
TABLE OF CONTENTS

Title Page

Table of Contents

How to Use the CFA Program Curriculum

Errata

Designing Your Personal Study Program

CFA Institute Learning Ecosystem (LES)

Prerequisite Knowledge

Feedback

Quantitative Methods

Basics of Multiple Regression and Underlying Assumptions

Learning Outcomes

1. Introduction

1.1. Summary

2. Uses of Multiple Linear Regression

3. The Basics of Multiple Regression

4. Assumptions Underlying Multiple Linear Regression

Practice Problems

Solutions

Evaluating Regression Model Fit and Interpreting Model Results

Learning Outcomes

1. Summary

2. Goodness of Fit

3. Testing Joint Hypotheses for Coefficients

4. Forecasting Using Multiple Regression

Practice Problems

Solutions

Model Misspecification

Learning Outcomes

1. Summary

2. Model Specification Errors

3. Misspecified Functional Form

3.1. Omitted Variables

3.2. Inappropriate Form of Variables

3.3. Inappropriate Scaling of Variables

3.4. Inappropriate Pooling of Data

4. Violations of Regression Assumptions: Heteroskedasticity

4.1. The Consequences of Heteroskedasticity

4.2. Testing for Conditional Heteroskedasticity

4.3. Correcting for Heteroskedasticity

5. Violations of Regression Assumptions: Serial Correlation

5.1. The Consequences of Serial Correlation

5.2. Testing for Serial Correlation

5.3. Correcting for Serial Correlation

6. Violations of Regression Assumptions: Multicollinearity

6.1. Consequences of Multicollinearity

6.2. Detecting Multicollinearity

6.3. Correcting for Multicollinearity

Practice Problems

Solutions

Extensions of Multiple Regression

Learning Outcomes

1. Learning Module Overview

2. Influence Analysis

2.1. Influential Data Points

2.2. Detecting Influential Points

3. Dummy Variables in a Multiple Linear Regression

3.1. Defining a Dummy Variable

3.2. Visualizing and Interpreting Dummy Variables

3.3. Testing for Statistical Significance of Dummy Variables

4. Multiple Linear Regression with Qualitative Dependent Variables

Practice Problems

Solutions

Time-Series Analysis

Learning Outcomes

1. Introduction

1.1. Challenges of Working with Time Series

2. Linear Trend Models

2.1. Linear Trend Models

3. Log-Linear Trend Models

4. Trend Models and Testing for Correlated Errors

5. AR Time-Series Models and Covariance-Stationary Series

5.1. Covariance-Stationary Series

6. Detecting Serially Correlated Errors in an AR Model

7. Mean Reversion and Multiperiod Forecasts