

## Abstract

We present a method for evaluating the welfare of a decision maker, based on observed choice data. Our method can be used whether or not the observed choices are rational. In place of the usual preference relation whose maximization induces the observations, we explain choice as arising from a compromise among a set of simultaneously-held, conflicting preference relations. We use these preference relations as the basis to measure the decision maker's welfare. In general our method does not yield a unique set of explanatory preferences. Thus we characterize all the explanatory combinations of preferences any one of which could generate the data and compute bounds on welfare changes based on this set. We show that unambigous evidence of binary preference implies the existence of non-conflicted explanations of choice. We show that stronger evidence for the preferability of an alternative improves the status of this alternative at the welfare bounds we develop. Our theory is consistent with context-dependent choice patterns found in psychological experiments and offers a welfare framework for evaluating changes in the set of opportunities in the absence of rationality.