



The Empirical Economics of Inequality

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論文内容の要約

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論文題目

The Empirical Economics of Inequality
(格差の実証経済学)

要約

This doctoral dissertation points out the empirical economics of inequality and aims to unravel the relationship between economic inequality and other economic variables such as trade openness, total fertility rates, and crime rates. I initially estimate the Gini index in each prefecture from 1981 to 2016 and use this panel data to analyze total fertility rates and crime rates.

Income inequality is the focus of recent academic and journalistic interests. This dissertation aims to test the conventional ideas. As below, I list the main contributions in this dissertation in order that I consider essential:

At first, in total fertility rates, this dissertation negates the negative statistical relationship between total fertility rates and population density. This relationship is widely acceptable so that this conclusion is new and exciting. Furthermore, this dissertation negates that economic inequality has negatively affected total fertility rates. These two analyses are significant contributions of this dissertation.

Second, according to trade openness, this dissertation uses the income share instead of the Gini index because the income share enables us to analyze the yearly dynamics of income inequality and trade openness. This result relies on the fact that income share is available yearly instead of that the Gini Index is sparse as yearly data.

Finally, concerning crime rates, this dissertation points out that the Gini indices negatively affect the crime rates, and the proportions of young people (15 to 29 years old) do not impact crime rates.

This dissertation contains three empirical studies in Chapters 2 to 4. On the one hand, Chapter 2 utilizes the dynamic panel data analysis. On the other hand, Chapters 3 and 4 use spatial panel data analysis. This spatial panel data analysis is useful in considering efficiency

to consider the spatial information of dependent variables and independent variables. Moreover, Chapter 2 uses the income share (income inequality) as the dependent variable. The dependent variables of Chapters 3 and 4 are total fertility rates and crime rates.

Chapter 2 examined the relationship between income inequality and trade openness. The use of income share sheds light on the dynamics of income inequality and trade openness, and the inverted U-shaped relationship. This chapter uses the conventional panel data regression analysis.

Chapter 3 examined the total fertility rates. This chapter is the main contribution of this dissertation. This chapter negates the negative statistical relationship between total fertility rates and the population density and that economic inequality has negatively affected total fertility rates if the analysis considers the one-year lag between the inception and the birth. Moreover, this chapter's results are in line with Easterlin hypothesis and Second Demographic Transition. Easterlin hypothesis explains the baby boom and the consequent baby bust. Second Demographic Transition also explains the inverted J-curve between total fertility rates and real expenditures. This chapter's panel data set has variables showing the spatial dependency so that spatial panel data analysis achieves higher efficiency than usual panel data regression method such as Least Square Dummy Variable and Dynamic Panel of Generalized Methods of Moments. The spatial dependency can be validated as the Moran's I of each variable. Moran's I tests the degree of the spatial dependency as the hypothetical testing.

Chapter 4 examined the crime rates. This chapter uses the spatial panel data analysis from the same reason as Chapter 3. The result shows the positive relationship between the Gini index and crime rates. The relationship between economic inequality and crime rates is debatable, and the discussion lacks data validation. This chapter and Chapter 3 show the strong efficacy of the Gini index panel data on each prefectural capital, which I initially estimated.

Finally, Chapter 5 concludes this doctoral dissertation.