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**BANKING SECTOR DEVELOPMENT AND ECONOMIC GROWTH IN WESTERN BALKAN COUNTRIES**

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**Abstract:** Since the collapse of the centrally-planned system, countries in transition have walked a rough road to recovery. Almost instantly, national economies opened to global markets, enforced price liberalization measures, combined with macroeconomic stabilization policies and structural reforms. At the beginning of the 1990s, they experienced a fall in output, accompanied by other deteriorating features, such as high unemployment, emigration, high level of informal economy, deteriorating balance of payments, growing debt, wars, ethnic problems etc. The annual real GDP per capita growth of most transitive economies during the early periods of transition (1990-1993) was. A major caveat in assessing the depth of the output fall is that it refers to official estimates and thus ignores the shadow economy or informal sector, which has grown very rapidly in the early transition years. The South-East European countries, additionally affected by the wars of Yugoslav secession, recorded notably larger output losses at the beginning of the transition than Central-East European Countries, reaching a negative peak of -20%, and an average decline of 10.90%, but exhibited high growth rates in the mid and late 1990s, as hostilities ended, macroeconomic stabilization took hold and structural reforms advanced. The speed of recovery differed significantly across countries, particularly in the period 1994-2001. This is particularly case in countries from Western Balkan where they were facing and still face many economic problems like as prolonged recessions, due to differing reform progress, varying impact of the war, unemployment, poverty, low living standards and inflation. Thus, these countries always try to increase their national income and hence create more jobs with maintained economic growth. Bearing this in mind it is essential the countries from this region consider steps towards financial liberalization and deregulation which will help open the borders for capital flows and attract new investments. In fact, financial and banking sector development leads to the increase in economic growth in any economy through financing economic development. Banking system is important to the economic growth through its ability in gathering and attracting deposits from savers. Secondly, its role in providing loans to encourage investment and production. Thirdly, its ability in creating economic expansion to the most of economic sectors such as; Agriculture, industry and trade sector. Fourthly, its intermediary role between savers and borrowers. Finally, banking industry provide entrepreneurs with required loans in order to finance the adoption of new production techniques. This paper examines the question whether in 6 countries from Western Balkan the banking sector influences economic growth. The empirical investigation was carried out using fixed effect model. In this study we use two measures for the level of banking development bank credit to private sector in relation to GDP (private credit) and interest margin. Namely, private credit still appears a superior option to the pure ratio of broad money to GDP used in some studies, because it excludes credits by development banks and loans to the government and public enterprises. We expect positive relationship between private credit and economic growth. The second variable is interest margin is likely a good estimator for efficiency in the banking sector as it describes transaction costs within the sector. If the margin declines due to a decrease in transaction costs, the share of savings going to investments increases. As growth is positively linked to investment, a decrease in transaction costs should accelerate economic growth. The results suggests that credit to the private sector is positively and significant, while interest margin is negatively and insignificant related to economic growth.

**Keywords:** Banking sector development, Economic growth, Western Balkan

**1. INTRODUCTION**

There is a long debated issue whether there is a connection between financial development and economic growth. The question is whether there is a causality and if so in what direction: is it the financial development that induces economic growth or maybe financial development merely follows economic growth Petkovski and Kjosovski(2014). During the last decade, and particularly after the outbreak of the recent international financial crisis, it became more evident that the consequences of excessively risky credit supply can not only contribute to the possible collapse of some banking and other financial institutions, but also affect the process of financing the other economic sectors that contribute to economic growth Ferreira (2015). There is a strand of literature (Petkovski and Kjosovski 2014; Pradhan et al. 2014; Asiri and Abdullah 2015; Puryan 2017 Ferreira 2018) who pointing to a general consensus that well-functioning banking institutions and financial markets contribute to economic growth by decreasing transaction costs and the problems connected to asymmetric information. Furthermore, banking institutions are supposed to

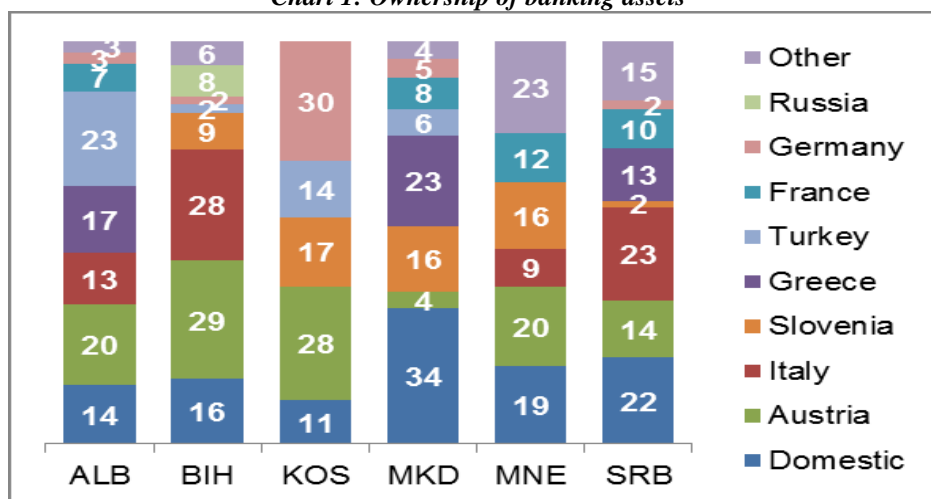
facilitate trade and the diversification of risk, and also to increase the financial resources to assist economic growth, by mobilizing savings, identifying the best investment opportunities and selecting the most profitable projects Ferreira (2015).

The relationship between financial sector and economic growth in transition countries has been largely ignored in the earlier empirical literature. It is of this view, countries from Western Balkan can be an especially interesting aspect of this discussion, because when the transition began in the early 1990s in these countries, the establishment of a properly working financial sector has been delayed or jeopardized by a number of adverse developments like war, political instability, hyperinflation and pyramid schemes.

**Banking systems in the Western Balkan have shown significant resilience during the crises of recent years.**

The region’s banking sectors, all dominated by foreign-owned subsidiary banks, have weathered the various crises well, helped by strong support from, and coordination with, the international community. Foreign ownership of banking systems ranges from about two-thirds in Macedonia to 90 per cent in Kosovo (see Chart 1). Italian and Austrian banks are among the largest in the region. They are followed by Greek banks, which have a sizeable (although declining) market share in Macedonia, Albania and Serbia. French, Slovenian and German banking groups are also present in the region, as well as OTP of Hungary, especially in Montenegro, and Turkish-owned banks, particularly in Albania and Kosovo.

*Chart 1: Ownership of banking assets*



Source: Bankscope 2018

The aim of this paper is to empirically examine whether the banking sectors plays a growth-supporting role in economic growth in Western Balkan countries and is a modest attempt to rectify this gap in the literature. We concentrate on banking sectors as they typically have dominated financial intermediation in transition countries. We use panel data from the 6 countries from Western Balkan (Albania, BIH, Kosovo, Macedonia, Montenegro and Serbia) over the period 2005-2018 to estimate the impact of financial development on economic growth. According to the knowledge of the authors this is the first empirical study who have investigate the impact of banking sector development and economic growth in the countries from Western Balkan. The selected period is determined by the need to encompass a period of relative boom, (i.e., upswing of economy, downfall, economic crisis), as well as its recovery.

**2. DATA AND METHODOLOGY**

**2.1 Data**

In our research of banking sector development and economic growth nexus, we estimate standard growth equation using a panel dataset consisting of 6 countries from Western Balkan (Albania, BIH, Kosovo, Macedonia, Montenegro and Serbia) over the period 2005-2018. Economic growth is measured by the growth rate of GDP per capita. Factors that we use as control variables that may explain economic growth include the following: private credit, interest margin, export, investment, government consumption and Inflation. Data are obtained from World development indicators (WDI) database.

## 2.2 METHODOLOGY

Following the theories of economic growth, Barro, and Sala-i-Marin (2004) suggest that real economic growth should be correlated with the sets of variables which includes: initial values of some variables marked by  $\gamma_{i,t}$  (such as: the GDP per capita) and control variables, marked by  $f_{i,t}$  which reflect the financial development,  $C_{i,t}$  reflect a set of conditioning variables  $\mu_i$  and  $\varepsilon_{i,t}$  error terms,  $i$  (where  $i = 1, 2, \dots, N$ ) the observational unit (country), and  $t$  (where  $t = 1, 2, \dots, T$ ) the time period, while  $\varepsilon$  is a white noise error with zero mean, and  $\mu$  a country-specific component of the error term that does not necessarily have a zero mean. The parameter  $\alpha_i$  is the country-specific intercept which may vary across countries

The basic regression takes the form:

$$g_{i,t} = \gamma_{i,t} + \alpha_i + \beta f_{i,t} + \gamma_i C_{i,t} + \mu_i + \xi_{i,t} \quad (1)$$

The focus of the analysis is on  $f$ , which measures the impact of financial sector development on economic growth. In order to measure financial development, we use several indicators of financial development and financial efficiency, which are discussed in more detail in the data section.

For this purpose we specify the minimal model for economic growth, as a tool to address this connection.

$$L(\text{GDP per capita})_{it} = \alpha_i + \beta_1(\text{Private credit})_{it} + \beta_2(\text{Interest margin})_{it} + \beta_3(\text{Investment})_{it} + \beta_4(\text{Export})_{it} + \beta_5(\text{Government expenditure})_{it} + \beta_6(\text{Inflation})_{it} + \varepsilon_{it} \quad (2)$$

Empirical analysis was conducted by regression estimation of conjoint data of time cross-sections and time lines. Data were not available for all the 6 countries for all the years, which resulted in the “unbalanced” set of data. Hsiao (2003) list several benefits of using panel data 1. The use of panel data enables us to control for individual heterogeneity. 2. Panels provides more informative data, more variability, less collinearity among the variables, greater degree of freedom, and more efficiency. 3. With panel data, one is better able to study the dynamics of adjustment. 4. Panel data are more suitable for identifying and measuring effects that are simply not detectable in pure cross-sections or pure time-series data. 5. Panel data models allow us to construct and test more complicated behavioural models than pure cross-section or time data models.

The starting point in each panel model is the assessment of fixed and random effects. In short, the analysis of fixed effects assumes that the units of interest (in our case, banks) are fixed, and that the differences between them are not of interest. What is of interest is the variance within each unit, assuming that the units (and their variations) are identical. By contrast, the analysis of random effects assumes that the units are a random sample extracted from a larger population, and that therefore the variance between them is interesting and a conclusion can be drawn for a larger population. The more fundamental difference between them is the way of locking. The model of fixed effects supports only a conclusion for the group of measurements (countries, companies, etc.). The random effects model, on the other hand, provides a lock to the population from which the sample was extracted. Judson and Owen (1996) argue that the model of fixed effects is desirable in the analysis of economic and financial systems for two reasons: i) the unobserved individual effects that represent the characteristics of units (ie, companies) are very likely to be in correlation with other regressors; and ii) it is quite likely that such a panel is not a random sample of many countries / companies, but most of the countries / companies of interest. In our case the situation is not that each country is randomly sampled from a pool of worldwide countries. The sole interest lies in the mentioned Western Balkan countries and therefore a panel with random effects does not seem to be appropriate. However, in addition to this, we will also conduct the famous statistical test of Hausman (1978) for distinguishing between the models of fixed and random effects.

**3. EMPIRICAL RESULTS**

*Table 1 The banking sector development and economic growth Fixed Effects Models (2005-2018)*

Variable	Coefficient	Prob.	Coefficient	Prob.
C	7.67	0.000	6.95	0.000
DCPSB	0.127	0.0015	0.068	0.0015
IM			-0.016	0.163
INV	0.142	0.0948	0.040	0.1478
EXPORTS	0.012	0.0025	0.022	0.000
GOVS	0.076	0.6992	0.048	0.0133
INFLATION	-0.863	0.9891	-0.002	0.6864
Hausman test	0.245		0.176	
Cross-section F	144.27	0.000	83.71	0.002
Period F	41.05	0.000	38.04	0.000
Cross-Section/Period F	68.10	0.000	56.11	0.000

Source: Authors' calculations

Table 1 presents the results. Diagnosis is given in the lower part of the table. The Hausman test does not reject the zero hypothesis that the fixed effect evaluator is efficient and consistent with that of random effects. Furthermore we can clearly see that according to the values of F statistics (144.27; 41.05 and 68.10 in the first model and 83.71; 38.04 and 56.11 in the second model), there is strong evidence of fixed cross-section and period effects in the both models, i.e. existence of only common intercept. This was expected since we are dealing with relative small number of countries.

According to the results from columns 1 in Table 1 DCPSB enters has positively and significant effect on economic growth, which respects our initial presumption. In particular, the results show that private credit shocks influence GDPPC growth mainly through investment and private consumption in Western Balkan countries. These findings, in line with most empirical literature such as Garcia-Escribano and Han (2015) Grabowski and Bujnowicz (2016) Škare et al. (2019) seem to suggest the existence of credit channels in supporting economic growth in our sample EM countries. The results show that with credit expanding, consumers can borrow and spend more and businesses can borrow and invest more. Increasing consumption and investment creates jobs and expands income and profits. Moreover, the expansion of credit tends to cause the price of assets such as stocks and property to increase, thereby boosting the net worth of the public. This facts were one of the crucial indicator for conomic growth in Western Balkan countries.

In the columns 2, the DCPSB variable is replaced with the IM variable. The result show that IM enters negatively in growth equations, but it lacks significance. These results are in line with theories presented in (Blackburn and Hung 1998; Harrison et al. 1999), an efficient banking sector decreases transaction costs and the margin between lending and deposit rates. The share of savings allocated to the investments increases and, according to the endogenous growth theory, leads to higher economic growth. The insignificance of this variable could be due either to the measurement errors that interest-rate margin may be subject to, or, as pointed out by Petkovski and Kjosevski (2014) to differences in activity and risk premium, rather than efficiency and competition, that could be reflected by the interest rate margins.

The results of the export is according to our expectation. Namely export creates the opportunity for faster implementation of the rapidly improving technologies from the leading countries. In our case this mean that countries from Western Balkan could grow faster than developed economies if it is cheaper to import new technologies than to create them within the country. In other words, export helps to allocate the resources in a more efficient way. Thus, the export increases economic growth due to efficient allocation of resources, implementation

of new technologies and ideas, but the economy grows at a high rate until the trade openness reaches the equilibrium.

The results from, government expenditure role in economic growth was statistically significant only in the second model and is in line with the study of Petkovski and Kjosevski (2014). This results is not suprising baring in mind that the state of domestic capital markets development is still in its infancy in countries from Western Balkan, and therefore, government expenditure role in economic growth is most probably exaggerated in current state of economic development.

The results from investment is in line with our expectations and this variable have positive and significant impact on economic growth, only in the first model, while inflation affects GDPPC negatively, but not significant in our two models.

Furthermore the positive value obtained for the constant term indicates that the variables that were not included in the model also have a positive impact on GDP. Also, it stands out the relatively high value of the constant term C, which leads us to conclude that the factors that were not taken into account in the construction of the regression model have a significant influence on the growth of GDPPC.

#### 4. CONCLUSION

Using fixed effect model we examined whether banking sector contribute to economic growth across sample of 6 countries from Western Balkan in the period from 2005 to 2018. We used two variables to measure the level of banking sector, amount of bank credit allocated to the private sector as a share of GDP and interest rate margin.

To summarise, the results from the study indicate that banks credit to private sectors has a significant influence on the evolution of GDP in the countries from Western Balkan. An increase with one percent point of credit will determine an increase of 0.127 percent points in GDPPC. Based on the results of this study we can say that banks should continue to finance the economy through credit as it is contributing significantly to the GDPPC growth in the countries from Western Balkan.

The findings could be suggestive for bank's policy makers. The key is to implement the policies that are going to provide institutional improvements, encourage competition, and contribute to increasing efficiency, especially in risk management, and product development of banks. Bank should better use their unique position among financial intermediaries regarding the function of providing mechanism of payment which enables them to collect important information on users of their services. The bank efforts should be helped by institutional reforms, too. Beside those that provide competitive bank market structure and adequate banking regulation, the improvements are needed in the field of forming public creditor register, the valuation of collateral and creditor rights protection. With all of these improvements, banking sector would have more potential to contribute to economic growth.

In a context of lower international liquidity and higher cost of country risks, banks in the countries from Western Balkan will have to rely much more on domestic funding, thus domestic deposits, matching lending growth to local fund-raising capacity. The loans over deposit ratio will have to grow over time.

On the overall, challenges ahead for the banking sector in the region include the growing national regulatory pressures, with moves which are often un-coordinated among countries, as well as Basel III implementation.

It would be interesting for future research to extend the sample and analyze and compare sub-groups of transition countries (South Eastern Europe, Baltic and Balkan's States), and to include the equity markets, consumer loans into the model and explore the link between financial sector openness - financial sector competition and financial sector competition - economic growth.

#### REFERENCES

- Asiri, K., & Abdollah, A.M. (2015). Economic growth and stock market development in Bahrain. *Journal of Applied Finance and Banking*, 5(7), 67-80
- Baro, R., & Sala-i-Martin, X. (2004), *Economic Growth*, second edition, MIT press.
- Blackburn, K., & Hung, T.Y.(1998). A theory of growth, financial development and trade. *Economica* 65, 107-124.
- Ferreira, C. (2015). The relevance of the EU banking sector to economic growth and the recent financial crisis. *Working Papers Department of Economics* 2015/02, ISEG - Lisbon School of Economics and Management, Department of Economics, Universidade de Lisboa
- Ferreira, C. (2018). Financial Crisis, Banking Sector Performance and Economic Growth in the European Union. *Economia Internazionale / International Economics, Camera di Commercio Industria Artigianato Agricoltura di Genova*, vol. 71(3), 257-288
- Garcia-Escribano, M., & Fei Han, F. (2015) Credit Expansion in Emerging Markets: Propeller of Growth? *IMF Working Paper*

- Grabowski, W., & Maciejczyk-Bujnowicz, I. (2016). Optimizing the Level of Bank Credit to Promote Economic Growth. Implication for Poland. *Studia Ekonomiczne. Zeszyty Naukowe Uniwersytetu Ekonomicznego Katowicach* Nr 269
- Hausman, J. A. (1978). Specification Tests in Econometrics. *Econometrica*, 46(6), 1251–1271.
- Harrison, P., Sussman, O., & Zeira, J. (1999). Finance and growth: Theory and new evidence. *Federal Reserve Board Discussion Paper No. 35*.
- Hsiao, C. (1986). Analysis of Panel Data. *Econometric Society monographs* No. 11, New York: Cambridge University Press
- Judson, R. A., & Owen, A. L. (1996). Estimating Dynamic Panel Data Models: A Guide for Macroeconomics. *Economics Letters*, 65, 9-15.
- Petkovski, M., & Kjosevski, J. (2014). Does banking sector development promote economic growth? An empirical analysis for selected countries in central and South Eastern Europe. *Economic Research Ekonomska Istraživanja*, 27(1), 55-66
- Pradhan, R. P., Arvin, M. B., Norman, N. R., & Nishigaky, Y. (2014). Does banking sector development affect economic growth and inflation? A panel cointegration and causality approach. *Applied Financial Economics*, 24(7), 465-480
- Vahid, P. (2017). The Causal Relationship between Economic Growth, Banking Sector Development and Stock Market Development in Selected Middle-East and North African Countries *International Journal of Economics and Financial Issues*, 7(3), 575-580.
- Škare, M., Sinkovic, D., & Porada –Rochon, M. (2019). Measuring Credit Structure Impact on Economic Growth in Croatia Using (VECM) 1990–2018. *Journal of Business Economics and Management* Vol 20 Issue 2, 294–310