"Collaborative Innovation and Knowledge Creation: Theory and Testing with a Natural Experiment in Japan" by Kanetaka M. Maki and Vish Krishnan

The growing complexity of industrial research and development has created the need for collaboration between industry researchers and university faculty. Drivers of such collaborative joint research between universities and firms, resulting in co-authored publications, have received relatively little research attention. In this paper, we develop and test a simple theoretical model of university-industry co-authored publications and the impact of an intermediary - the university's Technology Transfer Office (TTO) - on such joint research. Our analysis shows that TTO can have a negative impact on collaboration by actively pursuing intellectual property (IP) and increasing the transaction costs for the collaborating parties, but the TTO impact is shown to be felt differently by junior researchers in comparison with senior University researchers. These predictions are examined using data collected based on a natural experiment in Japan. Japanese universities were “forced” to introduce a TTO by their national government in the years 1998-2002. We consider this exogenous shock and examine the impact of joint research, using co-authorship of academic articles between researchers at universities and firms as an indicator of joint research. Using panel data, the results of our analysis weigh in on the model findings: the creation of TTO has a mixed and differential effect on joint research between university researchers and firms. Our theoretical model and empirical evidence offers one of the first models of joint research validated with a novel empirical dataset and suggests that intermediaries such as TTO may adversely impact joint publications between universities and firms, if not properly managed. Implications and next steps are discussed.