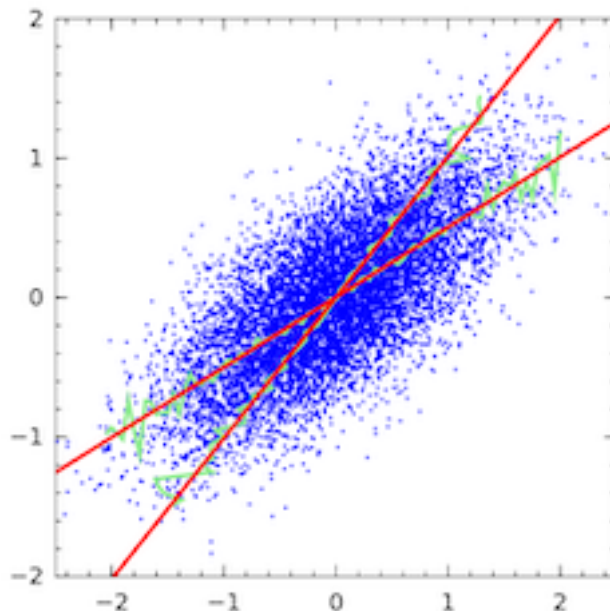# Errors-in-variables Model in Generalized Regression

Final project

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1   Motivation

In statistics, errors-in-variables models or measurement error models are regression models that account for measurement errors in the independent variables.

In the case when some regressors have been measured with errors, estimation based on the standard assumption leads to inconsistent estimates, meaning that the parameter estimates do not tend to the true values even in very large samples. For simple linear regression the effect is an underestimate of the coefficient, known as the attenuation bias. In non-linear models the direction of the bias is likely to be more complicated.

We are going to apply the errors-in-variables model to generalized regression. We choose logistic regression as an example to show how the errors-in-variables model works.

2   Reference

https://en.wikipedia.org/wiki/Errors-in-variables_models