Economic Systems 39 (2015) 541–551

Contents lists available at ScienceDirect

Economic Systems

journal homepage: www.elsevier.com/locate/ecosys

Cost efficiency of the banking industry and unilateral euroisation: A stochastic frontier approach in Serbia and Montenegro

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ARTICLE INFO

Article history:
Received 18 June 2014
Received in revised form 21 January 2015
Accepted 30 January 2015
Available online 30 June 2015

JEL classification:
E42
E43
G21
P34
P52

Keywords:
Banking
Cost efficiency
Dollarization
Euroisation
Montenegro
Serbia

ABSTRACT

This paper aims at investigating the differences in cost efficiency of the banking industry in Serbia and Montenegro over the period 2005–2012. These two countries operated under a common monetary regime until 1999 and followed two different monetary regimes thereafter: unilateral euroisation in Montenegro and monetary independence in Serbia. A stochastic frontier approach incorporating bank-specific and country-related variables is used to analyze cost efficiency in the banking sectors of Serbia and Montenegro. The analysis shows that a bank operating at given conditions in terms of ownership, market and other specific characteristics presents significantly higher cost efficiency if it operates in Montenegro rather than in Serbia. We argue that this result may relate to the choice of unilateral euroisation made by Montenegro. It is also shown that foreign-owned banks, higher capitalized banks and banks with lower non-performing loans operate at higher cost efficiency.

1. Introduction

The banking industries of Serbia and Montenegro went through tremendous changes during the last two decades. During the nineties they were affected by one of the most severe hyperinflations of the monetary history and by dramatic political turmoil which delayed the transition process

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http://dx.doi.org/10.1016/j.ecosys.2015.01.006
0939-3625/

compared to the other Southern and Eastern European (SEE) countries. During the last decade, the banking sectors in Serbia and Montenegro experienced a process of liberalization, consolidation and privatization that led to the move from the socialist decentralized system of former Yugoslavia to a market-oriented and privately owned system.

The development of an efficient financial system has been underlined as a major component of the successful transition to a market economy and has therefore attracted considerable attention in the literature. Most studies investigated banking efficiency in central and eastern European countries (Havrylchyk and Jurzyk, 2011; Kosak et al., 2009; Poghosyan and Poghosyan, 2010) but few focused on the SEE region where economic reforms were delayed by political turmoil. Staikouras et al. (2008) were the first to investigate bank efficiency in the SEE region and included Serbia-Montenegro for the period from 1998 to 2003, when these two territorial entities were part of a common state. Fang et al. (2011) also investigated bank efficiency in the SEE region, including Serbia only for the period 1998–2008. However, to the best of our knowledge, no study on bank efficiency ever included Montenegro as a full-fledged independent country. The improvement of banking performance is of critical importance for the catching up process of these two countries and their path toward European Union membership since it ensures a better allocation of financial resources, favoring growth prospects (Weill, 2003).

This paper aims at evaluating cost efficiency in the banking sectors of Serbia and Montenegro over the period 2005–2012. These two transition countries have been largely neglected in prior studies. Specific factors additionally motivate this investigation. Montenegro, which became politically independent from Serbia in 2006, adopted a full-scale unilateral and official euroisation in 2001 using the Deutsche Mark in the first step and the euro thereafter. We observe two banking sectors in two countries that were part of a common state, sharing the same economic and banking structures, and then decided to follow two separate monetary regimes at a first step and full independence thereafter. We aim at investigating whether banks in Montenegro operate at significantly different cost efficiency than banks with similar characteristics in Serbia. The full-scale euroisation of the Montenegrin economy may have influenced banking performance compared to Serbia, which kept its own currency and full monetary policy independence. This research setting provides a natural experiment to tease out the potential confounding effect of other country-level factors on banking development. In that respect, the research setting is similar to that of Glaeser et al. (2001) comparing the regulation of the financial markets in Poland and the Czech Republic in the 1990s, which was designed essentially from scratch in these transition countries.

The main economic rationale to support the view that the full-scale euroisation might have led to a different banking performance in cost efficiency relates to the absence of the lender of last resort in a dollarized or euroised economy (Edwards and Magendzo, 2006; Fabris and Kalezic, 2008). In a monetary environment without a lender of last resort, banks have a strong incentive to carefully monitor their liquidity and solvency because they cannot rely on any significant support from the central bank in case of crisis. This severe constraint may incentivize the banks to narrowly control all aspects of their business and especially their costs, since these directly impact their income balance and thereby their solvency and indirectly their liquidity. To the best of our knowledge, this is the first study on cost efficiency investigating the issue of the possible influence of dollarization or euroisation. To do so, this paper, drawing on a similar framework to that proposed by Staikouras et al. (2008), at a first stage estimates banks' cost efficiency in Serbia and Montenegro using the stochastic frontier approach incorporating both firm-specific and country-related variables. At a second stage, the paper investigates the factors that may explain the differences in cost efficiency across banks.

The paper proceeds as follows. Section 2 describes some key facts about the banking sectors in Serbia and Montenegro. Section 3 presents the methodology. Section 4 describes the data. Section 5 develops the empirical results. Section 6 summarizes and concludes.

2. Banking in Serbia and Montenegro and euroisation

It is important to stress that the choice of Montenegro for official dollarization in 1999 and full scale dollarization in 2001 was independent from the performance of the banking sector. As pointed out by Fabris et al. (2004), the choice of dollarization by the Montenegrin public authorities was a political