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Evaluating the performance of Swedish savings banks according to service efficiency

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Abstract

This article develops principles for an evaluation of the efficiency of a savings bank. It starts out from the observation that such a bank is less profit oriented than a commercial bank. The customer is a vital stakeholder to the savings bank implying a greater emphasis on customer service provision. We are using data envelopment analysis (DEA) as a method to consider the service orientation of savings banks. We thereby demonstrate how an evaluation of the performance of savings banks according to "service efficiency" differs from an evaluation based on the traditional "profit" or shareholder concept. We determine the number of Swedish savings banks being "service efficient" as well as the average degree of service efficiency in this industry.

Keywords: Savings banks; Performance; Service efficiency; DEA

1. Introduction

In a legal sense the association form of a savings bank may be regarded as a kind of "public-spirited" foundation without any private profit interest (Thunman and Eriksson, 1990). Besides operating in the interest of depositors, it should also watch over and care for developments of the neighborhood and territory it is operating in. However, even though the trustees governing a savings bank should act in the interest of its depositors, the bank is in principle fully owning and controlling all capital generated in its business operations itself. This does not mean that the bank can ignore fundamental principles of finance. On the contrary, unlike commercial banks and co-operative banks that may raise additional equity capital from shareholders or members, respectively, the traditional savings banks have no external part to turn to for managing capital adequacy requirements. Hence, the survival and growth of savings banks are more or less dependent on their capability to generate surpluses internally.

As savings banks generally have developed an image of being "safe" and "risk avert" as well as a strong local or regional knowledge (Gardener et al., 1997), risk adverse operations and countrywide services to customers are likely to be important objectives on their agenda. According to the findings in a recent study by Lindblom (2001) the risk

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aversion for savings banks was markedly higher than for commercial banks. Furthermore, Carbo and Williams (2000) found that EU Savings Banks (as a whole) are delivering relatively greater value to their stakeholders than their private counterparts.

The task to evaluate the performance of savings banks is advanced from several points of view. First, there is a need to develop performance criteria just to consider if savings banks should use multiple objectives different from the ones of banks in general and commercial banks in particular. One obvious reason for having other objectives than those of commercial banks is that savings banks have no shareholders. Secondly, efficiency analyses are more difficult to conduct on organizations having multiple performance criteria than on straight-forward profit maximizing firms. Classical evaluation instruments, like financial ratio analyses, may thus prove to be either inappropriate or insufficient for distinguishing efficient savings banks from non-efficient ones, let alone to explain what specific qualities are leading to efficiency. Thirdly, it is important to determine whether we should define banking firms as financial intermediaries or providers of financial products and services. This issue is widely debated in banking literature as the definition will affect the role of deposits (see e.g. Berger and Humphrey, 1992; Favero and Papi, 1995; Grifell-Tatjé and Lovell, 1996; Resti, 1997; Lozano Vivas, 1997; Tortosa-Ausina, 2002). When applying an intermediation or asset approach, deposits will be regarded as an input factor for producing loans instead of a production output that will contribute to the creation of value-added. The value creation of deposits is emphasized when using the production or value-added approach.

We will in this study use the technique of data envelopment analysis (DEA) that was introduced by Charnes et al. (1978) in order to measure relative (technical) efficiency. DEA is applicable on both profit and non-profit maximizing firms and may be seen as a modern and suitable method for evaluating the efficiency of banks as it weighs together multiple outputs and multiple inputs. For an introduction to the use of the DEA technique on banking firms, see e.g. Sherman and Gold (1985), Charnes et al. (1990), Yue (1992), Bergendahl (1995, 1998), Favero and Papi (1995), Berger and Humphrey (1997), Grifell-Tatjé and Lovell (1996), Resti (1997, 2000), Hartman et al. (2001), Weill (2004). With the exception of the study by Grifell-Tatjé and Lovell (1996), which is focusing on the efficiency of Spanish savings banks within a production approach, savings banks are not treated differently to other banks. They are generally assumed (explicitly or implicitly) to have the same objective(s) and business conditions in terms of output and input vectors as other banks. This means that the apparent stakeholder or customer convenience concern of savings banks observed by e.g. Carbo and Williams (2000) and Kumbhakar et al. (2001) is not taken into consideration. In order to capture the customer service orientation of Spanish savings banks, like Berg et al. (1993) and Kumbhakar et al. (2001), Grifell-Tatjé and Lovell (1996) suggest the use of number of branches (and/or ATMs) as an output.

This paper aims at evaluating the performance of mutually operated savings banks in Sweden. They are small savings banks operating outside the recently founded FöreningsSparbanken Group. First, we will explore the financial performance of these mutually operated banks by using classically oriented financial ratios. Secondly, we will apply data envelopment analysis in order to distinguish efficient banks from less efficient ones. We will particularly emphasize the importance of considering the customer service orientation of savings banks when measuring their individual performance and the average efficiency of the sector as a whole.

The paper is structured as follows: Section 2 provides a background to the study. It gives a brief description of the history of Swedish savings banks and the development within the savings bank sector up to today. In Section 3 the performances of the mutually operated savings banks are analyzed in terms of traditional financial key ratios. Section 4 concerns the central issue of how to accurately measure the efficiency of a savings bank. Applying a production approach, a comparison is made between two different bases for the choice of outputs and inputs – the traditional shareholder oriented "profit" concept and the stakeholder oriented "service efficiency" concept. The computational outcome of this comparison is presented in Section 5. Finally, conclusions are made in Section 6.

2. Savings banks in Sweden

The history of Swedish savings banks goes back in time to the beginning of the 19th century. Internationally, academic researchers, like Buckland and Thion (1991), acknowledge the first (trustee)