The thesis attempts to provide a basic insight into the theory used in causal inference. In this regard, it focuses on the potential outcomes model and the use of directed acyclic graphs (DAGs). It also presents one of the classical methods used in econometrics, which uses instrumental variables and two-stage estimation using the least squares method. This method is put in the context of a situation where there is confounding and the identification of causal relationships using more conventional methods therefore fails. In suitable situations, the assumptions necessary for causal inference from the perspective of the potential outcomes model are presented. Finally, for selected situations where confounding occurs, the simulation study demostrates the use of a method using instrumental variables. Throughout the thesis, the importance of the stated assumptions needed to draw valid inferences about causality is emphasized.