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ebm 2022

CONTEMPORARY ISSUES IN ECONOMICS, BUSINESS AND MANAGEMENT

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Gordana Radosavljević
Katarina Borisavljević

FACULTY OF ECONOMICS
UNIVERSITY OF KRAGUJEVAC

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E d i t o r s

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FACULTY OF ECONOMICS
UNIVERSITY OF KRAGUJEVAC
Kragujevac, 2022

Publisher
Faculty of Economics, University of Kragujevac

For the Publisher
Milena Jakšić, Dean

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Printed by
InterPrint - Kragujevac

ISBN 978-86-6091-133-1

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FOREWORD

The Faculty of Economics, University of Kragujevac organized the Seventh biennial International Scientific Conference on Contemporary Issues in Economics, Business and Management (EBM 2022). The Conference gathered the largest number of participants so far, a total of 104 authors – 81 authors from higher education institutions in Serbia and 23 authors from abroad (Poland, Italy, Slovenia, Ukraine, Croatia). The introductory speakers at the conference were Zlatko Nedelko (Faculty of Economics and Business, University of Maribor, Slovenia) and Stanislaw Mazur (Krakow University of Economics, Poland). After the plenary talk, the Conference was organized through five parallel sessions. Simultaneously, within a separate session, a Symposium was held, as a result of cooperation between Faculties of Economics from Italy (Messina), Poland (Krakow), Ukraine (Kiev) and Serbia (Kragujevac). The papers which were presented belong to different thematic areas which include key challenges in management and marketing, globalization and regionalization, accounting and business finance, and applied informatics and quantitative methods in economics and management.

The Proceedings contains positively reviewed papers. It is important to emphasize that several papers were selected for publishing in the journals which supported the Conference: Economic Horizons and Our Economy/Naše gospodarstvo. The authors of two papers decided to submit their papers to the journal Our Economy, and the authors of two paper decided to submit the paper to the journal Economic Horizons. Therefore, the above-mentioned papers are not included in the Proceedings.

This Proceedings includes the thirty six papers accepted for presentation at the EBM 2022 Conference. First section referring to Key challenges of management and marketing, participants presented the papers which deal with aspects of strategic management, corporate management and sustainability, corporate social responsibility, management and marketing aspects, WOM concept, customer satisfaction, application of innovations in business, characteristics of doing business in the field of tourism (with special reference to the image of the destination and the experience of the consumers and guests in the hotel business) and similar. Within the second parallel session, Key challenges of management and marketing, participants presented the papers which cope with the problems of human resource management, leadership, internal satisfaction and loyalty, lifelong learning and business in the digital era, as well as the recruitment process and vertical communication in companies, along with the analysis of the tourist offer in crisis conditions, and entrepreneurship (start-up companies) and acquisition of companies. The session named Globalization and Regionalization was dedicated to the consideration of the current key economic challenges in the Republic of Serbia and the region, such as: economic development, macroeconomic stability, stability of the financial system, the state and perspectives of the development of the financial market, the effectiveness of economic policy as well as the concept of sustainable tourism. When it comes to the papers that were included in the session Applied informatics and quantitative methods in economics and management, the participants discussed the application of various methods, models and approaches, the concepts of business and artificial intelligence, the impact of digitalization on business operations, the application of CRM software solutions and cloud-based digital platforms in business. Within the session Accounting and Business Finance, the participants discussed the areas of measuring business performance and profitability of companies operating in Serbia, primarily from the banking and pharmaceutical sectors, as well as higher education institutions. As for the scientific symposium entitled Contemporary Challenges in Economy, Business and Management, the following topics were discussed: international economy, internationalization of business, economic support to Ukraine in the post-war period, analysis of export opportunities and the economy of CEE countries. There is also a special review of the value-based management concept and analysis of start-up companies in the field of services.

The thirty six papers submitted represent a good indicator of the Conference success. We could state that EBM 2022 conference fulfilled its purpose providing a good basis for further research and consideration both in the academic community as well as in the general professional community.

Editors

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Faculty of Economics and Business, University of Maribor, Slovenia

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Stanislaw Mazur,

Cracow University of Economics, Poland

"THE GLOBOTICS TRANFORMATION AND ITS SOCIO-ECONOMIC CONSEQUENCES"

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FINANCIAL DEVELOPMETN, TRADE OPENNESS AND ECONOMIC GROWTH: PANEL ANALYSIS OF SELECTED CEE COUNTRIES

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Abstract: *The aim of the paper is to examine the impact of trade openness and financial development measured by domestic credit to the private sector by banks on economic growth in selected Central and Eastern European countries (CEEC). The analysis covered 19 years from 2000 to 2018. The following countries were analyzed: Bulgaria, Croatia, Czech Republic, Hungary, Poland, and Romania. Cointegration between variables is confirmed by the Westerlund cointegration test. Based on the Mean Group (MG) estimator, outcomes exhibit that the trade openness in the long run has a positive effect on economic growth, while domestic credit to the private sector by banks negatively affects growth in the observed period. The negative impact of financial development on economic growth is possible if the expansion of credit to the private sector is not accompanied by adequate increase in real output.*

Keywords: *Financial Development, Trade Openness, Economic Growth, Panel ARDL*

JEL Classification: C33, F10, O11

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INTRODUCTION

Endogenous growth theories, which seek to demonstrate where the economy can generate growth despite the absence of exogenous technological progress, presume that trade and finance can be significant determinants of production because their impact is not only short-term but also generates a substantial change in the growth trajectory (Kawa et al., 2020). As a result of numerous empirical studies, it is generally believed that trade openness and financial development stimulate economic growth, because outward-oriented economies with a developed financial system consistently have higher rates of economic growth than inward-oriented economies.

Investigating the main drivers of economic growth is one of the fundamental concerns of development economics. The literature has empirically explored the relationship and the direction of causality between financial development, international trade and economic growth. An intense discussion has taken place in macroeconomics over the effects of trade and financial development on economic growth. The argument has drawn more attention in both theoretical and empirical literature, but it is still up for debate. Numerous studies on the connection between financial development, trade liberalization, and economic growth have been undertaken throughout the years. These studies include cross-country and regional comparisons, examination of particular economies, and country-by-income comparisons. The literature generally comes to the conclusion that trade liberalization and financial development are important elements in promoting economic growth (Hong et al., 2018).

Hence, the aim of the paper is to examine the impact of trade openness and financial development measured by domestic credit to the private sector by banks on economic growth in selected CEEC. Following the aim of the research, two main hypotheses can be derived:
H1: An increase in trade openness incites economic growth in the analyzed CCE countries.
H2: An increase in domestic credits to the private sector stimulates economic growth in the analyzed CEE countries.

The rest of the article is organized as follows: Section 2 presents the review of the past literature. Section 3 illustrates the used methodology. Section 4 provides results and discussion. At last, conclusions are summarized, and some basic policy recommendations are offered in section 5.

LITERATURE REVIEW

The financial aspect of economic development has long been neglected in economic studies, and subsequent research has shown contradictory results. The connection between financial development and economic growth was first established by Goldsmith (1969), McKinnon (1973), and Shaw (1973). Patrick (1966) developed two hypotheses analysing causality between financial development and economic growth: the supply-leading hypothesis and the demand-following hypothesis. Thus, two directions of future studies were determined. The supply-leading hypothesis implies that financial development leads to economic growth. If economic growth causes financial development, it is the demand-following hypothesis.

Relationship between trade openness and economic growth has been examined in many studies. There are mixed results. Trade openness has been linked to economic growth, according to some academics. However, others have claimed the contrary, and yet other researchers have not been able to establish a link between these two factors. Ramanayake and Lee (2015) and Keho (2017) argued that economic growth is driven by trade openness. On the other side, Sarkar (2008) claimed that there are not positive long-run relationship between trade openness and economic growth in 51 countries in period over 1961-2002.

Companies can access to new technology through international trade which causes productivity increase. It encourages specialization in research-incentive products. At the same time, multinational companies have to be more competitive in order to thrive in international trade as opposed to domestic markets. This kind of process encourages economic growth. Contrarily, other research contends that trade openness may be detrimental to economic expansion. International markets enhance competition, which lowers predicted earnings and deters innovation and R&D. Additionally, when nations open to the rest of the world, they could choose to specialize in fields where they have a disadvantage or where technical advancements or experiential learning have reached their limits (Polat, 2019, 120).

Ayad and Belmokkadem (2017) examined the causal relationship between financial development, trade openness and economic growth for 16 MENA countries using panel co-integration tehniques from 1980 to 2014. The results show that financial development and trade liberalization does not have a significant impact on economic growth. To determine which proxy measures are most accurate, Hassan et al. (2007) used an unbalanced panel regression and variance decomposition to provide new evidence on the significance of financial development in accounting for economic growth. The results indicate considerable correlations between these factors and economic growth in high-income OECD nations but not in the regions of South Asia and Sub-Saharan Africa.

D'Onofrio and Rousseau (2018) examined relationship between financial development and trade and its impact od economic growth in 17 countries during first globalization wave (1850-1929) applying cross-country dynamic panels, VARs and VECMs. The results indicate that financial development led both trade and growth, while trade largely responded to financial development. Omoke et al. (2022) investigated impact of financial development, trade openness, and environmental degradation on economic growth in Venezuela from 1980 to 2019. They applied the nonlinear autoregressive distributed lag model. The results show that the variables have cointegration. Additional research results confirmed that Venezuela's deteriorating financial development impedes economic growth by demonstrating long-term negative impact of negative shocks to financial development on long-run economic growth. Additionally, both positive and negative shocks to trade openness have a long-term beneficial effect on economic growth. In contrast, short-term negative shocks to financial development have a negative impact on economic growth, but long-term negative shocks to financial development have a positive influence. They suggested the development of the financial sector and the trade restrictions elimination when this is practical to improve economic growth. Tatar et al. (2022) studied the efects offinancial development and trade openness on economic growth in Turkey from 1960 to 2017 by applying Fourier-based stationarity test and its complementary Fourier-based cointegration test. They found long-term cointegration relationship between variables. The conclusion is that there is a one-way causal relationship between financial development and trade openness as well as between financial development and economic growth. Contrast with that, Polat (2019) conducted dynamic panel data of 41 developing countries from 1995 to 2014 and did not found any impact of financial development or trade openness on economic growth.

When it comes to European countries only a few studies have concentrated on the transition economies from Central and Eastern Europe. Many studies primarily finding a positive relationship between a number of financial indicators and economic growth (Berglöf & Bolton, 2002; Bonin & Wachtel, 2003; Kenourgios and Samitas, 2007; and Fink et al., 2009). Dritsaki and Dritsaki (2013) investigate the relationship between financial development, trade openness and economic growth in Bulgaria by applying cointegration analysis and Granger causality test. Study confirmed long-run relationship between financial development, trade openness and economic growth. Furthemore, There is a high level of confidence that a greater degree of openness is related with improved economic performance in Bulgaria.Using a panel dataset of 26 European Union nations from 1990 to 2016, Asteriou and Spainos (2019) examined the the link between financial development and economic growth in light of the financial crisis from 2008. Caporale et al. (2015) analysed the relationship between financial development and economic growth in 10 new EU members using a dynamic from 1994 to 2007. Results showed that hat the stock and credit markets does not have impact on economic growth, but it is discovered that the banking sector has experienced faster development.

METHODOLOGY

The analysis takes into consideration the relationship between economic development (measured by GDP per capita - variable GDPPC), the openness of the economy (measured by trade openness - variable TO), and financial development (measured by domestic credit to the private sector - variable DCPS). The analysis covered 19 years from 2000 to 2018. The following countries were analyzed: Bulgaria, Croatia, Czech Republic, Hungary, Poland, and Romania. The data were taken from the World Bank Database. Descriptive statistics of the variables and correlation matrix are exhibited in Table 1 and 2, respectively. Except for the DCPS series, the Jarque-Bera statistic in Table 1 reveals the absence of normal distribution for all series. The cause might be a cross-sectional and heterogeneous characteristics of the data, which are corrected through the examinations in panel data analysis.

Table 1. Descriptive statistics of the variables

	GDPPC	TO	DCPS
Mean	3.540289	103.9341	42.96410
Median	4.112087	93.96496	45.05475
Maximum	11.14421	168.4897	70.85333
Minimum	-7.262149	48.52133	7.125225
St. Dev.	3.165445	33.05955	15.93682
Skewness	-0.820510	0.447210	-0.229365
Kurtosis	4.780328	2.067348	2.313535
Jarque-Bera	27.84695	7.931672	3.237833
Probability	0.000001	0.018952	0.198113
Obs.	114	114	114

Source: Authors' calculations

The variables are not highly correlated with each other therefore using variables in one regression equation will not lead to a problem of multicollinearity.

Table 2. Correlation matrix of the variables

	GDPPC	TO	DCPS
GDPPC	1		
TO	-0.1693	1	
DCPS	-0.4573	0.3721	1

Source: Authors' calculations

In the article, two tests were used that correspond to the characteristics of the analyzed panel (N<T) - Breusch–Pagan LM and Pesaran-scaled LM test. Given the high degree of interactivity in the functioning of analyzed economies, it is assumed that the data will be cross-sectionally dependent. Consequently, a second-generation unite root test, Cross-sectionally ADF (CADF) test and the Cross-sectional augmented IPS (CIPS) test will be used. Westerlund's error-correction-based panel cointegration tests was used in the paper to test for cointegration between variables. If cointegration is confirmed, short-term and long-term relationships between variables will be established through the ARDL model, which will be estimated using the Mean Group (MG) or Pooled Mean Group (PMG) estimators. The Hausman test will be used to decide between MG and PMG estimators.

RESULTS AND DISCUSSION

Table 3. shows the results of cross-sectional dependence and unit root tests. The cross-sectional dependence can be confirmed based on the Breusch-Pagan LM and Pesaran-scaled LM tests. Furthermore, all variables are not stationary at level besides the GDPPC (by the CIPS test) and DCPS (by the CADAF test). Different orders of integration of variables and occurrence of cross-sectional dependence support the use of the Westerlund cointegration test and the panel ARDL model.

Table 3. Cross-sectional dependence and unit root tests results

Variable	GDPPC	TO	DCPS
Breusch–Pagan LM	120.8042 (0.0000)	194.6544 (0.0000)	162.3475 (0.0000)
Pesaran-scaled LM	19.31712 (0.0000)	32.80025 (0.0000)	26.90186 (0.0000)
CIPS (level)	-3.060*	-0.894	-1.688
CIPS (first difference)	-5.091*	-2.937*	-2.371*
CADF (level)	-2.193	-1.950	-2.406*
CADF (first difference)	-3.910*	-2.810*	-3.958*
*Notes: Figures in the parenthesis are p-values, * symbolizes the rejection of the null hypothesis of unit root*			

Source: Authors' calculations

In table 4. the null hypothesis of no cointegration between the variables is rejected at the 1% significance level according to the p values of Gt, Ga, Pt, and Pa statistics, which imply the equilibrium association among the variables. Results denote the appearance of the cointegration relationship between economic growth, trade openness, and financial development in the entire panel.

Table 4. The Westerlund cointegration test results

	Test	Value
Westerlund cointegration test	Gt	-2.045***
	Ga	-3.371***
	Pt	-3.965***
	Pa	-4.333***
*Notes: ***, **, and * represent 1, 5 and 10 percent level of significance, respectively.*		

Source: Authors' calculations

The results of the Hausman test indicate that the MG estimator is more suitable for further panel analysis since the long-term homogeneity restrictions are rejected. Accordingly, Table 5. contains the results of the Hausman test and the Mean Group Regression results.

Table 5. Hausman test and Mean Group Regression results

Dependent variable	GDPPC ARDL(1 0 0)
Long-run coefficient	
TO	0.1148453***
DCPS	-0.2532225***
Short-run coefficient	
ECT	-0.7419893***
ΔTO	0.2323267***
ΔDCPS	0.1262497**
Hausman test value	9.96
P-value	0.0069
*Notes: ***, **, and * represent 1, 5 and 10 percent level of significance, respectively. The optimal lag length is determined by Schwarz Information Criterion*	

Source: Authors' calculations

The results reveal a positive impact of trade openness on economic growth in both the long and short term, an increase in trade openness of 1% enhances economic growth by 0.11% in the long run and 0,23% in the short run. The positive impact of trade openness on economic growth is not unexpected and is consistent with the results obtained by Silajdzic and Mehic (2018). The authors provide strong evidence for the positive relationship between trade intensity measures and economic growth, emphasizing the benefits of trade integration through increased imports from technologically advanced EU countries to less developed CEE economies. In the last two decades, the CEE countries have pursued a broad trade liberalization policy, opening their markets to outside participants. The trade liberalization that accompanied their accession to the EU was the reform that had the most profound impact on these economies (Stojčić et al., 2018). Iyke (2017), analyzing the impact of trade openness on economic growth in 17 CEE countries from 1994 to 2014, points out that trade openness is a good predictor of economic growth in these countries. On the other hand, a 1% increase in financial development measured by domestic credit to the private sector decreases economic growth by 0.25%, while in the short term, this impact is positive. One of the reasons may be the existence of a certain financial threshold in the relationship between financial development and economic growth, so a growth in credit in the short term that is below this threshold leads to an increase in economic growth (Law & Singh, 2014). However, a further increase in credit will lead to a negative impact of financial development on economic growth. This outcome is consistent with the result of Tang's (2015) study. Despite increased bank credit growth in CEEC, the author finds that bank credit flows harm economic growth. The growing reliance of CEEC banks on EU bank capital supply may be the cause of the negative effect, as bank credits may not be managed for productive investments due to EU bank dominance. Also, the negative impact of financial development on economic growth is possible if the expansion of credit to the private sector is not accompanied by adequate increase in real output. From Table 5. it can also be seen that the speed of adjustment (ECT) is negative and statistically significant, which indicates that there is a long-term equilibrium relationship between financial development, trade openness, and economic development in the observed CEE countries. The results confirm the first hypothesis, which assumes that increasing trade openness incites economic growth. The second hypothesis can be partially accepted since the increase of domestic credits to the private sector in the short term has a positive impact on economic growth, while in the long term, this impact becomes negative.

CONCLUSIONS AND RECOMMENDATIONS

The article includes an analysis of the impact of trade openness and financial development measured by domestic loans to the private sector on economic growth in 6 CEE countries, viz Bulgaria, Croatia, the Czech Republic, Hungary, Poland, and Romania. The paper includes an analysis of the impact of trade openness and financial development measured by domestic loans to the private sector on economic growth in 6 CEE countries, viz Bulgaria, Croatia, the Czech Republic, Hungary, Poland, and Romania. Analysis of the long-term relationship between variables was considered using Westerlund's error-correction-based panel cointegration tests. Test outcomes established the presence of the cointegration relation between trade openness, domestic loans to the private sector, and economic growth in the complete sample of countries. Furthermore, the short-term and long-term impacts of trade openness and the volume of domestic loans to the private sector on economic growth were analyzed using the MG estimator. The long-term aspect of the study showed the positive impact of trade openness and the negative effect of financial development on economic growth in the analyzed countries. The results of the short-term analysis revealed a significant positive impact of trade openness and financial development on economic growth in the entire panel.

The positive impact of trade openness on economic growth is not unexpected and has been confirmed by numerous empirical studies in CEE countries, as highlighted in the results and discussion section. Furthermore, the results suggest that more finance harms economic growth in the observed countries. Knowing the optimal level and efficient channeling of financial resources for productive activities are important for ensuring the efficiency of financial development and positive impact on economic growth (Law & Singh, 2014).

One of the limitations of the analysis is the inclusion of years of economic crisis. Studies conducted by Law and Singh (Law & Singh, 2014), and Arcand et al. (2015), which takes into account the years of crisis, reveals that more finance discourages economic growth.

As it was pointed out in the paper that the possible reason for the negative impact of financial development on economic growth is the existence of a certain financial threshold, the recommendation for further analysis can be oriented towards analyzing the extent of the financial threshold in the mentioned countries.

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CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

005(082)
339.9(082)
336(082)
332(082)
658.8(082)
004(082)

INTERNATIONAL Scientific Conference EBM - Contemporary Issues in Economics, Business and Management (7 ; Kragujevac ; 2022)

[Seventh International Scientific Conference] Contemporary Issues in Economics, Business and Management [EBM 2022], Kragujevac, 2022 / [organizer] Faculty of Economics, Kragujevac ; editors Gordana Radosavljević, Katarina Borisavljević. - Kragujevac : Faculty of Economics, 2022 (Kragujevac : Faculty of Economics). - [12], 386 str. : graf. prikazi, tabele ; 24 cm

Tiraž 100. - Str. [5-6]: Preface / editors. - Bibliografija uz svaki rad.

ISBN 978-86-6091-133-1

1. Radosavljević, Gordana, 1961- [уредник] [аутор додатног текста]
а) Менаџмент -- Зборници б) Глобализација -- Зборници
в) Регионализација -- Зборници г) Финансије -- Зборници
д) Маркетинг -- Зборници ђ) Информациона технологија -- Зборници

COBISS.SR-ID 84084745

ebm 2022

CONTEMPORARY ISSUES IN
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AND MANAGEMENT

FACULTY OF ECONOMICS
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ISBN 978-86-6091-133-1