

## **ABSTRACT**

*The purpose of this study is to see the role of IT investment value on the performance of banking-based companies, namely PT. Mandiri Bank. Refers to the increase in the quantity of IT investment made by the company, regardless of whether it is directly correlated with the level of performance and productivity achieved by the company. The data used for this research is derived from the annual report of Bank Mandiri for 15 years from 2006 to 2020. The variables contained in this research are the Equity variable (K), the Labor variable (L) and the IT capex variable (I). ). The process of data processing using SPSS software using the analysis method of Multiple Linear Regression and Nonlinear Regression by applying the classical assumption test method and statistical test. After processing the data, the results obtained are compared and taken which one is closest to the actual income value. In this final project, the results taken are by using the Multiple Linear Regression method, because the result of the difference obtained is 0.04% close to the actual value of income. Then after that the data were analyzed using the Cobb Douglas production function, by looking at the elasticity of the IT capex variable coefficient ( $\beta_3$ ) in accordance with the objectives of this study, the value obtained at Bank Mandiri was 8.898. This shows how important IT capital costs are at Bank Mandiri, due to the increase in performance of more than 8%. The results of the analysis of the Cobb Douglas production function at Bank Mandiri have less productivity in a period of 15 years (2006-2020). However, when viewed from the contribution of each variable, it turns out that none of them has a negative impact on Bank Mandiri. Such as equity, labor, and IT capex variables. Especially the IT capex has the highest contribution value compared to the other 2 variables.*

*Keywords— Cobb Douglas, Multiple Linear Regression, Nonlinear Regression, Bank Mandiri, IT Investment Value.*