. Nevertheless, we can state that cultural, economic, or scientific contacts between the V4 countries and Russia continue to take place regularly.

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