

DOCTORAL THESIS

Three essays on economic structure and resource allocation

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Abstract

This thesis aims at studying the issues of economic structure and resource allocation in development. Chapter 1 provides an introduction to economic development and gives an overview of this thesis. Chapter 2 reviews some theories and models about economic structure and structural change and points out that resource allocation is a critical factor in changing the economic structure. Five characteristics of economic structure and structural change are summarized.

Essay 1 in Chapter 3 investigates the relationship between competitiveness and economic growth. Adopting the Global Competitiveness Index to represent competitiveness, we empirically show that there is a two-way causal relationship between competitiveness and economic growth. We further identify that the relationship between competitiveness and economic growth change in different development stages. Specifically, better competitiveness can enhance economic growth but not vice versa in developing countries. We therefore relate such a difference to the ability to transform resources into competitiveness. This is fundamentally a question about resource allocation. Finally, we link structural change with economic growth and show that enhancing competitiveness is equivalent to improving the capacity to change the economic structure.

Essay 2 in Chapter 4 studies the impacts of sub-optimal resource allocation on economic growth by applying a new model to the case of the effectiveness of official development assistance (ODA). This new model analyzes economic growth through structural change by the difference between the observed and optimal levels of competitiveness. Regarding the positive and negative impacts of foreign aid on the receiving country in the literature, we show that the net impact of ODA depends on the value of bias caused by inefficient allocation of resources

and the adoption of a biased value system. As a result, both positive and negative views of ODA in the literature are somewhat correct. In principle, ODA does work in the sense of helping needy countries providing they can allocate such additional resources efficiently. The cruel truth is that most receivers of ODA are unable to transform these resources to productive uses and even lower their economic growth. The development aid country donors or global institutions may therefore have to review their existing policy for granting aid.

Essay 3 in Chapter 5 introduces a new framework to study two important structural issues in China: regional fragmentation and ownership distortion. We extend the output-oriented structural efficiency measure to include subgroups to evaluate potential gains of improving resource allocation within and among subgroups. The new framework is then applied to China's industrial sector. Applying our new method for policymaking, the empirical results advocate prioritizing ownership reform over regional reform in China. Specifically, by improving resource allocation among different ownerships, outputs of the whole industrial sector can be increased by 21% of the observed level. In contrast, the potential gains of reallocating resources between western and non-western regions are less than 1%. Such a conclusion cannot be drawn from other existing models of efficiency analysis.

Finally, Chapter 6 concludes the whole thesis.

Keywords: Economic structure, Structural change, Resource allocation, Economic development, Economic growth, Competitiveness, Efficiency analysis

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