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基于数据包络分析的中国城市创新能力评价

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DEA-based Evaluation on City Innovation in China

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摘要

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摘要 针对城市创新能力的应用背景, 构建了重点城市创新能力的评价指标体系, 其中包括人才培养和科技创新两个创新阶段, 提出了综合考虑共享投入和分阶段产出的两阶段数据包络分析模型, 对国内52座重点城市的总体和单阶段的创新能力进行了有效评价和区分。研究发现, 长三角和珠三角区域的创新能力在全国范围内具有优势, 而创新效率相对较低的城市主要分布于中部、西南和西北的部分地区。实证分析为这些城市进一步提高自身的科技创造和研发创新水平提供重要的参考价值 and 指导意义。

关键词: 数据包络分析(DEA) 效率 两阶段 城市创新能力

Abstract: According to the background of application to city innovation performance, a set of indices are established for evaluating innovation performance of key cities in China. The innovation process is divided into two individual stages—talent training and sci-tech creation. Two-stage data envelopment analysis (DEA) models are proposed to assess and differentiate the overall and individual-stage innovation performance for 52 Chinese key cities. It is demonstrated that the Yangtze River Delta region and Pearl River Delta region have done an excellent job in city innovation, while quite a number of cities in central, southeast and northeast China still have a lot to improve in that aspect. The results provide important implications and suggestions for those cities to effectively enhance their innovative development.

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









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