

AGRICULTURAL CREDIT AND BANK EFFICIENCY

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1. INTRODUCTION

**In Dabbay and Lamberte (2024), we asked the question:
Is there a role for government financial institutions in a market-oriented?**

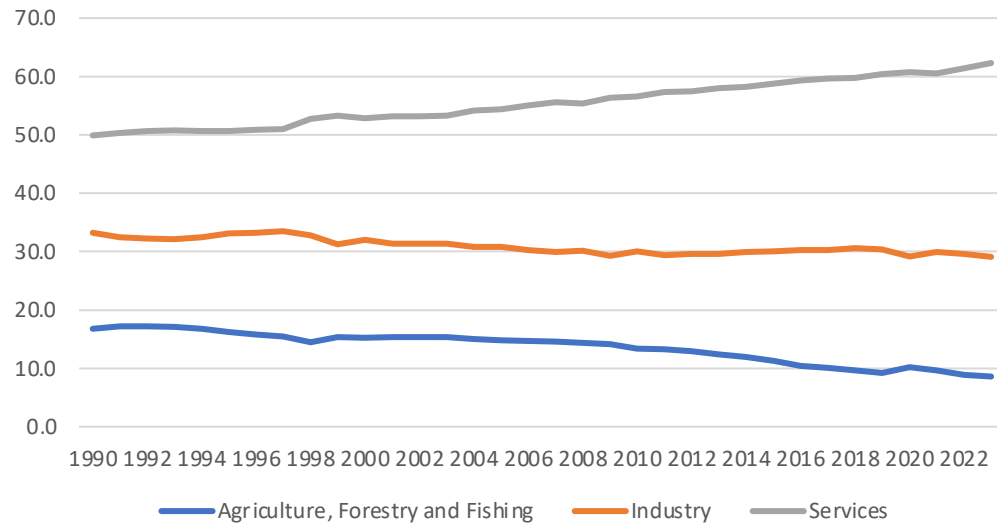
**After reviewing existing literature and experiences of many countries,
we found three roles that GFIs play:**

- (1) filling up gaps role (existence of market failure);**
- (2) countercyclical role; and**
- (3) enhancing competition role in the financial system.**

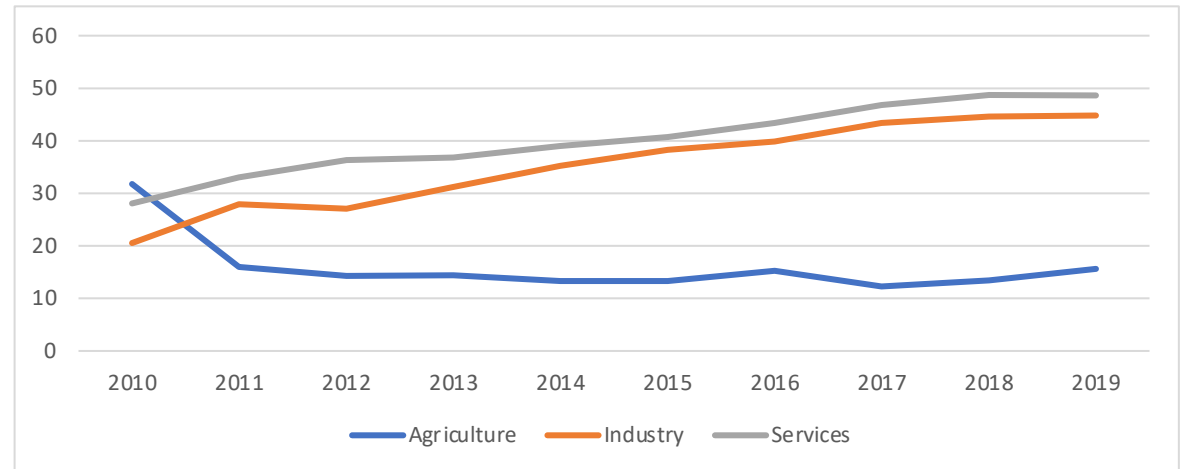
➤ *This paper focuses on the third role of GFIs by conducting econometric analysis to complement the results found in our earlier paper.*

2. Agricultural Credit and Government Financial Institutions

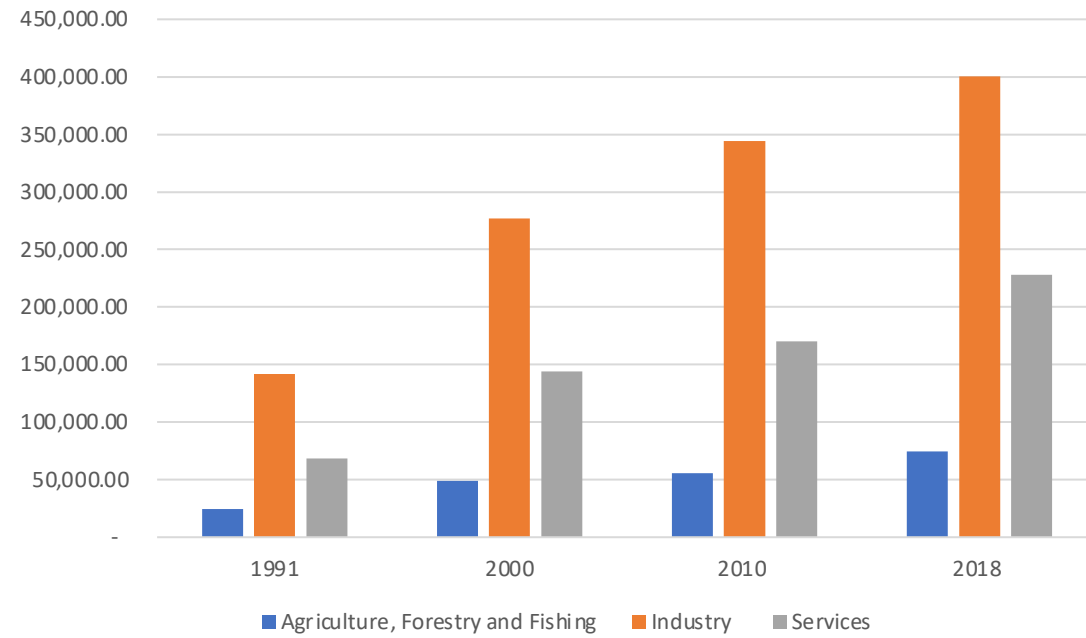
Economic transformation.....?



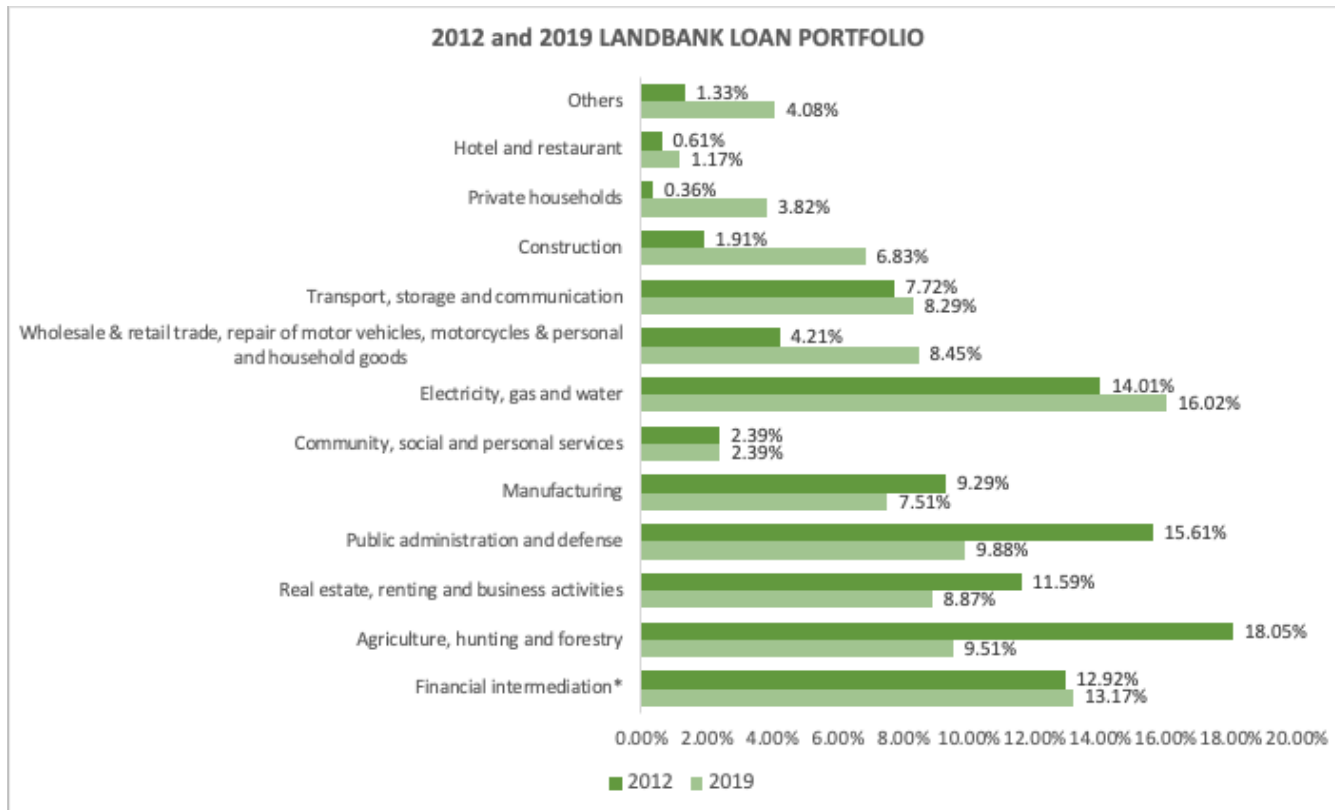
Bank loan allocation



Is high labor productivity sector attracting more loans.....?



Can LandBank help.....?



...by engaging itself in commercial lending, LandBank, a universal bank competes directly with private financial institutions (PFIs).

This brings us back to the third reason for the existence of a GFI, which is to enhance competition in the financial system.

➤ Need to verify this empirical.

3. Bank Efficiency Analysis

If LANDBANK competes with PFIs in many segments of the financial markets, it should be at least as efficient as PFIs to contribute to the overall efficiency of the financial system.

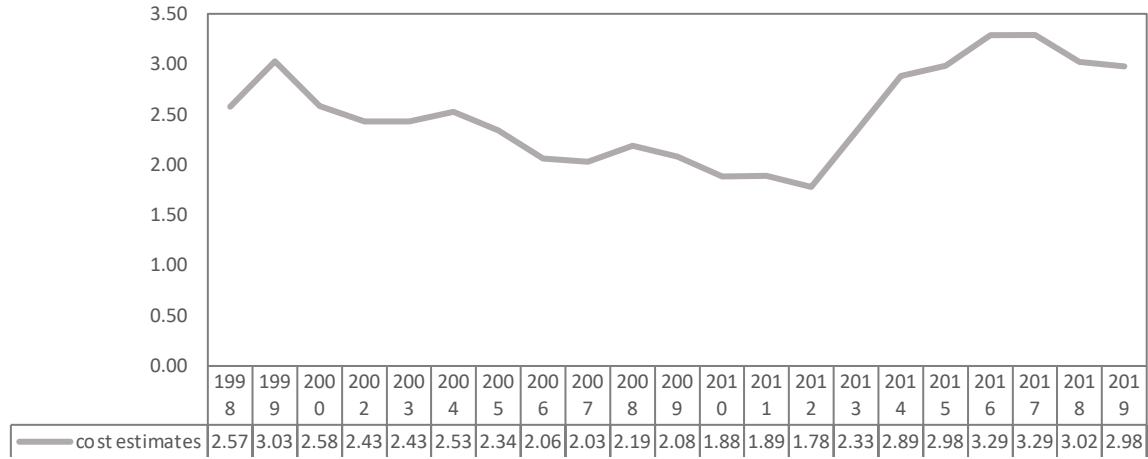
- **We use stochastic frontier analysis (SFA) to estimate cost efficiency of LANDBANK two GFIs and eight PFIs.**
- **The specific form of the cost function is transcendental logarithmic functional form.**

Definition of variables and descriptive statistics

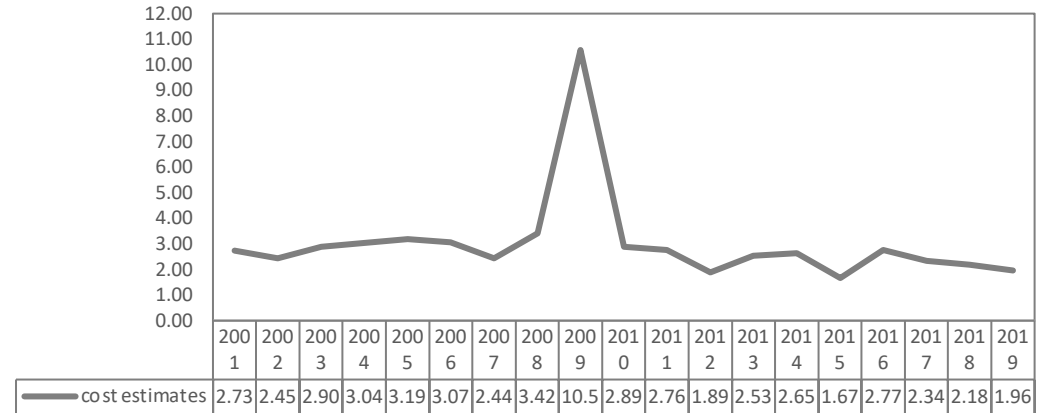
Variables	Description	Average	Standard Deviation
Dependent variable			
C	Total cost: interest expenses + overhead expenses (Php million)	26,202.98	21,116.11
Variable output quantities			
Y ₁	Gross loans (Php million)	310,547.37	371,475.06
Y ₂	Total securities (Php million)	124,554.43	112,913.93
Variable input prices			
W ₁	Price of funds: interest expenses/interest-bearing liabilities	0.04	0.02
W ₂	Wage rate: total personnel expenses/number of personnel or total personnel expenses/total assets	0.01	0.00
W ₃	Price of other inputs: other operating expenses/total assets	0.02	0.01
Fixed netput quantities			
Z ₁	Off-balance sheet items (Php million)	203,860.71	348,587.21
Z ₂	Physical capital (Php million)	17,205.04	15,804.26
Z ₃	Total equity (Php million)	66,158.63	62,730.84
Potential Correlates			
R ₁	Leverage ratio: total liabilities/total equity	8.33	2.50
R ₂	Intermediation ratio: gross loans/customer deposits	0.70	0.44
R ₃	Deposit mobilization ratio: total customer deposits/total liabilities	0.79	0.15
R ₄	Asset utilization ratio: non-earning assets/total assets		
R ₅	Bank ownership: GFI equals 1; PFI= 0		

Cost Inefficiency Estimates

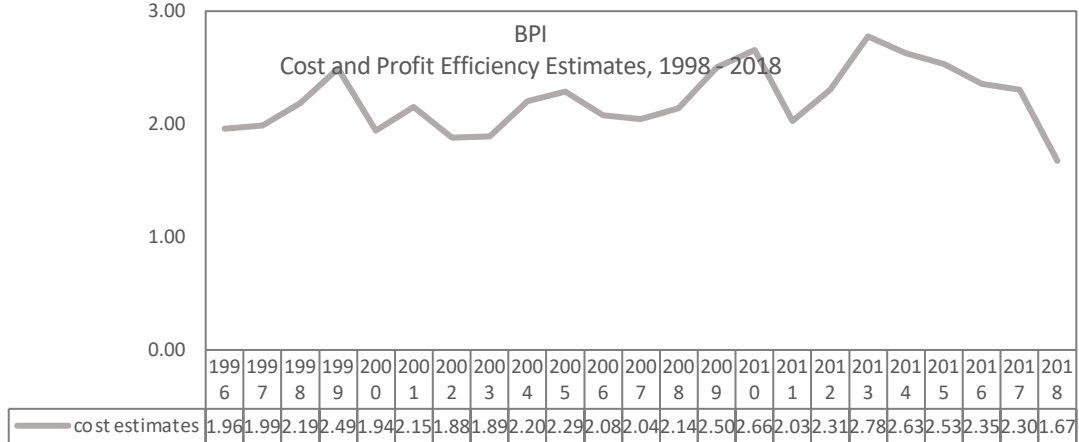
LANDBANK



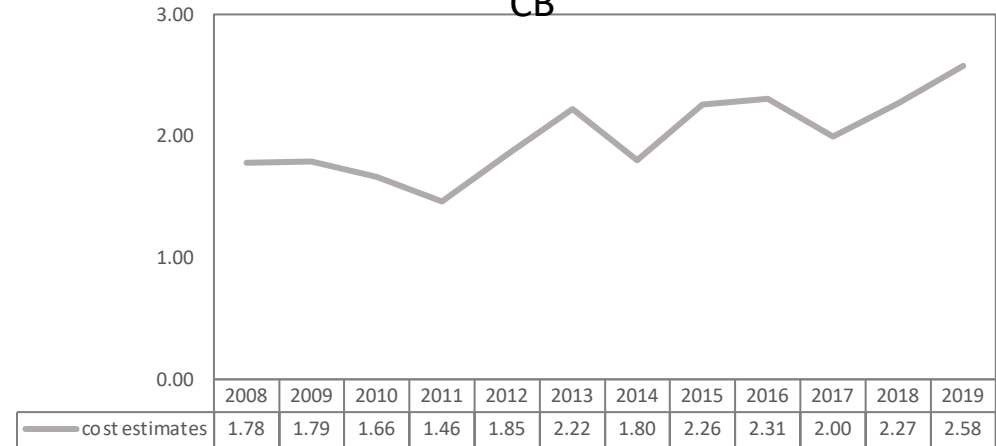
BDO



BPI

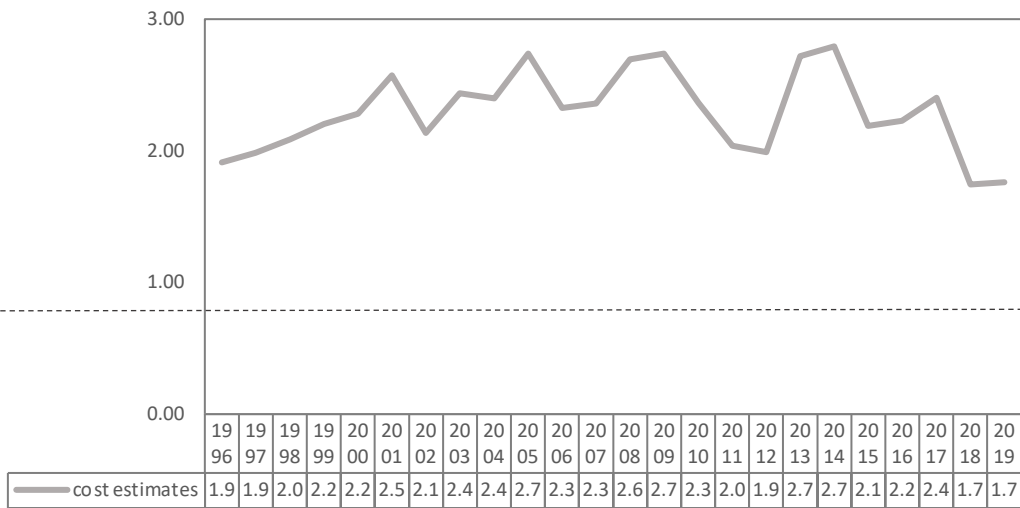


CB

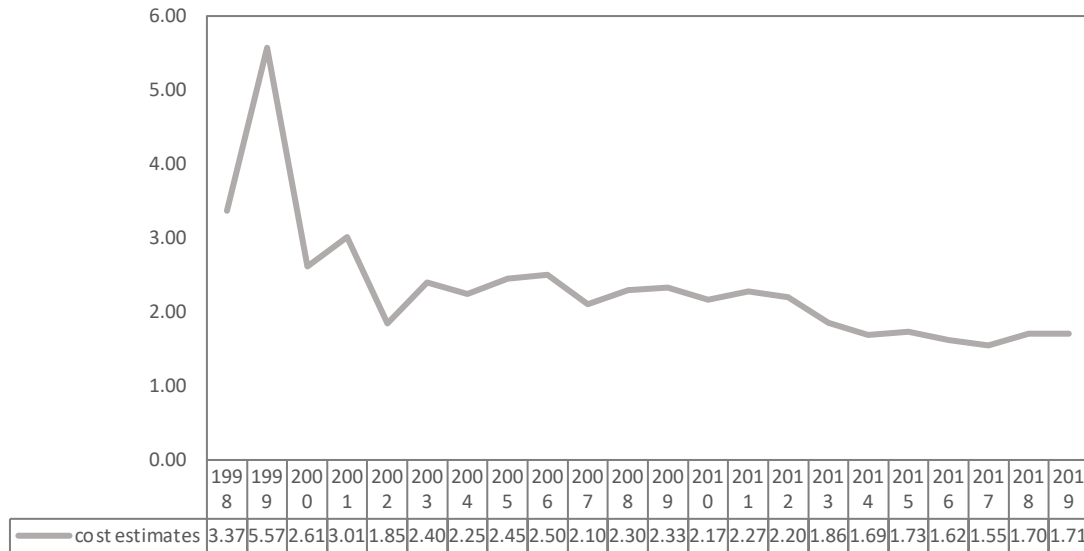


Cost Inefficiency Estimates

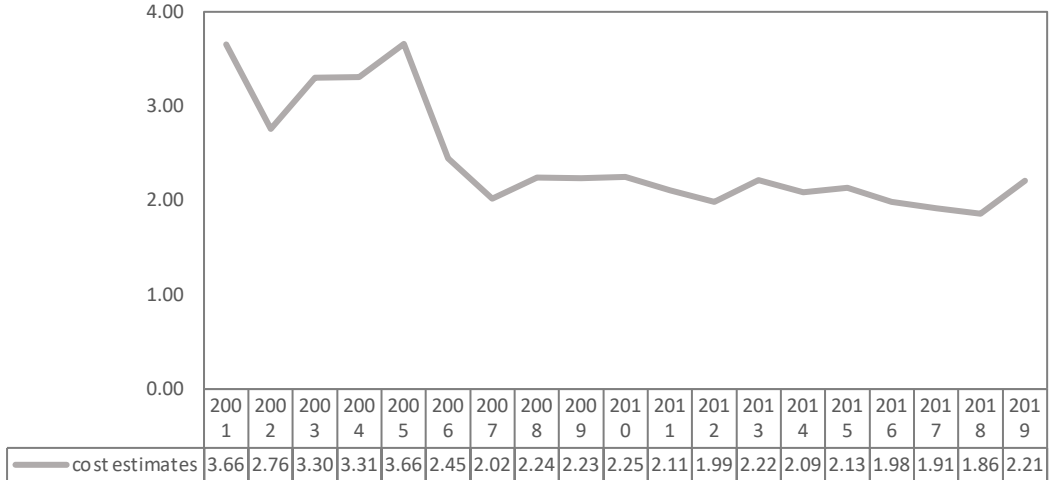
MBTC



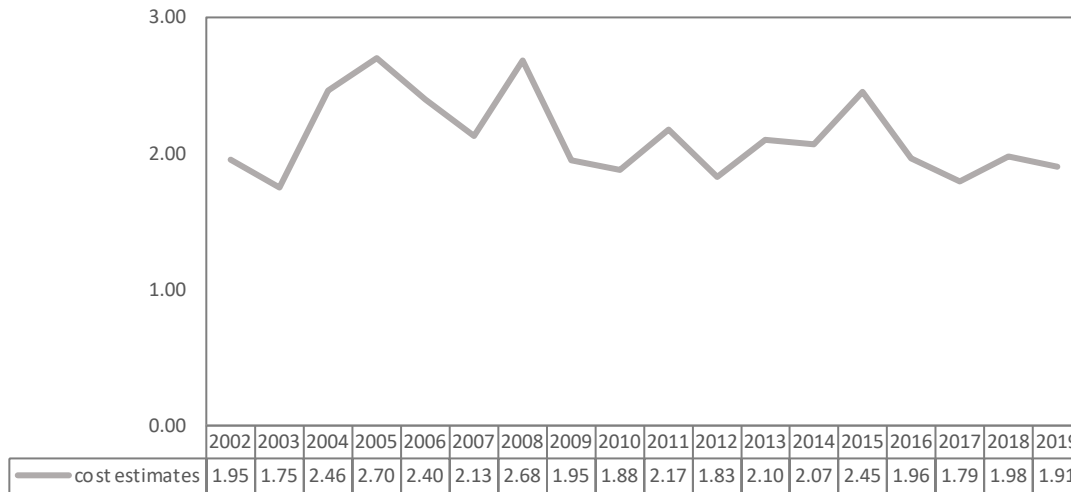
PNB



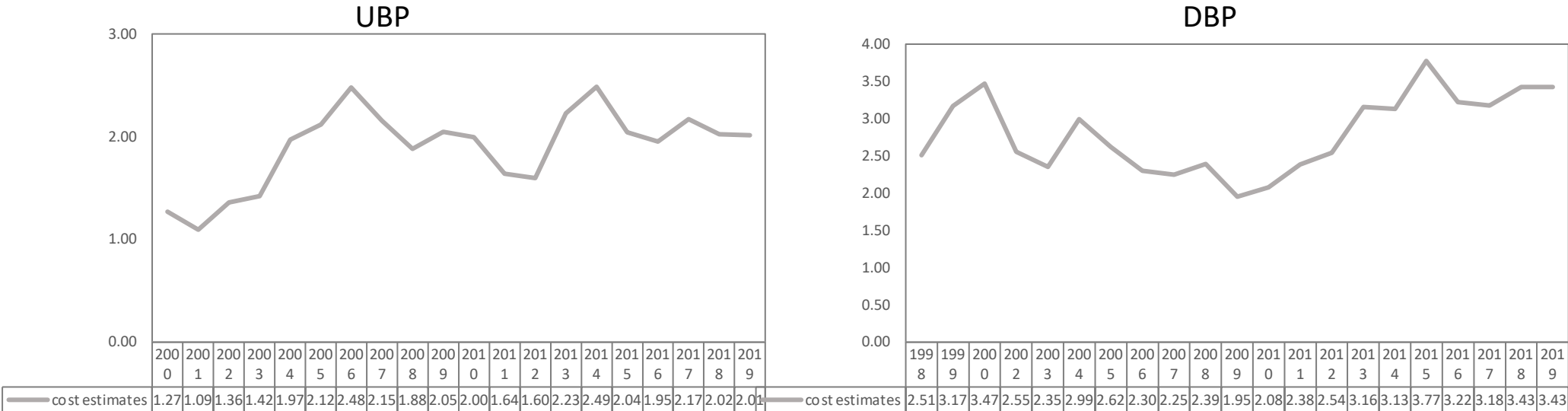
RCBC



SECB



Cost Inefficiency Estimates



Average cost inefficiency estimates of banks, 1996-2019

