Poverty and Economic Policy Research Network

Research Proposal

Fiscal Policy, Regional Disparity and Poverty in China: A General Equilibrium Approach

By

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1. Abstract

The main objective of this research is to analyze the effects of China’s fiscal dimension of government transfer and tax reduction on regional income disparity and poverty reduction. The study use a 3-region computable general equilibrium to mimic what are the impacts of China’s fiscal policy on uneven income distribution among different regions and poverty. This is a very important issue in the present economic debate in today’s China, because Chinese government is trying to switch its regional uneven development strategy to balance development strategy, and establish a Homonious Society in the coming five years. Through our research, we could test whether fiscal policies can be an effective instrument to deal with regional disparity and poverty alleviation currently underway in China.
2. Research Question and Core Research Objective

China is a large country with around 1.3 billion people and composed of 31 provinces with different natural resource, comparative advantage, economic structure and level of development. Since the early 1990s China has followed Deng Xiaoping's “Let some get rich first” policy and "coastal development strategy", which switched the national development priority from the “even” to “uneven”; from “inland” to “the eastern coastal regions”.

Followed this policy, China’s fiscal distribution system was unequal between different regions. The coastal provinces have been the beneficiaries of preferential policies from the central government. During 1979~1999, Chinese government committed a huge amount of government spending in eastern region to improve the infrastructure and investment environment. In terms of government transfer, policy based transfer payments tried to be dedicated to poor and ethnic minority autonomous, however, due to the volume of transfer are pegged on regional fiscal revenue, the rich region could get more transfer than poor region because of their higher fiscal revenue than that of poor regions. Besides, taxation policies are also preferable to the rich region, which make the coastal region richer and richer.

As a consequence of “coastal development strategy” and priority policy to specific region, income gap widened from region to region in the past two decades. People in developed areas gained higher income than those in developing and underdeveloped areas. This distribution pattern results in income disparity between coastal and inland, urban and rural areas, developed region and underdeveloped region. Table 1 provides some information on these disparities among three regions (using per capital income of urban resident): eastern China, central China and western China. In the pre-reform period, income levels of urban household were quite similar among the regions because of the egalitarian income distribution system at the time. Since 1978, income gap between east and west become larger and larger. A recent comparison among Eastern, Central and
Western parts shows that per capita GDP of Western and Central parts only accounted for 40.7% and 52.2% respectively of that in the Eastern, and the per capita consumption expenditure of the former two only accounted 57.6% and 69.6% respectively for that of the latter in 2001 (Zhong He 2002).

Table 1: Regional Disparities: Per Capita Income of Urban Household

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<tr>
<td>Average</td>
<td>458</td>
<td>1261</td>
<td>2337</td>
<td>4377</td>
<td>5854</td>
<td>6860</td>
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<tr>
<td>Eastern region¹</td>
<td>476</td>
<td>1441</td>
<td>3140</td>
<td>5371</td>
<td>7146</td>
<td>8448</td>
</tr>
<tr>
<td>Central region</td>
<td>397</td>
<td>1084</td>
<td>2118</td>
<td>3576</td>
<td>4837</td>
<td>5641</td>
</tr>
<tr>
<td>Western region</td>
<td>468</td>
<td>1200</td>
<td>2287</td>
<td>3733</td>
<td>5302</td>
<td>6186</td>
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Increasing income disparity result in high poverty rate in the western areas of China, where poverty population is the most concentrated and the poverty degree is the deepest across the country. In 2000, only 10%² of poverty population is distributed in the eastern regions; 28% of that is distributed in the middle regions; and 62% of the poor live in western areas.

Recognizing that regional inequality may not only stimulate the local government to make adjustment of inter-regional redistributive policies that may harm growth but also result in political pressure that may threaten the long run economic development, there was soon an explosion in China’s economic literature focus on this issue. Having been highlighted in China’s “Key Points of the Proposed 11th Five-Year Plan” in November

¹ Eastern region includes Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Guangxi, Hainan. Central region includes Shanxi, Inner Mongolia, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan. Western region consists of Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shanxi, Gansu, Qinghai, Ningxia, and Xinjiang.

2005, in which “Building a Harmonious Society” is one of the six tasks of China’s government in the next five years, which means Chinese Government tries to change the policy from “let some people rich first” to “let us build a commonwealth country”. Harmonious society, regional disparity and poverty are now being a hot topic in today’s Chinese economic and social research field.

Considering that income disparity between eastern and western regions results not only from the government's eastern coastal development strategy and priority to specific regions but also from inherent advantages of the eastern coastal area, and impact of the fiscal reform on regional disparities and poverty has not yet been assessed empirically, this project tries to use a 3-region general equilibrium model of China to clarify firstly the linkage between China’s fiscal policy, regional factor advantage, regional disparity of income distribution and poverty line. And then, simulate relative policy shocks on income disparity among different regions and change in poverty line.

Under this research proposal, the following questions will be addressed:

- What is the linkage between China’s fiscal policy, regional disparity of income and poverty in recent years?
- How to model fiscal policy shocks on regional income disparity?
- According to the model simulations, what kinds of suggestion on designing China’s fiscal policies against regional disparity and poverty in the future can we offer from the study?

To answer the above questions, the central aims of the study can be divided into four specific objectives:

- profile fiscal policy, region
- national disparity and poverty in China during 1980–2004
- establish a Chinese multi-region CGE model which is based on regional industrial structure and its advantages in resources, as well as the relationship between fiscal policy, income distribution and poverty line in recent China
- simulate policy shocks such as government transfer and priority tax policy on income disparity and movement of poverty line or poverty index in different regions.
- raise policy suggestions with regard to income promotion and equal opportunity provision.

3. Scientific Contribution of the Research

*Literature on regional CGE model and CGE model with poverty line*

The study on the link between fiscal policy and income distribution is one of the central questions of economic development. A number of approaches have been taken either to analyze these links or to construct of suitable tools to analyze the impact of fiscal policies such as change in trade policy or tax policy on poverty and income distribution.

Among the variety policy analyzing tools, computable general equilibrium (CGE) models are widely used because of their ability to illustrate the feedback effect between different markets, and produce disaggregated results at the sectoral or microeconomic level within a consistent macroeconomic framework (Piggott and Whalley, 1985; De Janvry, Sadoulet et Fargeix, 1991; Adelman and Robinson, 1988; Dervis et al., 1982; Bourguignon and al., 1991; De Janvry and al., 1991; Decaluwé, Dumont and Savard 1999; Cogneau and Robillard, 2000; Cockburn, J., 2001).

Following the varied applications of CGE models, computable general equilibrium models have become more widely used in regional policy analysis. Regional CGEs can be used to geographically disaggregate the impact of economic wide policy, as well as regional development policy such as geographically targeted transfer, tax policy and local-based public spending.
Earliest studies on regional CGE model focus on simulating trade policy shocks. Dixon (Dixon et al. 1982) present a top-down regional disaggregation of the effects of tariff increases in Australia; Liew (1984) uses a bottom-up approach to compare the effects of a tariff increase in Australia with the results achieved in a top-down framework; Whalley and Trela (1986) report results from an interregional CGE model for the regional impacts of tariffs in Canada; Gazel (1994) developed an interregional CGE model to measure the regional effects of the Free Trade Agreement between the US and Canada.

Mathur and Stein (1993) expanded CGE framework to a dynamic setting by allowing for sluggish interregional adjustment processes. In 1998, using a regional CGE model, Dalenberg, Partridge and Rickman found that taxes used to finance increased public infrastructure investment led to increased U.S state employment growth. Some recent extension to the early regional CGE literature include Seung and Kraybill (2001), and Conrad and Heng (2002). Both of these studies examine the role of public infrastructure for regional economic growth. They find that even when accounting for negative effects of increased taxes to finance public infrastructure, the reduced congestion increased regional output. Characterized by using a “supra-regional “ accounts, and consumer or buyer’s price in the model, Bernard Decaluwe (Bernard Decaluwé, etc., 2002) build a bi-region CGE (Québec and Rest-of-Canada) to mimic provincial and federal government policy shocks on the two economies.

Using innovative technique developed by Decaluwe, Patry, Savard, and Thorbecke (1999), poverty analysis is interpreted into the CGE methodology that allows the endogenous determination of both the intra-group income distributions and the monetary poverty line. By applying standard poverty measures to the simulation national poverty lines and distributions of income for each household group, policy induced changes in group-specific and national poverty can be evaluated. They show that an important contribution of the dual-dual model vis-à-vis poverty analysis in a CGE model is the inter-group migration it incorporates. They also find that the changing population shares of the socio-economic groups that follow population shifts have important implications.
for the magnitudes of changes in national poverty.

**Literature on a CGE model for China and China’s income distribution**

To my knowledge, CGE models can quantify income distribution effects in two key ways. One is in terms of returns to factors of production. The other is to model more than one household rather than only one representative household. To the case of China, the second types of model can be found from Yang and Huang (1997), Wang and Zhai (1998), and Li and Zhai (2000), Zhai and Hertel (2000). Due to many reasons especially the data problem, only few CGE studies have been done to consider the regional situation within China upon fiscal policy, Li and He (Li and He, 2005) apply a regional CGE model\(^3\) to simulate trade and environmental policy shock such as reduction of CO2 etc. on human health and preferably other environmental end-points like crop damage and material damage.

In this paper, we develop a 3-region (western China, eastern China and the rest of China) CGE model that in structure maintains the characteristics of a CGE model and meanwhile highlight income distribution and poverty line.

4. Policy Relevance

In China’s national and regional development strategies, the incentives cover always the following: increasing government investment, tax reduction, increasing government transfer, and other policies to attract investors. To our project, we focus on tax reduction and government transfer.

**Preferential taxation policy to eastern coastal regions during 1990-2000**

Since the early stages of economic reforms, the central government of China favored the idea that coastal provinces should develop firstly, and then help in the development of

\(^3\) This model is created by Development Research Centre (DRC), which is a three-region (Guangdong, Shanxi, and rest of China) (earlier version was 2-region CGE model) CGE model.
middle and western regions. For this purpose, the central government granted preferential treatment to coastal regions with respect to foreign investment and taxation. These policies resulted in a rapid income convergence among coastal regions that were allowed to integrate with the outside world, but the consequence was a widening income gap between coastal and interior regions (Jian, Sachs, and Warner, 1996).

**Preferential taxation policy to Western Regions during 2000-2005**

As pointed above, preferential policies to the eastern coastal area China's widened the income disparity between coastal and western region during 1990~2000. To reduce the gap, the government started to adjust the regional structure of the allocation of the state poverty relief funds in 1994 and to formulate preferential policies to actively promote a balanced development between the eastern and western regions. This was achieved by offering tax concessions and exemptions, which is “tax exemptions for two years and tax concession for 3 years” to local joint venture and foreigner-owned enterprises, as well as to the key investment projects in the western regions. In 2001, as means of supporting enterprise in western region, enterprise income taxes reduction to 15 % for the next 10 years, which cover the sector in resource development, tourism development and banking, and channels as build operate- transfer (BOT) pilot projects, transfer-operate-transfer (TOT) projects, mergers and acquisitions, stock markets.

**Transfer payment**

Transfer payment\(^4\) has been playing an important role in China’s governments’ budget and also acts as the most important tool in dealing with regional disparity and poverty. During 1980s and early 1990s, China’s fiscal system was decentralized, and regional governments were required to finance themselves. Most of the transfers are purely redistribution of tax revenues among the central and local governments as a result of implementing the tax sharing system. Since 1994, the central Government has increased

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\(^4\) In the existing fiscal system, transfer payment items from the central government to local governments include tax refunds, fixed subsidies of the original system, transfer payments, and funds raised by government bonds.
fiscal transfer payments to the central and western areas and implemented transitional measures for fiscal transfer payment. But country has not reached the basic goal of the tax-sharing system, i.e., increasing fiscal transfers to balance public finance among regions. As the consequence of tax-sharing system, rich regions rather than poor region receive more transfers in the form of returned tax revenues. Only a very small proportion of the transfers are dedicated to improve the regional disparity. However, the situation has been changed since the end of 1990s based on political rather than economic considerations. Although richer regions still receive more transfers in the form of returned tax revenues, poorer regions receive more transfers in total. For example, in 2001 the total amount of transfer payments to the central and western regions are, respectively, double and three times of the amount to the eastern regions.

However, several years’ fiscal policy support for western region does not change the increasing regional income disparity. While per capita GDP for eastern region reached 2000 US$ in 2003, per capita GDP for western region is only 800 US$. It will be with great interest to give Chinese government and international organization advice on how we can adjust possible fiscal policy such as cutting more tax and transfer more money to the western region in the future, and finally establish “a Harmonious Society ” in the coming five years.

5. The Methodology

As is well known, three types of regional CGE models are normally used. One is classified as top-down model that includes two separate parts, one part describes the national economy as a whole which belongs to the category of CGE models. Another part is regional model that tries to disaggregate national dimension into regional one. The second type of regional model is bottom-up models that are full-fledged regional CGE model, in which each region is considered separately, as a country in a multi-country model. Obviously, this type of regional model considers the feedback between different region and market, but due to the availability of the data, such model is more costly than
top-down one. In between the above two models, there is still a third type regional CGE which is named as Hybrid model. Hybrid models (see e.g. Higgs et al., 1983) are based on a similar structure, but it introduces some direct link between the national and the regional dimension. In this project, we try to build a hybrid model with a flexible income distribution function.

The model to be used in this study was based on the 3-region (China, the EU and the rest of the world) CGE model developed by Li Wang (2005) for the analyses of the impact of China’s trade policy changes on Chinese economy and EU’s economy. The regional CGE model in this proposal will be a static CGE model with three region (western China, eastern China and the rest of China), 8 sectors and 5 primary factors. It consists of also 8 groups of household in each region in order to mimic shocks on poverty. The equilibrium is general in the sense that it concerns all the market (goods market, factors’ market and international markets) simultaneously.

**Macro CGE framework**

The representative producer in each region maximizes profit by optimally using composite factors and inputs, given their market prices. By producing the most profitable combination of goods and services, their products are sold in the local domestic market and exported to the other region or the rest of the world by CET function given the different market prices. Consumers in each region receive income from the firm and other source, and then consume goods and services according to maximized utility. The government collects taxes and also consumes. Prices and wages are determined to clear regional commodity and factor markets.

The model in this project will consist of eight blocks: price block, firm behavior block, household behavior block, government (local government and central government)

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8 sectors includes: agriculture product, mineral product, light industrial product, heavy industrial product, other energy product, construction, transportation and retail business, other service. 5 factors: capital, land, unskilled labor, killed labor and professionals.
behavior block, inter-region and international trade block, investment demand block, general equilibrium condition block and poverty functions. The core equations of firm behavior, household behavior, government behavior, inter-region and international trade demand and poverty functions are explained as follows.

The output function in each region (or technology) can be nested in 2 stages. The first stage is the sector output, which is derived from intermediate inputs and a composite primary factor. In detail, it is specified by a CES function of intermediate input and CES composite of primary factor. The second stage is the composite primary factor or value added by sector, which is also characterized by the CES function of different primary factors. Sector output is sold on the regional local market, exported to other regions and exports to the international market through the Constant Elasticity of Transformation (CET) function.

In many CGE models, representative household expenditure behavior functions are derived from the maximization of the Cobb-Douglas or Constant Elasticity of Substitution (CES) utility. The limitation of using these functional forms for consumption is that they imply unitary income elasticity of demand. This fails to account for the way changes in income affect the structural adjustment of the economy to exogenous shocks (Noland, 1998). In order to avoid such drawbacks, consumption demand in our model will be determined by using the utility function associated with the extended linear expenditure system (ELES). Household income is the sum of wage income of the skilled, unskilled labor and the rent of land and natural resources. After paying income tax, the household use disposable income to save and to consume.

The role of the government is to provide public services such as public goods, health and education, and to provide a safety net for its people. So the government’s activity consists of purchasing goods and services, saving, making transfer payments and financing these expenses and transfers. Government spending can be financed in two ways: taxing and borrowing from the private sector.
However, China’s administration system has 2-layer character which means two layer governments (local government and central government) separate their duty on collecting tax, formulate their own budgets, and there are retransfer mechanism between local government and central government. Besides, China’s central government is responsible for several attempts to combine regional budgetary control with different autonomy for the provinces.

Considering the special relationship between local government and central government in China, we plan to make local government account and central government account separately in our model. Two types of governments get income from household, firm and sometime from import goods, and provides public goods and financial transfer to household. Further, local government gets income from indirect tax, household income tax, firm’s income tax and transfer from the central government. Central government revenues are source from tariff, indirect tax, as well as fixed proportion of firm’s income tax collected by local government (Due to China’s tax-sharing system between local and central government). Government consumption function will simplify as proportion function as the total output.

Regional total domestic demand includes household consumption, local government consumption, intermediate input demand, and local investment demand. Consumption functions for different agents (household and local government and central government) have been discussed above. Intermediate inputs demand equation can be Leontief function. Investment demand is simply defined as a portion of total local output. On the other hand, from the supply side of these demand points of view, regional total domestic demand follows Armington assumption, which can be nested into 2 stages, the first stage describe CES composite of local produced goods, imported goods from other regions and international market, the second stage describe CES composite of imported goods from different region in China.
Functions relate to poverty issue

To mimic policy shocks on poverty, which is a character of regional CGE model for China in this project, the function relates to poverty issues is highlighted in the model, and the functional form of poverty and income distribution is sourced from Decaluwé, Patry, Savard and Thorbecke (1999). Firstly we define the poverty line endogenously within ELES function in the CGE model. Then we estimate a Beta type income distribution function. Finally, we can calculate the number of poor within the group and other poverty index using the above information.

Linkage between different regions

Feedback effects will be described using regional trade equation. Actually, multi-regional input-output table for China from National Bureau of Statistics does not calculate inter-region trade flow. To model 3-region CGE, we plan to estimate trade flow between different region using gravity approach (Wang, 2000), given regional I-O table and other data that can be got from NBS. We plan to recalculate regional trade data according to this method and our regional classification.

Scenarios:

(1) Baseline: all tax rate, government transfer are set the same as that of in 1997
(2) Scenario 2: government transfer to western region and rest of China increase 30%7, for eastern region, increase 0%. Other conditions keep no change
(3) Scenario 3: income tax for enterprise in western region and rest of China decrease 10%, for eastern region, decrease 0%. Other conditions keep no change
(4) Scenario 4: combination of scenario 2+3

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6 See Li Wang “Modeling Bilateral Trade” in “China’s Economic Model” edited by Peter Lloyd and Xiaoguan Zhang, Edward Publication Co. UK. 2001
7 The percentage change here could be modified.
6. Data Requirements and Sources

Source of the SAM

As in any general equilibrium model applied, the main source of database is the Social Accounting Matrix (SAM). SAM for eastern China, western China and the rest of China in this project will be based on “China’s multi-regional input-output table” in 1997. To calculate inter-region trade flow, we also source the needed some macro-economic data from China Statistical Yearbook.

Source of the elasticity

Elasticity of the substitution in the model includes elasticity of substitution between domestic and imported goods in the Armington aggregation, elasticity of substitution between primary factors, elasticity of substitution among imports from different destinations, elasticity of substitution between composite intermediate inputs and value-added, elasticity of transformation between domestic sales and exports. The best way to get the elasticity is to estimate it using either econometric approach or “validation” procedure. To make the work easier and reasonable, the author will borrow these elasticity from the GTAP database directly otherwise estimated them by herself.

Besides some elasticity, before solving the CGE model, a so-called parameter calibration procedure must be undertaken so that the values of some key parameters (except elasticity of substitution) are directly calculated from the model equilibrium conditions. Such methodology is widely used in CGE models. Further, we use equilibrium data to

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8 See China Information Centre (2005), “Multi-regional Input-output Model for China”, Social Sciences Academic Press. In China, the National Bureau of Statistics (NBS) of China began to compile national income accounts from 1952 to 1984 according to Material Product System (MPS). From 1985 to 1992, national account featured the coexistence of MPS and the System of National Accounts (SNA). Since 1993, the SNA has been the sole basis of the national accounts system. Every five years the NBS has published a new I-O table. At present, although it was not really a SAM according to an SNA system in developed countries, it was very similar.
find the values of the share and scale parameters in the production functions, CET function, import demand function, as well as parameters in the ELES functions.

**Source to classify household**

It is clear that data on households’ behaviour is a crucial part for analysing the impact of policies on income distribution and poverty. We draw data on this issue from the China Statistical Yearbook edited by China’s National Bureau of Statistics (NBS) to disaggregate household in 10 different groups in each region (5 groups for rural area and 5 groups for urban area)\(^9\).

**7. Dissemination Strategy**

This study is jointly worked by research staff of Institute of Technical and Quantitative Institute Economics of CASS and National Bureau of Statistics, PR. China. CASS is “Think Tank” for China’s central government. So some research reports and discussion papers will submit to State Council of China and leading group of Anti-Poverty of State Council directly. (CASS is responsible for writing such inner working papers. We are obligated to submit at least 2 inner working papers to State Council of China each year) from the result of the project. Papers will also be presented to different international and national conferences such as the conference organized by PEP. A publication in an international journal is another objective.

**8. Key References**


\(^9\) Actually, in China Statistical Yearbook, NBS classifies 7 groups of urban household and 5 groups of rural household.


Wang, Li (2005), "Economic relations between the European Union and China and evaluation of impact of China's tariff change on both economies with a computable general equilibrium model" http://docserver.bis.uni-oldenburg.de/publikationen/dissertation/2005/waneco05/waneco05.html


9. The research team

The research team is comprised of 3 researchers, based at the Chinese Academy of Social Sciences (CASS) and National Bureau of Statistics (NBS) separately in Beijing.

- Li Wang (Associate Professor, Dr. CASS)
Ms. Li Wang is an associate professor of Institute of Quantitative and Technical Economics (IQTE), Chinese Academy of Social Sciences (CASS). She holds a PhD from Oldenburg University, Germany, obtained in 2005. Her thesis was entitled “Economic relations between the European Union and China and evaluation of impact of China's tariff change on both economies with a computable general equilibrium model”. She began to study on CGE model in 1998, when she took part in an international cooperation project between Chinese Academy of Social Sciences and Melbourne University, Australia, which is named “Models of Chinese Economy” financial supported by AusAID in Australia and the Australian Research Council. During her PhD study in Germany, her second supervisor, Prof. Dr. Heinz Welsch is very famous in the field of CGE model in Germany. From him she learned lots of about CGE modeling and techniques. Besides, being a research staff in the division of Modeling and Policy Analysis of IQTE, CASS, she is quite familiar with macroeconomic modeling and policy analysis. She will participate in all stages in this research, as major research staff and the team member specialized in the CGE modeling.

Mr. Xuesong Li is also an associate professor of Institute of Quantitative and Technical Economics (IQTE), CASS. He began to work on CGE model in 1998 with an international cooperation project with CPB (Central Planning Committee, Netherlands). After 1998, he edited a book and published several papers on different issues on CGE model. He once worked with Prof. James. Heckman on issues relate to Heterogeneous Returns to Education. He will participate in building CGE model and designing model simulation.

Mr. Wenbo Wang is a director of Division of Macroeconomic Monitoring in National Bureau of Statistics of China. He finished his master study in the early 1990s and was a
visiting scholar in Stanford University and IMF soon after he was employed by NBS. His present field of studies is analysis of China’s fiscal policy, income distribution and economic forecasting. He will be responsible for the data source and fiscal policy on poverty alleviation and income distribution during 1978~2004 in this project.

10. Expected Capacity Building for Researchers and their Institutions

As the leading researcher, Dr. Li Wang just graduated from Germany Doctoral study which needs the research environment and financial support after going back China. Also she will familiarise with poverty concept as well as its methodological approaches. In this way, she can provide more reasonable suggestion to Chinese government through writing working paper for CASS and State Council. Also through this project, CASS can have its own regional CGE model that is based on Chinese economic structure and capture the issues on income distribution, and this will be a property of the institution in the future. A publication in an international journal will be an important asset for her career. On the other hand, Dr. Li Wang and Dr. Xuesong Li are both lecturers in graduate school of CASS, they can also spread the modelling technique to the students year by year. Finally, Mr. Wang will also an important participant of the research so that the National Bureau of Statistics will befit in terms of CGE model building.

11. List of past, current or pending projects in related areas involving team members

Dr. Li Wang

- Dissertation “Impact of China’s WTO membership on bilateral trade between China and EU with a CGE model” Supported by China Scholarship Council during 2002~2003 and Niedersachsisches Ministerium für Wissenschaften und Kulture during 2003~2005
- Cooperation project “Models of Chinese Economy” between Chinese Academy of Social Sciences and Melbourne University, Australia. Supported by AusAID in Australia and the Australian Research Council.

Dr. Xuesong Li
- 1999-2002, Project supported by NSFC (Natural Science Foundation of China), “Multi-country game theoretic analysis and quantitative simulation based on CGE model on openness of China’s trade and finance”

- 2003-2005, Key project supported by CASS (Chinese Academy of Social Sciences), “Research on growth target and development strategy of Chinese economy during 11th five-year plan”

- 2005-2006, Project supported by Guangdong Province, “Provincial model construction for Guangdong and forecasts for main macro-economic and fiscal indicators for years 2006 to 2010”

Mr. Wenbo Wang
- Calculation of Gini Index using China’s statistics data supported by National Bureau of Statistics, China

- Evolution of policy on income distribution and empirical study on poverty in China supported by National Bureau of Statistics, China

- Study on the relation between agriculture and national economy supported by National Bureau of Statistics, China

- Study on the relation among economic speed, efficiency and structure supported by National Bureau of Statistics, China