

Discussion on the paper

‘Do banking regulations affect the competitiveness of Sri Lankan banks by limiting cross-ownership?’

by

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A Compressed view of the paper

- Research Questions:

1. Does the Cross-ownership affect the competitiveness of banks in Sri Lanka?
2. Which market structures approximate the various banking groups in Sri Lanka

- Sample: Sri Lankan banks, 2009 – 2018, panel data

- Methodology: H-statistic using Panzar and Rosse (1987)

- Finding: Regulations pertaining to the cross-ownership did not 'adversely' impact the competitiveness of banks in Sri Lanka.

Financial reforms in Sri Lanka **Liberalization** vs **Regulation**

- **To Ensure competitiveness and efficiency**
- **Participation in the banking industry by the private sector Real time gross settlement (RTGS) as a method of settlement of payments amongst banks.**
- **To ensure Financial stability**
- **Prohibition of direct/indirect ownership of a bank's shares of more than 10% in general**
- **Adoption of prudential regulations in respect of the maintenance of capital adequacy ratios, asset classification & provisioning and statutory liquid asset ratio**
- **Voting rights are curtailed to 15% (influence of shareholders through nomination to the Board of Directors)**
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Stylized facts

- 33 banks in Sri Lanka account for approximately 60% of the assets of the financial sector.
- Slow but steady rise in aggregate profitability of the industry
- Description of four forms of market structures as applicable to banking industry in Sri Lanka
- Review of literature of studies using Panzar and Rosse (1987) methodology

Methodology

Panzar and Rosse (1987) also a prod function, with alternative W variables.

- Banks are single-product firms
- Banks as intermediaries, provide financial services
- **Output**: value of loans granted and investments made by the bank
- **Inputs**: Labour, deposits from customers, capital

Traditional Production function approach with other methodologies

- **Output**: number of accounts or transactions performed in these accounts
- **Inputs**: All costs incurred to generate the output.

- The P-R revenue test is based on a reduced-form equation relating **gross revenues** to a vector of **input prices** and other firm-specific control.
- Assuming an «-input single-output production function, the empirical reduced form equation of the P-R model is written

$$\log \text{TR} = \alpha + \sum_{i=1}^n \beta_i \log w_i + \sum_{j=1}^J \gamma_j \log \text{CF}_j + \varepsilon,$$

The test for competitiveness is then measured by calculating an index known as the H- statistic, which is the sum of elasticities of the revenue measure to a change in factor prices

Three alternative versions of the empirical PR Model

$$\log \text{TR} = \alpha + \sum_{i=1}^n \beta_i \log w_i + \sum_{j=1}^J \gamma_j \log \text{CF}_j + \delta \log(\text{TA}) + \varepsilon,$$

$$H_S^r = \sum_{i=1}^n \beta_i$$

$$\log(\text{TR}/\text{TA}) = \alpha + \sum_{i=1}^n \beta_i \log w_i + \sum_{j=1}^J \gamma_j \log \text{CF}_j + \varepsilon,$$

$$H^P = \sum_{i=1}^n \beta_i$$

$$\log(\text{TR}/\text{TA}) = \alpha + \sum_{i=1}^n \beta_i \log w_i + \sum_{j=1}^J \gamma_j \log \text{CF}_j + \delta \log(\text{TA}) + \varepsilon,$$

$$H_S^P = \sum_{i=1}^n \beta_i$$

Model used in the study

$$\log R_{it} = \sum_{j=1}^J \alpha_j \log W_{it}^j + \sum_{k=1}^K \beta_k \log S_{it}^k + \sum_{n=1}^N \gamma_n \log X_{it}^n + \varepsilon_{it}$$
$$H = \sum_{j=1}^J \left(\frac{\partial R_i}{\partial w_{j_i}} \frac{w_{j_i}}{R_i} \right) \quad i = 1, \dots, I; \quad t = 1, \dots, T;$$

R measures **the gross revenue (including both interest and non-interest income) as a percentage of assets**. W is a three-dimensional vector of **factor prices as a percentage of assets** (since we consider banks to have three inputs, i.e. funds, labour and capital), S is a vector of variables which will be used to distinguish the size of the firm (scale variables).

Findings

- Cost of funds account for a significant proportion of the total costs of the bank.
- Prevalence of monopolistic competition
- domestic banks operate in a perfectly competitive market
- banks affected by cross-ownership: perfect competition when either measure of revenue is used
- banks not affected by cross ownership operate under conditions of monopolistic competition and their competitiveness is notably less than that of banks affected by cross ownership. Contrary to expectations based on theoretical literature.

Questions/ clarifications/Suggestions

- How far the **assumption** of one product firm is valid? It requires more details about the operations of banks and if the loans are not the main output, then how valid are the conclusions?
- Third equation in slide 8 is a log-log price equation instead of a log-log revenue equation. This study uses W variables (factor input prices) which are also divided by the total assets. In view of this, the interpretation of elasticities of factor inputs need to be explained.
- Literature review: methodology used in the literature and the time-period of the studies could have been elaborated so as to enable us to have a more meaningful comparison of the present study with its precursors.

- Do the business models of banks differ across different types:
 - Domestic banks;
 - Banks affected and not affected by cross-ownership;
 - Systemically important banks; and
 - Foreign banks

Thank you!