## R Notebook

## Criteria for evaluation: forecasting future inflation

The ability of the core inflation indicator to predict future headline inflation can be quantified by the following regression equation.

Here, x represents the headline inflation rate and core x represents some core inflation indicator, both year-on-year data. Parameter h is 12 (month) ahead in this case. For sufficiently large H, the core deviation,  $(x_t^{\text{core}} - x_t)$ , should be inversely related to subsequent changes in inflation,  $x_{t+h} - x_t$ . Moreover, in order for the candidate to satisfy equation (1), the coefficients in the regression, should satisfy  $\alpha = 0$  and  $\beta_H = -1$ .

$$x_{t+h} - x_t = \alpha + \beta \left( x_t^{\text{core}} - x_t \right) + \varepsilon_t \tag{1}$$