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Original scientific paper

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FINANCIAL CONVERGENCE OF THE REPUBLIC OF MACEDONIA WITH THE EUROPEAN UNION

Abstract

In this paper we explore the issue of financial convergence of the Republic of Macedonia with the EU. The purposes of our analysis is to determine the degree to which the domestic financial markets have become more similar to european financial markets. Is it interesting for several reasons. First, the country, the Republic of Macedonia, considered were centrally planned economy with undeveloped financial services. The transition path to a market economy was very uneven in the beginning due to delayed structural reforms and bad macroeconomic policies. As a result is achieved some markedly better outcomes, but there is greater room for the improvement in terms of increase of per capita income and price stability. These differences might have influenced also the process of integration of the domestic financial sector with those of the EU states. Secondly, the removal of barriers to factor mobility (a prerequisite for an economic union) implies convergence of the factor returns. Since capital tends to be relatively more mobile than labour, for example, the price equalization should take place more rapidly. The state of financial integration is also important from a policy making point of view. Well integrated markets are characterized by faster and more complete transmission of changes in the monetary policy.

The analysis in this paper will be based on two approaches to measuring convergence which have been originally developed in the growth literature-cross-sectional measures and compared with to the European standards- cointegration analysis.

Key words: financial convergence, financial markets, interest rate, bond yield, structural changes.

JEL Classification: E44

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1. Introduction

Measuring financial integration between the "new" EU member states and Eurozone is of great interest for policymakers and researchers. To begin, both theory and empirical findings suggest that financial integration contributes to a more efficient capital allocation, which, in turn, fosters economic growth. Several studies find that financial integration in the "old" EU member countries resulting from the introduction of the euro is beneficial for economic development and growth. In addition, the extent to which financial markets in the "new" EU member states are integrated with the Eurozone countries is an important factor in the recent debate on the appropriate time to adopt euro in these countries. Although the benefits from giving up monetary autonomy and adopting a single currency are considered to be proportional to the degree of financial integration already achieved, the financial integration itself can be promoted by the elimination of currency risks following the expansion of the Eurozone. Finally, financial integration has important implication for international investors and portfolio managers.

More integrated financial markets offer greater opportunities for agents to diversify portfolios and share idiosyncratic risks across countries. However, the more integrated financial markets can also lead to spill-overs of negative systematic shocks originating in the "old" EU countries to the "new" EU member states.

Despite the importance of financial integration for monetary convergence and economic development in the "new" EU member states, only few studies provide a quantitative account of the degree and development of financial integration in these countries. Most of the existing studies focus on various aspects of financial integration in the most developed "new" EU member states, including the Czech Republic, Hungary and Poland, for which the information on various financial indicators is more readily available, although some recent studies cover more countries and financial markets. A popular approach for studying financial integration is based on the so-called-convergence and convergence measures borrowed from the economic growth literature. The convergence detects catching-up tendencies across countries, while convergence identifies the state of the convergence for a particular period in time. Both measures are based on the law of one price, which disregards the presence of market frictions and transaction costs.

Another widely used technique employed in the financial integration literature is based on the co-movement of interest rates across countries. The workhorse methodology in this type of empirical works is cointegration analysis. However, similarly to the previous measures, a simple linear cointegration methodology is too restrictive since it does not take into account the impact of transaction costs and market frictions, that restrict the adjustment of interest rates towards long run equilibrium. In addition, a direct application of cointegration methods in the context of "new" EU member countries, most of which evolved through the transformation process from

planned to market economy during the 1990s, is problematic as during the transformation period relationships are changing.

Given the wide variety of empirical strategies employed for studying financial integration in the "new" EU member states, it is not surprising that the evidence coming from these studies is controversial.

In this paper we address the issue of financial market integration in the Republic of Macedonia. Our estimation results suggest that financial markets in the Republic of Macedonia gradually became more financially integrated with EU members. However, the degree of integration differs across financial segments: money markets appear to be the most integrated ones due to lower transaction costs, while loan markets display the lowest degree of integration.

2. THEORETICAL BASE AND ANALYTICAL FRAMEWORK

The interest in economic convergence emerged from the work on growth theory. One important implication of the neoclassical growth model is that the rate of increase of per capita output is inversely related to the absolute or conditional (if differences in the parameters of the economies are allowed) convergence. In this case the relevant concept of convergence is conditional convergence. Within the framework of conditional convergence, based on the Barro and Sala-i-Martin¹⁾ equation (which is a loglinearized approximation of the Solow growth model with Cobb-Douglas production function), an economy tends to grow faster when the value of the parameter β is positive (that means the speed of adjustment to equilibrium).

The concept of β -convergence has been criticized on a number of grounds. One of the best known critiques comes from Milton Friedman. In his article²⁾ Friedman is assumed that the true test of convergence is a decline in the variance among individual observations. This description of convergence has become popular as σ -convergence³⁾. For an extensive review of the literature on the various tests of convergence can see Rassekh⁴⁾.

The idea of convergence, that originated in relation with economic growth, was later applied to a wide range of problems, including the integration of financial markets. There is a well developed strand in the literature that tries to test and find evi-

1) Barro, R., Sala-i-Martin, X.: Convergence, *Journal of Political Economy* 100, No.2, 1992.

2) Friedman, M.: Do Old Fallacies Ever Die?, *Journal of Economic Literature* 30, No. 4, 1992.

3) Barro, R., Sala-i-Martin, X.: *Economic Growth*, McGraw-Hill, 1995.

4) Rassekh, F.: The Convergence Hypothesis: History, Theory and Evidence, *Open Economies Review* 9, 1998.

dence for the financial convergence among countries and especially, within a monetary union. Since the adoption of the Maastricht Treaty, which set the principles for further integration in the EU and the establishment of common currency, there has been substantial interest in testing the financial convergence hypothesis within the EU and the euro area. The expectations to find convergence are based on the effects of the removal of national barriers to flow of capital, explicit and market driven harmonization of regulations and supervisory standards and the mechanisms for coordination and convergence of macroeconomic policies of the national authorities within the union. Although the economic union should allow all factors of production to move freely across the borders, capital flows cross the borders much more easily than people or goods. Hence, one would expect to see a faster convergence in the financial markets as compared to the labour and goods markets.

A comprehensive methodology for analyzing the process of financial market integration in the European Union is provided by Adam et al.⁵⁾ The authors suggest to use a variety of indicators, based on price and returns data as well as indicators based on quantities (besides the β and σ convergence measures) to infer about the degree of integration of capital markets in the EU. The paper by Baele et al.⁶⁾ steps on the methodology developed in Report to the European Commission and complements it with some additional indicators for integration, like the response of interest rates to common news vs. local news. Also, analysis of the corporate bond market is included. They find that in the period 1993-2003 the degree of integration has increased in all markets except for the credit market. The money market is found to be the most integrated among the markets notwithstanding the differences that still remain between the various segments of the money market. As far as the new EU member states are concerned, a recent study by Baltzer et al.⁷⁾ provides valuable insights about the developments of the financial markets in these countries.

Following Baele et al. the authors estimate price-based, news-based and quantity-based measures of integration. They find that the financial markets in the NMS are considerably less integrated than the countries in the euro area. Yet, the process of integration is under way and the EU accession has given a significant impetus to it. Integration is more visible in the money and banking markets, both among NMS and vis-a-vis euro area, whereas in the bond markets it seems to be more relevant for the large economies.

⁵⁾ Adam, K., Japelli, T., Menichini, A., Padula, M., Pagano, M. : Analyse, Compare, and Apply Alternative Indicators and Monitoring Methodologies to Measure the Evolution of Capital Market Integration in the European Union, Report to the European Commission.

⁶⁾ Baele, L., Ferrando, A., Hordahl, P., Krylova, E., Monnet, C.: Measuring Financial Integration in the Euro Area, ECB Occasional Paper No. 14, April 2004.

⁷⁾ Baltzer, M., Cappiello, L., De Santis, R., Manganelli, S.: Measuring Financial Integration in New EU Member States, ECB Occasional Paper No. 81, March 2008.

The backbone of the financial convergence analysis in the above cited papers is the following panel regression:

$$(1) \quad \Delta r_{i,t} = \alpha_i + \beta r_{i,t-1} + \sum_{l=1}^L \gamma_l \Delta r_{i,t-l} + \epsilon_{i,t}$$

where $r_{i,t}$ denotes the spread between the return on some asset in country i and the return of the benchmark asset, Δ is the difference operator, $\epsilon_{i,t}$ is the error term and α_i is a country-specific constant. The main parameter of interest in this equation is β . Negative and statistically significant estimate of this parameter implies that returns in countries with high returns tend to decrease more rapidly. This specification was considered by Evans and Karras¹ in their study of economic growth.

Along with the β and σ measures, which are based on cross-sectional data, there are a number of studies which employ time-series tests of convergence. The time-series notion of convergence requires that the forecasts of the variable of interest y in countries i and j , given the available information I_t at time t , should be equal, i.e.

$$\lim T \rightarrow \infty E(y_{j,t+T} - y_{i,t+T} | I_t) = 0$$

This approach to convergence is associated with a number of assumptions, e.g. zero mean stationarity of the difference of the variables. Datta⁹⁾ noted that co-integration based tests, which assume structural stability, would fail to detect convergence if the countries are still in the process of converging. She proposed an alternative approach to capture the idea that the cross-country differences reflect the fact that the steady-state has not been reached yet. Furthermore, the process may not be “smooth”, i.e. there could be structural changes which could lead to a rejection of the hypothesis of convergence. To overcome this shortcoming Datta suggests estimating a time-varying parameter model where the parameter $\hat{\alpha}_t$ changes over time following a first-order autoregressive process. In doing so she uses a definition of convergence as catching up: if $y_{i,t} > y_{j,t}$ then $E(y_{i,t+k} - y_{j,t+k} | I_t) < y_{i,t} - y_{j,t}$. The model used to infer about convergence is written in a state-space form:

$$(2) \quad y_t = X_t \beta_t + \epsilon_t$$

$$(3) \quad \beta_t = M \beta_{t-1} + v_t.$$

Here X_t is a matrix of exogenous variables and M is a diagonal matrix.

The time-varying parameters β_t are estimated with the Kalman filter. The “convergence as catching up” concept has been applied for a sample of OECD countries by estimating the following equation:

⁸⁾ Evans, P., Karras, G: Convergence Revisited, *Journal of Monetary Economics* 37, 1996.

⁹⁾ Datta, A.: Time-series Tests of Convergence and Transitional Dynamics, *Economics Letters* 81, 2003, pp. 233-240.

$$\ln Y_i(t) = \beta_0(t) + \beta_1(t) \ln Y_{us} + \varepsilon_i(t),$$

where Y_i and Y_{us} denote the per-capita GDP of country i and us, respectively. Convergence in this setup is measured by the difference ($Y_{us} - \hat{Y}_i$), i.e. the difference between the actual value for the reference economy and the fitted value from the time-varying parameter (TVP) model for country i . The declining trend of this difference signals convergence.

It is obviously that there is no single measure which would capture all aspects of financial integration. Many of the relevant authors consider financial markets to be integrated if all potential market participants with the same relevant characteristics face similar rules in dealing with financial instruments, have equal access to the mentioned financial instruments and are treated equally when active in the market. The authors divide existing measures of financial integration into three broad categories: (a) price-based, (b) news-based, and (c) quantity-based measures.

The first set of measures is based on the interest parity relationship, which is presentation of the no-arbitrage condition (law of one price) in financial markets. The second set of measures makes use of the asset pricing theory and distinguishes between common (systematic) and local (idiosyncratic) risks. The markets are considered to be fully integrated when only the common risk factors (often proxied by yields in the benchmark country) determine the equilibrium returns. Finally, the third group of measures accounts for quantitative characteristics of cross-border investment activities in the form of capital flows, listings, M&A and other relevant indicators.

3. STUDIES ON EU FINANCIAL INTEGRATION

Most of the existing studies on EU financial integration have focused exclusively on financial integration in the “old” EU member states¹⁰⁾. This literature documents that European countries have become more financially integrated over time and that

¹⁰⁾ Fratzscher, Marcel, “Financial Market Integration in Europe: on the Effects of EMU on Stock Markets,” European Central Bank Working Paper Series n. 48. 2001; Adam, K., Japelli, T., Menichini, A., Padula, M., Pagano, M.: Analyse, Compare, and Apply Alternative Indicators and Monitoring Methodologies to Measure the Evolution of Capital Market Integration in the European Union, Report to the European Commission; Adjaoute, Kpate, and Jean-Pierre Danthine (2000), “EMU and Portfolio Diversification Opportunities,” FAME Research Paper no. 31, April. Adjaoute and Danthine, 2003; Baele, L., Ferrando, A., Hordahl, P., Krylova, E., Monnet, C.: Measuring Financial Integration in the Euro Area, ECB Occasional Paper No. 14, April 2004; Hardouvelis, Gikas A., Dimitrios Malliaropoulos and Richard Priestley (1999), “EMU and European Stock Market Integration,” CEPR Discussion Paper no. 2124., 2006; Kalin Hristov and Rosen Rozenov: Financial Convergence in the New EU Member States, W.P. D.1.2., European Commission, 2009.

the degree of integration has accelerated following the launch of the single currency in 1999. However, the current level of financial integration differs across different financial segments. In particular, some financial markets still exhibit various frictions preventing full integration.

The evidence on financial integration in the “new” EU member states is far less exhaustive. The existing studies on financial integration in the “new” EU members can be subdivided into descriptive studies and quantitative empirical applications. The descriptive studies focus on various aspects of legal and institutional adjustments, which took place in the “new” EU member countries to adjust their financial markets to the European standards.

A common finding in this literature is that increasing harmonization of the regulatory framework and integration of underlying financial infrastructures has bolstered the general convergence tendencies in the “new” member states.

The quantitative studies make a use of standard measures of financial integration and apply them to different financial market segments in the “new” EU member states, usually using Germany as a benchmark country. Among those studies, analyze integration of money markets, examine the validity of the monetary independence hypothesis using money market interest rate data for a group of advanced “new” EU member states with different degrees of flexibility in exchange rate regimes: the Czech Republic, Hungary and Poland. They find that neither of the countries could enjoy full monetary independence. The correlation between Czech and foreign interest rates tended to decrease with the increase of the exchange rate flexibility, but for Poland the degree of sensitivity of domestic interest rates to the foreign benchmark has increased with the introduction of more flexible exchange rate regime.

Others study the covered interest parity in “new” members with respect to the Euro area countries and provide a quantitative assessment of the factors driving systematic deviations from parity. They find that money markets in the “new” member countries show an increasing degree of integration with the Euro area. However, discrepancies are not completely eliminated yet due to transaction costs caused by the low level of liquidity and underdeveloped financial markets, which diminish the possibilities of arbitrage. They analyze the dynamics of interest rate spreads between eight CEE “new” EU member countries and the Euro area and report continuing decrease of the margins over time.

In addition, they show that integration between the “new” EU members and the Euro area has evolved through different phases: the bull period 2000-2003 characterized by a sharp spread contraction, the bear period 2003-2004 of spread widening, and the second bull period 2004-2005. Among the factors contributing to the segmentation of the national financial markets they also mention restrictions on short-term capital movements, which were abolished in 2001.

A number of recent papers studies integration of equity markets in the “new” member states using different methodologies. Some of them apply linear cointe-

gration methods, then employ a GARCH methodology, make a use of the -and -convergence indicators, and use a "comovement box" methodology based on the conditional correlations of different time-varying quantiles of the returns.

The common conclusion coming from these studies is that equity markets are becoming more integrated over time, which is reflected in statistically significant long-run relationships between stock indices (cointegration) and decreasing time varying volatility of stock returns in more recent periods. However, the speed and degree of integration greatly varies across countries and the studies provide contradictory conclusions in this regard. The conflicting results coming from differencies in apply this methodology also for studying integration in bond markets.

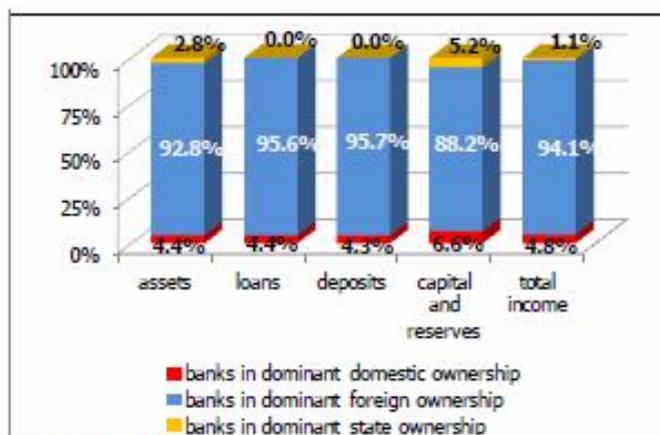
4. ASSESING THE FINANCIAL MARKETS IN THE REPUBLIC OF MACEDONIA

4.1. Financial sector development

The banking system in the Republic of Macedonia consisted of seventeen banks and eight savings hoses. Most numerous are the banks in dominant ownership of foreign shareholders, who have the biggest share in the structure of all major balance sheet categories(see Figure1).The share of state ownership in the sector remains low, at 7% of the sector’s assets.

Figure 1

FIGURE 1 STRUCTURE OF THE MAJOT BALANCE SHEET ITEMS, ACCORDING TO THE DOMINANT OWNERSHIP OF BANKS



Source: NBRM,

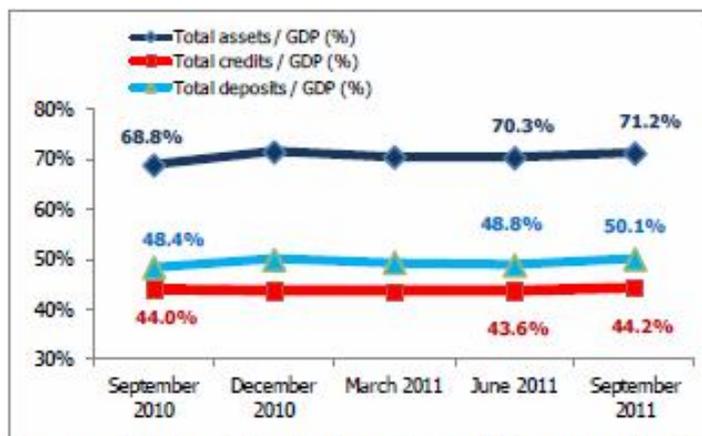
The share of savings houses in the total activities of deposit institutions (banks and savings houses) remained insignificant (0.9% share in total assets, 1.4% in total loans and 0.3% in total deposits of non-financial entities¹¹).

Concentration in the banking system is high, but generally it shows a tendency of decreasing¹². The five largest banks account for over 75% of all segments of the banks' operations. The high concentration is confirmed by the participation of the assets of an individual bank in total assets, with ten banks having individual participation of up to 3% or 15.3% all together¹³.

At the end of the third quarter of 2011 compared to June 2011 (as presented on figure 2), financial intermediation measured through the ratio of total assets, loans and deposits to GDP went up by 0.9 percentage points, 0.6 percentage points and 1.3 percentage points, respectively.

Figure 2

LEVEL OF FINANCIAL INTERMEDIATION IN THE BANKING SYSTEM



Source: National Bank, based on data submitted by banks.

The financial sector's significance and its intermediation function has increased, reflecting additional capital from foreign investors but also increased deposits and lending. In the banking sector, total assets as a share of GDP were up from 67% mid of 2010 to 69% of the estimated GDP by mid 2011.

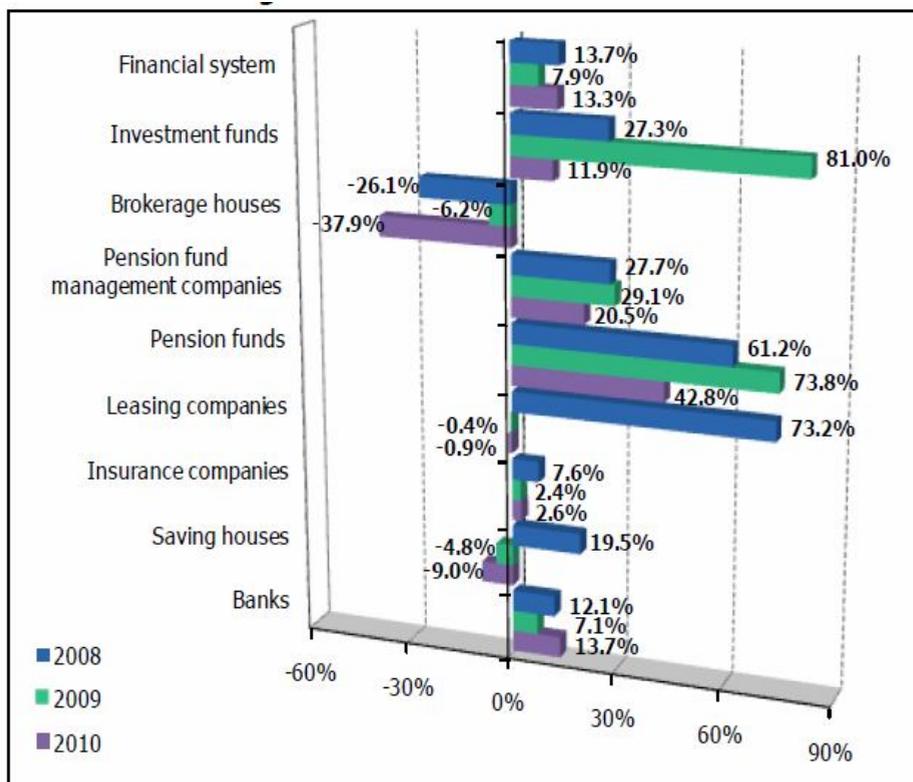
¹¹) Report on Banking System of the Republic of Macedonia in the third quarter of 2011, NBRM, 2011, p. 8.

¹²) Measured by the Herfindahl-index and CR5 index.

¹³) Report on Banking System of the Republic of Macedonia in the third quarter of 2011, NBRM, 2011, p. 10.

Figure 3

ANNUAL GROWTH RATES OF THE ASSETS OF EACH INSTITUTIONAL SEGMENT OF THE FINANCIAL SECTOR



Source: NBRM, SEC, MAPAS, ISA and the Ministry of Finance

Credits as a share of GDP increased from to 43.5% in October 2010 to some 45% of the estimated GDP end of August 2011, while the level of deposits rose from 48% end of October 2010 to around 50% of the projected GDP in August 2011¹⁴⁾.

Deposits continue to be the sector's main source of liquidity. The coverage of loans by deposits is still above 100%. The main state asset is the majority share in the country's only development bank and a limited number of remaining minority shares. Market concentration remains high, but has decreased slightly during the past year. The assets of the five biggest banks as a share of total assets declined only marginally, from 77.4% end of 2009 to 77.2% end of 2010. However, the three biggest banks lost some market shares to medium-sized banks. The efficiency of the banking sector has

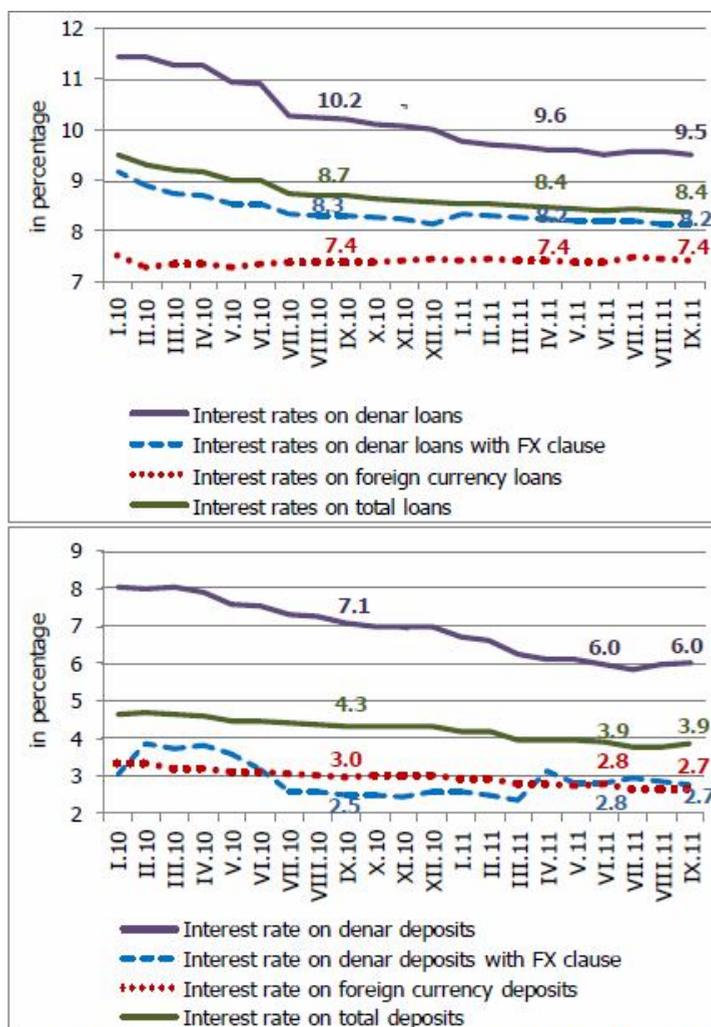
¹⁴⁾ European Commission Progress report on the Republic of Macedonia 2011, p 27.

remained largely unchanged. Profitability of the sector as a whole remains low, with slightly negative returns-on-assets and equity at the end of September 2011, relative to the same period of the previous year. However, larger banks performed better than smaller ones. Credit growth slowed down on annual basis.

Private-sector weighted interest rates declined following their peak in the last quarter of 2009. Rates for denar loans declined from 9.2% in September 2010 to 8.9% in July 2011, while the rates for denar deposits declined from 6.8% to 5.8%.

Figure 4

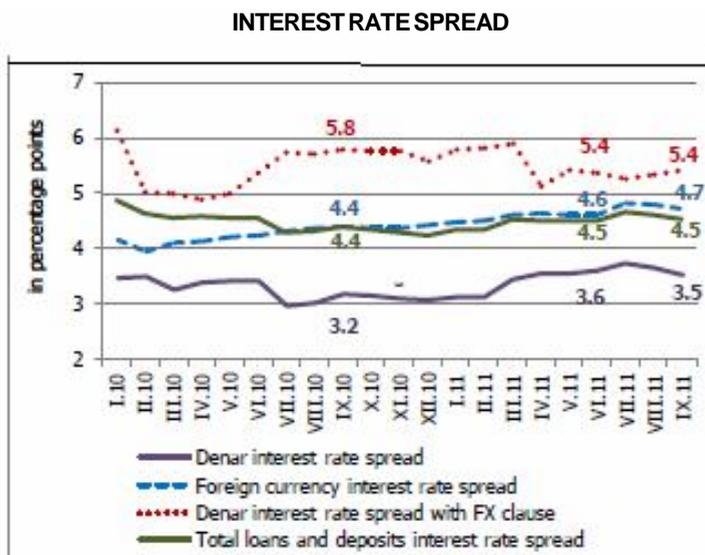
MOVEMENTS OF LENDING (UP) AND DEPOSIT (DOWN) INTEREST RATES



Source: National Bank, on the basis of data submitted by banks.

a result of the faster decline of deposit rates, spreads widened from 2.4 percentage points in September 2010 to 3.1 percentage points in July 2011. In the third quarter of 2011, the average interest rates on newly extended credits rose insignificantly (by 0.1 percentage point), and confirms the perceptions for higher risks and explains the slower trend of lending in this quarter.

Figure 5



Source: National Bank

Financial stability has been maintained, with sound liquidity, solvency and capital adequacy ratios. The share of non-performing-loans has started to decline, from a peak of 10.6% in September 2010 to 9.3% by end-June 2011, also increased their share in total loans to 9.8% (0.5 percentage points more compared to June 2011). The actualization of problems in the Euro area and the increasing global uncertainty is one of the main reasons behind the contraction of lending activity.

Banking regulation and supervision is largely in line with international standards. However, the proper functioning of regulatory and supervisory agencies, such as the Agency for the supervision of fully funded pension insurance (MAPAS) or the security exchange commission (SEC), is still hampered either by still insufficient financial independence and/or by insufficient human and IT resources. Furthermore, sometimes institutional competences are not sufficiently defined. As a result, the leverage of those institutions has not yet reached an adequate level. Transparency of the credit market has improved through the establishment of a private credit bureau, providing credit history reports.

The relevance of other financial market intermediaries is limited, with assets accounting for some 10% of the financial sector's assets or some 8% of GDP. Insur-

ance institutions account for some 4% of the sector's assets, while leasing companies and pension funds account for about 3% each.

4.2. Money market

In 2010, the significance of the money market in the Republic of Macedonia to the financial system was still modest. The limited range of instruments, shallow secondary market and low level of integration to the international financial flows remained major traits of this market. The interbank market of unsecured deposits still remained main money market segment making up 99% of the total turnover. Other market segments (short-term securities and repo markets) played insignificant role, with no derivative market, whatsoever.

Basic primary money market instruments include CB bills and government securities. The trading on the secondary market is insignificant. In spite of the cut of interest rate on CB bills for seven times in 2010, the banks showed considerably larger interest in this instrument compared to 2009.

The permanent relaxation of monetary policy by cutting the NBRM key interest rate in the period when the ECB preserved its key interest rate, in 2010, tended to narrow the interest rate spread between the interest rates of the NBRM and the ECB.

The decrease of key interest rate (as presented on the next figure) had a transmission effect on SKIBOR¹⁵⁾ and MKDONIA¹⁶⁾. Conversely, the ECB remained consistent, and did not change its key interest rate in 2010. Thus, the gap between the one-month SKIBOR and the one-month EURIBOR rate¹⁷⁾ decreased by 4.7 percentage points, p.a. and equaled 3.7 percentage points. Thus the gap between EONIA¹⁸⁾ and MKDONIA also reduced by 3.5 percentage points, and equaled 2.2 percentage points.

¹⁵⁾ Skopje Interbank Offer Rate – interbank indicative interest rate introduced in July 2007, for selling unsecured Denar deposits, calculated as arithmetical mean of quotations of reference banks, for four standard maturities (over night, one week, one month and three months).

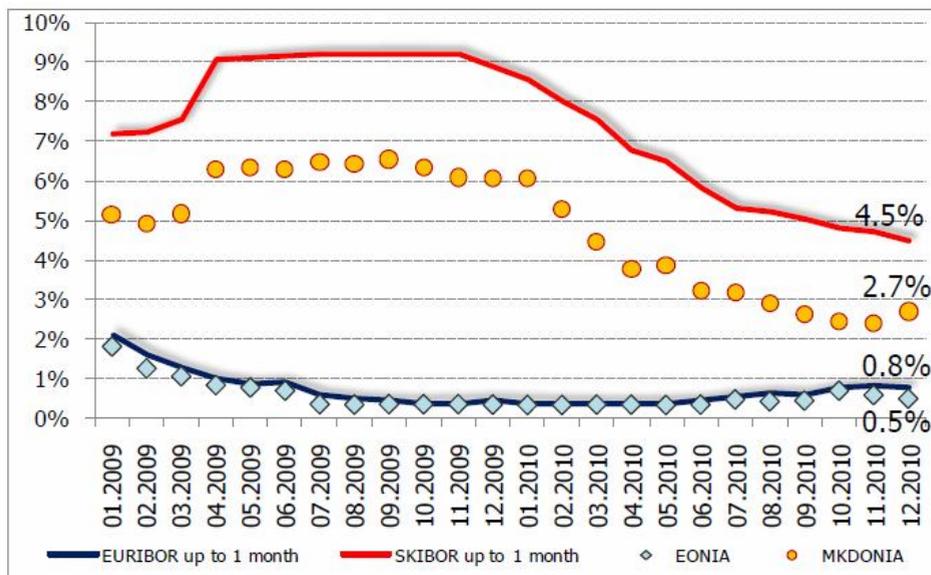
¹⁶⁾ MKDONIA started being calculated on October 15, 2008, as weighted average interest rate of already concluded over night transactions, with reference banks playing the role of sellers of unsecured Denar deposits.

¹⁷⁾ Euro Interbank Offered Rate – specific interest rate, at which a reference bank on the EU money market is willing to sell deposits to another reference bank, calculated on the basis of indicative interest rates.

¹⁸⁾ Euro OverNight Index Average – effective interest rate on the EU money market, calculated as weighted value of all overnight transactions where the reference bank acts as deposit seller.

Figure 6

**INTEREST RATES ON THE MONEY MARKET IN THE REPUBLIC
OF MACEDONIA AND IN THE EURO AREA**



Source: NBRM and website of the European Central bank

4.3. Free movement of capital and capital market

The country already met the requirements of the first stage of the Stabilisation and Association Agreement (SAA) in the field of capital movements and payments in 2008. Further liberalisation is conditional on the transition to the second stage of the SAA, pending a decision by the Council. Progress was limited to relaxing some of the restrictions on residents regarding portfolio investments in foreign markets; however, all restrictions remained. The restrictions for the amounts of cash that may be carried across borders and on the amounts of transfers that non-residents can perform through their local and foreign currency accounts are not aligned with the acquis. Foreign investment has not kept pace with neighbouring economies. Modernisation of infrastructure has to be reinforced. The legal provisions preventing nationals from buying foreign securities, opening accounts in foreign banks, or purchasing real estate abroad remain. Preparations in the area of capital movements and payments are moderately advanced.

In 2010, the private sector was less interested in issuing new shares, and therefore the total value of new issues of long-term securities decreased compared to the previous year. The lower interest in new issues of long-term securities was mostly

caused by the downward price trend on the secondary capital market, the lower volume of trade on the stock exchange market and decrease in the total stock exchange turnover.

Notwithstanding the gradual improvement of the domestic economic environment, the downward correction of the turnover on the Macedonian Stock Exchange continued in 2010. Compared to the same period of the last year, the stock exchange turnover was decreasing slowly, almost solely reflecting the lower turnover of shares. The poor shareholder activity on the Macedonian Stock Exchange indicates that they are risk averse. In 2010, in spite of the slightly higher number of foreign investors, their demand for securities on the Macedonian Stock Exchange kept on decreasing. The potential increase of their demand is contingent upon the speed of revival of the global economy and markets necessary to create positive effects on the near surrounding, the permanent and sustainable growth of the domestic economy, the positive performances of domestic corporations and the higher returns on investments in domestic securities. In 2010, the price growth on the capital market tended to decrease the market capitalization of the companies listed on the Macedonian Stock Exchange.

Progress is achieved in the area of securities markets and investment services. Most of the present directives on market abuse, markets in financial instruments, investors' compensations schemes, transparency and prospectuses, are already transposed; alignment remains to be confirmed. Further steps need to be taken to achieve alignment with Directive 2007/16 and other developments in the EU *acquis* relating to undertakings for collective investment in tradable securities (UCTIS IV package).

CONCLUSIONS

From the theoretical point of view the analysis of financial convergence in the new EU member states reveals a mixed picture. The application of the β -convergence concept suggests that the spreads of the interbank interest rates and the interest rates on bonds tend to move towards a long run equilibrium. For government bonds yields the convergence hypothesis is not supported by the data which may reflect the heterogeneity of fiscal policies in the EU. The σ -convergence measure in general indicates convergence until 2007. After that, most likely due to the effects of the global financial crisis and the associated uncertainty, the coefficient of variation of spreads increases. The effects of the financial crisis are also evident in the time-series measure of convergence based on estimation of a time-varying parameter model. In some countries a tendency of decline in spreads was observed initially which was later reversed. One possible extension to the work presented in this paper is to estimate the panel data model (1) with country-specific coefficients β_i . This would allow for differences in the speed of convergence among countries and would possibly yield more reliable results when computing the equilibrium levels of the spreads.

Also, conditional on data availability the analysis can be extended to include other asset prices or a more detailed breakdown of interest rates by instrument. The use of aggregated deposit and lending rates may disguise specific features of the credit and deposit markets.

The financial sector of Republic of Macedonia continued its gradual process of deepening and widening. However, the level of financial intermediation and competition in the market are still low, impeding more dynamic growth in the private sector, particularly for SMEs. Furthermore, some regulatory and supervisory agencies have not yet reached a sufficient level of independence, resource endowment and leverage.

Progress in the area of free movement of capital was uneven and focused on enforcement in the area of combating money laundering and financing of terrorism. There are still restrictions on short-term portfolio investments and on cross-border payment transfers. There are plans for the further liberalisation of the capital movements and payments after the transition to the second stage of the SAA. Preparations in the area of free movement of capital are on track.

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