

## MASTER'S THESIS

### Macroeconomic modelling and policy simulation for the Chinese economy

Wan, Lai Shan

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Macroeconomic Modelling and Policy Simulation  
for the Chinese Economy

WAN Lai Shan

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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.

## TABLE OF CONTENTS

<i>Declaration</i>		<i>i</i>
<i>Abstract</i>		<i>ii</i>
<i>Acknowledgements</i>		<i>iii</i>
<i>Table of Contents</i>		<i>v</i>
<i>List of Tables</i>		<i>vii</i>
<i>List of Figures</i>		<i>viii</i>
<i>List of Charts</i>		<i>viii</i>
Chapter 1	Introduction	1
1.1	The Reform of the Chinese Macroeconomy	1
1.2	Monetary Policy in China	5
1.3	Fiscal Policy in China	8
1.4	The Objectives and Structure of Thesis	11
Chapter 2	Macroeconomic Modelling for the Chinese Economy	14
2.1	Introduction	14
2.2	Literature Review	17
2.3	Model Structure and Specification	22
2.4	Summary	42
Chapter 3	Estimation of the Macroeconomic Model	44
3.1	Introduction	44
3.2	Methodology	45
3.3	Model Estimation	50
3.4	Summary	65
Chapter 4	Dynamic Simulation of Policy Shock	66
4.1	Introduction	66
4.2	Literature Review	70

4.3	Methodology	76
4.4	Measurement for the Accuracy of Model	79
4.5	Simulation Results of Policy Shocks	83
4.5.1	Increase in Fiscal Expenditure	85
4.5.2	Reduction in Tax Revenue	89
4.5.3	Increase in Credit Loans	94
4.6	Comparison of GDP Multipliers	99
4.7	Summary	100
Chapter 5	Causality between Interest Rate and Economic Growth	102
5.1	Introduction	102
5.2	Literature Review	105
5.3	Methodology	108
5.4	Analysis of Results	116
5.5	Summary	122
Chapter 6	Conclusion	123
Appendix 1	List of Variables	129
Appendix 2	Data Compilation	133
Appendix 3	The Specification for the Chinese Macroeconomic Model	140
Appendix 4	The Relationships between Variables in the Macroeconomic Model	148
References		149
Curriculum Vitae		161