

Causal Analysis After Haavelmo: Definitions and a Unified Analysis of Identification

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Trygve Haavelmo's seminal paper ([1943](#), *Econometrica*) is the first formal analysis distinguishing causation from correlation. Haavelmo drew on a fundamental notion of causality developed in Ragnar Frisch's laboratory of econometrics: that causal parameters are defined through purely mental operations within abstract models. Haavelmo distinguished the identification of causal parameters, which is a statistical exercise, from their definition, which is based on a hypothetical model. This paper revisits and clarifies his contribution using a modern framework for causal analysis. It also develops a unified framework for analyzing how matching, control functions, mixture distribution methods, instrumental variables, and principal stratification can be used to identify causal parameters.