

Independent Study Title	DETERMINANTS OF IMPLIED VOLATILITY THAI SMILE
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### **ABSTRACT**

There is volatility smile in Thailand. Different value of implied volatility at each level of moneynesses produces a smile shape of volatility. This research investigates which factors can determine implied volatility smile of Derivatives Warrants (DW) traded in Stock Exchange of Thailand (SET). There are seven explanatory variables. Potential explanatory variables consist of number of issuer, individual issuer, DW trading volume, beta, stock trading volume, firm size, and firm leverage. Issuer is empirically observed as a reason why implied volatility expresses smile shape for both call and put DW. Two dimensions of issuer, which are number of issuer and individual issuer, effect volatility slope of both call and put DW. During examined period, there are only nine issuers of call DW and seven issuers of put DW who participate in the market. Low number of issuer increases volatility slope. Individual issuer also produces volatility slope. Some of issuers sell OTM) or in-the-money (ITM) DW at expensive price relative to at-the-money (ATM) DW on the same underlying stock. This action totally effects volatility slope to express more smile shape.

**Keywords:** Implied Volatility, Volatility Smile, Derivative Warrants