Efficiency and Non-Performing Loans in Community Banks in Tanzania
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## EXTENDED ABSTRACT

Bank efficiency studies have concentrated on Traditional Commercial Banks (TCBs), and mainly in developed countries. This study examined bank efficiency measures and their link with Non-Performing Loans (NPLs) in a small community banking industry in Tanzania. Specifically, the study: (i) measured the efficiency score of Community Banks (CBs) in Tanzania in a multipleinput/output framework and analysed the impact of bank specific and regulatory factors on bank efficiency, (ii) determined the main factors leading to accumulation of NPLs among CBs, (iii) established the relationship between cost-efficiency and NPLs in CBs, and (iv) established the relationship between efficiency measures and NPLs threshold in CBs. The study covered a period of 13 years (2002-14) and employed an explanatory sequential research design. The study utilized Data Envelopment Analysis (DEA) to measure efficiency, while tobit and probit regressions were used to model relationships among variables, and applied the Stata 11.1 software to analyse quantitative data. The results established that efficiency in CBs was generally low. Cost Efficiency (CE) registered an average score of 35.5% while technical and allocative efficiency measures were at 63.4% and 51.9% respectively. Low CE was mainly found to be associated with excessive regulatory requirements and additional cost associated with servicing poor clients. Bank size, capital adequacy ratio and loan to assets ratio had a positive influence on most efficiency measures while the net interest margin had a negative impact on CE. NPLs ratio in CBs was 4% higher than the industry average, while capitalization and loan to assets ratios, GDP and the cooperative banking factor had an impact on NPLs. It was further established that NPLs in CBs were more a consequence of "bad luck" than bad management. It was further revealed that technical efficiency under constant returns to scale, scale efficiency and bank categories impacted on the probability to NPLs threshold. The study concluded that efficiency and NPLs performance levels were adverse

and bi-directionally negatively related. Accordingly, efficiency and NPLs performance levels were generally determined by bank size, capitalization, interest margins, regulatory requirements, and bank category. The policy implications of these results are that CBs should increase their assets size and capitalization in order to enhance efficiency and control excessive risk taking behaviour. Moreover, CBs management should revise their pricing policy to moderate interest margins as higher margins are counterproductive. Further, CBs should increase application of group lending methodology in order to increase cost efficiency and enhance chances to NPLs threshold. Further, BOT should apply a separate regulatory framework to CBs to cater for their uniqueness. BOT should also provide managerial training and knowledge sharing aimed at increasing management efficiency and NPLs control in CBs. Finally, the government and development partners should financially and technically support the community banking industry in order to enhance financial inclusion in low income markets, especially in the rural sector.