

PATENTS, VENTURE CAPITAL, AND SOFTWARE START-UPS

Abstract

This paper analyzes the relation between the patenting behavior of startup firms and the progress of those firms through the venture capital cycle. Linking data relating to venture capital financing of software startup firms with data concerning the patents obtained by those firms, we find significant and robust positive correlations between patenting and several variables measuring the firm's performance (including number of rounds, total investment, exit status, receipt of late stage financing, and longevity). The data also show that (1) only about one in four venture-backed software firms acquired even one patent during the period of the study; (2) patenting practices vary considerably among the sub-sectors of the software industry; and (3) the relationship between patent metrics and firm performance depends less on the size of the patent portfolio than on the firm's receipt of at least one patent.