

Love-for-Variety

Kiminori Matsuyama

Northwestern University

Philip Ushchev

ECARES, Université Libre de Bruxelles

Abstract

We study how love-for-variety, -- productivity (or utility) gains from increasing variety of differentiated inputs (or consumer goods) --, depends on the underlying demand structure. Under general symmetric homothetic demand systems, love-for-variety and the substitutability of different varieties can be both expressed as functions of the mass of available varieties V only. Since the homotheticity alone imposes little restrictions on the properties of these two functions, we turn to three classes of homothetic demand systems, H.S.A., HDIA, and HIIA, which are pairwise disjoint with the sole exception of CES. For each of these three classes, we establish the three main results. First, the substitutability is increasing in V , if and only if Marshall's 2nd law of demand (the price elasticity of demand for each variety is increasing in its price) holds. Second, increasing (decreasing) substitutability implies diminishing (increasing) love-for-variety, but the converse is not true. Third, love-for-variety is constant, if and only if substitutability is constant, which occurs only under CES within these three classes. These three classes thus offer a tractable way of capturing the intuition that gains from increasing variety is diminishing, if different varieties are more substitutable when more varieties are available.