The degree of offshore outsourcing has increased rapidly in past few decades and economists have argued that the role of intangibles in the U.S. economy has grown sharply during the same period time. This paper develops a forward-looking intangible investment model to estimate the depreciation rates of R&D assets and organizational capital for the IT and pharmaceutical industries. The data are from the Computstat dataset and BEA’s newly published R&D dataset, and cover the period of 1987 to 2010. The estimates are used to construct the stocks of these two types of intangible capitals for both industries.

In general, R&D assets depreciate faster than organizational capital in both industries, which is consistent with the recent finding by Bloom and Reneen (2010) that the evolution of management practices is slow and new improvements take time to diffuse across firms. Since 2000, both industries have decreasing ratios of R&D capital to total intangible capital, a pattern implying that organizational capital have played an increasingly important role for firms to sustain competitiveness in R&D intensive industries. However, how each type of intangible capital relatively contributes to each industry’s performance depends on the degree of offshore offshoring, the pace of technological progress, and the investment scale of intangibles.