2020 AFAANZ Research Grant – Final Report

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(2) Project Title

Do Bank Executives Bank on Accounting Information for Acquiring Information Technology (IT) Assets? A Behavioural Accounting Approach

(3) Updated Project Summary (500 words) including any variations between the project undertaken and the original application

There are two minor modifications in the research strategy:

i)   first, after extracting the efficiency measures, we found that the variations of (profit and cost) efficiencies across Australian banks are very small. Hence, we utilised the efficiency measures to extract the cost and profit frontiers. Then we used IT and other variables (bank-specific, industry-specific and country-specific factors) to explain how bank performance is predicated on IT and other regressors. Our innovation proved productive as we found robust (econometric) results.

ii)   secondly, we further explained the rationale for behavioural accounting as following: both human agents and IT can extract the hard information of depositors and borrowers. Yet, human interactions can FULLY extract the soft information of customers. The soft information is rooted to the behavioural issues, as explained in the paper. Thus, a critical question for us is whether managerial decisions based on IT can efficiently use available information (both hard and soft) for the benefits of shareholders, or other stakeholders.

(4) Funds Granted
AUD$5,000.00

(5) Detailed Report on Expenditure of Funds against Budget Items, with variations explained
A research assistant (RA)was employed under WSU's costing of $54.62/hr (level HEW-5 - 20551.65015) to collect bank financial data from annual reports and other related data from Datastream and Fitch

connect database. After data collection, the RA was asked to clean the data and make it ready for modelling. Additionally, the RA did help in collecting the relative literature for this project.

(6) Outcomes, for example, working papers, presentations and publications (give full details, including abstracts)

We completed a paper titled "**In search of a rational foundation for the massive IT boom in the Australian banking industry: Can the IT boom really drive relationship banking?**" and have recently submitted the paper to International Review of Financial Analysis (ABDC: A, Scopus: Q1). The paper received a first round of minor revisions and considerations which is due by the 17th January 2022.

The abstract of the paper is as follows.

We develop and test several models using primary and secondary data from the Australian banking industry to explore the effects of information technology (IT) on the performance of major Australian banks during 2000-2019. It is widely held that IT triggers significant improvements in bank performance in two plausible ways: First, IT can reduce operational cost by increasing cost efficiencies. Second, IT can raise profit efficiencies via a network effect: IT can facilitate better intermediation and, thereby, increase transactions among customers within the same network. Yet, the empirical evidence from a large number of studies across the globe failed to reach a consensus on the precise effects of IT on the banking industry as some find evidence to concur with the Solow Paradox while others contradict the Solow paradox. Thus, it has become a durable debate in the banking literature to rationalise how these two "seemingly positive effects of IT" fail to create a consensus on IT's impacts on banks performance. It is well-established in the literature that the heterogeneity in banking services' quality is partly responsible for the inconsistency in the findings. We, hence, focus upon the top-tier Australian banks for which the quality of banking services is homogeneous and apply the frontier approach to explain how the IT boom has impacted the frontier of production of banking services for these Australian banks. The results establish that the frontiers of bank profits decline due to adoption and diffusion of IT investment, reflecting adverse effects from IT's failure to adequately collect soft information in this industry despite significant improvements in the cost technologies driven by the IT boom. Hence, there is evidence that the IT boom has failed to promote relationship banking in Australia.

Keywords: Information technology, transactional banking, relationship banking, profit and cost frontiers, Panel ARDL approach, Solow Paradox

(7) Future Intentions for this Project (give full details)

a. Conference submissions – The working paper is going to be presented at a seminar at Western Sydney University.
 b. Journal submissions – A fully developed manuscript has been submitted to International Review of Financial Analysis (ABDC: A, Scopus: Q1) and received a first round of minor revisions and considerations.
c. Grant applications – We received the WSU, school of Business 2020 Small Project Grant Scheme ($4000) to extent this study this study how Intellectual capital impact bank profitability on a global scale.
d. Projects - We are planning to extend this study by investigating how Intellectual capital impact bank profitability on a global scale.

(8) Summary of Outcomes and Benefits

We are aiming to complete our minor revisions by due date and hopefully gets accepted and turn into A journal publication. Once finalized, we will try and share our findings with the banking industry in Australia since we believe that our findings have major implications for this vital industry.

The experience of using AFAANZ funds to collect data and undertake the research process has been very useful and beneficial to all three researchers and we would like to thank AFAANZ for funding the project.