Pricing the Risk of Innovation: Patents and Intangibles

Abstract

Economic literature documents that the investment rate of intangibles has exceeded that of tangible assets in the U.S. private sector since the mid-1990s. However, whether or how the increasing intangibles created by internal innovative activities affect audit process and pricing have not been empirically examined yet. This study investigates whether the features of corporate innovation (e.g., complexity, efficiency, or obsolescence) are associated with audit fees. Using patent-based metrics to measure the features of innovation within firms, we find that the complexity of corporate innovation is positively associated with audit fees, after controlling for the intangible assets acquired through external sources. Firms that can more efficiently convert R&D inputs into innovation outputs, which are measured by the number, citation frequency, and economic value of patents, are associated with lower audit fees. Furthermore, firms holding more aged patent portfolio are associated with higher audit fees.