







Southern Jiangsu was higher than that of middle Jiangsu and middle Jiangsu higher than Northern. This coincided with Jiangsu's regional economy development level. The main cause was that Southern Jiangsu had abundant innovation resource and the level of commercialization was rather high, so overall efficiency was high.

This thesis uses value chain's angle, and the production of innovation knowledge, the invention of innovation technology and realization of innovation value as process orientation, divides innovation process into two procedures: innovation development and innovation economic transformation. It used innovation data from 3 districts of 13 cities in Jiangsu province from 2005 to 2010. Using network DEA model, we calculated the innovation R&D efficiency, technological commercialization efficiency and overall innovation efficiency of each city in Jiangsu province, and the following was the results:

From general perspective, none of innovation R&D efficiency, technological commercialization efficiency or overall innovation efficiency was high. This might be that they focused more on R&D input and commercialization and less on the quantity and quality of output. From the trend perspective, recent years the trend of Jiangsu's innovation efficiency and economic cycle showed synchronicity. This showed that the level of economic, the degree of commercialization, the extent of government's support and the level of enterprise innovation would affect the efficiency of innovation. From the value chain perspective, upstream R&D efficiency did not show relation with downstream technological commercialization efficiency, and showed obvious inconsistencies, and the technological commercialization efficiency played a more important contribution to overall innovation efficiency than R&D efficiency. This demonstrated that the innovation efficiencies of different process would have different influence factors. From the innovation regional perspective, the overall innovation efficiency showed obvious regional distinction, southern Jiangsu rank first, followed by central Jiangsu and northern Jiangsu. This was the same with the level of economic development.

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