

摘要

当今世界新一轮科技各级革命和产业变革正在加速到来，给我国经济发展带来了巨大挑战。我国正处于经济高速发展阶段向高质量发展阶段转变的关键时期，随着大数据、云计算和人工智能等现代化信息技术的深入融合，数字经济已经成为引领我国建设成世界科技强国的重要引擎。然而一些“卡脖子”关键技术严重制约了我国城市的经济发展，“创新”的重要性愈发突出。因此，从数字经济最为发达的长三角地区出发，研究数字经济对城市创新能力的影响，对于长三角地区提高城市创新能力和科技实力、加快实现区域经济高质量发展具有重要的理论和现实意义。

本文首先对国内外关于数字经济和城市创新能力的相关研究和理论进行梳理，在此基础上做出研究假设。接着构建数字经济与城市创新能力的综合评价指标体系，采用熵值法计算出 2016-2021 年长三角地区数字经济和城市创新能力指数，并将得到的结果代入双向固定效应模型中分析数字经济对城市创新能力的直接影响，并以外资参与度作为门槛变量构建门槛效应模型来分析数字经济对城市创新能力的门槛效应。最后通过构建空间滞后模型分析数字经济对城市创新能力的空间溢出效应，包括直接效应、间接效应和总效应。

本文主要的研究结果如下：（1）2016 年-2021 年长三角地区数字经济和城市创新能力发展呈现上升趋势，区域发展极不均衡，两极分化严重，但差距正在逐渐缩小。

（2）长三角地区数字经济能够显著促进城市创新能力的提高，以外资参与度作为门槛变量时存在显著的门槛效应，当数字经济发展指数处于第一门槛值和第二门槛值之间时，促进效果最为显著。（3）从空间视角来看，长三角地区数字经济对城市创新能力的影响具有正向空间溢出效应，能够显著促进本地城市创新能力的提高，但是对相邻地区城市创新能力的发展具有抑制作用。

关键词：长三角地区；数字经济；城市创新能力；空间滞后模型

Abstract

The new round of scientific and technological revolution and industrial reform in the world is accelerating, which brings great challenges to China's economic development. China is in a critical period of transformation from a stage of high-speed economic development to a stage of high-quality development. With the in-depth integration of modern information technologies such as big data, cloud computing and artificial intelligence, the digital economy has become an important engine leading China's construction into a world science and technology power. However, some key technologies have seriously restricted the economic development of our cities, and the importance of "innovation" has become increasingly prominent. Therefore, starting from the Yangtze River Delta region with the most developed digital economy, the study of the impact of digital economy on urban innovation ability has important theoretical and practical significance for the Yangtze River Delta region to improve urban innovation ability and scientific and technological strength, and accelerate the realization of high-quality regional economic development.

Firstly, this thesis reviews the relevant researches and theories about digital economy and urban innovation ability at home and abroad, and then makes research hypothesis on this basis. Then, a comprehensive evaluation index system of digital economy and urban innovation capability is constructed, and the index of digital economy and urban innovation capability in the Yangtze River Delta region from 2016 to 2021 is calculated using the entropy method, and the obtained results are substituted into the two-way fixed effect model to analyze the direct impact of digital economy on urban innovation capability. Taking foreign investment participation as the threshold variable, a threshold effect model is constructed to analyze the threshold effect of digital economy on urban innovation ability. Finally, the spatial lag model is constructed to analyze the spatial spillover effects of digital economy on urban innovation capability, including direct effects, indirect effects and total effects.

The main research results of this thesis are as follows: (1) From 2016 to 2021, the development of digital economy and urban innovation capability in the Yangtze River Delta region shows an upward trend, with extremely unbalanced regional development and serious polarization, but the gap is gradually narrowing. (2) The digital economy in the Yangtze River Delta region can significantly promote the improvement of urban innovation capability, and there is a significant threshold effect when foreign investment participation is taken as the threshold variable. When the digital economy development index is between the first threshold value and the second threshold value, the promotion effect is most significant. (3) From the perspective of space, the digital economy in the Yangtze River Delta region has a positive spatial spillover effect on urban innovation capability, which can significantly promote the improvement of local urban innovation capability, but has an inhibitory effect on

the development of urban innovation capability in neighboring regions.

Key Words: The Yangtze River Delta region; Digital economy; Urban innovation capability; Spatial Lag Model

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