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## **FISCAL STRUCTURE, HUMAN CAPITAL AND INNOVATION IN CHINA: PATTERN AND REGIONAL HETEROGENEITY**

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### **Abstract**

This paper investigates the primary factors that determine the regional innovation of China, a key engine related to the economy growth. We try to understand whether and to what extent fiscal structure and human capital stock helps to stimulate the innovation behavior. By employ provincial panel data from 2007 to 2016, we find that government expenditure structure is essentially important to boost local innovation behavior, more specifically, we find that government expenditure on technology and education is significantly associated with innovation, every unit increase in the government expenditure on technology and research is associated with 0.41 unit increase in innovation. We also find that human capital plays an important role in determining local innovation, these results are robust after considering other factors such as economy growth, industry structure etc. We then explore regional heterogeneity of this relationship, we divide our sample into western, middle and eastern region according to geographic location, the regression results show that that the relationship between fiscal structure (human capital) and innovation is different across regions, more specifically, government expenditure on technology is more promising and significant in eastern areas, less significant in other two areas, which means public finance is more efficient in eastern areas to support innovation behavior. Our research has provided solid empirical evidence that helps us to understand local government's role to promote regional innovation, in areas that are less developed, a proactive fiscal policy maybe very efficient to promote innovation, while in well developed areas, fiscal policies are less efficient than human-capital-boosting policies in promoting regional innovation.

**Keywords:** Regional Innovation, Fiscal Structure, Technology Expenditure, Educational Expenditure, Human Capital

**JEL Classification:** I22, I30, J40

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