

This study re-examines the relationship between competition and innovation in a detailed firm-level dataset of publicly traded US companies spanning from 1975 to 2013. Using R&D expenditures, patent counts and patent citations as the measures of innovation, and Herfindahl-Hirschman Index, Lerner Index, Profit Elasticity and Product Market Fluidity as the proxies for competition we document a robust positive association between the two variables, as well as strong evidence of the non-linear relationship known as "inverted-U shape", when controlling for size, distance to technological frontier, level of knowledge spillovers, technological opportunities and other firm- and industry-specific characteristics. We address overdispersion in the data by using negative binomial and zero-inflated negative binomial count data regressions, and the results are robust in these specifications. Additionally, in order to address potential endogeneity issues, we employ a set of instruments based on the import tariff rates and the level of Chinese import penetration, and find a weak evidence of positive relationship as well. Overall the results strongly support the prediction of agency models, "replacement effect" and "escape-competition effect" about the positive influence of competition on innovation.