UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

EVALUATION ON THE MALAYSIAN HEALTHCARE COMPANIES PERFORMANCE USING DATA ENVELOPMENT ANALYSIS MODEL

MUHAMMAD SYAHIR BIN NORAZMAN - 2020615378
MUHAMMAD HAZIQ FAKHRUDDIN BIN BAHARLI – 2020476564
MUHAMMAD SYAHMI AKHTAR BIN SAMSUDIN - 2020490084

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ABSTRACT

During the COVID-19 outbreak in Malaysia, healthcare stocks plummeted, causing several companies problems. Despite the challenges, several healthcare companies managed to make big profits which attract many investors' attention. This study uses the Data Envelopment Analysis (DEA) approach, specifically the Charnes, Cooper, and Rhodes (CCR) model, to evaluate Bursa Malaysia-listed healthcare companies to guide investors and illuminate their performance during this crucial period. This research ranks healthcare companies by performance using DEA to help investors make smart investments. The DEA-based CCR model assesses healthcare companies using several input and output parameters. Financial performance ratios can be used to assess the healthcare companies' performance. This research inputs the debt-to-equity ratio and asset turnover ratio and outputs the return on equity, return on assets, earning per share, operating profit margin, and price-to-earnings ratio. This method optimizes input factors to maximize output for a reliable healthcare company rating. The Super Efficiency approach is also used to refine the ranking process when numerous companies have the same efficiency score. This research found Malaysia's top three healthcare companies throughout 2019 to 2022 is HARTALEGA, IHH HEALTHCARE, and KOTRA INDUSTRIES BERHAD. These companies were efficient and resilient, making them to be a good investment choice for investors. Their success shows they can overcome pandemic obstacles and preserve profitability. In conclusion, this research uses the DEA technique, especially the CCR model, to assess healthcare companies in Malaysia during COVID-19 pandemic, where major healthcare companies were struggling financially during that time. This research helps investors to find safe, lucrative healthcare investments by identifying healthcare companies' issues and assessing their performance. The top-performing companies might help prospective investors to boost Malaysia's healthcare sector.