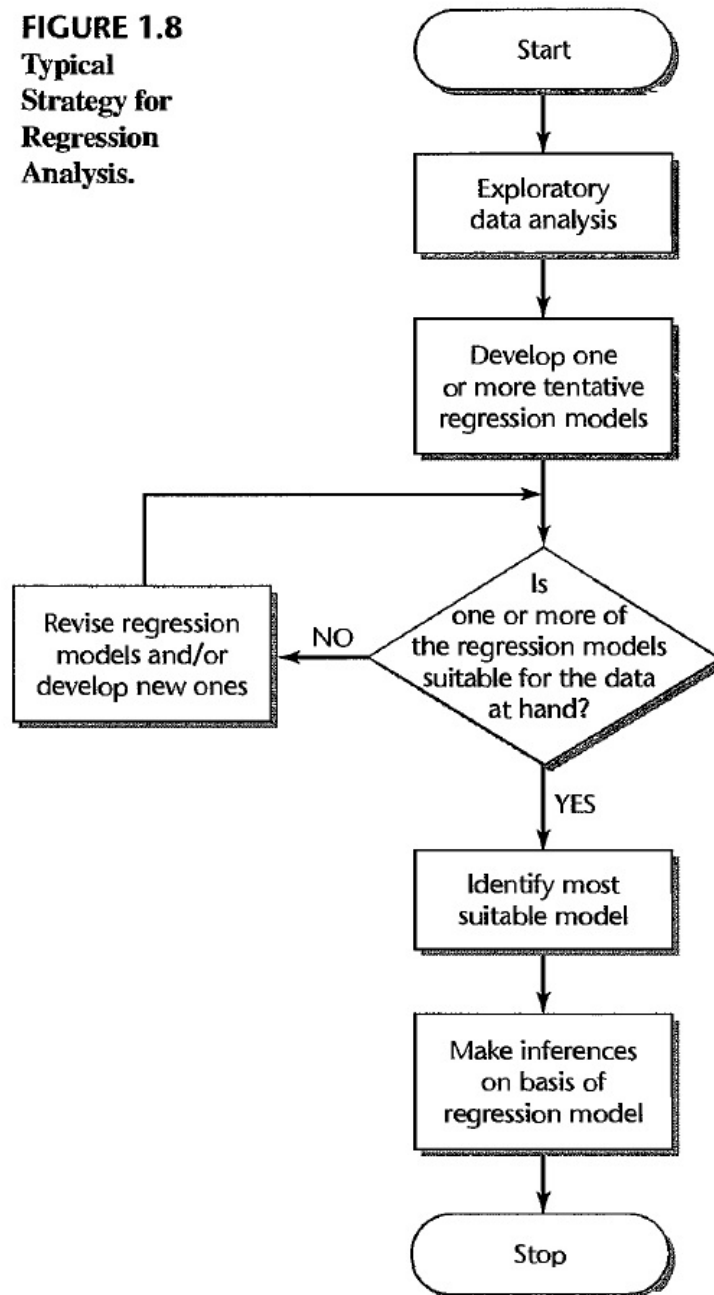


Section 1.5. Overview of Steps in Regression Analysis

Note. We briefly discuss the conditions for the applicability of a regression model being appropriate for the available data (be it observational or experimental data).

FIGURE 1.8
Typical
Strategy for
Regression
Analysis.



Note. Unless there is existing knowledge on which regression model to apply to data (normally the case in a new study), then the first step is an “exploratory data analysis,” as given in Figure 1.8. This is to result in a preliminary regression model (or models). These models are then revised or discarded and replaced with new models until a model judged to be suitable is chosen. Inferences about the regression parameters of the model and predictions of new observations can then be considered. We begin with a discussion of these inferences. Once we have discussed regressions models in more detail, we will return to the decision process concerning choosing an “appropriate” regression model.

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