DETERMINANTS OF TECHNICAL EFFICIENCY OF BANKS IN YEMEN

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DETERMINANTS OF TECHNICAL EFFICIENCY OF BANKS IN YEMEN

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ABSTRACT

The main objective of this thesis is to identify the efficiency level and the determinants of efficiency of the Yemeni banks over the period from 1998 to 2011. This thesis consists of three specific objectives. The first objective is to determine the technical, pure technical and scale efficiency score of banks. The second objective is to analyse the differences in efficiency in terms of banks identity, bank type and internationalization of banks. The third objective aims to identify factors that determine efficiency. The two-stage approach which consists of data envelopment analysis (DEA) and Tobit regression is employed in analyzing the data. Specifically, the DEA was used to estimate banking efficiency in the first stage, while the Tobit regression was applied in examining the determinants of the efficiency obtained from the first stage. The results of DEA show that, on average, technical, pure technical and scale efficiencies for all banks over the sample period are 74.5%, 86.3% and 85.5%, respectively. The results also indicate that most Yemeni banks are facing scale problems due to decreasing returns to scale. In addition, the results reveal that there are significant difference in efficiency among banks operating in Yemen based on their identity, bank type and internationalization of banks. Moreover, the results from Tobit regression illustrate that there is a positive relationship between efficiency scores and internationalization of banks, type of banks, intellectual capital performance and gross domestic product, while banks size and profitability have significant negative influence on efficiency. A major contribution that arises from the study is that this is the first study that shows the importance of intellectual capital performance in ensuring banks efficiency especially in Yemen.

Keywords: technical efficiency, pure technical efficiency, scale efficiency, data envelopment analysis, intellectual capital performance
ABSTRAK


Kata kunci: kecekapan teknikal, kecekapan teknikal tulen, kecekapan skala, analisis penyampulan data, prestasi modal intelektual
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<td>AE</td>
<td>Allocative Efficiency</td>
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<td>ATM</td>
<td>Automated Teller Machines</td>
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<td>CBY</td>
<td>Central Bank of Yemen</td>
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<td>CEE</td>
<td>Capital Employed Efficiency</td>
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<td>Crisis</td>
<td>Financial Crisis</td>
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<td>CRS</td>
<td>Constant Returns to Scale</td>
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<td>Data Envelopment Analysis</td>
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<td>DFA</td>
<td>Distribution-Free Approach</td>
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<td>DMUs</td>
<td>Decision Making Units</td>
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<td>DRS</td>
<td>Decreasing Returns to Scale</td>
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<td>EE</td>
<td>Economic Efficiency</td>
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<td>FINCP</td>
<td>Financial Capital</td>
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<td>GATS</td>
<td>Agreement on Trade in Services</td>
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<td>GCC</td>
<td>Gulf Cooperation Council</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>HCE</td>
<td>Human Capital Efficiency</td>
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<td>Human Intellectual Capital</td>
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<td>ICP</td>
<td>Intellectual Capital Performance</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>Internationalization of Banks</td>
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<td>ROA</td>
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<td>Value Added Intellectual Coefficient</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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<td>YBRD</td>
<td>Yemen Bank for Reconstruction and Development</td>
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1.1 Introduction

It is widely believed that the banking system is the core of the economic structure of any country, and represents the engine of any development initiative. In addition, it plays a significant role in the growth and development of an economy, as evidenced academically and practically by the literature (Al-Marri, Ahmed & Zairi 2007). Therefore, as the financial institutions and banking system become more effective and stronger, the more roles they play in the economic development through efficient production of products and services (Al-Hajri & Tatnall, 2008). Hence, to carry out this role, each bank needs to be efficient in order to maintain its business successes, given increasing competition in the financial markets, and to contribute to the economy.

Efficiency in economics is a term that describes how well a system performs in producing the maximum output for a given quantity of inputs. If more outputs are produced without altering inputs, or if fewer inputs are used for the same quantity of output produced, efficiency is said to be improved. In the banking industry, efficiency is measured as the difference between the bank's position and its best production frontier. These measures are critical as they enable us to distinguish banks that will survive from those that will not. As such, the present study examines the efficiency of the banking sector in Yemen over the period from 1998 to 2011.
The contents of the thesis is for internal user only
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