

Week Seven

[Help Center](#)

Goodness of Fit Tests

Last week you learnt how to use logistic regression for stratified analysis. This week you will learn how to determine whether or not the fitted model is good enough.

We will introduce the concepts of model calibration and model discrimination. You will learn about the various tests that can be used to assess the goodness of fit. You will be taught how to use ROC curve for discrimination. All these tests will be illustrated through interesting examples along with the STATA outputs. You will learn how to draw logical inference from the goodness of fit tests.

Lectures

Please click on the links below to access the video lectures for this seventh week

- [Assessing Model Calibration: Part 1](#)
- [Assessing Model Calibration: Part 2](#)
- [The Pearson Chi-Squared Statistic](#)
- [The Hosmer-Lemeshow Test](#)
- [Statistical Software for Goodness of Fit Test: Part 1](#)
- [Statistical Software for Goodness of Fit Test: Part 2](#)
- [Assessing Model Discrimination: Part 1](#)
- [Assessing Model Discrimination: Part 2 and Week Seven Homework](#)

Lecture Material

Please click on the link below to download the slides of the seventh week

[Week Seven: "Goodness of Fit Tests"](#)

Conversations

Please join in the conversations around regression analysis in our [community forums](#) area. You can ask and answer questions and discover insights and help for yourself and others as we come together to encourage each other in our exploration.

Key Terms

Below are definitions of some important terms covered this week:

- **Covariate Pattern:** A single set of values for the variables in the data set. Suppose the data is stored row-wise, then the 10th row corresponds to the 10th covariate pattern.
- **Decile:** Any of the nine values that divides the data into 10 equal parts.
- **ROC Curve:** The Receiver Operating Characteristic Curve (ROC curve) is a graph that shows how well a binary classifier system works as its discrimination power is varied. The area under the ROC curve is a measure of discrimination.

Homework

Please watch the following video, [Homework Highlights from Week Six](#), to review the homework from last week.

Navigate to the [Week Seven Homework](#) page to view and download the homework for this week.

*(*Please note: Because of a mixup in order, this week seven homework is identical to what you may have previously seen from week four before the new version was posted on June 23.)*

Quiz

After you've gone through the materials for this week please be sure to visit the [quizzes area](#) to complete this week's quiz.



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