Intellectual capital and bank branches' efficiency: an integrated study

Irene Wei Kiong Ting Faculty of Industrial Management, Universiti Malaysia Pahang, Gambang, Malaysia *Fu-Chiang Chen* Department of Accounting Information, Chihlee Institute of Technology, New Taipei City, Taiwan *Qian Long Kweh* Faculty of Management, Canadian University Dubai, Dubai, United Arab Emirates *Hai Juan Sui* Faculty of Industrial Management, Universiti Malaysia Pahang, Gambang, Malaysia, *Hanh Thi My Le* Faculty of Accounting, Ton Duc Thang University, Ho Chi Minh City, Vietnam

ABSTRACT

Purpose – This study aims to investigate the association between intellectual capital (IC) and bank efficiency of Taiwanese bank branches.

Design/methodology/approach – This study manually collects sample data from 107 nonpublic financial reports of the bank branches of Taiwan Business Bank Company Limited. As this study concerns bank branches, this study uses questionnaires related to IC to measure the implementation of IC at branch level. This study employs data envelopment analysis (DEA) models (BCC, EBM and Boot BCC) to identify bank branches' efficiency. This study uses partial least square-based structural equation modelling analysis to assess the impact of IC and bank efficiency.

Findings – Result reveals that relational capital (RC) significantly and negatively impacts bank efficiency. Findings also imply that human capital (HC) and structural capital (SC) do not contribute to bank efficiency in Taiwan.

Practical implications – Spending effort in building relationships with customers diverts banks' resources. More inputs that are used may not be converted to outputs immediately. Bank branches should focus on enhancing their service quality to attract customers to use the facilities provided by branches.

Originality/value – To the best of the authors' knowledge, this empirical study is the first to examine the association between IC and bank branches' efficiency in Taiwan by integrating primary and secondary data. For IC components, this study conducts a survey by designing the questionnaires related to IC to assess the implementation of IC at bank branches in Taiwan. In terms of efficiency, this study uses bank financial data and DEA models to identify bank branches' efficiency.

KEYWORDS: Intellectual capital, Bank branches' efficiency, Data envelopment analysis

DOI: https://doi.org/10.1108/JIC-07-2020-0245

ACKNOWLEDGEMENTS

This research is funded by the Foundation for Science and Technology Development of Ton Duc Thang University (FOSTECT), website: <u>http://fostect.tdtu.edu.vn</u>, under Grant FOSTECT.2019.B.14.