

## Zero-step prediction

This type of prediction can be constructed not only for dynamic models but also for static ones. Its result (RPE - relative prediction error) can verify quality of the estimation.

$$RPE = \frac{\text{var}(y - y_p)}{\text{var}(y)}$$

## Prediction for regression model

Consider an example of predicting with the regression model

$$y_t = b_0 u_t + a_1 y_{t-1} + b_1 u_{t-1} + k + e_t$$

where the parameters  $b_0, a_1, b_1, k$  and  $r$  (noise variance) are unknown.

[Program and its description](#)

[Back to Main](#)

## Prediction for exponential model

Here, the data are simulated by the model

$$f(y|a) = a \exp(-ay)$$

The same form of the model is also used for estimation.

Program and its description

[Back to Main](#)