

MASTER'S THESIS

Macroeconomic modelling and policy simulation for the Chinese economy

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Macroeconomic Modelling and Policy Simulation
for the Chinese Economy

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ABSTRACT

The main objective of this thesis is to study the macroeconomy of China by using econometric modelling under the SNA framework. This thesis is an attempt to analyse the effectiveness of monetary policy and fiscal policy on the growth of the Chinese economy. The model contains nine different blocs covering major aspects of the Chinese macroeconomy. The gross domestic output is expressed in the expenditure approach which was not adopted in previous published research papers.

Three counterfactual simulations of increase in fiscal expenditure, reduction in tax revenue, and increase in credit loans from Monetary Authorities are carried out to examine the impacts on various economic aspects, especially the output sector. From the comparison of GDP multipliers of the three simulations, it can be noticed that the fiscal policy is more effective to the economic growth in late 1980s and early 1990s while the monetary policy is more effective during 1990s. In addition, it is found that the impact of reducing tax revenue on the domestic product is smaller than the impact of increasing fiscal expenditure.

Moreover, the relationships between interest rate and economic growth are investigated by using the Granger causality test. The results indicate that the interest rate does not Granger cause the economic growth. It can be concluded that interest rates, as tools of monetary policy, fail to improve the economic growth in China. The GDP would not be grown efficiently by the changes in the interest rates. For this reason, interest rates are not simulated in the macroeconomic model.

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