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JCOM-50; No. of Pages 9
ARTICLE IN PRESS
Journal of Co-operative Organization and Management xxx (2016) xxx–xxx
Contents lists available at ScienceDirect
Journal of Co-operative Organization and Management
journal homepage: www.elsevier.com/locate/jcom

Cooperative banks, the internet and market discipline

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ARTICLE INFO

Article history:
Received 28 August 2015
Received in revised form 16 August 2016
Accepted 17 August 2016

JEL classification:
G21
G28

Keywords:
Cooperative banks
Market discipline
the internet

ABSTRACT

This paper analyses market discipline mechanisms at Polish cooperative banks within the special context of their internet activity. I argue that cooperative banks' depositors punish more risky banks for their bad behavior by withdrawing deposits. The findings demonstrate that a greater emphasis could be placed on stimulating market discipline at cooperative banks because a large number of these institutions hampers their regulatory discipline. To strengthen the market discipline mechanisms, regulators should promote internet activity at cooperative banks and among their depositors, as well as require banks to present financial information on their websites and to adopt online banking systems.

1. Introduction

Cooperative banks constitute a significant part of the European banking sector. For example, in such countries as Italy, France, Germany and the Netherlands, between 25% and 45% of all loans are granted by cooperative banks, with SMEs representing between 20% and 50% of their clients (European Association of Co-operative Banks, 2015). In terms of deposits, cooperative banks' market share is of a comparable magnitude. In Poland, cooperative banks make up the largest group of entities from the banking sector, with nearly 600 of them. Their market share is smaller than the EU average, but it is still significant because they possess 9% of banking sector assets, 8% of loans, and 10% of deposits from the non-financial sector. In addition, cooperative banks employ more than 20% of the banking sector's personnel (Polish Financial Supervision Authority, 2014). Polish cooperative banks serve mostly small local communities, whereas their areas of operation are usually restricted only to several counties. It should be noted that the banks are associated in two unions, but they are only loosely linked organizationally and financially.[1] In contrast to cooperative banks in certain other EU countries, including the Netherlands, France and Austria, Poland's distinct cooperative banks from the same association do not consolidate financial statements and even do not guarantee their obligations. As a result, institutions from the same or neighboring counties compete for depositors and debtors.

The financial standing of cooperative banks is vital for households, farmers and micro companies because these banks are significant and often major providers of financial services in rural areas and small cities. The stability of cooperative banks, as with other institutions in the banking sector, is under the monitoring auspices of the Polish Financial Supervision Authority. Nevertheless, the large number of cooperative banks in relation to the limited resources of supervisors reduces the possibility of performing onsite inspections within appropriately short time intervals. Because onsite inspections at individual cooperative banks take place once every 5 or 6 years, more resources are delegated to offsite activities, including analyses of cooperative banks' financial statements and other financial documents. Even if officials are able to increase supervisory efforts, it should be recalled that assessments become outdated quickly, which is especially evident in the case of banks with weak financial standing and during systemic crises (Cole & Gunther, 1998; Hirtle & Lopez, 1999; Berger, Davies, Flannery, 2000).

The limited resources held by authorities who exercise regulatory discipline at cooperative banks require a discussion of the role of private entities in ensuring the sector's stability. It is in line with the general opinion that regulatory discipline needs support from market participants to ensure financial stability. In other words, it naturally leads to questions about market discipline, that is, a process in which market participants monitor and evaluate the financial standing of a bank and provide informative signals that affect how bank managers run their companies and how they man-

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[1] The situation changed at the end of 2015 when the introduction of the capital requirements regulation and Directive CRR/CRD IV pushed cooperative banks to build stronger ties within an association.

http://dx.doi.org/10.1016/j.jcom.2016.08.002
2213-297X/

Please cite this article in press as: Kozłowski, Ł. Cooperative banks, the internet and market discipline. *Journal of Co-operative Organization and Management* (2016), http://dx.doi.org/10.1016/j.jcom.2016.08.002

age bank risks (Bliss & Flannery, 2002). Different groups of market participants can discipline a bank, including its depositors, bond holders, outside equity holders or even borrowers (Berger & Udell, 1995; Slovin, Sushka, Polonchek, 1993). The major and the most numerous risk bearers are nevertheless depositors, which is especially true in the case of cooperative banks in Poland because they rarely issue bonds,[2] and their legal form (a cooperative) eliminates the possibility of market discipline from stock market participants. Strengthened market discipline from depositors, that is, depositor discipline, could thus effectively complement regulatory discipline efforts aimed at cooperative banks to promote their financial stability (Flannery, 2001).

The literature presents a short list of market discipline prerequisites, including depositors' reasons for monitoring a bank, their financial competences to perform these tasks, as well as easy access to information about a bank, and the availability of tools to punish risky banks (Bliss & Flannery, 2000; Crockett, 2002; Llewellyn & Mayes, 2003; Caprio & Honohan, 2004; Hamalainen, Hall, Howcroft, 2005; Moe, 2006; Nier & Baumann, 2006). Depositors, a bank's major capital providers, usually track a bank's financial standing even in economies with partial or full deposit insurance schemes because many of them are not aware of the deposit insurance scheme or its details (Bowyer, Thompson, Srinivasan, 1986; Goedde-Menke, Langer, Pfingsten, 2014; Inakura, Shimizutani, Paprzycki, 2005; Steiger, Simon, Montgomery, 2001) or fear indirect costs of a bank's insolvency, such as waiting for deposit redemption (Park & Peristiani, 1998). In raising the issue of depositors' competences to monitor their banks, we face the uniqueness of cooperative banks. Their depositors are mostly private individuals and farmers and, to some extent, small and medium enterprises (SMEs) from outside the agriculture sector. At first glance, these groups have little or no expertise in evaluating the risk of bank failures, but other studies show that such circumstances do not necessarily preclude market discipline (Karas, Pyle, Schoors, 2013; Murata & Hori, 2006; Shimizu, 2009; Tsuru, 2003; Yan, Skully, Avram, Vu, 2014). Regardless depositors' motivation and financial competences, cooperative banks' depositors naturally possess tools to stimulate banks towards more safety because they are able to withdraw their savings from a bank or demand higher interest rates and, as a result, to influence a bank's access to cheap financing sources.

Because cooperative banks' depositors supposedly have reasons and tools to engage in the disciplinary activity, the issue of fostering the market discipline mechanism is mostly a matter of increasing depositor's financial competences and improving the availability of information about the banks. Strengthening people's financial competences is a desirable investment but one with a relatively long-term return. On the other hand, increasing the availability of information about individual cooperative banks, fostering their transparency in the eyes of their clients and thus reducing their opaqueness (Flannery, 1998) are manageable in a straightforward manner. Promoting cooperative banks' activity on the internet and placing this activity in a predefined framework could play a pivotal role in boosting market discipline because the internet is a fast and easy-to-access source of information. In other words, if cooperative banks were obliged to run websites, Facebook profiles, and Twitter accounts to consistently disclose information in the social media, doing so could increase their transparency and thus improve market discipline. Such improved transparency would additionally work in favor of depositors because it reduces the risk they bear. Online banking, that is, a special case of a bank's internet presence, could additionally strengthen the tools with which depositors influence cooperative banks. Online banking systems do not only decrease depositors' risk by offering convenience and speed. Because they increase deposit mobility and encourage banks to think about a threat of faster deposit outflow, they are independent factors that can improve market discipline.

This article contributes to the literature on cooperative banking and, especially, on mechanisms that can be used in order to increase the stability of this banking sector. I empirically analyze market discipline at Polish cooperative banks with panel data comprising more than 2.5 thousand observations covering the period 2007–2013. The results confirm the findings from other countries that cooperative banks' depositors punish more risky institutions for their bad behavior by withdrawing deposits. Thus, I argue that, in spite of the unique group of served clients, their organizational form, and the role of profit (Tuominen, Tuominen, Jussila, 2013), cooperative banks can be disciplined by their depositors similarly to large commercial banks. Moreover, the study extends the existing literature on cooperative banking and market discipline by pointing out that the internet activity of a bank significantly alters depositors' sensitivity to a bank's fundamentals. To be more precise, more internet-active cooperative banks face stronger market discipline, and their depositors pay special attention to banks' equity levels. The research results lead to policy conclusions and demonstrate that steps aimed at promoting cooperative banks' financial stability do not have to be restricted to purely regulatory measures.

2. Literature review and hypotheses

The market discipline mechanism is discussed extensively in the literature. A bulk of authors study the behavior of commercial banks' and bank-holding companies' depositors, and provide evidence of a relation between a bank's fundamentals and access to deposits or their cost. Within this strand of literature, works by Martinez Peria and Schmukler (2001), Demirgüç-Kunt and Huizinga (2004), Ungan and Caner (2004), Nier and Baumann (2006), Levy-Yeyati, Martinez Peria, Schmukler (2010), Bertay, Demirgüç-Kunt, Huizinga (2013) and Karas et al. (2013) constitute several notable and seminal examples. In addition, several authors study depositor discipline at thrift institutions (Brewer & Mondschean, 1994; Cook & Spellman, 1991, 1994, 1996; Goldberg & Hudgins, 1996, 2002; Kane, 1987; Park & Peristiani, 1998), but only a few examines small savings banks (Choi & Sohn, 2014), non-banking financial institutions (Hess & Feng, 2007), and small cooperative banks (Chipalkatti, Ramesha, Rishi, 2007; Murata & Hori, 2006; Shimizu, 2009; Tsuru, 2003). Taking into account the scope of my research, I concentrate on the latter group of studies, which is nevertheless relatively limited. It should be noted that within this strand, the literature provides evidence that is restricted almost entirely to Japanese *shinkin* banks. Tsuru (2003), using information on more than 300 Japanese cooperative banks, finds that *shinkin* banks with higher asset risk proxied by a non-performing loan ratio generated significantly lower deposit growths. Murata and Hori (2006), in their extensive study of *shinkin* banks and credit cooperatives, provide additional observations. First, they argue that deposit growth and interest rates are correlated negatively and positively, respectively, with the risk of financial institutions, supporting the existence of depositor discipline. Second, the relative importance of depositor discipline is stimulated by the failures of Hyogo Bank and the two large credit cooperatives, that is, during periods in which depositors became more aware of risk of bank failure. Third, depositors strengthen their monitoring activities of banks when they anticipate the relaxation of deposit insurance scheme. On the other hand, Shimizu (2009) addresses the issue of limited availability of information about Japanese cooperative banks in the context of

[2] Between 2010 and 2014, only 21 out of nearly 600 Polish cooperative banks issued bonds, and the bond market was illiquid.