CORPORATE ENTREPRENEURSHIP: A LONGITUDINAL EXAMINATION OF INNOVATIVE EFFICIENCY, PATENTS, AND FIRM PERFORMANCE (SUMMARY)

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SUMMARY

CORPORATE ENTREPRENEURSHIP: A LONGITUDINAL EXAMINATION OF INNOVATIVE EFFICIENCY, PATENTS, AND FIRM PERFORMANCE

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Principal Topic

Because of increasing levels of competition and decreasing product-life cycles, a firm's ability to generate a continuous stream of innovations may be more important than ever in allowing a firm to develop and/or maintain competitive advantage. This paper investigates several issues that are central to an examination of the innovation productivity in a firm. I first investigate the relationship between a firm's commitment to research and development and its innovative outcomes. Two innovative outcomes are examined: invention – which focuses on the development of new ideas, and innovation - the development of commercially viable products or services from creative ideas. Invention is measured by the number of patents granted, and innovation is assessed by the number of new product announcements. Moreover, because many inventions ultimately result in marketable innovations, and because patents may provide protection for new products, the relationship between patents and product announcements is also investigated. Finally, the ability of a firm to benefit from its inventions and innovations by examining their separate effects on firm performance, measured as ROA and sales growth.

Results and Implications

The results from a model of simultaneous equations provided support for some of the hypotheses, but several other surprising findings were found. As expected, R&D spending was positively related to patents. This finding is consistent with others (e.g., Bogner and Bansal, 2007; Cardinal and Hatfield, 2000), who argue that internal research capabilities, particularly those with a strong basic research component, is key to enabling a firm to generate creative outputs. More surprising was the finding of increasing returns to scale to R&D spending was surprising. While this contradicts much of the existing research, it is consistent with economic arguments for the advantages of scale in innovation. Also interesting is the finding that while a significant curvilinear relationship exists between R&D spending and product announcements, it is not the predicted inverse-U, but instead a U-shaped relationship. Consistent with previous work, product announcements were found to be positively related to both performance measures. The fact that a negative relationship between patents and both ROA and sales growth did not support the hypotheses, it is intriguing and calls into question the value of patents as protection mechanisms. As expected, a positive relationship was found between patents and new product announcements.

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