



Simple Regression

Multiple Regression



Simple Regression

A regression with only one explanatory or X variable

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Simple Regression

A regression with only one explanatory or X variable

Multiple Regression

A regression with two or more explanatory or X variables



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"Y" variable

"Dependent" variable

Variable of interest



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Overview of Regression

1. Modeling Developing a regression model

2. Estimation Using software to estimate the model

3. **Inference** *Interpreting the estimated regression model*



Overview of Regression

 Modeling Developing a regress 	ion model
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- 2. **Estimation** Using software to estimate the model
- 3. **Inference** Interpreting the estimated regression model
- 4. **Prediction** Making predictions about the variable of interest



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$$Sales = -25096.83 - 5055.27$$
 $Price + 648.61$ $AdExp + 1802.61$ $PromExp$

√2. Estimation Using software to estimate the model

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