

# A Theory of Investment Based on Microeconomic Theory

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Firm's actions are classified into three categories, production, investment (i.e. purchasing capital goods) and finance (i.e. raising fund). In this paper, we discuss the formalization of firm's investment and finance and show a explanation of investment using microeconomic theory. Although the long-run production function is often used in the theory of investment, the formalization of production using long-run production function is inappropriate. So we expand a theory of investment based on the formalization of production using short-run production function. The adjustment cost is not intrinsic to the optimization problem concerning investment and unnecessary for the theory of investment. We should consider the effect of investment to the production in the future more specifically.

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