Competition in Sri Lankan Commercial Banking Industry: A Panzar-Rosse Assesment

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Introduction

Bank competition is a key indication of the financial sector development of a country. Traditional Industrial Organization models such as Klein (1971), predict that restraining competitive forces should unequivocally produce welfare losses. Indeed, much of the recent public debate seems to assume that perfect competition in banking is ideal. For much of the last century, this has not always been the case where policy-makers focused on stability. Therefore, banking competition generally can be characterized as monopolistic competition that banks do not offer completely homogeneous products (Allen and Gale, 2000).

The traditional approach to competition has been to associate more firms with more price competition and fewer firms with less price competitive behaviour. This definition comes from a classic Industrial Organization argument, called the structure-conduct-performance (SCP) paradigm,that assumes there is a causal relationship running from the structure of the market to the firm's pricing behaviour, the firm's profits and degree of market power. In SCP paradigm competition is measured by using the structural approach which is reflected in concentration ratios (CR ratios) and the Hirschman Herfindhal index.

The non-structural approach posits that factors other than market structure (concentration) may affect competitive behaviour. This approach has been developed in the context of the New Empirical Industrial Organisation (NEIO) literature. The ambiguous results of the concentration approach and the results of the emerging contestability literature both suggest that the competitive behaviour of banks is not necessarily related to the number of banks in a market or to their concentration but to other factors such as entry-exit barriers and the general contestability of the market (Baumol et al. 1982; Rosse and Panzar, 1982; Panzar and Rosse, 1987).

The most important advantage of non-structural approaches is that it cannot be assumed a priori that concentrated markets are not competitive because contestability may depend on the extent of potential competition and not necessarily on market structure (Casu & Girardone, 2006) or the number of banks (Northcott, 2004). Thus, according to the bank competition literature the structure is only one source of competition.

The research problem

Over the past two-three decades numerous economic forces, including technological innovations and prudent monetary and fiscal policy, account for the unprecedented growth and prosperity experienced by emerging economies. The Sri Lankan banking sector has also been characterized by a number of profound changes over the last two decades. Advances in technology, new types of dynamic bank firms, various products and services, financial liberalization, and the ongoing economic and regulatory integration have increased the efficiency in the Sri Lankan banking sector. However the banks in developing countries are operating in an environment where the financial infrastructure or the prerequisites for a competitive environment is lacking. Consequently, the combined net result of these changes on the intensity of competition in emerging economies is uncertain and less revealed. It is widely perceived that competition in the Sri Lankan banking sector has increased since the inception of the financial sector reforms in 1990's. Using annual data of commercial banks for the period 1996–2010, this paper evaluates the validity of this claim in the Sri Lanka context.

Research questions and objectives

This paper evaluates the competitiveness in the banking sector in Sri Lanka during 1996-2010. Thus the main objective of the study is to understand the degree of competition among the banks in Sri Lanka and how this competition evolved during last fifteen years in Sri Lanka. As such the study seeks to provide answers to the following questions.

(1) What is degree of bank competition in Sri Lanka?

(2) Has the level of competition in the Sri Lankan banking sector changed significantly during the sample period?

(3) Whether the Sri Lankan banking sector is competitive?

The Methodology

The study applies a NEIO approach and will use Panzar - Rosse (PR) model abbreviated as the H-statistic with some modifications to measure bank market competition in Sri Lanka. The Panzar-Rosse approach estimates the sum of elasticities (H statistic) of a firm's revenue with respect to input prices in a reduced form revenue equation. The measure is grounded in the idea that competitive firms are price takers and must pass through cost changes to customers, while a monopoly can vary output to maximize profits in the face of higher input prices. The PR model has been extensively used to analyze the nature of competition in mature banking systems, but only more recently in emerging markets' banking systems

(Buchs and Mathisen (2005) for Ghana, and Claessens and Leaven (2003). Being a non structural approach is the main reason for using this approach. It has some attractive features too, which explains its popularity in the empirical banking literature. The P-R revenue equation is easy to estimate by means of regression, with only few explanatory variables. Since the P-R model involves only firm-level data, it is robust to the geographic extent of the market.

Findings and conclusion

The results suggest that the Sri Lanka commercial banking market is monopolistic-competitive in general, a feature of banking structure in developed countries and other emerging markets. More important, supporting the prediction of Casu & Girardone, (2006) and Northcott, (2004) the results of the study suggests that the competitive nature of the Sri Lanka banking system is not significantly different from the competitive banking system in other countries. Though most of the assets and the loans are concentrated in two state banks, the estimated annual H statistics shows that the competition in Sri Lankan banking industry has gradually increased during the sample period. This is particularly due to the reason that the state-owned banks too have entered to competition to capture and retain their market share which they loss during 1996-2003 period. The findings of the study supports the predictions of NEIO literature and thus advances in technology, new types of dynamic bank firms, various products and services, financial liberalization, and the ongoing economic and regulatory integration may have caused this increased competition in the Sri Lankan banking sector during the sample period. However, the disaggregated picture of competitive conditions shows that competition in banking intensified during 2006-2008 and slowed down there after.

Key References

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