



Patenting Strategies, R&D and Corporate Governance

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This paper investigates how different aspects of corporate governance influences R&D and patenting practices by firms. Three aspects of governance are studied: (i) CEO pay and compensation, (ii) board structure and ownership and (iii) financial pressure. First, we hypothesize that CEO's stock ownership and pay-performance sensitivity from stock option grants should have a significant impact on R&D and patenting strategies. Specifically, higher stock ownership may increase investment in R&D and produce higher quality patents under certain conditions, while greater pay sensitivity may dampen this effect, especially if we consider the short tenure of most CEOs – rather we may find a large number of lower quality patents being produced. Second, board structure and the type of share-holder ownership may have important effects as well. Agency theory would suggest that insider control may fail to discipline firms and such companies may have a relatively low patent intensity, all else equal. In addition, greater institutional ownership may impose stricter discipline and a longer time horizon on companies who may then invest in higher value, long-term research that generates greater quality patents. Last, financial pressure may imply that there is less 'free' cash flow at the disposal of the managers and there is a higher pressure on managers to perform, which may produce a high number of low quality patents. We control for market structure, concentration, nature of the industry and firm characteristics in all specifications. Based on a sample of 815 U.S. manufacturing firms in 20 industries during the period 1993-2003, we find support for the above hypotheses.