



# PROBIT MODELING OF INDONESIAN ECONOMIC AND SOCIAL FACTORS TO THE INTEREST IN PURCHASING FLOOD-IMPACTED INSURANCE PRODUCTS

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## ABSTRACT

Flood is a serious problem that can occur in many countries in the world. For tropical countries such as Indonesia, flooding is generally caused by rainfall that is high above normal. Almost all cities in Indonesia experience flooding every year, including DKI Jakarta, the capital city of Indonesia. Based on data from the National Disaster Management Agency (BNPB) in 2020, East Jakarta is a city that is prone to flooding. Considering that there are so many losses caused by flooding, it is necessary to have a disaster mitigation effort to minimize the possible risk of flooding. One of the risk mitigations due to natural disasters is to buy insurance products. However, not all people buy flood-impacted insurance products because of their economic and social factors. This research aims to create a model with Probit Regression Model to determine the factors that influence Indonesian's interest to buy flood-impacted insurance products. Furthermore, this study conducts a test. The results show that from the 19 factors used, eight factors significantly affect Indonesia's interest in purchasing flood-impacted insurance products. In the end, this research calculates the level of model accuracy and obtained 84.3%.

**Keywords:** *Flood; Risk Mitigation; Logistic Regression Model; Insurance*