G Model
ECOSYS 564 No. of Pages 24
ARTICLE IN PRESS

Economic Systems xxx (2016) xxx–xxx

Contents lists available at ScienceDirect

Economic Systems

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

Bank risk and performance in the MENA region: The importance of capital requirements

Mohammad Bitar[a,*], Wadad Saad[b], Mohammed Benlemlih[c]

[a] David O'Brien Centre for Sustainable Enterprise, John Molson School of Business, Concordia University, 1455 Blvd. de Maisonneuve West, Montréal, QC H3G 1M8, Canada
[b] Lebanese University, Faculty of Business Administration and Economics, Beirut, Lebanon
[c] University of Grenoble Alpes, CERAG, CNRS – BP 47, 38040 Grenoble Cedex 9, France

ARTICLE INFO

Article history:
Received 24 September 2015
Received in revised form 14 December 2015
Accepted 17 December 2015

JEL classification:
G21
G28
G32
P5

Keywords:
Basel capital
Too-big-to-fail
Arab Spring
Risk
Efficiency
Profitability

ABSTRACT

This paper benefits from various risk- and non-risk-based regulatory capital ratios and examines their impact on bank risk and performance in the Middle East and North Africa (MENA) region. Our findings suggest that compliance with the Basel capital requirements enhances bank protection against risk, and improves efficiency and profitability. The impact of capital requirements on bank performance is more pronounced for too-big-to-fail banks, banks in periods of crisis and banks in countries with good governance. The results are also robust when controlling for the Arab Spring transition period. Finally, endogeneity checks, alternative risk and performance measures, a principal component analysis and other estimation techniques confirm our findings.
© 2016 Elsevier B.V. All rights reserved.

1. Introduction

Investigations into whether bank capital has a positive or negative effect on bank risk and performance proliferated after the 2007/2008 subprime crisis. The existing empirical work mainly focuses on the association between capital, risk and profitability in American and European contexts (Altunbas et al., 2007; Demirgüç-Kunt et al., 2013). However, recent research offers novel insights into banks in alternative regions or countries: the Asian (Lee and Hsieh, 2013), the Sub-Saharan African (Flamini et al., 2009), the Middle Eastern and North African (MENA) regions (Ben Naceur and Omran, 2011), and banks in Egypt (Ben Naceur and Goaeid, 2008) and Tunisia (Ben Naceur and Magda, 2009). Despite the ongoing debate on the importance of financial reforms, there are no empirical studies that examine the impact of banking regulation (in particular, capital requirements in light of the Basel accords) on the risk and the performance of banks in the MENA region. Accordingly, this paper examines the impact of the Basel capital requirements on risk and bank performance (namely efficiency and profitability) for a sample of 168 banks in 17 Middle Eastern and North African countries for the 1999–2013 period.

* Corresponding author.
E-mail addresses: mohammad.bitar@concordia.ca (M. Bitar), wsaad@ul.edu.lb (W. Saad), mohammed.benlemlih@upmf-grenoble.fr (M. Benlemlih).

http://dx.doi.org/10.1016/j.ecosys.2015.12.001
0939-3625/© 2016 Elsevier B.V. All rights reserved.

Please cite this article in press as: M. Bitar, et al., Bank risk and performance in the MENA region: The importance of capital requirements, Econ. Syst. (2016), http://dx.doi.org/10.1016/j.ecosys.2015.12.001

Our study differs because we extend the analysis to examine the effect of bank capital on risk, efficiency and profitability using risk-based regulatory ratios and non-risk-based traditional capital ratios. Evidence of the impact of the Basel capital requirements (namely, Tier 1 capital, Tier 2 capital and total capital ratio) on bank risk and performance in the MENA region is scarce. In addition, as far as we know, no existing studies have employed both the Basel risk-based capital ratios and the traditional non-risk-based capital ratios (such as common equity and tangible equity) to investigate their impact on both bank risk and performance.

We investigate the MENA countries for several reasons. First of all, credit growth in the MENA region has been more moderate, less volatile and less risky. However, more recently, the MENA countries have experienced rapid and more volatile credit growth rates, which may raise concerns about the stability of the financial system, and especially the fact that higher credit growth is often followed by financial crisis (Crowley, 2008). Second, the MENA region contains four of the most essential and international trade canals or checkpoints (Suez, Hormuz, Bab-el-Mandeb and Gibraltar). Third, as a bridge between developed and developing countries in Europe, Asia and Africa, the MENA region attracts investors and bankers worldwide. This strategic position makes the MENA countries more susceptible to political instability and thus economic and financial vulnerability. In addition, the region is facing numerous changes, such as the opening up of certain markets to foreign competition, the expansion of the private sector and the increased role of bank lending. In practice, several countries in the MENA region have adopted financial reforms since the late 1990s for the purpose of ensuring efficiency in allocating bank resources and enhancing productivity. Yet this region is still ranked far behind the industrialized countries (Creane et al., 2004). Therefore, there is a need to strengthen banking supervision and regulation by conforming to international Basel standards and especially to the capital requirements.

We find that higher risk- and non-risk-based capital ratios are positively associated with bank loan loss reserve ratios, bank efficiency and profitability, which is consistent with the recommendations of the Basel Committee on Banking and Supervision (BCBS) regarding the importance of holding higher capital ratios. Our results also show that banks in the MENA region are less capable of dealing with capital-like ratios (that is, Tier 2 ratios) than those in GCC countries. In particular, the latter benefit from the oil boom, expertise and connections with many Western banks operating in the Gulf region. Accordingly, banks are encouraged to increase the Tier 1 element in their capital adequacy ratios rather than the Tier 2 element. Moreover, the impact of capital requirements on bank efficiency and profitability is more effective for too-big-to-fail banks, banks in countries with a good governance policy and banks during the Arab Spring political transition period. In addition, we find differences in the effect of capital ratios when comparing banks in GCC countries with banks in the rest of the MENA region and banks during crisis with banks during normal times, especially for capital-like ratios. This provides additional support to the importance of capital guidelines and good governance in preventing financial instability in periods of political transition and financial distress. Finally, an instrumental variables approach, alternative risk and performance measures, a principal component analysis and other estimation techniques validate our findings.

Our research contributes to the existing literature in several ways. For the first time, we examine the impact of the Basel guidelines – in terms of risk- and non-risk-based regulatory capital requirements – on the risk, efficiency and profitability of commercial banks in the MENA region. Also, our study is different because we use eight capital ratios and combine risk-based capital measures with non-risk-based capital measures to compare and examine whether the Basel Accords have a pronounced effect on the bank risk and performance of a large sample of commercial banks in the MENA region. We use risk- and non-risk-based capital ratios because of the renewed debate on the effectiveness of capital requirements. For instance, Demirgüç-Kunt et al. (2013) and Anginer and Demirgüç-Kunt (2014) ask what kind of capital banks need to use and how to structure it. This is consistent with Haldane (2012),Dermine (2015) and Cathcart et al. (2015), who shed doubts on the ability of risk-weighted assets to reflect actual bank risk exposure, especially during the subprime crisis. This paper adds to the literature on the effectiveness of capital requirements (Basel risk-based capital ratios versus traditional non-risk-based capital ratios) by examining the banks in the MENA region. In the additional subsample comparison analyses between Gulf Cooperation Council (GCC) countries and the remaining MENA countries, we study the impact of the Arab Spring transition period on the linkage between capital, risk and bank performance in both regions. Furthermore, we not only consider the traditional relationship between capital and risk but also extend our study to examine banking efficiency and profitability. Finally, we utilize several regression techniques and combine parametric approaches (OLS regressions, 2SLS, LIML, GMM) and nonparametric approaches (principal component analysis and quantile regressions) to examine the robustness of our results.

This paper proceeds as follows: Section 2 establishes the theoretical and empirical frameworks by examining the relationships between bank capital, risk and performance. Section 3 describes the data and summarizes the variables' characteristics. Section 4 reports and discusses the empirical results. The last section discusses the paper's limitations and implications for regulators and policymakers in the MENA region.

2. Literature review

VanHoose (2007) provides an extensive literature review of the impact of capital requirements on the stability (risk) of the banking system. However, only a limited number of studies extend this association to examine bank efficiency and profitability for the European context (Altunbas et al., 2007) and for the Asian context (Lee and Hsieh, 2013). In contrast to most previous research, our study uses various types of capital to examine, for the first time, their effect on the risk, efficiency

Download English Version:

https://daneshyari.com/en/article/5056272

Download Persian Version:

https://daneshyari.com/article/5056272

Daneshyari.com