Innovate to Lead or Innovate to Prevail: When Do Monopolistic Rents Induce Growth?

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Abstract:

This paper embeds in a Schumpeterian endogenous growth model a previously overlooked insight that the cost of innovation to the followers increases in their technological distance to the leader. This new assumption introduces an incentive for the leader to innovate to increase his technological distance from the followers, reducing the risk of being leapfrogged and thus prevailing in the leadership game. In addition to the High Growth steady state in which only followers innovate as in Grossman and Helpman (1991), there now exist two other steady states: a Middle (a source) and a Low (a saddle) Growth steady state, that feature both leaders and followers innovating. With an initial condition of the economy that sees many industries having leaders prevailing – a situation characterized by low dynamism - the economy eventually converges to a Low Growth steady state. We illustrate in the model how an increase in monopolistic rents to the leaders, depending on the initial condition, can increase or reduce aggregate growth in the long run.