

**Firm Survival and Growth under Different Technological Regimes,
Industry Life Cycles and Internal Resources**

Jeong-Dong Lee¹, Jeong-Sook Han² and Almas Heshmati³

Abstract

This study aims to prove the function of nurture -- internal competition assets -- and nature -- industrial environment factors -- on the growth and survival of Korean manufacturing firms, based on the plant-level data. Resource-Based View is used to extract the internal competition resources, and the concepts from the theories of Technological Regime and Industry Life Cycle are used to examine industrial environmental factors. The former shows the industry-wise technological differences, and the latter determines the time variant level of industrial maturity in a given industry. Plant-level panel data are analyzed from all plants with five or more employees in 460 manufacturing industries at the KSIC (Korean Standard Industry Code) five-digit level from 1994 to 2002, approximately 835,000 observations from 290,000 firms. In the empirical results, firm's growth was affected by only the internal competition assets (nurture), whereas, firm's survival was influenced by both the internal competition assets (nurture) and the industrial environment (nature). In other words, growth of the firm was not pre-determined by ecological environment, but determined by the firm's acquired abilities. However, although the possibility of firm's survival was limited by firm's external conditions, it could be enhanced by the efforts of the firm. In addition, the stylized fact, that growing firms survive longer, on the correlation between growth and survival of the firm was proved in the Korean economy. By the means of expansion of firm's growth and extension of firm's survival, government should lead firms to acquire further internal resources in order to reduce unnecessary social costs. The increase of the firm's investment and R&D activities can contribute to enhancing the growth and survival of the firm.

¹ Seoul National University, leejd@snu.ac.kr

² Seoul National University, jshan131@snu.ac.kr

³ Seoul National University, heshmati@snu.ac.kr