

Title: Reduction, Rationality and Competition: Exploring Game-Theoretic Marxism

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Abstract

This paper develops a Marxian theory of class conflict and the competitive process in the light of the emergence, since the late 1970s, of analytical Marxism. The competitive process, which is multi-faceted and complex under capitalism, warrants examination in class terms. An anti-reductionist approach in which instrumental rationality is not *a priori* assumed is advocated, although it is accepted that instrumental rationality can be a useful way to characterise the motivation of agents at particular moments in competitive capitalism. The paper considers the theory of surplus-value, regarded by Marx to be his main theoretical discovery, and considers this in game theoretic terms. Finally, the claim that there may be a tendency for the rate of profit to fall as a consequence of technical change is considered and modelled, paying explicit attention to the issues of equilibrium and reduction. It is concluded that the *uncritical* adoption of micro-reduction and instrumental rationality may hinder the future development of an alternative approach to economic theory, but that partial insights may be gleaned from such approaches.