

**UNIVERSITI TEKNOLOGI MARA**

**Evaluation of Pricing Warrant Using  
Black-Scholes Model in Comparing  
Between Historical and Implied  
Volatility**

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## **STUDENT'S DECLARATION**

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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## ABSTRACT

A warrant is security that enabling the holder the right but not the obligation to buy or sell the underlying stock at a specific date for a specific price. This study discusses about pricing warrant in Malaysia by using Black-Scholes model method. The objectives of this study is to determine the price of the warrant and to compare the price of the warrant using historical and implied volatility. The data were selected randomly from UiTM's datastream which are listed in Bursa Malaysia. There are five selected companies have been choosing which are Boon Koon group Bhd, Hovid Bhd, MGB Bhd, Sersol Bhd and Kelington Group Bhd. The warrant and option have many similarities. The assessment techniques used to price the option could also be linked to the warrant. The exercise price, interest rate, initial market price, maturity date, historical and implied volatility are the parameters that will be used in this research. The results show that the Black-Scholes model is suitable method to price the warrant since it gives accurate values in calculating the price of the warrant. Besides that, the results of moneyness shows that all five selected companies turned to be in the money. Therefore, it can say that these companies are profitable and have low risk. The historical and implied volatility has been compared to find the best volatility in pricing the warrant. The results of the finding have shown that the implied volatility is the best and most accurate volatility that companies can use for pricing the warrants. The objectives of this research are well accomplished.

**Keywords:** Warrant, Black-Scholes model, historical volatility, implied volatility, moneyness

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