Revisiting the finance-innovation nexus: Evidence from a non-linear approach

ABSTRACT

This study examined the non-linear relationship between financial development and innovation using generalized method of moments (GMM) estimators for a panel data model. The sample comprised data for 75 developed and developing countries for the period 1996 to 2010. An inverted U-shaped non-linear relationship between finance and innovation was observed. This finding implies that finance enhances innovation only up to a certain level. Beyond that level, further development of finance tends to affect innovation adversely. The institution interaction term was included to examine its role in the relationship between finance and innovation. The results suggest that the finance-innovation curve varies with different settings of institutional quality. Specifically, the finance-innovation relationships followed an inverted U curve only for countries with high institutional quality. Hence, sound institutional quality is a prerequisite for financial development to benefit innovation.

Keyword: Innovation; Institutions; Financial development; Non-linearity; Panel data; GMM