

## Semiparametric Regression Of Truncated Spline Biresponse On Farmer Loyalty And Attachment Modeling

**Authors :** Adjil Achmad Rinaldo Fernandes

**Abstract :** Regression analysis is a statistical method that is able to describe and predict causal relationships between individuals. Not all relationships have a known curve shape; often, there are relationship patterns that cannot be known in the shape of the curve; besides that, a cause can have an impact on more than one effect, so that between effects can also have a close relationship in it. Regression analysis that can be done to find out the relationship can be brought closer to the semiparametric regression of truncated spline biresponse. The purpose of this study is to examine the function estimator and determine the best model of truncated spline biresponse semiparametric regression. The results of the secondary data study showed that the best model with the highest order of quadratic and a maximum of two knots with a Goodness of fit value in the form of Adjusted R<sup>2</sup> of 88.5%.

**Keywords :** biresponse, farmer attachment, farmer loyalty, truncated spline

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