

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

**MODELLING THE PERFORMANCE OF COMMERCIAL BANKS IN
MALAYSIA BEFORE AND DURING COVID-19 USING MCDM
APPROACHES**

(P42M22)

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ABSTRACT

A commercial bank is a for-profit financial organization that accepts deposits, offers loans, and provides customers with other financial services. Businesses rely on commercial banks for their short-term and medium-term financial needs. However, they do not offer long-term credit because they must maintain their liquid assets. This study aims to select, compare, and rank the performance of the commercial banks in Malaysia before and during pandemic COVID-19. The spread of the novel COVID-19 virus and the subsequent pandemic has substantially impacted the banking sector's performance worldwide. The information was acquired from the annual reports of eight commercial banks in Malaysia starting from 2018 to 2021. In our research, we are attempting to propose the integrated Analytic Hierarchy Process (AHP) with Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS), VlseKriterijumska Optimizacija I Kompromisno Resenje (VIKOR), and Preference Ranking Organization Method for Enrichment Evaluations II (PROMETHEE II). The AHP approach will be used to determine the weightage of criteria where we used three expertise to conclude the weightage. The bank's performance was ranked using the multi-criteria decision-making (MCDM) methods which are TOPSIS, VIKOR, and PROMETHEE II. The overall performance of the commercial banks is evaluated in terms of six selected criteria, which are Return on Assets (ROA), Return on Equity (ROE), Earnings per Share (EPS), liquidity, total liabilities, and total equity. Research results reveal that Malayan Banking Berhad (MBB) had the best performance among Malaysian commercial banks. The VIKOR and PROMETHEE II methods demonstrated that Malayan Banking Berhad remained at the top of the rankings for four years. Using the TOPSIS method, Malayan Banking Berhad is also ranked first in 2020 and 2021. Meanwhile, Alliance Bank had the lowest ranked performance among Malaysian commercial banks. It is because, using the VIKOR and PROMETHEE II methods, Alliance Bank last rank remained constant from 2018 to 2021. Furthermore, the TOPSIS method only recorded Alliance Bank in the last rank for 2018 and 2019. Ultimately, the trend results for the eight commercial banks in VIKOR and PROMETHEE II are nearly identical.