

論文審査の結果の要旨

論文審査の結果の要旨および担当者

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論 文 題 目

The Rebalancing of Human Capital Disparity in China
(中国における人的資本の不均衡の是正)

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論文審査の結果の要旨

1. 論文の概要と構成

Significant human capital development is seen as one of the key components of China's rapid economic growth and catch-up. This was mainly driven by rapid improvement in education and skills development investments, supported by strong household demand for education. In 2008, China created the national "talent" program to attract high-skilled labor and increase its competitiveness in the global economy. According to the World Bank World Development Indicators, government expenditure on education as a percentage of GDP in China has increased substantially from 1.9 percent in 1999 to 4.2 percent in 2012. Despite these efforts, there are still substantial disparities in human capital development between urban and rural areas, coastal and inland regions, and between different socio-economic groups. These disparities have led to unequal access to employment opportunities, which has resulted in a widening income gap and social inequality.

This dissertation examines how to promote human capital development in China by reducing inter-regional disparities. The specific research objectives of this study are (i) to provide consistent estimates of the return to education in China in the past decades, (ii) to construct a human capital index that can be used to identify lagging regions, (iii) to assess the determinants of the human capital disparities, and (iv) to propose policies to rebalance these disparities. The findings suggest a more targeted approach to human capital development that focuses on redistributing education resources and funding, improving the quality of education, strengthening medical expenditure's efficiency and quality, and promoting inclusive economic growth.

The overall structure of the dissertation takes the form of seven chapters. Chapter One describes the background for the study and sets out the research objectives and questions. Chapter Two provides a survey of the literature on human capital, its determinants, and its measurements. The Chapter discusses the current state of human capital development in China, briefly outlining education and health policies. Chapter Three uses unique longitudinal data and instrumental variables regression techniques to estimate the return to education in China. Results show a rapid increase in the returns to years of schooling, particularly between 1997 and 2011. Another important finding is that the return to vocational education increased significantly after 2011, consistent with the pattern of structural change in China. Chapter Four constructs a new index to measure human capital in China by combining education, health, and survival indicators. The human capital index specifically applies the quality-based adjustment method to account for differences in the quality of education and health services in China. One interesting finding is that the

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contribution of the education dimension has decreased since 2013 while the health component has been increasing. This result may be explained by the fact that the market value of education decreased due to over-education.

Chapter Five uses a decomposition-based convergence analysis to shed more light on human capital disparities in China. The study finds four convergence clubs and one non-convergent group among 31 provinces between 2010 and 2018. The decomposition analysis results suggest that economic growth and industrialization patterns mainly cause human capital disparities. In contrast, human capital returns to schooling years, education density to life expectancy, and life intensity reduce human capital disparities. Chapter Five uses a novel variance decomposition method to measure various factors' importance in predicting China's human capital index between 2010 and 2018. The findings highlight the importance of redistributive educational spending and effective medical and health spending in explaining the regional variance in the human capital index. The Final Chapter, Chapter Seven, draws upon the entire dissertation, tying up the research questions and empirical findings. It also discusses the policy implications and limitations of the study.

2. 評価

The rebalancing of human capital disparities in China is a multifaceted challenge that requires a comprehensive and targeted approach. This research provides a better understanding of the nature and extent of human capital disparities in different regions of China. It also provides insights into the determinants of human capital development and the role that public policies can play in promoting it. This knowledge can inform policies that are more effective in promoting more equitable access to education and training and, in turn, help to reduce inequality and poverty. The dissertation makes three significant contributions to the literature.

- 1) The dissertation formulates a better methodology for calculating the human capital index with quality-based adjustment. This index builds on and expands the World Bank Human Capital Index in three ways. First, it uses returns to education empirically estimated from longitudinal data. Second, it incorporates notions of the quality of education and health. Third, it uses an empirical method, the Principal Component Analysis, to aggregate different dimensions of the human capital index. The new index can contribute to the theoretical understanding of human capital development, including the measurement of human capital, the factors that affect its accumulation, and the impact of human capital on economic outcomes.

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- 2) This dissertation develops a new approach to studying the imbalances of human capital based a modified version of the Kaya-Zenga index and the convergence analysis.
- 3) The dissertation uses an innovative approach to estimate the determinants of human capital based on the decomposition of variance.

The dissertation committee members noted two areas where improvement is advised:

- 1) There is little variability in life expectancy across provinces within China due to the short time span (2010-2018). The proposed methodology for calculating the human capital index should therefore be tested in other settings.
- 2) The econometric analysis in Chapter Five does not include temporal lag in assessing the determinants of human capital development.

However, these points are issues that the author should address in order to deepen the research on human capital development in the future, and do not detract from the academic value of this dissertation. This dissertation is judged to have sufficient originality and academic value for a doctoral dissertation.

3. 結論

Based on the results of the above examination, this dissertation is judged to be worthy of a Ph.D. (International Development) degree.