

Abstract: Extant studies take it for granted that there is a one-to-one mapping from a change in the equilibrium allocation to a change in welfare. We show, however, that such a premise does not apply to fairly standard models of monopolistic competition in various fields of economics, namely trade, growth, and economic geography. For any change in the equilibrium allocation, there exist an infinite number of possible welfare changes, provided that the number of varieties consumed differs between the two equilibria. Our result thus reveals a fundamental difficulty in measuring welfare changes when consumption diversity varies.