

**Rethinking Regional Development and
Spatial Inequality: Evidence from county-level
China**

By

Man Xu

SUBMITTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

April 2016

I, Man Xu confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm this has been indicated in the thesis.

Abstract

Regional development and spatial inequality in China is an area of research that has attracted considerable scholarly interest, mainly focusing on the implications of development theory and development strategies in this transitional and developing country.

In contrast to most previous studies of China's regional development and spatial inequalities based on provincial data, my arguments are drawn from observations on a much finer scale. In this thesis, information at the county scale is employed to fill a gap in the literature on Chinese regional development. In addition, as the majority of previous research has focused on the economic indicators that have had a great influence upon China's regional development and spatial inequality, I explore social, political and ideological, as well as economic, factors in China's transition and transformation. The central aims of my thesis are to understand current spatial regional inequality in China at different scales, to explore the relationship between development and inequality and to explain the factors that cause the inequality underlying China's impressive progress in macro economic development.

My thesis identifies and explains spatial inequalities in China at the county scale by using data from more than 2000 counties, focusing on economic, social, political and ideological factors. As well as the quantitative data collected from the official statistical yearbook and documents, my field survey relies on data gathered through focus groups, questionnaires and interviews in five counties in three different provinces. Such data illuminates how local people understand and react to rapid socio-economic development and widening disparities between different groups of people. Through critical analyses of fieldwork data, this fieldwork intends to explain the inequality phenomenon and explore the causes of socio-economic disparities at the county level in China.

Table of Content

ABSTRACT.....	1
TABLE OF CONTENT.....	3
LIST OF FIGURES.....	6
LIST OF TABLES.....	11
ACKNOWLEDGEMENTS.....	13
CHAPTER 1 INTRODUCTION.....	15
1.1 DEVELOPMENT AND INEQUALITY.....	20
1.2 RESEARCH AIMS AND OBJECTIVES.....	24
1.3 THESIS OUTLINE:.....	26
CHAPTER 2 CHINESE UNEVEN REGIONAL DEVELOPMENT AND INEQUALITY IN THE CONTEXT OF DEVELOPMENT THEORY.....	29
2.1 INTRODUCTION.....	29
2.2 GEOGRAPHICAL SCALE.....	31
2.3 DEVELOPMENT MODELS IN THE CONTEXT OF CHINESE REGIONAL DEVELOPMENT STRATEGIES.....	33
2.4 SOCIAL DIMENSIONS IN PERSPECTIVES OF THE TRANSITIONAL ECONOMY IN CHINA.....	38
2.5 POLITICAL DIMENSIONS IN CHINA FROM THE PERSPECTIVE OF THE TRANSITIONAL ECONOMY.....	47
2.6 ANALYSIS FRAMEWORK.....	52
CHAPTER 3 RESEARCH DESIGN.....	57
3.1 INTRODUCTION.....	57
3.1.1 Statistical Data Collection and Processing.....	58
3.1.2 Data Source and Data Selection.....	59
3.1.3 Statistical Data Accuracy.....	63
3.2 FIELD RESEARCH PRACTICE.....	66
3.2.1 Research Locations.....	69
3.2.2 Focus Groups.....	72
3.2.3 Questionnaires.....	77
3.2.4 Interviews.....	83
3.3 ANALYTICAL METHODS.....	86
3.3.1 Quantitative Analysis: GIS and Statistical Analysis Methods.....	86
3.3.2 Qualitative Analysis: Data Coding and Analysis.....	89
3.4 CONCLUSION.....	91

CHAPTER 4 SPATIAL DISTRIBUTION OF DEVELOPMENT: GEOGRAPHICAL, HISTORICAL AND POLITICAL CONTEXT.....	93
4.1 INTRODUCTION.....	93
4.2 CONSTRUCTION OF THE PRC AND THE START OF THE REGIONAL BALANCED DEVELOPMENT STRATEGY (1949-1957).....	94
4.3 THE GREAT LEAP FORWARD AND READJUSTMENT (1958-1965).....	100
4.4 THE TEN-YEAR CULTURAL REVOLUTION (1966-1976).....	104
4.5 POST-MAO AND PRE-OPEN-DOOR POLICY (1976-1978).....	109
4.6 CONCLUSION.....	111
CHAPTER 5 CHINA'S REGIONAL DEVELOPMENT AND INEQUALITY: SPATIAL DISTRIBUTION AT COUNTY SCALE.....	113
5.1 INTRODUCTION.....	113
5.2 DEVELOPMENT AND DISPARITY PATTERNS AT COUNTY SCALE.....	114
5.2.1 <i>Provincial Scale vs. County Scale</i>	114
5.2.2 <i>Spatial Distribution of Economic and Social Development</i>	124
5.2.3 <i>Understanding Regional Development and Disparity: Using County Data to Test the Kuznets Model</i>	134
5.3 UNDERSTANDING REGIONAL DEVELOPMENT AND REASONS FOR DISPARITY.....	147
5.3.1 <i>Political Preferential Strategies</i>	148
5.3.2 <i>Geographic Diversity</i>	152
5.3.3 <i>Economic Imbalance</i>	154
5.4 CONCLUSION.....	161
CHAPTER 6 ECONOMIC INEQUALITIES: INCOME AND CONSUMPTION.....	163
6.1 INTRODUCTION.....	163
6.2 RESIDENTIAL HOUSEHOLDS.....	164
6.3 UNDERSTANDING INCOME.....	172
6.4 GENDER AND INCOME INEQUALITY.....	176
6.5 REGIONAL INEQUALITY IN INCOME AND CONSUMPTION.....	180
6.6 INCOME AND CONSUMPTION INEQUALITY BETWEEN URBAN AND RURAL AREAS.....	190
6.7 INCOME AND CONSUMPTION INEQUALITIES BETWEEN SOCIAL CLASSES.....	196
6.8 CONCLUSION.....	209
CHAPTER 7 SOCIAL TRANSFORMATION AND INEQUALITY.....	210
7.1 INTRODUCTION.....	210

7.2	BIRTH CONTROL AND GENDER EQUALITY.....	211
7.3	SOCIAL CLASS AND STRATIFICATION.....	221
7.3.1	<i>HuKou and Social Stratification.....</i>	221
7.3.2	<i>Social Stratification.....</i>	226
7.4	EDUCATION AND SOCIAL MOBILITY.....	234
7.4.1	<i>Case 7-1: Education fees, medical fees and inequality.....</i>	241
7.4.2	<i>Case 7-2: Example of upward social mobility via education.....</i>	243
7.5	CONCLUSION.....	250
CHAPTER 8 GEOSPATIAL ANALYSIS OF POLITICAL POLICY AND CORRUPTION		251
8.1	INTRODUCTION.....	251
8.2	PARTICIPANTS' UNDERSTANDING OF CHINA'S CHALLENGES.....	252
8.3	PREFERENTIAL POLICIES AND INEQUALITY.....	255
8.3.1	<i>Preferential Policies between Locations.....</i>	256
8.3.2	<i>Preferential Policies between Urban and Rural Regions.....</i>	259
8.3.3	<i>Case 8-1: Company village governance in Boluo, Guangdong province.....</i>	260
8.3.4	<i>Preferential Policies between Ethnic Groups.....</i>	262
8.4	CORRUPTION.....	269
8.4.1	<i>Determinants of Corruption.....</i>	271
8.4.2	<i>Spatiality of Corruption.....</i>	275
8.4.3	<i>Case 8-2: village cadres and governance in Wuchang (Hubei province).....</i>	276
8.4.4	<i>Case 8-3: the corruption of village cadres in Liangzhou (Gansu province).....</i>	279
8.5	CONCLUSION.....	283
CHAPTER 9 CONCLUSION.....		284
9.1	INTRODUCTION.....	284
9.2	CONCEPTUAL AND EMPIRICAL CONTRIBUTIONS.....	286
9.3	MAIN FINDINGS AND POLICY IMPLICATIONS.....	288
9.4	CHALLENGES AND CONSTRAINTS.....	290
9.5	POSSIBLE RESEARCH DIRECTIONS IN FUTURE.....	291
APPENDIX 1: FOCUS GROUPS GUIDE.....		294
APPENDIX 2: QUESTIONNAIRE.....		298
APPENDIX 3: INTERVIEW GUIDE.....		310
BIBLIOGRAPHY.....		317

List of Figures

Figure 1- 1: ‘Son for free’ (Source: Xkb.com.cn, 2007).....	15
Figure 1-2 : Urban (left) and rural (right) primary school facilities (Source: Xinghuanet, 2006).....	17
Figure 1-3: Shenzhen (Source: Shenzhen Special Zone Daily, 2007).....	18
Figure 1-4: Northwestern China (Source: Bbs.5460.net, 2007).....	19
Figure 2- 1: Key Theoretical Debates (Source: author).....	30
Figure 2- 2: Kuznets Curve.....	38
Figure 3- 1: Locations of Fieldwork (Source: author).....	72
Figure 4- 1: 1 st . Five-Year Plan Project Distribution (Source: author).....	96
Figure 4- 2: Communal kitchens in 1958 (Source: Xinhua net, 1959).....	101
Figure 4- 3: Cultural Revolution Slogan (Source: author).....	105
Figure 4- 4: Cultural Revolution Poster (Source: www.sinohits.net).....	107
Figure 4- 5: The Scope of the Third Front (Source: author).....	108
Figure 5- 1: 2006 per capita GDP at provincial level (RMB) (Source: author).....	116
Figure 5- 2: 2006 per capita GDP at county level (RMB) (Source: author).....	117
Figure 5- 3: High development areas 2002(RMB) (Source: author).....	119
Figure 5- 4: Wenzhou Model and Sunan Model (RMB) (Source: author).....	120
Figure 5- 5: Per county GDP in Cixi from 1997 to 2006 (RMB) (Source: author)....	122
Figure 5- 6: Rural–urban income inequality in China, 1978-2002 (RMB) (Source: author).....	123
Figure 5- 7: 2006 Per capita rural income (RMB) (Source: author).....	126
Figure 5- 8: 2006 per capita savings (RMB) (Source: author).....	127
Figure 5- 9: 2006 student number per 10000 people (Source: author).....	128
Figure 5- 10: 2006 hospital beds per 10,000 people (Source: author).....	129
Figure 5- 11: 1999 per capita GDP (RMB) (Source: author).....	132

Figure 5- 12: 2002 per capita GDP (RMB) (Source: author).....	133
Figure 5- 13: 2006 per capita GDP (RMB) (Source: author).....	134
Figure 5- 14: Kuznets Curve.....	142
Figure 5- 15: Regression graph of per capita GDP and CV of per capita savings (Source: author).....	145
Figure 5- 16: Regression graph of QDI and CV of per capita income (Source: author)	145
Figure 5- 17: General geomorphology map of China (Source: White Papers of the Chinese Government, 2006).....	153
Figure 5- 18: Distribution of metallic mineral resources in China (Source: White Papers of the Chinese Government, 2007).....	154
Figure 5- 19: Per capita local government expenditure (Source: author).....	156
Figure 5- 20: Per capita local government revenue (Source: author).....	157
Figure 6- 1: Improvements in the condition of residential housing in Gulang (Source: author).....	165
Figure 6- 2: Improvements in the condition of residential housing in Wuchang (Source: author).....	166
Figure 6- 3: Improvements in the condition of residential housing in Boluo (Source: author).....	167
Figure 6- 4: Liangzhou Square in Gansu province (Source: author).....	169
Figure 6- 5: Wuchang Square in Hubei province (Source: author).....	169
Figure 6- 6: Boluo Square in Guangdong province (Source: author).....	170
Figure 6- 7: Gender and income inequality in five counties (Source: author).....	177
Figure 6- 8: Female migrant worker in China (Source: Xinhuanet, 2008).....	179
Figure 6- 9: Mr. Wu's house (Source: author).....	184
Figure 6- 10: Residential apartments constructed by Foxconn (Source: author).....	184
Figure 6- 11: Arable lands in Gulang (Source: author).....	186
Figure 6- 12: Wheat field in Gulang (Source: author).....	187

Figure 6- 13: Greenhouse in Gulang (Source: author).....	188
Figure 6- 14: Wheat field in Liangzhou (Source: author).....	188
Figure 6- 15: Greenhouse inLiangzhou (Source: author).....	189
Figure 6- 16: Rural and urban per capita income in the five counties (Source: author)	191
Figure 6- 17: Apartment in urban area (Source: author).....	193
Figure 6- 18: House in rural area (Source: author).....	194
Figure 6- 19: Boluo leisure centre for retired cadres (Source: author).....	202
Figure 6-20: Wang Peng lives in one of the many apartments in this multi-storey modern building (Source: author).....	206
Figure 6-21: Yang Liping and author (Source: author).....	208
Figure 7- 1: Slogan: ‘If you run away to avoid the one-child policy today, you will lose all your property tomorrow’ (Source: Beijingwanbao, 2009).....	213
Figure 7- 2: A wife cooking in the kitchen (Source: author).....	215
Figure 7- 3: A husband drinking with guests while his wife prepares the food (Source: author).....	215
Figure 7- 4: Neonatal sex ratios (Source: derived from CSB yearbook, 2007).....	216
Figure 7- 5: Mr. Zhang and his grandson (Source: author).....	218
Figure 7- 6: Poster stating: ‘The one-child policy is brilliant and the government will care for the elderly’ (Source: Xinhuanet, 2008).....	219
Figure 7- 7: Mr. and Mrs Ma and their grandchildren (Source: author).....	220
Figure 7- 8: Cover of a typical copy of China’s Household Register Book (Source: author).....	222
Figure 7- 9: First page of a <i>HuKou</i> book in Chinese (Source: baidu.com).....	222
Figure 7- 10: First page of a <i>HuKou</i> book in English (Source: author).....	223
Figure 7- 11: The contents of a <i>HuKou</i> book in Chinese (Source: author).....	224
Figure 7- 12: The contents of a <i>HuKou</i> book in English (Source: author).....	224

Figure 7- 13: A peasant comforts his son (Source: cishan.net).....	232
Figure 7- 14: A low-income peasant (Source: author).....	233
Figure 7- 15: Ideal jobs of Chinese inhabitants (Source: author).....	233
Figure 7- 16: Social disparity between urban and rural regions (Source, author).....	235
Figure 7- 17: Village school in Gansu (Source: author).....	237
Figure 7- 18: Town school in Gansu (Source: author).....	237
Figure 7- 19: Secondary school in city in Gansu (Source, author).....	237
Figure 7-20: Tuition fee increase against income and GDP growth (Source: author)	239
Figure 7-21: Mr. Yang and the author (Source, author).....	242
Figure 7-22: Mr. Yang's greenhouse (Source, author).....	242
Figure 7-23: Number of university graduates between 1977 and 2010 (Source: author)	245
Figure 7-24: Secondary school (top: old campus, bottom: new campus) in Wuchang, Hubei Province (Source: author).....	248
Figure 7-25: Secondary school (top: old campus, bottom: new campus) in Boluo, Guangdong Province (Source, author).....	249
Figure 8- 1: Challenges facing the government (Source: author).....	254
Figure 8- 2: First-class road in Jinchang (Source: author).....	258
Figure 8- 3: Road in Gulang(Source: author).....	258
Figure 8- 4: Translator, Uncle Ma, his wife and author (Source: author).....	264
Figure 8- 5: The first house from the left belongs to Uncle Ma (Source: author).....	264
Figure 8- 6: Uncle Ma's cattle (Source: author).....	265
Figure 8- 7: The scrapped ancestral hall in Boluo (Source: Author).....	266
Figure 8- 8: Christian church in Boluo (Source: author).....	267
Figure 8- 9: Buddhist temple in Wuchang (Source: author).....	268
Figure 8- 10: Muslim mosque in Jinchang (Source: author).....	268

Figure 8- 11: The village party secretary's restaurant (Source: author).....	271
Figure 8- 12: Restaurant in the middle of a lake (Source: author).....	278
Figure 8- 13: New apartments for villagers (Source: author).....	278
Figure 8- 14: Urban residential management committee office (Source: author).....	279
Figure 8- 15: Li Tiande's house (Source: author).....	279
Figure 8- 16: The village cadre's house (Source: author).....	281
Figure 9- 1: GDP from 1952 to 2012 (Unit: Billions of RMB).....	284

List of Tables

Table 1- 1: Macro Data of China (Source: World Bank, 2010).....	16
Table 3- 1: Administration Unit Number (Source: derived from National Bureau of Statistics).....	60
Table 3-2: County-Level Data Indices (Source: derived from National Bureau of Statistics, 1992-2006).....	62
Table 3-3: County-Level Data Indices (Used in Thesis (Source: calculated and derived from National Bureau of Statistics, 1997-2006).....	65
Table 3-4: Field Survey Methods by County (Source: author).....	68
Table 3-5: County Economic Competitiveness (Source: derived from China County Level Economy Yearbooks, 2002-2006).....	70
Table 3-6: Focus Groups (Source: author).....	74
Table 4- 1: Death rate between 1956 and 1963 at the provincial level (Source: Population N., 1989).....	102
Table 5- 1: Correlations of PGDP, PLGR, PLGE, PSDUH, PCNIRH, PFI, HB, SWB, SE and QDI.....	139
Table 6- 1: Income components in China (Author derived from Hao and Wei, 2010; Khan and Riskin, 2005; Chang, 2002).....	172
Table 6-2: Average school years (Source: author).....	178
Table 6-3: Annual income in five field survey counties (Source: author).....	181
Table 6-4: Wufamily compensation for their land and house (Source: author).....	185
Table 6-5: Top three household expenses for rural/urban participants in the five counties, 2008 (Source: author).....	195
Table 6-6: Income and consumption inequality between different social classes (Source: author).....	199
Table 7- 1: Number of children per family amongst sample population (Source: author).....	212

Table 7-2: Scores based on occupation and other related factors (Source: author
derived from field interviews and questionnaires).....229

Table 7-3: Components of social classes (Source: author).....229

Acknowledgements

Firstly, I would like to express my sincere appreciation to my supervisor, Professor Klaus Dodds, for his continued support of my Ph.D. research, his inspiring comments, his unfailing encouragement, his patience and his understanding. His supervision has helped me through both the research and writing up of this thesis. I could not have imagined having a better supervisor and mentor for my Ph.D. study. I would also like to thank my other supervisor, Professor Tim Unwin, not only for his tremendous supervision and great encouragement, but also for challenging me to widen my research questions from a range of perspectives. Without both of their help and devoted supervision throughout the research, this thesis would never have been completed.

Secondly, I would especially like to thank the Department of Geography for its warm and friendly environment. In particular, I am greatly indebted to the staff and colleagues of the Department: Professor Edward Derbyshire, Professor Katie Willis, Professor David Gilbert, Professor David Simon, Professor Felix Driver, Professor Jim Rose, Dr. Vandana Desai, Dr. Jay Mistry, Dr. Dorothea Kleine and Dr. Alasdair Pinkerton for their support and invaluable advice. In addition, I am grateful to two research groups –the Politics, Development and Sustainability Group (PDS) and Information Communications Technology for Development Group (ICT4D) –and my research peers for stimulating discussions and sharing their honest and illuminating views on this thesis.

Thirdly, I would like to take this opportunity to show my appreciation to all my friends who supported me during the research process. In particular, I am thankful to Professor Xingmin Meng, Ms. Yanyan Wu, Dr. Rui Mu and their families for their help, care and company; Dr. Madeleine Hatfield and Miss Emily Derbyshire for their professional and excellent proof-reading; and Mr. Xiaopeng Ran and Mr. Yajun Li for their valuable assistance. I am sincerely grateful to them.

Last but not least, I would like to thank my family for their unconditional love and support. We have experienced some ups and downs in the past few years but they

have always supported me spiritually through the writing of this thesis and my life in general. Thank you to my husband, Song Dong, my children, Alan and Katie, my parents, my parents-in-law and my brothers. Words cannot express how grateful I am to them for all of the sacrifices that they have made on my behalf.

Chapter 1 Introduction

Born and brought up in Wuhan, the largest city in the middle part of China, I was educated in communist ideologies such as ‘everybody is equal in the People’s Republic of China’. I had complete faith in such mantras until finishing my undergraduate studies. However, when I worked in Shenzhen after my graduation in 1998, I noticed that there were a lot of wealthy people around me. There was a popular saying in Shenzhen that, ‘those with 100 thousand RMB are poor, those with one million are just about going towards wealthy, and only those with 10 million can be ranked as wealthy [10 万是贫困户, 100 万才起步, 千万才算富]’. A typical rich man in Shenzhen normally has three or four properties, one or two luxury cars and membership of a golf club, all of which could worth around 5 million RMB in 1998 and nearly 20 million in 2008.



Figure 1-1: ‘Son for free’ (Source: Xkb.com.cn, 2007)

The difference is striking when comparing the cohort who has become rich first with the mass majority. For example, I joined a charity group helping rural children with severe illness such as heart disease, leukaemia or other disabilities. There is no free medical service for rural residents, which means that children must simply wait to die if their parents are unable to afford expensive surgery fees. In some extreme cases, parents abandon their sick children in hospital hoping that wealthy people will adopt their children and save their lives. Figure 1-1 shows a woman giving away her son, who is suffering from thalassemia. Her husband is disabled and they have spent all of

their savings on their son's illness. They have sought help from various governmental organisations but the allowances they have received are still far from enough. Eventually, they decided to give their only son to someone able to pay his medication costs. I was shocked by this huge inequality between rich and poor and wanted to understand why it was happening.

At the time of beginning my research, Asian countries and regions such as Taiwan, Malaysia, Indonesia, India and China had experienced high economic growth in the previous four decades (Heikkila, 2003). China's economy in particular has been growing at a rate faster than that of any other country, with annual GDP increasing by approximately 10% since the economic reform in 1978 (China's Statistical Yearbook, 2007).

In 2009 (see Table 1-1), China's GDP reached 12.5% of the world total, making it the third largest economy in the world after the US and Japan (People's Daily Online, 2009). In terms of the total value of imports and exports, China was the third largest country after the US and Germany. China has also become the world's largest recipient of foreign direct investment (FDI), totalling 148 billion US dollars. China had accumulated 2.4 trillion US dollars in foreign exchange reserve by the end of 2009, the largest amount in the world to date (China's Statistical Yearbook, 2010). Given similar sustained growth, China is likely to emerge as the largest national economy in the world within the next fifteen years.

Table 1-1: Macro Data of China (Source: World Bank, 2010)

Indicators	US Dollars (trillion)
Gross Domestic Production (GDP)	4.91 (2009)
Total Value of Imports and Exports	2.174 (2007)
Foreign Direct Investment (FDI) Net Inflows	0.148 (2008)
Foreign Exchange Reserve	2.4 (2009)

Substantial disparities in regional development are not new and are found in almost every geographically large country (Williamson, 1965), as well as in some

small countries experiencing rapid development, such as Botswana in south-central Africa. Since its independence in 1966, the economy of Botswana has been growing at an annual average rate in excess of 10%. The country has gone from being one of the least developed and poorest nations in the world to one classified as an ‘upper-middle income’ economy but severe socio-economic disparities exist between rural and urban people (Hope and Edge, 1996). Therefore, while maintaining rapid economic growth and simultaneously getting disparities under control has become both a theoretical and a practical challenge (Coes, 2008; Barro, 1995; Williamson, 1965), the extent and causes of the disparity are very complex, and vary considerably from place to place.

China also suffers large inequalities in income (see Wang, 2007; Li and Zhu, 2006 and Lee, 2005), education (for example, Zhang and Kanbur, 2005 and Hannum, 2005) and health care (Akin *et al.*, 2005; Björn and Li, 2004) as well as between different regions and between groups of people differentiated by age, gender and social class. Figure 1-2 for example shows the distinct difference in classroom facilities between urban and rural areas.



Figure 1-2: Urban (left) and rural (right) primary school facilities (Source: Xinghuanet, 2006)

These inequalities might have severe economic, social and political consequences. Due to limited interaction between China’s regions, the great differences between geographical zones, the strong contrasts in the distribution of resources (both human and natural), and the broad spectrum of technologies and local policies in use, different parts of China differ widely in their level of economic activities, organisational forms, and degree of prosperity. This has been particularly exacerbated in recent years and these disparities have now reached extreme proportions (see Fan and Sun, 2008; Edward, 2006; Fleisher, 2006; Hu, 2002). The problems are so great

that the 11th. Five-Year Plan (2005-2010) is intended to reduce inequality. The richest regions – such as the Yangtze River estuary region centred on Shanghai, the Pearl River estuary region centred on Guangzhou and Shenzhen, and the Beijing-Tianjin region – occupy about 1.6% of the territory of China, with less than 10% of the total population, yet produce over 40% of the GDP (China Statistical Yearbook, 2007).

In particular, Shenzhen (see Figure 1-3) has the highest per capita GDP in China (89814 RMB in 2007: equivalent to about £8800) (Shenzhen Statistical Yearbook, 2008) and the Purchasing Power Parity (PPP) of the local people has been significantly higher than in several developed European countries.



Figure 1-3: Shenzhen (Source: Shenzhen Special Zone Daily, 2007)



Figure 1-4: Northwestern China (Source: Bbs.5460.net, 2007)

In great contrast, in the poorest areas such as Gansu province (Figure 1-4) in north-western China (which is similar in size to France), there are still millions of poverty-stricken people. In 10% of rural areas (counties or prefectures) per capita GDP is far less than 2500 RMB (equivalent to about £180) (Gansu Statistical Yearbook, 2008; Shang, 2007). The inequality between rich and poor has been growing continuously and rapidly for some time. The Gini coefficient has risen for the whole of China from a low of 0.33 in 1980 to 0.465 in 2005 (National Statistics Bureau of China, 2006). This level is much higher than the international warning level of 0.4. Based on a UNDP (2006) report, 10% of China's population possess 41% of the total national wealth. It has been estimated that 60% of the nation's wealth lay in the hands of less than 0.5% of families in 2005. The situation is far worse than is found in any developed capitalist country, such as the US or in Europe.

Nobel Laureate Joseph Stiglitz (2006: p44) has commented that

'I believe that it is important for countries to focus on equity, on ensuring that the fruits of growth are widely shared. There is a compelling moral case for equality; but it is also necessary if there is to be sustained growth. It is important to remember the big picture: success means sustainable, equitable, and democratic development that focuses on increasing living standards, not just on measured GDP. Income is, of course, an important part of living standards, but so too is health and education. A country's

most important resource is its people. At the extreme, high levels of inequality, especially as a result of unemployment, can result in social unrest.’

Similar questions have been asked about China’s situation. For example, is such a long period of high economic growth sustainable in China (Zhang, 2001)? How can rapid economic growth be maintained and disparities be brought under control (Kanbur, Qian and Zhang, 2008)? How will such inequalities affect China’s economic, social and political stability in the future (Knight, 2008; Fleisher, 2006)? Why disparity in China has become so exceedingly high in recent years (Wan, 2007, 2008; Fan, 2006)? These questions are becoming matters of grave concern as well as bringing both theoretical and practical challenges. Therefore, my thesis attempts to answer these questions via theoretical and empirical research.

1.1 Development and Inequality

‘Development occupies the centre of an incredibly powerful semantic constellation. There is nothing in modern mentality comparable to it as a force guiding thought and behaviour’ (Sachs, 1992: 8).

This statement affirms that development has been a very important topic in academic research since World War II. Fundamentally, ‘development’ refers to economic development since this is the principal component of development, with the primary criteria of increasing the quantity and quality of resources of all kinds (Szirmai, 2005).

However, the identification of development with economic growth has come under increasing criticism. Authors such as Acemoglu (2008); Ul Haq(1999); Sargent and Wallace (1995); Terhal (1992); Fogel (1986); Seers (1979) and Koopmans(1965) along with institutions like the International Labour Organisation (ILO), have pointed out that developing countries did not experience much change in the living conditions of the poor in spite of impressive growth figures in the post-World War II period. They came to the conclusion that development involves more than economic growth and changes in economic structures. Seers formulated three additional requirements for the use of the term development, namely that there should be a decrease in poverty and malnutrition, that income inequality should decline, and that the employment

situation should improve (Seers, 1979). Therefore, although the discussion of development has focused mainly in the economic domain, some social scientists have stated that development should not be viewed in terms of economics only (Szirmai, 2005; Potter, 2004; Sen, 2000). Instead, one should also pay attention to changes in family structures, attitudes and mentalities; culture changes; demographic developments; political changes and nation building; the transformation of rural societies and processes of urbanisation. Other critics have gone even further and challenged the narrow focus on the economic dimensions of development alone. This is because a country can grow rapidly but still do badly in terms of literacy, health, life expectancy and nutrition (Sen, 2000). The environmental costs of growth are also insufficiently recognised (Mishan, 1967); and economic growth does not necessarily make people happier or satisfied (Easterlin, 1972). Criticism of growth fetishism has led to the emergence of so-called social indicators: life expectancy, literacy, levels of education, infant mortality, availability of telephones, hospital beds, licensed doctors, availability of calories, and so forth. The Swedish Nobel Prize winner Gunnar Myrdal (1957) has argued that discussions of development have implicitly been based on a series of modernisation ideals or values, while Amartya Sen (1999) has argued for an even broader concept of development focusing on the concept of freedom. Therefore, as Sachs (1992) and Drakakis-Smith (1993) argued, 'development' should not always be used as an abbreviation of 'economic development' and, instead, it should encompass social, political, culture dimensions. Many scholars, such as Unwin (1994), have addressed the importance of such social, political and cultural dimensions in development.

Thus, defining development is incredibly complicated because it has been debated continuously since the establishment of development studies several decades ago (Simon, 1997; Tim, 1994; Drakakis-Smith, 1993; Saches, 1992). Perspectives on its definition have been changing from time to time in association with world economic development stages and events (Potter, 2004). As a result, there has for some time been no widely accepted definition of development. Typical examples of definitions include:

- *The word 'development' (发展) in Chinese is a combination of two characters: '发', meaning gradual growth in scale or quantity, and '展', meaning spatial extent or spreading (Chinese Dictionary: 290);*
- *The word 'development' means 'the gradual growth of something so that it becomes more advanced, stronger, etc.' (The Oxford English Dictionary: 344);*
- *'The core of development is economic growth' (Potter, 2004:5);*
- *'Development has connection with social, economic and technological change' (Unwin, 1994:14);*
- *'Development involves three things: development theories, development strategies and development ideologies' (Hettne, 1995:10).*
- *'Development means national enhancement and increases in economic wealth of a group of people' (Dawkins, 2003:133).*
- *'Development can be seen; it is argued here, as a process of expanding the real freedoms that people enjoy' (Sen, 1999:2).*

Inequalities between people, urban and rural, and areas/regions (both within countries and between countries) are generally induced by natural differences, socio-economic conditions and policy decisions. Owing to the existence of natural and inherent differences, complete eradication of disparities is very difficult, if not impossible. However, it is quite possible to eliminate or, at least, reduce artificial impediments (e.g. social restraints and policies) that prevent people, areas or countries developing their full potential. Balanced development tends to provide all people with equal opportunities (often referred to as a level playing field), enabling them to participate in development by contributing to, benefiting from and influencing the decision making involved. Such participation can be expected to provide people with income and assets, good health, knowledge, respect and recognition.

Compared to development, defining 'inequality' is relatively straightforward: it refers to a difference or disparity, especially connected with unfair treatment (Oxford Dictionary). When it is used in conjunction with development it refers to the differences in economic, social, and political aspects between countries, provinces,

states, continents or people (Yang, 2002; Yao, 2001). Similarly, the interaction of development and inequality have long attracted extensive attention from across research fields (Easterly, 2007; Fields, 2007; Edward, 2006; Vicente and Borge, 2000; Hirschman and Rothschild, 1973; Kuznets, 1955), including from economists, socialists and geographers who have developed many theories, strategies and debates on development and inequalities. Inequality is often considered to be a consequence of the development of economic wealth among one group of countries or people at the expense of another political or social group.

In the context of this thesis, China is also defined as a ‘developing country’. Commonly, the definition of a developing country refers to nations with low per capita income, widespread poverty, and low capital formation (Marangos, 2006). However, modern geographers use the term less economically developed country (LEDC) to portray the countries classified as developing countries more accurately, a relative categorisation specifying that they are less economically developed than other counterparts. More recently, Szirmai (2005:6) defined common characteristics of developing countries as: *‘a) a relatively large share of agriculture in output and employment; b) pronounced dualism in economic structure; c) explosive urbanisation; d) large-scale underutilisation of labour; e) political instability, pervasive corruption; f) environmental degradation; and g) low levels of technological capabilities’*. From this definition, it can be seen that China meets most of the criteria.

China is also recognised as a transitional economy, which is changing from a centrally planned economy to a free market. Transition economies undergo economic liberalisation where market forces set prices rather than a central planning organisation. The process has been applied in China, the former Soviet Union and Communist bloc countries.

Inspired by above definitions and debates, I argue that inequality is identified as the differences between regions, locations, genders, social classes and ethnic groups; and development as the elimination of a range of types of inequality. As a transitional developing country, based either on historical evolution or statistical and empirical data, China’s economic development has not promoted socio-economic equality and political democracy so far. On the contrary, there is a wide inequality between coastal and inland areas, between urban and rural, between genders, between social classes

and between ethnic groups. In order to fully understand the connection between development and inequality in my thesis, I investigate three dimensions of development and inequality: economic, social and political. Development is not only characterised as GDP growth and increasing income but also the equality of social status, education and health care. In addition, the removal of political corruption and attainment of political democracy are also essential.

1.2 Research Aims and Objectives

The central aims of this research are to understand the current spatial regional inequality in China at different scales, to explore the relationship between development and inequality, and to explain the factors that cause the inequality underlying China's impressive macro-economic development progress.

In order to achieve the central aims, the thesis has four objectives. First, this thesis attempts to understand the current spatial regional inequality in China by examining county-level data using Geographic Information Systems (GIS) and statistical analysis. To date, most research has concentrated on provincial-level data. In contrast to provinces, the county is the most basic economic, social and political unit in China and offers a much finer scale at which to analyse China's spatial inequalities. However, in China, there are only 31 provinces, but these contain more than 2000 counties. The huge amount of data collection, arrangement and analysis required in a county-level study is therefore a big challenge for a researcher, which means that county-level research lags behind provincial-level research. Therefore, in contrast to most previous studies which have used provincial data, this thesis fills a gap by using information based at the county scale.

Second, previous research on China's regional development and inequality has focused mainly on economic indices, and rarely mentions the social and political factors which have had a great influence on China's economic development. One of the key innovative features of this research is therefore its comparison between social and economic difference at a range of scales and a willingness to consider how certain political factors have influenced China's social and regional economic strategies. This thesis, therefore, is the first systematic attempt to investigate spatial differences not

only in terms of economics but also in terms of social and political development across China at the county level.

Third, this thesis explores insights into debates about uneven regional development in China, especially the relationship between economic growth and economic inequality, both theoretically and empirically.

Fourth, in order to explain the factors that cause development inequality, the case study research analyses data from five counties, with special emphasis on income, expenditure, saving, education, health care, social welfare, central government preferential policies, local governance and people's values and beliefs. As a result, the research explains how people with different backgrounds— such as age, gender, location, social status and ethnicity —respond to development and disparities. This also involves investigating the factors behind the disparities and suggesting practical means of alleviating such inequalities at the county level in China.

To achieve these objectives, two main methodological approaches are adopted. The first is the use of GIS to analyse China's recent economic development and induced regional disparities. To understand the differences in economic and social development between county and provincial levels, at least three years' economic data will be examined (one from the beginning of the economic reform period, one from the middle, and one from recent years). Within each province, features and conditions that have important influences the local economy, such as social and geographic conditions, vary from one county (or area) to another. Unlike provincial division, county division is smaller scale and so is at little risk of giving rise to regionally independent forces. In order to provide a distinctive image and scientific interpretation of the data, GIS is employed to display and analyse the data. Using GIS to analyse the economic data of over 2000 counties and reveal the detailed spatial distribution of China's uneven economic development is an innovative approach, which may offer an alternative account to that suggested in current regional development studies. Existing regional development theories and models mentioned in the literature review chapter are examined, tested and discussed using the new pattern identified by the use of GIS. In addition, this research investigates the major factors that have caused disparities between regions, and in particular between urban and rural areas, which include

geographic, natural and human resources, as well as other social, economic and political factors.

The second approach is to conduct research with people in five counties concerning their experiences of development and inequality, in order to provide more detailed investigation. Further to the nationwide county-level study, three counties from west China (Gansu province), one county from the middle of China (Hubei province) and one from a coastal area (Guangdong province) have been selected as case studies. Via focus groups, questionnaires and interviews, the case studies explore how people understand development and inequality. They also give insights into the nature of economic, social and political differences between groups of people as a result of age, gender, social status, location and ethnicity. Research into the reasons underlying inequality can provide a basis for the exploration of ways to reduce the more extreme disparities identified.

1.3 Thesis Outline:

This thesis covers the period from 1949 to the present, and the analyses focus on economic, social, political and ideological dimensions at the county level. The thesis consists of nine chapters:

The Introduction (Chapter 1) has covered the rationale for choosing this topic and how my thesis intends to move existing knowledge forward. It has also introduced the aims, objectives, thesis outline and definition of the key terms.

Chapter 2 establishes the theoretical framework and examines the scholarly debates from previous literature. Special attention is paid to China's uneven regional development in the context of Western and Chinese development theories; the effect of economic inequality and economic growth, both theoretically and empirically; the social, political and ideological dimensions of development and inequality; and development and inequality at county level.

Chapter 3 then investigates the methodologies employed in this research. Both quantitative and qualitative approaches are used because each has strengths and weakness, and using them in combination maximises the quality of the analysis. In

addition, this chapter explains how the data sets – containing over 1.4 million pieces of data – are collected, managed, selected and analysed. GIS and statistical methods are both used to analyse the data chronologically and spatially.

Chapter 4 discusses China ' s regional development history and related development features prior to the economic reform in 1978, which serves as a background for further understanding present-day China and its ideological, political, social and economic dimensions, as discussed in other chapters of the thesis.

Chapter 5 explores the spatial distribution of inequality in China using county-level data, which gives a different perspective compared to more commonly use provincial data. This chapter focuses on understanding spatial development and inequality patterns through county-level data and gives explanations of the maps created using GIS. It then explores the causes of regional development inequalities. The political factor is emphasised here but is not the sole reason as other factors, such as environmental, economic and social, also play an important role.

Chapter 6 presents detailed evidence of interprovincial development and disparity in Guangdong, Hubei and Gansu. Understandings of development and economic inequalities– such as in income, expenditure and savings – are explored in order to ascertain how people react to rapid development and widening inequality, and how these regional development disparities influence the attitudes and opinions of people with different backgrounds, such as age, gender, location, ethnicity and social status (e.g. occupation).

Chapter 7 examines the social inequality between different groups of people by using fieldwork data. Further to the economic analysis, inequalities in social development are investigated in more detail, including birth rates, social classification and social mobility.

Chapter 8 examines the political inequality between different groups of people by using fieldwork data. Further to the economic and social analyses, this chapter presents detailed investigation of inequalities in political development, such as local government preferential policies and corruption as experienced by people from different backgrounds.

The last chapter summarises the main conceptual and empirical contributions of the research, its challenges and constraints as well as directions for future research about development and disparity in China.

Chapter 2 Chinese Uneven Regional Development and Inequality in the Context of Development Theory

2.1 Introduction

Development has been well established as an important topic in academia since WWII (Iyer, Kitson and Toh, 2005; Khan and Jomo, 2000; Martin and Sunley, 1998; Hirschman and Rothschild, 1973). Relatedly, China's emergence and transformation as a transitional developing country has raised many research questions for economists and geographers. Substantial scholarly interest has focused on regional development and inequality in China because of its size, history, diversity and implications for development theory and strategies (Zhang *et al.*, 2008; Woetzel, 2004; Fu, 2004; Zhang, 2003; Golley, 2002; Zhang and Zou, 1998; Fan, 1995 and Zhang, 1989). The interplay between recent literature on regional development theory and the transitional economy demonstrates that these two bodies of literature are embedded in Western regional development theory and strategy. At the same time, during the transition progress China's new perspectives and ideas on the development process have shaped regional development theory and vice versa. The aim of this chapter is to focus on the key academic debates and arguments that are particularly associated with the aspects addressed in the following empirical chapters.

This chapter therefore brings three bodies of literatures together into a conceptual framework for the specific context of this thesis. Firstly, current prevailing research on Chinese development, which is mainly based on provincial economic statistical data and their spatial variations (Zhang *et al.*, 2008; Fan and Wei, 2006; Fu and Wu, 2006; Golley, 2002; Zhang and Zou, 1998). The significance of scale in terms of development and inequality has been justified by this literature. Analysis of county-level data presents a more comprehensive picture of regional development in China, which is why this thesis employs this scale of analysis. Secondly, the huge amount of literature on development theory is reviewed (Dawkins, 2003; Barrow and Sale-I-Martin, 1999; Lucas, 1988; Caldor, 1970; Williamson, 1965; Rostov, 1960; Solow,

1956; Schumpeter, 1947) focusing on the key debates and arguments relevant to the following empirical chapters. Thirdly, China, like all other ex-communist countries such as Romania, Poland and Vietnam, is in transition from a centrally planned economic system to a free-market economy (Maragos, 2006; Ding, 2005; Muldavin, 2000). However, as Ding (2005) argued, Chinese development is actually characterised by a hybrid of a capitalist economic system and a socialist social and political system. This hybrid symbolisation distinguishes China from both developing countries, such as the East Asian states, and transitional countries, such as the Eastern European states (Maragos, 2006). Therefore, this chapter investigates understandings of the social, political and ideological dimensions of transitional economies particularly in the context of China (see Figure 2-1).

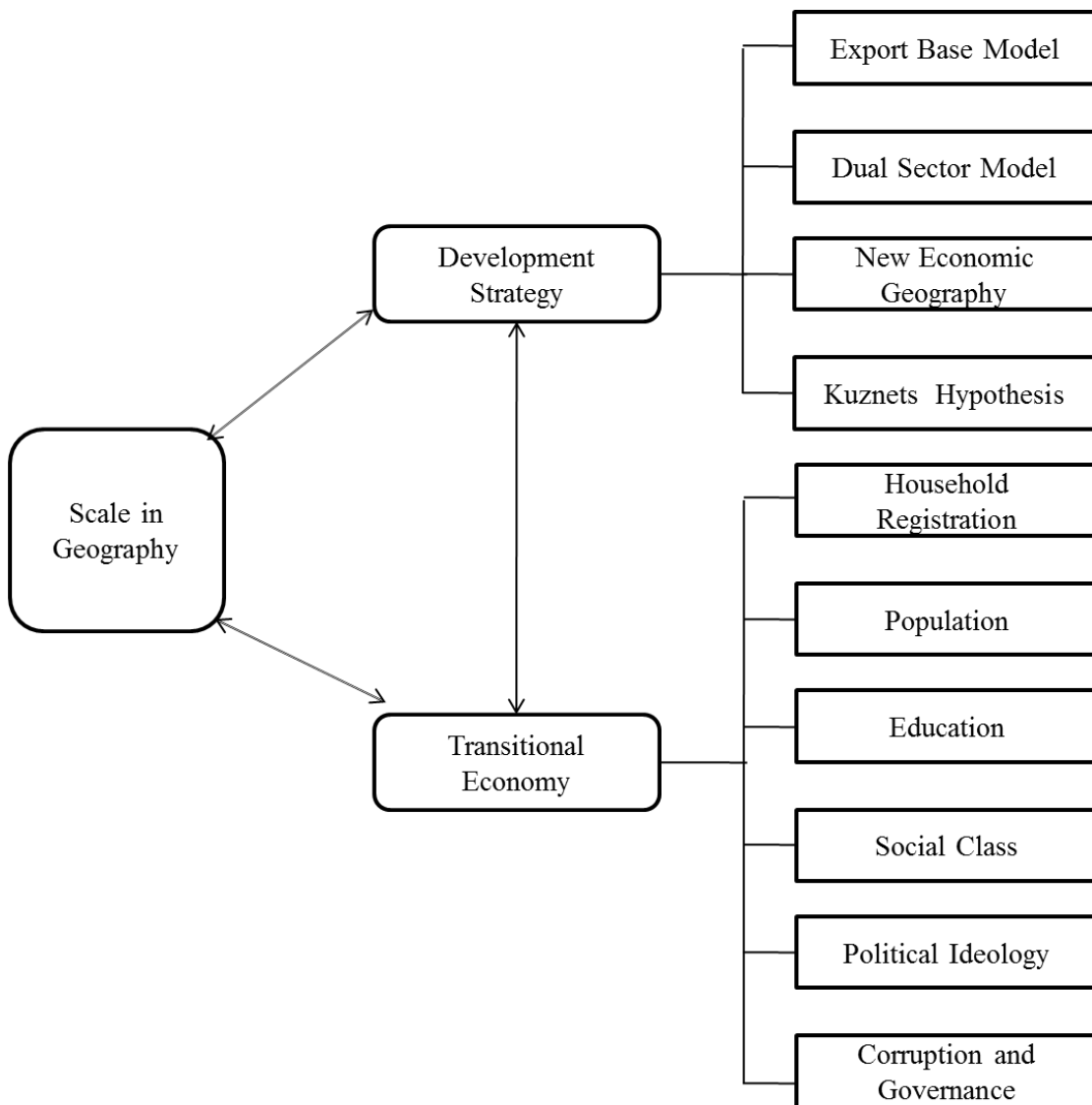


Figure 2- 1: Key Theoretical Debates (Source: author)

In order to set up a coherent framework for following empirical chapters, this chapter consists of five sections. Following the introduction, the second section focuses on the main arguments of economic geography and the geographies of scale. The importance of scale in helping with understandings of regional development and inequality is addressed. The third section reviews the key development models and economic development strategies that have inspired Chinese development, and which have consequently induced imbalanced regional development and spatial inequality. In particular, mature Western unbalanced regional development theories are examined, such as the Export Base Model (Orloff, 2002; Tiebout, 1956; North, 1955); Dual Sector Models (Kaldor, 1970; Myrdal, 1957) or Neoclassical Growth Model (Barro and Sala-i-Martin, 1992; Koopmans, 1965; Cass, 1965) and Kuznets's inverted U model (Higgins and Williamson, 1999; Kuznets, 1965). The fourth and fifth sections draw special attention to the social and political dimensions of development and their relationship to economic dimensions. The last section concludes with an analytical framework for the thesis.

2.2 Geographical Scale

Hewitt (1993:34) states that, *'the problem of geographical scale has long been identified as central to the task of geographical research, particularly in regional studies. Development can be considered at a number of scales. These go from the individual, the local community, the regional, the national and the global (among others)'*. Elsewhere, Smith (1988:149-50) points out that, *'in our knowledge of regional change depend on our ability to pin the processes of change to real places. An understanding of the production of scale is central to this effort'*. The definition of development may differ by scale and, in addition, strategies of development may be similarly scale dependent (Torres and Momsen, 2004). Smith and Dennis (1987) suggest that the continual restructuring not only of geographical space but of spatial scale is an integral part of the broader experience of uneven development. Inequalities can be revealed if you look at particular spatial scales (Willis, 2005).

Marceau (1999:348) argued that, *'every change in scale will bring about the statement of a new problem and there is no basis for presuming that associations existing at one scale will also exist at another'*. For example, if we analyse national-

level development data we get no sense of the differences between regions and sub-regions within the country. Spatial inequalities play a key role in any debate of development. Some development models and strategies may lead to increasing inequalities between places, while other development approaches may unambiguously attempt to decrease spatial inequalities. Haggett (1965: 263) declared that, *'our basic dilemma is that generations made at one level do not necessarily hold at another level and that conclusions we derived at one scale may be invalid at another'*. Le Gallo and Ertur (2003) argue that spatial effects are most important when it comes to smaller scales. A number of issues, such as the increasing development of trade and technology between different spatial units on a smaller scale, lead to geographical dependence. Those factors, if investigated on a provincial scale, maybe insignificant or unobservable due to their local specificity. However, the county level may show significant spatial effects so ignoring finer scale data analysis may result in misleading or even inaccurate assessment of development outcomes.

Previous research on regional inequality has been less sensitive to scale and space. China-based geographers and economists have made some improvements and argued that regional development in China can be more thoroughly understood through studies of scalar relations (Ye and Wei, 2005; Huang *et al.*, 2003; Gu *et. al.*, 2001). Geographical differences within provinces are as enormous as across provinces, and an improved understanding of regional development requires more studies in different locales (Wei and Ye, 2009). A finer scale investigation is important because an outstanding feature of transition and transformation are reshaping China's political economy, *'through the process of decentralisation of state power from a single unitary national scale to multiple local scales'* (Wei, 2002: 111). Therefore, geographers have researched at a finer scale, including analysing intraprovincial inequality within local development models and strategies, especially in Jiangsu, Guangdong and, more recently, Zhejiang Province (Wei and Ye, 2009; Ye and Wei, 2005; Wei and Ye, 2004; Wei and Fan, 2000; Weng, 1998). The research results have revealed a multifaceted picture with a diversity of factors leading to spatial inequality in provinces, especially local institutions, geography, and FDI. Fiscal decentralisation of central-local fiscal relations in China has also been shown to have significant practical and uneven impacts on regional inequality (e.g., Wei, 2007; Zhao and Tong, 2000).

Therefore, compared to the provincial level, researching at the county level helps to provide a better understanding of development and inequality in China, including understandings of the economic, social, political and ideological dimensions. The county-level scale offers a new vision of the relationship between people's everyday lives in their communities and larger scale forces operating on them.

2.3 Development Models in the Context of Chinese Regional Development Strategies

Economic development theories have flourished since the 1930s in Europe, particularly following World War II when people desperately sought to rapidly rebuild the economy, and economists began to regard economic development as a distinct subject (Dawkins, 2003). Since then, many economic theories and strategies have gradually evolved into development economics, Neoclassical Endogenous Growth Theory (Barro and Sala-i-Martin, 1992; Koopmans, 1965; Cass, 1965), Neoclassical Exogenous Theory (Barro and Sala-i-Martin, 1995; Borts and Stein, 1964), Rostow's Stages of Growth Theory (Rostow, 1960), Simon Kuznets's inverted U hypothesis (Higgins and Williamson, 1999; Kuznets, 1965), Dual Sector Models (Kaldor, 1970; Myrdal, 1957), Growth Pole Theory (Perroux, 1950), Export Base Model (Orloff, 2002; Tiebout, 1956; North, 1955), Cumulative Causation Model (Myrdal and Sitohang, 1957), Growth Machine Theory (Quah, 1996) and New Economic Geography (Behrens and Thisse, 2007; Krugman, 1991; 1999). In addition, the post-war formation of the United Nations – and its attendant agencies, such as the World Bank, the I.M.F. and the various regional commissions – saw a growth in studies leading to the emergence of a non-academic strand of development theory (for example, The World Bank Development Report 1992, 2003, 2005, 2007).

Among the huge amount of literature about economic development theories and strategies, the following models are particularly discussed in this section in order to address the spatial characteristics of unbalanced regional development: Export Base Model (Yang, 2012; North, 1995; Lewis, 1972; Tiebout, 1956), Dual Sector Models (Woetzel, 2004; Dixit, 1973; Kaldor, 1970) and New Economic Geography (Roberts *et al.*, 2012; Martin and Sunley, 2007; Paul Krugman, 1991; 1999; 2011; Fan *et al.*, 2000). This is because, first, the ideologies of these models are specifically favoured

by Chinese authorities among other Western development models, and are considered to be the most applicable to China's situation because they explain the spatial characteristics of unbalanced regional economic development (Wang and Fan, 2004; Tsai, 2001; Deng, 1983). For example, Wang and Fan (2004) believes that economic development does not occur in all places at the same time; developing countries in particular lack resources meaning that it would be viable to concentrate energy on certain places able to make rapid economic development, and then gradually bring other places to follow.

Second, prior to 1978, China's economy was in chaos while other countries and regions, especially its neighbours, benefited from economic growth (Fan and Sun, 2008). China was very keen to learn from the positive experiences of these countries, especially from their development strategies. Export-led strategies and market-orientated economies have been found to be positively related to high economic growth for developing countries such as Singapore, Malaysia and South Korea (Vogel, 1991). Therefore, as successful experiences, these models were also introduced in China to lead a new era of development economics.

Compared to previous economic models, *the Export Base Model* emphasises the importance of trade for economic growth. Douglass North (1955) proposed that a region's response to exogenous world demand basically determines regional growth in local political, economic, and social institutions. This leads to the expansion of both the export sector and economic base as a whole. Later on, Charles Tiebout (1956: 170) challenged: '*North's model ignores the importance of supply-side factors that ultimately affect a region's ability to support an emerging export base*'. Furthermore, Lewis (1972:25) declared that, '*as most industries, both export and non-export, are attracted to areas where input supplies are ample and growing, it should be expected that regional growth would be associated with expansion of the export sectors*'.

Asian countries such as Japan, South Korea and Malaysia have employed the export-driven model successfully in practice (Heikkila, 2003). As China has similar characteristics to its neighbouring countries, it also followed this successful export-driven model. As the Chinese economist Yao (1999) has suggested, similar to these Asian countries, China adopted the principal approaches of maximising exports to developed countries, retaining long-term high growth rates and pursuing high degrees

of economic freedom. For example, between 1979 and 1980, China established Special Economic Zones (SEZs) in Guangdong and Fujian provinces; in the 1980s, it set up coastal Economic and Technological Development Zones (ETDZs), Coastal Open Economic Zones (COEZs) and Open Coastal Belt (OCB); and in the 1990s these policies were extended to all of China (Lee, 2000; Mody and Wang, 1997). It is commonly accepted that FDI and foreign trade exert a critical influence on regional economic diversity. Therefore, export and trade encourages China to increase its involvement in international trading and competition, which in return have beneficial impacts on its domestic economic development. For this reason, FDI and export have been extensively investigated and analysed. Therefore, in Chapter Six, I investigate how FDI and exports have affected personal income associated disparities between people in different regions.

The Dual Sector Model was coined because many developing countries had dual economies with both a traditional agricultural sector and a modern industrial sector (Lewis, 1972). It assumes that surplus labour from the traditional agricultural sector is transferred to the modern industrial sector, whose growth over time absorbs the surplus labour, promoting industrialisation and stimulating sustained development.

The Dual Sector Model was expanded by researchers such as Kanbur and Zhang (2005); Levin (2001); Putterman (1992) because it provides a good starting point for explaining China's economic development situation. As Kanbur and Zhang (2005) suggested, in China, the industrial sector had highly developed technology with high levels of investment in urban environments. The traditional agricultural sector was characterised by low savings, low productivity, low incomes and considerable under employment. The modern industrial sector attracted migrant workers from rural areas (Roberts, 2001). Industrial firms, whether private or publicly owned, could offer better wages that would guarantee a higher quality of life than remaining in the rural areas. Indeed, in China, migrating workers moved away from the villages to the towns to earn higher incomes, and this reflects Lewis's suggestion that the model would be driven by a desire to generate more savings. As a result, urban migration from poor rural areas to relatively rich industrial urban areas gave workers the opportunities to earn higher incomes and, crucially, save more of their funds. These funds made more investment possible by entrepreneurs (Solinger, 1999b). Therefore, a growing

industrial sector requiring labour provided the income for the labour. This would in itself generate demand and also provide funds for investment. However, Dong (2003) argued that a regular demand for labour from the industrial sector is problematic. Technological development may reduce the need for labour. In addition, rural-urban migration figures have exceeded the jobs that the industrial sector can provide (Guan, 2014). As a result, urban poverty can replace rural poverty. It is interesting that in China these two arguments have both occurred (Banister and Taylor, 1989). Therefore, the application of the Dual Sector Models to China's development stage will be examined and analysed in Chapters Six and Seven, based on the county-level data.

Gunnar Myrdal (1957) proposed that within a given region, the first economy to industrialise is the one in which economic activity has regularly increasing returns. In addition, the process of growth tends to feed on itself, which is called *cumulative causation*. Underdeveloped regions provide low-wage labours and developed regions, through *spreading*, offer benefits to underdeveloped regions. This is a result of the diffusion of innovations into lagging regions and the growing export markets for products from these lagging regions. However, another possibility is that it may cause backwash effects, with capital and labour flowing from the lagging region into the developed region. Free trade among regions strengthens this process of cumulative causation by further increasing the economic growth of developed regions at the expense of economic growth in underdeveloped regions (Dawkins, 2003).

Kaldor (1970) expanded Myrdal's theory of cumulative causation by introducing ideas from Export Base Theory and the concept of an efficiency wage. Kaldor assumed that increasing returns to an economy give early industrialising regions the advantage in international trade. Cumulative causation sets in when an exogenous shock increases international demand for an industrial good. Actual monetary wages may be the same in all regions, but efficiency wages – defined as monetary wages divided by a measure of labour productivity – become lower in industrialised regions due to scale economies. Since regions with lower efficiency wages can produce more output, lead to further reductions in the efficiency wage, growth may build on itself without boundaries (Dawkins, 2003). Dixon and Thirlwall (1975) argued that Kaldor's model captures the main elements of an open economy growth model, which has relevance to regions within countries and to open developed and developing countries

alike. At the national level, a built-in balance of payments limitation might suggest that exports and imports must balance in order to preserve the value of a currency in the foreign exchange market. At the regional level, it is difficult to conceive of a balance of payments constraining growth, except to the extent that there may be a constraint on the regional money supply. There is certainly no requirement that exports and imports must balance to preserve the value of a currency in the foreign exchange market.

New Economic Geography, as developed by Paul Krugman (1991), offers static assumptions about the forces that lead to the emergence of industry clusters. A combination of centrifugal and centripetal forces causes regional clusters of economic activity. On one hand, firms with strong scale economies wish to serve national markets from a single location. Therefore, firms will choose locations with a large local demand in order to reduce the cost of delivering goods to market. As a result, firms are most likely to choose a location to which industries have already located, because firms wish to be close to their workers. The implication of this theory is that there is a form of circular causation. Once a significantly sized manufacturing belt has been recognised, it will have a tendency to stay in existence. The significance of this model is to integrate external scale economies and increasing returns into traditional models of interregional trade. It has to be noted that this mainly relies on the general equilibrium model of monopolistic competition developed by Fujita and Mori (2005). Fan *et al.*, (2000) presented an N-region, N-industry, three-factor evolutionary economic geography model with monopolistic competition. This model can create urban systems with different sizes and industry compositions. It shows that the economic-geographic equilibrium reached by the economy depends not only on initial conditions, but also on the speed of adjustment (Fan *et al.*, 2000).

Furthermore, among existing development theories and strategies, Simon Kuznets's 'inverted U-curve hypothesis' is the most influential statement on the dynamics of development and inequality (Kuznets, 1955). This debate has not been settled in academia since the introduction of the hypothesis in 1955 (for example, Candelaria, 2009; Bahmani-Oskooee, 2008; Lahiri and Dillon, 2007; Khasru and Jalil, 2004; Thornton, 2001; Higgins and Williamson, 1999). *Kuznets Curve* is one of the most famous hypotheses, introduced by one of the earliest workers in development

economics, Simon Kuznets (the Nobel Laureate in Economics). It is an empirical model, as shown in the graph below: the horizontal axis measures the increase in economic development (presumed to correlate with time), and the vertical axis measures income inequality. The curve is an inverted U-curve, which means that economic inequality increases over time while a country is developing, and after a critical average income is attained, it begins to decrease (see Figure 2.2).

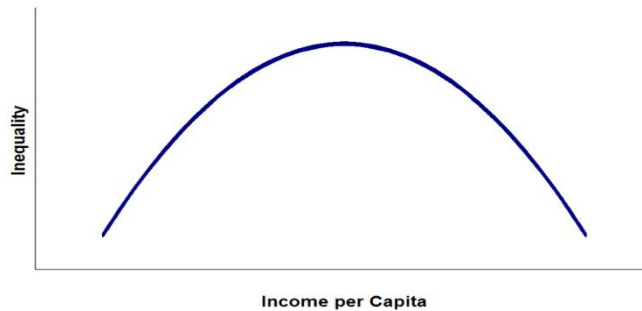


Figure 2-2: Kuznets Curve

In other words, Kuznets's hypothesis that income inequality increases in the early stages of economic growth and then decreases is not a law or even a central tendency. However, *'about 10% of the country cases are consistent with Kuznets' inverted-U, another 10% support an ordinary U, and the remaining 80% exhibit no statistically significant tendency at all'* (Fields, 2007:579). Therefore, the question of how the Kuznets inverted U model fits with China's development is both interesting and theoretically critical: will the U-shape happen, i.e. will inequality start to decrease? In Chapter Five, Kuznets's inverted U model is tested based on county-level data.

2.4 Social Dimensions in Perspectives of the Transitional Economy in China

China, like all other ex-socialist countries such as Romania, Poland and Vietnam, is in transition from a rigid, centrally planned economic system to a free-market economy (Gainsborough, 2003; Pickles and Smith, 1998). Taking a political economy approach, Marangos (2005:662) identified and developed 'five alternative models of transition: Shock Therapy, the Neoclassical Gradualist Model, the Post-Keynesian model of transition, the Pluralistic Market Socialist, and the Non-Pluralistic Market Socialist Model of transition (the Chinese model)'. Based on the case of China,

Muldavin (2000) argued that China's mixed economy is not necessarily a transition to capitalism, but more an emergent form of modernisation and development.

The social dimension of development was first addressed by classical sociologists such as Marx and Weber, as it is the fundamental pillar of social theories. Research on social dimensions primarily includes studying society's development trends and human social interactions, seeking to understand how to manage the dynamics on which societies operate. Marx and Weber, although ideologically opposite to each other, have made well-known contributions to research on social dimensions. Marxists such as Callinicos (1983) believe that the critical social problem is the contradiction between high and low social groups or tiers. Those in high social groups normally own major means of production, whereas low social groups often have nothing but their labour. In contrast to Marxism, Max Weber (1994) argued that the development of capitalism is part of a wider long-run social trend of rationalisation and bureaucratisation in Western societies. Yet, it is not only capitalism that makes a profit, socialism also does. The difference is that in the capitalist system government bureaucracies and capitalist firms can maximise profit by efficiently making use of impersonal bureaucratic forms (Coleman, 1990). Along with the rise of modern capitalist society, Jacobs and Asokan (1999) and Brock and Durlauf (2001) pointed out that social development is a multifaceted and complex process with a communal social pattern based on family, kinship, class and local community.

Emerging from classical social evolutionism theories, *modernisation theory* highlights the positive role played by the developed world in modernising and facilitating sustainable development in underdeveloped nations. So (1990:23) outlines that

'western countries are the most developed, and rest of the world (mostly former colonies) are on the earlier stages of development, and will eventually reach the same level as the western world; development stages go from the traditional societies to developed ones; third world countries have fallen behind with their social progress and need to be directed on their way to becoming more advanced'.

The dichotomy between traditional and modern societies involves changes in a number of cultural and institutional dimensions. For example, modern societies are

characterised by increased upward and downward social mobility in comparison with transitional static hierarchical societies; and by political democratisation in comparison to authoritarian rule. Modernisation therefore implies increased roles for unions, parties, political pressure groups and other associations of civil society (Charlton and Andras, 2003). Modernisation theory stresses that many societies are simply trying following the most successful societies and cultures so it has been criticised for emphasising a one-sided focus on the Western world and its culture. Contrasted with modernisation theory, *dependence theories* considered the development of industrialised countries and the underdevelopment of developing countries as two parts of one historical process. Developing countries are dependent countries and underdevelopment is not backwardness but intentional downward development (Paul, 1997).

Therefore, Ding (2005) argued that Chinese development is actually characterised as a hybrid of a capitalist economic system and a socialist social and political system. This hybrid symbol distinguishes China from both developing countries such as the East Asian states and transitional countries such as the Eastern European states (Marangos, 2006). As a result, section 2.3 focuses on the arguments of the regional development and inequality literature and explores Western capitalist development models and strategies related to China. This and the following section particularly concentrate on literature related to China's transitional social and political perspectives, which have significant impact on regional development and inequality.

Household Registration and HuKou

The '*HuKou*' system (Zhu, 2003) is considered here because unlike any other developed or developing country, all Chinese residents have a household registration (or *HuKou*), by which their movement, education, employment, welfare and even some activities are manipulated by the state (Cheng, 1994). Under the *HuKou* system, every household is designated as rural or urban. Before 1978, citizens had to live and work in the place where they were permanently registered, normally their place of birth (Liu, 2005). Since the introduction of the open-door policy, urban workers are free to apply for and to leave jobs; but they are only entitled to pensions where they are registered. Rural workers, who often become migrant workers, are forbidden from

competing with urban workers for higher paying jobs, and, if they do not have jobs, are even subject to arrest by the state's public security bureau (Wang, 2004).

Basically, the *HuKou* system shapes the welfare of the rural population in two ways. First, the rural population are not entitled to access quality education, in urban areas, resulting in lower educational attainment by rural residents relative to their urban counterparts (Li, 2009; Lu, 2008). Second, the *HuKou* system denies the rural population access to urban employment that rewards education more than rural employment (Tsang, 1994); this, in turn, discourages the rural population from investing in education and therefore leads to a further reduction in educational attainment.

In an investigation of the impact of the *HuKou* system on social and economic outcomes at the individual level, Li (2001) found that those who had obtained an urban *HuKou* late in their lives fared significantly less well than other urban residents. Such people tend to have fewer years of education, are less likely to hold state sector jobs, or to have employer-provided healthcare benefits, and are more likely to be self-employed or unemployed. Therefore, it is very important for a rural individual to obtain urban resident status as early as possible. In order to estimate the potential economic benefit associated with urban *HuKou*, Liu (2015) conducted pair-wise comparisons between urban and rural residents of Beijing. In Beijing there are neither geographical nor informational barriers between the rural and urban populations, so Liu (2015) argued that the rural–urban income differential can be attributed mainly to the *HuKou* system because it denies rural residents the rights to urban life, education, and employment. On the other hand, urban residents have benefited substantially from the *HuKou* system, not from a monetary point of view, but with respect to other benefits, such as a better quality of life through access to social and cultural activities in urban areas.

In summary, the *HuKou* system has played an important role in affecting social and economic outcomes at the individual level. It is a fundamental cause of rural–urban inequality, as well as related education, health care, social welfare and employment inequalities. More details are presented in Chapter Seven.

Population and the One-Child Policy

Malthus and Malthusians believe that population growth threatens human welfare and that there are physical limits to the increase in population, such as the availability of land, energy and raw materials and the carrying capacity of the global environment (Bergaglio, M., 2001; Hilali, 1997; Dudley and Yaukey, 1992; Ehrlich and Ehrlich, 1990; Malthus, 1798). However, optimists argue that scarcity provides a challenge to human creativity. Feng *et al.*, (2012) believes that although over-population could cause a scarcity of resources, scarcity in turn promotes human creativity, which will be capable of solving all encountered problems. From this perspective, people always find new technological solutions to the problems of scarcity. For instance, if the prices of raw materials such as oil go up, it becomes economically feasible to develop alternative sources of energy. Limits to growth are not fixed, but are shifting all the time. Well-known representative of this optimistic perspective is Ester Boserup (Boserup, 1983). In China, these two opinions about the consequences of population growth have been debated. Ma(1957) suggested that a fast growing population without the support of a fast growing economy could cause disaster for China, a theory supported by Chinese leader Deng (Deng, 1983). On the contrary, Mao's theory supported human optimists. He asserted that, 'people have the real power, greater than God, more people, more power' (Mao, 1963). Ultimately, China was the only country in the world to strictly control its population growth rate with a 'one-child policy', implemented in 1979. Optimists and pessimists differ not only in their analysis of causal mechanisms, but also in their empirical estimates and projections.

The debates on the effect of China's one-child policy are extensive. Chinese authorities claimed that the birth control policy has effectively prevented 250 to 300 million births. The total fertility rate (meaning the number of children born per woman) decreased from 2.9 in 1979 to 1.7 in 2004, with a rate of 1.3 in urban areas and just under 2.0 in rural areas (Kane and Choi, 1999). However, some researchers have pointed out that although the one-child approach significantly limited the overpopulation problem, with its associated social and environmental difficulties, it created other social problems, such as a gender-based birth rate disparity (Ding and Hesketh, 2006), an imbalanced sex ratio (Hesketh and Zhu, 1997), an ageing population, named the 'One-Two-Four' (one child, two parents and four grandparents)

problem (Qu, 2014; Friedman *et al.*, 1996; Du, 1992), and discrimination against the Han Chinese and city communities (as other ethnic groups and rural residents were able to have two children). Therefore, stemming from these arguments, Chapter Seven examines how the social consequences of the one-child policy shaped China's further social development and inequality according to fieldwork survey data.

Education

Knowledge is a significant factor in regional development (Gewirtz *et al.*, 1995). An increasing store of knowledge leads to a rising productivity of regional inputs such as labour, human capital and physical capital, as well as to higher per capita incomes (Zhang and Zou, 2007). In the long term, the growth of total factor productivity is mainly determined by the accumulation of knowledge, which is often considered to be the best available indicator for regional development and competitiveness (Robeyns, 2006; Farrell, 1994). As the spatial pattern of an economy plays a crucial role in regional development, the distribution of knowledge is just as important as the creation of knowledge (Bretschger, 1999). Knowledge diffusion can be described as a special type of communication concerned with the spreading of messages that constitute new ideas (Sutton, 2009).

In line with neoclassical economic theory, greater labour productivity would result in higher incomes for the categories of employees concerned. It is not only individuals who would benefit from investment in education, but society as a whole would also benefit from an increasing supply of better educated workers and citizens. The human capital theory suggests that with people becoming more and more educated so they became more productive and better able to handle existing and new production techniques (Chi, 2008; Yan, 2007; Robeyns, 2006; Wang and Yao, 2003; Becker, 1964; Schultz, 1961). The indirect effects of education also include more rapid technological change, reduced fertility and higher infant health. Such positive external effects are a justification for public subsidies to education. Though highly influential, human capital theory has also been severely criticised by screening theory (Stiglitz, 1975) which argues that education in itself does not contribute to a person's productivity. Screening theory suggests that much of education in developing countries is irrelevant as the knowledge and skills acquired in educational institutions

are not applied in one's later career. The specific skills required in a profession are instead learned on the job rather than at school. Expanding the educational system merely results in diploma inflation and a scramble for the highest diplomas, which is reflected in contemporary China (Zheng, 2008). Therefore, in my opinion, both human capital theory and screening theory prove that primary education, secondary education and skilled worker qualifications are as important as higher education for the labour market. People with higher diplomas displacing people with lower educational qualifications will not improve productivity. Like human capital theory, screening theory is also open to criticism (Blaug, 1985). For example, if screening theory is valid and education does not contribute to productivity, it is hard to explain why self-employed people with a higher education usually have higher earnings than self-employed people with less education (Gregorio and Lee, 2002).

As an ancient civilisation, education was considered the top priority for China. Therefore, it is not surprising that between 1949 and 1952, the Chinese Communist Party (CCP) organised literacy campaigns in villages, factories and poor sections of cities, and the number of students doubled (from 24 to 51 million primary school pupils and from one to two and half million secondary school students) (Hannum, 1999). Now, the government provides nine years of free universal elementary education throughout the country. This policy is consistent with research outcomes (China Daily, 2007). For example, Hannum (2003) finds that developing countries should give priority to primary education because increasing the level of schooling would lead to higher labour productivity and a personal income levels. In addition, the rates of return for primary education were consistently much higher than those for secondary and higher education. However, after 1978, China's investment in education is not as significant as investment in physical capital, although another interesting research finding is that in developing countries the rate of return on investment in education was higher than the rate of return on investment in physical capital (Li, 2003; Psacharopoulos, 1984).

Social Class Stratification

Before considering how to analyse class stratification, it is important to recognise that the term 'stratification' has its limitation and can be ambiguous (Saunders, 2006). In the case of a stratification metaphor, the arrangement of different social groups

within a society is not really like the arrangement of rock in the earth's crust because geological strata do not interact with one another, whereas there is some degree of interaction between social groups in even the most rigid and hierarchical of societies. Similarly, different geological layers cannot change places relative to one another whereas in human societies, one group may rise in power and status over time while another group may fall. Class has been a key issue in sociological analysis. Marx and Engels (1943) suggested that all societies that had ever existed had been 'class societies' of one kind or another. There was in their view one *'overriding principle governing the organisation of human affairs in all societies up to and including the advent of capitalism and that was that one section of population owned and controlled the basic material resources at the society's disposal while another section owned nothing'*. According to Marx, one group of people (the 'bourgeoisie' or 'capitalist class') owns the factories, land and banks while another (the 'proletariat') has no choice but to work for the capitalists in return for a subsistence wage which never reflects the real value of what is produced in the course of labour. Marx did not deny that sometimes workers could become capitalists and the vice versa. From a Marxist perspective, the class relationships between social groups are characterised by contradictions and conflicts (Jessop, 1982). The ruling class is in charge of state apparatus, and ultimately has completely control over law, religion, culture and economic development. The Marxist perspective is a source of inspiration for the empirical study of the social constraints within which government must operate and the influence of classes, interest groups and pressure groups on government actions and policies (Lukács, 1971).

However, although Chinese ideology and social society have been deeply affected by Marxism, understanding social structures and the subjective identification of social classes is complicated. Is China still a 'class society'? How have economic shifts and social changes shaped the way we understand class? Has social mobility done away with class as a key issue in contemporary societies? Thus, among the different groups being identified by Chinese sociologists, a deeper understanding of the social relations developing within these groups is central. Of course, this topic has drawn the interest of many Western scholars as well. Croll (2011) has focused on increasing inequalities faced by women; Anagnost (2008) has focused on urban inequality; and Davin (2005) has, separate from gender, studied inequality emerging within China due to large-scale

rural-urban migration. All have contributed evidence to understanding the fundamental structural changes happening in Chinese society after, as Tang and Parrish (2000:3) says, a ‘socialist contract’ society was turned into a ‘marketing contract’ society. Research on changes in post-communist East European societies also shed light on the social consequences of China’s reforms. Kornai’s (2006:16) work concerned the way people’s daily interactions changed due to the prevalence of what he calls ‘vertical dependency’, where rather than dependence on the self, one relied on the state and its representatives to meet one’s material needs. Notions of the self and individual were replaced by collectivised identities. This leads us to understanding social difference in all its complexity. Bourdieu (1987) has extended the idea of social differentiation to the facets of social, economic, cultural and symbolic capital. His intention was not to add to the corpus on class theory but to assess a set of practices that structure social differentiation and the ways in which social differentiation is expressed. China today presents an excellent example of the complexity of social differentiation that occurs when a society undergoes economic and structural change.

In contemporary China, social class stratification is not yet apparent as it is still in its transition stage (c.f. Bian, 2002). During Mao’s era, the classification of social classes was rather simple, with society divided into peasants, workers, intellectuals, cadres, soldiers and black five elements [黑五类份子]: landlords [地主]; rich farmers (peasants) [富农]; anti-revolutionists [反革命]; bad-influencers [坏分子]; rightists [右派] (Anagnost, 2008). At present, social classes are much more complicated than before. Bian (2002) has redefined the class structure as: peasants living on agricultural products they produce; peasant labourers floating in urban areas; working class; cadres (both administrative and managerial); rural cadres; private entrepreneurs; managers; household business owners, individual manufacturers, traders; professionals; and intellectuals. Sociologist Li (2005:5) suggests a detailed model of Chinese social stratification: *‘in China today, there is a peasant class, a working class (urban state worker and urban collective worker, urban non-state worker, and peasant worker), a capitalist class (about 15 million), and a class of cadre (about 40 million) and quasi-cadre (about 27 million)’*. However, there is a problem with above models/classifications, as they all ignore the fact that China’s economic development, particularly in the last decade, has significantly diversified the occupation-based social

classification, and such classifications no longer reflect the reality of social status. As Barbrook (2006:16) commented: *'in every society the most basic class distinction is between the powerful and the powerless'*. Following this line, a classification model providing a much clearer and simpler picture reflecting China's current social class stratification is explained in Chapter Seven.

2.5 Political Dimensions in China from the Perspective of the Transitional Economy

Modernisation theorists posit a dichotomy between traditional and modern societies. The economic core of modernisation is industrialisation, which requires a measure of congruence between economic developments and their social and political environment. Ding (2005) argued that Chinese development is actually characterised as a hybrid of a capitalist economic system and socialist social and political system. Therefore, this hybrid symbolisation makes China distinguish itself from either developing countries such as the East Asia's states or transitional countries such as the Eastern European states (Marangos, 2006).

Political Ideology

The CCP still has almost absolute control over politics. The post-1978 reforms on the mainland have led to some relaxation of control over many areas of society. However, the Chinese government still continually seeks to eradicate threats to the social, political and economic stability of the country. China's economic reforms had a dramatic improvement; however, political reform is far from being mentioned. From the political point of view, China is more like a traditional society rather than a modern society.

Modern society emphasises political democratisation compared to authoritarian rule and implies increased roles for unions, parties, political pressure groups and other associations of civil society.

Marxism has been particularly emphasised here as China's overall social and economic development was governed by Marxist ideologies: principles of common ownership with the state as trustee, together with generalised fairness (Fan, 1997). As

one of the most important and influential development theories, Marx's economics focused on capitalism and commodity surplus value (King and Howard, 1985). This originated from classical economic theories such as Adam Smith's (1776) 'an invisible hand', John Stuart Mill's 'utilitarianism and liberty' (cited from Hollander, 1985), Thomas Malthus's (1798) 'population growth theory' and David Ricardo's 'free trade and comparative advantages' (cited from Ruffin, 2003), which were characterised by ample economic development ideologies. Marx's main argument was focused on capitalism and commodities. He argued that 'capitalists do not pay workers the full value of the commodities they produce. The gap between the values of a worker produces and his wages are a form of unpaid labour, known as surplus value' (Marx, 1887).

Adhering to Marxism, Chinese planners believed that capitalists exploit the surplus value of the wage from workers, making them wage slaves, and the real labour values are always hidden (Callinicos, 1983). Therefore, China demolished capitalism in order to achieve the socialist ideology of radical equality. However, Marx's theory itself has many inconsistencies, which have been rigorously debated since the 1970s. For example, Dmitriev (1974) has argued that Marx's theory of labour value cannot handle the relation between value and price, and that Marx's theory is internally contradictory on this basis. Kliman (2006) also points out that Marx's theory cannot possibly be right since his theory was internally inconsistent. However, in China, Marx had long been worshiped almost as a god and Marx's theory provided the guideline for establishing the CCP and the new government in 1949. For example, on 15th September 1956 at the 8th General Meeting of the CCP, Mao declared that '*the ideology of Marxism and Leninism is always the principle of our party*' (Mao, 1956:116); and in February 1959 in an interview made by the director of Chile's newspaper 'The Last Minute', Mao said that '*Marx-Lenin Economics is to use Marxism-Leninism's point of view to investigate economic phenomena*' (Mao, 1959:34).

Therefore, unsurprisingly, any policy developed in 1978 that reversed radical equality policies was questioned and debated in the context of whether China would become a socialist or a capitalist country (Yu and Chen, 1985; Gu *et al.*, 2001). For example, uneven regional development policies were to concentrate the limited capital

and resources at that time to enable only a small group of people and some chosen regions to become rich first. Therefore, these strategies were against Marxist ‘fairness’ ideology. In order to justify the new strategies in line with the CCP’s principle of Marxism, the CCP authorities and researchers had to find theoretical support from the Marxist model that could rationalise such transformation. For example, researchers such as Fan (1997:622) in their well-cited paper argued that *‘China was a semi-colonial and semi-feudal country when it adopted socialism; and because it has not yet reached the socialist stage as defined by Marx and Lenin, the transition to socialism would entail a very long process’*. Therefore, it is viable for China to fully adopt classical Marxism, as Deng (1993) pointed out that *‘classical Marxism was designed for mature socialist societies but not for nations at a primary stage of socialism and with a low level of economic development. Therefore, it is fair to combine Marxism and the special practices of China to form a specialised Chinese Socialist System’*. Engaged in these debates, one of my field research objectives is to explore whether ordinary Chinese people prefer radical equality or uneven development policy.

In addition, the relationship between politics and economics is co-dependent. Marx (1959) defined development in the economic sphere of society as the ‘substructure’ and development in culture, religion, politics and law as the ‘superstructure’. He suggests the substructure (the development in the economic sphere) determined the superstructure of society (the development in the social, political and ideological sphere). On the contrary, according to Weber’s thesis (1994), the Protestant ethic favours economic development. Weber pointed out that the combination of diligent and disciplined work in one’s professional ‘calling’ and religiously motivated sobriety in consumption promoted high levels of savings and the accumulation of capital. Thus the Protestant work ethic is the determining factor in the rise of capitalism and process of economic growth in the West.

In my view, neither Marx nor Weber’s theories can explain the relationships between economic, social, political and ideological development in the context of China. Whether in ancient or modern China, economic growth does not necessarily suggest social, political and ideological development, and vice versa. The economic sphere cycles up and down, and the social, political and ideological spheres cycle in

their own pattern, although these cycles sometimes connect with each other. However, it seems that economic growth remains one of the necessary conditions for long-term development and that economic development can be explained by economic, historical, institutional, cultural, demographic, political, social and ecological factors (Lee, 2000). For example, development involves a wide range of changes in a variety of social indicators such as health, education, technology or life expectancy, which are directly or indirectly linked to economic changes (Knight, 2008). Therefore, the fact that there are modernisation ideals or development goals do not mean that all societies ought to develop in the same manner or that they ought to converge at some common standard (Bourdieu and Passeron, 1977).

Corruption and Local Governance

Weber (1994) considered state formation to be one of the important prerequisites for economic development. Political centralisation, uniformity of regulation at the national level and the development of a well-functioning government bureaucracy increase predictability, which is a prerequisite for rational calculations of costs and benefits in a market economy. Legal protection of individual ownership rights by central rules, sanctioned by the central apparatus of violence, contributes to entrepreneurship and investment in capital goods and technical innovation. In the long term these lead to an increase in collective welfare (Hebel, 2003).

A key political condition for economic development is political stability. Political instability, social unrest and abuse of civil rights hamper long-run capital accumulation (Fosu, 1992), whether in the form of political turmoil, ethnic tensions or unpredictable changes in regimes and governments, which cause economic stagnation. Kuznets (1966) identified a minimum degree of political stability for assuring a stable relationship between entrepreneurs' efforts and rewards. Another important political condition for economic development is good governance (Ndulu and O'Connell, 1999). Good governance has a wide range of connotations, including the effectiveness of governance bureaucracies, prudent macro-economic policies, transparency and predictability in public decision making, the existence of checks and balances to control the abuse of political power, the insulation of the bureaucracy from undue influences from pressure groups, the rule of law and the impartial and independent functioning of the judicial system.

One of the important dimensions of good governance is a low degree of corruption. Corruption takes many forms, including bribery, nepotism, fraud, patronage and extortion. Rock and Bonnett (2004) summarise an increasing volume of recent empirical research showing that corruption has negative influences on economic growth (e.g. Booth, 1999; Wei, 1997a; 1997b). The negative effects of corruption on growth include the fact that corruption acts as a tax on investment, and substantially reduces the rate of investment and therefore of growth. It also reduces the rates of return of capital. An unexpected effect of corruption is that it is likely to increase the rate of investment in public infrastructure while decreasing its quality and productivity (Rock and Bonnett, 2004). The often noted paradox that developing countries prefer investments in new infrastructural projects, rather than maintaining existing infrastructure, becomes more understandable (Roberts *et al.*, 2010). Thus, corruption contributes to the decay of existing infrastructure.

The negative influence of corruption on the rate of growth does not mean that corrupt societies cannot experience rapid growth. For example, China and Indonesia are two countries that have combined pervasive corruption with rapid economic growth (Pei, 2001). However, Indonesia's experience during the Asian crisis of 1997 illustrates that corruption can reach levels at which a regime becomes totally incapable of responding adequately to economic challenges (Timmer, 2004). Reducing the extent of corruption is a difficult task as corruption is deeply embedded in the nature of political systems.

The Chinese official stance appears to be a synthesis of the major political leaders' beliefs, with Deng Xiaoping playing a key role as arbiter between the reformers and conservatives, and influences the parameters within which the official discussion of corruption and reforms occurs. Although there are disagreements about the causes of corruption, the leadership and official publications all agree that, unless corruption can be brought under control, it poses a serious threat to the reforms, if not to the regime (Ostergarrd and Petersen, 1991: 89-91). For example, as the Official Government Position on Corruption, in 1982 the Standing Committee of the National People's Congress defined corruption as:

‘smuggling, illicit currency exchange, seeking exorbitant profits, stealing public property, speculation and profiteering, stealing and selling valuable cultural relics, and demanding or receiving bribes.’ (NPC on Publishing Crimes, 8 March 1982:155.)

In 1985, the Supreme People’s Court and the Supreme People’s Procuratorate defined corruption as:

‘Activities by state personnel who use their positions to acquire public property by misappropriation, embezzlement, theft, fraud or other illegal methods’. (Answers to Several Questions by the Supreme People’s Court: 156)

However, while political stability and good governance are a prerequisite for economic development, economic development is not necessarily a prerequisite for political stability and good governance. It is true that when there is economic growth, capital accumulation and an increase in productivity can allow an effective government administration to be financed and the government to play a mediating role in conflicts between social groups and classes (Zhuang *et al.*, 2010). However, under certain circumstances economic growth may also trigger bad governance and give rise to political instability (World Bank, 1992). This is because, in accordance with Kuznets’s well-known U-curve hypothesis, income inequality tends to increase during the early industrialisation (Kuznets, 1955). Economic growth leads to increasing inequality between groups who benefit from the increase in productivity and those groups who do not. This growth and industrialisation can give rise to political tensions and conflicts until a certain redistribution of access to the new production factors takes place and inequality is decreased. World Bank (1992) emphasises that such redistribution does not occur automatically. Political elites can try to mitigate social tensions by co-opting the economically rising groups and improving their access to political power and social status. At the same time, a regime can increase its legitimacy among the poorer masses not profiting much from economic growth by a process of political democratisation.

2.6 Analysis Framework

Since the mid-1990s, geographers such as Fan and Sun (2008); Ho and Li (2008); Kanbur and Zhang (2005); Jones *et al.*, (2003) have made significant contributions by

using updated, newly released data to reveal a more complete picture of regional inequality in China. Their work challenged the conventional ideology of regional convergence under Mao and regional divergence during the reform period after 1978. As summarised by Li and Wei (2010b) and Fan *et al.*, (2003), they argued for the dynamic and multi-scalar nature of regional inequality, and the significance of central and local governments and regions in uneven development. In addition, scholars have attempted to uncover reasons for regional inequality, including notions of transitional institutions; multiscalar and multi-mechanism, externally driven development; and place-based development, etc. (e.g., Wei and Fan, 2000; Wei, 1999; Yang, 1990). The effects of fiscal decentralisation, foreign investment, state investment, labour mobility, technology, and privatisation on regional development have also been analysed (e.g., Hu, 2007; Fu and Wu, 2006; Ma, 2006; Zhang, 2005; Lu and Wang, 2002; Bian, 2002; Wei, 2000; Ying, 1999; Zhang and Zou, 1998; Fan, 1997; 1995). Along with economists and scholars in China (e.g., Lu, 2003; Bao *et al.*, 2002; Luo *et al.*, 2002; Raiser, 1998), geographers have exposed the strengthening of the coastal-interior divide, the decline of interprovincial inequality in the 1980s due to problems in SOE (state-owned enterprise) dominated regions favoured by Mao's military industrialisation policy, and the emergence of a group of coastal provinces driven by foreign investment and non-state enterprises. Wei's (2002:118) '*multiscale and multi-mechanism framework conceptualises the process of China's economic reforms as a triple process of decentralisation, marketisation, and globalisation, and argues that multiscalar regional inequalities (interregional, interprovincial, intraprovincial) are driven by a multiplicity of agents (including the global investor, the state, and the local agent) unleashed by the triple process, which have interactively and jointly produced the uneven landscapes of regional development in China*'. The work of China-based geographers has enhanced understanding of these processes and the bottom-up forces at work. They argue that treating the region as the geographical sphere (i.e., expanding the scale of analysis to encompass the entire planet) is most suited to framing interactions of complex social processes in an era of globalisation (Cartier *et al.*, 2005), and that regional inequality is shaped by the complex interplay of globalisation, institutions, and region-specific factors (Wei, 2002). Cartier *et al.*, (2005) has criticised Skinner's macro-region model for its theoretical base in location theory, treating the region as a 'container' and ignoring causal processes and

transboundary activities. Such a critique is situated in the broadening of economic geography from neoclassical location theory to institutional, relational and cultural perspectives. Unlike conventional work on regional inequality focusing on the macro scale, the efforts of Chinese geographers to scale down research and connect to regional development theories have improved understanding of how causal forces shape the trajectories of regions and the evolution of regional inequality. The institutional turn in economic geography has placed institutions, particularly the role of development states in China, at the centre of the regional development literature (Zhang *et al.*, 2008; Wei, 2007; Wei and Fang, 2006; Zhu, 2003; Dawkins, 2003; Démurger *et al.*, 2002a; Martinand Sunley, 1996; Yang, 1990). The notion of conditional convergence is limited because it removes some structural, local variables that significantly influence regional inequality (Petrakos *et al.*, 2005). Despite such progress, research on regional inequality in China can be further deepened and broadened.

First, the scalar nature of regional inequality and bottom-up forces can be studied further. Most economists working on China deal with regional inequality at the provincial level, with limited studies on intraprovincial inequality, while much of the work of geographers on local development is rarely connected with the study of regional inequality. A scalar perspective presents a typology of regional inequality (Wei *et al.*, 2011), and has the potential to link inequalities from the macro scale to the micro scale, even everyday life experiences. The ways in which multiple mechanisms operate at each scale are extremely complicated and require substantial attention. At even finer scales, one can analyse intracounty and intraurban inequalities, which have drawn some attention from economists, geographers and political scientists working on China (e.g., Wei, 2002).

Second, regional inequality can be manifest in many different forms, such as rural-urban, interurban, and rural inequalities, as well as inequalities in specific sectors, such as the technology divide and social inequality, which remain less studied (Li and Sen, 2003). With globalisation and liberalisation, inequalities in those dimensions, especially social and political inequality, have been intensified and merit more attention from geographers.

Third, with the scaling down of the discipline of geography and the distance from public policy, few geographers are engaging in the debate on regional development policy in China, including the recent Great Western Development Strategies, although China-based geographers have been heavily involved in numerous policy efforts. As far as many are concerned (e.g., Dawkins, 2003; Démurger, 2002a), geographers cannot afford to abandon ‘totalisation’ and distance themselves from large policy and political issues of national and even global significance.

Therefore, based on the conceptual framework of this chapter, this thesis argues that ‘development’ has economic, social, political and ideological dimensions in the context of Chinese development, according to both statistical and survey data at the county scale. By engaging with debates on development models, theories and strategies, this thesis fills in two gaps in the literature: it uses county-level rather than provincial data; and economic, social, political and ideological dimensions are used to examine Chinese development and inequality.

Chapter Three describes the methodologies employed in this research. Both quantitative and qualitative approaches have been used because each has strengths and weakness, and using them in combination can maximise the quality of the analysis. In addition, this chapter explains how the data sets, containing over 1.4 million pieces of data, have been collected, managed, selected and analysed. Both GIS and statistical methods are used to analyse the data chronologically and spatially.

The historical and statistical part of the thesis includes two chapters. Chapter Four addresses the historical evolution of China’s regional development history and related development features prior 1978, which serves as a background for understanding contemporary China, including its ideological, political, social and economic dimensions. Chapter Five explores the spatial distribution of inequality using county-level data, which offer a different perspective compared to provincial data, and explains the understandings of disparity shown by the maps. In addition, in order to understand China’s regional development disparity from county data, the Export Base Model, Dual Sector Model, and Kuznets inverted U model are tested. This explains why development and inequality exhibit different patterns at the provincial and county scales. Then, by exploring the relationship between economic growth and economic inequality using county-level data, this chapter considers the causes of the inequalities.

Political factors should not be considered to be the sole reason as other factors – geographical, economic, social, and ideological – also play an important role.

The empirical part of thesis focuses on how different groups of people – segmented by age, gender, location, ethnicity and social status – understand and react to rapid development and widening inequality. Chapter Six emphasises the relationship between development, inequality and economic indices, such as income, expenditure, savings and consumption. Chapters Seven and Eight examine social and political inequality between different groups of people by using fieldwork data. Further to the economic analysis, these chapters investigate the relationship between development, inequality and indices of social and political development, such as education, health care, social stratification, political policies, local governance and corruption.

Chapter Nine summarises the conceptual and empirical contributions of the thesis; the policy implications of the main findings; the research challenges and constraints of the thesis and possible future research directions on development and inequality in China.

Chapter 3 Research Design

3.1 Introduction

In order to achieve the research aims and objectives, a good and practical research design must reflect research questions which draw out a conceptual framework and knowledge of the advantages and disadvantages of different techniques (McQueen and Knussen, 2002). Rubin and Babbie (2008) have argued that researchers should be explicit about the research process, including participant selection and analytical procedures. In accordance with the above, this chapter aims to explain the methodology that was used to achieve the research aims in accordance with the theoretical framework. This research design illustrates how economic, social, political and ideological dimensions affect China's development and the current spatial regional inequality underlying China's impressive macro-economic development (especially since 1978) at different scales.

In order fully to understand and explore these dimensions of China's development and disparities, both quantitative and qualitative approaches have been used in this thesis. Quantitative methods generally involve counting and measuring and are able to grasp changes in indices, especially regarding economics, social development and demography; while qualitative methods focus on descriptive information, exploring social actors' meanings and interpretations, and recognising how policies are changed as they are implemented at various levels (Sullivan and Gilbert, 2004). Jones *et al.*, (1997) points out that single methodology approaches (qualitative only or quantitative only) have strengths and weakness. Using a combination of methodologies (both qualitative and quantitative) can bring their relevant strengths to the fore. This is one of the crucial aspects in justifying a mixed methodology research design, as focusing on any one of the methods alone may lead to important parts of the research context being missed (McQueen and Knussen, 2002). Therefore, both quantitative and qualitative studies are applied in this research, and extensive data and information is gathered in order to investigate the critical fact that regional disparities do exist in China's nationwide economic development, and to determine and analyse the causes of such disparities.

This chapter begins by providing a justification for statistical data collection methods and the reliability of statistical data. Section 3 examines how a field survey of local residences' data through focus groups, questionnaires and interviews in five counties of three provinces was designed and put into practice. Section 4 explains how the quantitative and qualitative analytical methods were used to analyse the statistical and survey databases. The last section clarifies the implications of the research methods and how these methods overcome key challenges of the research.

3.1.1 Statistical Data Collection and Processing

Data used by this research has been obtained from two sources: official statistical data and field survey data. This section focuses on the justification of statistical data collection methods and reliability of data. Statistical data analysis has been widely used in different domains of economics, business, science and social science because it is normally regarded as the abstraction of information and knowledge. Although the reliability of China's statistical data had once been questioned by some researchers (e.g. Xue, 2004; Holz, 2002), analysis of statistical data have been extensively used to understand China's development and inequality, using a process entailing inspection, modelling, suggesting conclusions and supporting decision making (Bramall, 2008; Zhang, 2006; Fu, 2004; Démurger, 2002). Therefore, this section includes two parts: data collection and data reliability. This first part focuses on economic and social statistical data that have been collected, compiled and released publicly by Chinese governments and statistical bureaus at national and provincial administrative levels. Therefore, this data forms the mainstay of the raw materials on which this research has been built, as it provides a primary picture of the economic, social and development status of China over the years. It has also been extensively employed by researchers, analysts and governmental officials for a range of purposes, both domestically and internationally (Bramall, 2008; Zhang, 2006; Fu, 2004; Démurger, 2002). The second part of the section examines the reliability of the data because the accuracy of the data plays a key role in terms of quantitative methods. It is therefore essential to evaluate the data accuracy and quality as far as possible in this section.

3.1.2 Data Source and Data Selection

Chinese development and inequality have been widely researched, but mostly at a provincial level (for example, Ho and Li, 2008; Knight, 2008; Kanbur *et al.*, 2008; Huang *et al.*, 2003; Jian *et al.*, 1996). Compared to the provincial level, researching at the county level provides a better understanding of development, and in particular inequality in China's economic, social, political and ideological development (section 2.4 gives detailed rational arguments for choosing county-level data). Only two papers (Tsui, 2005 and Yin, 2003) have conducted their studies at county level. However, both studied only fiscal disparities and statistical data that were collected before 2003.

Using provincial data has its limitations. For example, one of the most developed provinces, Guangdong, has some of the richest cities (e.g. Shenzhen and Guangzhou) and also some of the poorest areas (e.g. Shaoguan) in China. Such development inequalities are not identified in research focusing on comparisons at a provincial level. In contrast, this thesis is based on a smaller scale than most previous debates of China's development and inequalities. Besides economic aspects, it also explores social, political and ideological factors such as the economic infrastructure, personal income, social class stratification and biased policies that have caused such inequalities.

One of the main difficulties in conducting the study at a finer level is the amount of data that needs to be processed. The county-level data set is over 67 times the size of the provincial data set in terms of any single index. For example, in 2000, there were only 31 province-level administrative units, which included 4 municipalities (Beijing, Shanghai, Tianjin and Chongqing), 22 provinces (Heilongjiang, Jilin, Liaoning, Hebei, Shaanxi, Shandong, Jiangsu, Zhejiang, Anhui, Jiangxi, Fujian, Henan, Hubei, Hunan, Guangdong, Hainan, Sichuan, Guizhou, Yunnan, Shanxi, Gansu, Qinghai), and 5 autonomous regions (Inner Mongolia Autonomous Region, Ningxia Hui Nationality Autonomous Region, Xinjiang Uigur Autonomous Region, Tibetan Autonomous Region, and Guangxi Zhuang Nationality Autonomous Region). In addition, there were two special districts (Hong Kong and Macao), and Taiwan, which Beijing considers a province but is not actually under the administration of the People's Republic of China (NBS, 1990). In comparison, there were over 2000 counties (including county-level cities) across China (the number of counties in each province-level unit varies significantly from 3 to 140, see Table 3-1).

Table 3- 1: Administration Unit Number (Source: derived from National Bureau of Statistics)

Province-level Unit	Province Name	Number of Counties
Municipalities	Beijing	5
	Shanghai	3
	Tianjin	4
	Chongqing	26
Provinces	Heilongjiang	66
	Jilin	41
	Liaoning	44
	Hebei	126
	Shaanxi	109
	Shandong	91
	Jiangsu	58
	Zhejiang	62
	Anhui	61
	Jiangxi	81
	Fujian	59
	Henan	110
	Hubei	66
	Hunan	88
	Guangdong,	77
	Hainan	18
	Sichuan	140
	Guizhou	78
	Yunnan	120
	Shanxi	87

	Gansu	76
	Qinghai	39
Autonomous regions	Inner Mongolia Autonomous Region	84
	Ningxia Hui Nationality Autonomous Region	20
	Xinjiang Uigur Autonomous Region	87
	Tibetan Autonomous Region	72
	Guangxi Zhuang Nationality Autonomous Region	85

Data used by this study are taken from the Statistical Yearbooks published by the National Bureau of Statistics of China (NBS) and the Provincial Bureau of Statistics. The original statistics provide records of 20 indices per county per year from 1992 to 2006 (see Table 3-2). As mentioned above, one challenge of this thesis is the collection and processing of the database –around 1.4 million pieces of data were used by this study. The creation of this database has been a very time-consuming task as most of the data provided by NBS are not in digital format. It took the author nearly five months (eight hours a day for 20 days a month) to type these data sets manually into an Excel file. All the data have to be manually typed up and put into a digital format so that they can be further processed by analysis tools such as GIS.

Table 3- 2: County-Level Data Indices (Source: derived from National Bureau of Statistics, 1992-2006)

Unit: RMB	GDP (100 million RMB)
	Value-added of Primary Industry (100 million RMB)
	Value-added of Secondary Industry (100 million RMB)
	Industrial Value-added (100 million RMB)
	Annual Per Capita Net Income of Rural Households (RMB)
	Local Government Revenue (100 million RMB)
	Local Government Expenditure (100 million RMB)
	Outstanding Loan of Financial Institutes at Year-end (100 million RMB)
	Outstanding Amount of Savings Deposits of Urban Households (100 million RMB)
Unit:Persons and Household	Population at the Year-end (10000 persons)
	Of which: Rural Population (10000 persons)
	Student Enrolment in Regular Secondary Schools (10000 persons)
	Student Enrolment in Primary Schools (10000 persons)
	Number of Households at Year-end (household)
Percentage	GDP Index (%)
Unit: Ton	Total Output of Crop Cultivation
	Total Output of Meat
Unit	Number of Beds in Hospitals and Sanitation Agencies (10000 units)
	Number of Social Welfare Nursing Centres (unit)
	Number of Beds in Social Welfare Nursing Centres (unit)

Another challenge of this thesis is the dimension covered by the statistical data sets. From the above table, 14 out of 20 indices belong to the economic dimension; 6 are social data; and there are no data published on political or ideological dimensions. This is partly because political and ideological data are very sensitive in China so the publication of these data is strictly controlled by central government. Therefore, in order to remedy this limitation of statistical data, conducting a field survey is essential because it is able to collect detailed first-hand county-level data about the ideological and political dimensions.

3.1.3 Statistical Data Accuracy

The reliability of China's statistical data had once been questioned by some researchers (Holz, 2004a; Xue, 2004). Indeed, over-reporting of output data through China's traditional regular reporting (statistical) system has been a problematic issue for many years in China (Wong, 2001; Rawski, 2001). This is because the exaggeration of outputs was once particularly prevalent in the lower tier of statistical bureaus (below county level) when reporting to a higher bureau (county statistical bureau and then provincial, eventually reaching to the state level). In addition, the output data was to some extent based on estimation, and most importantly, the data had long been seen as a judgement on local officials' achievement. As a result, the quality of these data is likely to be poor, often no more than guestimates, and easily subject to manipulation. Therefore, the reliability of these data is in turn likely to be low prior to 1996. In many cases, overstating is so apparent that some higher level statistical bureaus had to fight against data falsification by 'squeezing the water content' away from the data they received from an immediate lower-level statistical bureau (Rawski and Xiao, 2001).

In order to remove data falsification in 1996, along with the success of the economic system's transformation from central planning to market economy, the Chinese government decided to revise Statistic Law, through which innovative changes were made to the old data collection and regular reporting system. Starting from 1996, the Chinese statistical data collection system consisted of three methods: i) a regular reporting system; ii) censuses; and iii) sample surveys. Censuses and sample surveys have been added to the existing regular reporting system to significantly reduce the role of the traditional reporting system (Chow, 2006).

Above the regular reporting system, which involves the lower tier of statistical bureaus making regular statistical reports to the higher tier of bureaus and the results eventually reaching the state level (Holz, 2004a), censuses double-check the comprehensiveness and accuracy of China's statistical data, adding an influential extra function to the regular reporting system. Holz (2004b) give the example of the tertiary sector census of 1993, which led to a large number of revisions to the value-added data. As a result, GDP had to be revised for the years 1978 to 1993. Holz (2006:54) stated, '*China's National Bureau of Statistics announced a benchmark revision of national income and product accounts statistics based on the findings of the 2004 economic census. The benchmark revision covers the years 1993-2004 and comprises revised nominal values of economy-wide and of sectorial value added, as well as revised real growth rates*'.

Sample surveys are established because the traditional reporting system does not reliably cover some activities. Therefore, in 1984 the National Bureau of Statistics (NBS) established urban and rural survey teams as administrative facilities directly under its control. In 1994, the NBS enterprise survey teams were equipped with networked computing systems so that data could be easily shared among them. By 2004, the NBS had established 857 rural survey teams in China's over 2000 counties and 226 urban survey teams in its 663 municipal or county-level cities (Holz, 2004a). The main advantages of directly employing survey teams are that the NBS can ensure the quality of collected data and obtain selective data quickly, which it cannot easily get from lower tiers of statistical departments. In addition, high-quality data on some productive units that are not reported directly to statistical authorities can also be gathered by the survey teams. Most importantly, sample surveys reduce the possibilities of data falsification at the local level.

Furthermore, party and administrative disciplinary policies are enforced through the NBS. In 1997, the NBS cooperated with the CCPCC Disciplinary Commission and the CCPCC Organizational Department in drafting a document attacking data falsification. The offices of the CCPCC and State Council formally issued the document in February 1998 warning '*local officials not, because of a discrepancy between reality and the targets they are responsible to achieve, to falsify statistics or command the falsification of statistics*' (CCPCC/SC, February 16, 1998).

Given such innovative changes to the data collection systems and the introduction of a series of disciplinary measures against data falsification, it is believed that since 1996 China's overall statistical data has been reasonably accurate, more or less reflecting a true picture of its realities (Wong, 2001; Rawski, 2001). Thus, in order to avoid any inconsistencies for data analyses which would mislead the analytical results, this research only employs the post-1996 statistical data. Furthermore, in order to provide enough information to produce representative research results, the statistical data specifically cover a ten-year time span used for sample studies from 1997 to 2006 because it is in these ten years that China's economic development accelerated and inequalities dramatically enlarged accordingly.

Specifically, this study has used the following variables (see Table 3-3) for detailed comparison and analysis. These variables were either taken directly from or derived from the raw statistics collected in the database constructed for this research. The justification for choosing these variables is explained in section 5.2.

Table 3-3: County-Level Data Indices (Used in Thesis (Source: calculated and derived from National Bureau of Statistics, 1997-2006)

Per capita GDP calculated from GDP and population
Per Capita Net Income of Urban/Rural Residents calculated from Net Income and population
Per Capita Residents' Savings Deposits calculated from Savings and population
Per Capita Local Government Revenue calculated from Local Government Revenue and population
Per Capita Local Government Expenditure calculated from Local Government Expenditure and population
Per Capita Outstanding Loan of Financial Institutes calculated from Loans and population
Student Numbers per 10000
Hospital Beds per 10000

3.2 Field Research Practice

The second part of the research consists of data that has been collected directly in field surveys carried out in five counties of three provinces in China. This first-hand information vividly reveals the actual disparities that exist between different areas and different groups of people, which would have otherwise been hidden within government statistics (Hamel *et al.*, 1993).

Besides data coming from official Statistical Yearbooks, conducting a field survey is also necessary because through focus groups, questionnaires and interviews, fieldwork helps to collect detailed first-hand county-level data of the ideological, political, social and economic dimensions of development. Unwin (1994) suggests that all groups of people have four main types of activities: economic, social, political and ideological. Unwin (1994) also argues that none of the four dimensions operate independently from one another during development. For example, development engages a large range of changes in a diversity of social indicators such as population, life expectancy, education and social classes, which are directly or indirectly linked to economic transformation. This conceptual framework was discussed in detail in section 2.3.

Therefore, following the analytical framework of this thesis, the field investigation aims to understand these economic, social, political and ideological dimensions. It reveals the reality of how people understand and react to rapid economic development and widening disparities between urban and rural areas, and between rich and poor people; and how development and disparities affect their well-being and relationships with family members, relatives, friends, neighbours, communities, and other ethnic groups. Through critical analyses of fieldwork results, the field survey explains the inequality represented by county-level statistics, uncovers reasons behind the disparities between different ethnic groups and communities, and seeks practical ways of alleviating such inequalities at the county level inching.

Jones *et al.* (1997) points out that a central aspect in justifying a mixed methodology research design is that every single methodological approach has its strengths and weaknesses, and the combination of different methodologies can draw

on their relevant strengths and avoid their weaknesses. Focusing on any one of the methods may lead to important parts of a story being missed.

This thesis uses different research methods to make a full investigation of China's development and disparities. Alongside quantitative analyses using statistical data, different qualitative methods are also used to better understand different aspects of the research topic. In particular, questionnaires are used to help better understand economic, social, political and ideological disparities; focus groups and interviews are adopted to identify the reasons behind such developmental disparities and strategies that could alleviate these disparities from economic, social, political and ideological perspectives.

Both interviews and focus groups are best used for problems requiring deep insight and understanding, especially when dealing with explanatory concepts (Robinson, 1998). Focus groups provide information that cannot be obtained in interviews. Gibbs (1997:2) points out that '*focus groups elicit a multiplicity of views and emotional processes within a group context compared to individual interviews, which aim to obtain individual attitudes, beliefs and feelings.*' Goode and Hatt (1981) suggest that in the early stages of research, focus groups are helpful to guide the later construction of questionnaires and interview questions. Questionnaires provide a rapid and inexpensive way of discovering the characteristics and beliefs of the population at large, while interviews capture rich insight into people's feelings, attitudes, aspirations, experiences and opinions (Robinson, 1998).

Therefore, in the fieldwork carried out from June to September 2008 for this research, focus groups were conducted first, which provided guidance for the construction of interview questions (c.f. Morgan, 1988) and the refinement of the questionnaires. Then, questionnaires were used, providing a rapid and inexpensive way of discovering the characteristics and beliefs of the research population at large (Robinson, 1998). Finally, interviews were used to provide a rich insight into individual people's experiences, opinions, aspirations, attitudes and feelings (McQueen and Knussen, 2002), which cannot be achieved solely through focus groups and questionnaires. More details of each method are discussed separately in later sections.

“A researcher is positioned by her/his gender, age, “race”/ethnicity, and so on, as well as by her/his biography, all of which may inhibit or enable certain research method insights in the field” (Kim, 1994:85). As a Chinese woman studying abroad and coming back to China to carry out field work, my research position is affected by my gender, age, race and my cross cultural background (Wiederhold, 2014). For example, being a young woman, it is easy for me to convince participants I am “unthreatening or ‘harmless’ (Turner, 2012). So most of my participants are cooperated well and provide me the detailed information. Being a Chinese to conduct the field work in China, for one side, I can understand some phenomena more easily and better than foreigners. I am able to find the gatekeepers easily. But I also face challenges such as presumptions of their answers using my own knowledge in the field. Certainly, my biographies of studying in UK give me access to a particular view of the events and enable me have certain insights in the field. For example, being self-critical methods encourage me to explore the different dimensions rather than focus on one side of fieldwork as they arise.

Although ensuring flexibility in the research design was important, it was equally important to plan ahead. The whole fieldwork survey carried out for this research included 15 focus groups, 505 questionnaires and 100 interviews. The numbers of each method are shown by county in Table 3-4.

Table 3-4: Field Survey Methods by County (Source: author)

	Focus Groups	Questionnaires	Interviews
Boluo in Guangdong Province	3	105	20
Wuchang in Hubei Province	3	102	20
Jinchang in Gansu Province	3	100	20
Gulang in Gansu Province	3	98	20
Liangzhou in Gansu Province	3	100	20
Total	15	505	100

In addition to the survey, other information, such as population (e.g. China population and employment statistical yearbook, 2007–2011), environment (topographic and climatic) (e.g. White papers of Chinese Government, 2006), human

and natural resources (e.g. White Papers of the Chinese Government, 2007) and statements of governmental policies (e.g. Report on the Work of Gansu Government Report, 2007) can be obtained from publications (including normal print and online publications), government documents (including reports, news circulations, new policies and regulations, planning and filed records), enterprise and industry reports and media documentaries. Published data of this kind were used as background information for this thesis.

3.2.1 Research Locations

Places play an important role in shaping the research setting (Sullivan and Gilbert, 2004). The choice of locations puts constraints on the conclusions that can be drawn (McQueen and Knussen, 2002). The location of a focus group, questionnaire or interview also impacts on participants and their responses (Rubin and Babbie, 2008). Therefore, among over 2000 counties in China (see Figure 3-1); a few representative locations with different development levels were selected for this research. The survey setting was also carefully designed so that the underlying causes of China's development and disparities can be identified and investigated.

Most current literature shows that the per capita GDP of coastal areas is much higher than most western areas in China, and that the middle area is in between the two (for example, Hao and Wei, 2010; Liu and Li, 2006). Therefore, choosing one county in Guangdong Province, one in Hubei Province and one in Gansu Province enable comparison between a coastal, middle and western area of China.

According to the China County Level Economy Yearbooks 2002-2006, all counties of China have been ranked from A (the most competitive) to J (least competitive) based on the County Economic Competitiveness, which considers eight indices as shown in Table 3-5. Counties change their classifications year by year according to their competitiveness.

Table 3- 5: County Economic Competitiveness (Source: derived from China County Level Economy Yearbooks, 2002-2006)

	Competitive ness Ranking	Indices	Fieldwork Survey Counties
Well- Developed Counties	A (the most competitive counties)	<ul style="list-style-type: none"> • Per Capita GDP • Per Capita GDP Growth Rate • Annual Per Capita Urban Disposable Income 	
	B		Boluo Wuchang
	C		Jinchang
Medium Developed Counties	D	<ul style="list-style-type: none"> • Annual Per Capita Net Income of Rural Residents 	
	E		
	F		
	G		Liangzhou
Under- Developed Counties	H	<ul style="list-style-type: none"> • Per Capita Year-End Urban and Rural Savings • Per Capita Fiscal Budget Revenue • Per Capita Fiscal Budget Expenditure 	
	I		Gulang
	J (the least competitive counties)		

Therefore, along with the China County Level Economy Yearbook 2006 (the most up-to-date data at the time of the field survey), Boluo, Wuchang and Jinchang are all well-developed counties which rank in groups B, B and C respectively. Investigating areas with similar developmental backgrounds enables an understanding of development and reveals the causes of disparities between different areas. In addition, within Gansu province, Jinchang, Liangzhou and Gulang counties are next to each other, so their social and political environment should be very similar, yet

these three counties exhibit large economic development inequalities. The fieldwork allowed research into the reasons behind this inequality. According to the China County Level Economy Yearbook 2006, Jinchang is a well-developed county ranked in group C; Liangzhou represents a medium developed county ranked in group G and Gulang falls into the category of an under-developed county and is ranked in group I.

Finally, local connections play an important role in the fieldwork. There are many counties to choose from but the reality is that the surveyor should have some local connections as these are crucial for field surveys, especially in China. Yang (1994) demonstrates the difficulties of carrying out fieldwork if there is no local network. I asked 10 interview participants if they would have accepted my interview invitation if they had not known me, and they all said no. For example,

‘If you were not my sister-in-law’s friend, why would I bother to talk to you? There are too many cheaters in China and I do not trust any 陌生人’ (Li-45-M-U-Policeman-Wuchang (surname-age-gender-urban/rural-profession-location)).

Therefore, having a local network in these five counties was a key factor in enabling me to carry out the fieldwork. Without it, it would have been almost impossible to run a focus group or organise an interview.

For all the above reasons, Boluo in Guangdong Province, Wuchang in Hubei Province and Jinchang, Gulang and Liangzhou in Gansu were chosen as representative case studies for this research (see Figure 3- 1).

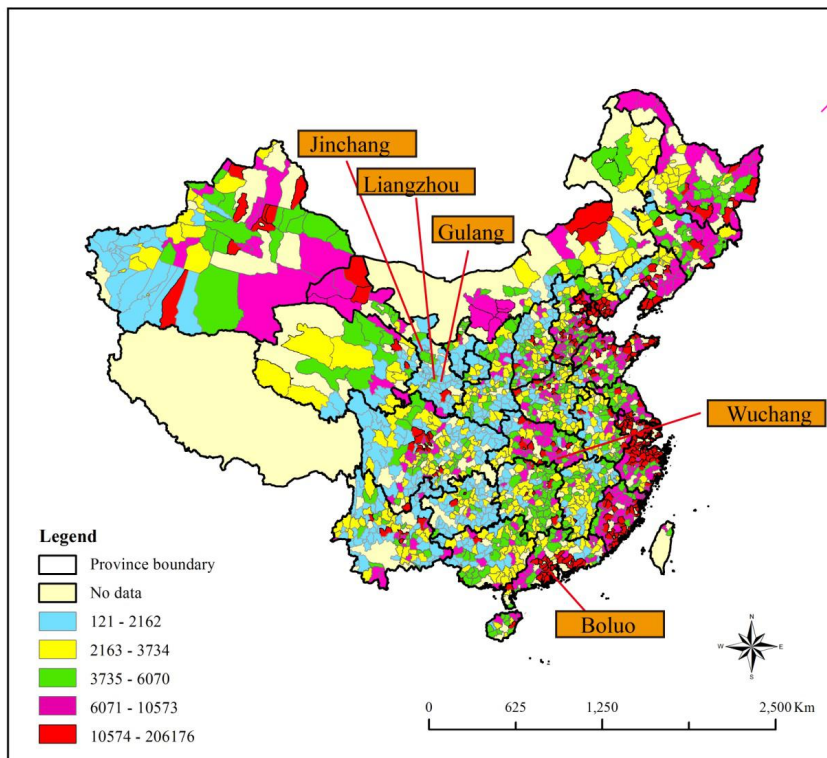


Figure 3- 1: Locations of Fieldwork (Source: author)

3.2.2 Focus Groups

‘Focus groups are group discussions organised to explore people’s views and experiences on a specific set of issues’ (Kitzinger, 1994: 104). A particular advantage of focus groups, and therefore the main reason why they were included as part of the multi-method approach, is that they can reveal issues and opinions that would not have emerged without the group interaction (Kitzinger, 1994; Morgan, 1988). Furthermore, focus groups help to explore how meaning and experiences are negotiated and contested between participants (Limb and Dwyer, 2001). Another important benefit of focus groups is the extent to which researchers as well as participants learn through the process (Bedford and Burgess, 2001).

Although the term focus group has been used to include a range of techniques, the general field of social science research has come to generally conceptualise this technique as follows: using a semi-structured group session, moderated by a group leader, held in an informal setting, with the purpose of collecting information on a designated topic (Limb and Dwyer, 2001). Data regarding observations and opinions

are enhanced through group interaction because individual participation can be improved in a group setting (Bedford and Burgess, 2001). Thus, the most important characteristic is the nature of the group itself as expressed through the interaction of the members and the flow of the discussion. The focus groups conducted during my fieldwork meant that participants not only expressed their own attitudes and experiences but also responded to the views of others, helping to promote discussion and generate new ideas.

The guidelines for conducting focus groups suggest that the members included in a focus group ought to be chosen on the basis of their common experience related to the research topic. Generally, members are homogeneous in terms of prestige or status, such as occupation, age, education, family background and social class (Grudens-Schuck *et al.*, 2004; May, 1997). This homogeneity is important because people are more likely to share information with others who are seen as similar. In addition, if the group is too heterogeneous, the lower status members may defer to higher status members and not fully contribute. Therefore, following these guidelines, this research involved three focus groups in each county with around ten participants invited in each group.

Given the fact that people in each group have a similar background and share common experience and interests in local development, the variation in their occupations may better stimulate their discussion and encourage them to debate (Kitzinger, 1994). Therefore, in each focus group, people are invited from within the same class and from a similar background but with different occupations. However, due to differing views on the definition and measurement of classes, there is no straightforward way to classify people in terms of income and classes (see section 2.3.3). However, according to Bian (2002), China's social classes can be grouped into three categories: the cadres, the new middle class and the vulnerable group. The cadres form a very special class which, since 1949, has had power without being properly monitored. Thus, this class has supremacy over other groups, high levels of welfare and the highest social status, meaning that it possesses both power and wealth. Those who earn their wealth using their knowledge or talent are classed as new middle class, as they have wealth, but no power. Those who have neither power nor money are classified into the vulnerable group, falling in the lowest social class stratification

(Li, 2005). Therefore, following the above claim, in each county three focus groups were conducted (see Table 3- 6).

Table 3- 6: Focus Groups (Source: author)

Groups	Social Class
Group 1: Cadres	government officials rural cadres retired government officials policemen
Group 2: New middle class	private entrepreneurs managers household business owners and individual manufacturers and traders professionals intellectuals
Group 3: Vulnerable group	peasants living on producing agricultural products; peasant labourers floating in urban areas workers of private companies and state-owned enterprises unemployed persons

Having established the main groups of people being invited, the next challenge is to choose individuals. The most frequently used non-probability method is quota sampling (Kothari, 1994). The selection of participants for my focus groups was further helped by snowball sampling (Grudens-Schuck *et al.*, 2004). Once one or two people had agreed to participate, they helped to identify peers of a different gender to participate. Although the total number of participants in a focus group was planned to be precisely ten, some flexibility towards the size was employed in the field so that the participants varied from six to twelve. This flexibility in participant selection involved trade-offs balances and compromises depending on the circumstances.

The focus group session structure comes from the guideline questions developed by the researcher. The amount of structure varies with the preferences and professional experiences of the researcher. As a researcher and moderator, I monitored group interaction and adapted plans accordingly. For example, a group that seems

stuck on one aspect may be guided to the next. Each of the focus groups conducted took one and a half hours and consisted of the following four primary stages (see also Appendix 1):

Introduction – The moderator presents an overview of the goals of the discussion and introduces the participants to each other (taking approximately 10 minutes).

Discussion Building Stage – Easily answered questions are asked to encourage participants to begin talking and sharing. For example, the question of how their personal life has changed since 1978 may be asked first (lasting approximately 10 minutes).

In-depth Discussion – Focus on the main questions in the topic guide, encouraging conversation to reveal participants' feelings and thoughts. All questions may be asked (approximately 60 minutes).

Closure – Summary of the impressions and conclusion about the information gathered, which gives an opportunity for participants to clarify, confirm or even elaborate (taking approximately 10 minutes).

An important component of the focus groups was the introduction and discussion building questions. The introduction assured participants that the focus group was only for the purposes of research, promoting a relaxed atmosphere. Then, the question of how their personal life has changed since 1978 was a good icebreaker with which to start the discussion. In the in-depth discussion stage, nine main issues were discussed:

1. Understandings of 'development';
2. The difference between the periods 1949-1978 and 1978-present in China;
3. Imperative challenges for the government;
4. GDP inequality in different parts of China;
5. GDP inequality in different parts of the province;

6. Reasons for disparity;
7. Understandings of disparity;
8. Changes in disparity in China in the last 30 years;
9. China's future and prospects for ordinary people's lives.

Each main issue enabled exploration of understandings of development in more depth. For example, when participants discussed the difference between the periods 1949-1978 and 1978-present in China, income, living conditions, community and political and ideological factors were discussed.

Four key issues arose during my fieldwork research:

First, Morgan (1988) emphasise that group size is a concern in conducting fieldwork. In the case of this research, a session involving around ten people proved to be very efficient during fieldwork. This is to say that: 1) everybody feels comfortable as part of a small group; 2) each member has an opportunity to talk; and 3) it is easy to manage the group dynamically and pass information between each member.

Second, my research experience shows that participants were reluctant about conversation being recorded digitally in China, although this has become almost universal in other places. Taking notes by hand in a focus group was deemed much more acceptable. This is probably because people fear that their recorded voice might be used against them in the future in an unforeseeable circumstance – for example, the Cultural Revolution recurring. Therefore, during the survey, I made notes myself and also employed an assistant to take notes for me using the pre-designed forms (see Appendices 1 and 2), thus enabling me, as the moderator, to concentrate on stimulating discussion, asking key questions and making everything run smoothly and efficiently. Soon after the focus groups, I worked with my note-taker to review notes, filling in gaps and ensuring that accurate and complete information had been gathered.

Third, the location and the arrangement were chosen very thoughtfully based on local tradition and custom. My previous experience also shows that the condition and environment of the place where the focus group is being carried out is equally very important. Local people did not like to feel as if they were in a formal meeting;

otherwise, they would not express their true views and have a real discussion. This is because many of them have had too many political meetings, particularly during the Cultural Revolution period, in which the expression of any incorrect political view could bring disaster for them. An informal gathering in a quiet place with certain privacy and less interruption from unexpected intruders will encourage a very relaxed atmosphere, making the participants feel as if they are talking with a group of friends.

Fourth, sitting around a table with drinks, teas and snacks provided was always appreciated by people as a form of hospitality, which in most cases helps to make participants talk freely and openly. Those who do not make much contribution to the discussion would be seen by locals as an unfriendly person and not deserving of the entertainment. Silverman (2005) considered school premises as a good location but in my experiences in China school premises were far from an ideal research setting, because there was a danger that participants perceived my research as an extension of classroom rules, such as only speaking when asked a question and only giving correct answers.

Despite the advantages of focus groups in terms of group interaction, at the same time the group dynamics also had disadvantages. One of the biggest challenges of the focus groups was that participants sometimes remained silent about some views or readily agreed with more dominant views as a result of group pressure (Yin, 2003). For example, I ran five focus groups with cadres in the five counties. I found that in two out of the five groups, cadres at a lower tier either remained silent or totally agreed with other cadres, especially those at higher tier. Furthermore, focus groups were less suitable for exploring sensitive topics or talking about personal experiences and feelings (Denscombe, 2007). For example, during one of the focus groups in Jinchang, the participants were very unresponsive to questions regarding issues such as corruption and local governance.

3.2.3 Questionnaires

After focus groups, questionnaires were conducted in order to collect information from a larger proportion of the population. Compared to focus groups and interviews, Flowerdew and Martin (2005) suggests that the great advantage of questionnaires is that they enable the targeting of a large number of people (who may be from variety of

backgrounds) in a short period of time with relatively little effort. Respondents also remain completely anonymous so that their answers to the questions can be more genuine than other methods, particularly in the case of more elderly Chinese people who have bitter past experiences of political movements, such as the Cultural Revolution. In addition, questionnaires can cover a wider range of questions than focus groups and the answers might or might not support the findings from the focus groups (Marshall and Rossman, 1995).

The questionnaire was designed in English (Appendix 2) and then translated into Chinese. My experience shows that concise questions printed in a neatly and closely designed layout can effectively encourage people to take part in answering the questionnaire. In the questionnaire both closed-ended questions and open-ended questions were used. The use of closed answers produces quantitative data and permits easy comparison between answers given by different people; on the other hand, open-ended questions identify relevant topics and determine the full range of possible answers (Marshall and Rossman, 1995).

The choices made in selecting participants, such as who to talk with, where, when, about what, and why, put constraints on the conclusions which can be drawn. Therefore, a strategy was adopted to ensure that my sample would be representative of my target population. Through conscious choices of the places where my research was undertaken and those who were approached to participate, an attempt was made to include as many participants as possible.

Approaches for participant selection fall into two broad categories: probability and non-probability sampling (Kothari, 1994). In probability sampling each member of a population has the same chance of being selected, whereas non-probability sampling selects participants based on the judgement of the researcher in an effort to achieve particular objectives.

The approach used to select the questionnaire participants was probability sampling. Questionnaires were conducted in five counties: Boluo (with a population of 760,000), Wuchang (850,000), Liangzhou (980,000), Jinchang (460,000) and Gulang (370,000) (Guangdong, Hubei and Gansu Bureau 2006). In each county, around 100 questionnaires were completed, giving 95% confidence with a calculated

margin of error of 9.78%. Based on probability and sample size distribution theories, the sample sizes for the all five counties were the same, as the populations of the five counties are all greater than 20,000 (<http://www.raosoft.com/samplesize.html>). A stratified sampling method (dividing the respondents into two strata: urban and rural residents) was employed as it has fewer sampling errors than a random sampling method (Cochran, 2007). About half of the questionnaires were circulated randomly in urban areas and half in rural areas. In urban areas, the questionnaires were delivered to every 10th person in the high street of the city during weekends because in China most people from various social and economic groups go out shopping or participate in other leisure activities during the weekend. In rural areas, the questionnaires were distributed in a couple of radial directions away from the city, travelling from the city towards the furthest distance possible. In China, people who live in rural areas are all peasants, so the responses to the questionnaires received from rural areas were confidently considered as from peasants with a range of economic status. Therefore, these sampling and delivery methods covered a variety of groups of people, including peasants working on farms, those working local industries, self-employed business owners and government organisations.

However, as with any approach to selecting participants, mine also had its weaknesses. For example, I aimed to deliver questionnaires to urban residents in the high street of the city during the weekend. However, rural residents sometimes go to the city during the weekend to go shopping on the high street. Thus, I realised that some questionnaires were completed by rural rather than urban residents, so the finished questionnaire had to be abandoned.

As Goode and Hatte (1981:171) point out: *'the questionnaire is effective only when the respondent is able or willing to express his reactions clearly'*; thus, the design of the questionnaire for this research aimed to be short and concise. People are often impatient about answering long questions. If the number of questions is over 25 (i.e. more than three A4 pages) people may be put off participating. Therefore, the questionnaire survey was confined to 21 questions excepting personal information. As the written Chinese language is in characters, not letters, the seven-page English version of the questionnaire easily condensed onto two pages in Chinese.

Sudman and Bradburn (1983) suggest that the design of the questionnaire should consider three elements: questions should closely reflect the research aim; question type and wording should be appropriate; and the question sequence and overall layout design should also be appropriate. Following the above guidelines, and my research aim and analytical framework (see section 1.1 and section 2.5), my questionnaire included six sections as shown below:

Section 1 covers basic understanding of the terms ‘development’ and ‘disparity’ and an understanding of ‘development and challenges in China’. At the beginning of the questionnaire, this section aims to ask the less sensitive and confidential questions which can be answered easily and comfortably, giving respondents some confidence at the start and encouraging participants to complete the whole questionnaire.

Section 2 covers the economic dimension. Economic growth, as the core of development in many definitions, is also a key element of the research. Therefore, questions about economic information immediately follow the general understanding section. The questions in this section mainly target aspects regarding personal income, savings, consumption and investment. Although many researchers have shed light on income inequality and consumption disparity using statistical data (Yao *et al.*, 2005; Wong and Lu, 2002), interesting debates arise from the use of questionnaires. For example, in China many people, particularly government and industrial officials, teachers and medical staff, receive extra income in addition to their normal salaries. This extra income is labelled as ‘grey income’ by ordinary people (Lv, 2004). For example, ‘grey income’ teachers ask for payment from students for giving extra tutoring; lecturers receive consultation fees from commercial companies; medical doctors accept red pockets (money wrapped in red paper) from patients, illegal refunds from medicine producers or salesmen; and government officials take bribes, which include cash, commodities, free meals or other forms of entertainments. In addition to ‘grey income’, another benefit enjoyed by certain occupations is ‘non-currency income’, which refers to insurance for medication, education and unemployment. Clearly, all this extra income is closely connected with particular occupations, as it is said by ordinary people that ‘*power generates money and money exchanges for power*’ (Zhang-52-M-U-Worker-Liangzhou). Using another example, Mao once claimed that imperialism, feudalism and bureaucratic-comprador capitalism

are the three big mountains pressing on the head of the Chinese people. This was something my participants made fun of, saying that the new three big mountains now sitting on the heads of Chinese people are housing, education tuition fees and healthcare costs.

Section 3 focuses on social dimensions. This section includes questions about family and social community, education, social class stratification and social welfare. Along with rapid economic development, a social evolution is quietly emerging in Chinese society. Economic inequality has been widely recognised but increasing social inequality has not yet received similar contemplation. There are several reasons that social inequality ought to be highly considered. First, family linkages among Chinese people are very strong and people do care about their relatives' positions in a society. They may undertake selfish and sometimes even unlawful actions to help their relatives, such as opening 'back doors' for them using their power (Pei, 2001). Zhang (2005) asserts that higher social inequality is frequently connected to lower happiness. Second, large social inequality often leads to social instability and even more crime, which in turn has a negative impact on investment in the social environment and economic growth. Third, the increasing gap in social development may decrease the trickle-down effect of economic growth on poverty reduction (Brown and Park, 2000). For example, it is hard for an uneducated person to share in rapid economic development. On the whole, social inequality is equally as important as income inequality. Traditionally, relationships between family members or between neighbours are very close in China. With social and economic development, close relationships have been declining (Thornton and Fricke, 1989). The purpose of asking questions about this is to discern how social and economic change influences family relationships. This is also one of the central issues in the social sciences. During Mao's era, the classification of social classes was rather simple, with society divided into peasants, workers, intellectuals, cadres, soldiers and black five elements [黑五类份子]: landlords [地主]; rich farmers (peasants) [富农]; anti-revolutionists [反革命]; bad-influencers [坏分子]; rightists [右派] (Anagnost 2008). Nowadays, social class is still in transition (Bian, 2002) so it is very interesting to see how social classes have been redefined in China.

Section 4 focuses on political dimensions. Three key political elements were examined: governance, corruption and political stability. First, a key political condition for economic development is good governance (Tarschys, 2001) and one of the important dimensions of good governance is a low degree of corruption. Second, Yang and Zhao (2004) summarise an increasing volume of recent empirical research showing that corruption has negative influences on economic growth (e.g. Wei, 1997; 2000). Ahlin and Pang (2008) also point out that corruption has a negative influence on the rate of growth, but does not necessarily mean that corrupted societies cannot experience rapid growth. Here with this question I asked people's opinion about the local political environment to see how happy they were with their 'parent officials' (government officials always call themselves parent officials of ordinary people). Of course, the answers from the questionnaire only show one side of story. I later reviewed local governments' practical performance using various documents and then combined the information to make a fair judgement of local governance and the political environment. Third, Fan (2001) stressed that a minimum degree of political stability is required for entrepreneurial individuals to be assured of a stable relation between their efforts and their rewards. Dewoskin and Stones (2006) concludes that political instability, whether in the form of political turmoil, ethnic tensions or unpredictable changes in regimes and governments, causes economic stagnation. Fosu (1992) suggest that political stability is a prerequisite for economic development, and economic development is one of the prerequisites for political stability. Currently, many Western journalists and scholars, through various media, have suggested a few factors that may threaten China's political stability: the independence of Xinjiang, Xizhang (Tibet) and Taiwan, corruption and disparities. I included these factors in my questionnaire to see what Chinese people actually think about these threats.

Section 5 sheds light on the ideological dimensions. Beliefs, values and culture are discussed in this section. For example, although cultural elements can be gradually changed under socio-economic development, such as the emergence of global markets or the impact of mass media, once a cultural pattern has emerged and hardened, it will have a certain persistence of its own and will play an independent role in channelling and regulating behaviour for long periods of time. Tang (1991) concludes that cultural patterns influence subsequent behaviour. Tang (1991) also found that Confucianism, as the root of culture, has helped to promote economic growth in East Asia. In China,

traditional culture such as Confucianism was more or less destroyed during the Cultural Revolution under the instruction of the central government. It has been revived since the end of the Cultural Revolution and the revival of Confucianism and rapid economic growth started at the same time in China. Question 18 tries to ascertain the linkage between cultural understanding, economic development and disparity.

Background information on personal characteristics, such as gender, education, age and marriage, were solicited to aid the analysis of the results. In order to obtain a diversity of responses, it was deemed necessary to involve people with a range of different backgrounds. Compared with the other sections, the last section of the questionnaire asks for personal information related to more sensitive and confidential questions: place of residence, marital status, gender, age, ethnic group, education and profession. Thus, I put this section last on the questionnaire, in case some respondents chose not to proceed in answering the questions. Nevertheless, the objective of the last section was to allow an examination of the attitudes and opinions of people from different backgrounds, the possible relationship between background and economic status, and if personal status has any influence over attitudes towards development.

3.2.4 Interviews

‘Interviews are a form of human interaction in which knowledge evolves through dialogue, with the aim of acquiring qualitative descriptions of participants’ lives’, according to Kvale (2008:9). Furthermore, an advantage of interviews is that they present a wide range of information quickly, allowing a researcher to clarify issues and quickly follow up on unanticipated themes. Compared to a questionnaire, which fails to provide any explanation or analysis beyond the descriptive level, an interview can effectively compensate for these shortcomings (Rubin and Babbie, 2008).

There are different ways to structure an interview, ranging from very structured to completely unstructured, and the choice of interview technique largely depends on the research aims and objectives (McQueen and Knussen, 2002). I chose to use semi-structured interviews, both to create a degree of comparability between the different research locations, but at the same time to give participants a chance to explore issues they felt were important and in that way influence the direction of the discussion (May,

1997). As Kvale (2008) points out, in contrast to survey data, the discussion in semi-structured interviews helps to develop a thorough understanding of elements such as community values. This method is well suited to smaller target groups, with whom more open-ended, interactive discussions can be held.

The interviews were structured around a list of predetermined questions and themes to be covered, but at the same time there was flexibility to change the questions or the sequence of the questions to follow up on participants' answers (Kvale, 2008; Kothari, 2004).

Jones *et al.*, (1997) notes that the main argument against the use of the qualitative research methods is the relatively low sample numbers often encountered, which may lead to claims of findings being unrepresentative of the population. In order to bring a rational selection process to this method, at least two participants from each group were interviewed so as to obtain an unbiased view of their interests and concerns. The need to balance the gender of participants was also considered. Varying by income and social classes, a total of 20 people in each county were interviewed. The selection criteria included the following stipulations:

1. Interview two wealthy people and their enterprises to trace their respective ways of achieving success.
2. Interview some of the middle-class individuals, possibly two teachers and two doctors.
3. Visit and interview the poorest group of people to reveal the realities of their living conditions and the reasons for their position in society. Interview two peasants, two peasant labourers and two workers.
4. In order to explore the level of corruption of government officials and how this affects overall local economic development, interview two rural cadres, two urban cadres and two policemen, who are normally aware of the underside of society.
5. Interview two household business owners and individual manufacturers and merchants.

Each interview began with a structured introduction after which participants were asked for consent and permission to voice record the conversation. Unfortunately, similar to the focus groups, most of participants objected to this because they were concerned that the recordings might be used against them in an unforeseeable circumstance. Therefore, I instead took literal notes of the conversations on the printed interview guides. Then, participants were asked for the following personal details: place of residence, marital status, gender, age, ethnic group, education and profession. Although it is more common to ask participants for personal details at the end of an interview, I found that asking them at the beginning often helped to put the answers they gave in their particular context. Furthermore, I used semi-structured questions which were drafted from the questionnaire and these were the same for all participants. However, participants were encouraged to use their own words, as this can best convey a sense of reality and familiarity. Furthermore, in accordance with the research objectives, the interview questions were particularly focused on participants' own experiences and stories (see Appendix 3).

Three main factors arose when conducting interviews, which influenced the responses and should therefore be discussed in some detail here:

First, in choosing the interview location, a private setting was preferable to a public one (Kvale, 2008.). The research locations were intended to provide an informal and relaxed atmosphere in which participants would feel comfortable expressing themselves freely, particularly with respect to more challenging questions (Denscombe, 2007). The fieldwork showed that when interviewing wealthier people, such as cadres, teachers, doctors and policeman, the best place to do so was their office, as they were more talkative in a formal and quiet place. However, for peasants, peasant-workers, workers, and household business owners, it was better to conduct the interview outside as they were accustomed to working in an open place where they often utilise their skills to carry out their tasks, and in the same way, they felt more comfortable and talkative in such a location. Another benefit to the interview location being set in participants' own 'territory' was that it created a more informal atmosphere and also gave me an opportunity to learn about their environment, allowing me to discover more about the research sphere of interest (Flowerdew, R., and Martin, D., 2005).

Second, finding an appropriate gatekeeper was crucial in my field survey because the gate keeper affected my participants' willingness to be interviewed and also their willingness to talk. If I was introduced by a close friend, my participants felt free to talk. Otherwise, they tended not have much inclination to talk about their own story or experience. Therefore, finding an appropriate gatekeeper became one of the main tasks in my field survey.

Third, voice recording usually allows an interview to flow freely without interruption but the note-taking method can be inaccurate and takes time, meaning that respondents may behave seriously and speak slowly. Therefore, I prepared a digital recorder to record the process if participants allowed me to do so and took notes if they did not. However, most participants were very sensitive to recording and as a result, only 10% interviews were recorded digitally.

3.3 Analytical Methods

While there is a wide range of academic literature on how to collect qualitative data, much less is written about quantitative data analysis (Neuman, 2005) (for exceptions see Silverman, 2005; Bryman and Burgess, 2002; Marshall and Rossman, 1995). Similarly, scholars are usually explicit about how they collected their research data, but often remain silent about how they actually analysed it (Bryman and Burgess, 2002). In accordance with such recommendations, this section seeks to avoid this pitfall by making explicit the steps that were taken in the data analysis (Neuman, 2005; Darlington and Scott, 2003; Clifford and Valentine, 2003).

3.3.1 Quantitative Analysis: GIS and Statistical Analysis Methods

GIS has been widely employed in both physical and human geography (Fotheringham and Rogerson, 2013; Goodchild, 2000). In my research, this method has been used particularly because it can analyse and display county-level data. In particular, it enables the variations in inequalities or disparities across China to be visibly and distinctively demonstrated by different levels of shading. This also means spatial correlations can be undertaken relatively simply, and comparisons with other data sources can be made. ArcInfo 9.1 software, which was produced by ESRI in 2005, was employed for all of the further analysis. This is the professional version of the

ArcGIS package, which has the full analytical, statistical, mathematical and modelling functionalities.

Yu and Wei (2003; 2008) have previously used GIS to study features of China's economy at a provincial level, but this approach has not yet been extended to the county level. The provincial borders are unduly broad administrative divisions and do not match geographical divisions, and the statistical data they employed were frequently based on averaged information for each province. Therefore, their studies failed to identify the real distribution patterns of economic development across China. The core GIS analyses of this research concentrated on the county level, with over 2000 counties in total, as county division is determined more scientifically, being based on its population distributions and geographical characteristics that facilitate easy management and administration. Given that there has so far been no systematic research on differences in economic development undertaken at a county level, this research revealed the detailed spatial distribution pattern of the uneven economic development of China, which may offer an alternative account to that suggested in current regional development studies. Existing regional development theories and models mentioned in Chapter 2 were also examined and discussed using the new results. A new regional development model, based on the county-level study, was then proposed.

Moreover, previous analyses have mainly concentrated on pure economic statistical data and lack the full incorporation of social and other vital factors that have significant impacts on economic development (Postiglione, 2006; Lin, 2003; Hu, 2002; McMichael, 1996). This research overcame the existing problem in regional economic development studies by incorporating social, environmental and physical geographical data into the analyses and producing a series of GIS maps at the county level, so that critical comparisons with other researchers' results could be made. Informed interpretations were then formulated to explain the diversity of regional economic growth based on multi-factor orientated GIS models. The great advantage of using GIS is that the large database, together with its spatial information, can be displayed, analysed and modelled in various mapped or graphic forms, which provide effective visual outcomes so that comparisons and conclusions can be drawn in a straight forward manner (Maguire *et al.*, 2005). This research involved large quantities of

statistical data at the county level as well as other regional geographical information, and most importantly all these data are highly spatial, so GIS is an ideal analytical method for this research.

After statistical data obtained from NBS had been input into Microsoft Excel format manually, they could be conveniently transformed into an ArcInfo GIS database, and then linked to the corresponding digitised spatial map of China in ArcGIS format (obtained from the China Centre, University of Michigan), based on the 2000 county-level administration map. Then each index of data can be displayed visually in map format using different classification methods, which is very appropriate for displaying the spread of variable values. Rather than making simple displays, my research incorporated appropriate information into the analyses. When displayed, the data of each index themed, simply showing the variations in actual values among all counties.

In 1996, the Chinese government embarked on a drive to end data falsification by revising the Statistic Law, as a result of which innovative changes were made to the data collection system. New statistical data systems, namely census and sample survey, have been added to the long and existing regular reporting system, which has significantly reduced the role of the traditional reporting system and emphasised the importance of censuses and sample surveys: 'Statistical investigation should collect and compile statistical material through regular censuses as the basis, routine sample surveys as mainstay, and unavoidable statistical reporting, key investigations, and comprehensive analysis as supplement' (NPC, May 15, 1996, quoted from Holz, 2004). In addition, in 1997 the NBS cooperated with the CCPCC Disciplinary Commission and the CCPCC Organizational Department to draft legislation cracking down on data falsification. The offices of the CCPCC and State Council formally issued the document in February 1998 (CCPCC/SC, February 16, 1998), warning local officials not to falsify statistics or order the falsification of statistics because of a difference between reality and their targets, as they were otherwise at risk of party and administrative disciplinary measures. Given such innovative changes to the data collection system and the introduction of a series of disciplinary measures against data falsification, it is believed that China's overall statistical data since 1996 are reasonably accurate, more or less reflecting a true picture of its realities (Wong, 2001).

Thus, in order to avoid any inconsistencies in data analysis or misleading analytical results, this research mainly employs statistical data from between 1996 and 2005, derived from China's Statistical Yearbooks. The reasons for choosing the 2000 county administrative map are that, firstly, it is the most up-to-date administrative map by 2008. Secondly, 22 counties were promoted to cities between 1996 and 2000 due to rapid social and economic improvements but their administration boundaries remained unchanged, so this has no influence on the county-level GIS analysis. Furthermore, given that these are a relatively small number of counties in comparison with the total, they do not have much influence on the overall analysis. However, it has to be noted that Chongqing, together with its surrounding 27 counties, was granted autonomous city status in 1997.

3.3.2 Qualitative Analysis: Data Coding and Analysis

Qualitative data analysis is a dynamic process that is an ongoing and continuous part of the entire research (Darlington and Scott, 2003; Bryman and Burgess, 2002). Although there are different understandings about what data analysis entails, it is usually about systematically identifying patterns, relationships and concepts in the generally imprecise, diffuse and context-based qualitative data, and then interpreting and organising them into theoretical explanations (Neuman, 2005; Darlington and Scott, 2003).

Bryman and Burgess (2002) usefully distinguished between analysis in the field and analysis after data collection. According to them, during analysis in the field researchers engage in preliminary analytic strategies, whereas analysis after the fieldworks about identifying and interpreting patterns through a coding system. Also in my research, analysis began as soon as the first data was collected in the field. In the initial stages of the field research the analysis above all served to revise the different research methods and rephrase some of the questions asked. In later stages it served to focus and elaborate on emerging themes by asking participants for further explanation about them. After returning from the field, a more systematic analysis of the data began. The bulk of the data consisted of written notes on 15 focus groups, 500 questionnaires and written notes on 100 interviews (see examples in Appendices 1, 2 and 3).

To analyse the questionnaire data in a systematic manner, a database was designed in Microsoft Excel, which followed the questions of the questionnaire format, with a separate column for each variable and each individual question, while at the same time leaving room for additional questions. Typing all the data into this database was a major time investment, but it offered me the opportunity to become immersed in the data in the transition between field research and further analysis, and a chance to get a feel for the data as a whole. As Bryman and Burgess (2002) and Darlington and Scott(2003) claim, a common technique used for qualitative analysis is coding, which is the process of categorising and sorting data by creating conceptual categories and assigning them to selected data. Therefore, close-ended answers were coded as follows:

1. Single variable: use numerical values 1, 2, 3... to represent A, B, C...respectively and make input as one variable.
2. Multiple variables: use numerical value 1, 2, 3... to represent A, B, C... respectively and make input as multiple variables.
3. Ranking: define multiple variables according to ranking using numerical values.

Furthermore, throughout the input process preliminary themes and patterns were identified and extracted from the data. Once the database was in place, it allowed for the data to be sorted according to fixed variables such as gender, age, location and occupation, as well as for descriptive statistics to be derived and selected areas or questions to be searched for specific words or expressions. Open-ended descriptive data from focus groups, interviews and questionnaires were also digitised, but just typed into plain text. After all the data had been digitised, the preliminary themes and patterns were organised in accordance with the research objectives into initial conceptual categories and subcategories, such as income, expenditure, savings and investment, social community, social class, social welfare, governance, corruption and values. Subsequently, these were then iteratively refined through continuing data analysis and are reflected in the structure of the empirical chapters of this thesis.

3.4 Conclusion

Kimmel (1988: 30–41) and Hay (2006:112–128) have explained the importance of ethical principles in research. Many professional bodies, state agencies and universities define relevant ethical principles as ‘honesty, objectivity, carefulness, openness, respect for intellectual property, confidentiality, responsible publications, responsible mentoring, respect for colleagues, social responsibility, non-discrimination and human subject protection’ (Resnik, 2011:2-6). As a Chinese woman studying in the UK, when I returned to China to undertake sensitive research, being honest, objective, careful, open and avoiding misconduct are key ethical considerations for researchers trained in UK universities (as noted in Royal Holloway’s research ethics guidelines). Research misconduct may result from environmental and individual causes. ‘The deviations from research norms may also occur because the researcher simply did not know or have never thought seriously about the ethical norms in research’ (Resnik, 2011: 8–9). For example, in China, using and presenting participants’ photos and answers from research is not traditionally regarded as an issue. Since studying in the UK, I have realized the importance of privacy. Therefore, during the fieldwork I asked the participants for their permission to use and present their photos and answers for research purposes, in order to avoid research misconduct.

In order to fully understand and explore the economic, social, political and ideological dimensions of China’s development and disparities, both theoretically and practically, this chapter has justified how the research aims and objectives evolved into a specific design, especially focused on three parts. The first part explored how a large, county-scale database was collected and processed. The second part explained the design and implementation of a field survey of local residences’ data through focus groups, questionnaires and interviews in five counties of three provinces. The third part examined how statistical data and field survey data were analysed, which stressed both quantitative and qualitative analytical methods. This chapter also clarified the rationale, strategy and processes behind the research design and justified the choices that were made. The chapter has also demonstrated the implications of the research methods, such as the use of GIS software to visually and clearly demonstrate and analyse spatial variation in inequalities across China. Furthermore, the chapter

addressed some challenges of my research, such as collecting and processing such a large data set and making an interview appointment with a wealthy person. In addition, the chapter discuss the reliability of the database. Before moving to the outcomes of this data analysis as presented in the four main analytical chapters, the next chapter examines how China's history between 1949 and 1978 has influenced contemporary China's ideological, social, political and economic spheres.

Chapter 4 Spatial Distribution of Development: Geographical, Historical and Political Context

4.1 Introduction

The impact of the years 1949 to 1978 is still felt in China today. It follows that, in order to more deeply understand and analyse the post-1978 development of China, it is essential that the pre-1978 situation and its impact on China's ideological, social, political and economic spheres is examined. Therefore, this chapter specifically addresses the spatial distribution of regional development in the period between 1949 and 1978, providing a historical background to the disparities in China.

China has experienced a long history of both development and disruption caused by wars; the country and the people were extremely impoverished in periods such as the Han and Tang dynasties. This chapter only examines the period between 1949 and 1978 because the communist country was founded with the launch of the People's Republic of China (PRC) in 1949, led by Mao Zedong, Chairman of the CCP (Perry, 1999). Both the communist country and Mao Zedong have dramatically influenced Chinese values, attitudes and behaviour under the specific political, social, economic and ideological circumstances governed by the communist party. In 1978, Deng Xiaopin launched the open-door policy to reform the economic system even though China was governed by the communist party (Perry, 1999). Therefore, the aim of this chapter is to explore political, economic, social and ideological development prior to 1978, especially China's regional development and its spatial distribution, which provides a background for the following chapters.

There were two extraordinary historical events in China between 1949 and 1978: the Great Leap Forward (1958-1962) (Chen, 2010) and the Cultural Revolution (1966-1976) (Barnouin and Yu, 1993). Around these two events, China's modern history between 1949 and 1978 can be subdivided into four shorter periods chronologically:

- 1949 - 1957: Construction of the PRC and the transition to socialism.
- 1958 – 1965: The Great Leap Forward and the readjustment and recovery.

- 1966 – 1976: Ten years of the Cultural Revolution and the ‘third front’ construction.
- 1976 – 1978: The post-Mao era and pre-open-door policy.

China’s economic, social, political and ideological features were quite different in each of these periods. Therefore, these features are examined in this chapter and provide a more detailed understanding of the regional geography of China and the national shifts that characterised each period.

4.2 Construction of the PRC and the Start of the Regional Balanced Development Strategy (1949-1957)

In 1949, huge national disparity existed, although its features were different from those of the present (a description of current disparity is provided in Chapter 5). In general, China was very weak and poor economically. It was seriously lacking in capital; inflation reached its apex in the spring and summer of 1949 (Brugger, 1981); unemployment was widespread in the cities; the instruments of production were in poor shape in both cities and the countryside; and agricultural reserves were extremely low. A large amount of China’s infrastructure was devastated by years of war; public and private buildings were shattered or damaged; and roads, railways and bridges were in ruins. As a result, it was very difficult to get to many remote rural areas (Brugger and Reglar, 1994).

Spatially, different regions experienced unequal and unbalanced economic development. The core economies of several coastal centres were dominated by the industries previously set up by Western countries. The northeast, previously seized by the Japanese, was oriented toward a colonial-style economic expansion. Compared to the coastal provinces, however, the majority of the interior areas were still focused on traditional agriculture. As a result, coastal provinces were relatively rich and well developed, whereas the inland provinces remained very poor.

Accordingly, from a social viewpoint, there were not only widespread malnutrition and public health problems but also misery and poverty among millions of people (Fan, 1988). Ideologically, the traditional cultural adherents of

Confucianism were very much alive in most regions, especially in rural areas and small and middle-sized cities; Confucianism was an active influence on general ideology and behaviour in the social life of the majority of Chinese people (Tang, 2001). However, large, modern cities, like Shanghai, had been influenced by the West since the nineteenth century. People were concerned with personal careers, technological progress, monetary values, individual freedom and a culture generally disinterested in Confucianism. At the same time, there were groups of people who belonged to the revolutionary movement and believed in total socialism and communism (Nee, 1991).

These inequalities were partly caused by the direct result of long-term civil and foreign wars (Yang, 1998) and partly by the legacy of a century of foreign domination by countries such as Britain, France, Russia and Japan. Therefore, the CCP faced enormous problems and challenges arising from economic, social and ideological factors (Perry, 1999).

Between 1949 and 1957, the CCP attempted to transfer China, on a national scale, directly from a semi-feudal and semi-colonial condition to a socialist/communist system. The assumption was that 'everybody is equal' because this desire was not only urged by the communist ideology but also by the people's anticipation that the new government could create a new era after the long years of war (Brugger, 1981). Therefore, in order to reward people's support during the civil war against the Chinese National Party (Guomintang), the CCP moved quickly to institute changes and to eliminate inequality between people and regions. Consequently, a balanced regional development strategy was launched and aimed at providing a boost to later economic reform because the CCP and its leaders had very little experience of handling such huge tasks.

Spatially, in order to reduce the inequality between regions, China started to develop interior provinces during the period of the 1st. Five-Year Plan (1952-1957). Among 156 projects aided by the USSR, Chinese central government placed the vast majority in interior provinces (Figure 4- 1) (Strauss, 2007). As well as these projects, nearly 5000 kilometres of new railway tracks were laid down and 14000 kilometres of roads were built, which created a much larger circulation of agricultural and industrial products (Barnett, 2001).

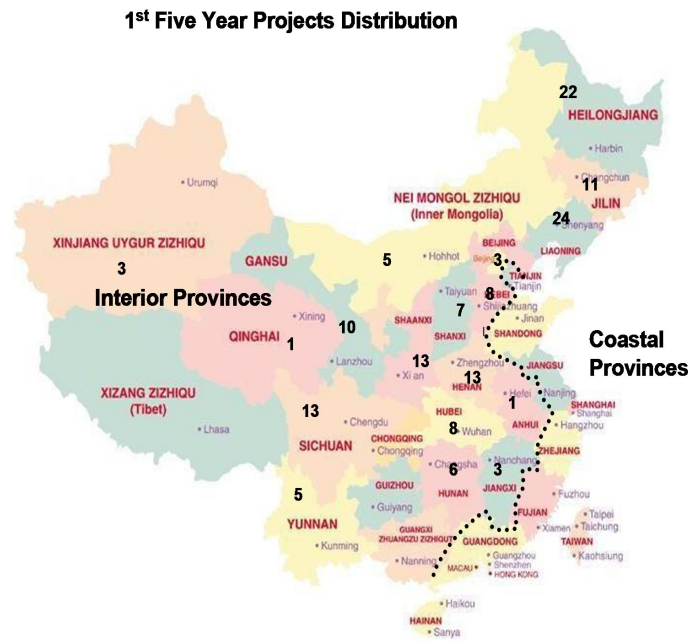


Figure 4- 1: 1st. Five-Year Plan Project Distribution (Source: author)

However, the success of the balanced regional development approach during this period has been widely debated. Its supporters suggested that it was the right strategy because China's economy made spectacular progress between 1952 and 1957. For example, Chan (1992) proposed that under this system international relations were dominated by the confrontation of capitalism and socialism; Mao brought China into the socialist camp and pursued China's overall development in the Soviet model. In industry, the CCP used the Soviet model together with their own experience to gain a firm foothold in the factories by deploying army leaders. The railway systems, roads and river channels were gradually repaired, largely due to help from the army. By the mid-1950s, the government had assumed total control of all enterprises. Lieberthal (1995) suggested that, overall, these projects invested in central and western China greatly promoted economic development in the western region, filled the gap between interior provinces and coastal provinces and laid a preliminary foundation for industrialisation in China.

In opposition to the above supporters, some researchers, such as Shabad (1972), regarded the 1stFive-Year Plan as having caused huge imbalance between the large

production units and the small and middle-sized industrial units; between heavy and light industry; and between cities and rural areas in conflict with its initial aim of achieving equality. Shabad (1972) argued that the 1st Five-Year Plan favoured heavy industry, particularly the means of production, in the great tradition of Stalin. Spatially, the main effort was directed toward regions in the interior, whereas in 1952 three quarters of the industrial potential was still concentrated on the coasts for historical reasons. This argument is problematic. First, China had just started to launch projects in 1952 and, therefore, it is not surprising that most of the industrial potential was still concentrated on the coasts in 1952. Second, the initial aim of the 1st Five-Year Plan was to achieve economic development equality between coastal and interior provinces. Therefore, it was the early stage of industrialisation that caused the inequality between urban and rural areas. Third, the imbalance between heavy and light industry did not arise because of the 1st Five-Year Plan but because of the overall development model. Both economically and politically, the Soviet Union was a key model for Chinese development by 1953, in that it favoured heavy industry at the expense of light industry (Lardy, 1987). Therefore, the 1st Five-Year Plan made impressive progress in spite of some huge imbalances.

At county level, the CCP introduced the following three reforms and improvements (Lardy, 1987). First, the new government adopted the Agrarian Reform Law in 1950. Rather than simply distributing land to landless peasants, the CCP encouraged peasant courts (led by party representatives). As a result, two to three million landlords and their family members were executed (Stavis, 1976:384). This was similar to Stalin's policy of eliminating the Kulaks as a class, although estimating the Kulak death toll is complicated (Conquest, 1991). As a result of this in China, the landlords who represented the rural elite have effectively disappeared from the villages. In the early 1950s, the average land held by each family was as high as 2.3 acres in the north and 0.5 acre in the south, owing to different population densities in the north and south (Strauss, 2007). Ding (2003) suggested that the Agrarian reforms had greatly contributed to an increase in agricultural production in the short run. The popularity of the CCP was accordingly high among the rural population in the early years of CCP rule. However, Teiwes and Sun (1993) challenged the view that the achievement in agricultural production occurred not only because of land reform but also because of the positive impact of ending the civil war. In fact, it is difficult to be

sure of the reason for the improvement because of a negative correlation between land reform and economic development, as in the case of Taiwan (Cheung, 1969).

Second, in order to meet long-standing needs for basic health care in rural China, the CCP built clinics in each county and trained health workers in order to decrease the impact of some of the most common diseases such as schistosomiasis. Young people called ‘barefoot doctors’ were trained to be familiar with and report diseases and to give talks at the village level on the importance of sanitation and hygiene (Lampton, 1979). The cost was modest; however, it was the first time that China was able to afford and provide health care at a rudimentary level. These efforts had a significant outcomes and life expectancy had risen from 36 years of age prior to 1949 to 57 years by 1957. Furthermore, life expectancy reached 63 years in 1975 (Bergaglio, 2001).

Third, the emphasis was on popular education and scientific and technical studies. Literacy campaigns were organised in factories in poor sections of the cities and villages. Between 1949 and 1952, the number of students doubled from 24 to 51 million primary school pupils and from 1 to 2.5 million secondary school students (Hannum and Xie, 1994). Plans were instituted to provide free universal elementary education throughout the country, although by the 1970s this goal had still not been met. Ideologically, the study of Marxism became compulsory at all levels in schools and universities.

The visionary goal of these three reforms was to ensure that all would be equal and all needs would be met. Although reforms were presented through mass campaigns and led by local cadres, they were welcomed by the vast majority of people (Hiniker, 1977) because they normally accorded everyone equality of status with respect to land (a basic physical productive condition) as well as health and education (basic social factors for human capital). Thus, these reforms have deeply influenced China’s overall structure since then, right up to the present. As a result, for example, the county data show that registered student numbers and have a relatively even the number of hospital beds spatial distribution pattern across China compared to other economic indices for 2006 (see Figure 5-10 and Figure 5-11).

In comparison with the later ‘disorder’, the 1st.Five-Year Plan resulted in impressive progress in spite of the huge imbalances it caused. However, these inequalities contributed greatly to the sudden turning point in 1958. As the leader and founder of the PRC, Mao could not face criticism when he called upon the CCP cadres to offer their comments and criticisms to his policies in 1956 (Domenach, 1995). Instead, the sharpest critics were detained and many individuals found themselves accused of being ‘rightist’ and thus opposed to the party. In order to end the criticisms, Mao moved forward with plans for the rapid shift of all of China to the commune system; he announced that China would now begin a ‘great leap forward’ in order to catch up with European powers like Britain in just 15 years (Karnow, 1984). As MacFarquhar (1993) suggested, politics dominated and altered China’s economic and social development, as the balanced regional development strategy was replaced by the Great Leap Forward. As a consequence, the Great Leap Forward launched by Mao and his supporters in 1958 became the first great cataclysm to hit the PRC.

From encouraging criticism to being accused of ‘rightist’ views, Chinese people over 60 years of age still vividly recalled their tough experiences during the interviews that I undertook in order to write this thesis. They and their children faced severe discrimination, including when it came to studying, employment and even marriage.

‘I was accused of being rightist because I criticised our party. I was expelled to a rural area in Shangxi. I could not suffer the discrimination and mental abuse so I attempted suicide once. Later, I spent most of my spare time self-learning English and French. Thanks to Deng Xiaopin’s policy in recruiting university students in 1978, I had the chance to pass examinations to enter university as a graduate student at the age of 37. Since then, my life has totally changed. I still believed in communism; our party is a great party and always corrected its mistakes.’(Chen-69-M-U-Professor-Wuchang).

Ideologically, therefore, some people learnt their lesson and never criticise the government and party. Partly because of this, I found that during interviews people over 60 years of age were very cautious in making comments about the government and its policies.

4.3 The Great Leap Forward and Readjustment (1958-1965)

Nationally, in order to reduce the inequalities between heavy and light industries, between industry and agriculture and between urban and rural, the beginning of the Great Leap Forward aimed to break with the heavy-industry priorities of the Soviet model and shift attention to agriculture (Brown, 2010). Initially the aim was to develop agriculture because its progress would ensure increased profits, help to promote industrial culture, stimulate independent subsistence in rural areas and lessen inequality between urban and rural. It was necessary, said Mao and his supporters, to engage all the people's energies in combating backwardness and attacking its roots in the countryside. While there was no problem with the aim, achieving it proved to be problematic because the Great Leap Forward was such fundamentalist and untried political choice?

A new commune system was created by the Great Leap Forward centred on the countryside and a few urban areas. By the autumn of 1958, about 23,500 communes, each averaging 5,000 households or 22,000 people, had been designed as a result of planning at the county scale (MacFarquhar and Fairbank, 1991). For example, a typical commune consisted of a small-scale local industry, a self-supporting agricultural community, marketing, administration, a medical system, schooling and local security. The commune also had communal kitchens (see Figure 4- 2), mess halls and nurseries. The new centralised economy demanded certain quotas from each commune. The state would collect a percentage from each commune while the remainder would sustain the commune members. However, ignorance of the rudiments of agriculture on the part of the cadres resulted in advice on planting techniques that led many communes into agricultural disaster. Instead, the cadres reported impossibly high quotas to please their superiors and demonstrate their enthusiasm for the new system (Chang and Wen, 1997).



Figure 4- 2: Communal kitchens in 1958 (Source: Xinhua net, 1959)

Misjudging the local cadres and their reporting of impossibly high quotas, Mao and his supporters for the most part believed that more could be achieved in the 2nd Five-Year Plan (1958-62) than in the 1st.Five-Year Plan (Meisner, 1977). Therefore, the 2nd Five-Year Plan set out to continue industrial construction, expand the shares of collective ownership, reinforce scientific research and development, strengthen national defence and improve people's living standards and cultural consciousness (Wang and Yao, 2003).

Nevertheless, the Great Leap Forward ended with an economic and agricultural catastrophe. During the 'Three Bitter Years', the 'national grain output plunged by 15% in 1959 and by another 16% in 1960 and 1961' (Bernstein, 2006:428), which was a devastating blow to rural China. However, the unnatural mortality figures were contested by researchers and because no official figures were published, the use of various calculation methods and different data resources led to different values. For example, Riskin (1998) estimated the lowest figure (16.5 million) and Yang (1998) the highest (30 million). Between these, Bernstein (2006) suggested 18.48 million and Ashton *et al.* (1984) claimed 29.4 million.

For Chinese people who are now more than 50 years old, the experience in those three years was a nightmare. During one interview I undertook, Mr. Wang told me:

'The three Bitter Years were a nightmare. Lots of people died because of starvation. Sometimes, we had to eat tree bark and even a kind of soil in order to survive. My mother died in 1961 because she could not digest these things. She was very piteous. I hated myself for being so helpless' (Wang-54-M-R-Peasant-Jinchang).

The reasons for the catastrophe were partly natural disasters and partly the actions of party and government (Riskin, 1998). For example, Yang (2005) suggested that the correlation between participation rate in the communal kitchens and the death rate was robust. Spatially, Table 4- 1 shows that the death rate in the interior region was higher than in the coastal region because of high participation rates in the communal kitchens in the interior. This conclusion is consistent with Riskin (1998) and Yang (2005).

Table 4- 1: Death rate between 1956 and 1963 at the provincial level (Source: Population N., 1989)

Province	Participation rate in communal kitchens (%)	Death rate (%)			
		1959	1960	1961	Average 1959-1961
Beijing		9.7	9.1	10.8	9.87
Tianjin		9.9	10.3	9.9	10.03
Hebei	74.4	12.3	15.8	13.6	13.9
Shanxi	70.6	12.8	14.2	12.2	13.07
Inner Mongolia	16.7	11	9.4	8.8	9.73
Liaoning	23	11.8	11.5	17.5	13.6
Jilin	29.4	13.4	10.1	12	11.83
Helongjiang	26.5	12.8	10.6	11.1	11.5
Shanghai		6.9	6.8	7.7	7.13
Jiangsu	56	14.6	18.4	13.4	15.47
Zhejiang	81.6	10.8	11.9	9.8	10.83

Anhui	90.5	16.7	68.6	8.1	31.13
Fujian	67.2	7.9	15.3	11.9	11.7
Jiangxi	61	13	16.1	11.5	13.53
Shandong	35.5	18.2	23.6	18.4	20.07
Henan	97.8	14.1	39.6	10.2	21.3
Hubei	68.2	14.5	21.2	9.1	14.93
Hunan	97.6	13	29.4	17.5	19.97
Guangdong	77.6	11.1	15.2	10.8	12.37
Guangxi	91	17.5	29.5	19.5	22.17
Sichuan	96.7	47	54	29.4	43.47
Guizhou	92.6	16.2	45.4	17.7	26.43
Yunnan	96.5	18	26.3	11.8	18.7
Shannxi	60.8	12.7	12.3	8.8	11.27
Gansu	47.7	17.4	41.3	11.5	23.4
Qinghai	29.9	16.6	40.7	11.7	23
Ningxia	52.9	15.8	13.9	10.7	13.47
Xinjiang		18.8	15.7	11.7	15.4
National		14.6	25.4	14.2	18.07

Realising that it would be difficult to maintain the pace of economic development as envisaged, the State Planning Commission of the central government had to bring forward the policy of readjustment, restructuring, consolidation and improvement (Dirlik and Meisner, 1989). During this time there was still a political and ideological struggle between the Left [左] and the Right [右]. Each camp made a different assessment of the Great Leap Forward and had a different idea of what path should be taken afterwards. The rightists, such as Liu Shaoqi and Deng Xiaoping, felt that, above all, the Great Leap Forward was an economic movement that had failed drastically. However, the Left saw the Great Leap Forward as a new mode of development which had the potential to demolish the three big inequalities at that time

between mental and manual, between worker and peasant and between urban and rural, even though this was a long-term objective. In 1961, the political majority began to swing to the Right; Liu and other top leaders such as Deng Xiaoping, Chen Yun, Peng Zhen and Bo Yibo dealt with the disastrous aftermath of the Great Leap Forward and initiated a series of corrective measures (MacFarquhar, 1993). In terms of industrialisation, reasonable and well-organised planning was implemented and much emphasised; ideological fever and mass movements were no longer the controlling ideas. Slowly, China began to recover. Another notable important change after 1961 was the party's greater attention in strengthening defence and internal security, which deeply influenced regional development (Naughton, 1988) (see the more detailed analysis in section 4.4).

The Great Leap Forward had many economic consequences including a shortage of food and raw materials for industry; overproduction of poor-quality goods; worsening of industrial plants through mismanagement; and the collapse and demoralisation both people and government at all levels. However, the most important lesson from the Great Leap Forward for party officials and scholars is that economic law is much more important for economic development than political commands which might impede economic growth.

4.4 The Ten-Year Cultural Revolution (1966-1976)

Even today on the wall of an old house in Guangdong (one of the richest provinces: see Figure 4-3) there is still the remnant of a propaganda slogan that was put up during the Cultural Revolution. The slogan reads 'Highly Hold the Great Banner of Mao Zedong Thought and Bravely March Forward'. As one of the most extraordinary events in this century, the Cultural Revolution, which lasted for ten years, is best understood as a tragedy not only for individuals and society but also for the nation as a whole. A vivid description of it can be found in the book *Wild Swans: Three Daughters of China*, authored by Jung Chang.



Figure 4- 3: Cultural Revolution Slogan (Source: author)

MacFarquhar (1993) pointed out that the origin of the Cultural Revolution was Mao's restless quest for revolutionary purity which led him to over emphasise and misjudge the political and social problems confronting China in the mid-1960s. His unique status in the CCP gave him enough power to unleash powerful social forces. He was confident that the initial challenges and problems would soon die out. However, on the contrary, the Cultural Revolution dragged the whole nation into violence and chaos. The economy was severely damaged, careers were disrupted, spirits were broken and lives were lost.

From a different point of view, Wang and Wong (1998) considered that the Cultural Revolution was used as an instrument to re-establish order and begin the reconstruction of political institutions. At that time, the CCP faced a big challenge due to the high levels of urban protest and widespread dissatisfaction with a variety of social, economic and organisational policies. If effective reforms cannot be undertaken, a political crisis may produce violence and disorder, or even rebellion and revolution, because of the pressure of economic transformation, political mobilisation and social change. These circumstances forced China into deep disorder until military forces became involved.

The violent phase of the Cultural Revolution, from 1966 to 1969, deeply marked Chinese society (Barnouin and Yu, 1993). As to the estimated half a million deaths, even today no one can be sure of the precise figure because no official statistical data have been published concerning deaths as a result of torture, beatings and enforced suicide. In addition, thousands more were brutalised as a result of the frenetic activities of the Red Guard faction who caused untold physical and psychological damage. For example, in February 1968 the editorial section of the *Blood on Bayonet* magazine of the Capital Red Guards designed a typical poster (Figure 4-4), which reads ‘we will crash the "dogs’ heads" of those who dare to oppose Chairman Mao!’

The survey for this research found that participants in the age group 50-60 had been more deeply affected than other age groups of people because the latter were Red Guards during the Great Cultural Revolution. Inspired by Mao’s call to action, they began their onslaught on traditional Chinese culture. The following quotation from one of my interviews is consistent with research conclusions such as those of Karnow (1984).

‘I deeply regret what I did during the Cultural Revolution. I smashed, destroyed, burned and attacked ‘old culture, old ideas, old customs and old habits’ with great enthusiasm. I imposed humiliating verbal abuse and public beatings on my teachers. I physically and psychologically attacked other people who are now believed to be innocent. I lost 10 years’ education. I got nothing.’(Wang-58-M-U-Retired Driver-Liangzhou).



Figure 4- 4: Cultural Revolution Poster (Source: www.sinohits.net)

Overall, Maoist policies exacted an enormous human cost. Misguided policy decisions of the Great Leap Forward claimed millions of lives. Mao himself chose the policies which led to human disaster and he cannot be absolved of responsibility for the outcomes (Womack, 1986). What is unique about the Cultural Revolution is that this political crisis was deliberately induced by the leader of the regime itself.

The country also suffered economic disorder. Production fell as workers spent their time involved in political struggle because most of these struggles took place in urban areas. Agricultural production also fell in many areas and income stagnated. One of the few positive developments was that the urban turmoil brought opportunities for small town and village enterprises that produced necessities like chemical fertiliser and smaller consumer goods, which city factories, absorbed by political activity, failed to supply (Klatt, 1970).

The 3rd. Five-Year Plan also called for the prioritisation of national defence in the light of a possible major war either with Russia or with India, actively preparing for conflict and speeding up construction in three key areas: national defence, science and technology, and industrial and transportation infrastructure. Between 1966 and 1975, 52.7% of national investment in the 3rd. Five-Year Plan and 41.1% of national

investment in the 4th Five-Year Plan was put into the ‘Third Front’. The total investment amount reached 117.341 billion RMB (Ju, 2014).

Spatially, the objective of the Third Front construction was to create an entire industrial system within this naturally remote and strategically secure region. With both security and economic development in mind, the programme was created to provide a strategic reserve when and if China was drawn into a war (Naughton, 1988). China carried out a massive programme of investment in the remote regions of south-western and western China. Figure 4-5 shows the scope of the Third Front. China’s potential enemies included the USA, USSR and India. China bordered the USSR in the north and India in the southwest; and the USA conducted a war with Vietnam between 1964 and 1971. Therefore, most Third Front projects were undertaken far from China’s borders and were widely dispersed, often in hidden mountain areas. The area included all of the provinces of Sichuan, Yunnan, Guizhou, Gansu, Qinghai and Ningxia; a portion of Shanxi; and western, mountainous portions of Henan, Hubei and Hunan, comprising about one third of the country in total.



Figure 4- 5: The Scope of the Third Front (Source: author)

Basically, the Third Front greatly increased the cost of industrialisation. The projects of the Third Front were built not only in provinces more distant from existing

industrial centres but also, even within those provinces, individual Third Front factories were located in remote locations on purpose, which further added to costs. According to Growth Pole Theory (Perroux's, 1955), projects launched in remote locations cannot benefit from the availability of a range of supporting services in the urban area. As a result, projects based outside of major urban areas take longer, require greater expenditure and make any complex project difficult to carry. Thus, most of the projects were considered to be economically inefficient (Naughton, 1988).

However, Ju (2014) argued that some projects resulted in achievements that would eventually benefit China's long-term development strategy. For example, a new railway network linking previously inaccessible parts of China; exploitation of previously unknown or neglected ferrous and non-ferrous mineral resources; and the construction of some reasonably efficient manufacturing enterprises.

4.5 Post-Mao and Pre-Open-Door Policy (1976-1978).

Since the establishment of the PRC in 1949, China's overall social and economic development has been governed by Mao's ideologies or a Maoist development model. The core content of Mao's development ideas was based mainly on Soviet experience and planning. Mao adopted the same two key sets of guiding principles that underlay the Soviet development strategy: principal roles for politics above economics; and radical equality and mass mobilisation to sustain permanent revolution (Fan, 2003). In addition, Mao added another principle to China's economic policy making: the principle of regional economic self-sufficiency. This declares that a region should be self-sufficient not only in food production but also in industrial goods. The reason for adopting self-sufficiency was because China was internationally isolated from both Western countries and Soviet Russia. As a result, this third principle undoubtedly had the greatest impact on China's regional economic outcomes.

Mao's development ideology, especially the self-reliance principle, had several virtues. As Karnow (1984) concluded, the self-reliance principle overlapped with the egalitarian principle to lead to reduced provincial inequality. As a consequence, Eisner (1977) suggested Mao had identified one of the key social contradictions to be eliminated in the new China. Yang (1990) suggested another virtue, which is that the

biggest beneficiaries of the self-reliance principle were the poorest provinces (because they were overwhelmingly agricultural). This policy was favourably supported by many senior party leaders because during the civil war, the Kuomintang (National Party) had driven the CCP out of urban areas and into the poorest and most remote mountainous or border regions, where the CCP had established their bases and set up good relationships with local communities. Therefore, the majority of the party leaders were keen to rebuild these provinces in order to show their appreciation to the local people and compensate them for the sacrifices they had made.

In economic terms, despite considerable agricultural growth living standards in rural areas in the late 1970s were said to be much the same as in the 1950s and the amount of cash paid to commune members had declined. NBS (2000) showed that the per capita availability of raw grain in 1977 was 226 kilograms, only slightly higher than the 1957 figure of 214 kilograms. However, cadres were often unwilling to seek relief grain when their units were entitled to it because of bureaucratic obstacles or because such action would suggest they had failed in the self-reliance rubric.

Statistical data also reveal major problems in industry. It became apparent that many commune-level industries, of which China's leaders were very proud, were just as wasteful as the county-level industries of the late 1960s. Local industries in general had performed inefficiently and decentralisation had allowed enterprises to be established by local authorities without any reference to macro-economic rationality. There was much wasteful duplication and the proliferation of small plants exacerbated an already serious problem of over-accumulation. In the industrial sphere as a whole, a prolonged wage freeze caused the average wage to fall in real terms by 17% between 1957 and 1977 (Kanbur and Zhang, 2005).

There was also a crisis of productivity. Productivity per capita had tripled since 1952 but per RMB productivity had declined. Moreover, phasing out the policy of rustication youth revealed significant urban unemployment. The accumulation rate was also felt to be exceptionally high (due to a concentration on heavy industry), which depressed consumption and caused dissatisfaction. Energy production (with excessive consumption) and the development of transport also lagged behind the economic growth rate. Investment was neglected in anything defined as 'non-productive', and also in trade and services. The over-centralised system, which took as

its basis the view that the economy as a whole was a ‘natural economy’ analogous to a single workshop, also gave considerable power to the arbitrary whims of top leaders and ignored the complexities of ‘circulation’. With such a view, production was divorced from demand (Riskin, 1987).

Although China suffered major economic setbacks, social chaos and political dictatorship, it is worth mentioning some national achievements in economic and social development. For example, China’s infrastructure expanded with the addition of new railways and improved roads; electricity became available in all but the most remote villages; and life expectancy had reached 65 years by the time of Mao’s death (Brugger, 1981). Under the PRC’s new laws, women held equal status to men and, as a result of the commune movement, worked outside the home. Although efforts to expand education stumbled repeatedly due to political campaigns, the number of literate men and women increased as schools and colleges grew in number throughout the period (Gao, 2004). All these achievements provided a base for developments in economic and social equality. Therefore, during Mao’s era China experienced more equality than present, although it was equally poor.

After Mao’s death in 1976, Maoist redistributive policies and ‘Third Front’ development policy were criticised for not having emphasised factors of production, for ignoring scale, for ineffective investment and for causing a slowdown in national economic growth, especially compared to its neighbours such as Japan, Taiwan, Singapore, Hong Kong and South Korea (Fujita *et al.*, 2004; Booth, 1999). Mao’s successor, Deng Xiaoping, took power in 1978 and reversed China’s development strategies from Maoist redistributive policies to those of uneven development. In essence, the new policy was designed to concentrate the limited capital and resources available at that time and to enable a small group of people and some chosen regions to become rich first.

4.6 Conclusion

China’s historical evolution can be used to explain the spatial distribution of regional development after 1978. Both Mao’s ideal of ‘everybody is equal’ and Deng’s ideal of ‘letting some people get rich first’ have, in different ways,

dramatically shaped Chinese economic, social, political and ideological conditions (Bhalla *et al.*, 2003a; 2003b).

This chapter provides a background to present-day spatial disparities in China. In 1949, different regions experienced unequal and unbalanced economic development. The coastal provinces dominated the economy and the majority of interior areas were still based on traditional agriculture. As a result, coastal provinces were relatively rich and well developed, whereas inner provinces remained very poor. Between 1952 and 1957, the 1st Five-Year Plan (1952-1957) sought to develop the interior provinces in order to eliminate inequality between people and regions. As a result, the central government placed the vast majority of construction projects in interior provinces. Between 1958 and 1962 the national economy was in chaos and there was no obvious spatial development pattern.

Between 1966 and 1976, 52.7% of national investment in the 3rd Five-Year Plan (1966-1970) and 41.1% of national investment in the 4th Five-Year Plan (1971-1975) was put into the Third Front, which was located in the remote regions of south-western and western China. Between 1976 and 1978, the balanced development strategy was widely questioned and the central government focused on developing coastal provinces.

The conclusions drawn in this chapter focus on the main points of spatial development patterns as well as development experience and lessons in the economic, social, political and ideological dimensions of China, which underpin understandings and explanations of the disparities addressed in the following chapters.

Chapter 5 China ' s Regional Development and Inequality: Spatial Distribution at County Scale

5.1 Introduction

Scale is an essential concept in geography, similar to terms such as space, place, environment and network (Wei and Ye, 2009; Wei, 2002; Marceau, 1999; Howitt, 1993; Smith and Dennis, 1987). Current literature on China's regional development and inequality mainly focuses on the provincial level (Ye and Wei, 2005; Wei and Ye, 2004; Xu and Tan, 2002; Huang and Leung, 2002; Williams, 2002; Gu *et al.*, 2001; Wei, 2000; Wei and Fan, 2000; Weng, 1998). Research at the county level remains limited and so far research on regional development and disparities is confined to a couple of papers, such as those by Kim (2004), Wang (2002) and Lyons (1997), which focus on only one province, each at the county scale. The way various mechanisms operate at each scale is extremely complex and requires considerable attention (e.g., Wei, 2002). A county scalar perspective has the potential to link inequalities from the macro scale to the micro scale and even everyday life experiences (Wei *et al.*, 2011). In addition, more attention needs to be paid to comparisons between social and economic inequality. Therefore, research on these areas can be further deepened and broadened. In order to fill these gaps in the literature, this chapter contains the following three innovative concerns. First, unlike most previous studies which have all been based on provincial data, such as those by Fan and Sun (2008), Ho and Li (2008), Knight (2008), Wan and Zhang (2006), this chapter investigates the county scale, giving detailed and accurate analytical accounts. Secondly, the chapter demonstrates that regional inequality can manifest in social, political and ideological dimensions. Much of the previous research, conducted mainly by economists, has focused on economic indices and other dimensions remain less studied (e.g., see Kanbur *et al.*, 2008; Wan, 2008; Zhang, 2006; Hertel and Zhai,

2006). This chapter extends the indices to the social dimension, making comparisons between social and economic ‘difference’ at a range of scales, and analysing how certain political, geopolitical, social and economic factors influence China’s regional social and economic strategies. Thirdly, this chapter employs advanced GIS techniques to analyse the economic, social and political data for over 2000 counties, so as to disclose the detailed spatial distribution patterns of uneven economic development of China, which may present an alternative explanation to those proposed in current regional development studies.

In sum, this chapter analyses and explores social, economic and political factors in the context of contemporary development and disparity debates based on a database of all counties in China from 1992 to 2006. In addition, it analyses reasons for the development of these inequalities alongside China’s impressive progress in terms of development at the macro level. Section 2 of this chapter starts by comparing development patterns between the provincial level and the county level, before presenting spatial distribution patterns of regional development and inequality at the county scale. Section 3 analyses how factors such as political policy, geographic diversity and social economy lead to regional development and inequality. Section 4 concludes with summary of how and why all counties in China have experienced a very high speed of economic growth together with widening inequality between 1999 and 2006.

5.2 Development and Disparity Patterns at County Scale

5.2.1 Provincial Scale vs. County Scale

Development can be judged against diverse scales from the individual, the family, the local community, the regional, the national and the global (among others), and the approaches to development may also be dependent on scale (Torres and Momsen, 2004). Chinese geographers have demonstrated how spatial regional development heavily influences regional inequality (e.g., Yu and Wei, 2008; Ye and Wei, 2005;

Fujita *et al.*, 2004; Shen *et al.*, 2000; Tong, 1999; Zhao, 1997). However, although a few researchers have previously used GIS to study features of China's economy at provincial and metropolitan levels (Yu and Wei, 2003, 2006); this technique has not been extended to the county level. Le Gallo and Ertur (2003) state that spatial effect becomes one of the most important aspects. Numerous features, such as trade, analysed at a smaller scale reveal geographically dependent spatial units. Investigation at a provincial scale may not be significant or provide clear analysis due to the neglect of more local characteristics. However, analysis at the county level in China may direct us to understandings of significant spatial effects. Ignoring county-scale data analysis might result in misleading or even incorrect analytical results. In addition, the recent developments in GIS and spatial analysis have offered a great perspective for the study of regional development and provide an in depth understanding of China's development (Fotheringham and Rogerson, 2013; Goodchild, 2000). Therefore, in order to develop further understanding of regional development and inequality, I have used GIS to analyse and display the county-level data in map format. This enables the spatial variation of development and inequality levels across China to be visibly and distinctively demonstrated in maps.

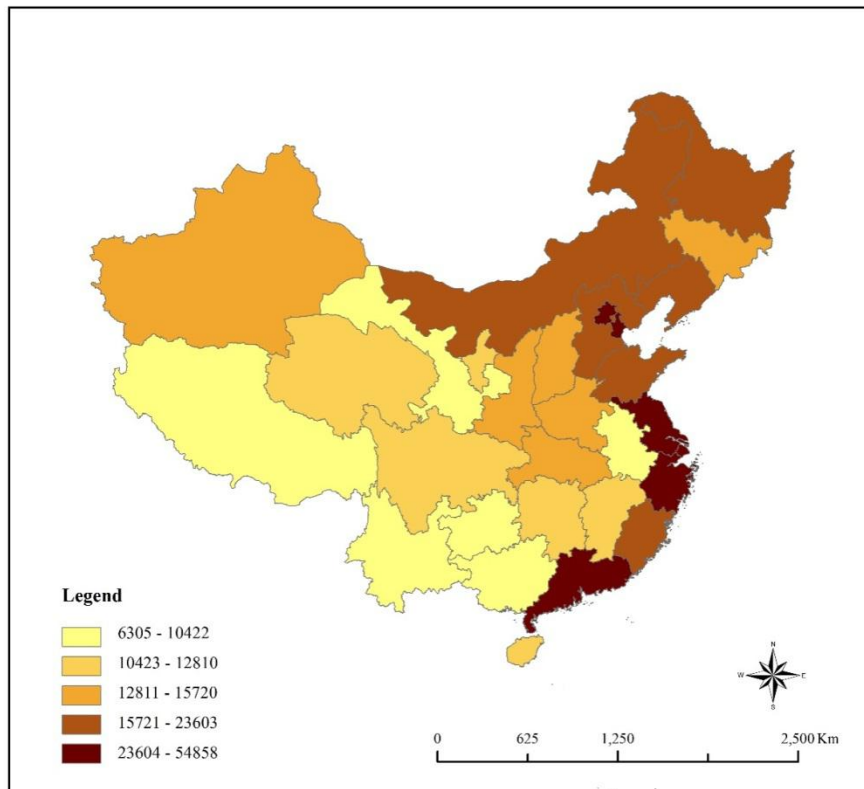


Figure 5- 1: 2006 per capita GDP at provincial level (RMB) (Source: author)

Figure 5- 1 shows the 2006 provincial-level GDP map and Figure 5.2 shows the 2006 county-level per capita GDP map. Both present data spatially categorised according to the QUANTILE classification methods by creating five classes equally according counties numbers. After comparing Figure 5.1 and Figure 5.2, spatial distribution patterns are observable. The county-level map provides much more detailed information than the provincial-level map, the breadth of which means that less detailed variation is presented. Wang (1995) observe that economic development does not occur in all places at the same time. Normally, economic development happens in certain places very rapidly before gradually moving to other regions. Figure 5.1, the provincial-level map, demonstrates a straightforward pattern similar to previous researchers' results (Tsui , 2007; Cheng *et al.* , 2002). Beijing, Tianjin, Shanghai, Jiangsu, Zhejiang and Guangdong province are the richest areas; and the coastal area including Liaoning, Hebei, Shandong and Fujian plus Inner Mongolia and Heilongjiang is the second richest region. Towards the west, the regions become

poorer, such as Gansu, Sichuan, Yunnan, Guangxi, Anhui and Tibet, per capita GDP far lower than the national average (Yu, 2006; Ye and Wei, 2005).

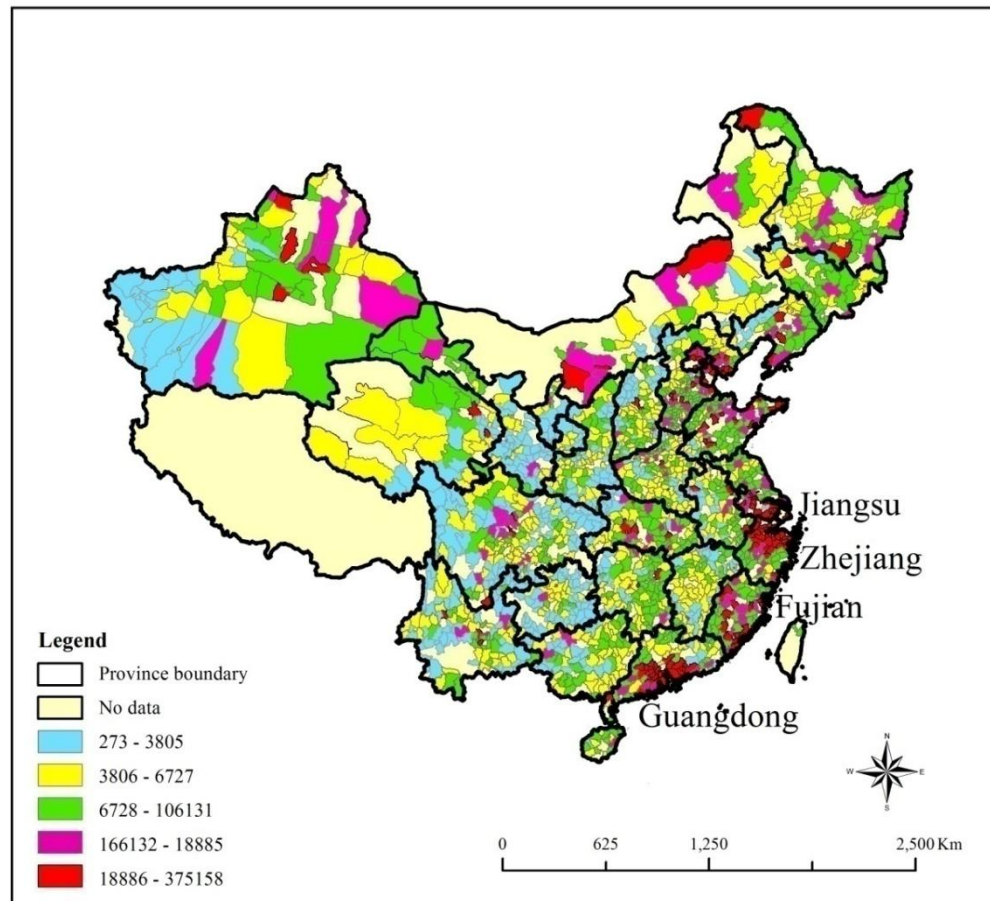


Figure 5- 2: 2006 per capita GDP at county level (RMB) (Source: author)

Understanding regional development in China using varied scales is crucial. Given the large scale of China, development patterns and models are extraordinarily varied from north to south and from east to west at the county scale. The 2006 county-level per capita GDP map shows a much more complicated impression of China's economic productivity (Figure 5- 2). It should be noted, however, that all county-level data on Tibet, most of the county-level data on Inner Mongolia and some of the county-level data on Xinjiang and Qinghai are absent because government control the economic data release in these areas before 2006.

Five key observations about development patterns can be made by analysing the county-level per capita GDP across the whole of China.

First, there is a development belt along the coastal areas exhibiting GDP per capita far above average, which partly coincides with the provincial-level research result. Running from the north to the south, the Beijing-Tianjin region (Greater Beijing area), Yangtze River estuary region and Pearl River estuary region are the richest areas (Zhang and Xu, 2011). During the last few decades, the majority of research has tended to focus on the southern coastal provinces rather than the northern area such as the Beijing-Tianjin region (2014; Yu and Wei, 2008; Yu, 2006). However, as the capital, Beijing has been the most important political centre of China since the thirteenth century. The pattern for development in Beijing, Tianjin and the adjoining of area Hebei province shows signs of ‘backwash’ effects occurring, where capital and labour flows from a lagging region into a more developed region. Since economic reform began in 1978, economic growth in Beijing has been very steady and mainly depends on SOEs and tourism, unlike southern regions such as Guangdong province. With regional development and globalisation, Beijing and Tianjin have become urban cores which have attracted FDI more rapidly than the proximate area of Hebei. Eighty percent of FDI has occurred in Beijing and Tianjin as Beijing is the national capital and Tianjin is a coastal city which has a much better business environment than the adjacent area of Hebei (Yu and Wei, 2008). As a result, more and more capital and labour has flowed from other counties of Hebei into Beijing and Tianjin, leaving Hebei lagging behind economically. Dawkins (2003) argues that free trade strengthens the process in which capital and labour flows from a lagging region into a developed region. The Beijing-Tianjin-Hebei development model proves there are no obvious effects resulting from the developed Great Beijing spreading into the ‘lagging’ region of Hebei.

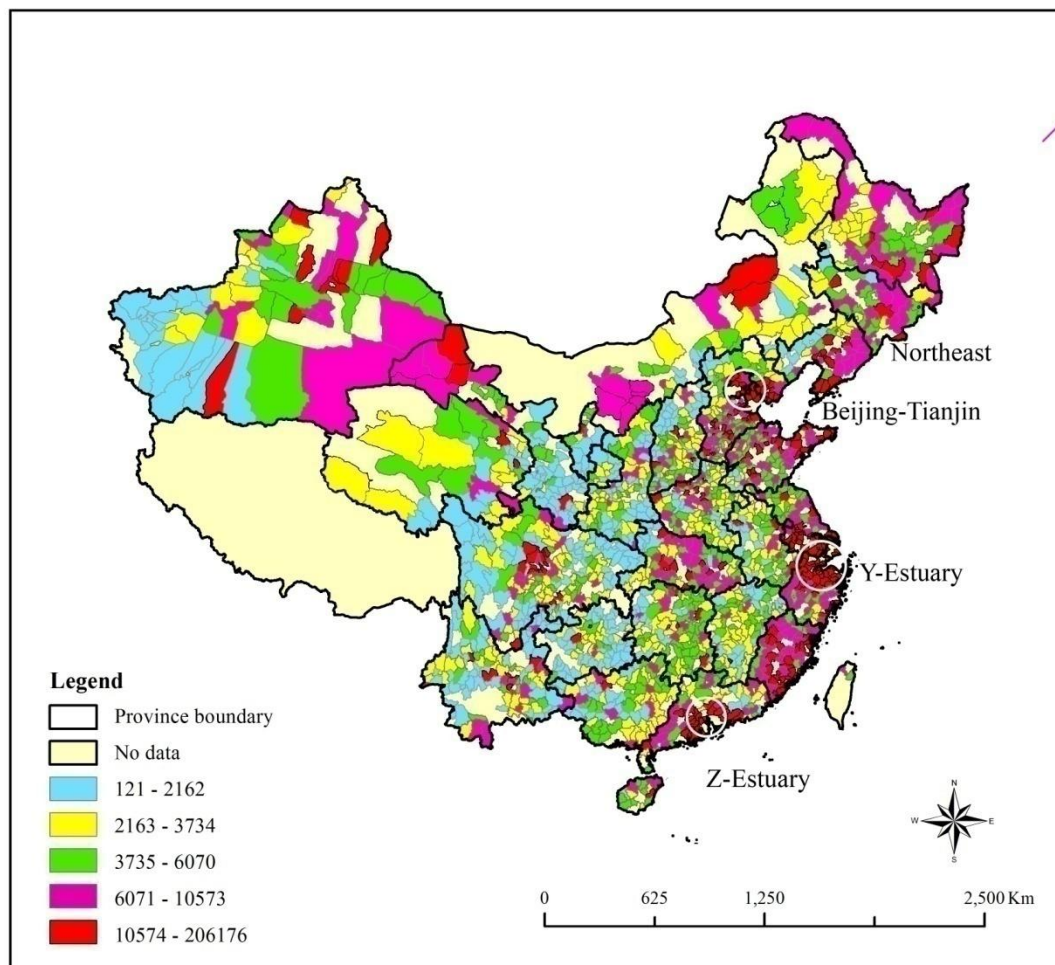


Figure 5-3: High development areas 2002(RMB) (Source: author)

Second, two other high development belts can be seen that are not revealed by the provincial-level research (Figure 5-3). These are the belts along the Jing-Guang Railway lying in the middle of China from Beijing to Guangzhou and along the Yangtze River from Sichuan to Shanghai. In the process of reform in 1978, the Wenzhou Model and the Sunan Model in the Yangtze River Estuary became widely known as one of three major regional development models (another is the Pearl River Estuary Model). Given different circumstances and various mechanisms of development, the Wenzhou Model was the leading model for the development of private enterprises in China (Ye and Leipnik, 2013); the Sunan Model centred on development for Township and Village Enterprises (TVEs) and the Pearl River Estuary Model focused on FDI (Wei and Ye, 2004; Lin, 1997). Ye and Wei (2005:

357) claim that the ‘Wenzhou Model is centred on small-scale, manufacturing-oriented, and often family-owned, private enterprises, distribution networks linking producers and consumers all over the country and extending to the global market’. The explosive growth of private enterprise in Wenzhou during the reform contributed significantly to regional development in Zhejiang and has produced a number of rapidly growing counties (Wei *et al.*, 2007; Liu, 1992).

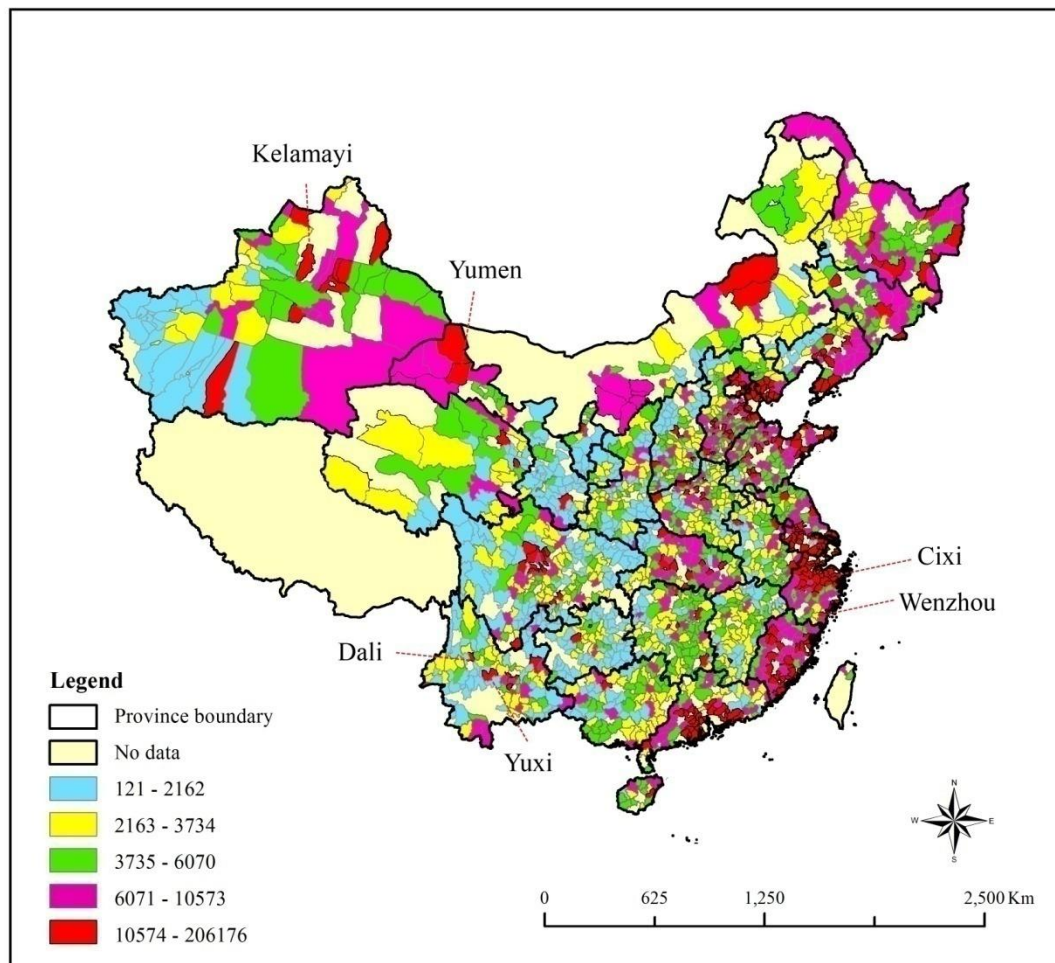


Figure 5-4: Wenzhou Model and Sunan Model (RMB) (Source: author)

Cixi (Figure 5-4), the richest county in China from 2004 to 2006, had a per capita GDP as high as 240,382 RMB (approximately £24,000) in 2004, 305,211 RMB (approximately £30,000) in 2005 and 375,158 RMB (approximately £37,000) in 2006 (Figure 5-5) (CSB, 2004, 2005 and 2006). Its economy dramatically grew during the

period of reform and it shows the ways in which the Sunan Model was successful. At the beginning of the reform in 1978, the Chinese government encouraged non-state enterprises to be established, especially TVEs, which are market-oriented public enterprises under the control of local governments based in townships and villages. TVEs enjoy more favourable government policies such as low tax rates. Enterprises sponsored by townships and villages, and enterprises jointly owned with peasants, have been booming (Huang and Meng, 1997). Cixi produces a variety of goods manufactured in TVEs, such as clothes, shoes, computers and other light industrial goods. The strong support from the local government and the establishment of economic linkages with Shanghai facilitated Cixi in becoming one of the richest counties in China. There are evident spreading effects from Cixi to the surrounding counties, lending supporting evidence to Myrdal's (1957) development theory. In the early stage of economic reform TVEs in Cixi were mainly controlled by local governments, however between 1999 and 2007 90% of local government-owned firms were privatised (Tong, 1999). Since privatisation, many new firms have been created, which have been shown themselves to be more capable than those they replaced. In addition, a large number of new managers have controlled firms efficiently. Therefore, privatised TVEs have achieved great success and have provided extraordinary contributions to the local economy.

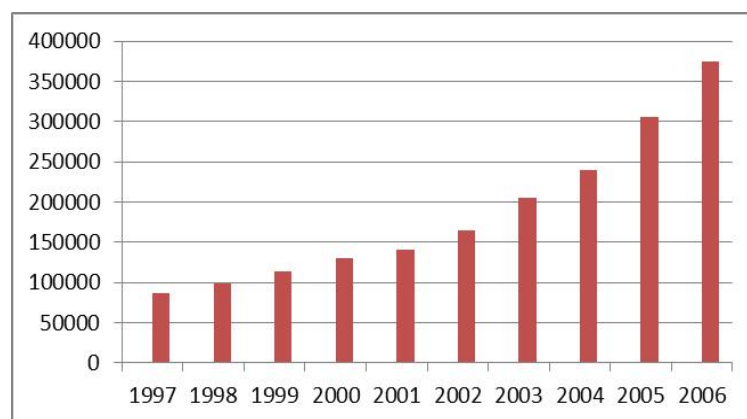


Figure 5- 5: Per county GDP in Cixi from 1997 to 2006 (RMB) (Source: author)

Third, in the rich coastal area, there are still many poor counties which are in the arid to semi-arid mountainous areas, such as north Guangdong, western Fujian and southern Zhejiang provinces (Figure 5-2), which are not revealed by maps of provincial GDP.

A number of researchers and institutions have confirmed that China's poverty problem mostly occurs in the poor mountainous regions (Shen and Zou, 2008; Chambers *et al.*, 2008; Ravallion and Chen, 2007; Liu, 2006; Fan *et al.*, 2004; World Bank, 2000b). For example, 34% of the people with income between 1000 RMB and 5000 RMB live in a mountainous area and 9% in a flat area with convenient transportation and poor land conditions. In addition, it is worth pointing out that, within a province such as Gansu, the majority of poor residents are from minority groups, living in mountainous and border areas. Compared to the rural population, the absolute rural poor are 2.7 times more likely to be from ethnic minorities (Björn and Ding, 2009; Heath, 2005; Gustafsson and Li, 2002).

Fourth, most poor counties are located in the western part of China, and especially in rural areas. In 2001, 63% of the population in western China was classified as low income (Golley, 2007; Lai, 2002). The poor areas were overwhelmed with environmental difficulties and infrastructure insufficiencies, particularly a shortage of roads, water storage facilities and health care clinics, which combined with low education, low agricultural productivity, undeveloped agricultural

markets and under-developed non-agricultural industries (Zhang and Xu, 2011; World Bank, 2003).

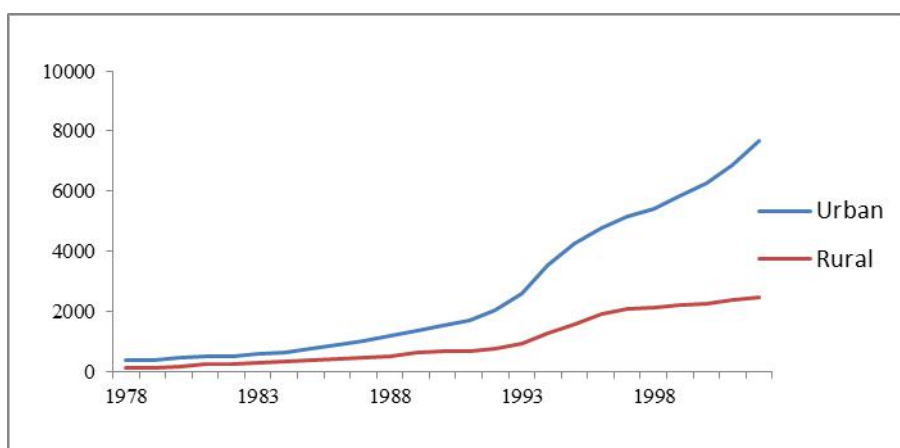


Figure 5- 6: Rural–urban income inequality in China, 1978-2002 (RMB) (Source: author)

Figure 5- 6 shows that between 1978 and 2002 the disparity between urban and rural soared. In 1978, the per capita income in rural regions was nearly half the per capita income in urban regions. However, in 2002, the per capita income in urban regions was over four times that in rural regions. The reason for this swiftly rising disparity between urban and rural regions is urban-biased governmental policy (Lu and Chen, 2006), as a result of which rural populations have been severely restricted from migrating to urban areas. Additionally, urban residents were provided with subsidies for living costs at the expense of their rural counterparts, which has been noted by researchers such as Yao *et al.*, (2005), Wan and Zhou (2005). However, the low income pattern has changed since the early 1990s. Prior to the 1990s, the majority of urban residents owned the ‘*Three irons (meaning guaranteed): iron rice bowl (salary), iron chair (position), and iron bed (housing)*’ (Ding and Warner, 2001:316). Urban poverty became a severe challenge because of the collapsing state ownership of firms and the breakdown of the welfare systems formerly provided by SOEs (Sachs *et al.*, 2002). In 1998, about 40% of national government employees were retrenched (Shah *et al.*, 2006). Meng *et al.* (2005) suggests that 17.5 million

SOE workers were left unemployed. However, rising urban poverty in recent years does not change the overall picture: China's rural areas – long lagging behind the urban areas in terms of social and economic development – still provide a home to the majority of its poor population. The Gini coefficient for urban and rural residents jumped from 0.389 in 1995 to 0.417 in 2000, above the international danger level of 0.4 (Cheng, 2007).

Fifth, in the western poor areas, there are nevertheless still some rich counties, such as in Yunnan, Gansu, Sicuan and Neimenggu (Inner Mongolia). Reasons for this include the plentiful oil fields found in areas such as Yumen of Gansu and Kelamayi of Xinjiang (see Figure 5-4), which have become engines for the local economy. Yunnan province provides another example: Yunnan contains destinations attractive to tourists, such as Dali, and the production of tobacco brands, such as Yuxi, is fruitful. In addition, Xingjiang, as a province principally inhabited by ethnic minorities, has been the recipient of Chinese investment in an attempt to keep the area politically stable. Put simply, in counties in western provinces, regional development is economically orientated with agriculture, which is more dependent on natural resources like sunshine, water and climate. However, in counties of eastern provinces, regional development is orientated towards industry, which is more dependent on investment and labour (Kanbur and Zhang, 2005).

5.2.2 Spatial Distribution of Economic and Social Development

Defining development as economic development is always a problematic issue. As Sachs (1992) and Sen (1999) argue, 'development' should not always be used as an abbreviation of 'economic development' and should instead include social, political and cultural dimensions (Unwin, 1994). In extensive discussions about 'development', lots of scholars have addressed the importance of the social, political and cultural dimensions. In order to overcome such a problem and focus on both economic and social dimensions, nine indices are used in this research to analyse and visualise development and inequality in a more detailed manner.

The socio-economic spatial dimensions of China have been insufficiently analysed at the county scale, in large part because of the absence of reliable data (although for provincial-level analysis see Zhang and Kanbur, 2001; 2005; Khan and Riskin, 1998). Here, per capita GDP, per capita net income of rural residents and per capita resident savings are chosen for measuring economic development and living standards. The indices of student enrolment [中小学在校学生数] (means primary school and secondary school student enrolment number referring to the 9 years of compulsory education plus 3 years of high school student enrolment number) and hospital beds are selected to reflect education and health among social dimensions. The main reasons for selecting these indices can be summarised as follows.

First, the per capita GDP is one of the most widely used indices for economic measurement (Ho and Tsui, 2004; Wang and Yao, 2003; Zhang and Yao, 2001). The GDP of a country is defined as the market value of all final goods and services produced within a country in a given period of time (Eatwell, 1998). Researchers frequently use GDP to measure a country's macro development status (Lu and Lo, 2006). In my research, data demonstrating the per capita GDP at provincial and county level in 2006 are chosen to reveal the difference between provincial and county-level models. Net income is a popular index to evaluate individuals' earning. Hering and Poncet (2010a) define income as the sum of all the wages, salaries, profits, interest payments, rents and other forms of earnings received in a given period of time. Figure 5-7 shows that rural income has a similar distribution pattern to GDP. Furthermore, financial saving is one of the most important measures of people's disposable income. It is a cultural tradition in China that people prefer to save as much money as possible in preparation for any unforeseeable circumstances. Figure 5-8 proves that per capita saving is evenly spatially distributed in most areas. Therefore, savings can also be used as an index of personal income level (Ramsey, 1928). In order to understand the process of developmental change in more detail, Figure 5-7 and Figure 5-8 show the spatial distribution patterns of income and saving by using county-level data.

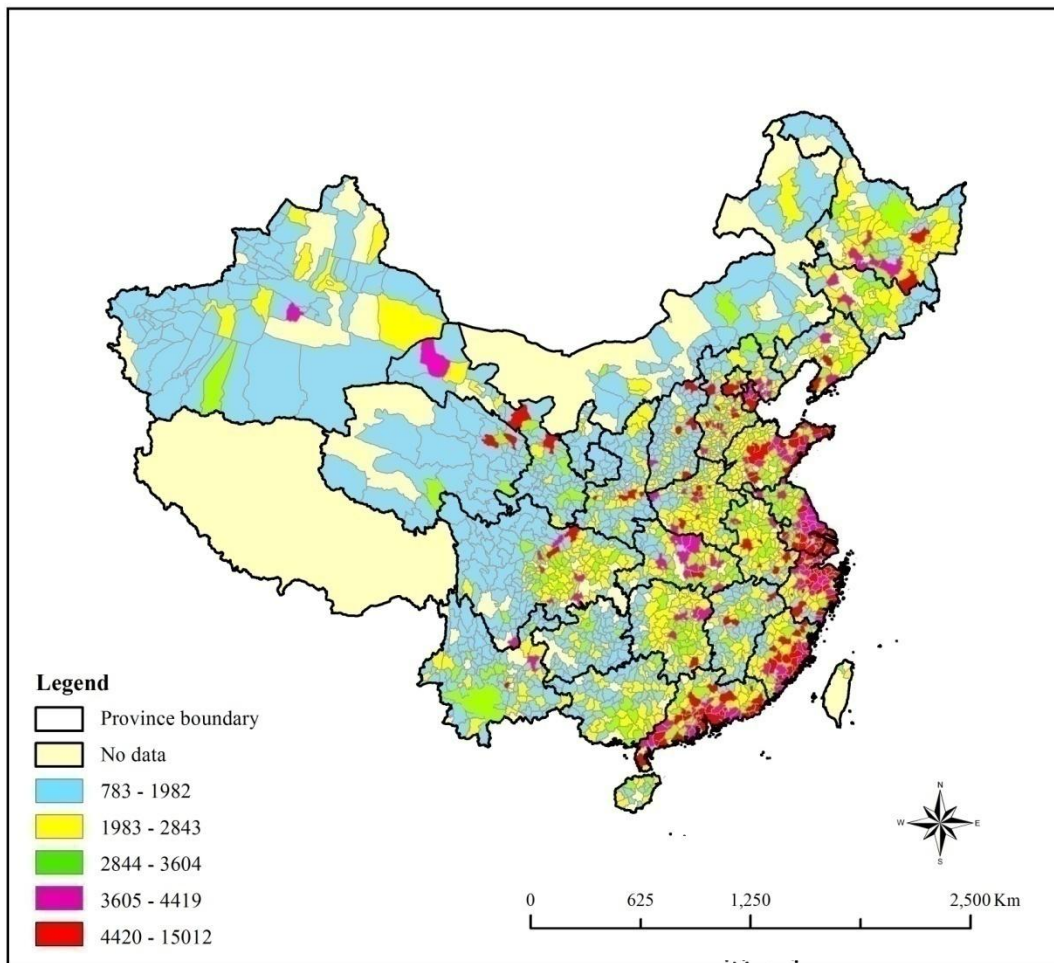


Figure 5- 7: 2006 Per capita rural income (RMB) (Source: author)

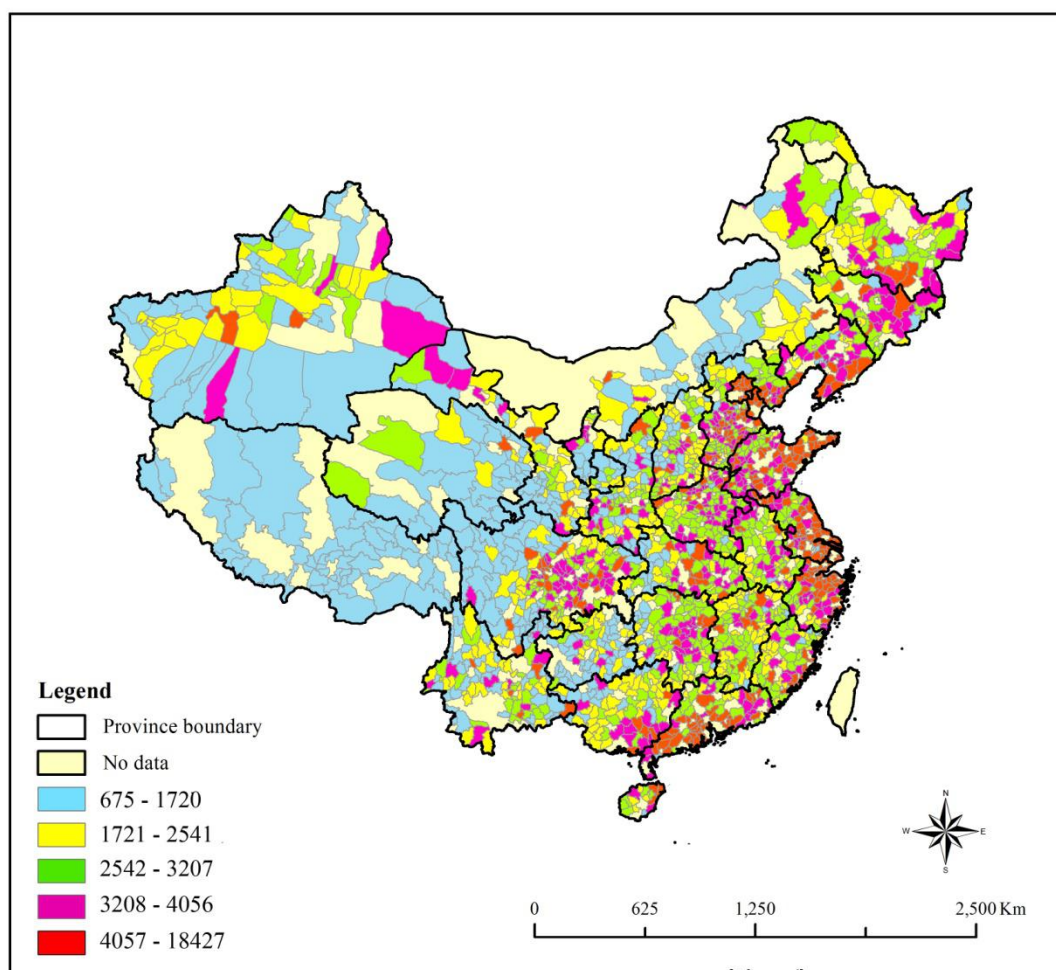


Figure 5- 8: 2006 per capita savings (RMB) (Source: author)

Second, as one of key factors in the increase of productivity, the attainment of education is often used to measure the level of human capital and plays an important role in economic growth, especially in endogenous growth models (Barro, 1995 and Lucas, 1988). By using data across 29 provinces over the period between 1978 and 1998 in China, Cai *et al.*, (2002) illustrate a positive and significant relationship between initial human capital (measured by average years of school in 1982) and the growth of GDP per capita. They confirm that initial human capital has a positive effect on growth so regional disparities in the attainment of education generate inequality in economic growth. Given the importance of education as a measure of human resources and social development, I use student enrolment data to explore education as an aspect of China's social development (Qian and Smyth, 2008a).

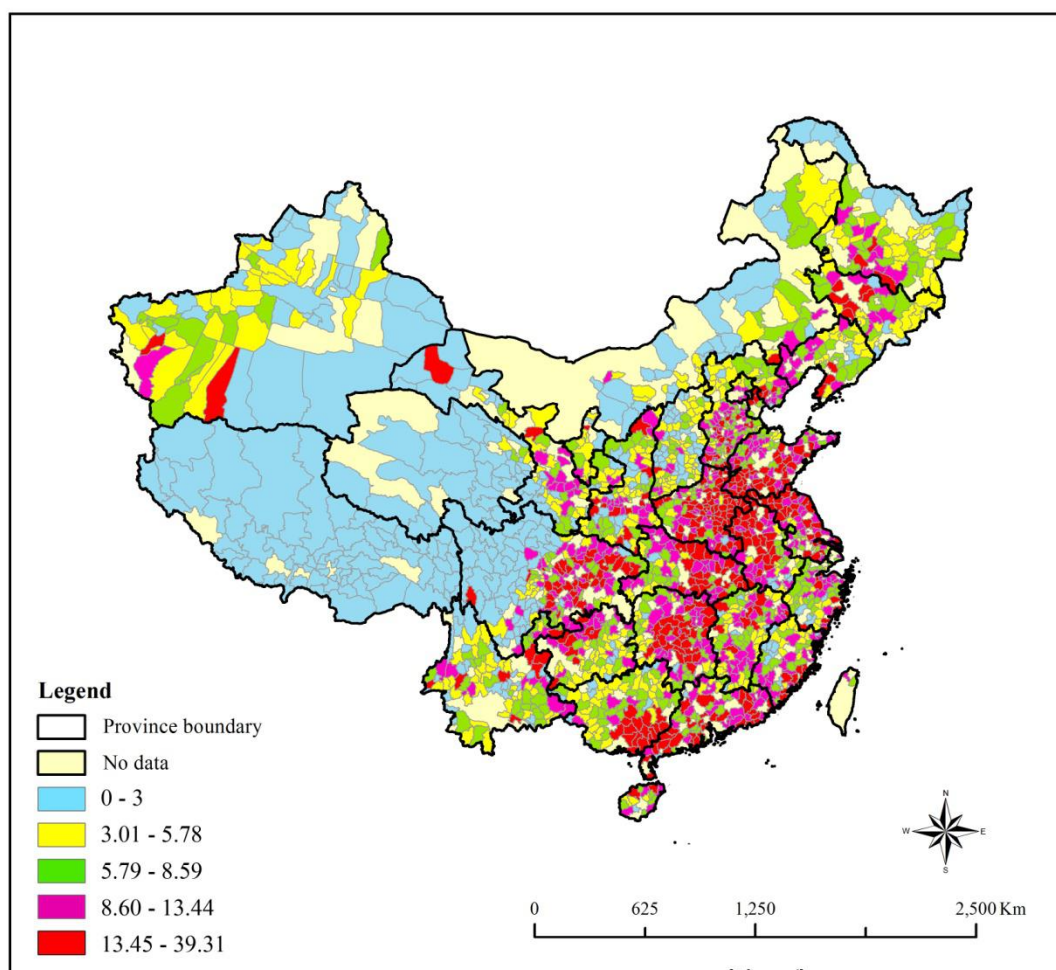


Figure 5-9: 2006 student number per 10000 people (Source: author)

Figure 5-9 shows that student enrolment number per 10000 people[每万人中小学在校学生数] (means primary school and secondary school students enrolment number per 10000 people referring to the 9 years of compulsory education plus 3 high school years students enrolment number per 10000 people) are higher in central parts of China where education is traditionally highly valued. On the contrary, northwest, west and some of coastal provinces show a moderate or low number of enrolments for students. In the western part of China, poverty affects education facilities which in turn affect student enrolment numbers. A nine-year compulsory period of education has been instituted since 1986 in urban areas and 2007 in rural areas, and pupils studying in primary and secondary schools need only pay a small amount of money to cover the costs of books (Hannum, 2005). However, in poor western localities, fewer

qualified teachers are available and, as people tend to live in more dispersed and remote areas, it can become very difficult to establish education facilities (Fan *et al.*, 2004 and Yao, 2000). In most coastal provinces, people are generally wealthy and the rate of student enrolment should in theory be high. However, the reality in these areas is that traditionally people emphasise ‘commerce’ rather than ‘education’ (Hannum and Wang, 2006). Therefore, the student enrolment numbers are on average the same and in some cases even lower than in some western provinces. Clearly local culture and ideology play an important role in social development.

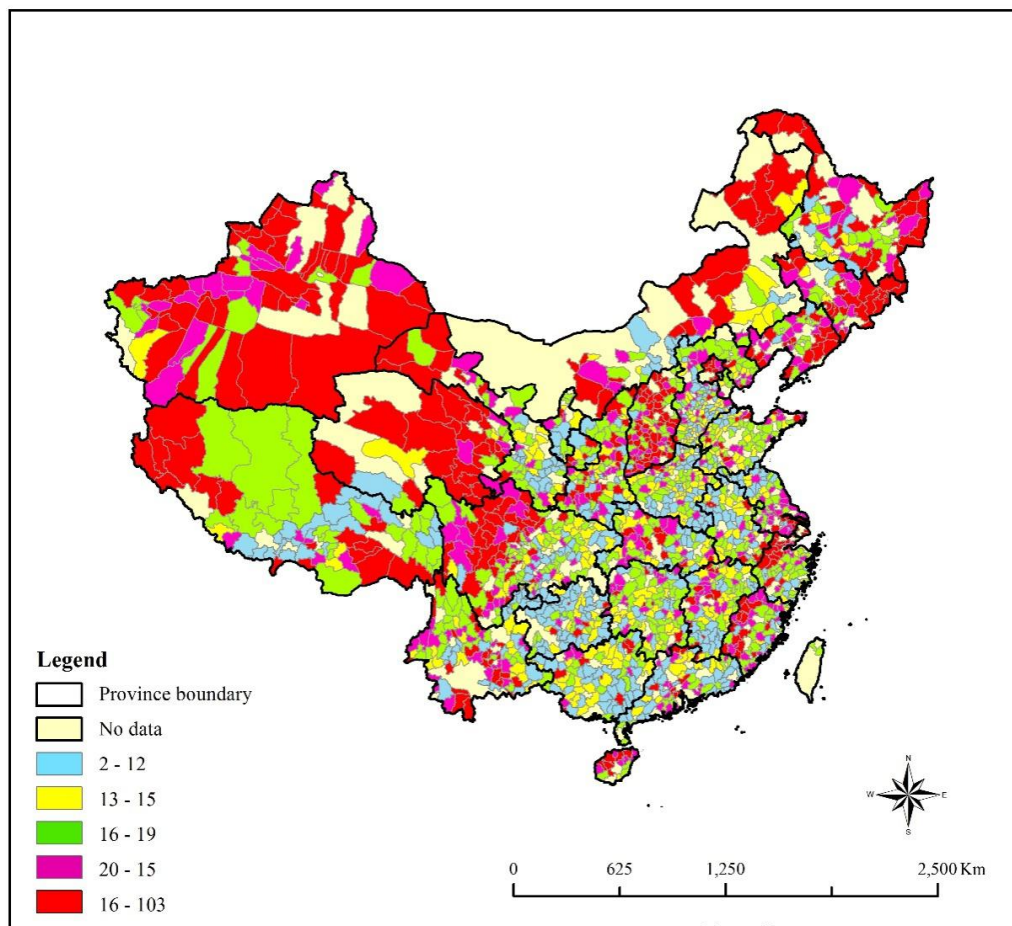


Figure 5- 10: 2006 hospital beds per 10,000 people (Source: author)

Third, human capital can also be measured by population growth (labour) and health care. Health care can be judged by the number of hospital beds per 10,000 people (Björn and Li, 2004). The dominant impression from provincial-based analyses

is that eastern China, and its urban centre in particular, have a much higher provision of health services than western rural areas. However, when focused at the county level, a rather different picture emerges. The overwhelming impression from Figure 5- 10 is that northern and north-western China actually has much a higher provision of hospital beds per 10,000 people than many areas of central and eastern China. Certainly in southwest China there are very low levels of hospital provision. It is in much of central China that some of the lowest levels of hospital provision are to be found. In explaining the relatively high densities to be found in parts of northern and north-western China, it is worth noting that the Chinese government has been seeking to provide better healthcare and education in border regions, in particular where there are a high number of minority groups. It aims to reduce potential social tensions and tendencies towards separatism. In addition, in the 1960s and 1970s health care facilities were traditionally established in the urban centres, based on indicators such as the provision of doctors and hospitals. In rural areas, the population generally had to rely on preventative medicine and the training of rural health workers. As Zhang and Kanbur (2005:191) note, ‘by the late 1970s, “bare-foot doctors” and clinics were set up in almost all the villages’. These policies allowed the government to offer an equality of health care facilities for all people. As a result, China’s life expectancy rates were much higher than most developing countries. Inequality of health care is also understood to be one of the causes of regional disparity (Akin *et al.*, 2005; Golley, 2002), as well as gender inequality in health care (Gao and Yao, 2006).

However, other health care resources such as health care expenditure and local clinic services have undergone dramatic changes since the reform. Thus while per capita health expenditure rose from 10.9 RMB in 1980 to 101.7 RMB in 2001, the government share of this fell from 28% to 16%, the share of social expenditure fell from 56% to 23%, and the share derived from personal expenditure rose from 16% to 61% (Zhang and Kanbur, 2005). The rising regional and urban-rural differences have been disguised by average indicators. This means social indicators such as increasing infant mortality have not been observed in poorer rural areas (Li and Wei, 2010a). In

addition, local government has responsibility for financial support for health care. Therefore, regional inequality widened disparities in health resources. The distortion of fees for health care service leads either to the neglect of preventive care or the prescription of inappropriate drugs and services (WHO, 1999).

Fourth, the number of beds in nursing centres reveals details concerning social welfare (Wong, 1994). Since the mid-1980s, social welfare policy has been in transition. In order to keep pace with the economic changes, China has been struggling to reform its social welfare and pension systems. Medical insurance schemes have been brought in to replace practices under the centrally-planned system. Transition processes are generating significant difficulties for the provision of social welfare support, particularly in rural areas (c.f. Zhang and Kanbur, 2005; Hebel, 2003). Hebel (2003), for example, estimate that the coverage of social welfare system is only 2% in countryside and expenditures on farmers who account for 70% of total population only accounts for 11% of total expenditure. China has a high level of decentralisation in financing and organising rural social security. Rural areas with high demand for provision – due to higher poverty or population levels – are forced to reduce coverage or the benefit level provided because they tend to have fewer public resources and public finances.

Finally, I have chosen three years of GDP data (1999, 2002 and 2006) because I want to provide the most up-to-date information possible and also focus on changes over time. The very latest statistical data available at the time of the research was of 2006, and oldest reliable data was of 1999. Therefore, the data from these two years – plus the data from 2002, in the middle of the ten year span – were chosen for detailed analysis. According to Figure 5- 11, Figure 5- 12 and Figure 5- 13, one may conclude that spatial distribution patterns in 1999 and 2002 are similar but 2006 shows more severe inequalities. These distribution patterns partly prove that economic development increased between 2001 and 2006 (see Fan, 2008; Fleisher, 2006; Yu and Wei, 2003; Huang *et al.*, 2003).

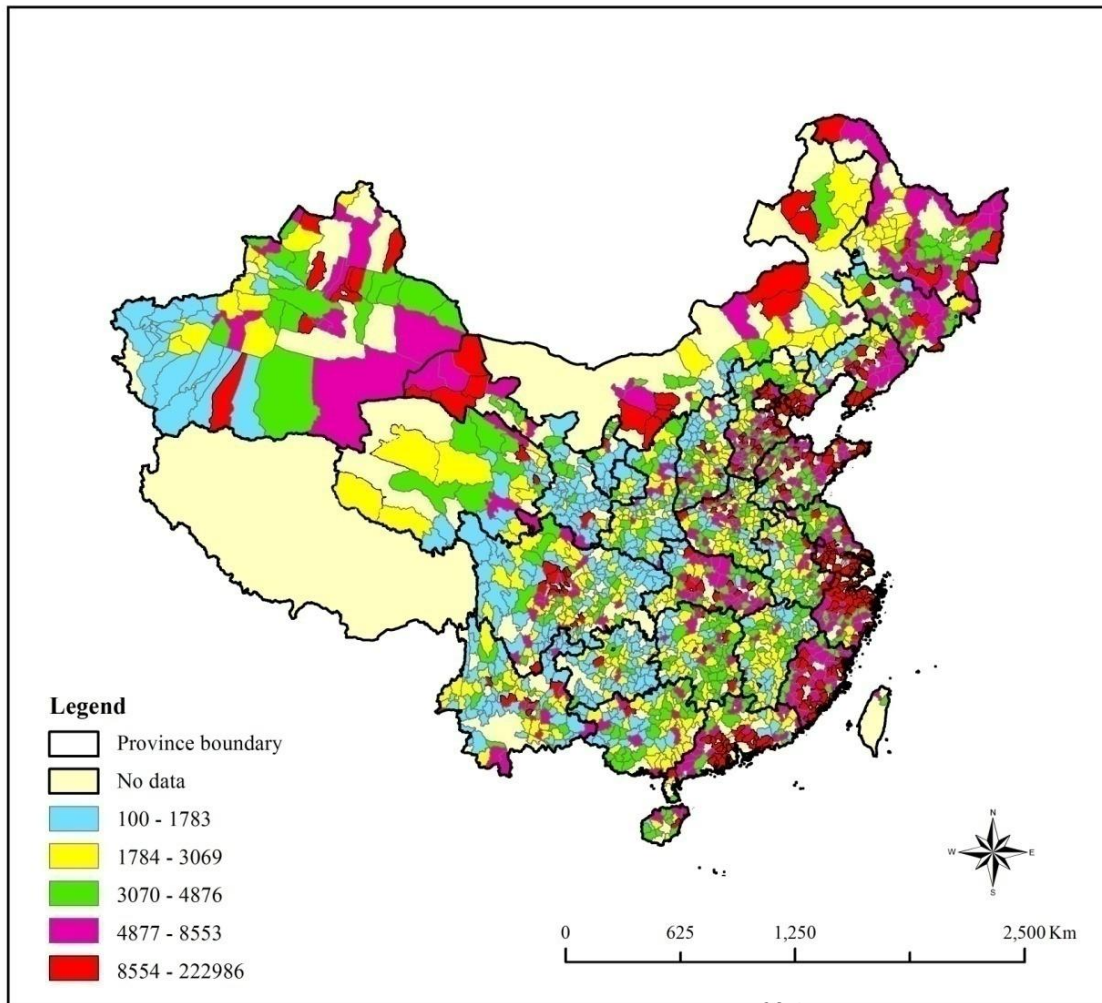


Figure 5- 11: 1999 per capita GDP (RMB) (Source: author)

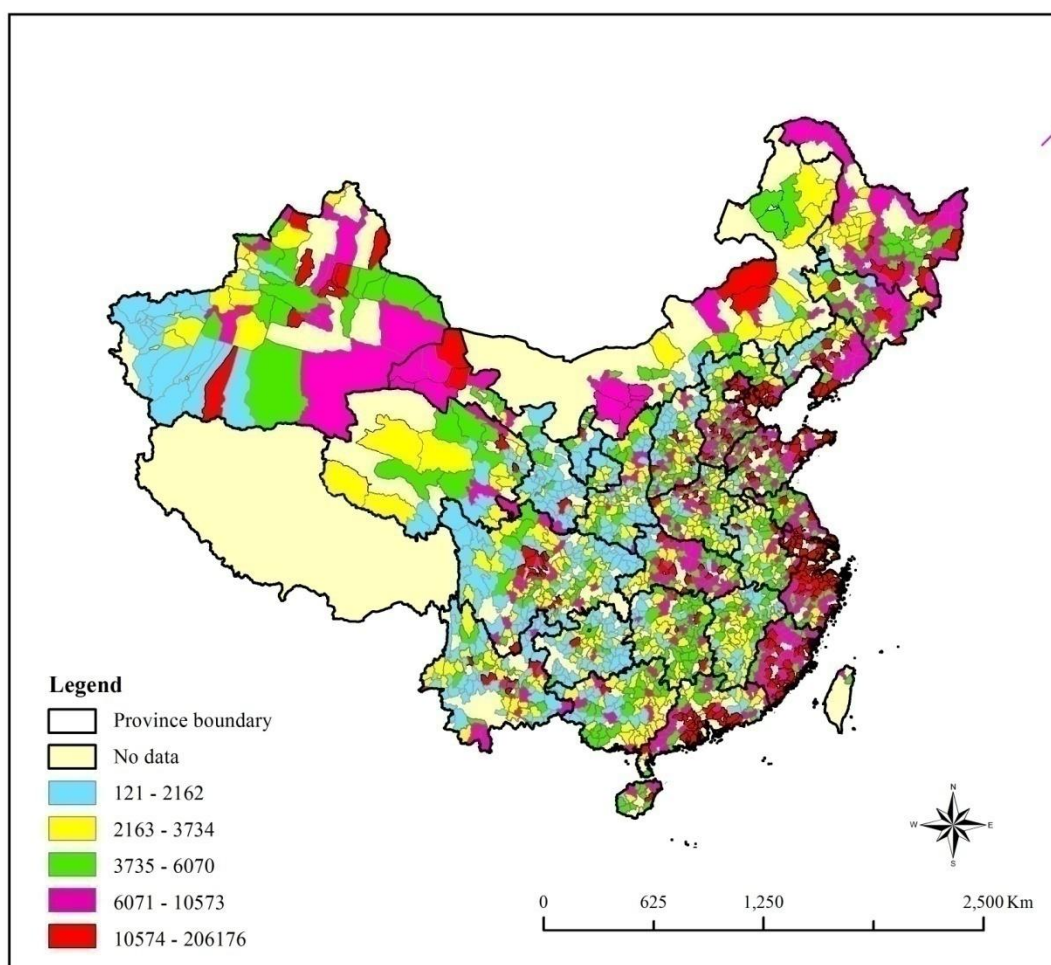


Figure 5- 12: 2002 per capita GDP (RMB) (Source: author)

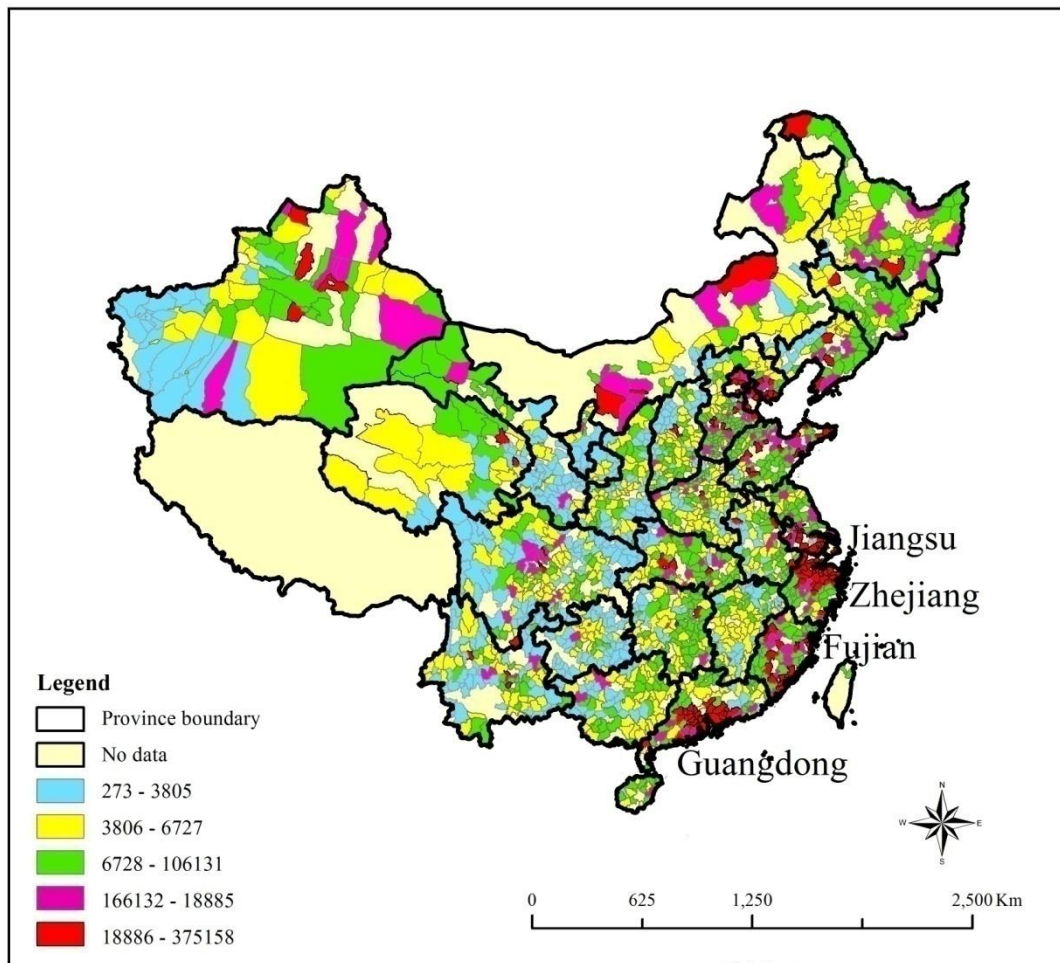


Figure 5- 13: 2006 per capita GDP (RMB) (Source: author)

5.2.3 Understanding Regional Development and Disparity: Using Multivariate Analysis to Test the Kuznets Model

As Sachs (1992) and Drakakis-Smith (1993) have argued, ‘development’ should not always be used as an abbreviation of ‘economic development’ and, instead, it should also encompass social, political and cultural dimensions (Unwin, 1994). Consequently, many scholars have addressed the importance of the social, political and cultural dimensions of ‘development’. Therefore, this chapter uses multivariate analysis to overcome such a problem of definition. Namely, nine indices of three dimensions are used here to measure development, rather than simply using the economic dimension. Inspired by the Human Development Indices (UNDP, 2000),

this chapter intends to combine nine variables which includes three dimensions into one development index called Quality Development Index (QDI).

Economic development and population living standards:

1. Per Capita GDP
2. Per Capita Net Income of Urban/Rural Residents
3. Per Capita Residents' Savings Deposits
4. Per Capita Local Government Revenue
5. Per Capita Local Government Expenditure
6. Per Capita Outstanding Loan of Financial Institutes

Social-education:

7. Student Numbers per 10000

Social-health:

8. Hospital Beds per 10000

Political-welfare

9. Number of Social Welfare Nursing Centre Beds per 10000

In general, to transform an item of raw data, say x , into a unit-free index between 0 and 1 (which allows different indices to be added together), the following formula is used:

$$X_{it} = \frac{x_{it} - \min(x_t)}{\max(x_t) - \min(x_t)} \quad (1)$$

Where:

X_{it} is the index of item x_{it} at time t

x_{it} is the raw data of county i at time t

$\min(x_t)$ is the lowest value of the variable x_{it}

$\max(x_t)$ is the highest values the variable x_{it}

Therefore, according to above method, all nine indices can be calculated either based on their monetary unit or numerical unit, depending on the type of data. Based on such statistics, I am able to calculate QDI, which is the arithmetic average of the nine indices, and develop a picture of the economic, social and political dimensions of a study area.

$$QDI_t = \frac{\sum_{i=1}^9 X_{it}}{i} \quad (2)$$

The main reasons for selecting these nine indices to calculate QDI are as follows: The first six indices measure regional economic development and living standards. GDP measures income and output (McCains, 2007); net income of households and individuals, 'is the sum of all the wages, salaries, profits, interest payments, rents and other forms of earnings received in a given period of time' (Case and Fair, 2007). Financial savings is one of the most important measures of people's disposable money. It is a cultural tradition in China that people prefer to save as much money as possible in preparation for any unforeseeable circumstances, regardless of their income. Therefore, savings can also be used as an index of personal income levels. Local government revenue and local government expenditure measure the financial condition of local government and public service facilities; outstanding loan of financial institutes is able to measure local economic activity; and the level of student enrolment per 10,000 persons is an important index of basic education. Given the importance of education as a measure of human resources and social development, I use this to explore the social educational dimension of China's development. The number of hospital beds per 10,000 persons can be used as a measure of social health;

and finally the number of social welfare nursing centre beds per 10000 explores aspects of political welfare as it pertains to China's regional development and political welfare.

Identifying a measurement of inequality is also difficult because in my thesis inequality means not only income or economic inequality, but also includes various other dimensions. In order to capture these three dimensions and features of these statistical data, the coefficients of variations are used to calculate the disparity. Coefficient Variation (CV) is one of the most widely used measures of regional inequality in the literature – examples include Dev (2000), Decressin (1999), Sachs (1999), Tsui (1996), Akita and Lukman (1995), Lyons (1991) and Williamson (1965). The CV is a measure of dispersion around the mean. So, in this chapter, the CV, as defined below, attempts to capture the dispersion of indices. This measure is standardized and can be used to make comparisons between counties and over time. In the following analysis, the CV is an unweighted measure and is calculated as below:

$$CV_U = \frac{\sqrt{\frac{\sum_i (y_i - \bar{y}_U)^2}{N}}}{\bar{y}_U} \quad (3)$$

where y_i is the per capita index of county i , N is the number of regions and \bar{y}_U is the mean. \bar{y}_U is computed as the mean of the regional per capita index without weighting by population as follows:

$$\bar{y}_U = \frac{1}{N} \sum_i y_i \quad (4)$$

There were several main reasons for selecting these indices. First, I wanted to provide the most up-to-date information possible, and also focus on changes through time. Therefore, the analysis concentrated on data for 2006. Second, per capita Gross Domestic Product (GDP) is one of the most widely used measures of economic production. The GDP of a country is defined as the market value of all final goods and services produced within a country in a given period of time (Eatwell, 1998).

GDP has been widely used by researchers to provide a picture of a country's development status (Lu and Lo, 2006). Here, 2006 provincial and county per capita GDP are chosen to reveal the difference between provincial- and county-level models.

Therefore, the correlation of QDI and Per Capita GDP, Per Capita Net Income of Urban/Rural Residents, Per Capita Residents' Savings Deposits, Per Capita Local Government Revenue, Per Capita Local Government Expenditure, Per Capita Outstanding Loan of Financial Institutes, Student Numbers per 10000, Hospital Beds per 10000, Number of Social Welfare Nursing Centre Beds per 10000 are listed as follows.

Table 5- 1: Correlations of PGDP, PLGR, PLGE, PSDUH, PCNIRH, PFI, HB, SWB, SE and QDI

Correlations

		PGDP06	PLGR06	PLGE06	PSDUH06	PcNIRH06	PFI06	P10000HB06	P10000SWB06	SE06	@06QDI
PGDP06	Pearson Correlation	1	.846**	.820**	.854**	.385**	.843**	.395**	.321**	.108**	.876**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	1931	1931	1928	1928	1921	1928	1920	1832	1931	1823
PLGR06	Pearson Correlation	.846**	1	.793**	.818**	.347**	.858**	.262**	.218**	.099**	.802**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000
	N	1931	2056	2053	2040	1921	2046	2010	1910	2056	1823
PLGE06	Pearson Correlation	.820**	.793**	1	.784**	.128**	.748**	.475**	.280**	-.009	.835**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.700	.000
	N	1928	2053	2053	2038	1918	2044	2007	1908	2053	1823
PSDUH06	Pearson Correlation	.854**	.818**	.784**	1	.310**	.877**	.316**	.273**	.188**	.848**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	1928	2040	2038	2040	1918	2040	1998	1900	2040	1823
PcNIRH06	Pearson Correlation	.385**	.347**	.128**	.310**	1	.345**	.038	.142**	.128**	.284**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.093	.000	.000	.000
	N	1921	1921	1918	1918	1933	1918	1910	1822	1930	1813
PFI06	Pearson Correlation	.843**	.858**	.748**	.877**	.345**	1	.279**	.241**	.130**	.814**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	1928	2046	2044	2040	1918	2046	2003	1903	2046	1823
P10000HB06	Pearson Correlation	.395**	.262**	.475**	.316**	.038	.279**	1	.555**	-.089**	.533**
	Sig. (2-tailed)	.000	.000	.000	.000	.093	.000		.000	.000	.000
	N	1920	2010	2007	1998	1910	2003	2019	1903	2011	1823
P10000SWB06	Pearson Correlation	.321**	.218**	.280**	.273**	.142**	.241**	.555**	1	.048*	.569**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.035	.000
	N	1832	1910	1908	1900	1822	1903	1903	1917	1910	1823
SE06	Pearson Correlation	.108**	.099**	-.009	.188**	.128**	.130**	-.089**	.048*	1	.239**
	Sig. (2-tailed)	.000	.000	.700	.000	.000	.000	.000	.035		.000
	N	1931	2056	2053	2040	1930	2046	2011	1910	2068	1823
@06QDI	Pearson Correlation	.876**	.802**	.835**	.848**	.284**	.814**	.533**	.569**	.239**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	1823	1823	1823	1823	1813	1823	1823	1823	1823	1823

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 5- 1 shows the Pearson Correlation for ten indices. First, it is found that the QDI is highly correlated to its all nine indices, which indicates that there is a strong relationship between the QDI and its nine variables. Therefore, it can be claimed that the QDI is a reasonable measure of the three dimensions of development. This index is able to measure the process by which citizens' options are widened, giving them greater opportunities when it comes to income, savings, public infrastructure, education, health care and welfare. Therefore, the QDI is also able to rank counties by their level of 'quality development', which usually also determines whether a county is a developed, developing or underdeveloped county. Although this index has some limitations, like the Human Development Index (UI Haq, 1998), it is a broad index able to measure three development dimensions. This multivariate index is a better measure of quality of life than any single index, which only measures one dimension. This also proves the theory that development is not just economic, but also has social, political and ideological dimensions.

Second, per capita GDP has a very high correlation with five other indices but a low correlation with student enrolment. This means per capita GDP has a strong relationship with personal income, savings, government revenue and expenditure, but a weak relationship with student enrolment numbers. This is also supported in research by Qian (2008) and Hannum (2007)

Third, there is negative coefficient between local government expenditure and student enrolment, and there is also an extremely weak relationship between them. In this case, it means when local government expenditure increases, student numbers decrease or do not change.

Therefore, I use QDI (a multivariate index) to represent development index and CV of QDI and its components indices to stand for inequality index. Then, I test Kuznets Curve by using QDI and CV.

Due to China's economic, social, political and ideological conditions, there has never been an applicable development theory or strategy to guide the prevailing situation and development. There are some theories and strategies for understanding and explaining China's rapid development and worsening disparities, but they are limited to certain historical situations or specific conditions (for example, Fan and Sun,

2008; Ho and Li, 2008; Lu, 2008; Wang, 2007; Li, 2006; Jun, 2006 and Woetzel, 2004) and are inadequate for understanding the overall development of China in the last few decades.

In the debates about the relationship between development and disparity, the proposal made by Björn and Johansson (1999:586) has received widespread attention, as the phenomena described are quite evident in many developing countries: ‘in the early stage of development, economic inequality increases over time while a country is developing, then after a critical average income is attained, it begins to decrease’. Among the existing development theories and strategies, Simon Kuznets’s ‘inverted U-curve hypothesis’ is the most influential statement on inequality and development. The debate surrounding the existence of the Kuznets Curve (or the Kuznets model) has not settled in academia since 1955 (Candelaria *et al.*, 2009; Lahiri and Dillon, 2007; Khasru and Jalil, 2004; Thornton, 2001; Tisdell, 2001; Higgins and Williamson, 1999). As one of the earliest researchers of development economics, Simon Kuznets (the Nobel Laureate in Economics), proposed the Kuznets Curve (or the Kuznets model) in 1955. It is an empirical model (for development) as shown in the graph below, where the horizontal axis measures the increase of economic development (presumed to correlate with time), and the vertical axis measures income inequality. The curve is an inverted U-curve, which means that economic inequality increases over time while a country is developing, and after a critical average income is attained, it begins to decrease (see Figure 5- 14)

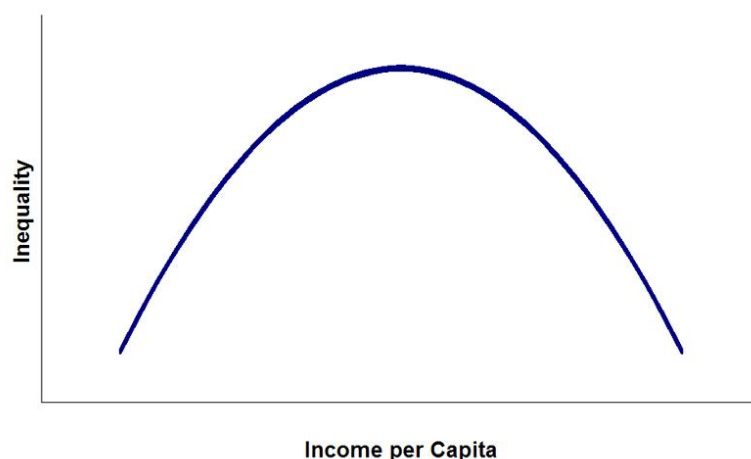


Figure 5- 14: Kuznets Curve

In order to understand the current situation of China's development and inequality, Kuznets model is used here to test China's development stage. The reasons for choosing Kuznets model are as follows:

First, the Kuznets Curve is deeply rooted in many development theories. For example, a few well-known development models, such as Lewis's (1972) Dual Sector Model of Development, Hirschman's (1958) Unbalanced Growth Model and Rostow's (1956, 1960) Stages of Economic Development, all argue that there is a disparity in income distribution during economic development in low-income countries. The distinction of Kuznets's inverted U curve is that it has incorporated the inequality or the Gini coefficient on the Y axis and economic development or per capita income on the X axis. In addition, Kuznets (1955, 1966, and 1995) also gives a theoretical explanation for the shape of the curve based on development theories. For example, he explains the stages of developments. In the early stages, economic growth is mainly driven by investment in physical capital. By distributing resources towards those who save and invest the most, inequality normally encourage growth. However, in mature economies, if physical capital accrual is still the main source of growth and human capital accrual has not been incurred, inequality slows growth because education standards are lowered and poor people lack financial support for their education in imperfect credit markets. All these explanations fit very well with China's development situation.

Second, because the empirical model is very important for understanding how inequality changes during development in various countries, the Kuznets Curve has been widely used to test many different countries' data since its publication (for example, Bahmani-Oskooee and Gelan, 2008; Lahiri and Dillon, 2007; Tisdell, 2001; Thornton, 2001). However, the debate has not reached a clear conclusion. Kuznets (1966, 1995) himself proved that income inequality (shown on his vertical axis) increases first and then decreases in developed countries according to historical statistical data from the UK, USA and Germany; for the horizontal axis, he also examined the income distribution of both developing and developed countries after World War II. The result shows that income inequality is much higher in developing countries than in developed countries. The majority of research conducted in the 1960s and 1970s supports the Kuznets model. However, after the 1980s, empirical results from the Asian countries labelled the 'Four Little Dragons (Hong Kong, Taiwan, South Korea and Singapore)' were found to directly contradict the Kuznets model (Heikkila, 2003). For example, Vogel (1991) concludes that during the rapid development of Asia's Four Little Dragons, income distribution improved rather than deteriorated. It becomes apparent that Kuznets's conclusion that inequality must increase before decreasing is only true in the case of 'cross-sectional' data being used, i.e. the U-shape of the curve cannot be formed from the progressive development data of any individual country. In his data set, many of the medium-income countries were in Latin America, a region with historically high levels of inequality. However, if Latin America is excluded from his datasets, the U-shape of the curve tends to disappear. In China, there has also been a debate over the Kuznets Curve. For example, Zhang and Zou (2012) conclude that the Kuznets's hypothesis does not work in the context of empirical analysis of China; however, Zhou and Li (2011) reach the opposite conclusion based on his empirical analysis. Therefore, the theoretical question of whether the Kuznets Curve fits with Chinese development is of critical importance; in particular, it is of interest to discern if/when the different stages of the U-shape will occur and if/when inequality might start to decrease.

Third, compared with other western models, Kuznets's (1955) inverted-U model has had the most prevailing influence on China's recent development. China is different from the typical developing economy. Due to its history of planned (balanced) development under state ownership and its poor industry base, aiming for

unbalanced growth in China is one development strategy. This model had given comfortable reassurance to the Chinese authorities in choosing such an unbalanced development strategy from the beginning of the reform period. The renowned ‘getting rich first’ policy proclaimed by Deng (1983) was actually based on belief in Kuznets’s model and the idea that the regional inequality will rise during the initial stages of development and then should decline at more advanced stages, i.e. ‘making people equally rich eventually’ (Deng, 1983:25). Following the ‘getting rich first’ principle, in the late 1980s Chinese authorities divided the country into three economic belts or zones: the eastern, coastal, and central and western regions. Great attention, resources and capital were concentrated into the eastern and coastal areas. In reality, under this strategy, the coastal and eastern regions have claimed about 85% of total foreign investment and 70% of total domestic investment for most of the past two decades, leaving the central and western region far behind (Zheng and Ge, 2004; Cai *et al.*, 2002; Fan, 1997). Now the crucial question is whether the aim of ‘people getting equally rich eventually’ can be achieved.

As China is a huge country and contains different development regions, I use county-level data to represent unevenly developed regions instead of the nations at different development stages used by Kuznets to test his model through static analysis. The Kuznets Curve is tested using QDI as a development index and coefficient variable (CV) of QDI and its components as inequality indices. Identifying a measure of inequality is very difficult because of the vast database required. In order to capture the various features of statistical data, the CV rather than Gini coefficient is used to calculate the disparity because it is almost impossible to calculate Gini coefficient with such a huge database. In the literature, the CV is one of the most widely used measures of regional inequality. Examples include Chen (2007); Lyons (1997); Jian *et al.*, (1996), Williamson (1965).

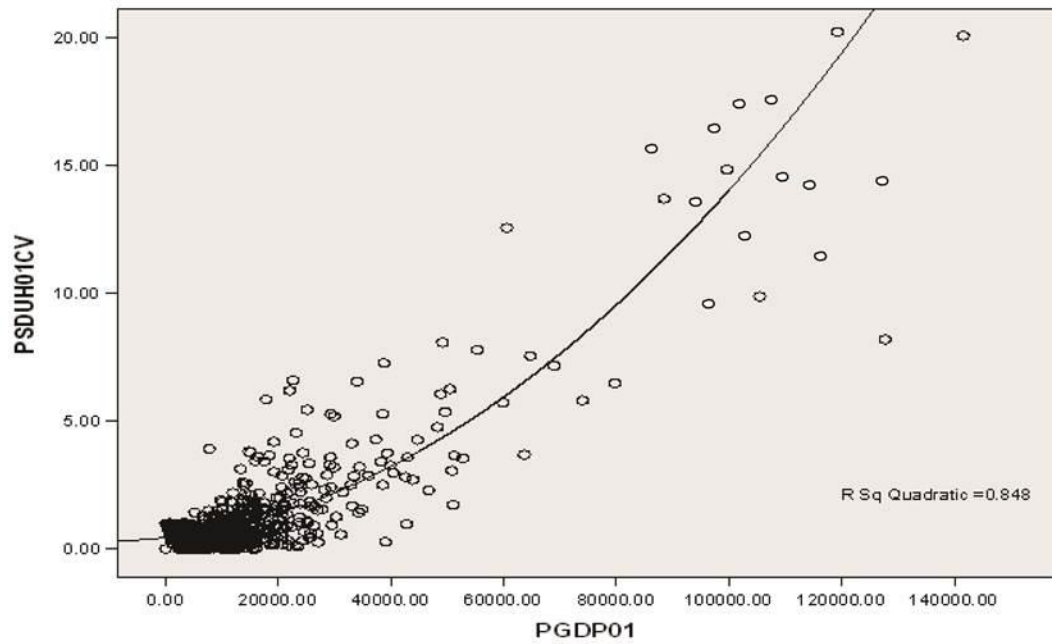


Figure 5- 15: Regression graph of per capita GDP and CV of per capita savings (Source: author)

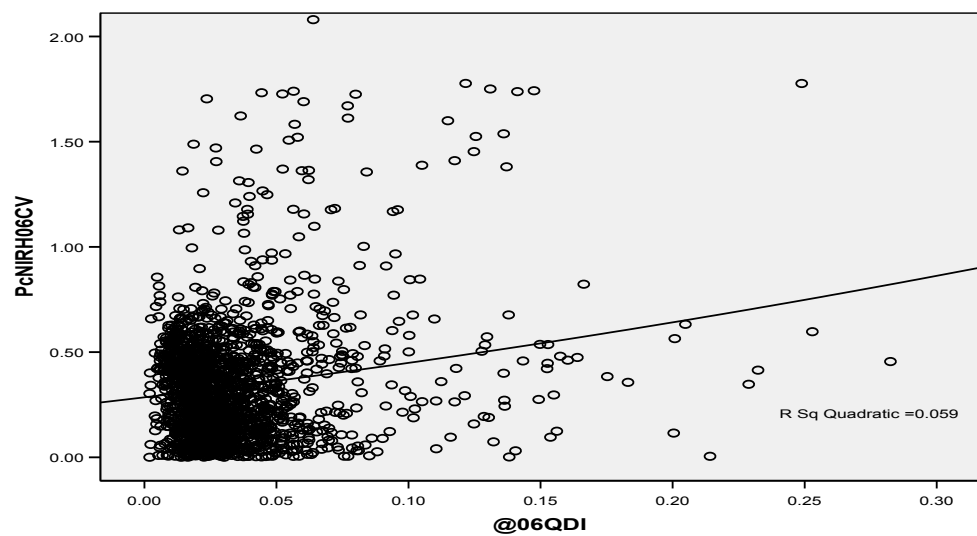


Figure 5- 16: Regression graph of QDI and CV of per capita income (Source: author)

After testing the regression between the per capita GDP and CV of per capita savings (Figure 5- 15), between QDI and CV of per capita income (Figure 5- 16), the following conclusions can be drawn.

First, the Kuznets Curve is not obvious on all graphs and the Kuznets Model does not apply to China according to the county-level data. In other words, based on analysis of over 2000 counties using statistical data from China in 2001 and 2006, the inequality of the counties with high income and savings and the counties with low income and savings, is not higher than that of the counties with medium income and savings. This result supports the arguments made by Zhang and Zou (2012) that the Kuznets Curve does not exist in the Chinese context. Therefore, it can be concluded that it is impossible to use the Kuznets Curve to forecast the ongoing trend of inequality along with economic, social and political development.

Second, most regression fit lines are in a curve shape at the first half of the graph. This indicates that the counties with high income and savings experienced greater disparity than counties with medium and low income and savings in 2001 and 2006. This outcome proves that China's disparity is getting worse and has not yet reached its maximum conversional point with high economic growth. This is also demonstrated in the literature of Wan (2004, 2007, and 2008) and Gravier-Rymaszewska *et al.*, (2010). There is no sign that inequality has reached a downwards turning point. This outcome supports the view of other researchers, such as Ho and Li (2008) and Hao and Wei (2010).

Third, the R square of PGDP is similar to that of QDI in 2006, and the R square of QDI is larger than the R square of PGDP in 2001 and 1997. This means that using the Quadratic Regression Function is more reliable in finding a relationship between the QDI and per capita income and saving, than between per capita GDP and per capita income and saving. This finding again supports the definition of development as not only economic growth or economic development, but also social and political development.

Fourth, the R squares are very high in 1997 and 2001 but very low in 2006. The R squares in 1997 and 2001 reach around 0.8, which suggests that it is very reliable to use the Quadratic Regression Function for the analysis. However, the R square is only 0.05 in 2006, which then suggests that using the Quadratic Regression Function for the analysis is inappropriate. Instead, the linear regression provides better results. This most likely means that rich counties have a greater disparity than medium and poor counties.

In addition, in the light of Kuznets's model, there are two questions about China which need to be answered. First, is uneven regional development a 'natural' and 'inevitable' stage in China's development? Second, should rising regional disparity be tolerated? Some researchers, such as Ma and Yu (2001), use time series to examine China's regional per capita income convergence. He draws upon Barro (1992) and Barro and Sala-i-Martin's (1995) theory, which suggests that regional disparities can only be short-term phenomena, as they will generate self-correcting movements in prices, wages, capital and labour, which will restore the tendency towards regional convergence. This has happened in the United States and Japan (Fujita *et al.*, 2004). In contrast, Higgins and Williamson (1999) have warned the Chinese government that Kuznets's Curve and Williamson's inverted-U approach are too theoretical and their anticipated events may not happen. Even if such a model is realised, the turning point could take a long time and possibly more than 30 years. Therefore, it is a great risk to tolerate rising disparity. Yao (2001) suggests that regional growth and incomes do not necessarily converge, even over a long period. Instead, regional divergence is the most likely outcome, and regional incomes will tend to diverge. However, Zhou (2009) proposes that both convergence and divergence of economic growth have appeared successively in China. I may answer the above two questions through critical analysis of the detailed and large quantity of county-level data. Uneven regional development is an inevitable stage in China's development because the Chinese government launched preferential policies both historically between 1949 and 1978 as well as during the process of economic reform since 1978. Therefore, the inequality conversional point can only be reached through the efforts of the government to reduce inequalities in production, education, health and politics, because the severe disparity not only restrains economic growth but also affects social stability.

5.3 Understanding Regional Development and Reasons for Disparity

There are various reasons for the patterns of regional differentiation, such as political preferential strategies, natural resource differentiation, access to large markets and transport routes (Xu and Wang, 2006).

5.3.1 Political Preferential Strategies

The previous section argues that, according to the analysis of county-level data, disparity in China is getting worse and has not yet reached Kuznets's maximum conversional point, despite high economic growth. Many reasons have been put forward to explain this phenomenon (Yao, 2009; Yao *et al.*, 2004; Yang, 2002; Yao, 2001). The most common is that China's transition process since 1978 has been marked by a series of incremental and gradual reforms. The timing and significance of China's reform policies have significant influence on the evolution of regional inequalities (Yang, 2006; Zhang and Zou, 1998).

First, coastal regions have been the beneficiaries of coastal region-biased policies from central government and these regional development strategies cause regional inequalities (Yao, 2009; Démurger *et al.*, 2002). Since 1980, four SEZs have been established in the two coastal provinces of Guangdong and Fujian. Later, 14 open coastal cities were set up in 1984. Hainan province and Shanghai Pudong Development Zone were founded in 1988 and 1989 respectively. The rise of regional inequalities has been directly contributed to by China's regional development strategies. Both domestic and foreign investments have become exceedingly concentrated in the coastal regions due to preferential policies. In addition, more advanced technologies and management skills have been brought to the coastal regions by open-door policies. The coastal regions enjoyed high growth rates driven by scale economies where industrial agglomeration took place. Golley (2002) identifies industrial agglomeration (a so-called 'cumulative causation effect') in five south-eastern provinces using data covering 22 industrial sectors in the period between 1989 and 1994. In the meantime, a huge volume of labour was attracted through migration to the coastal regions from inland regions. The coastal regions benefited significantly from an initial take-off as a result of the preferential regional development strategies in the 1980s, which then in turn led to steadily higher-than-average growth rates in the 1990s due to the effects of agglomeration and increasing returns (c.f. Kanbur *et al.*, 2008). However, spill-over effects were not strong enough to allow the inland regions to catch up with the rich coastal regions. Empirical evidence from county-level data supports the view that preferential investment and

trade policies are important determinants of growth differentials in China (e.g. Démurger *et al.*, 2002).

The second reason for regional inequality is urban-biased policies (Lu and Chen, 2006). The government installed a set of urban-biased fiscal and monetary policies after 1985 in order to maintain economic and political stability. The government subsidies to urban commodity prices totalled 71.2 billion RMB in 1998, which was 7.6% of the government's budget. The Chinese government also subsidised the urban-based, loss-making SOEs, which accounted for 19% of the government's revenue between 1986 and 1990, and 9% between 1991 and 1995. Such subsidies totalled 232.5 billion RMB and 206.1 billion RMB for the periods respectively (Yang, 2002). The share of the budget devoted to cities ranged from 52 to 62% for the period between 1986 and 1992 (Yao, 2001). The urban state sector also received preferential credit allocations in addition to fiscal transfers, which caused a redistribution of income in favour of urban areas. As a result, rural-urban inequality has been constantly increased by urban-biased fiscal and monetary policies. This has significantly contributed to rising inequality in China since 1985. Regions in China differ widely in their rates of urbanisation (Yang, 2002) so widening rural-urban inequality translates into rising regional inequality because counties with a higher level of GDP per capita in general have higher urbanisation rates.

The third reason explaining regional inequality is public service delivery by the inter-governmental transfer system. The local governments took responsibility for fiscal support to most core public services, including education, health care, social security and infrastructure (Tsui, 2005; Zhang and Fan, 2004). However, the present inter-government finance system is not ensuring adequate delivery of public services because the extensive decentralisation of the basic service delivery of education and health care is associated with regional inequalities. Central government should complement a strong inter-government fiscal transfer system to ensure education and health care equality (Ma and Yu, 2001). However, the current inter-government transfer system only plays a partial role and is unable to offer an adequate equalising role because China's per capita revenues and expenditure by local governments vary greatly across provinces. Similarly, large disparities have also existed within provinces. For example, the central government set up local government staffing and

salaries according to local government fiscal revenue, which absorbs over two thirds of local government budgets (Qing, 2005). The relative lack of autonomy in such a major spending area, disparities in fiscal capacity and different levels of responsibility largely explain why many local governments, especially those in poor localities, have fallen short of ensuring adequate the delivery of public services. The long-term financial constraints at the local level have resulted in many misrepresentations and undermine efforts of poverty alleviation (Wan, 2008).

Fourth, internally, the question of regional economic development is a major concern for national security planning. In general terms, China's military and political elites identify three major levels of security: the national, the regional in terms of East Asia and beyond, and the global. The interactions between the three are clearly important and the disputed ownership of Taiwan is an example of how one island links all three geographical scales together. For the Chinese authorities, of course, the reunification of Taiwan with continental China remains one of the most important policy priorities. Traditionally, ethnic separatism and the disputed region of Tibet tend to be viewed as an internal matter. More recently, there has been a far greater awareness of how apparently localised issues might be connected to regional and global flows of people and ideas.

In terms of ethnic separatism, one of the most important sources of tension has been the status of Xinjiang province in the far west of China. The central government has claimed in the past that so-called Uighur terrorists have been responsible for over 200 attacks between 1990 and 2001 (Dodds *et al.*, 2009). Allegations have also periodically surfaced that the central authorities have been particularly serious in suppressing any anti-government or separatism activities. In 2000, a 'Go West' development campaign (the Great Western Development Strategy) was launched with the purpose of developing the country's western regions. It was seen as an explicit recognition that China's border regions were vulnerable to further unrest and not helped by the fact that some of the poorest and non-Han Chinese communities were located there. Economic development has been routinely cited as essential for dampening down acts of subversion attempted by a small number of ethnic minority people, such as the Uighurs.

This is significant because it means that regional inequalities are not merely social and economic questions for the authorities in Beijing. The border regions, especially in the far west, have become ‘securitised’ in the sense that investment in education and training alongside investment in infrastructure is widely perceived as an essential element in restraining, if not crushing, ethnic separatism in Xinjiang province. Under the remit of the Great Western Development Strategy, attention has been devoted to improving school attendance figures in a province populated by eight million Muslims who are culturally and linguistically distinct from local Han Chinese. Evidence from the county level is significant because most religious minorities including Uighurs live outside the main cities and towns. The strategy has combined incentives with tougher measures to ensure the territorial integrity of China in the far west. Incentives include preferential treatment for minorities with regard to university entry and a growing Uighur middle class able and willing to access better school-level education for their children who may well choose Chinese rather than Uighur language schools. The Chinese government hopes that improved educational and employment prospects will diminish secessionist pressures among a new generation (Dodds *et al.*, 2009).

In short, the Chinese authorities are eager to counteract regional disparities in the far west and to address the perceived problem of ethnic separatism. Hence, the Great Western Development Strategy, which has improved living and social-educational conditions for minorities but has not shifted the dominance of the Han Chinese with regards to positions of power such as membership of the CCP. In recent years, therefore, it has been recognised that this is the number one internal security challenge and not the question of Tibet, which requires the co-operation of India rather than the Central Asian Republics. Elements of the Uighur population have become more radicalised and experienced in terms of international training and fighting. By way of contrast, Tibetan separatists and their overseas supporters are less inclined towards violent struggle. Regional economic development, educational investment and employment creation have become conjoined and this is likely to continue in the immediate future (Morduch and Sicular, 2000).

5.3.2 Geographic Diversity

Geography matters significantly. Substantial inequality in regional development is not new and is found in almost every geographically large country (Williamson, 1965), such as the US, Brazil and Russia. In this sense, China is not unique. As the fourth biggest country in the world (covering more than 9.5 million square kilometres), China has the world's largest population (over 1.3 billion), is marked by extreme geographical differences in development conditions and has immense diversities in geography, climate, natural resources, culture and population distribution. (Bao *et al.*, 2002) proposed that geographic factors have a significant positive relationship in explaining regional disparity in China and this has been investigated in wider scientific literature. Chang *et al.*, (2002) applied new geographic theories to study Chinese development since the reforms. The paper develops a theoretical model to explain the regional growth pattern in China. According to the model, the geotopographic advantages of the coastal regions in international trade and transportation are realised in the context of market reforms and open-door policies. As a consequence, returns to capital investment in the coastal regions are superior to in the rest of the country (Hertel and Zhai, 2006). Démurger (2001) discovered that the interaction between the coastal dummy and the time effect has a significant and positive impact on growth, which supports Chang *et al.*, (2002), who argue that the reforms have helped the coastal regions to realise their geographic advantages.

Geographic factors have an impact on income (Fan *et al.*, 2000). As demonstrated in Chapters Six and Seven, geographic conditions, climate, natural resources, culture and population distribution have different effects on economic and social development at the county scale. Therefore, in order to understand and analyse China's economic, social, political and ideological inequalities, it is important to understand the immense diversity to be found in geography, climate, natural resources, culture and population distribution. The physical environment also plays an important role in regional differentiation in China (Bao *et al.* 2002), with the topography, climate, soil and hydrology all providing very different contexts for development. For example, low land, mild climate, fertile soils and sufficient water provide the best conditions for agricultural activities (see Figure 5-17) in central and southern China. The land is separated by broken hills, and millions of people live in these undulated regions and

cultivate the valleys and lower slopes. The real main lowlands are those of the great river basins and estuary plains, built up of alluvial deposits. This is why these great river basins and estuary plains are well-developed areas such as the Yangtze River estuary centralised around Shanghai, the Pearl River estuary centralised around Guangdong and the Yellow River estuary around Shandong. Counties with a strong development trajectory are concentrated in these areas, where agricultural products are particularly able to flourish. Specialisation is indicated, for example, by the renown of vegetables from Shouguang Xian and flowers from Guangrao Xian of Shangdong province (the Yellow River estuary); grapes from Penglai Xian; and poultry, silk worms and fish from Hai'an Xian of Jiangsu province.

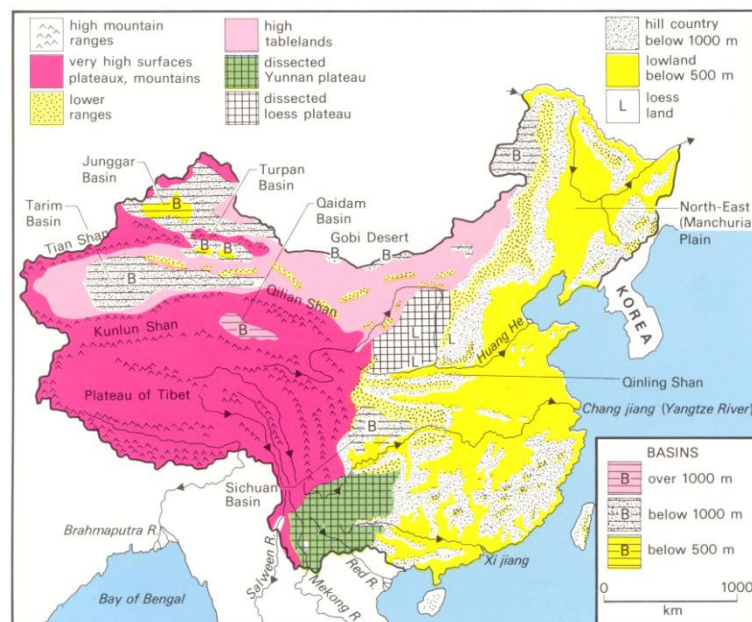


Figure 5-17: General geomorphology map of China (Source: White Papers of the Chinese Government, 2006)

The possession of mineral, natural, water, cultural and historical resources are particularly important in terms of county-level economic development. For example, Huang *et al.*, (2012) explain how resources have a positive influence on regional development and Liang *et al.*, (2004) highlight the relationship between tourism and regional economic development. So far, China has discovered 171 types of mineral and nearly 18,000 mineral deposits (mines) (see Figure 5-18). More than 7,000 of these deposits are medium to large in size, providing over 92% of China's primary energy, 80% of its industrial raw materials and more than 70% of its agricultural

means of production (White Papers of the Chinese Government, 2007). However, these mineral resources are not distributed very evenly across China and possession of mineral resources is one of the most important factors in some counties being more developed in terms of their local economy than others. For example, Pinged Xian (county) in Guangxi province has abundant aluminium mines; Tingyi Shi (city) in Huizhou province has coal, aluminium and other metal mines; Edina I (I is the equivalent to county in Mongolian) in Inner Mongolia has coal. Counties with rich cultural, historical and scenic resources have also been attracting a large number of both domestic and overseas tourists. For instance, the famous Guiling Shi in Guangxi province and Yixing Shi in Guizhou province have been making profiting from visitors who come to see their spectacular limestone castle landscape, caves and rivers.



Figure 5- 18: Distribution of metallic mineral resources in China (Source: White Papers of the Chinese Government, 2007)

5.3.3 Economic Imbalance

The core of development is always defined as being economic, although development also consists of social, political and cultural dimensions (e.g. Krugman, 1991; Martin and Sunley, 1996). Development theories, including the Neo-classical Growth Theory (e.g. Cass, 1965; Koopmans, 1965; Solow, 1956), the Regional

Development Theory (e.g. Kaldor, 1970; North, 1955) and New Institutional Economics (e.g. Williamson, 1985, 1975; Coase, 1937), consider physical (e.g. labour and capital) and human capital (e.g. education and health care) to be the key factors for increasing productivity. Public infrastructure and public policies also have an impact on regional productivity and stimulate regional development (c.f. Dawkins, 2003; Button, 1998). China's development in general is not exceptional and the economic factors are not only the consequences of political preferential policy but also lead to uneven regional development and disparity.

First, although the central government preferential policy has promoted growth in economies in coastal areas, the geographical location of these economies provides them with a unique advantage in engaging in international trade, as well as enhancing their potential for industrialisation to supply the trade in manufactured exports (Yao, 1998). Mody and Wang (1997) and Démurger (2001) have found that infrastructure investment in communications infrastructure, such as roads, railway, waterways, and telephones, can help inland areas to overcome geographical obstacles. Indeed, transportation and telecommunication infrastructures are particularly important to economic growth because China has huge distances and diverse geo-topographical features between different provinces or even within the same province. Therefore, investment in public infrastructure can improve productivity growth by assisting market transactions. A few empirical works study the relationship between infrastructure development and economic growth in China. Zhang and Fan (2004) find that both telecommunication facilities and road network length had positive and significant effects on growth for seven coastal provinces from 1985 to 1989. Démurger (2001) finds a nonlinear relationship between economic growth and transportation indicators. The development of telecommunication in rural areas (measured by the number of villages with access to telephone services) has a positive impact on growth.

Before the reform period, public infrastructure was evenly distributed across regions in China. However, since the reform, the central government has built infrastructure mainly in coastal provinces according to the regional bias in its development policy. The central government has recently started to focus on western provinces in order to stimulate western economic growth (Ding, 2008; Lu, 2002).

Démurger (2001) suggests that economic policy measures may have a greater impact on improving infrastructure equipment than in promoting per capita income convergence. Furthermore, setting policy priorities to target public investments would help to improve regional as well as national growth prospects. Figure 5- 19 depicts the spatial distribution of per capita county government expenditure and it shows the expansion and upgrading of fiscal expenditure by country government in western counties, especially in Xingjiang and Inner Mongolia. Investment in the network of telecommunications, distribution and storage services, as well as the transportation network, would be particularly useful in most western counties, rural areas and mountainous borders, to assign in the development of capable, competitive markets and the diffusion of economic growth (Yang, 2002).

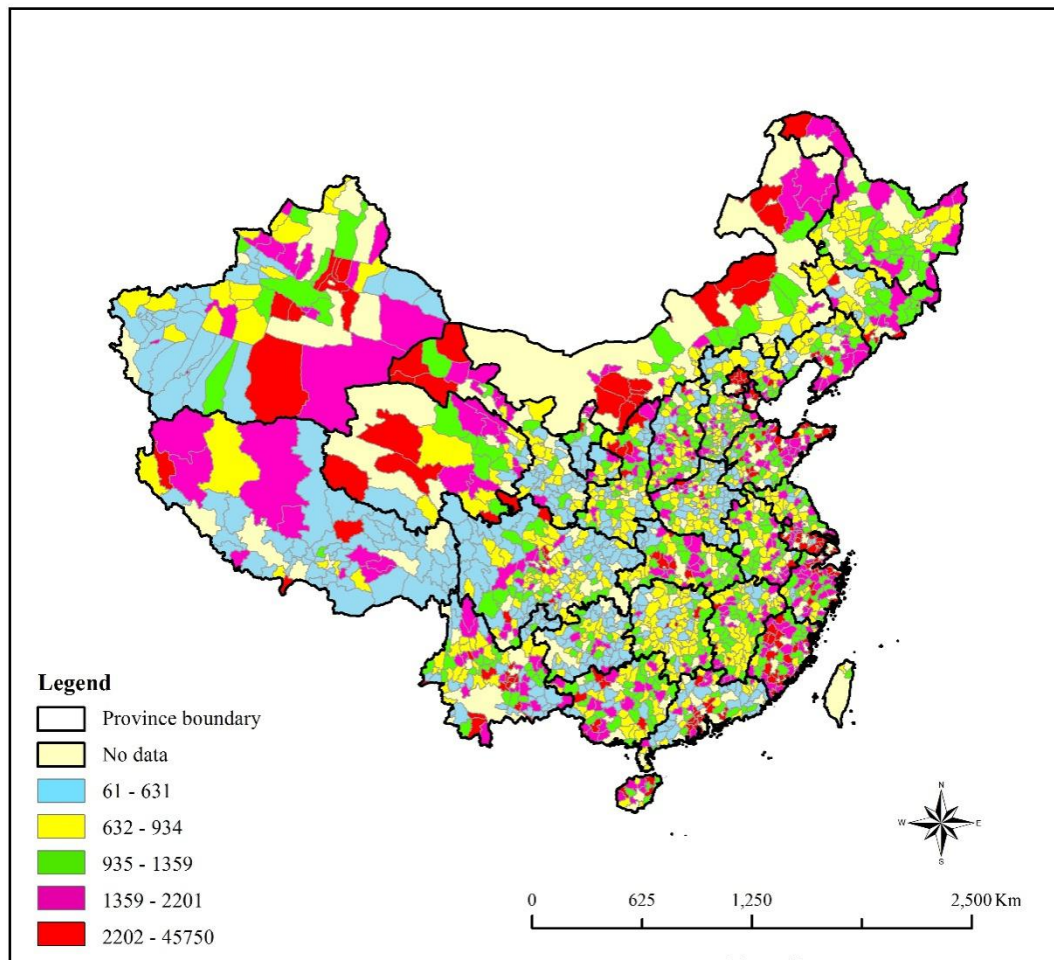


Figure 5- 19: Per capita local government expenditure (Source: author)

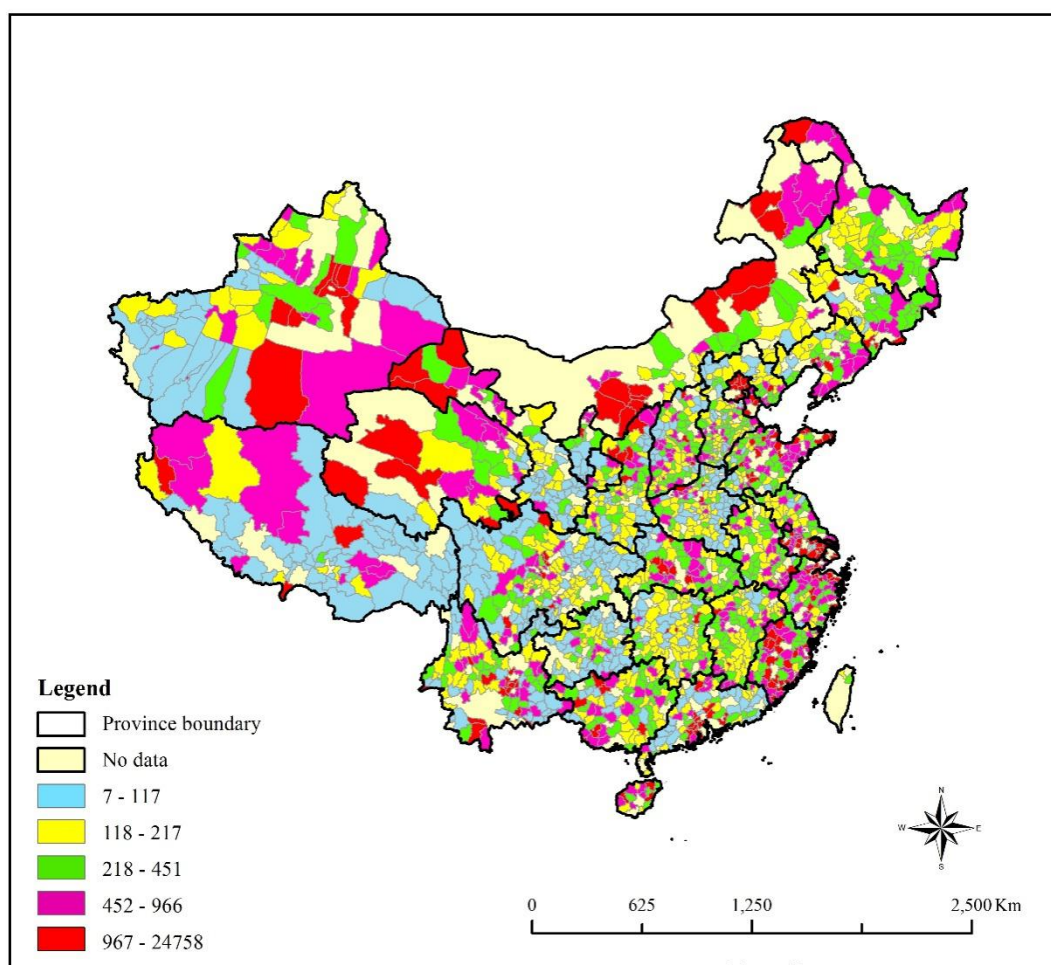


Figure 5-20: Per capita local government revenue (Source: author)

Second, fiscal decentralisation is another factor because local governments are able to accumulate power and their relationships with local enterprises strengthen during the process of fiscal decentralisation (see Figure 5-20) (Jin *et al.*, 2005; Brueckner, 2000). From the beginning of the reform to decentralise its fiscal system, Chinese fiscal reforms suffered from strict budgetary constraints. In the process of reform, the contracts established between central and local governments started to vary by regions and were subject to renegotiations when circumstances changed (Zhang and Zou, 1998). The contracting system provided incentives for local governments to increase their revenues and allocate their spending more efficiently because it caused central government taxation rates to drop sharply. However, direct empirical evidence shows that fiscal decentralisation has exacerbated regional inequality in China. For example, Tsui (1991) uses a graph analysis based on data up

to 1985 to demonstrate that decentralisation increased regional inequality. Kanbur and Zhang (2002) discover that decentralisation had a significant and positive effect on the degree of regional inequality and it especially widened rural-urban inequality (Qian *et al.*, 2008).

Tax contracting between central government and the provinces was implemented during fiscal decentralisation. Each fiscal contract – ranging from fixed lump-sum contracts for five years to highly complicated (province-specific) revenue-sharing formulas – was individually negotiated. For example, Guangdong and Fujian provinces must hand over a fixed lump-sum in fiscal revenue to central government while other provinces, such as Hubei and Gansu, follow complicated (province-specific) revenue-sharing formulas. The provincial governments, in turn, negotiated individual revenue contracts with local governments such as those in the city and county (Zhang and Zou, 1998). The motivations for the provincial and local governments to engage in local economic development and generate tax revenue are different because the marginal tax rate set by the central government varied considerably across provinces. Practically, poor provincial governments reduced local development expenditure to cover local expenditure from local revenue, which formerly received fiscal subsidies from the central government (Wang, 2010). The tax reform of 1994, which had value-added tax as its centrepiece, has reduced the discriminatory elements of the fiscal system but it has not restored the fiscal capacity of the state to significantly help poorer provinces (Chen and Feng, 2000).

The negative effect of fiscal decentralisation on local economic growth has been found to be constantly strong and significant in China (Jin *et al.*, 2005). Zhang (1998) claimed that provincial spending has failed to deliver the widely expected rapid economic growth. Fiscal reforms began in China in the early 1980s, since when it has clearly failed to promote the country's economic growth (Zhang, 1998). This counters arguments that fiscal decentralisation generally makes a positive contribution to local economic growth. So, the merits of fiscal decentralisation have to be calculated relative to existing revenue and expenditure obligations as well as the stage of economic development. Zhang and Fan (2004) points out that the central government may be in a much better position to carry out public investment in the early stages of economic development. Further decentralisation may cause slower economic growth,

particularly if local governments already have high shares of total fiscal revenue and expenditure.

Third, since 1978 a variety of industrial organisation forms have emerged, including SOEs, TVEs and foreign-owned enterprises (Knight, 2008; Wei, 2004; Lin *et al.*, 1992). Inland SOEs dominate the development of the local economy but in coastal areas, TVEs or foreign-owned enterprises dominate the local economy (Ng and Tuan, 2003; Tong, 1999). Compare to inland areas, China's coastal areas have competitive concentrations of TVEs and FDI due to business traditions and their geographic locations (Zhang, 2005a). The economic development of counties is above all related to their commitment to local industry. Rural industrial growth has provided one of the most important growth engines in China. For example, the development of southern Jiangsu, known for the TVE-centred Sunan Model of development, has been conceptualised as local state-led development. Township and village governments acting as managers or board directors directly control TVEs and treat them as components of a larger corporation. In addition, local states control TVEs through labour and resource allocation, and they run their authorities like industrial firms (Walder, 2002). In market economy environments, China's state sector has been lagging behind the non-state sector in economic growth due to its low efficiency and high production costs. Therefore, Chen and Feng (2000) has proposed that local and central governments should promote private enterprises because booming non-SOEs caused high growth rates in the coastal provinces. However, the reform of large SOEs may cause some political problems and remains one of the biggest challenges for China because it may be accompanied by greater unemployment and an increase in regional inequality (Renard, 2002).

Fourth, FDI is heavily concentrated in coastal China, especially in the coastal cities, which enjoy preferential policies and agglomeration economies. This is partly because of the state's gradual opening up policy initially launched in coastal cities and partly because the coastal cities have geographical advantages (e.g., Ng and Tuan, 2003). The role of the state is significant in the decision as to where to locate foreign investment, and the state's intervention and selected openness have improved foreign investment in China (Yeung, 2006). As a result, China has adopted a strategic policy to upgrade technology and boost economic growth by attracting FDI and Hong Kong

and Taiwan Direct Investment (HKTDI) (Zhang, 2005). It is generally believed that FDI has been one of the most important factors contributing to China's rapid economic growth, as supported by researchers including Cole *et al.*, (2009); Cheng (2008); Zhang (2005); Gao (2005); Giner and Giner (2004); Bao (2002); Wu (2001). HKTDI has been secured particularly because of China's large pool of cheap labour, their unique links with China and linguistic, cultural and geographic attractions, especially of Guangdong, Fujian and other coastal areas (for example, Giner and Giner, 2004). In contrast, FDI from Europe, the US and Japan is attracted mainly because of China's large market. As China's domestic markets become more open to foreign investment, the share of HKDTI becomes smaller (Zhang, 2005).

According to the standard growth theory, the accumulation of capital is facilitated by FDI and it also enhances the adoption of more advanced technologies from abroad. Moreover, in China, FDI is closely related to exports because most products of FDI are exported abroad. For example, in 1999 exports of foreign invested enterprises accounted for 45% of the country's total exports (c.f. Fu, 2004). According to the Export Base Model, exports help a region realise its comparative advantages through specialisation and economies of scale (Huang *et al.*, 2003). This may also alleviate a region's foreign exchange constraints and thus allow the region to import more advanced materials and machinery. Therefore, FDI and export have become two major driving forces behind China's economic growth since the reform and open-door policies. However, the spatial distribution of FDI and exports are uneven in China for various social, economic and geographical reasons, such as the central government's regional development strategies (Cheng, 2008). In the meantime, the coastal regions declared 90% of the country's total exports. In 1999, the average ratio of export to GDP was 4.8% in the inland regions but 25% in the coastal regions (Fu, 2004). Therefore, exports have been the major driving force of economic growth for coastal regions, but not for inland regions. Furthermore, Fu (2004) suggested that the export-led growth in the coastal regions has not spilled over significantly into the inland regions, widening the regional gap. Similarly, sufficient empirical evidence has proved that the uneven spatial distribution of FDI and exports has contributed significantly to increasing regional inequality (c.f. Cheng, 2008; Giner and Giner, 2004; Brun *et al.*, 2002; Démurger, 2001; Fujita and Hu, 2001)

5.4 Conclusion

In this chapter, I combined nine indices to construct Quality Development Index to measure development rather than simply using the economic dimension. By using multivariate analysis through critical analysis of the detailed and large quantity of county-level data, I test Kuznets Curve model and key findings from testing it as follows: first, uneven regional development was inevitable in China's development because the Chinese government introduced preferential socio-spatial policies both historically, between 1949 and 1978, as well as during the process of economic reform beginning in 1978. Second, the inequality conversional point can only be reached through government efforts to reduce inequalities in production, education, health and politics because the severe disparity not only restrains economic growth but also affects social-spatial stability. Third, although the Chinese government is making efforts to reduce disparities, the analysis of data relating to economic growth and economic, social and political inequality –both statistical data from the last 30 years and my fieldwork data –suggests that the government's policies are inadequate for the purposes of reducing entrenched patterns of county-level and regional inequality. This situation has been proved by Zhang *et al.* (2008), Wei (2007) and Fleisher (2006), as well as by my thesis' analysis of using county level data.

Then I explore the social, economic, and political factors underlying China's impressive macro development progress, based on a database of all counties in China from 1999 to 2006. The results show that all counties experienced rapid economic growth together with widening inequality during this time. In addition, through analysis of economic growth and income diversity over the last 20 years, it is found that income inequality increased with economic growth. The main causes of the inequalities are preferential policies such as regional development strategies, urban-biased policies, inter-governmental transfer systems, public service delivery and national security planning. Economic factors include regional public infrastructure, FDI and exports, fiscal decentralisation, the reform of SOEs and inter-regional trade protection. In addition, diverse geographical factors such as topography, climate, soil and hydrology, natural resources, culture and population distribution also play an important role and have different effects on economic and social development at the county scale.

The next three chapters aim to examine and ascertain how different groups of people understand and react to rapid economic development and widening inequality, and how these uneven regional developments and disparities influence the attitudes and opinions of people with different backgrounds, varying as to gender, age, education, marital status, place of residence, ethnicity and social status.

Chapter 6 Economic Inequalities: Income and Consumption

6.1 Introduction

The Chinese economy has had an annual per capita growth rate of about 10% since 1990 (Liu and Zhang, 2007; Jones *et al.*, 2003). However, growth has been uneven and unequal. There is much debate about the implications of growth for regional development and the related inequality between rural and urban areas as well as between coastal and inland areas (Knight, 2008; Sicular *et al.*, 2007; Lu and Chen, 2006; Meng *et al.*, 2005; 2005; Lee, 2000; Kanbur and Zhang, 1999). Not every area has benefited equally from the economic success, although lagging inland and rural areas have started to catch up in recent years because of central government development efforts (Zhou, 2009; Tsai, 2001).

Income and consumption are the most important popular indicators of economic development because they are seen as measurements of household purchasing power (Wong and Lu, 2002). As a basis for development, certain physical conditions such as household purchasing power largely determine quality of life, and are a concern for most citizens. Therefore, in order to improve the quality of people's lives, local authorities have sought to address both income and consumption because these play key roles in terms of economic development and associated inequality. However, in parallel with economic growth, income and consumption inequality has also been widening since 1980 (Fleisher and Chen, 1997). The reasons for China's widening income and consumption inequality have been extensively debated. Some studies describe the impact of government policies on inequality (Gustafsson *et al.*, 2008; Giner and Giner, 2004; Fan *et al.*, 2002) with some blaming this on corruption and unlawful activities (Zhu, 2012; Li *et al.*, 2000). Other studies focus on inequality between rural and urban areas and between coastal and inland areas (see for example,

Gustafsson *et al.*, 2008; Tsui, 1993; 2007; Brun *et al.*, 2002). However, most of this research has only addressed inequality at the provincial level, among groups of provinces or between rural and urban areas. Therefore, this chapter aims to fill a gap in the literature by using county-level field survey data in five counties to analyse how income and consumption inequalities are expressed in a wide range of changing indicators such as gender, place, location, social status and ethnicity. In order to achieve this aim, section 6.2 shows how residential households' quality of life improved remarkably; section 6.3 discusses the definition of income and grey income in the context of Chinese development; section 6.4 concentrates on income inequality by exploring it between genders; section 6.5 analyses income and consumption inequality between different locations; section 6.6 examines income and consumption inequality between urban and rural areas; section 6.7 explores income inequality and consumption patterns between different social classes; section 6.8 presents the main findings of this chapter.

6.2 Residential Households

In the past 30 years, China's economy has been growing and annual GDP has been increasing by approximately 10%, faster than any other country (NBS, 2001-2011). According to Chi (2008), income and quality of life have a positive relationship to economic development. Similarly, almost all participants in my research felt that their personal lives had changed remarkably during this period, and for the better. The following set of photographs taken from Guangdong, Hubei and Gansu provinces show, for example, how participants' private properties have improved over time.



Figure 6- 1: Improvements in the condition of residential housing in Gulang (Source: author)



Figure 6-2: Improvements in the condition of residential housing in Wuchang (Source: author)



Figure 6- 3: Improvements in the condition of residential housing in Boluo (Source: author)

Figure 6-1 illustrates three dwellings constructed in Gulang, Gansu province; Figure 6-2 shows dwellings in Wuchang County, Hubei province; and Figure 6-3 provides examples from Boluo County, Guangdong province. These are typical residences belonging at different times to the same families and which were constructed prior to the 1980s (top), between 1980 and 2000 (middle) and then after 2000 (bottom).

As well as residential housing development, China has made substantial improvements in public infrastructure (Banerjee *et al.*, 2012). For example, the city/town squares that exist in almost all Chinese urban areas provide a prominent public open space for gatherings and recreational activities, and are often considered to be a symbol of the cultural spirit of an individual city/town. In recent years, these squares have been refurbished or rebuilt by many local authorities at as much expense as possible. Although there is no research available on the relationship between city/town squares and local economic strength, the photographs below show that the quality and lavishness of the square in Guangdong is clearly superior to those in many other cities because Guangdong has more fiscal revenue than, for example, Hubei and Gansu (Figure 6-4, Figure 6-5 and Figure 6-6 show the civic squares of Gansu, Hubei and Guangdong respectively). It is also noticeable that north China favours more traditional architecture than central China and the coastal regions.



Figure 6- 4: Liangzhou Square in Gansu province (Source: author)



Figure 6- 5: Wuchang Square in Hubei province (Source: author)



Figure 6- 6: Boluo Square in Guangdong province (Source: author)

Speaking more generally, a communist party cadre, aged 72, commented that:

‘ Generally speaking, the living standard has greatly improved. I am quite satisfied with my living conditions and government policies. Compared to the past, before the initiation of reform in 1978, people, including urban and rural residents, now have much bigger houses (of decent quality); higher incomes; better transportation systems; beautiful cities and towns with plenty of plants and clean, wide streets; and sufficient possessions’ (Qian-72-M-U-Officer-Jinchang).

Similarly, a 54-year-old peasant from Gulang commented that:

‘ Our peasants no longer have to pay tax for growing crops. Before the initiation of reform in 1978, we had to pay a heavy tax. We now have our own lands and can decide what to grow and are no longer told or forced to farm certain crops. I support our government policy and the reform is very good’ (Xing-54-M-R-Peasant-Gulang).

However, a few workers who have been ‘laid off’ (Xia Gang, 下岗) do complain that their quality of life is not as good as in previous years. Issues about SOEs and workers made redundant have been discussed by Cai (2002) and Bai *et al.*, (2006)

who conclude that a large percentage of laid off workers suffer urban poverty. Thus, it is clear that not all local people shared the benefit of China's increasing development. For example, a 49-year-old female worker stated that:

'I have to admit that China has undergone great improvement and people have more opportunities to make money. However, I am so miserable. I had been working in a national stock enterprise for nearly 20 years as a worker. We had lots of welfare provision and I was so proud. Then, I was laid off by the state-owned enterprise. The only compensation I got were dozens of stocks which were worth nothing. I do not have specific skills, decent education or work experience that is highly demanded in the job market. Anyway, I will be retired next year and I am able to receive a basic pension from the central government. I only hope that my son will be able to get rich in the future' (Wang-49-F-U-Worker-Wuchang).

Similarly, a male worker complained:

'I belong to the unlucky generation that straddled all of modern China's political stages, just as the proverb says: when we were of school age, it happened to be the cultural revolution and all the schools were closed for revolutionary activities; when we were of working age, it happened to be the campaign called upon by Mao for young people to go to the countryside and work as peasants; when we were of marriage age, it happened to be the time when people were forced to abide by the one-child policy; and now that we are close to retirement age, it happens to be the time of non-pensionable redundancy' (Zhang-52-M-U-Worker-Liangzhou).

In sum, 98 out of 105 interviewees took a positive view and only 7 out of 105 were neutral in terms of understanding 'development' in China. This supports the findings of most publications that the initiation of economic reform in 1978 led to a rise in average incomes and a drastic reduction in poverty over the past 30 years, driven by rapid economic growth and to the benefit of most of the population (Chen and Lu, 2008; Coes, 2008). However, as the Chinese economy continues to grow,

income is becoming more unequally distributed among different groups of people, as shown in my field survey.

6.3 Understanding Income

Income and consumption are the most popular indicators of economic development so their unequal distribution plays a key role in explaining development disparity (Yao *et al.*, 2005). Before analysing income and consumption inequality it is important to clarify the meanings of ‘official’ and ‘grey’ incomes in China. The definition of income has changed since the initiation of reform in 1978 and is still in transition, making it crucial to define the contents of income clearly before it can be thoroughly analysed. The main components of income, as agreed by most researchers, are shown in Table 6- 1 (Hao and Wei, 2010; Khan and Riskin, 2005; Chang, 2002)

Table 6- 1: Income components in China (Author derived from Hao and Wei, 2010; Khan and Riskin, 2005; Chang, 2002)

		Urban	Rural
1	Labour compensation.	Wages, bonuses, pensions and other forms of labour compensation.	All output of farm, forest and fishery products, plus non-farm household enterprises and subsidiary activities.
2	Non currency income.		
3	Private, individual and joint venture enterprises, plus income from the collective welfare fund.		
4	Property, including interest on savings deposits and bonds, dividends, and rent on land, houses and other property.		
5	Other, which consists of private transfers and minor sources of income not classified under other headings.		

However, during my survey, although I emphasised that income includes wages, pensions, bonuses, bonds, dividends and rent, participants commonly considered

‘income’ as derived only from labour compensation. This is because income other than labour compensation was only introduced after the Reform. This means that much research aimed at estimating income in China may generate inaccurate figures (Holz, 2004a). Even now, capital gains tax has not been established in China, which means that income from property is free from tax. Therefore, participants’ restricted understanding of the components of income is unsurprising. For example, one of my participants was an elderly woman who had a job selling buns on the street. In addition, she has another two other sources of income: a minimum income allowance from central government and monthly compensation from her daughter. When asked about her monthly income, she only considered the profit from selling buns as income. However, I discovered that her consumption was more than her earnings due to additional sources of income coming from allowance and compensation.

‘Grey income’ (between white and black income) has a special meaning in China (Wang, 2007). In popular parlance, legal income is termed white income and illegal income is termed black income. Defining grey income thus requires an understanding of what is legal and what is not. In practice, grey income is termed semi-legal or elusive income (Lv, 2004). Lv (2004) and Wang (2007) have also shed some light on income inequality in relation to occupation by pointing out that some people, particularly government and industry officials, teachers and medical staff, receive grey income in the form of ‘service fees’, ‘consulting fees’ and red packets (money wrapped in red paper from patients or students) (He, 2000). Grey income therefore has a close connection to individual occupations and the common saying that ‘power generates money and money exchanges for power’ (Zhang-52-M-U-Worker-Liangzhou).

Similarly, grey income did not exist before the Reform because the salary scale was transparent; certain professions had a fixed salary range and all income other than fixed salaries was illegal before 1978. Since 1978, income components have changed dramatically due to increasingly diversified economic activity. Hence, grey income refers particularly to income in addition to an individual’s nominal salary and is

received by many people, especially government and industrial officials, teachers and medical staff (Wang, 2010). For example, teachers receive payment from students for giving extra tutoring; lecturers request consultation fees from commercial companies; medical doctors accept red packets; government officials take bribes, which include cash, commodities, free meals or other forms of entertainment; and certain superstitious occupations enjoy the benefits of ‘non-currency income’, such as insurance for medication, education and unemployment (Wang, 2007). In addition, the prices of medicines in hospitals are generally much higher than in ordinary pharmacies and doctors tend to make excess prescriptions or prescribe for expensive medicines as they can receive cash-back payments from pharmaceutical companies. Grey income was even considered to be evil by many of my participants:

‘Unfortunately, such evil has spread into educational and hospital systems which is awful’ (Ye-79-M-U-Retired Cadre-Wuchang).

The actual amount of grey income varies from region to region and from case to case. There is a dearth of literature about the levels of grey income in different parts of China because it is highly sensitive and data collection remains problematic. Similar to my investigation, in 2008 Credit Suisse (2010) launched a survey to analyse Chinese grey income in 19 provinces, 64 cities and 14 counties, with a total sample size of 4,000 individuals. The results showed that the total grey income in 2008 was estimated to be as high as 10 trillion RMB (Credit Suisse, 2010: 29). All of my participants admitted that they had to give a certain amount of cash to the doctor and anaesthetist, as otherwise they might receive worse treatment. For example:

‘Generally speaking, in Liangzhou where the salary scale ranges from 300 RMB (lowest skilled workers) to a couple of thousands RMB (government officials), patients need to give 1000 RMB to the doctor who actually does the surgery and 200 RMB to anaesthetist (otherwise the patient may receive an inaccurate dosage of anaesthetics due to his ignorance of the importance of the anaesthetist)’ (Sun-45-F-U- Teacher-Liangzhou)

My own smaller field survey supports Credit Suisse's conclusion that grey income could reach 30% of GDP (Credit Suisse, 2010: 29). Based on this estimation, income inequality is much worse than statistical data presents.

It is also worth pointing out that, in general, income has been increasing considerably in China over the past three decades (Chen and Li, 2010; Hao and Wei, 2010; Benjamin *et al.*, 2005; 2008; Khan and Riskin, 2005; Chinese Statistical Yearbook, 2006-2011), a change of which every participant approved:

'Of course, my income has hugely increased. Before the Reform in 1978 I earned 150 RMB per month which was good compared to other workers. Now I earn 5000 RMB per month because of my special skills. If I retire in two years, I will be able to find a job in a private company which will enable me to earn more' (Gao-58-M-U-Engineer-Boluo).

Even the retired participants confirmed that their pension had also increased dramatically in the last three decades. For example,

'When I retired in 1987, my pension was 170 RMB every month. Now, I am able to get 1500 RMB every month, which is nearly 10 times more' (Chen-73-F-U-Retired-Jinchang).

However, from my field data, it is evident that there have been widely occurring income and consumption inequalities in the five counties studied. In general, it is very difficult to ask respondents about actual personal income since it is a very sensitive question for many people, although in China it is recognised that different groups of people have different attitudes to answering this question. For example, participants working in SOEs, where the salary scale is quite transparent, and other professions with a fixed range of salaries were very willing to tell me how much they earned, but those participants who probably earn grey incomes avoid this question. Therefore, it is very difficult to judge how much grey income they might receive and, in turn, their true total income. However, consumption data reflects hidden or grey income to make

up for this potential flaw in income data and is itself an important measure of economic development. Thus, in my questionnaire I structured income questions to give more space to cover possible extra income. In order to analyse income inequality in more detail, I have broken it down according to the following indicators: gender, location, place, social class and ethnic group.

6.4 Gender and Income Inequality

Income inequality based on gender has been a common social problem in many developing and industrialised countries (Wang and Cai, 2008; Rozelle *et al.*, 2002), particularly in transitional economies such as Russia (Brainerd, 2000). In China, it was only in the 1990s that researchers began to shed light on gender inequality related to income because China was committed to gender equality during the planned economy period (1949-1978) and the Chinese constitution guaranteed women equal rights to men in all aspects of life. This was particularly the case in the labour market, where pay for equal work equal reflected famous slogan ‘Women hold up half the sky’ (Tao *et al.*, 2004). Therefore, it is commonly agreed that income inequality between genders became apparent only after 1978 and since then it has been continuously rising (Wang and Cai, 2008). Furthermore, wage discrimination against women has emerged as a major phenomenon of income inequality during ongoing Reform processes (Zhang *et al.*, 2008). Rozelle *et al.*, (2008) argue that most existing literature (such as Ng, 2004 and Shu and Bian, 2002) is outdated and only covers the period between 1988 and 1995. Large-scale empirical research into gender wage inequality is therefore urgently needed.

My field survey data in 2008 investigated gender inequality in income and is therefore able to contribute to filling this literature gap by examining more recent data and also covering different geographical locations due to the analysis of five counties in coastal, middle and western areas.

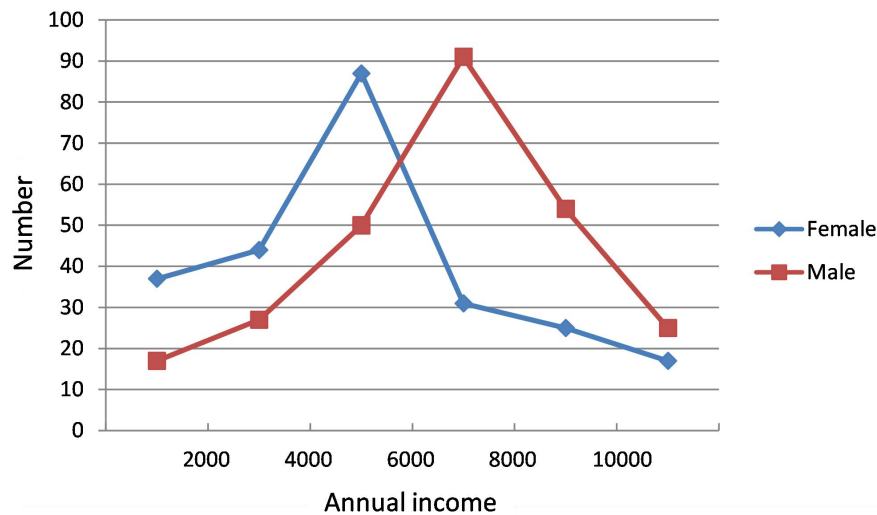


Figure 6-7: Gender and income inequality in five counties (Source: author)

My field survey indicates that economic reform has resulted in considerable gender income inequality as a result of education, experience and marital status, which supports the conclusion of studies such as that of Rozelle *et al.*, (2008). My data indicates the existence of gender inequality in incomes, which is consistent with most existing literature (Zhang *et al.*, 2008; Bian *et al.*, 2000). Figure 6-7 shows that most female participants' annual income was less than 30000RMB, whereas male participants' income was spread evenly between 10000RMB and 100000RMB. In addition, job discrimination and wage discrimination against females was evident:

'In my factory, compared to men, women have fewer opportunities to be promoted to senior positions' (Chen-20-F-R-Worker-Boluo).

Further to this, gender inequalities in income are mainly caused by education and marital status (Song and Tan, 2004). Although the establishment of the Compulsory Education Law in China in 1986 established a legal basis for gender equality in schooling, household economic considerations and culturally related expectations regarding males and females at home and in society are the main influences on girls' school enrolment rates (Li and Tsang, 2003). According to the survey data, the number of school years is lower for female than for male participants (see Table 6-2).

Table 6-2: Average school years (Source: author)

Age Group	Average School Years			
	Male		Female	
	Urban	Rural	Urban	Rural
Under 30	11.2	8.5	10.85	7.3
30-49	10.6	7.4	9.53	5.44
Over 50	9	5.5	6.73	3.8

As a result, average female income is lower than male income because the number of years in school is strongly positively correlated to income (Song and Tan, 2004). Marital status is also an important index because women are judged by employers as not devoting all their energy into their work if they are married or mothers. In the past two decades, many privately-owned enterprises in the manufacturing and service sectors have hired a large number of young female workers (see Figure 6-8) with limited education especially in the flourishing coastal cities (Lee,1998). However, this kind of employment is recognised by both the female migrant workers and employers as being a temporary phenomenon until the women get married.



Figure 6- 8: Female migrant worker in China (Source: Xinhuanet, 2008)

‘I was always asked whether I was married and whether I had a child or not in job interviews. If I was married and planned to get pregnant, most likely I would not get the job. This discrimination is very common in China. Sometimes women are asked to sign a contract that they will not fall pregnant in the first five years’(Shen-32-F-U-Accountant-Wuchang).

At the same time, overall salary differences between genders in China are relatively small in comparison with other countries such as Eastern Europe (Brainerd, 2000), particularly among urban residents because the Maoist gender equality ideology has been maintained in the transition to a market economy (MacPhail and Dong, 2007). Although the employment of female migrant workers is temporary, women are considered as working productively and efficiently due to an accumulation of work experience and their care, patience and conscientiousness. As a result, female workers are able to receive similar salaries to their male colleagues in the long run. My field survey results suggest that firms which do not discriminate against women are able to achieve higher productivity and efficiency than those that do, especially in the textile industry (see Figure 6.8). For example,

'My factory is one of biggest knitwear manufacturing companies in China and we export most of our products abroad. In my factory, if you have a few years of experience and good skills, you will be promoted to be a small team manager and then a big team manager. Male workers only take care of machines. Female workers have more options than male workers in my factory' (Xin-25-F-R-Migrant Worker-Boluo).

6.5 Regional Inequality in Income and Consumption

Spatial inequalities in income growth in different regions have also been on the rise in China. Numerous studies such as those conducted by Chan and Wang (2008), Zhang and Yao (2001) and Tsui (1993) have addressed issues of regional inequality in China, but largely at the provincial level. Previous research has shown that income inequality between the coastal area and the rest of China has been growing since the 1980s (e.g., Hao and Wei, 2010; Liu and Li, 2006; Kanbur and Zhang, 1999; Mody and Wang, 1997; Tsui, 1993; Vogel, 1989). This research also concludes that related government policies play an important role, such as regional policies that enhanced capital investment (including foreign investment) in coastal provinces and open zones (e.g., Hao and Wei, 2010; Wei, 1999; Kanbur and Zhang, 1999); the decentralisation of education and other previously centralised services (e.g., Qian and Smyth, 2008a; Postiglione, 2006; Gregorio and Lee, 2002); central fiscal transfers to less developed regions (e.g., Qing, 2005); industrialisation and economic agglomerations (Chen and Lu, 2016; Wei *et al.*, 2011; Ke, 2010); and market expansion leading to improved labour mobility (e.g., Wu, 2001). In addition, endowments such as location, infrastructure and labour also lead to inequality (e.g., Démurger *et al.*, 2002a; 2002b; Bao *et al.*, 2002; Chen and Fleisher, 1996).

My field survey supports such findings, revealing substantial difference between income growths in the three provinces investigated (Guangdong, Hubei and Gansu).

Table 6-3: Annual income in five field survey counties (Source: author)

Annual Income (Yuan/ RMB)	Below 2000	2000 to 5000	5000 to 15000	15000 to 30000	30000 to 50000	50000 to 100000	Above 10000 0
Boluo	0	1	3	6	41	28	21
Wuchang	1	11	17	37	23	5	6
Jinchang	0	9	13	22	32	19	5
Liangzhou	2	13	21	30	20	12	2
Gulang	5	16	45	14	12	8	0

Table 6-3 presents the estimated annual income of participants in Boluo, Wuchang, Jinchang, Liangzhou and Gulang. It shows that in Boluo 90% of participants has an income of above 30000RMB; while in Gulang 83% of participants have an income between 2000 and 50000RMB. Development economists have promoted foreign investment and foreign trade, the symbols of the open economy, as the engines of growth for those who lack the capital and technology to initiate development (Hu, 2007). Until the 1980s, the Chinese central government's policies were focused on coastal provinces in order to attract foreign investment and foreign trade. Boluo was among the counties that attracted such trade (Qiao *et al.*, 2008; Yang and Zhang, 2003). In the 1990s, these preferential policies expanded to some open zones in central provinces such as Wuchang (Fan *et al.*, 2011; Démurger *et al.*, 2002) (see Chapter Five for details of the preferential policies). I contend that key reasons for income inequality between Guangdong (Boluo), Hubei (Wuchang) and Gansu provinces (Jinchang, Liangzhou and Gulang) are capital investment levels (especially FDI) in local manufacturing and booming private enterprises. Although Jinchang, Gulang and Liangzhou in Gansu benefited from central fiscal transfers and preferential policies in the 2000s (e.g., Wang, 2007), lower industrialisation levels meant they were unable to attract foreign investment and therefore prevent income

inequality from reaching a new high. Section 6.3.1 focused on the impact of industrialisation on local economic growth, and in this section I elucidate the impacts of industrialisation on regional income.

The industrialisation level in Boluo is much higher than in the other inland counties because FDI from both Hong Kong and Taiwan took the lead in Boluo's economy (Lei and Yao, 2009; Zhang, 2005; Ng and Tuan, 2003). Here, arable lands were converted into special zones and roads to facilitate the building of factories, in common with most other areas of the Pearl River Delta. In the transition to industrialisation in countries such as China and India, land acquisition and the need to compensated farmers has become a significant issue (Chan, 2003).

As a result of its industrialisation, the current average income in Boluo is much higher than in the other four inland counties. In addition, as also shown in Lu (2008), income mainly comes from private, individual and joint venture enterprises, collective welfare funds and property, rather than mainly from compensation for labour. For example, Mr. Yuan was a peasant in Boluo. He told me:

'My income mainly comes from two sources: one is from the village welfare fund. The village rents our lands to enterprises. Every month each resident in the village is able to get 3000RMB as compensation. The other source of income is from my shop. I sell all kinds of consumables to factory workers from which I am able to get 5000RMB per month' (Yuan-50-M-R-Peasant-Boluo).

In my field survey, after witnessing the whole interview process and how the compensation was calculated, I found that participants were generally very satisfied with the compensation they received in this part of China. For example, at the time of my field survey in 2008, a couple of villages in Wuchang were purchased by Foxconn Group. Foxconn were severely criticised by the media because of a range of suicide cases among its employees in 2010. Yet, the suicide rate for Foxconn in 2010 was 1.5 per 100,000 making it well below the national average (around 7 per 100,000) (Chan

and Pun, 2010). According to my research, Foxconn was greatly welcomed by both the local government and peasants due to its investment scale and high salary levels. In addition, Foxconn employs more than 1 million people in 9 of its 13 factories in China, which translates into a huge number of new jobs at the local level– although these can involve difficult labour conditions such as long working hours (Chan and Pun, 2010).

One of my participants, Mr. Wu, received a large amount of compensation and new apartments recently constructed by Foxconn Group (see Figure 6- 9). In exchange, his family sold all their farm land and residential houses to Foxconn to allow them to build a new factory. The calculation of compensation depends on land registered with the local rural *HuKou* and the size of the houses. For example, Mr. Wu has three sons and one daughter. His sons are working in Shenzhen as migrant workers and his daughter is married and lives in another village. Mr. Wu, his wife and three sons all have local rural residences as well as the land distributed to them by the government. He also owns three-storey houses with a total surface area of 210m² (Figure 6- 10). On top of the compensation for his land, his family is allowed to buy up to five apartments, of which 210m² are free, another 20% of 210m² can be purchased at 500 RMB per square metre and the rest of the area can be purchased at the market price, which is 1500RMB per square metre (see Table 6- 3 in detail).



Figure 6-9: Mr. Wu's house (Source: author)



Figure 6-10: Residential apartments constructed by Foxconn (Source: author)

Table 6-4 shows that every member of Mr Wu's family except his daughter received an apartment and nearly 4.66 times their previous annual income. The compensation paid to those displaced has been criticised as being inadequate and the cause of social and political tensions (Chan, 2003). According to the results of my

field survey, I argue that the problems of compensation have not necessarily created social and political tensions. The amount of compensation and the process of determining and implementing this compensation are crucial, and highly positively correlated to the satisfaction of the peasants. During the implementation of compensation, it is highly likely that embezzlement of compensation by village cadres triggers social and political tensions. However, the peasants themselves welcome conversion to industrialisation because it not only provides them with some capital endowment, which helps them to run their own businesses, but the large amount of labour released from the land also provides a base for industrial development. My arguments are similar to the debates of some scholars such as Ding (2007).

Table 6- 4: Wu family compensation for their land and house (Source: author)

	Age	Local Rural HuKou	Compensation for land (RMB)	Compensation for house	Cost of apartment(RMB)	Remaining Compensation (RMB)	Ratio to average annual income
Mr. Wu	55	Yes	150000	2-bedroom apartment (70m ²)	33900	116100	4.66
Wu's wife	54	Yes	150000	None	None	150000	6
Wu Fei	30	Yes	150000	2-bedroom apartment (70m ²)	33900	116100	4.66
Wu Jun	28	Yes	150000	2-bedroom apartment (70m ²)	33900	116100	4.66
Wu Dong	24	Yes	150000	2-bedroom apartment (70m ²)	33900	116100	4.66
Wu Ai	21	No	0	2-bedroom apartment (70m ²)	33900	-33900	-1.34

Compared to Boluo and Wuchang, Jinchang, Gulang and Liangzhou are characterised by a lower level of industrial development and agriculture is still the dominant sector (see Figure 6- 11). Most farmers had to stay on their land because of limited local non-farming opportunities and the potential cost of migration to other regions. The income of famers living in Gulang consists of two parts, as indicated in the following interview response:

‘My income mainly comes from two sources. One is from farming; I plant wheat and some vegetables to feed my family. If I am lucky, I am able to sell the rest to earn 1000RMB per year. The other one is from labour. Sometimes I am able to find non-farming work to support my family. For example, I can earn 15RMB per day from helping to build houses or plant trees for the government. But it is not easy to find this kind of job’ (Gao-50-M-R-Peasant-Gulang).



Figure 6- 11: Arable lands in Gulang (Source: author)

Unlike the causes of income inequality at the provincial scale, within one province the physical environment and infrastructure are key factors causing income inequality. However, these reasons are often ignored in the current literature. For example, the reasons for income differences between Liangzhou and Gulang in Gansu

province are fairly noticeable: environmental disadvantages; infrastructure deficiencies such as a particularly insufficient road network and a shortage of water facilities (compare Figure 6-12 and Figure 6-13); rudimentary agricultural markets and under-developed non-agricultural industries. Under these circumstances, farmers in Gulang are struggling not only with low agricultural productivity but also with few casual employment opportunities. In contrast, Zhang village in Lianzhou is located in the valley (see Figure 6-14 and Figure 6-15) and is equipped with a reservoir and water facilities. This village produces some vegetables and fruits which are very popular in cities. Their Township-Owned enterprises (TVEs) and good road infrastructure make a great contribution to economic growth and average income in the village. As a result, the average income in Lianzhou is higher than that in Gulang.



Figure 6-12: Wheat field in Gulang (Source: author)



Figure 6- 13: Greenhouse in Gulang (Source: author)



Figure 6- 14: Wheat field in Liangzhou (Source: author)



Figure 6- 15: Greenhouse in Liangzhou (Source: author)

Yao *et al.*, (2005) suggests that there is a positive relationship between household income and household consumption structure when it comes to economic development: the higher the household income, the more likely the consumption structure is to shift from basic necessities to luxury goods. All participants in the focus groups conducted in Gansu, Hubei and Guangdong admitted that they now have more disposable income after the initiation of the Reform in 1978. However, the consumption pattern of the three locations is varied, which demonstrates that consumption is a reflection of income. This is well exemplified by taking the example of three of my interviewees from different counties: the top three most expensive items bought by Mr. Song Xuan from Guangdong in the south are jewellery, a car and a computer. For Mr. Wang Peng (primary school teacher) from Hubei, the three most expensive items of consumption are a computer, a motor-bicycle and a TV. For Mr. Meng Xiang from Gansu in the north, the three most expensive items he has bought are a TV, a refrigerator and air conditioning.

6.6 Income and Consumption Inequality between Urban and Rural Areas

The majority of the Chinese population still lives in rural areas, which have long lagged behind urban areas in terms of social and economic development. Current literature draws common conclusions about the difference between urban and rural incomes in China, which are that the gap is large, has increased over time and contributes substantially to overall inequality (e.g. Knight and Gunatilaka, 2010b; Zhou, 2009; Sicular *et al.*, 2007; Lu and Chen, 2006; Luo, 2006; Yao *et al.*, 2005; Lu, 2002; Levin, 2001; Knight and Song, 1999). For example, Sicular *et al.* (2007) investigated the size of China's urban-rural income inequality between 1995 and 2002; their key findings are that the gap remains large and has increased over time. The Gini coefficient for urban and rural residents jumped from 0.389 in 1995 to 0.417 in 2000, above the international danger level of 0.4. The mean per capita income in urban China is estimated to be more than triple that in rural area and is one of the highest urban-rural income ratios in the world (Lu and Chen, 2006). Similarly, my field survey (Figure 6- 16) shows that rural per capita income in 2008 was 50% less than urban per capita income in all five counties studied. Survey data also shows that rural residents, especially in Gulang, are living on less than \$1 a day, further proving that poverty mainly afflicts people living in rural China. Urban-rural inequality was initially caused by the central government's urban-biased policy, through which rural populations were severely restricted from undertaking any sort of migration, particularly to urban areas, and urban residents were provided with various subsidies at the expense of their rural counterparts. In order to reduce this gap, the Chinese government has recently launched a series of policies such as the 'Build a New Socialist Countryside' campaign (Sicular *et al.*, 2007). These policies aim to boost public spending in rural areas in order to reduce the rural-urban income gap.

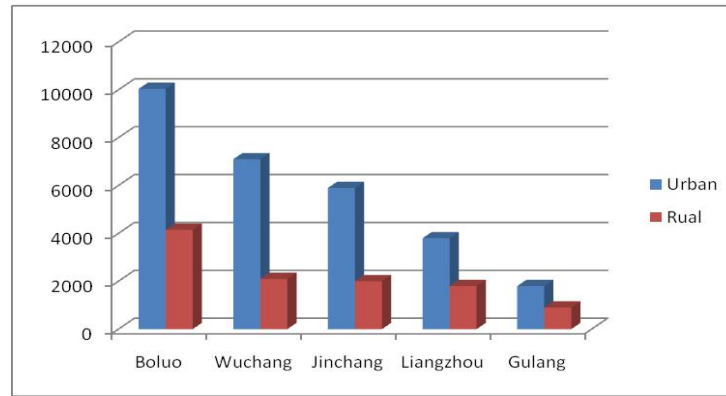


Figure 6- 16: Rural and urban per capita income in the five counties (Source: author)

Drawing on both national statistical data and my survey data, it is evident that rural income is much lower than urban income. However, my field survey also reveals two further important observations: the misjudgement of migrant workers' income and the living cost disparity between rural and urban areas; and that the actual rural-urban income gap is not as severe as the data suggests.

First, family members in China have strong relationships, especially between parents and children. Following the initiation of the Reform in 1978, there were approximately 4 million rural migrant workers in urban areas in 2007 (Population and Family Planning Commission of P. R. China, 2010). Chinese migrant workers have the highest savings rates in the world (Knight and Gunatilaka, 2010b) and it is common for migrant workers to remit most of their savings to the countryside to support their family (Wu, 2004). However, to date this income has been calculated as belonging to temporary residents in an urban area. This is problematic in the face of evidence that large amounts of remittances have been transferred back to rural areas but are not calculated as rural household income. For example:

'The more the better with saving and the less the better with spending. I send 80% of my money back to my family. My parents are going to build a new three-storey house with one floor for them, one for me and one for my little brother'(Fei-28-M-R-Migrant worker-Wuchang).

Second, China's initiation of economic reform in 1978 has effectively changed the income balance between urban and rural areas, especially since the early 1990s. Prior to the 1990s, the majority of urban residents had the benefit of the 'three irons' (guarantees): iron bowl (food), iron chair (position) and iron bed (housing) (Shah *et al.* 2006). However, since the 1990s, urban poverty has become a severe challenge because of the collapse of the state ownership of firms and the dismantling of the welfare systems formerly provided by SOEs (Wu, 2004). 'In 2001, the official unemployment rate was 3.1% but, taking into account laid-off workers, the urban poverty population could be as high as 14 million, accounting for 3.6% of the urban population' (Wu, 2004:401). Fang *et al.*, (2002) claimed that rising urban poverty in recent years does not change the overall conclusion that income inequality between urban and rural areas is substantial. However, living costs such as food and house prices are much lower in rural areas than in urban areas. Therefore, my field survey shows a different picture behind the statistical data:

'The living condition of those urban residents with low incomes is much worse than some of the poorest peasants in the countryside. We are struggling to make money for basic living costs, i.e. food, clothes and house energy bills, etc.' (Yue-45-M-U-Laid Off Worker-Gulang).

This situation was confirmed by several of interviewees in urban areas (Figure 6-17) who had been made redundant by SOEs. They state that living costs are too expensive for them to afford: if they do not receive housing benefit they are unable to secure proper shelter, and they cannot afford to warm their houses sufficiently in the winter, or to eat meat once a week, because of inflation. However, in rural areas (Figure 6-18), people are generally able to feed themselves adequately because they own houses and land, and the energy costs are exceedingly cheap.

'The government is giving us financial aid if we grow crops. Even the poorest peasants are able to have enough food and energy supplies (coal, gas or electricity).'

Nowadays, we don't admire urban residents anymore.'(Hu-50-M-R-Farmer-Liangzhou).

Indeed, the ongoing economic reform processes in China have, to a certain extent, had a positive impact upon the urban-rural income disparity. Further, if we consider the remittances sent from urban to rural areas by migrant workers, as well as the rural-urban disparity in living costs, the gap in quality of life is not as severe as the statistical data shows; it is also clear that the urban poor rather than the rural poor are now at the bottom of the income hierarchy.



Figure 6- 17: Apartment in urban area (Source: author)



Figure 6- 18: House in rural area (Source: author)

Generally speaking, living standards have greatly improved at all levels, and interviewees are quite satisfied with their individual living conditions and surrounding environmental conditions. Both urban and rural residents now have much larger houses (of decent quality) and most farmers now have their own lands and more spacious houses because of the low cost of building materials. A critical point that needs to be emphasised here is that even though many people remain relatively poor, almost everyone has witnessed a decided improvement in their living standards over the last 20 years, and this has an important influence on their perceptions.

However, with house prices soaring, urban residents have to pay much more when purchasing apartments. This is inevitably a huge burden, especially to those with low incomes. As one focus group participant in Gansu said:

‘Purchasing a commercial house is considered to be one of the ‘three new big mountains’ (alongside education and health care fees) for urban residents. However, rural residents do not have such feelings about their houses, as they have their own land on which they can build whatever houses they can possibly afford’ (Huang-42-M-U-Worker-Liangzhou).

The pattern of consumption can also be appropriately used to assess people's quality of life, in particular when it comes to testing Engel's Law that the proportion of income spent on food falls as income rises (Garner, 1993). Based on my investigations, Table 6- 5 presents the three top household expenses differentiated by urban and rural residents in the five counties.

Table 6- 5: Top three household expenses for rural/urban participants in the five counties, 2008

(Source: author)

Rank	1	2	3
Rural	Food	Health Care	Education
Urban	Accommodation	Education	Health Care

Four main factors and processes help to explain these different consumption patterns between rural and urban areas:

First, in urban areas, purchasing a house or apartment is the most expensive item of consumption for a family. Prior to the initiation of economic reform in 1978, most urban Chinese residents were provided with reasonable accommodation by local governments, SOEs or work units. However, this proved neither financially viable nor sustainable during ongoing reform processes. The Housing Reform, launched by the central government in 1998, aims to provide affordable houses for most people to purchase, and in the meantime terminates free accommodation welfare (Hui and Wong, 2004; Hui 2006). In the last few years, house prices have been soaring continuously such that buying a house has gradually become an unreachable goal for many young people. For example, the average house price in Boluo was 400RMB/m² in 1998 and 2100RMB/m² in 2007 (Boluo Statistical Yearbook 2008). As a result, access to housing is now becoming another major factor inducing disparity (Hui and Wong, 2004).

Second, food remains the most significant household expense in rural areas. It is generally believed that rural residents spend less money on entertainment than urban

residents. My field survey result supports Engel's Law that as income rises, the proportion of income spent on food falls, even if actual consumption of food rises (Economypedia.com: Engel's Law). Thus, the consumption pattern can be used to explain the income disparities between urban and rural areas (Gibson, 2003).

Third, in both urban and rural areas the cost of education is another major expense for households. Since 2006, rural students in western provinces have been exempted from tuition fees for nine years of compulsory education. In 2007, the exemption policy was expanded to the central and eastern regions. 'China will exempt all tuition fees for nine years of compulsory education for students in urban areas from 2008,' said the Chinese State Councillor Chen Zhili in 2007 (China Daily, 2007). However, whether the tuition fees for nine years of compulsory education are charged or not, almost every school or educational institution charges various additional fees, such as for extra tutoring, school selection and other concocted fees, which demand a large proportion of ordinary people's incomes (Zhang and Kanbur, 2005). The most expensive education fees are actually charged for secondary and higher education. Many of my interviewees said that supporting a student at university could make an ordinary family utterly destitute.

Fourth, health care is another essential cost for every individual and household. After food, health care has now become the largest cost for ordinary households in rural regions; and the third most significant cost in urban regions after accommodation and education. One patient could drag a family into a desperate situation (see Case 7-1 in Chapter Seven), as *'spending on medication can be like the blow of air from a broken balloon (constant drips)'* (Bjorn and Li, 2004:295).

6.7 Income and Consumption Inequalities between Social Classes

In present-day China, social class stratification is still in its transition stage and is much more complicated than in Mao's era (c.f. Bian, 2002). Both Bian (2002) and Li (2005) have suggested a system for classifying Chinese social stratification (see

section 7.3 for detailed analysis). However, these two classifications have ignored the fact that China ' s economic development, particularly in the last decade, has significantly diversified occupation-based social classification, and such classifications no long reflect the reality of social status. Therefore, to correct these problems, I designed a four-tier class structure: upper class, upper-middle class, middle class and lower class. According to my analysis, the upper class includes communist party cadres (administrative, managerial and rural), private entrepreneurs and managers; the upper-middle class consists of senior managers and professionals; the middle class includes household business owners, individual manufacturers and intellectuals; and the lower class consists of peasants living on agricultural production, migrant workers (peasant labourers in urban areas) and urban workers (Chapter Seven further details the definition of these social classes).

Occupational status has started to induce class stratification as well as associated income inequality between individuals (Lu, 2004; Wang, 2007). In order to demonstrate the occupationally orientated social classes/status and their relationship to economic conditions such as income, consumption and welfare, four cases are illustrated below, one for each social class. The four examples were all selected from the urban area of Gansu to avoid locational and specifically urban-rural variations, in order to keep the focus on social status. All the individuals in these case studies are from a similar age group but have different occupations, which characterise the various social classes.

Table 6-6 illustrates the experiences of four individuals to demonstrate income and consumption inequalities between different social classes.

Table 6- 6: Income and consumption inequality between different social classes (Source: author)

		Mr. Gao	Mr. Xing	Mr. Wang	Mrs. Yang
Social Strata	Social Class	Upper Class	Upper-Middle Class	Middle Class	Low Class
	Profession	Cadre	Entrepreneur	Teacher	Laid-off worker
Income	Salary	Middle	High	Middle	Low
	Non-Currency Income	Yes	No	Yes	No
	Grey Income	Yes	Yes	Yes	No
Consumption	Accommodation	Large and almost free	Large and pay market price	Medium and pay market price	Small rented accommodation
	Education	Best and free schools	Best but high fees	Median and fee depends on schools	Local schools
	Health Care	Best and almost free	Best but high fees	Median but high fees	Can only afford basic care
Welfare	Other welfare	Free car, free meals, etc.	n/a	n/a	n/a

Upper Class

The reason for placing communist party cadres in the upper class is that in China cadres have absolute power, and power can generate wealth. Power promises

privileges, such as receiving free (or almost free) accommodation, free luxury cars, free chauffeurs, and a high social and political status (Nee, 1996). For example, Mr. Gao states that,

'The local government has allocated me a car and a personal car driver, of which the costs are totally covered by the government' (Gao-52-M-U-Cadre-Liangzhou)

Wang *et al.*, (2002) comments that income inequality is much worse than suggested by the statistical data gathered from different groups. Indeed, 'true income' in different social classes varies considerably. The rich are able to hide their wealth, whereas the poor must declare it openly. The income of members of the upper class includes a salary, non-currency income and grey income, while the income of those in the lower class only includes a salary or government allowance. Apart from their salary, cadres also receive non-currency income such as free rice, cooking oil or even shopping cards, which are worth approximately 30% of their salary (Wang, 2010). Compared to their salary and non-currency income, grey income is highly confidential. Although it is very difficult to judge how much grey income cadres could earn, some of my other participants were willing to talk about it:

'Although the salary of cadres is normal, they receive a large amount of grey income, some five to ten times higher than the normal salary, through various channels, such as being a consultant for a private company' (Xing-57-M-U-Entrepreneur-Liangzhou).

However, cadres are also very cautious about what they can and cannot accept, as obvious bribes would lead to terminal damage to their career and future.

'My desire for the future is to be promoted to a more senior position. Salary, accommodation and all other benefits depend on my level. There is no rule as to who can be promoted and who cannot. It only depends on whether or not you have support from high-ranked cadres' (Li-58-M-U-Cadre-Boluo).

Promotion to the upper level is always very competitive, because the upper level means more power and more privilege. A cadre either has to be rich or well-connected because bribes and nepotism are the two key factors enabling promotion. As a result, constructing a safe network is very important because cadres need to exchange power for wealth while also ensuring that these exchanges will not destroy their careers.

‘The cadres know very well the rules of exchanging the usage or misuse of their power with real materialised interests. We have to take him to very expensive clubs and treat him to very expensive dinners, each of which may cost over 10,000RMB (equivalent to £1000)’ (Xing-57-M-U-Entrepreneur-Liangzhou).

As well as their salary, non-currency income and grey income, cadres also have a special pension system. They do not need to make any contributions to pension funds during their career. After retirement, the government guarantees a pension amounting to 90-100% of their salary (Li and Sen, 2003). They also keep their other privileges if they reach a certain level within the cadre system. For example, if they obtain a rank similar to the mayoral level, they are able to keep their car, driver and the same salary after retirement. Figure 6-19 shows the Boluo leisure and entertainment centre for retired cadres.



Figure 6- 19: Boluo leisure centre for retired cadres (Source: author)

My field survey revealed that accommodation, health care fees and education fees are the top three expenses for urban households (Figure 8.4). They have been termed the ‘new three mountains’ for Chinese people (Xinhuanet, 2007). However, for cadres, these top items of consumption are not as costly. For example, accommodation is allocated by the government at a very low cost. In addition, the surrounding environment of cadres’ apartments is much more pleasant than ordinary residential areas, adorned with plenty of plants. The area is also very secure because all cadres working for the government live in the same district or compound tightly guarded around the clock (unfortunately, the guard did not allow me to take photo). This type of accommodation is called welfare housing, which is a very different usage of the term compared with its meaning in the West. The size of the welfare housing allocated to cadres depends on their grade or position. The cadre normally pays just one tenth of the market price of the welfare housing or it may even be completely free. The cadres’ children and even grandchildren attend privileged free schools and they can also receive care in elite hospitals for little cost.

'To our utter astonishment, cadres don't need to spend any of their salary at all. I totally believe the credibility of what the local proverb says: "basic wages don't need to be spent, daily necessities don't need to be bought", implying that cadres receive a significant amount of non-currency income and grey income' (Yang-50-F-U-Laid off Worker-Liangzhou).

Upper-Middle Class

Compared to the upper classes, the upper-middle class is prominently characterised by owning the most evident private wealth. Wealth, as the most important and decisive factor determining an individual's overall life in present-day China, can also be exchanged for power, although this is not necessarily always successful. The obvious characteristics of members of the upper-middle class are that they have large houses and luxury cars; employ private chauffeurs and maids; and some of them hold positions of power in society (Watson, 2010). This can be seen from Mr. Xing, who once repaired shoes on the street and is now a successful businessman in Liangzhou:

'My first priority is to make these cadres happy. In order to achieve such a goal, I need to invite the cadres for meals and play 'Ma Jiang' [traditional Chinese gambling game] with them' (Xing-57-M-U-Entrepreneur-Liangzhou).

As mentioned earlier, cadres are now very cautious about being caught taking bribes and a way around this is to 'win' cash through gambling.

'If at the end of the day things don't go well, their only fault is being involved in playing a game, or the serious term, gambling. So I always intend to deliberately lose my money to them to make them happy' (Xing-57-M-U-Entrepreneur-Liangzhou).

He described the successful businessmen of privately owned enterprises as owning large houses in urban areas, normally over 500m² in area. Their families also often buy properties in other cities. The typical entrepreneur is characterised as being

extremely busy keeping his company running smoothly so that he rarely has time to have a meal with his family and is able to count the number of days he has actually spent with his family each year. Although typical businessmen of privately owned enterprises often suffer from hyperlipidaemia– Xing’s cholesterol level also being higher than normal –they are very proud of their success in accumulating wealth.

‘I am a very successful businessman but I am very tired. In China, you never know what tomorrow will be. Yes, my salary is very high but my main wealth is actually bonuses from my company’s shares. I own a reasonable share of my company’s equity. If my company shares could be traded in public, my wealth could expand by as much as 50 times, and I could safely and happily take retirement by that time’ (Gao-52-M-U-Cadre-Liangzhou).

In spite of the global recession that began in 2008, the number of wealthy people in China continues to grow such that *‘by 2015, the country will hold the world’s fourth largest concentration of wealthy people’* (Atsmon and Dixit, 2009:1). The upper-middle class is very distinct from other classes in China, not only in income but also in consumption behaviour: they still seek status labels and display their wealth, which often triggers social and economic tensions because of the huge inequalities compared to lower classes.

Middle Class

Compared to the upper class and upper-middle class, members of the middle class generally work hard turning their knowledge and experiences into wealth, as in the case of intellectuals. Before the Reform, intellectuals were slandered as the ‘stinking number nine – ignominiously assigned to the bottom of the list after landlords, rich peasants, counter-revolutionaries, bad elements, rightists, spies, enemy agents, and capitalist roaders’ (Li, 1995:27). However, in present-day China, intellectuals are very well treated and have regained prestige and respect from wider society. The middle class is nevertheless suffering from the ‘three big mountains:

accommodation, health care fees and education fees' (Xinhuanet, 2007) because of the housing, health care and education reforms. In China, the housing reforms started in 1988 but it was only in 1998 that the government decided to stop distributing apartments to employees and urban residents, and to allow people to buy their apartments from the housing market directly (Hui and Wang, 2006). Since 2006, house prices have increased dramatically, with house prices in major cities increasing by nearly 10% per month and doubling in just one year (Liang and Gao, 2007). Many young graduates are eager to buy their first city apartment in order to get married and achieve their dream of being urban residents. However, high mortgages have led these young graduates to become 'house slaves', as they have to work so hard to save the money to pay off their mortgages (Brockmann *et al.*, 2008; Sato, 2006).

For example, Wang Peng is a primary school teacher whose salary is around 2,000 RMB per month and his wife earns 1,000 RMB per month. Their income is reasonably high in this small city. However, every month he has to pay 1,500 RMB towards the mortgage for their first apartment (see Figure 6-20). He is always worrying about becoming ill or losing his job as they cannot afford high hospital medication fees. Luckily, he and his wife are young and so far they have had no health problems. They wanted to have a baby but are afraid of the high cost of raising a child. However, they are fortunate compared with many other young people because they are at least on the property ladder. In order to pay off his mortgage as early as possible and have a baby, Mr. Wang has to teach special training classes after work and at weekends, which bring him an extra 1,500 RMB per month. He normally works in school from 8:30am to 5:30pm and an extra two hours from 7pm to 9pm in order to gain the cash payment from extra tutoring. On Saturday he works from 9am to 4pm. He only takes a break on Sunday.

'I heard teachers work really hard on such private training courses. Teachers also examine students deliberately using a certain amount of materials that were given during their private training courses, forcing students to pay extra tuition fees to take the after-school training.' (Yun-45-F-U-Housewife-Wuchang).



Figure 6- 20: Wang Peng lives in one of the many apartments in this multi-storey modern building (Source: author)

The middle class represents a large majority of Chinese people especially in urban areas. Atsmon and Dixit (2009) estimates that the middle class could reach 580 million people; however, these people have not yet reached their full spending potential. Similarly, my field survey shows that high saving rates and low consumption rates are the key features of this class, although the people in this class also earn a reasonable salary and grey income. Members of the middle class are very concerned about their mortgages, health care, children's education costs and their retirement.

Lower Class

People in the lower-class tier include urban workers and peasants working on agricultural land and floating in urban areas seeking temporary labouring jobs. They have no power in society, lack luxury possessions and have not had proper educational training. They are basically living at the bottom of society and are struggling to get by, as is the case for Mrs Yang who I interviewed at Liangzhou in Gansu province.

Mrs. Yang Liping was made redundant from a SOE and looks much older than her true age because of the challenges she has experienced in life. The SOE Mrs. Yang worked for went bankrupt and was bought out by a new private company. She was paid a lump sum of 30,000 RMB for her redundancy on condition that she gave up any welfare or pension entitlements.

She lives in an urban area but her living conditions are basic: she has few household assets except for some small ordinary domestic appliances, such as a TV, electric fan and refrigerator (Figure 6-21). She does not have specific skills, decent educational qualifications or work experience that is in high demand in the job market. Her typical day involves getting up at 5am before riding a wobbly old bike for an hour to reach rural farms, where she buys as many vegetables as she can carry directly from farmers for a low price. She then takes these vegetables to the local market to sell to urban residents. Her son, now aged 13, is growing up very fast. She needs to buy him an egg a day and two pounds of meat per week. If she is lucky, she makes 20 RMB per day to cover the living costs of her whole family.

In the afternoon, Mrs. Yang returns home and cooks for her husband and son. Her family enjoys little entertainment because it is too expensive for them. Mrs. Yang has to save especially carefully in winter when she cannot make enough money from selling vegetables and the cost of heating is high. She is very unhappy and her only hope is that her son might go to university and find a decent job after his graduation, escaping from his current bitter life.



Figure 6- 21: Yang Liping and author (Source: author)

Mrs. Yang belongs to the unlucky generation who have experienced all the challenges of modern China, as demonstrated by the proverb: ‘When they were of school age, it happened to be the cultural revolution and all schools were closed for revolutionary activities; when they were of working age, it happened to be the campaign when Mao called for young people to go to the countryside to work as peasants; when they were of marriage age, it happened to be the one-child policy; and when they are now close to retirement age, it happens to be the time of non-pensionable redundancy’.

‘What I worry about the most at the moment are the health care and education costs for my only son. If I became ill, I would not be able to afford the health care fee. Thus, I always buy non-prescribed cheap medicines from the pharmacy for any light illnesses and, luckily, so far I have not been very ill or needed hospital treatment. The lump sum of 30,000RMB compensation is saved for paying my son’s university tuition’ (Yang-57-F-U-Laid-off Worker-Liangzhou).

The millions of people in the lower class are struggling for basic needs such as food, shelter and health care. This is consistent with Engel's Law that the lower a family's income, the greater the percentage spent on food.

6.8 Conclusion

This chapter used county-level field survey data to analyse how income inequalities involve a wide range of changing indicators such as gender, place, location and social class. By using this framework, the results show that, overall, per capita income has increased and decreased unequally over time. The income gap between the western, central and coastal areas widened as income increased faster in the coastal areas. The rural-urban income gap was not as severe as statistical data suggested. In addition, the coastal rural-urban income gap is narrower than the gap inland. The income inequalities between genders and between different ethnic groups are widening. In addition, income inequality and stratification into different social classes leads to social and economic tension. Consumption patterns are shaped differently across urban and rural areas, coastal and inland counties and different social classes.

Due to the restrictions of my field survey, large-scale empirical research exploring the effects of economic reform on gender income inequality is urgently needed. Research is also required into how to judge the total amount and distribution of grey income, as well as how to judge income inequality in different social classes.

Chapter 7 Social Transformation and Inequality

7.1 Introduction

Sociologists such as Bian and Logan, (1996), Nee (1991), Szelenyi and Manchin (1987) have argued that the shift from a planned economy to a market economy is likely to reduce social inequality as a result of the redistribution process. For example, Szelenyi and Manchin (1987:124) analysed the privatisation of urban housing in Hungary and concluded that the overall effect of market reform on the cadre elite led to a ‘gradual erosion of its privileges’. Similarly, studies of economic reform in Eastern Europe agree with this view (Kornai, 2006). However, in contrast, Chen and Qiao (2002) and Chen and Li (2010) emphasised that social inequality has worsened under China’s economic reform and transition because of regional and urban-rural development inequality. Furthermore, Hu (2001) argued that Chinese society is experiencing frustration, bitterness and even resentment about the severe social inequality between different groups of people and in particular the widespread corruption. Chapter Two, in providing a conceptual framework for the thesis, highlighted the importance of the research question related to development and inequality under China’s economic transition since 1978. Bian (2002), Beller and Hout (2006), Hesketh *et al.* (2005) and Anagnost (2008) interrogate the ways in which changes in the structure of birth control policy, social class and social mobility have resulted in social transformation. This chapter presents county-level field survey evidence from five Chinese counties in order to analyse the ways in which China’s socio-economic reform has shaped a range of social perspectives upon issues such as birth control policy, social stratification, education and social mobility. In order to achieve these aims, section 7.2 examines how China’s birth control policy affects population fertility and gender inequality, and how it is causing an ageing society and gender imbalance (Zhang, 2012). Section 7.3 focuses on how social stratification is

forming within a transitional society and section 7.4 explains the relationship between education and social mobility.

7.2 Birth Control and Gender Equality

China is the only country in the world to directly and deliberately penalise people for violating population policy (Bongaarts and Greenhalgh, 1985). Under the one-child policy, each married couple is allowed to have one child and, under some special circumstances, couples from minority ethnic groups and rural areas are allowed to have two children, in order to control the country's population growth (Kane and Choi, 1999). The depth of its social impact means that many arguments have been advanced about the wide-ranging ways in which the one-child policy has affected society and whether or not it has succeeded since it was introduced in 1979. For example, Feng *et al.*, (2012) stated that the one-child policy contributed to two decades of impressive economic development by cutting population growth to an all-time low. However, Hesketh *et al.*, (2005) argued that the costs of the one-child policy consist of a growing proportion of male births and an outsized proportion of elderly inhabitants without sufficient government or family support. This section aims to clarify whether the one-child policy has been necessary for controlling China's population growth as well as assessing how it causes social inequality and impacts on a range of familial issues such as family size, gender roles and the ratio between elderly parents and adult children (Yi, 1992).

It is widely recognised that the main benefit of the one-child policy has been the changes to marriage and fertility rates. The average age at which women get married has increased gradually from about 23 in 1980 to 25 in 2000 (Ding and Hesketh, 2006) and the total fertility rate has declined from about six births per woman before 1970 to two in 2004 (Hesketh *et al.*, 2005). However, behind the statistical data, my field survey has revealed that satisfaction with the one-child policy is low, with 22% of women in urban areas and 3% of women in rural areas demonstrating support. In

addition, there is a large inequality in the fertility rate between urban and rural areas. Table 7- 1 shows that in urban areas, 95% of families have only one child born after 1979 but the number of children born in 90% of rural families averages between two to five.

Table 7- 1: Number of children per family amongst sample population (Source: author)

	One Child Per Family (%)	More Than One Child Per Family (%)
Urban	95%	5%
Rural	10%	90%

One reason for this disparity is the cultural tradition of favouring sons and the influence of patrilineal culture, deeply rooted in rural areas (Ebenstein, 2010), which encourages couples to attempt to ensure at least one male offspring. In addition, peasants have left their hometowns, where they were subject to government control, and succeeded in finding ways to have more children (Ding and Hesketh, 2006). Therefore, in 1989 the government introduced a new policy, allowing rural couples to have a second child if their first child is a daughter. This permits couples to have more children while approving and encouraging the customary preference for sons. As a result, it is no surprise that one participant said publicly:

‘As the Chinese proverb says, the more male offspring, the more luck the family receives’ (多子多福). In our village, every family has at least three children. I have three sons. My elder brother has five daughters and one son and my younger brother has two daughters and two sons’ (Wu-46-M-R-Peasant-Wuchang).

Another reason for the disparity is that different punishments are enforced in urban and rural regions. In China, couples who have obtained an official permit are only supposed to have one child. ‘Unplanned’ pregnancies (pregnancies without a birth permit) must be terminated by abortion (Edlund *et al.*, 2003). The heavy punishments associated with violating the one-child policy are widely publicised in

policy regulations and media propaganda (Li, 1995). For example, in rural areas, it is common to see one-child policy slogans painted on walls (Figure 7-1). Penalties are enforced by local authorities. For example, heads of work units or villages have to make sure that the number of infants born in their unit or village fits the birth quota allocated by the upper level of administration. Heads of work units or villages are themselves under various economic and disciplinary pressures to ensure their compliance. A direct financial penalty is also regarded as a powerful means to limit childbearing (Li, 1995).



Figure 7-1: Slogan: ‘If you run away to avoid the one-child policy today, you will lose all your property tomorrow’ (Source: Beijingwanbao, 2009)

In addition to financial penalties, urban residents, especially those working in SOEs, universities and hospitals (99% of which are state owned), and cadres are under direct government control and at risk of more severe punishment beyond direct financial penalty. People who violate regulations are discharged from employment immediately and cannot be employed by similar employers (Hesketh and Zhu, 1997). Therefore, the different punishments between urban and rural areas are one of the main reasons for fertility inequality. For example, one employer of a university complained:

'My wife and I have always dreamed about having our second child. But it is impossible because we are working in the same university. If we dare to have our second child, both of us would lose our jobs and lose our pensions. In addition, every member of staff in my university would lose their bonus that year. It is unfair that those peasants can pay fines to have many more children but we don't get any changes' (Zhu-39-M-U-Reader-Wuchang).

A benefit of the one-child policy is that it may allow Chinese women to achieve social equality in the long run (Fong, 2002). Although the right of women to control their own reproduction was abolished, the one-child policy decreases the time women spend childbearing to a comparatively short period in their adult lives. Women are able to prepare themselves for work and spend more time on their careers. Therefore, it is not surprising that a decline in fertility has been accompanied by a drastic rise in the number of women participating in the labour force since 1979. Although patrilineal traditions are still very dominant in the social and economic lives of the Chinese, especially in the countryside, the one-child policy may eventually transform Chinese society into one where the patrilineal kinship system ceases to be a significant factor in everyday life. The most common observation is that Chinese women are distinctly underrepresented in non-traditional jobs outside the home, such as high-level positions in the political and economic sectors (Hong, 1987), although there are some exceptions. All married female participants in my focus groups claimed that they have spent more time doing housework in comparison to their husbands, and all male married participants admitted that their wives do most of the housework regardless of age, social class and location. Thus, during my field survey it was common that the wife prepared the food in the kitchen (Figure 7-2) while the husband enjoyed dinner with guests (Figure 7-3).



Figure 7- 2: A wife cooking in the kitchen (Source: author)



Figure 7- 3: A husband drinking with guests while his wife prepares the food (Source: author)

The fundamental reason for this divide is that in Chinese ideology a woman's success is judged on her family's happiness, rather than individual career achievement. As Miss Niu commented:

'A woman is highly praised if she sacrifices herself and takes the best care of her husband and children. Females are commonly thought unlucky and unhappy if they

are not married or get divorced even if they have a very successful career' (Niu-29-F-R-Teacher-Liangzhou).

The one-child policy may instead gradually reduce the significance of patrilineal kinship and lead to gender equality. A combination of these factors could reshape the traditional role of Chinese women and create social equality in the long run.

Although the one-child policy has some social benefits, the policy has been widely criticised because of its potential social consequences (Ebenstein, 2010). First, the one-child policy has caused gender imbalances (see Figure 7.4). The neonatal sex ratios have been increasing, from 1.06 in 1979 to 1.11 in 1988, which is considerably higher than the expected standard of about 105 male to 100 female births (Edlund, *et al.*, 2003). In 2006, neonatal sex ratios reached 1.17, as 117 boys were born for every 100 girls (National Bureau of Statistics of China, 2007).

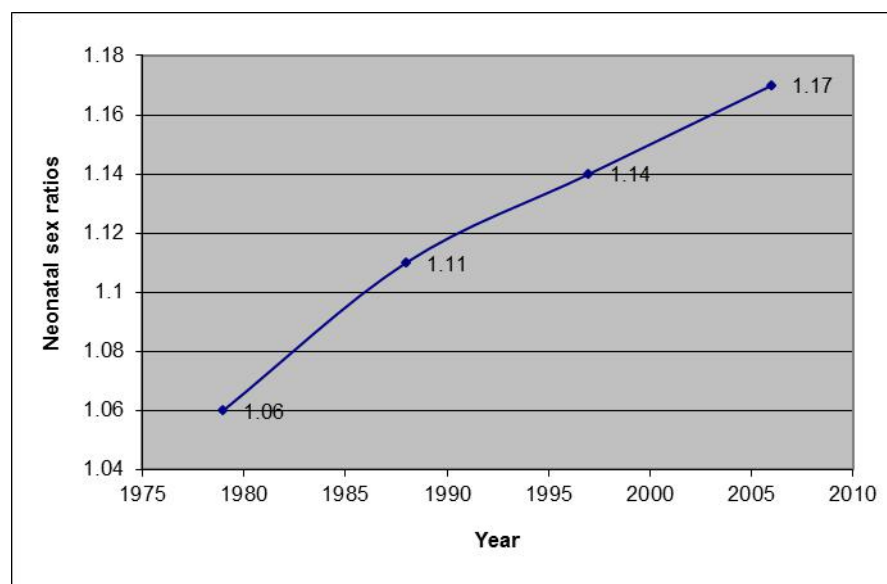


Figure 7-4: Neonatal sex ratios (Source: derived from CSB yearbook, 2007)

The data of Figure 7-4 show that China has an extremely high ratio of boys to girls, which Kane and Choi (1999) suggested is unlikely to occur in a natural way and which gives cause for concern at many levels. Traditionally, the son and his spouse have responsibility for most duties related to caring for elderly parents (Hong, 1987). Therefore, in the attempt to ensure a son, some Chinese families have chosen sex-

selective abortion after ultrasonography, leading to a large proportion of the decline in female births (Ebenstein, 2010). Actual figures are impossible to obtain because sex-selective abortion is illegal, although it has been carried out by growing numbers of private sector companies. Regardless, the impact of the one-child policy on the sex ratio has received much attention, as have the potentially unfortunate social consequences of this sex imbalance.

Second, two demographic indicators reveal that China is an ageing society due to falling fertility and increasing longevity over the past few decades (from 1950 to 2010 life expectancy increased from 41 to 71 years) (Pei, 1999). The rapid decrease in the birth rate combined with improving life expectancy has led to an increasing proportion of elderly people. The ratio between elderly parents and adult children has also enlarged. In China, this problem has been named the '4:2:1' phenomenon (four grandparents, two parents and one child), meaning that increasing numbers of couples will be responsible for the care of only one child but four parents. The low fertility rates in urban areas caused by one-child policy mean that even more urban residents will reach their final years without any surviving children or only one child. For example, in the urban section of my field survey, 65% of senior citizens lived alone in homes which were not suitable for the elderly, but they would feel disgraced to move and spend their final years in a nursing house because of tradition (Pei, 1999). In rural areas, too, family support systems for the elderly are weakening. This is primarily because of the increasing numbers of young people who have immigrated to urban areas (Luand Wang, 2006; Li, 2003; Zhao, 2000). It is very common for young couples to leave their parents and children behind in their rural homes (see Figure 7-5). This situation has become very precarious and must be addressed, as for most elderly rural population the family remains the primary source of care (Fong, 2004).



Figure 7-5: Mr. Zhang and his grandson (Source: author)

Caring for older parents now poses a major challenge to the nation because traditionally they were cared for by extended families, but this is no longer an option for most Chinese.

'We will try our best to be financially secure. But if we were sick I think we would still expect our son to fulfill some of his responsibilities like coming to visit us, since money cannot buy everything, especially things like the emotional support of the family. Nowadays, our pensions are pretty good, but who knows what is going to happen later. The government should offer some security for the elderly like other countries' (Xu-68-M-U-Doctor-Boluo).

My interviews exposed that most parents, particularly those in urban areas, now accept that it will be impossible for a single child to care for two parents and four grandparents (4-2-1) in future. For this reason, parents are now making their own non-traditional and independent plans for their futures if they are financially able to do so. However, not all urban residents have the financial capacity to make such plans, and many rural residents are unable to afford financial planning for their future retirement. Therefore, the role of government in solving the problems caused by the one-child

policy needs very serious consideration. Although the government vowed that it would care for the elderly in 1980 (see Figure 7-6), as problems have emerged institutional changes and government policy still lag far behind.



Figure 7-6: Poster stating: ‘The one-child policy is brilliant and the government will care for the elderly’ (Source: Xinhuanet, 2008)

Unless the elderly in China are universally provided with adequate security, they will remain dependent on their children for financial and social support.

‘I am the only child in my family. I remember the last time my mother was ill and my father was abroad. I had to care for her day and night, unlike others who can share this type of burden with their siblings. At that time I was not even in good physical shape myself. It was a really difficult time for me until my father hurried back from abroad. Since I do not have any siblings I will have to care for my parents and there is no possible escape or valid excuse’ (Xu-32-F-U-Nurse-Boluo).

In addition, the one-child policy has greatly changed the structure of Chinese families because the average size of the Chinese family is much smaller than it was before. The traditional extended family with married brothers living together has become rare. Instead, the nuclear family (assuming there are no more than two

generations in the family) has become the dominant family form (Short and Zhai, 1998). However, in light of the deeply rooted traditional Chinese ideology favouring large families, the three generation family remains an important family type in Chinese society. According to my field survey, three generation families account for 22.3% of all families. Several other local surveys conducted by Western scholars show similar patterns (for example, Reher, 1998). As a result, grandparents such as Mr. and Mrs. Ma in Figure 7-7 typically take care of grandchildren in the three generation family.

'My son and daughter-in-law are working in city. Nursery care is very expensive there and my wife helps them to take care of their children. When they come back, we will all live together' (Ma-59-F-R-Housewife-Jinchang).



Figure 7- 7: Mr. and Mrs Ma and their grandchildren (Source: author)

In sum, my research reinforces the findings of previous researchers who have suggested that the one-child policy has strongly affected the fertility rates in urban areas but resistance to the one-child policy nevertheless remains common among peasant women. The one-child policy has a positive relationship to gender equality

and the reduction of the average family size. However, it has also caused severe social consequences such as sex imbalance and an ageing society.

7.3 Social Class and Stratification

7.3.1 HuKou and Social Stratification

Chan (2009) defined China's political system as a centralised multidivisional-form hierarchy structure (M-structure). Under this structure, the household registration system, *HuKou*, was launched in the 1950s as an instrument to solidify administrative control, and it is still in place today (Wu and Treiman, 2004). Figure 7-8, Figure 7-9 and Figure 7-11 illustrate respectively the cover, first page and contents of an original *HuKou* book. Figure 7-10 and Figure 7-12 are corresponding translations of Figure 7-9 and Figure 7-11.



Figure 7-8: Cover of a typical copy of China's Household Register Book (Source: author)



Figure 7-9: First page of a *HuKou* book in Chinese (Source: baidu.com)

For Your Attention			
<p>A. The <i>HuKou</i> book legally proves the identity of the resident and demonstrates their relationship with other family members. It is the main document provided by the <i>HuKou</i> registry office required for proof of identity and census registration.</p> <p>B. The house owner and family members should handle and check the <i>HuKou</i> book carefully as it will be inspected by the registry office.</p> <p>C. The house owner should care for the <i>HuKou</i> Book and it cannot be altered, changed and borrowed. If it is lost, the house owner should report this loss to the registry office immediately.</p> <p>D. Any profits relating to the <i>HuKou</i> belong to the registry office; private and external offices cannot interfere with this record.</p> <p>E. If there are any changes of address, you should apply to the registry office.</p>			
Family Category	Non-Agricultural Resident/Agricultural Resident	Head of the House/ House Holder's Name	
Family Number		Residence Address	
Province Police Office Seal			
Year Month Day of issue			

Figure 7- 10: First page of a *HuKou* book in English (Source: author)

住址变动登记

变动后的住址	变动日期	承办人签章

常住人口登记卡

姓名	户主或关系	
曾用名	性别	
出生地	民族	
籍贯	出生日期	
本市(县)其他住址	宗教信仰	
公民身份 证件编号	身高	血型
文化程度	婚姻状况	兵役状况
服务处所	职业	
何时由何地 迁来本市(县)		
何时由何地迁来本址		

登记日期： 年 月 日

承办人签章： _____

Figure 7- 11: The contents of a *HuKou* book in Chinese (Source: author)

Resident Registration Card	
Name	House Owner/ Relations of House Owner
Other Names	Gender
Place of Birth	Ethnic Group
City/ town of residence	Date of Birth
Place of residence	Religious Belief
ID Number Height	Blood Type
Degree Marital Status	Military Status
Station	Occupation
First address in the City/ Town	
Dates at this address	
Dates at your current address	

OFFICIAL SEAL OF THE REGISTRY

Year Month Date of issue

Figure 7- 12: The contents of a *HuKou* book in English (Source: author)

Using the contents of the *HuKou* books and the household details they supply, the government can categorise the population according to various groups, such as location, gender, ethnic group, occupation and agricultural (rural) or non-agricultural (urban) status. This offers both the principal basis for establishing identity, citizenship and proof of official status but also presents a means of controlling population movement and mobility through the implementation of a code of laws and regulations (Wong *et al.*, 2015; Solinger, 1999a). Chan and Zhang (1999:2) argue, '*HuKou*'s functions go far beyond simply controlling population mobility but regulating population distribution and serve many other important objectives desired by the state'. The aim of the *HuKou* system is to enable the central government to define the urban-rural relationship and shape state-society relations. Gao from Hubei explained:

'The HuKou book is essential for every aspect of daily life; without registration, one cannot obtain employment, go to school, marry or enlist in the army'.(Gao-40-F-U-Policewoman-Wuchang)

In particular, there is a sharp differentiation of rights and privileges between those recorded in their *HuKou* books as having agricultural status and those of non-agricultural status, exacerbated by the stringent conditions governing conversions from rural to urban status (Lu, 2002). For example, only urban residents are entitled to government-provided benefits such as housing (Wu, 2003), job opportunities (Knight, Song and Jia, 1999), education (Qian and Smyth, 2008a; 2008b), health care (Zhang and Kanbur, 2005), pensions (Li *et al.*, 2012), inter-generational occupational mobility (Wu and Treiman, 2007; Davis, 1992) and migration (Whalley and Zhang, 2007; Ganzeboom *et al.*, 1989). As a migrant from a rural to an urban area, Hu complained:

'I was born in a village in Hunan Province. I have been working and living in Boluo for about 10 years. But I still don't have a local urban HuKou book. As a result, my child cannot go to public school for education and all my family cannot receive the same social services and benefits as native residents' (Hu-38-M-U-Engineer-Boluo).

Since the 1950s, the government has only allowed local *HuKou* holders access to these social resources and welfare, meaning that administrative rank is often an indicator of the degree to which an individual or group of individuals can profit from socio-economic development. The value of the *HuKou* book is roughly stratified with province-level cities such as Beijing, Shanghai and Guangzhou at the top, followed by prefecture-level cities and county-level cities, with rural areas at the bottom (Wang, 2005b). It is estimated that the total number of rural-urban migrants reached 211 million in 2009 (National Population & Family Planning Commission of P.R. China, 2010). Li *et al.*, (2010: 146) argue that 'the central government is neither moving to abolish the *HuKou* system, nor does its importance in major cities appear to be diminishing although it has undergone numerous adjustments over the past 30 years'. Instead, *HuKou* is still an important tool serving multiple state interests under China's current economic and political system. However, Tao (2009) and Zhang and Wang (2010) have argued that the *HuKou* system is no longer as relevant to people's lives because of economic development and changes in the migrant population, although it still to some degree determines access to resources and one's life chances. As one of my participants said:

'I would prefer to have an agricultural HuKou classification rather than a non-agricultural one because the government only distributes land to those with agricultural classifications. When our agricultural land was converted into land for industrial projects, my family received a large amount of compensation and five two-bedroom flats in exchange for our agricultural land and house. The urban HuKou holders say that our lands grow houses rather than crops(种房子).' (Wu-55-M-R-Peasant-Wuchang)

7.3.2 Social Stratification

Social class and social stratification are key topics in sociological analysis (Grusky and Weisshaar, 2001). Analysis of social class and social stratification demonstrates that one social class may own and enjoy more economic resources than

another. Similarly, one social class may be held in higher esteem, or it may be in a position to control other groups. The analysis of social class is concerned with understanding how inequalities like these arise in the first place and the impact that they have on other aspects of society. For example, Bourdieu and Wacquant (1992) analysed a set of practices in order to structure social differentiation and extended this social differentiation to social, economic, cultural aspects. Contemporary China provides an excellent example of the complexity of social differentiation that occurs when a society undergoes economic and structural change. Li (2005) suggested that the discourse of social stratification has become increasingly dominated by the approach that grasps the widespread and total impact of market reform and globalisation on Chinese society in a time of rapid social and economic transformation.

Social groups can be stratified using various methods. For example, there are systems of stratification based on gender or ethnic groups (Anthias, 2001). It may also be possible to identify stratification operating on the basis of age, religion or caste (Saunders, 2006; Ahmad, 1978). Therefore, in this section, two key questions need to be clarified: (i) how can we define different social classes? (ii) how does social stratification shape Chinese social and economic inequality? Giddens *et al.* (2003) has devised a three-fold classification model for social class, consisting of the upper, middle and lower classes. However, Warner *et al.* (1949) have created a six-tier classification model for social class: the upper-upper, upper-middle, upper-lower, lower-upper, lower-middle and lower classes. In addition, Watson (2010) has spoken of three major types of class stratification: economic, political and occupational. As Barbrook (2006:6) commented with respect to social classification: ‘in every society the most basic class distinction is between the powerful and the powerless’. In contemporary China, distinct social classes are not yet apparent as the development of social class is still in its transition stage (c.f. Bian, 2002). During the Mao era, social classification was rather simple, as society was divided into peasants, workers, intellectuals, cadres, soldiers and black elements (Anagnost, 2008).

At present, the stratification of social classes in China is very complicated. Bian (2002) has redefined Chinese social classes as follows: peasants living by means of agricultural production; peasant labourers floating in urban areas; the working class; cadres (both administrative and managerial); rural cadres; private entrepreneurs; managers; household business owners; individual manufacturers and traders; professionals; and intellectuals. More recently, the sociologist Li (2005:8) has suggested an alternative model of Chinese social stratification: '*in China today, there is a peasant class, a working class (urban state worker and urban collective worker, urban non-state worker, and peasant worker), a capitalist class (about 15 million), and a class of cadre (about 40 million) and quasi-cadre (about 27 million)*'. However, there is problem with both of the above classifications, as they tend to ignore the fact that China's economic development, particularly in the last decade, has significantly diversified occupation-based social classification, and such classifications no longer reflect the reality of social status.

My field survey results favour Giddens *et al.* (2003) observations that there are several factors determining a person's social class. The most important of these factors is the personal or household per capita income or wealth, which is influenced by the ownership of land and property, means of production and occupation, educational qualifications and family background. With this in mind, I outlined 12 occupations as a basis for observation and asked my participants to give scores between 1 and 12 for each occupation in terms of power, wealth, education, occupation and family background. For example, in the column headed Power in Table 7-2, the cadre, considered to be the most powerful occupation in China, is given a score of 12. Table 7-2 displays my questionnaire and interview results, culminating in a final average score for each occupation. Based on these scores, incorporated with field observations on people's living conditions, I have divided the twelve occupations into four groups, each consisting of three occupational subdivisions. This classification model provides a much more accurate reflection of

China's current social stratification, based on the observations and comments of those I engaged with during my field research.

Table 7-2: Scores based on occupation and other related factors (Source: author derived from field interviews and questionnaires)

Factors	Power	Wealth	Education	Occupation	Family Background	Total Scores
Cadres	12	10	10	10	12	54
Rural cadres	10	9	6	9	10	44
Private entrepreneurs	9	11	9	11	9	49
Managers	11	12	8	1	11	43
Professionals	8	8	11	8	8	43
Traders	7	6	12	6	7	38
Intellectuals	6	7	7	7	6	33
Household business owners	4	5	5	5	4	23
Individual manufacturers	5	4	4	4	5	22
Urban worker	3	3	3	3	3	15
Peasant labourer	2	2	2	2	2	10
Peasants	1	1	1	1	1	5

According to my scores, the upper class consists of cadres, rural cadres and private entrepreneurs; the upper-middle class consists of managers, traders and professionals; the middle class consists of household business owners, individual manufacturers and intellectuals; and the lower class consists of peasants living by means of agricultural production, peasant labourers floating in urban areas and urban workers (see Table 7-3).

Table 7-3: Components of social classes (Source: author)

Social Class	Scores	Occupation
Upper Class	Above 43	Cadres
		Rural cadres
		Private entrepreneurs

Upper-Middle Class	38-43	Managers
		Professionals
		Traders
Middle Class	22-33	Intellectuals
		Household business owners
		Individual manufacturers
Lower class	Below 3	Urban workers
		Peasant labourers in urban areas
		Peasants living by means of agricultural production

Three aspects of these results are particularly worth noting. First, they show that being a member of the party cadre is a key element of belonging to the upper class. This conclusion was also drawn by Li (2005) and Bian (2002), who both defined cadres as being part of the upper social class because they have been given high social status and socio-economic privileges from the Mao era to the present day. For example, it was recently revealed that a state-owned-coal mine in Shanxi worth 200 million RMB had been sold to a relative of a cadre for 375,000 RMB (Feng,2012) Hao and Johnston (1997:85) concludes that ‘it is very common that cadres’ children and spouses accumulate wealth directly and indirectly via secret methods using their privileges’. Tian (2009) likewise indicates that the reason why cadres enjoy various privileges is the lack of mechanisms for legal supervision. Section 6.6 further investigates how cadres enjoy privileges in income and expenditure and explores in detail the inequality between cadres and other social classes. One participant Mr. Yue, for example, indicates that:

‘Cadres are a privileged class who have power and high social status. Although they swear they are servants of the people, they never are. They use their power to

control more economic resources. Even their offspring have many more opportunities to be wealthy and maintain a high social status' (Yue-45-M-U-Policeman-Wuchang).

Second, as Weber (1994) and Kerbo (2006) have argued the middle class consists of people who have some property but little education and people who have little property but can command high wages by virtue of their education and qualifications. However, on the contrary, according to my definition, the upper-middle class is represented by the professional and managerial occupations that both own property and receive high wages as a result of the economic transition. The middle class is characterised by household business owners, individual manufacturers and intellectuals: people who either own some property or receive reasonable wages by virtue of their education and qualifications (Murthy, 1984). Dividing the middle class into upper-middle class and middle class is necessary because in the past three decades the former have been able to earn much higher wages than the latter as a result of being involved in China's rapid economic development. In particular, the disparity between the upper-middle class and middle class in terms of wages and social status has significantly diversified the occupation-based social classification system, which needs to reflect the reality of social status.

Third, at the bottom of society, peasants, peasant labourers floating in urban areas and urban workers are considered as comprising the lower class because they have low income, less social welfare and are the most vulnerable groups (see Figure 7-13 and Figure 7-14) (Li, 2005 and Bian, 2002). Section 6.6 explores in detail the inequalities of income and expenditure between the lower class and other social classes. Figure 7-15 shows that, according to my research, 43% of participants' dream of working in the government, hospital and education sectors; and only 1% of participants wish to be peasants or workers, revealing that in reality there is a universal view that this group has a low social status.



Figure 7- 13: A peasant comforts his son (Source: cishan.net)



Figure 7- 14: A low-income peasant (Source: author)

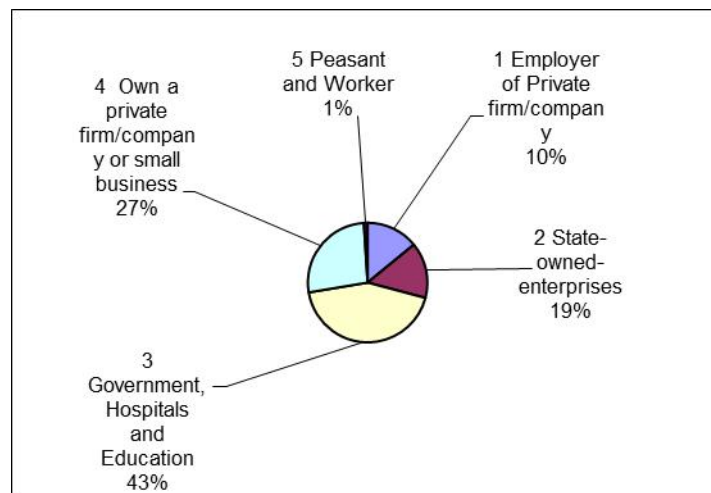


Figure 7- 15: Ideal jobs of Chinese inhabitants (Source: author)

In conclusion, China's social classes are still in transition but occupation-based stratification as well as associated inequalities between groups is now very evident. In this section, I have demonstrated why and how I define four occupationally orientated social classes. Significantly, inequalities in economic conditions such as income, expenditure and accommodation, as well as healthcare and social security, are highly related to differences between these four social classes.

7.4 Education and Social Mobility

The last section in this chapter explores how Chinese social classes are not determined at birth and social mobility is permitted. Social inequality is a common concern in research on social stratification and social mobility. Erikson and Goldthorpe (1992) emphasised that the level of relative social mobility within a society (at a particular time) can be taken as a measure of its openness; that is, whether or not it provides its citizens with equal opportunities. Education plays an important role in modern societies both as a way of encouraging social mobility and as a tool for social reproduction (Ishida *et al.*, 1995). Breen and Jonsson (2005) investigated how educational attainment mediates the relationship between social class of origin and social class of destination; while Breen and Luijkx (2004) also claimed that educational attainment was an important driver of social mobility in Europe between 1970 and 2000. However, Shavit and Blossfeld (1993) conducted a cross-country comparative study in which they found that class inequalities in educational attainment have remained substantially unchanged over time in many countries including the UK. Shavit and Muller (1998:1) showed that ‘education is a crucial intervening link between the social background of individuals and their later class destination’ by conducting a cross-country comparative study. Saunders (1990:68) pointed out that patterns of social mobility in all industrial societies include *intra-generational mobility* (the movement that may occur within one individual’s lifetime) and *inter-generational mobility* (the movement that may occur between generations as children achieve a different position from that occupied by their parents). Breen (2004) stressed another important feature of class systems, which is that movement between classes, may occur in both directions. In other words, movement may involve both *upward mobility* and *downward mobility*.

Since 1949, China has made tremendous efforts to improve education with the aim of promoting economic and social development. For example, China introduced nine years of compulsory education in 2007 (Li *et al.*, 2007) and education

expenditure increased from 26.5 billion RMB in 1986 to 1214.8 billion RMB in 2007 (National Bureau of Statistics of China, 2007). Figure 7- 16 shows that 100% of urban and 95% of rural students receive nine years of compulsory education according to my survey data from five counties.

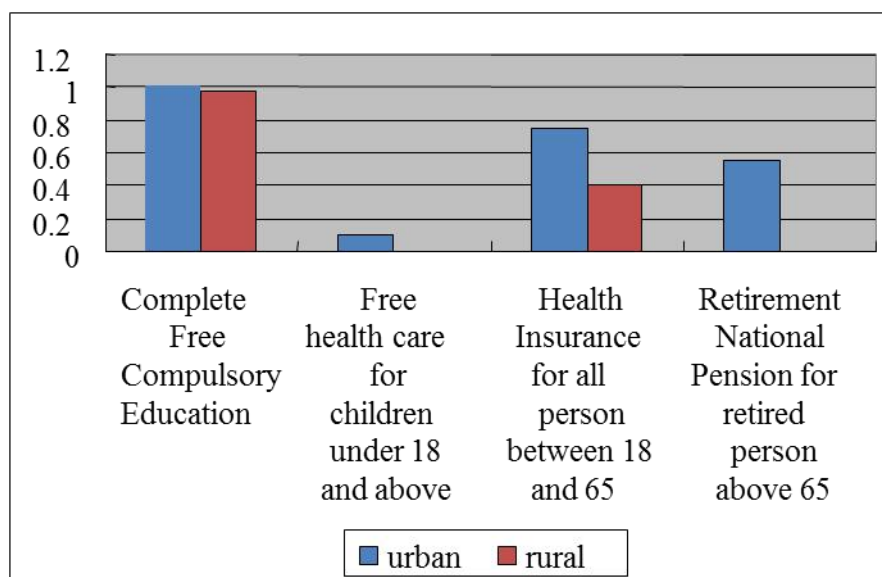


Figure 7- 16: Social disparity between urban and rural regions (Source, author)

(Graph labels should read: Completely free, compulsory education; Free health care for children under 18 and above 65; Health insurance for all aged 18-65; National pension for retirees over 65)

Blaug (1985) found that the improved level of education in developing countries leads to higher labour productivity and, for the individual, an increased income level. Barro and Sala-i-Martin (1995) emphasised that education plays a key role in economic growth. Lucas (1988) and Cai *et al.* (2002) have also demonstrated the significant positive relationship between education and the growth of GDP per capita using data from 29 Chinese provinces between 1978 and 1998. However, as Farrell and other scholars have pointed out, inequality in education has many different dimensions including socio-economic status, gender, ethnicity, race and geographical location (Wang, 2008; Liu and Li, 2006; Kwong, 2006; Zhang and Kanbur, 2005;

UNDP, 2005; Yang and Zou, 2003; Farrell, 1994 and 1999). Chapter Five presented the main arguments surrounding inequality in education and the reasons for it, as suggested by the national statistical data. This section uses my survey data to explore educational inequality with a particular emphasis on the impact of education upon social mobility, bearing in mind the special contexts of education and social mobility in China (Jackson *et al.*, 2005).

Similar to previous research, my survey data suggests that regional inequality in the attainment of education has largely existed because of the imbalanced distribution of educational resources and inequality in educational policies (Mok, 2005; Yang, 2000). For example, poor people often live, dispersed, in remote areas in which the central government rarely establishes proper education facilities. Figure 7- 17, Figure 7- 18 and Figure 7- 19 show three local schools in Gansu: a local village school, a local town school and a local city school respectively. The facilities and conditions of the schools in larger settlements are considerably better than those in smaller settlements. In addition, fewer qualified teachers serve poor western localities (World Bank, 2003:15). However, the government has vowed to reduce educational inequality by launching new educational policies (MOE, 1996; 2009). For example, my field survey revealed that qualified teachers are increasing noticeably in some village schools and most town schools. In Gulang, my participants pointed out that the government has increased its educational budgets since the 1990s. Now, the government pays each teacher in a town school at least 3000 RMB in salary per month, meaning that most teachers in town schools have graduated from university.



Figure 7-17: Village school in Gansu (Source: author)



Figure 7-18: Town school in Gansu (Source: author)



Figure 7-19: Secondary school in city in Gansu (Source, author)

The cost of secondary school education has soared since educational reform in the 1990s and is arguably the main reason for educational inequality in recent years (Wu, 2010; Liu, 2007; Tsang and Ding, 2005; Hannum, 1999). However, China's schooling policy was revised in 1986, for urban areas, and 2007, for rural areas, so that pupils studying in primary and secondary schools during the nine-year compulsory period of education now only need to pay a small amount of money to cover the cost of books and supplementary classes, and no longer need to pay tuition fees (Li and Wang, 2007). However, fiscal reform in education in the early 1990s shifted the responsibility of funding education to local governments. Local governments in less developed areas were then unable to gather sufficient funding for education (Mok, 1997). As a result, tuition and other miscellaneous fees can reach several thousand RMB per child following the nine-year period of compulsory education.

'My son and younger daughter are within the nine years of compulsory education so I pay around 200 RMB tuition fees per child per year. However, after my children reach the end of the nine years, I need to pay 3000 to 4000 RMB in fees per child per year to the secondary school' (Yang-45-M-R-Peasant-Gulang).

Until the mid-1980s, higher education (HE) was free in China and the state even subsidised students' living costs so HE was affordable to all qualified students (Qu, 2008). A market ideology has gradually been adopted in tertiary education since the economic reform, beginning with the admittance of a small proportion of self-funded students (Wang, 2008). Notably, compared to the average income for urban and rural residents (which increased by nine and six times respectively) and GDP (which increased by almost four times), tuition fees in higher education have increased 25 times from 200 RMB (30USD) in 1989 to over 5000 RMB (700USD) in 2007 during the same period of time (Figure 7-20; NBSC, 2008).

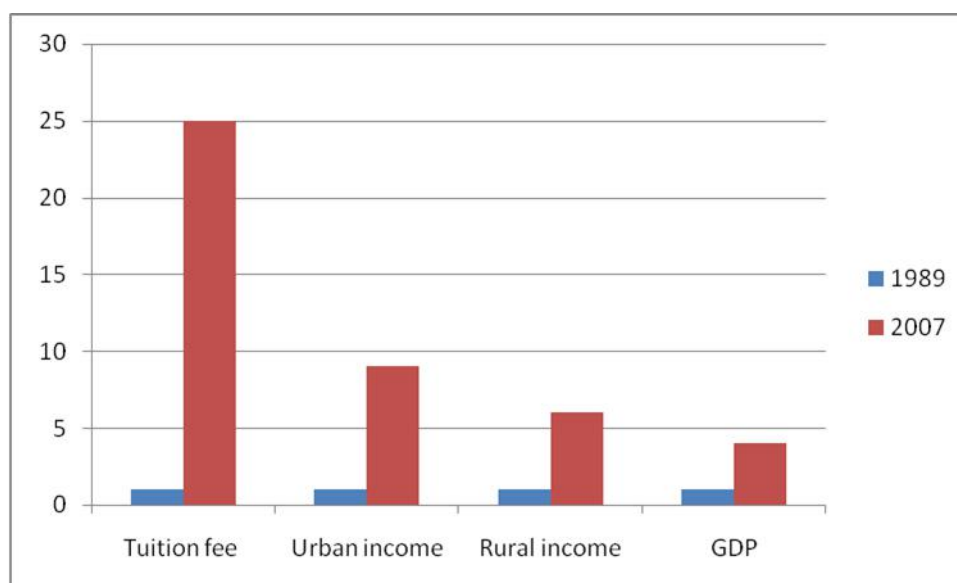


Figure 7- 20: Tuition fee increase against income and GDP growth (Source: author)

Moreover, a report by the National Development and Reform Commission recently estimated that in the last decade, each undergraduate student in a public university has needed to spend over 10,000 RMB (1400USD) per year to cover tuition fees and accommodation costs (NDRC, 2007). Family support has turned out to be the primary source for university funding in the face of inadequate access to the existing student loan and grant system (MOE, 2009). Therefore, higher education has become unaffordable for many low and middle-income families (Wang and Yao, 2003; Tsang, 1996). In absolute terms, tuition fees in China are much lower than those in many other countries such as the UK (BBC, 2009). However, in China 60% of the average household's disposable income is taken up by tuition fees, compared to 22% in the UK (Office for National Statistics, 2010). Therefore, the soaring cost of higher education and its disproportionate relation to household income has become a significant source of educational inequality (People's Daily Online, 2006). Supporting such arguments, the participants in my focus group living in poor areas disclosed that they are unable to afford such a burden and that their children often leave secondary school before they are qualified. Tuition fees for university study are even further out of reach figure for many people in poor areas, as emphasised by one of my interviewees, Ma Qing:

'The university tuition fee is around 8000 RMB per year and the living costs are 5000 RMB, which is equivalent to the total income of our household over three years. Universities do provide some subsidies, but they are far from enough. For the sake of our children's future, we have to borrow money to pay for the costs of education' (Ma-50-F-R-Peasant-Jinchang).

In my opinion, the central government is to blame for this phenomenon because it deliberately devolved financial responsibility for higher education to governments and individuals at lower provincial levels. Government expenditure on higher education decreased sharply from 93.5% of all HE income in 1990 to 42.6% in 2006, while GDP almost quadrupled (NBSC, 2008). Meanwhile, the promotion of multi-method and multi-channel funding strategies has led to increased tuition fees because other support mechanisms have not been introduced. Education has therefore been commoditised by the replacement of the merit-based selection mechanism with selection based on financial criteria. This transition has excluded students from vulnerable groups, low-income families and families in the lower social class.

In line with Guo (2005), my survey data shows that China's educational policy has not improved chances for disadvantaged groups to advance to a higher level of education. Therefore, students living in poor areas are often forced to abandon further education if their parents cannot borrow the large amounts of money required to support them, resulting in a shortage of intellectuals and consequently exacerbating the poverty trap. A typical example of such a situation can be found in Gulang County in Gansu (see Case 7-1). However, for many Chinese people, access to higher education is still a matter that transcends individual circumstances. This is mainly due to the influence of traditional Confucian values (Cummings, 1996). For example, when I asked survey participants about their views of education, over 85% of them stated that they strongly encourage their children to gain as good an education as possible without considering the cost. Many mentioned the traditional proverb

‘Education is always more of a priority than anything else in one’s whole life’ (万般皆下品，唯有读书高)’. Mr. Zhang was one of them:

‘I hope that my children can go to university and that they will have a bright future. I know I might not be able to afford the tuition fee. However, I will support them even if there I have to sell every family possession’ (Zhang-48-M-R-Peasant-Liangzhou).

7.4.1 Case 7-1: Education fees, medical fees and inequality

Mr. Yang lives in the countryside in Gulang County, Gansu province, and is a typical rural peasant in north China (Figure 7.20). His income is above the average, according to his own assessment. His income comes from raising pigs, growing vegetables in his greenhouse and doing part-time, low-level jobs in the local building trade. He raises 100 pigs every year and sells around ten pigs each month, from which he makes an annual profit of 8000 to 10000 RMB. The vegetables he plants in his greenhouse include peppers; tomatoes and so on, which bring him around 10000 RMB per year (see Figure 7-21). Occasionally, if he is free, he accepts invitations to help build farmers’ houses or work on local roads, at a standard local rate of 60-70 RMB per day. Therefore, his total income is around 35000 RMB per year. His family’s top two expenditures are education and healthcare fees. He has three children: his eldest son, now 20 years old, has a serious heart disease; and his two younger sons are university students. Every year, the tuition fees and living costs of the two students totals 15000 RMB. He has already spent 50000 RMB on his eldest son’s heart surgery and expects more medical fees. He commented that:

‘Normally, in my village, people who are elderly, have too many children or are not good at farm work, are very poor. However, my family is pulled into poverty because of the children’s university fees and surgery fees. The university only offers my children 3000 RMB of financial aid each per year. And the government only provides each person with 48 RMB per year under the Rural Cooperative Medical

Schemes. This is like a drop in the bucket. So I have to pay all the tuition fees and medical fees myself. I have already used up all my savings and have started to borrow money from my relatives.'



Figure 7-21: Mr. Yang and the author (Source, author)



Figure 7-22: Mr. Yang's greenhouse (Source, author)

In China, many people are experiencing similar problems. Before the initiation of the Reform in 1978, everyone received free higher education and healthcare. However, following the initiation of the Reform in 1978, people have to pay near to the full cost

of their higher education and medical fees. With tuition and medical fees soaring, the cost of education and healthcare has become a major burden for ordinary people.

However, it is true that in China education can help children from disadvantaged backgrounds to change their status in society: since the initiation of the Reform in 1978, upward social mobility has become a common phenomenon (see Case 7.2). Beller and Hout (2006) explore how education policies affect social mobility using cross-national data. Hannum (2005) has presented constructive insights into the origins and current trends of inequality in Chinese education. However, there is a notable lack of analytical frameworks connecting educational inequality and social mobility. According to my survey, it is worth noting, common to all industrial societies. Rates of inter-generational mobility have generally become more considerable over time. It is now far more common for children to enter the workforce at a much higher position than their parents attained when they started work (Wu, 2007). The reason for this is that since 1978, China has come to place greater emphasis on formal qualifications, which have expanded educational provision over the past thirty years. University degrees therefore play a key role for upward social mobility.

7.4.2 Case 7-2: Example of upward social mobility via education

Chen Yingdi is a 77-year-old woman from Hubei. Her family members, including children and parents, have been actively helping each other in almost every possible way. Before 1949, Mrs. Chen's father was a capitalist, owning several trucks used for transporting goods and passengers, etc. She was educated in a religious school run by American Christian missionaries, which only children from wealthy families could afford to attend. However, after 1949, all their private property was appropriated by the CCP. Her father was incarcerated during the 'Three Anti and Five Anti movement' in 1951 and 1952 (see section 4.2 for details), where he died aged 52 from a high fever without receiving proper or timely treatment. After her father's death, the family had no income. Mrs. Chen became a child labourer when she was 11 years old

in order to support the family as she had two younger brothers to look after. Since then, she has had no opportunity to participate in full-time education. As she was so keen on learning, she attended an evening school operated by the local government. Mrs. Chen also has very strong family values: she gave one third of her salary to her mother even after getting married, and financially helped to raise her two younger brothers until they both went to university. She has three children born in 1960, 1963 and 1967 and holds a strong belief that 'education is very important for children's careers and futures'. All her children went to university and became a professor, lawyer and government officer respectively. She felt very lucky that tuition fees were free twenty years ago; otherwise she would not have been able to afford them. She worked for SOE as a worker for forty years and her pension is only 1000 RMB per month. Fortunately, every month her children give her 3000 RMB, which makes her life very comfortable. Yet, many of her friends and colleagues are not so lucky. As a rule, if their children did not attend university they were unable to find a professional job. Most of them have had to stay in the same or a similar SOE to their parents, or have been laid off as a result of the large number of SOE bankruptcies in the 1990s. Consequently, many of these parents have had to use their pensions to support their adult children and even grandchildren. Mrs. Chen said that, 'knowledge is vitally important to our family's fate', and that education can indeed help children from disadvantaged backgrounds to attain a higher status in society.

Upward social mobility has therefore become a common phenomenon in China and it is this form of mobility that education encourages, rather than downward social mobility. One possible cause of this trend is that technological changes have expanded the number of jobs in the service sector while the demand for unskilled manual labour has declined. Similarly, in China it is noticeable that the generation born in the 1960s has had greater access to high-status jobs than their parents and, therefore, some degree of upward mobility is inevitable. The mere existence of upward mobility in turn indicates the existence of an open class system in the 1980s

and 1990s, following which a considerable number of people have moved upward from lower to higher classes (Bian, 2002).

However, it has become more and more difficult for people to move between classes under the current Chinese educational system. The existing socio-economic disparities in education are likely to block the channels through which children from disadvantaged backgrounds can move up to the higher social classes (Waters, 2006). According to my field survey, the children of peasants and workers are increasingly excluded from upward social mobility.

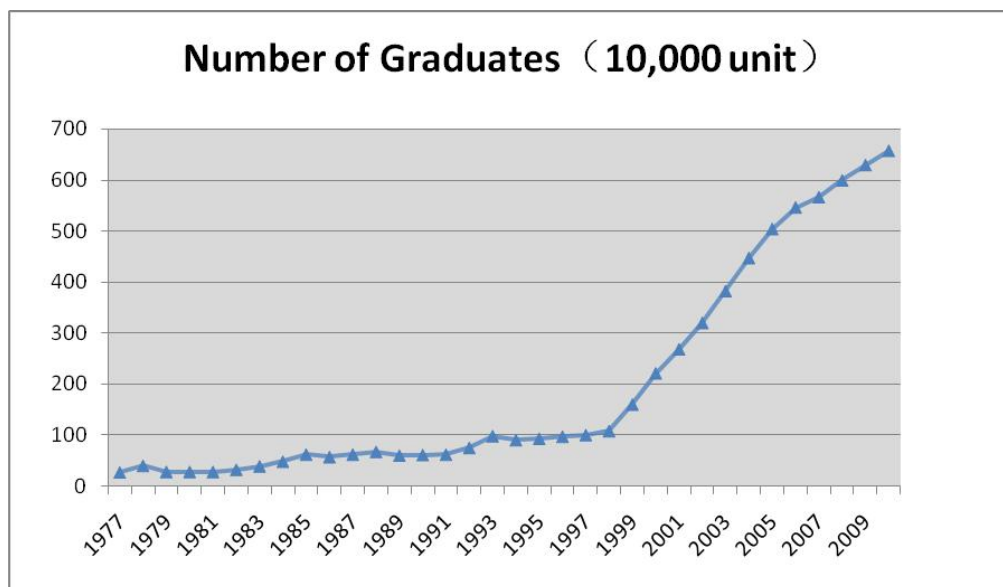


Figure 7- 23: Number of university graduates between 1977 and 2010(Source: author)

The main reason for this is that there has been an expansion in university provision since 1999 and the numbers of graduates are soaring (see Figure 7-23). Iannelli and Paterson (2007) explain that the role of education in promoting social mobility may relate to employers' recruitment processes. Consequently, the soaring number of university graduates results in a highly competitive job market and education and qualifications no longer guarantee a highly paid job. Therefore, compared to their parents' generation, upward social mobility is becoming more

difficult for those people born in the 1980s and 1990s. Mr. Wang expressed the confusion he felt after graduating from university:

'Originally, I believed that knowledge could change my fate. Now, I know that finding a good job doesn't depend on your ability and knowledge but the power and the social network of your father. As the child of a peasant, how can I move my social class upward if I cannot even find a job in the city?' (Wang-22-M-U-Student-Liangzhou).

The inequalities between the different age groups are very significant. For example, Mr. Shi and his eldest son are peasants. His niece, younger son and eldest grandson were university students.

'After graduating from university, my niece became a high-ranking cadre in the 1980s and now belongs to the upper class; my younger son found a job in a state-owned bank in the 1990s and belongs to the middle class. But, nowadays, my grandson could not find a job in the city' (Shi-65-M-R-Peasant-Jinchang).

Notwithstanding such unjust phenomena in education, all participants in my focus groups admitted that the overall quality of education has improved dramatically since the initiation of economic reform in 1978. As Figures 7-17, 7-18 and 7-19 evidently show, fiscal investment in school buildings and facilities varies wildly between rural and urban areas. However, although Gansu, Hubei and Guangdong provinces are exceedingly far away from each other, there is not much difference between the city-level schools in terms of building conditions, teacher qualifications and other facilities (see Figure 7-24 and Figure 7-25). This is because the central government's educational endowments were evenly spread across all regions after the initiation of the Reform in 1978. Another reason for such consistency is the commercialisation of the education system across the whole of China. In particular, all educational institutes above secondary school level receive high tuition fees from students, which enable them to accumulate capital and continuously improve their

conditions. Tuition fees aside, these institutions also demand other fees, such as the 'voluntary' donation which creates another large burden for many families.



Figure 7- 24: Secondary school (top: old campus, bottom: new campus) in Wuchang, Hubei Province (Source: author)



Figure 7-25: Secondary school (top: old campus, bottom: new campus) in Boluo, Guangdong Province (Source, author)

Access to education has been widely established as a human right to which everyone is entitled. Under calls for universal education, nations throughout the world have become more devoted to the promotion of educational equality (UNESCO, 1990). However, since the Chinese educational reform in the 1990s, education has become more like an investment than a public good, which has caused great

inequality in education and reinforced the effects of social exclusion. My field survey reveals that the educational inequalities experienced between different age groups, between urban and rural areas and between social classes are significant and become more pronounced above secondary school level. Educational attainment may no longer significantly correlate with upward social mobility.

7.5 Conclusion

This chapter has dealt with several key sociological issues, namely birth control policy, social stratification and the role of education in promoting social mobility. The results from the field survey confirm that the transition from a planned to a market economy is likely to increase social inequality between places, urban and rural regions and different groups of people (Chen and Li, 2010; Hu, 2001). In sum, China's birth control policy has reduced population fertility but it has also generated an ageing society and gender imbalance. Social stratification is still forming within China's transitional society and education has lost its importance within social mobility processes.

Chapter 8 Geospatial Analysis of Political Policy and Corruption

8.1 Introduction

Over the past three decades, economic growth in China has meant that hundreds of millions of Chinese people have been lifted out of absolute and relative poverty (see Chapter Six), which has led to radical changes in every aspect of Chinese society as a growing middle class has emerged (see Chapter Seven). Persistent and widening socio-economic inequalities continue to exist amongst different regions, different groups of people and between urban and rural areas (Li and Wei, 2010; Fan and Sun, 2008; Chen and Fleisher, 1996). However, compared with this rapid and effective economic reform, political reform in China has been smaller in scope and slower in implementation.

As an extra-legal political party, the CCP is committed to preserving an everlasting power monopoly (Wu, 2005). Individual rights such as free speech and political participation are not embraced by the political system (Goel and Nelson, 2005). The political atmosphere has remained largely unchanged and has even become more charged under the new Chinese leader, Xi Jinping. For example, the Supreme Court (2013) has released a judicial interpretation of criminal law stating that anyone who advances opinions which seriously endanger social order and national interests via internet channels and which receive over 5000 hits or 500 shares will be jailed. This regulation has limited the range of ideas expressed in the public sphere and statements pertaining to anti-corruption via internet platforms such as Twitter. Fewsmith (2013) has pointed out that the new leaders of the CCP are unlikely to launch large-scale political reform and restructure the political system. Therefore, the tightening of political power does prevent (even limited) political reform in the future.

The longevity of China's current political system is understood to depend on the sustainability of its successful economic transition. However, researchers have brought this argument into question, particularly in recent times. Montinola *et al.* (1995) argue that the Chinese political system shares much in common with Western federal states. The Chinese approach to the federal political system provides considerable support for China's economic reforms. Shirk (1993) explain that there is social support for China's current political order. However, Goel and Nelson (2005) and Fewsmith (2013) have pointed out that, under the current Chinese political system, the method of governance faces rigorous challenges from the disparities in bureaucratic rank, legal implementation and ideology. These disparities have the potential to have a negative effect on political stability, social uniformity and economic development. Therefore, in this chapter I use field survey data from five Chinese counties to address these inter-related concerns. Section 2 presents how the participants understand the various challenges faced by the government. Section 3 explains how political centralisation and preferential policies shape inequality between regions, between urban-rural locales and between different ethnic groups. Section 4 analyses why corruption has become such a pressing concern in China and interrogates the spatiality of corruption.

8.2 Participants' Understanding of China's Challenges

The statistical data show that great socio-economic disparities exist in China between different regions, urban and rural communities, and the rich and the poor (see Chapters Five). It has been widely debated whether these disparities pose a threat to China's future stability. Zhang *et al.* (2008) question whether such a long period of high economic growth can be sustainable. Fleisher (2006) and Knight (2008) believe that major inequalities will affect China's economic, social and political stability in the future. In contrast, Kanbur *et al.* (2005) believe that China will be able to maintain its rapid economic growth and keep the disparities under control. Knight and Gunatilaka (2010) consider that a new, wealthy generation will raise the bar for the

less prosperous. However, Jun (2006) warns that growing inequalities will eventually affect China's economic and social stability, and envisages that China's economy will soon collapse. These questions are becoming a matter of grave concern as well as posing both a theoretical and a practical challenge. More recently, and Fewsmith (2013) pointed out under the current Chinese political system, the method of governance and resultant disparities have the potential to have a negative effect on political stability, social uniformity and economic development. The Chinese government has admitted that such disparities exist in China between different regions, urban and rural communities, and the rich and poor. Thus, the ideology of the latest two Five-Year Plans (the 12th and the 13th) has changed emphasis from 'getting rich first' to 'common prosperity' (Fan, 2006), in order to maintain sustainable and harmonious development. In line with these debates, my field survey show how participants understand China's challenges.

The participants of three focus groups in Liangzhou ranked five challenges currently faced by the government in order of importance. Figure 8-1 lists these challenges as follows: 1. struggles for independence in Tibet, Xinjiang and Taiwan, 2. Natural Disasters, 3. Corruption, 4. Socio-economic Inequality, and 5. Other or no challenges. Then, questionnaires were conducted in five counties according to the order. The results show that 36% of participants think the most important factor affecting social stability is corruption and 32% of participants believe the most important factor the government ought to tackle is worsening inequality. Only 8% of participants consider territorial integrity to be the most important challenge (shown in Figure 8-1). The results of these questionnaires reflect the potential of corruption and social-economic disparity to cause political crisis.

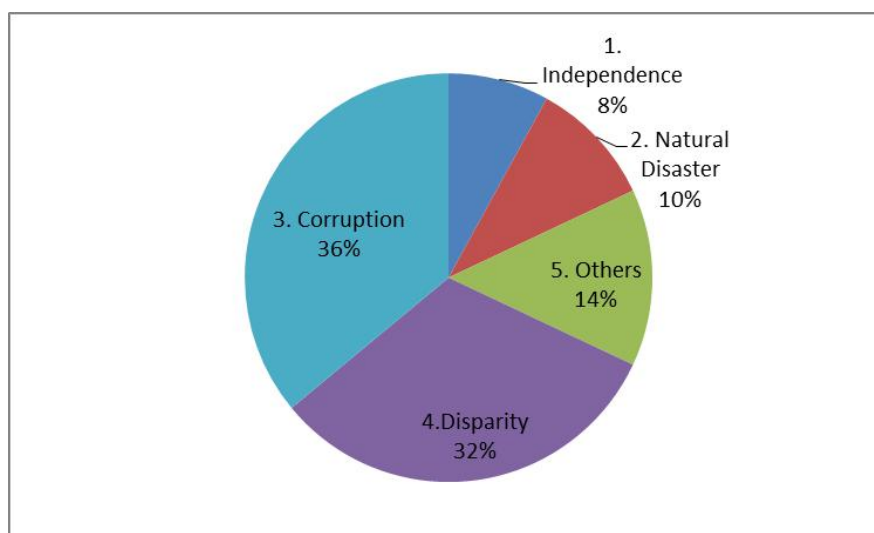


Figure 8- 1: Challenges facing the government (Source: author)

Therefore, my research shows that a large percentage of participants regard corruption and socio-economic inequality as the two most pressing challenges:

‘Corruption and inequality are big challenges for our government. If they do not act seriously against corruption and alleviate the socio-economic disparities, the community party might lose their political power’ (Yuan-35-M-U-Journalist -Boluo).

My research also revealed the severity of the corruption. For example, the fact that an official cadre position is a purchasable post is an 'open' secret.

‘There is a saying in Jinchang that to register as a potential official, one needs to spend around 5000 RMB , but in order to get appointed, one has to pay 10,000 to 100,000 RMB . The appointment of the vice mayor of Jinchang costs 400,000 RMB ’ (Wang-70-M-U-Retired-Jinchang).

Therefore, in line with participants' understanding of the various challenges facing the government, section 8.3 analyses the key political reasons underlying inequality and in particular analyses how preferential policies affect ethnic groups. Section 8.4 investigates why corruption is so severe and explores the spatiality of corruption.

There are noticeable discrepancies in the empirical results gathered in the three different provinces in which this study was conducted (Hubei, Gansu and Guangdong provinces). Out of all the provinces, Hubei demonstrated the smallest percentage of respondents considering the claims for independence in Tibet, Xinjiang and Taiwan as a major influence on social stability. This can be explained by its location: Hubei is an inner province of China, and its inhabitants have not had immediate contact with the voices that demand independence. Naturally, therefore, they only exhibit a modest concern about such threats. However, in Gansu province, which is in close to Xinjiang and Tibet, and Guangdong province, close to Taiwan, there are more individuals from ethnic minorities either involved in or vigorously supporting independence-orientated activities, such as the denouncement of preferential policies and the direction of anger towards not only the government but also ordinary Han Chinese inhabitants (Björn and Li, 2003). Therefore, people living in these two provinces are greatly concerned about the threats such actions pose to social stability. The second greatest cause for concern in Gansu province is corruption, which could be explained by the fact that the province has many poor areas with lower standards of governmental administration, and in which corruption is widespread (Dewoskin and Stone, 2006). Finally, Guangdong province has the highest percentage of replies in the ‘other or no challenges’ category. The majority of population in the province is sufficiently wealthy and their satisfaction with their current quality of life is illustrated by the fact that many of my respondents were unable to think of a single challenge that might pose a threat to their lifestyle.

8.3 Preferential Policies and Inequality

As Ding (2005) argues, the development model in China is based on the concept of political centralisation, which enables the central government to introduce preferential policies in support of development in particular sectors or economic growth in particular areas, and to favour a particular group of people to ‘get rich first’. The most common of these is that the coastal provinces have been the beneficiaries of

preferential policies from the central government (Démurger, Sachs and Hu, 2002). Also, compared to rural residents, urban residents have benefited from central government policies (Knight and Gunatilaka, 2010b). In addition, central government policies favour the minority ethnic groups rather than the Han (Mackerras, 2005). The challenge for the government is how to maintain the imbalance between coastal and inland provinces, urban and rural residents, and minority ethnic groups and Han Chinese. *HuKou* is an instrument to block the free flow of resources (including labour) between agriculture and industry and between cities and the countryside (Wu and Treiman, 2007) (see section 7.3.1 for more detail).

8.3.1 Preferential Policies between Locations

As the most important cause of regional inequalities, preferential policies were investigated in section 5.3. From the field survey data, it is worth noting that public infrastructure policies also play an important role in regional development and disparity at the county level. Prior to reform, public infrastructure was evenly distributed across the regions in China. However, after reform, central government built infrastructure mainly in coastal provinces according to its biased regional development policy. Démurger (2001), Fleisher and Chen (1997), Mody and Wang (1997) find that infrastructure investment in roads, railways, waterways and telephone networks have had significant and positive effects on growth for seven coastal provinces. The coastal Guangdong province was the first province chosen to test these preferential policies and it received enormous benefits in the form of public infrastructure (Démurger *et al.*, 2002b).

However, as a western province, public infrastructure is unevenly distributed across Gansu. This is due to the fact that different local authorities have had different capacities to invest in public infrastructure since the Reform. For example, Liangzhou County, a network centre for local transportation, has a long railway (Gansu Statistical Yearbook, 2007). In Jinchang, a wealthy county, the density of first-class roads (highways) is 372km per 1000 km², well above the national average of 237km

(Jingchuan Statistical Yearbook, 2006) (see Figure 8-2). In Gulang, a poor county, the density of first-class roads is only 23km per 1000km² (Wuwei Statistical Yearbook, 2003) (see Figure 8-3). The development of public infrastructure is an important determinant of local economic growth across regions. This is vividly confirmed by my field observations: at Gulang, characterised mainly by hills and mountains, many of the remote villages have no vehicular access. We had to leave our car and walk long distances to interview peasants. I was told by Mr. Wang Fusheng (peasant, 58) that the cost of transporting crops and fruit to market is very high, meaning that peasants are unable to profit if they fail to sell their products at a reasonable price. Thus, peasants must work very hard to grow economically viable crops, especially fruit and vegetables such as Solamwnmuiealnm, which was recently introduced to China from Peru.



Figure 8- 2: First-class road in Jinchang (Source: author)



Figure 8- 3: Road in Gulang (Source: author)

Furthermore, the policy of fiscal decentralisation plays a key role in county-level government development. For example, Guangdong province's tax contract was individually negotiated with the central government within a complex (province-specific) revenue-sharing formula. The Guangdong provincial government then negotiated individual revenue contracts with the Boluo local government. The marginal tax rate lay down by the central government varied considerably across provinces and Guangdong province and the Boluo local government have

considerably more tax revenue than local governments in inland and western China. As the result, the tax rate for FDI is lower in Boluo than in Wuchang, Jinchang, Liangzhou and Gulang.

Therefore, these preferential policies have had an important impact on interprovincial inequality and have specifically enabled the residents of Boluo to become richer than those in the other four counties (Ying, 1999). All participants in my focus groups acknowledged that Guangdong province swiftly grasped the opportunities available, enabling it to have a higher per capita income than Hubei and Gansu provinces and to become the richest province overall (with the highest GDP). Consequently, labourers from middle regions of China, such as Hubei, Hunan and Sichuan, flow into Guangdong seeking better jobs and higher earnings. With economic development and FDI accelerating, it is estimated that there are thousands of company villages in Guangdong (Bao, 2006).

8.3.2 Preferential Policies between Urban and Rural Regions

As Zhang (2008) suggest, the urban-industrial sector has been a development priority of the early PRC. This meant government jobs (and related welfare) and food for all urban residents, but left the rest of the rural population fundamentally outside governmental support. Before 1978, the government considered urban areas to be state developmental priorities and their residents automatically became the state's responsibility. The government budget provided urban areas with housing, food, water, sewage disposal, employment, schools, transportation, medical facilities, police protection, etc. (Yao *et al*, 2005; Knight and Song, 1999). However, the countryside received none of these benefits, nor any of the other fundamental services and welfare entitlements regularly provided to urban residents. Rural residents have relied on the highly differentiated resources allocated by self-reliant rural communities (villages) or their collective sub-units (production teams) (Gustafsson and Li, 2002). All participants in my focus groups acknowledged that urban areas greatly benefited from the preferential policies and that this privilege provided urban areas with much more

developed infrastructure and industrialisation. In addition to fiscal transfers, urban state sectors are also given preferential credit allocations, causing a redistribution of income in favour of urban areas. As a result, urban preferential fiscal and monetary policies have led to a steady increase in rural-urban inequality, which has made a significant contribution to rising inequality in China since 1985 (World Bank, 2011; Zhou, 2009; Khan and Riskin, 2005; Yao *et al.*, 2005; Lu, 2002).

However, the following case study provides a different perspective, showing the ways in which a village company in Boluo, Guangdong province has been governed by a self-reliant rural village. It also shows how the per capita income of the village residents and their welfare are similar to, or even in excess of urban residents in Gulang, Gansu province.

8.3.3 Case 8-1: Company village governance in Boluo, Guangdong province

Chen Jiao is a female peasant in Boluo, Guangdong. Like most women living in Guangdong province, she does not need to work because her family has enough money for her to stay at home to take care of her family and play Ma Jiong in her spare time. China's preferential policy has brought remarkable benefits and wealth to the people of Guangdong. Mrs. Chen lives in Boluo, near to the city of Guangzhou, and her land has been rented by a FDI enterprise which intends to build a factory there. Of the 1000mu (a mu is a traditional unit of land area in China, equating to about 666.6m²) of land in the village, 900mu have been rented out. The village is governed like a company. As the land is owned collectively by the villagers (consisting of 250 households), no one villager has the power to make an individual decision about the lease of their land. Rather, the village cadres act like company managers who decide how to lease the land. At the end of each year, the village cadres distribute the rental income to households as dividends according to the official register of villagers. In the present economic climate, each villager could get around 10000 RMB per year. The status of being an officially registered villager is transferred through a patriarchal

system; women can only gain dividends through her husband's family. Like most of the inhabitants of Guangdong, Chen Jiao is very appreciative of Deng Xiaoping's open-door policy. However, before 1978, people's living conditions were very low. People in her village had insufficient food and clothes and most young men went to Hong Kong as illegal immigrants, leaving behind women and children as well as the old, weak, unwell and disabled. Chen Jiao's husband is lame so he stayed behind and eventually became the head of the village. In Chen Jiao's words, 'Time can change our direction in life dramatically (30 年河东, 30 年河西)'. Those who risked their lives to travel illegally to Hong Kong have had mixed fortunes. Some of them died at sea while swimming across the strait in the dark; others were shot dead by soldiers at the border. Although most finally reached Hong Kong, they were then unable to find good jobs. When China opened the door in 1978 they returned to visit and seemed to be much wealthier than those who had remained behind. However, 30 years later, their living conditions are worse: 'They have to work really hard to make a living. Their apartments (flats) are tiny in Hong Kong. They do not receive a very large pension'. In contrast, villagers such as Chen Jiao do not need to work hard as every year, they receive dividends. Chen Jiao also runs a shop which sells every day necessities to workers. Villagers also have a large house and a car, as well as a private pension, so they do not need to worry about money when they get old. The village society is very friendly and everybody knows one another. Residents obey the one-child policy but if a villager does disobey the policy, the whole family loses five years' worth of dividends and is also fined. The village cadre will also issue a warning if anyone violates local regulations or customs, such as gambling, fighting or arguing with others, or disrespecting parents or the elder generation. After several warnings, the offender's dividends will be reduced. Thanks to these measures, the village society is dominated by a friendly, polite and harmonious environment. Village cadres are elected by all villagers and every villager has the right to vote on important issues. Although village cadres have power, Chen Jiao does not think they misuse it.

This example demonstrates that, following economic reform in 1978, the great division between urban and rural regions could no longer be maintained because the income of rural residents of coastal provinces accelerated beyond that of urban residents in the middle and western provinces.

8.3.4 Preferential Policies between Ethnic Groups

Björn and Li (2003) argue that minorities in China have historically faced obstacles to status attainment, including geographic remoteness, poverty, language and cultural barriers. China's 55 minority ethnic groups, which include Muslim, Mongolian, Tibetan and Uyghur (Xingjiang), comprise 2% of the population. Ninety-eight per cent of population is Han Chinese, who originally inhabited China's central territory (China statistical yearbook, 2007). Rising regional and rural-urban inequalities have had a negative impact on minorities because most minorities live in remote rural China (Björn and Ding, 2009). However, reform era preferential policies implemented by central government aim to promote the overall development of minority ethnic groups, many of which are vastly superior to the policies to which the Han Chinese are subjected (Postiglione, 1992). For example, the one-child policy only applies to Han Chinese, while those from ethnic minorities can have up to three children (Fong, 2004); minorities tend to be promoted to high-level positions more easily than Han Chinese in a work unit; and the children of ethnic minorities need lower examination scores to enrol into universities (Brown and Park, 2002). These policies are meant to improve the population size, social status and educational opportunities of ethnic minorities, which can in turn alleviate the poverty and inequalities between them and the Han Chinese (Postiglione, 2010). However, in my field survey such preferential policies were seen as discriminatory by Han Chinese participants, especially in areas where mixed ethnic groups live together, such as in Gansu province. There is a lot of sensitivity about ethnic difference in Gansu and conflicts occasionally occur, largely due to jealousy on the part of the Han Chinese. Conflict also occurs when minorities demonstrate dissatisfaction and demand more

benefits from central government, which in turn arouses hostile feelings among the Han Chinese leading to protests and counter protests. As Mr. Zhang said:

'I am Han ethnic. I think the preferential policies are fundamentally wrong, as it has not only hurt the feelings of the Han, but discouraged minorities from working hard' (Wu-50-M-U-Doctor-Liangzhou).

However, although the minority ethnic groups have privileges in their careers, education and birth rights, they are dissatisfied with the central government's religious policies because, as far as they are concerned, religious freedom is more important. For example, Uncle Ma is a Muslim who owns a house similar to his Han neighbour (see Figure 8- 4 and Figure 8- 5), and who makes a living by feeding cattle (see Figure 8- 6). He is satisfied with his living conditions but disapproves of the government's religious policy because it is very strict. For example,

'During the cultural revolution, we were treated badly, being forced to raise pigs, etc. But nowadays, the government policy is very fair to us, and I am not discriminated against at all. We Muslims even have some privileges over Hans. I have a nice house and enough money. But the government seems very nervous about seeing us worship in mosque'(Ma-62-M-R-Peasant-Liangzhou).



Figure 8- 4: Translator, Uncle Ma, his wife and author (Source: author)



Figure 8- 5: The first house from the left belongs to Uncle Ma (Source: author)



Figure 8- 6: Uncle Ma's cattle (Source: author)

Uncle Ma is not the only person to complain about the government's religious policy. Most participants agreed that China's economic development has greatly improved people's livelihoods. However, compared to economic achievements, beliefs and value systems are far from being the centre of attention. On the contrary, they have been regularly attacked and challenged. The main reason for this is that relations between religion and state power in China have long been contested (Gries and Rosen, 2004). As a result, the socialist transformation and policies of political monopoly challenged the social bases of Chinese folk religion during the Maoist period (Figure 8- 7) and attacked organised religion (Potter, 2003). Although the regime adopted a more tolerant perspective on religion in post-Mao China, bureaucratic control of religion remains a major theme. According to party policy Document 19, only five religions are recognised in China: 'Buddhism, Daoism, Islam, Catholicism and Protestantism', 'in an effort to exclude folk religions, superstition and cults from protection' (Overmyer, 2003). In addition, atheism was encouraged and CCP members were strictly prohibited from believing or participating in religion; this legislation was also used to control the educational system so as to marginalise religious belief (Chan, 2005). As a result, it is not surprising that 98% of my field survey participants have no religious beliefs and only 2% of participants identify with

one of the five religions listed above, with most of these found in minority ethnic groups.



Figure 8- 7: The scrapped ancestral hall in Boluo (Source: Author)

Religion's ability to satisfy social and spiritual needs helps to reduce shock, especially when it operates as consolation for socio-economic dislocation. With economic reform, the Chinese state has supported economic opportunity for a few privileged individuals and groups, leading to growing socio-economic inequality. Although some informal networks and social safety nets are available in China, religion provides an important source of comfort for the dispossessed. However, partly because of bureaucratic control of the policy on religion, according to my field survey results only one participant in Boluo believes in Catholicism, one living in Wuchang believes in Buddhism and eight Muslims in Gansu believe in Islam. My field survey data shows that 46.7% of people belonging to an ethnic minority (7 out of 15) are atheists; while 99.6% of the Han ethnic group (2 out of 485) are atheist. The result reflects a number of interesting points. First, overall, the high percentage of atheists arises from the fact that government policy strictly controls religions. Second, in Boluo and Wuchang, all participants interviewed in my field survey are majority ethnic Han people because most ethnic minorities settled down in the western part of China. Thus, atheists are much more numerous in these two counties than in the three

counties studied in Gansu. Third, Boluo was opened up by the Second Opium War (since 1880) when Catholicism was introduced (Dean, 2003), so it is not surprising that a county-level Catholic church was built there (see Figure 8-8). In contrast, Wuchang is situated in the middle of China so traditional Buddhism is similarly popular there (see Figure 8-9). Finally, at present there are two main Muslim minority ethnic groups in Gansu: Hui and Dongxiang (see Figure 8-10). Respectively, they represent 0.74% (c. 9.6 million people) and 0.03% (c. 0.39 million people) of the national population (Israeli, 2002). In Gansu, therefore, more minority ethnic participants, from either the Hui or Dongxiang groups, took part in this investigation.



Figure 8-8: Christian church in Boluo (Source: author)



Figure 8- 9: Buddhist temple in Wuchang (Source: author)



Figure 8- 10: Muslim mosque in Jinchang (Source: author)

In Gansu, the two main Muslim minority ethnic groups show certain differences. To a great extent, Hui Muslims have adopted many aspects typical of the Han Chinese, including language and lifestyle. The Hui people speak the Chinese language and have adopted most of the cultural practices of the Han. In contrast, the Dongxiang have their own spoken language (which sounds similar to Turkish) although Chinese is their written language and most of them are able to speak Chinese. It is also well known that the patriarchal Islamic religion is traditional in families among both Hui

and Dongxiang groups (Chau, 2010). This means that, ideologically, both groups retain their own distinct traditions, especially in areas of Muslim concentration.

'I am a heavy smoker and drinker like other Han Chinese. According to Islamic principles, smoking and drinking alcohol is strictly forbidden. But I have only broken some light principles; it doesn't mean that I am not a faithful Muslim. However, I don't eat pork and abide to other key Islamic principles' (Ma-52-M-U-Professor-Liangzhou).

'I could not strictly abide to the tradition of the Ramadan; otherwise I would not have the energy and strength to work or do other routine activities required by my job. I pray at home and work whenever I feel like it. I do occasionally go to the mosque (Figure 8- 10) to pray, but not regularly, because my work doesn't allow me to have that amount of spare time'(Xin-47-F-U-Businesswoman-Jinchang).

On the whole, minority ethnic groups such as the Hui and Dongxiang appear to be satisfied with the central government's policy in terms of career, education and birth rights. However, in the context of gradual social liberalisation, the bureaucratic control of religion faces an enormous challenge. The policy is seen by many people as interfering in deeply personal matters. In addition, the policies aimed at controlling religious practices have been widely criticised around the world for restricting human rights, as a result of China's expanding participation in the world economy. Therefore, China requires a new policy on religious belief; a system which enables the government to maintain adequate authority to ensure political control while also presenting an image of tolerance.

8.4 Corruption

Tanzi (1998: 564) defines corruption as *'the abuse of public power for private benefit'*. This definition is also the one used by the World Bank (Tanzi, 2001). Corruption occurs in almost all societies but for different reasons and with varying

consequences (Blackburn and Sarmah, 2008; Björnskov and Paldam, 2004; World Bank, 1997; Ades and Di Tella, 1996). Today, endemic corruption in regional and local government has been cited by the Chinese people, including CCP leaders. As shown by the survey results in section 8.2, denying corruption would see it become a fatal problem for China's economy and society (Dewoskin and Stones, 2006; He, 2000). The CCP's new leader, Xi Jinping (2012), warned that, '*a large number of cases show that corruption is unbearable and it will eventually destroy the CCP and subjugate the nation*'. Dong and Torgler (2012) associates corruption in China with two general practices of local cadres: the practice of using their positions to extract bribes (also see Gong, 1994) and the practice of misappropriating public property or public funds for personal benefit. For local inhabitants, the idea that cadres use public funds to obtain generous housing and luxury cars or to travel abroad causes particular cynicism. One participant, Mr Li, asserted that:

'Our village is poor but all cadres are embezzlers (无官不贪). They have power, which they exchange for grey income in addition to their salaries. For example, our village cadres embezzle our land compensation. The village received 110,000 RMB compensation per mu of land from the central government but the cadres only gave us 70,000 RMB per mu. Our village party secretary is a very wealthy person, who owns a big restaurant [see Figure 8-11] and two cars' (Li-50-M-R-Peasant-Liangzhou).



Figure 8- 11: The village party secretary's restaurant (Source: author)

8.4.1 Determinants of Corruption

Public opinion surveys in China and studies by international organisations confirm that corruption is deeply rooted and widespread (Chen and Yin, 2008). According to Yao (2002), in China corruption is caused by the Chinese political system which shields the privileged. Wu Qinglian (2008) has also pointed out that widespread corruption is generated by China's political and economic system. Duanmu (2011) observes that the cause of China's current corruption problems is the 'lack of separation between business and government brought about by efforts to open up the Chinese economy'. It is worth noting that the 'Princelings' (太子党) (the most privileged group in China) have led to widespread corruption and seize almost all the wealth created by ordinary Chinese people. Princelings are a tiny percentage of the offspring of the top CCP leaders and their former subordinates. They enjoy various privileges, from entering the top universities to choosing the best occupations. Very often, they have extensive social networks and may be selected as 'successors' by the top leaders of the CCP, securing their monopoly of power (Yao, 2002). Although a period of training and practice is necessary for these Princelings before they proceed to their high-ranking posts, they dominate the central committee of the CCP and many of its organisations and important governmental departments. With the exception of a

small minority, all the highest-ranked officials in central government are members of this privileged class, including current President of China, Xi Jinping (the son of former Vice Premier Minister Xi Zhongxun), military generals such as Liu Yuan (the son of former President of China Liu Shaoqi), provincial government officials such as Shanxi Province Governor Li Xiaopeng (the son of former Premier Minister Li Peng) and major SOE controllers such as China Power International Development Limited Corporation CEO Li Xiaoling (the daughter of former Premier Minister Li Peng). In the case of the latter, corruption has specifically Chinese characteristics because this privileged group member uses his state-owned resources to do business through back doors (开后门), work for himself, accumulate huge wealth and pay no tax against the unrecorded grey income (灰色收入). Situations like this lead to widespread inequality because ordinary people must bribe these high-ranked officials in order to do business with them. Otherwise, any request could be denied by these officials even if the request is within their duty. As Professor Wang state:

'As China's economy grows in the reform, many of the privileged group members have learned how to utilise their monopoly power in the market. They became price searchers, demanding higher and higher bribes for doing business with ordinary people. The bribes could be very substantial amount of money and privately are called 'grey income'' (Wang-45-M-U-Professor-Wuchang).

Gong (2006:87) pointed out *'opportunities for corruption arise to a very great extent because the administrative controls still remain in the Chinese economy and because the government of the PRC has not yet established mechanisms for preventing the abuse of these controls'*. In addition, there is only a low probability of corruption leading to prosecution. Each year, there are more than 700,000 reports of corruption received by the central government (He, 2000) yet only a handful of ministerial-level officials have been convicted of corruption. Dr. Cui Zhiyuan (2010) states that corruption is caused by the capitalist market mechanisms introduced by China's open-door policy. He argues that China's rapid economic development over the last twenty years has actually benefited from the solid economic foundation laid in

Mao's era while inflation and corruption are the direct consequences of economic reform. However, this argument is not well supported by the evidence collated during my field survey; the majority of the my participants, including many unemployed workers, were quick to recall the human impact of economic and political movements such as the Great Leap Forward and the Great Cultural Revolution. The participants stressed their dislike of corruption and dissatisfaction with the current economic situation which, it could be suggested, has some historical precedence in the manner in which Mao's government protected privilege.

However, there are many diverse views among scholars when it comes to the fundamental cause of corruption. Goel and Nelson (2010) used cross-country data for about 100 nations and found that corruption is determined by historical factors, geographic influences and the role of government. Similarly, Li and Wu (2007) hold the view that corruption is rooted deeply in Chinese history and culture. They argue that in several Asian countries, including China, the real source of corruption is a long tradition of placing personal connections above the law (Pei, 2001). This implies that no matter what political system China chooses, the problem of corruption is inevitable. The CCP cadres and business leaders who took part in my study showed support for this theory but are unwilling to admit in public that corruption is a real problem, doubtless because acceptance of the situation is necessary for survival. The view that corruption has its root in culture occludes the fact that China has never adopted a democratic political regime which, along with an independent legal system, has the potential to alter the prevalence of corruption by engendering a cultural shift in people's attitudes and behaviour.

Indeed, corruption in China has cultural, historical and political system antecedents. However, the question remains as to why '*corruption is now worse than during any other period since PRC was founded in 1949*' (Sun, 2004:122). It seems that corruption is so severe partly because the whole country has sustained a money-oriented elite and a focus on materialistic values without the balance of a moral standard since the economic reform. As Chen (2005) said, money has replaced

Marxism and become China's new god. Monetary value is now unduly praised and personal wealth has even been used as a means of judging an individual's success (Wedeman, 2004). In addition, the government encouraged the more commercialised educational system in which access to schooling has become more and more dependent on one's family wealth. Therefore, money has become necessary for success across the generations, so individuals are in turn now much more willing to admit their self-centred motivations.

My field survey data is consistent with the increasing role that money and a money-oriented life style play in Chinese aspiration. The survey is of particular interest because it reveals an open willingness of citizens to acknowledge the rising value of money, in comparison with other cherished values.

'At present there is a popular saying: men with money become bad; women who become bad can get money. More and more modern people are becoming slaves to money.' (Li-38-F-U-Hairdresser-Liangzhou)

Money emerged as a central topic for discussion because it has become important for success in almost every key area of social life, including schooling, employment, marriage and healthcare. When asked about the importance of money in their social, economic and personal life, only 3% of respondents said that it was not significant, while 86% said that it had great importance and a further 11% claimed that it was all-powerful and enough to *'make a ghost turn a millstone'* (Li-38-F-U-Hairdresser-Liangzhou). Unsurprisingly, my field survey found that local residents were ambitious, impatient, and dissatisfied with the pace of reform and its lack of a positive effect on their own lives, especially in the case of younger participants. Rural young people were willing to find non-agricultural jobs; school graduates were seeking meaningful employment; and everyone was demanding higher salaries, an opportunity to develop their skills and a higher social status. Thus, 80% of interviewees thought that improving the socio-economic status of young people was important and 68% were not satisfied with their own status. The dominant desire for economic success and

status, combined with a general dissatisfaction with current conditions, influenced their views on morality. Thus, although the participants criticise cadres' behaviour of corruption and bribery, when asked if they themselves would offer a bribe, 54% said that they 'most certainly would'.

8.4.2 Spatiality of Corruption

The previous section investigated the cultural, historical, economic, political and ideological reasons behind corruption in China. Goel and Nelson (2008) identify the geographical determinants of corruption. Mo (2001) used panel data from 61 countries and over a period of 20 years to show that economic growth and income distribution have significant effects on regional differences of corruption. Graeff and Mehlkop (2003) indicate the impact of economic freedom on corruption. For example, FDI is attracted to areas that exhibit relatively high levels of government efficiency and are strongly involved in the fight against corruption. Gong (2006) has reported a significant negative influence of corruption on FDI. My field survey verifies the existence of regional differences in the effects of local corruption on economic growth and income distribution. For example, Boluo has two shoe factories which have received foreign investment because the central government's preferential policies favour coastal areas of this kin. The higher economic growth and the increased levels of FDI urge the local government to become more efficient and reduce the occurrence of corruption, such as that of governmental officials asking for free business meals or profiting from construction projects. However, it is extremely difficult to collect evidence to evaluate the spatiality of corruption during field surveys because of the highly confidential nature of the information. Case studies offer a greater chance for observation.

Case 8-1 (see section 8.3.3) portrays how the village government cadres of Boluo in Guangdong province distribute the revenue from leasing village lands and how the village residents benefit from FDI. The following case study introduces a village

cadre and her experiences of local governance in Wuchang in Hubei province (located in the middle of China).

8.4.3 Case 8-2: village cadres and governance in Wuchang (Hubei province)

Xin Ning is a female village cadre in Hubei. She is 45 and lives in a village on the outskirts of Wuchang. Her good communication skills mean he has been a village cadre for about twenty years, as a female representative in the village committee. Her duties cover a wide range of issues related to women. For example, if a couple falls pregnant in contravention of the one-child policy, her role is to negotiate with the wife and persuade her to have an abortion. She said,

‘Normally I would let them know the policy and in the case that they insist on having more children, the other cadres and I would ‘keep one eye closed’ and pretend that we were not aware of it (睁一只眼闭一只眼). We are peasants and it is fully understandable that people want more children. At the end of the day, those couples with more than one child are obliged to pay a fine at a fixed rate. Cadres have more power and because of this, more opportunities to have free meals and drinks. In China, every problematic issue can be sorted out over the banquet table [implying the bribing of cadres to open back doors]. Such sorts of phenomena are not considered to be offences against the party’s regulations in our village.’

Cadres are elected by villagers. Xin Ning has been in this position for a long time. She commented,

‘Locals know me very well, so I have been elected in every round of elections. It is important that all cadres have a good relationship with the villagers. Otherwise, nobody would vote for you. Before 1978, we were very poor because the governmental policies restricted our initiatives. However, since the economic reform, our country has implemented very good policies. We can raise as many pigs as we are able to, grow any vegetables based on our own choices, and have the freedom to take

any sort of part-time job in the city if we feel it is necessary. This area is very close to the city so it is convenient for us to find a job there. On the other hand, we are trying to find some investors who are willing to develop the tourism industry in our area so that people from the city can come here to have fresh food and enjoy the beautiful rural scenery [e.g., Figure 8-12 shows a restaurant built in middle of a local lake]. Recently, it has been said that our land will be leased to a big industrial enterprise. This means that we shall soon lose most of our land. However the government will build apartments for us and will offer everyone 40 square metres of house for free and an extra 20 square metres for a low price if requested’.

Xin Ning has a family of six, meaning that they could be given 360m² in total; constituting three apartments (see Figure 8-13). These properties are worth a huge amount of money considering the current high housing prices in China. On top of this, the government will also compensate each person with 20,000 RMB. It is unlikely that the young single inhabitants of the village would have chosen to stay in the countryside working on the land anyway; most, if not all, would have preferred to go to the city to find a better-paid job. Thus, every villager is happy with this arrangement and the compensation offered.

However, if an individual spent all of their compensation and failed to find a sustainable job, they would fall into difficulties. ‘Nevertheless, one good thing is that if the land were successfully leased, all of us would become urban residents, and of course, our village committee would automatically become an urban residential management committee (Figure 8-14). All of us would be entitled to the same social welfare that normal urban residents have at the moment’, added Mrs. Xin.



Figure 8- 12: Restaurant in the middle of a lake (Source: author)



Figure 8- 13: New apartments for villagers (Source: author)



Figure 8- 14: Urban residential management committee office (Source: author)

The following case 8.3 illustrates how a peasant of Liangzhou in Gansu province (located in western China) is angry about this village cadres' corrupt behaviour.

8.4.4 Case 8-3: the corruption of village cadres in Liangzhou (Gansu province)



Figure 8- 15: Li Tiande's house (Source: author)

Li Tiande is a fifty-year-old male peasant living in the area between the urban and rural regions of Liangzhou (see Figure 8- 15). Most of his land has been retrieved by the local government to be used for other purposes, such as building motorways and buildings for industrial development, leaving him with 266.64m². The compensation for land retrieval is 70,000 RMB for each mu. With this compensation and the income generated from the remaining land, Li needed to support his two children through their university studies, quite apart from other routine expenses. He feels very hard done-by. Before his land was retrieved, he grew tomatoes and other fruit and vegetables in a large greenhouse, which could bring him around 10,000 RMB in income per annum. Now, the average expenditure for inhabitants in this area is much higher than before. Despite the fact that poor urban residents are often placed in a more difficult situation than their counterparts in the countryside, some of the rural peasants who have lost much of their land are working in the city as labourers. However, as Li says with disappointment, 'I can't do the same, because nobody wants a labourer who is older than 40.' Li states that before 1978 his situation was 'bad' and that the best period for him was between 1978 and the retrieval of his land; since then he has been unhappy with his situation. He commented, 'The village committee is just like the mafia and there is no honest cadre among them. I would prefer to have the land and even let it remain unused; I didn't want it to be retrieved.' When asked why he felt this way, he spelled out that the compensation he had received was too low: 'The government actually paid 110,000 RMB for each mu of land, but by the time this money reached our hands through the local village committee, it had become 70,000 RMB, and we were oblivious as to where the rest of the money had gone.' He believes that this disappearance can be attributed to the corruption practised by the cadres, saying that,

'Corruption among our cadres is common. In our township, we have 4000 families, out of which five families are entitled to receive the Minimum Social Welfare Support. In our village, we have 800 families and are entitled to one allowance, but this didn't go to the poorest family. Instead, it was given to one of the

village cadre's relatives. The village cadres are the richest people in the village, as they all have their own businesses, such as shops, restaurants or construction teams. Figure 8-16 illustrates the house owned by the village party secretary. The village party secretary is the most powerful person in the village. He has a good personal relationship with his direct chief, the party secretary of the township. In every election the township party secretary selects candidates for the village cadre posts and then the candidates bribe electors for votes. Once elected, each cadre is entitled to a fixed salary of around 4600 RMB per annum. We are not satisfied with what they are doing, but what can we do? Cadres protect each other (官官相护)!'



Figure 8-16: The village cadre's house (Source: author)

When questioned about his household expenditure, he said that most of his income went into his children's education, healthcare and the savings he has set aside for his son's marriage. He has one son and one daughter and he spent all the land compensation he was given on his children's education. After his graduation, his son found a job in Shanghai. Li proudly said that, 'my son only keeps part of his salary, enough to cover his living costs and sends 3000 RMB per month back to us.' His daughter has got a job in the local area and her salary only covers her own expenses; she has no spare money to send to him. Luckily, all of Mr. Li's family members are

healthy and he has not spent much money on healthcare. When questioned about his main concern at present, he said:

‘I feel very miserable about my future. Without land, I do not have any income. I am getting older and older and cannot find a part time job as a peasant labourer. We have lost our land, but we are not urban residents. My only hope is down to my children. If they didn’t look after (give money to) us, the only way we could possibly survive would be by becoming beggars’.

Cases 8-1, 8-2 and 8-3 indicate that the participants of Liangzhou (Gansu province) were more intolerant of local cadres’ corrupt behaviour than those in Wuchang and Boluo. As Mauro (1995) and Li *et al.*, (2000) suggest, the higher the economic growth and income distribution, the lower the incidence of corruption across different regions. For example, in the poor village of Liangzhou, where much of the farmland has been occupied for urban expansion, farmers who lost their land were told that they would be fully compensated. However, it is often the case that about half of the compensation is taken by village cadres. One participant showed me that the best houses in the whole village belong to the head and party secretary of the village. Villagers whispered that ‘the biggest mafia around is the village authority; and the head and party secretary are the local evils’ (Wang, 2008). ‘*Corruption is everywhere. For example, they buy and sell cadres’ positions; and even the minimum subsistence allowances go to cadres’ relatives, not to those who are in real need,*’ Mr. Zhang Qian (2008) said.

According to according to Ying’s own experiences, corruption spreads to all levels of the government and:

‘The corruption of governmental official include taking free business meals; getting profits through undertaking construction projects; colluding with the mafia; involvement ingambling; obtaining governmental official posts through bribery’(Ying-35-F-U-Businesswoman-Guangdong).

According to He (2000), if corruption spreads to all levels of government, it slows down economic development, creates political instability and could cause a legitimacy crisis for the regime. Since 1978, the Chinese government has made efforts to reduce corruption. It has re-established and improved various anti-corruption agencies and institutions such as the central and local Commissions for Discipline Inspection of CPC, the Supreme People's Procuratorate and local Procurators, the Ministry of Supervision and its local branches, and the Anti-Corruption Work Bureau (Liang, 1994: 391–417). According to Wedeman (2005), the Chinese government has also launched anti-corruption campaigns and aims to punish a huge number of cadres who violated party discipline or engaged in corrupt activities.

8.5 Conclusion

Démurger (2002a) suggests that inequality is a political problem because it arises from political policy. All my focus group participants believed that in China, political decision making and policies have played an important role in uneven regional development and are still the decisive factors in economic and other development inequalities. In contemporary China, corruption is persistent and may create political instability and cause a legitimacy crisis for the regime. Although the current Chinese government has made an effort to organise anti-corruption campaigns, corruption has increased dramatically since 1978 and has become even worse since the 1990s. It is obvious that the central government's anti-corruption efforts are quite inadequate because of the character of the current political system (He, 2000; Wedeman, 2005). Further political reform towards democracy is essential and could allow China to control corruption more effectively.

Chapter 9 Conclusion

9.1 Introduction

Since the initiation of economic reform in 1978, China's economy has been growing at a higher rate than any other country, with an approximate annual GDP growth rate of 10% (see Figure 9-1) (CBS, various years). However, during the ongoing Reform, China is also suffering from large inequalities, such as in income, education and health care, and especially between different groups of people (according to age, gender and social class) and between different regions (Wang and Chen, 2007; Hannum and Wang, 2006; Zhang, 2005; Gao, 2004; Levin, 2001; Lee, 2000).

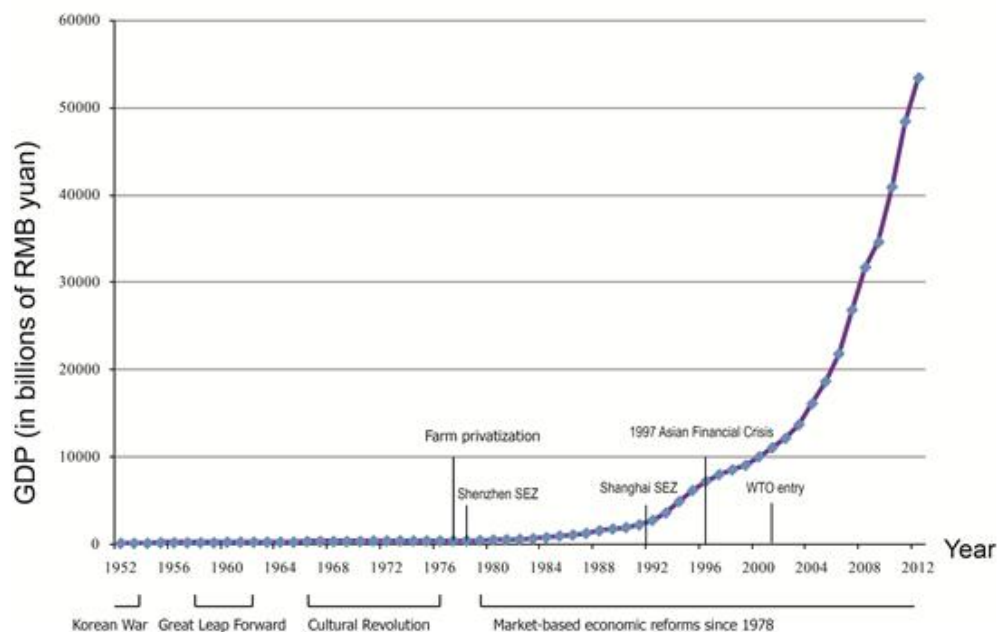


Figure 9-1: GDP from 1952 to 2012 (Unit: Billions of RMB)

This thesis comes to the conclusion that development involves changes in economic structures and growth, and also contributes to inequality in a wide range of spheres, such as education, healthcare and life expectancy. However, economic factors are not alone in contributing to such inequalities resulting from development, and historical, socio-political, demographic, cultural, institutional and ecological factors are all demonstrated to be equally relevant to the study. Development can be

assessed at a number of scales: the individual, the local community, the regional, the national and the global (among others) (Liu and Wu, 2008; Deng and Moore, 2004; Akita, 2001). Fine-scale analysis reveals more significant results when applied not just at the macro, national scale, but also at a number of different local scales. In comparison to the provincial level, researching at the county level results are in a better understanding of development and economic, social, political and ideological inequality in China. Such research offers a new vision of the relationships between forces at the regional and national scales, and people's daily lives in their communities.

Thus, the central aims of this thesis are to understand the current spatial and regional inequality in China at different scales, to explore the relationship between development and inequality and to explain the factors contributing to and resulting in the inequality underlying China's impressive macro-economic development. By using multivariate analysis through critical analysis of the detailed and large quantity of county-level data, I find uneven regional development was inevitable in China's development because the Chinese government introduced preferential socio-spatial policies both historically, between 1949 and 1978, as well as during the process of economic reform beginning in 1978. Second, the inequality conversional point can only be reached through government efforts to reduce inequalities in production, education, health and politics because the severe disparity not only restrains economic growth but also affects social-spatial stability. Third, although the Chinese government is making efforts to reduce disparities, the analysis of data relating to economic growth and economic, social and political inequality –both statistical data from the last 30 years and my fieldwork data –suggests that the government's policies are inadequate for the purposes of reducing entrenched patterns of county-level and regional inequality.

This thesis comes to the conclusion that development involves changes in economic structures and growth, and also contributes to inequality in a wide range of spheres, such as education, healthcare and life expectancy. However, economic factors are not alone in contributing to such inequalities resulting from development, and historical, socio-political, demographic, cultural, institutional and ecological factors are all demonstrated to be equally relevant to the study. Development can be assessed at a number of scales: the individual, the local community, the regional, the

national and the global (among others) (Liu and Wu, 2008; Deng and Moore, 2004; Akita, 2001). Fine-scale analysis reveals more significant results when applied not just at the macro, national scale, but also at a number of different local scales. In comparison to the provincial level, researching at the county level can present a better understanding of development and economic, social, political and ideological inequality in China. Such research offers a new multi-scalar vision of the relationships between forces at the regional and national scales, and people's everyday lives in their communities and counties. Therefore, the multi-scalar and quotient nature of regional inequality should be studied further at an everyday level. County-level analysis can achieve complementary insights to current provincial-level research rather than replacing provincial-level research per se. Data at both levels should be used in order to maximise its overall value because complementary insights can be obtained from multi-scalar analysis. Similarly, Kornai (2006) examines the changes of the Central Eastern European region and finds that the scale and pace of transformation is astonishingly fast and yet socially and geographically uneven for citizens and communities. Rapid social and political transformation causes significant inequality because dramatic restructuring so often goes hand in hand with an uneven distribution of income and consumption.

9.2 Conceptual and Empirical Contributions

Development should not be observed solely in terms of economic change, and the impact of cultural, political and ideological change should be equally considered. In particular, it is clear that the economic dimension has been prioritised in academic discussions about development and that, as a result, social and political inequality has received less scholarly attention (Stiglitz, 2006; Sen, 1999; Simon, 1997; Unwin, 1994; Sachs, 1992; Smith, 1984). In addition, current literature concerning China's regional development and inequality mainly focuses on the provincial level, with limited studies at the county level (Knight, 2008; Fan and Sun, 2008; Wan and Zhang, 2006; Xu and Li, 2006; Ye and Wei, 2005; Wei and Ye, 2004; Huang and Leung, 2002; Williams, 2002; GU *et al.*, 2001). The scalar nature of regional inequality can be studied further at a finer scale. This thesis, therefore, fills these gaps in the literature and is the first systematic attempt to investigate, at the county level, the spatial

differences to be found in social and political, as well as economic, development across China. The thesis covers the following four innovative aspects:

First, unlike most previous studies, which have all been based on provincial data (such as Fan and Sun, 2008; Ho and Li, 2008; Knight, 2008; Wan and Zhang, 2006), this thesis investigates at the county scale, providing significantly more detailed and accurate analysis. A county-scale perspective enables a study of the relationships between inequalities at larger and smaller scales, even taking into account everyday life experiences (Wei, 1999).

Second, much of the previous research (conducted mainly by economists) has paid attention to economic indices and seldom mentions the social and political factors which have had an enormous influence on China's economic development. Social inequality in particular remains less well studied (Kanbur, Qian and Zhang, 2008; Zhang and Wan, 2006; Hertel and Zhai, 2006). This thesis extends the indices to the social and political factors contributing to developmental inequality. It draws comparisons between social and economic inequality at a range of scales and analyses how certain geopolitical factors influence China's regional social and economic strategies. One of the key innovative features of this research is the fact that it seeks to draw comparisons between social and economic differences at a range of scales and it demonstrates a willingness to consider how certain political factors have influenced China's regional social and economic strategies.

Third, in China there are only 31 provinces but at least 2000 counties. In China, the county rather than the province is the fundamental economic, social and political unit. Therefore, it follows that China's spatial inequalities can be better explained at the county level. However, the huge amount of data collection, organisation and analysis presents a real challenge for the researcher, which has resulted in county-level research lagging far behind that at the provincial scale. The methodology of this thesis includes using GIS so that the data could be scientifically interpreted and a set of distinctive images could be produced to display the research findings. This research therefore adopts an innovative approach in its use of GIS techniques to analyse the economic data from over 2000 counties and reveal in depth the spatial distribution of economic, social and political development in China. This method provides an alternative perspective to those suggested in current regional development studies.

Fourth, excluding the data collected from the official statistical yearbook and documents, the research project aimed to examine data relating to individual experiences of development and inequality by investigating a series of case studies. These case studies were located across five counties, with three from Gansu province in west China, one from Hubei province in central China and a final one from Guangdong province in south China. This thesis analyses empirical data from five counties, collected from focus groups, questionnaires and interviews, in order to explain the ways in which people from different contextual backgrounds (according to age, gender, place, location, social status and ethnicity) respond to disparities in development. The empirical data places a special emphasis on certain factors which might impact upon the study participants, such as personal income, expenditure and savings; access to education, health care and social welfare; the impact of central government preferential policies and local government; and, finally, people's values and beliefs. The thesis also investigates the causes of these disparities and suggests practical means for alleviating such inequalities through the findings of the case studies.

9.3 Main Findings and Policy Implications

Regional development and spatial inequality in China is an area of research that has caught the interest of a considerable number of scholars. Resulting research has mainly focused on the implications of development theory and development strategies in this transitional and developing country.

Overall, based on a database of all the counties in China from 1999 to 2006 and field surveys conducted in five counties, the main findings of this study are summarised below:

In general, China's progress in terms of its economic development has been impressive and significant. Between 1996 and 2006, all five counties investigated experienced rapid economic growth. In addition, this thesis' analysis of economic growth and income diversity over the last twenty years has demonstrated that the inequality of income has increased with economic growth. This inequality is still widening and has not reached its maximum conversional point yet (Lu, 2008).

Preferential policies such as regional development strategies (Démurger *et al.*, 2002a; 2002b), urban-biased policies (Fang *et al.*, 2002), the inter-governmental transfer system and national security planning are the main causes for such inequality (Tsui, 2005). Economic factors impacting on inequality include regional public infrastructure (Démurger, 2001), FDI and exports (Ng and Tuae, 2003), fiscal decentralisation (Qiao *et al.*, 2008), the reform of SOEs and inter-regional trade protection. In addition, a diverse range of geographical factors also play an important role (Wei and Fang, 2006).

Although individual incomes have significantly increased, overall, the results of the decomposition framework show that the income gap between the western, central and coastal areas widened as income growth accelerated in the coastal areas. The rural-urban income gap was not as severe as statistical data suggested. In addition, the rural-urban income gap in coastal regions is found to be narrower than the rural-urban income gap inland. Inequalities in income between genders and between different ethnic groups are widening. Income inequality between different social classes leads to social and economic tensions. Consumption patterns vary between urban and rural areas, between coastal and inland counties, and between different social classes. At present, the poorest populations are concentrated in the western provinces and the remote and mountainous areas, where economic development is obstructed by the lack of basic infrastructure and limited human resources. Even in the regions with a more developed economic environment, poor people have increasingly struggled. In the meantime, compared to rural poverty, rising urban poverty may cause greater social and political instability because the urban residents are comparatively more powerful and more politically organised.

In contemporary China, the transition from a planned to a market economy is likely to extend the social inequality between locations, urban and rural regions and different groups of people (Chen and Lu, 2008; Wong and Lu, 2002; Sorensen, 1996). China's birth control policy has reduced population fertility but it has also generated an ageing society and gender imbalance. Social class stratification is still forming within this transitional society, and education has lost its importance within social mobility processes. Political decision making and policies have played an important role in uneven regional development and are still decisive factors in economic and

other development inequalities. Corruption is persistent and may influence political instability and cause a legitimacy crisis for the regime. Although the current Chinese government has made an effort to organise anti-corruption campaigns, the central government's anti-corruption efforts are inadequate because of the character of the current political system. Corruption has increased dramatically since 1978 and has become even worse since the 1990s. As a result, political reform towards democracy is essential and could allow China to control corruption more effectively.

Given that economic, social and political inequality is still increasing and has not yet reached its maximum conversional point, it is essential that the Chinese government introduces policies to relieve spatial disparity and build a harmonious society. First, agriculture plays an essential role for the poor as a source of employment and income. Some areas do not have strong agricultural resources and endowments where off-farm employment or migration may help them to escape poverty (Tabuchi, 1988). Therefore, the local government needs to pay more attention to labour mobility. As some areas have strong agricultural resources, the government may help to overcome obstacles for individuals by offering small loans, constructing physical infrastructure, fostering links within the community and expanding markets to boost the local economy. Second, constructing physical infrastructure in rural areas, particularly roads, should be a high priority for the government when investing in rural development because it may create opportunities for the poor population to help themselves. Third, the central government ought to deliver and finance core public services such as education, health care and social security; responsibility for these services is frequently pushed down to lower-level governments without the central provision of sufficient financial support, producing huge fiscal disparities across regions. If the central government provides poor regions with more and better quality services, it will alleviate costs to the local government and local people. Fourth, the current political system needs political reform. In particular, attempts to encourage a more democratic system and anti-corruption efforts are inadequate.

9.4 Challenges and Constraints

Denscombe (2007:146) assert that researchers should 'try to learn as much from our shortcomings as from our successes'. Therefore, awareness of challenges and

constraints is essential for researchers. I summarise some of the key challenges and constraints of this thesis in this sections.

One of the main difficulties in conducting my research was the collection and processing of the huge amount of data required for analysis, which comprised around 500,000 statistical data sets. The county-level data set is over 67 times larger than the provincial data set in terms of any single index. There are over 2000 counties (including county-level cities) and, from 1992 to 2006, over 20 indices were collected per county per year. The construction of this database was a very time-consuming task as some of the data provided by NBS was not in digital format. Such data had to be manually inputted or adjusted into a digital format and further processed by analysis tools such as Stata and GIS. Although this study has a limited data set, it has proved very useful to the thesis' aim of further analysing and understanding different aspects of regional development at the county level in China.

Due to the limited levels of funding and a lack of institutional support, carrying out research on China is challenging (Scoggins, 2014). It is very important of knowing people and social networks although gender and place of birth may matter as well. This has resulted in some constraints during the field survey. For example, I encountered difficulties in judging the total amount of grey income and its distribution pattern. Further research is required into methods for judging the income inequality in different social classes, and the relationship between gender and income inequality during the Reform. Therefore, a future empirical field survey might wish to examine grey income inequality in more depth.

9.5 Possible Research Directions in Future

During the ongoing processes of the Reform period, continuous reforms, rapid change and extraordinary growth have stimulated many debates about China. Regional development theory has identified a number of issues emerging from China's transition process, which may provide possible directions for future research.

First, future research needs to pay more attention to areas in central and western China. At present, most papers and projects focus on globalising cities such as Beijing and Shanghai; coastal regions such as the Yangtze Estuary and the Pearl River

Estuary; or other core cities in the coastal area such as Wenzhou (Yeung and Lin, 2003). Such a regional bias may partly be due to the fact that data can be more accessible for scholars working in local areas. For example, scholars in Hong Kong, many trained in the West, are particularly interested in studying the cities in, and the development of, the Pearl River Estuary.

Second, the role of the local government in China's regional development and transformation needs to be further studied. There are complexities not only in relations between the global, national and local scales, but also between the economic, social and political dimensions of development, raising many research issues for future investigations.

Third, the theoretical framework through which development and inequality is discussed is deeply sited in Western theory, meaning that the theoretical contexts of China and other developing countries have been ignored (Dawkins, 2003; Yeung and Lin, 2003). However, with the Reform and its transitional processes still ongoing, it is difficult to use existing Western--based theoretical models to accommodate its dynamics and complications (Pannell, 2007). Indeed, it is challenging to construct theoretical models and launch an empirical field survey at a moment of ongoing Chinese transition and transformation. Therefore, more research is required to facilitate the creation of new theoretical models through which county and provincial level data can be better analysed and Chinese development and transition can be better understood through multi-scalar modelling and data collection.

Since the initiation of Reform in 1978 and particularly since China opened to the West in the mid-1980s, quantitative research methods, development models and spatial geographical models have been a focus for researchers in China. Scholars turned to the West to find alternative development models and strategies in academic inquiry such as Kuznets Curve model to explain China's reform policy and development strategy (Fan, Kanbur and Zhang, 2011; Aandahl, 2005). Furthermore, theoretical frameworks of transition, transformation, globalisation, can also contribute to understanding China's current development and inequality. For example, Rose and Viju (2014) display that income inequality has become a significant problem in Central and Eastern European countries during their transition process because of its economic, demographic, political, and cultural and environmental factors. Fedorov

(2002:443) state ‘Increasing regional inequality and regional polarization are becoming a serious policy concern in modern day Russia’ because of export shares of regions. Rapid social and political transformation causes significant inequality because dramatic restructuring so often goes hand in hand with an uneven distribution of income (Curwin and Mahutga, 2014; Aghion and Commander, 1999). Kornai (2006) examines the changes of the Central Eastern European region and finds that the scale and pace of transformation is astonishingly fast and yet socially and geographically uneven for citizens and communities.

In sum, development and inequality can be assessed at a number of scales: the individual, the local community, the regional, the national and the global (among others) (Liu and Wu, 2008; Deng and Moore, 2004; Akita, 2001). Although my researching at the county level can present a detailed understanding of development and economic, social, political and ideological inequality in comparison to the provincial level, both the provincial-level data and county-level data should be used in order to maximise overall value because complementary insights can be obtained from multi-scalar vision. According to current county data and provincial data, uneven regional development was inevitable in China’s development because the Chinese government introduced preferential socio-spatial policies both historically as well as during the process of economic reform beginning in 1978. In addition, the inequality conversional point has not reached yet because government’s policies are inadequate for the purposes of reducing regional inequality (Zhang *et al.*, 2008; Wei, 2007 and Fleisher, 2006).

Development involves changes in economic structures and growth, and contributes to inequality in a wide range of spheres, such as education, healthcare and life expectancy. Economic factors are not alone in contributing to such inequalities resulting from development, and historical, socio-political, demographic, cultural, institutional and ecological factors are all demonstrated to be equally relevant to the study (Bramall, 2008; Chang, 2006; Fan, 1997). Therefore, multi-scalar analysis reveals significant results not only at regional scale, but also at a number of different local scales. County-level analysis can achieve complementary insights to current provincial-level research rather than replacing provincial-level research per se.

Appendix 1: Focus Groups Guide

I. Introduction – as the moderator, I will present an overview of the goals of the discussion and introduce the participants to one another (Approximately 10 minutes)

This discussion is about economic growth and social development. In particular, it covers: how local people react to, and understand, the rapid economic development and widening disparities between urban and rural regions and rich and poor people; and how the development and disparities affect their well-being and relationships with other ethnic groups, neighbours, family members, relatives, friends and communities. My intention is to explain the inequality phenomena, discover the reasons behind the disparities between ethnic groups and communities, and seek practical means of alleviating such inequalities at the county level in China.

Introduction: My name is Man Xu and I am a PhD student at the Department of Geography, Royal Holloway University of London. Today's discussion will be used as a case study for my PhD thesis. All information will be used for the research purpose only and all personal information will be kept confidential.

Then, introduce each participant, including their names and professions.

II. Discussion Building Stage (Approximately 10 minutes)

Easily answered questions are used to encourage participants to begin talking and sharing. Undoubtedly, China's economic reform has so far been very successful and in the past 20 years China has experienced dramatic economic growth. All participants will be asked how their personal life has changed as a result and how they value the changes, i.e. positively or negatively.

Question: How has your life changed in economic, social, political and cultural ways in the last 30 years? Could you give some examples? (Approximately 10 minutes)

(Prompt: Thirty years ago what were the three most valuable household assets you had, and what are they now? E.g. watch, bicycle, sewing machine, TV, refrigerator, washing machine, computer, mobile phone, air conditioner, house, car)

(Prompt: Have your living conditions changed significantly in the last 30 years?
E.g. house size, quality of building material and surrounding environment)

(Prompt: What are your most significant current expenditures? What were they
30 years ago? E.g. house, education, health care, food and clothes, entertainment)

III. In-depth Discussion Stage (Approximately 70 minutes)

Focus on the main questions in line of the topic guide, encouraging conversation to reveal participants' feelings and thoughts. All questions may be asked.

Understanding of “development” - The term “development” has been debated continuously since the establishment of development studies in the 1940s, as views about the definition change over time in association with world economic development stages and events (Potter, 2004). There is no single widely accepted definition of “development”. All participants will be asked about their own understanding of the word “development”.

Question: How do you understand development? (Approximately 5 minutes).

Types of activities - Western scholars suggest that all groups of people have four main types of activities: economic, social, political and ideological (e.g. Unwin 1994). Does this criterion fit with Chinese people? All participants will be asked about their activities. This question can then be extended further, asking if these activities have changed from before the establishment of People's Republic of China in 1949, through Mao's era (1949-1976), to the present.

Question: Do you think all groups of people have different types of activities? (Approximately 5 minutes).

Understanding the disparity and inequality in China - So far China's economic reform has been very successful and, in the past 20 years, China has experienced dramatic economic growth. However, the Chinese government has admitted that immense disparities now exist in China between regions, between urban and rural residents, and between rich and poor people. These disparities pose a vital threat to China's future national economy, which will inevitably influence its social stability.

Thus the ideology of the latest Five-Year Plan (11th) has changed from “get rich first” to “common prosperity” (Fan, 2006). All participants will be shown a map of the GDP in different parts of China and different parts of Gansu province.

Question: This is a map of GDP in different parts of China. Why do you think that these differences exist? (Approximately 5 minutes).

Question: This is a map of GDP in different parts of Gansu? Why do you think that these differences exist? (Approximately 5 minutes).

Reasons for disparity - All participants will be asked if they consider disparity to be the most important issue for social stability, what causes disparity and inequality, and why. They will also be asked for suggestions for alleviating disparity and inequality and encouraging sustainable development. They will also be asked about the key obstacles preventing China from achieving sustainable and harmonious development.

Question: Why do you think that disparities exist and have worsened in present-day China? (Approximately 15 minutes).

(Prompt: Economic factors: income, grey income, expenditure, consumption, saving, etc.; social factors: gender, social welfare, social injustice, education, health care, etc.; political/policy factors: preferential policies, government efficiency, etc.; cultural and religious factors: different development expectations according to cultures, religions and ethnic groups, etc.; natural resources/conditions; personal factors: laziness, lack of willpower or poor luck).

Question: Do you think disparity is an inevitable part of modern life? How do you think the government or other organizations could alleviate disparity? (Approximately 10 minutes).

(Prompt: Economic development strategy; social development strategy; preferential policies)

Question: How have disparities changed in China in the last 30 years? Do you prefer Mao's China or present-day China, and why? (Approximately 15 minutes).

China's future and prospects for ordinary people's lives - Two different opinions are currently expressed about China's future. Fan (1997) states that those who have become rich first will consequently bring prosperity to other ordinary people; while Jun (2006) warns that the great inequalities will eventually affect China's economic and social stability, and that China's economy will soon collapse. In line with this debate, all participants will be asked about their personal views of China's future and its impact on their own life, as well as the key obstacles preventing China from achieving sustainable and harmonious development.

Question: What do you think will happen in the future in China with respect to disparity? (Approximately 10 minutes).

IV. Close (Approximately 10 minutes)

I will summarise the impressions and make conclusions about the information gathered, which gives participants the opportunity to clarify, confirm or even elaborate.

Appendix 2: Questionnaire

To participant:

This questionnaire is for PhD research on the social and economic situation of your county, with the main aim of exploring the reasons for disparities between rich and poor people. I would appreciate it if you could complete this questionnaire. All responses will remain anonymous and confidential. Please try to answer all the questions that are relevant to you. Thank you for taking part.

Section One: Basic Understanding

1. In your view, what is the meaning of development? (Please tick one answer)
 - National enhancement ☐
 - Economic growth ☐
 - Social, economic and technological change ☐
 - Increases in economic wealth of a group of people ☐
 - Other (specify) _____
2. Thinking about the period of old China (before liberation, i.e. 1949), Mao's era and the present, could you describe these three periods of time in four words? (Please write down one answer in each box)

	First Word	Second Word	Third Word	Forth Word
Old China				
Mao's era				
Present				

Section Two: Economy

3. Please tick the three most valuable items in your household.
 - Watch ☐

- Bicycle ☐
- Sewing machine ☐
- TV ☐
- Refrigerator ☐
- Washing machine ☐
- Computer ☐
- Mobile phone ☐
- Air conditioning ☐
- House ☐
- Car ☐
- Other (please specify) _____

4. What kind of property do you inhabit? Size? : (Please tick one answer)

- Provided by work unit/government/enterprise as welfare ☐
- Purchased without mortgage/loan ☐ , and how much did you pay for your accommodation? _____
- Purchased with mortgage/loan ☐ , and how much did/do you pay monthly for the mortgage? _____
- Rented from private landlord ☐ , and how much do you pay monthly in rent?

- Other(specify) _____

5. Please rank the following expenditures made by your family from high to low. (Please put highest in first box and lowest in sixth box)

1	2	3	4	5	6

- a. House
- b. Education
- c. Health care

- d. Food
- e. Entertainment
- f. Other (please specify)_____

6. Do you or your family members have health insurance?(Please tick one answer):

- Yes ☐
- No ☐

Please specify approximately how much you or your family members have spent for the health care in the last year, including hospital bed, medicine and all other fees? (If you have health insurance, please let me know the fees you paid for the insurance and other fees that insurance does not cover) _____

Do you think if health care cost is affordable? (Please tick one answer)

- Yes ☐
- No ☐

7. Please specify how many years do you in school? _____

8. Please specify how much you or your family members have spent in total on education in the last year _____

What was this expenditure for? (Please tick one or more answers):

- Nursery ☐
- Primary school ☐
- Secondary school ☐
- Higher education ☐
- Professional training ☐
- Other (please specify)_____

9. In your opinion, which of following employment situations is the best to work in? (Please put the best one in first box and the worst in seventh box)

1	2	3	4	5	6	7

- a. Private firm/company
- b. State-owned-enterprise
- c. Central or local government
- d. Hospitals or other health services
- e. Education
- f. Own a private firm/company or small business
- g. Farmer

10. Except salary and bonus, do you have other income resources? (Please tick one answer):

- Yes
- No
- If Yes, please specify_____

11. Thinking about annual income, what is your annual income scale at the moment?

(Please tick one answer)

	Below 2000 Yuan	2000 to 5000 Yuan	5000 to 15000 Yuan	15000 to 30000 Yuan	30000 to 50000 Yuan	50000 to 100000 Yuan	Above 100000 Yuan
Your annual income							

12. Thinking about saving, what is your percentage rate approximately?(Please tick one answer)

	0%	0% to 10%	10% to 30%	30% to 50%	50% to 70%	Above 70%
Your saving rate						

13. How do you judge the economic growth of your county? (Please tick one answer)

- Very fast ☐
- Fast ☐
- Average ☐
- Slow ☐
- Very slow ☐

How many of your family members reside outside of your household (*HuKou* registration) for more than six months? (Please tick one answer)

- None ☐
- 1 ☐
- 2 ☐
- 3 ☐
- More than 3 ☐

Section Three: Social Features

14. Which of the following social problems do you think will affect social stability the most?

(Please tick one answer)

- Drugs ☐
- Gambling ☐
- Mafia ☐
- Prurient ☐
- Crime, including fraud ☐

15. Please rank the following social classes according to which is the most admirable. (Put the most admirable in first box and the least admirable in tenth box)

- Peasants
- Peasant labourers
- Working class
- Urban cadres
- Rural cadres
- Private entrepreneurs
- Managers
- Household business owners, individual Manufacturers and traders
- Professionals

j. Intellectuals

16. Please tick which government benefits you receive:

- Complete free compulsory education ☐
- Free health care for children under 18 and above 65 ☐
- Health insurance for people between 18 and 65 ☐
- Retirement national pension for people over 65 ☐

17. How many children do you have?(Please tick one answer)

- None ☐
- 1 ☐
- 2 ☐
- 3 ☐
- More than 3 ☐

18. Do you live with your parents/grandparents/children/grandchildren? (Please tick one answer)

- Yes ☐
- No ☐

If no, how often do you contact your parents/grandparents/children/grandchildren?

Here, contact means calling, visiting or providing financial/practical support.

How often do you contact your relatives and neighbours? Here, relatives include siblings, cousins, uncles, aunties, etc. (Please tick one answer for each item)

	Never	Less often than once a month	At least once a month	At least once a week	At least once a day
Parents/grandparents/children/grandchildre					

n					
Relatives					
Neighbours					

Section Four: Politics

19. Do you agree with the following statements? (Please circle one that meets your agreement)

	Strongly Disagree	Disagree	No opinion	Agree	Strongly Agree
Compared with the pre-open-door period, you are more satisfied with the current central government's policies					
Compared with the pre-open-door period, you are more satisfied with current county-level government policies					
Compared with the pre-open-door period, disparity is getting more serious					
It is the government's responsibility to solve the disparity problem					

20. Which of the following local government units you are most satisfied with? (Please put the one you are most satisfied with in first box and the one you are least satisfied with in the ninth box):

1	2	3	4	5	6	7	8	9

a. County Government

- b. Local Tax Bureau
- c. County Hygiene Bureau
- d. County Cultural and Education Bureau
- e. County Public Security Bureau
- f. County Court and Procuratorate Bureau
- g. County Finance Bureau
- h. Township Government
- i. Village Committee

21. Which of the following do you think is the biggest threat to China's political stability?

(Please tick one answer)

- Tibet, Xinjiang and Taiwan independence ☐
- Natural disaster ☐
- Corruption ☐
- Disparity ☐
- Others (please specify) _____

Section Five: Ideology, religion and culture

22. Do you think that culture is an important influence on economic and social development?

(Please tick one answer)

- Yes ☐
- No ☐

If yes, which culture do you think most influences economic and social development in China? (Please tick one answer)

- Traditional Confucianism ☐
- Traditional Chinese culture (other than Confucianism) ☐
- Christian culture ☐
- Other Western culture (other than Christian) ☐
- Other (please specify) _____

23. Please choose your three favourite types of entertainment. (Please tick three answers)

- Traditional operas ☐

- Mahjong ☐
- Traditional calligraphy and painting ☐
- Classical poetry and novels ☐
- Hong Kong and Taiwanese popular music ☐
- Disco and karaoke ☐
- Oil painting ☐
- Other (please specify) _____

24. Do you have any religious beliefs? (Please tick one answer)

- Yes ☐
- No ☐

If yes, please tick one answer

- Communism ☐
- Christian ☐
- Muslim ☐
- Buddhist ☐
- Daoism ☐
- Confucianism ☐
- Other (please specify) _____

Section Six: Personal Information

This is the last section. It would be very helpful for my research if you could tell me about yourself, so that I can analyse the results by interpreting how people from different backgrounds respond to the issues raised.

25. Do you live in a town or in a village? (Please tick one answer)

- Town ☐
- Village ☐

26. Legal marital status: (Please tick one answer)

- Married ☐
- Single ☐ (includes divorced, widow and widower)

27. Gender (Please tick one answer):

- Male ☐
- Female ☐

28. Age:(Please tick one answer)

- 21-40 ☐
- 41-60 ☐
- 61 and over ☐

29. Ethnic group: (Please tick one answer)

- Han ☐
- Muslim ☐
- Tibetan ☐
- Other (Please specify) _____

30. Education: your highest education level: (Please tick one answer)

- No education ☐
- Primary school ☐
- Secondary school and professional training ☐
- University/college degree ☐
- Postgraduate/PhD ☐

31. Occupation: (Please tick one answer)

- Peasant ☐
- Peasant labourer ☐
- Working class ☐
- Urban cadre ☐
- Rural cadre ☐
- Private entrepreneur ☐
- Manager ☐
- Household business owner, individual manufacturers and traders ☐
- Professional ☐
- Intellectual ☐

Appendix 3: Interview Guide

To interviewee:

China's economy is currently growing at a rate faster than that of any other country, with annual GDP increasing by approximately 10% per year in the past two decades. However, the inequality between rich and poor has been growing continuously and rapidly for some time. Local people in different parts of China have different reactions and understandings of rapid economic development and widening disparities. I would like you to talk about the development and disparities based on your own experience. Please tell me your own story, your understanding of development and disparity and the reasons behind the disparity, and possible ways to alleviate the disparity. I would like to talk about the following issues:

1. Understanding of development.
2. Economic, social, political and ideological development in China and your life over the past 30 years.
3. Understanding of disparity, causes of disparity and suggestions for sustainable development.
4. Imperative challenges for the government.
5. China's future and impacts on ordinary people's lives.

I would greatly appreciate your kind assistance. All these conversations will be used only for the purpose of my PhD research.

Section 1 Understandings of “development” and “disparity”.

The first section starts with basic understandings.

1. We hear about “development” everywhere in China. What is your understanding of it, and why? In your view, what are the key dimensions of development, and why?
 - Definition (Prompt: national enhancement; economic growth; social, economic and technological change; increased economic wealth of a group of people)
 - Dimensions (Prompt: economic, social, political, ideological, etc.)

2. According to the Oxford Dictionary, “disparity” means inequality related to economic, social or political differences in a country, province, state, continent or people. It is often considered as a consequence of development. What is your understanding of disparity, and why?
- Definitions (Prompt: inequality, unfair)

Section 2 Economic, social, political and ideological development in China and its impact on your life over the last 30 years.

Data from the Statistical Yearbook and findings from my pilot survey show that there have been huge changes since economic reform began. In this section, all interviewees will be asked for their point of view as to how China as a whole has changed, if they feel that their own life has changed as a result, and how they value the changes.

3. Could you describe the improvement in China’s economic development and your own economic condition?
- What are the major changes you have witnessed in China’s economic development? Could you give some examples?
 - What are the major economic improvements you have witnessed in your town/village? Could you give some examples?
 - How has your individual and household income changed? What are they?
 - Do you own your apartment/house? How big is it? How much did you pay for it?
 - Thirty years ago what were the three most valuable household assets you had, and what are they now? (Prompts: Watch, bicycle, sewing machine, TV, refrigerator, washing machine, computer, mobile phone, air conditioner, house, car)
 - Has the condition of your house changed significantly in the last 30 years? (Prompts: house size, quality of building material and surrounding environment)
 - What are your most significant current expenditures? What were they 30 years ago? (Prompts: house, education, health care, food and clothes, entertainment)

4. Social Development:

- What are today's most severe social problems? What were they 30 years ago? (Prompts: drugs, gambling, mafia, prurient, criminality and crime-related fraud)
- In your opinion, how many social classes exist in present-day China? What are they? What were they 30 years ago? (Prompts: peasants, peasant labourers, working class, urban cadres, rural cadres, private entrepreneurs, managers, household business owners and individual manufacturers and traders, professionals, intellectuals)
- Have you heard of the minimum livelihood guarantee? Do you know about any other social welfare offers?
- What are the major differences in your health care conditions now compared to the period before economic reform? What about the cost in particular? Are you able to afford it?
- How do you value the education? What are the major differences in education conditions between the present and the period before economic reform? What about the cost in particular? Are you able to afford it?
- Has the relationship between family members changed from 30 years ago to the present? (Prompts: Becoming closer? No change? Drifting apart?)

5. Political Development:

- What are your understandings of the government's policy changes?
- Local government governance
- What is the most serious threat to political stability in China? (Prompts: Tibetan independence, Xingjiang independence, Taiwanese independence, corruption, disparity)

6. Culture and Religion

- How has culture changed from 30 years ago in China? (Prompts: traditional Confucianism or Western culture affecting China more than before, less than before or no change).

- How has religion changed from 30 years ago in China?
- How important is religion or religious belief to your life?
- How important are religion and religious beliefs to socio-economic development?

7. Changes of Environment

- Improvements. (Prompts: beautiful cities and towns with plants and clean, wide streets)
- Pollution. (Prompts: water, atmosphere, etc.)

8. I would like you to describe your typical daily activities

- Your working time
- Your transportation
- Your job tasks
- Your social life
- Your family
- Your entertainment

Section 3 Imperative challenges for the government.

What are the key obstacles preventing China from achieving sustainable and harmonious development? Why?

9. Economic challenges

- Economic growth
- Economic structure balance
- Regional development balance
- Income disparity

10. Social challenges

- Social welfare reform
- Education reform
- Health care system reform
- Social inequality

11. Political challenges

- Political stability
- Corruption
- Disparity
- Good governance
- Political reform

12. Ideological challenges

13. Environmental and resource challenges

- Environmental deterioration
- Diminishing natural resources

Section 4 Causes of disparity and suggestions for sustainable development.

The Chinese government has admitted that immense disparities now exist in China between regions, between urban and rural residents, and between rich and poor people. These disparities pose a vital threat to China's future national economy, which will inevitably influence its social stability. Thus the ideology of the latest Five-Year Plan (11th) has changed from "get rich first" to "common prosperity" (Fan, 2006). All interviewees will be asked what challenges they think China is facing. In this section, I would like to know about interviewees' understandings of current disparity in China, opinions on the causes of disparity and suggestions to alleviate disparity.

14. Thinking about Mao's China and present-day China, which society has less disparity? Which society do you prefer? Why?

15. What factors cause disparity and how?

- Economic factors (Prompt: income, grey income, expenditure, consumption, savings, etc.)

- Social factors (Prompt: gender, social welfare, social injustice, education, health care, etc.)
- Political/policy factors (Prompt: preferential policies, government efficiency, etc.)
- Cultural and religious factors (Prompt: different development expectations according to cultures, religions and ethnic groups, etc.)
- Natural resources/conditions (Prompt: oil fields resources, tourism resources)
- Personal factors (Prompt: laziness, lack of willpower or poor luck).

16. Do you think disparity is an inevitable part of modern life? How do you think the government or other organizations could alleviate disparity?

- Economic development strategy
- Social development strategy
- Preferential policies

Section 5 China's future prospects and impacts on ordinary people's lives

Two different opinions are currently expressed about China's future. Fan (1997) states that those who have become rich first will consequently bring prosperity to other ordinary people; while Jun (2006) warns that the great inequalities will eventually affect China's economic and social stability, and that China's economy will soon collapse. In line with this debate, all interviewees will be asked about their personal views of China's future and its impact on their own life, and the reasons behind their judgement.

17. What do you think China's future will be? Why?

18. Do you think China will achieve sustainable and harmonious development? (Prompt: positive, negative). How will China's future relate to your own life?

Bibliography

1. Aandahl, G., 2005. Development fieldwork: A practical guide. *Regional Studies*, 39(3), pp.388–388.
2. Acemoglu, D., 2008. *Introduction to modern economic growth*. Princeton University Press.
3. Ades, A., and Di Tella, R., 1996. The causes and consequences of corruption. *IDS Bulletin*, 27, pp.6–10.
4. Ades, A., and Di Tella, R., 1997. The new economics of corruption: A survey and some new results. *Political Studies*, 45, pp.496–515.
5. Ades, A., and Di Tella, R., 1999. Rents, competition and corruption. *American Economic Review*, 89, pp.982–993.
6. Aghion, P., and Commander, S., 1999. On the dynamics of inequality in the transition. *Economics of Transition*, 7(2), pp.275-298.
7. Ahlin, C., and Pang, J.R., 2008. Are financial development and corruption control substitutes in promoting growth? *Journal of Development Economics*, 86(2), pp.414–433.
8. Ahmad, 1978. *Caste and social stratification among Muslims in India*. South Asia Books.
9. Aidt, T.S., 2003. Economic analysis of corruption: A survey. *Economic Journal*, 113, pp.632–652.
10. Aidt, T.S., 2009. Corruption, institutions, and economic development. *Oxford Review of Economic Policy*, 25(2), pp.271–291.
11. Akin, J.S., Dow, W.H., Lance, P.M., and Loh, C., 2005. Changes in access to health care in China, 1989-1997. *Health Policy and Planning*, 20(2), pp.80–89.

12. Akita, T., 2001. Decomposing regional income inequality in China and Indonesia using two-stage nested Theil decomposition method. *Annals of Regional Science*, 37(1).
13. Anagnost, A., 2008. From 'class' to 'social strata': grasping the social totality in reform-era China. *Third World Quarterly*, 29(3), pp.497–519.
14. Andvig, J.C., and Moene, K.O., 1990. How corruption may corrupt. *Journal of Economic Behavior and Organization*, 13(January (1)), pp.63–76.
15. Anthias, F., 2001. The material and the symbolic in theorizing social stratification: issues of gender, ethnicity and class. *The British Journal of Sociology*, 52(3), pp.367–390.
16. Ashton, B., Hill, K., Piazza, A., and Zeitz, R., 1984. Famine in China, 1958–61. *Population and Development Review*, 10(4), pp.613–645.
17. Atsmon, Y., and Dixit, V., 2009. Understanding China's wealthy. *McKinsey Quarterly*, July, pp. 1–6.
18. Bahmani-oskooee, M., and Gelan, A., 2008. Kuznets inverted-U hypothesis revisited: a time-series approach using US data. *Applied Economics Letters*, 15(9), pp.677–681.
19. Bai, C.E., Lu, J., and Tao, Z., 2006. The multitask theory of state enterprise reform: empirical evidence from China. *The American Economic Review*, 96(2), pp.353–357.
20. Banerjee, A., Duflo, E., and Qian, N., 2012. On the road: Access to transportation infrastructure and economic growth in China. *Working Paper, No. 17897*. Cambridge, MA: National Bureau of Economic Research.
21. Banister, J., and Taylor, J.R., 1989. *China: surplus labour and migration*. Paper presented at the General Conference of the International Union for the Scientific Study of Population, New Delhi.
22. Bao, C., 2006. Policies for compulsory education disparity between urban and rural areas in China. *Frontier of Education in China*, 1, pp.40–55.

23. Bao, S., Chang, G., Sachs, J., and Wood, W., 2002. Geographic factors and China ' s regional development under market reforms, 1978–1998. *China Economic Review*, 13, pp.89–111.
24. Barbrook, R., 2006. *The class of the new*. OpenMute.
25. Bardhan, P., 1997. Corruption and development: A review of issues. *Journal of Economic Literature*, 35(3), pp.1320–1346.
26. Barnett, A.D., 1964. *Communist China: the early years, 1949-55*. Pall Mall Press.
27. Barnouin, B., and Yu, C., 1993. Ten years of turbulence: The Chinese cultural revolution. Routledge.
28. Barro, R.J., and Sala-i-Martin, X., 1992. Convergence. *Journal of Political Economy*, 100, pp.223–251.
29. Barro, R.J., and Sala-i-Martin, X., 1995. *Economic growth*. New York: McGraw-Hill.
30. Becker, G.S., 1964. *Human capital: A theoretical and empirical analysis, with special reference to education*.
31. Bedford, T., and Burgess, J., 2001. The focus-group experience.
32. Behrens, K., and Thisse, J.F., 2007. Regional economics: a new economic geography perspective. *Regional Science and Urban Economics*, 37, pp.457–465.
33. Beller, E., and Hout, M., 2006. Welfare states and social mobility: How educational and social policy may affect cross-national differences in the association between occupational origins and destinations. *Research in Social Stratification and Mobility*, 24(4), pp.353–365.
34. Benjamin, D., Brandt, L., Giles, J., and Wang, S., 2008. Income inequality during China ' s economic transition. In: L. Brandt and T. Rawski, eds., *China ' s great economic transformation*. Cambridge: Cambridge University Press, pp.729–775.
35. Benjamin, D., Brandt, L., and Giles, J., 2005. The evolution of income inequality in rural China. *Economic Development and Cultural Change*, 53(4), pp.769–824.

36. Bergaglio, M., 2001. Population Growth in China: The Basic Characteristics of China's Demographic Transition. Citeseer.
37. Bernstein, T.P., 2006. Mao Zedong and the Famine of 1959–1960: A Study in Wilfulness. *The China Quarterly*, 186(June), pp.426–445.
38. Bhalla, A.S., Yao, S., and Zhang, Z., 2003a. Causes of inequalities in China, 1952 to 1999. *Journal of International Development*, 15(8), pp.939–955.
39. Bhalla, A.S., Yao, S., and Zhang, Z., 2003b. Regional economic performance in China. *Economics of Transition*, 11(1), pp.25–39.
40. Bian, Y.J., 2002. Chinese social stratification and social mobility. *Annual Reviews Social*, 28, pp.91–116.
41. Bian, Y.J., and Logan, J.R., 1996. Market transition and the persistence of power: The changing stratification system in urban China. *American Sociological Review*, 61(5), pp.739–758.
42. Björn, G., and Ding, S., 2009. Temporary and persistent poverty among ethnic minorities and the majority in rural China. *Review of Income and Wealth*, 55(S1), pp.588-606.
43. Björn G., and Johansson, M., 1999. In search of smoking guns: What makes income inequality vary over time in different countries? *American Sociological Review*, 64(4), pp.585-605.
44. Björn, G., and Li, S., 2003. The ethnic minority-majority income gap in rural China during transition. *Economic Development and Cultural Change*, 51(4), p.805.
45. Björn, G., and Li, S., 2004. Expenditures on education and health care and poverty in rural China. *China Economic Review*, 15, pp.292–301.
46. Bjørnskov, C., and Paldam, M., 2004. Corruption trends. In: J.G. Lambsdorff, M. Schramm and M. Taube, eds., *The new institutional economics of corruption*. New York: Routledge, pp.59–75.

47. Blackburn, K., Bose, N., and Haque, M.E., 2006. The incidence and persistence of corruption in economic development. *Journal of Economic Dynamics and Control*, 30, pp.2447–2467.
48. Blackburn, K., and Sarmah, R., 2008. Corruption, development and demography. *Economics of Governance*, 9, pp.341–362.
49. Blaug, M., 1985. Where are we now in the economics of education? *Economics of Education Review*, 4(1), pp.17–28.
50. Bongaarts, J., and Greenhalgh, S., 1985. An alternative to the one-child policy in China. *Population and Development Review*, 11(4), pp.585–617.
51. Booth, A., 1999. Initial conditions and miraculous growth: why is south East Asia different from and South Korea? *World Development*, 27(2), pp.301–321.
52. Boserup, E., 1983. Population and technological change: a study of long-term trends. Chicago: University of Chicago Press.
53. Bourdieu, P., 1987. What makes a social class? On the theoretical and practical existence of groups. *Journal of Sociology*, 32 (1987), pp. 1-17.
54. Bourdieu, P., and Passeron, J., 1977. *Reproduction in education*. Society and culture. London; Beverly Hills: Sage Publications.
55. Bourdieu, P., and Wacquant, L.J.D., 1992. *An invitation to reflexive sociology*. Chicago: The University of Chicago Press.
56. Bramall, C., 2008. *Chinese Economic Development*. Routledge.
57. Brainerd, E., 2000. Women in transition: changes in gender wage differentials in Eastern Europe and the former Soviet Union. *Industrial & Labor Relations Review*, 54(1), pp.138–162.
58. Breen, R. ed., 2004. *Social mobility in Europe*. Oxford: Oxford University Press.
59. Breen, R., and Jonsson, J.O., 2005. Inequality of opportunity in comparative perspective: Recent research on educational attainment and social mobility. *Annual Review of Sociology*, 31, pp.223–244.

60. Breen, R., and Luijkx, R., 2004. Social mobility in Europe between 1970 and 2000. In: R. Breen, ed., *Social mobility in Europe*. Oxford: Oxford University Press.
61. Bretschager, L., 1999. Knowledge diffusion and the development of regions. *Annals of Regional Science*, 33(3), pp.251–68.
62. Brooded, C.M., and Liu, C., 1996. Family background, gender and educational attainment in urban China. *The China Quarterly*, 145, pp.53–86.
63. Brock, W.A., and Durlauf, S.N., 2001. Discrete choice with social interactions. *Review of Economic Studies*, 68, pp.235–260.
64. Brockmann, H., Delhey, J., Welzel, C., and Yuan, H., 2008. The China puzzle: falling happiness in a rising economy. *Journal of Happiness Studies*, 10(4), pp.387–405.
65. Brown, J., 2010. Great leap city: Surviving the famine in Tianjin. In: K. Manning and F. Wemheuer, eds., *Eating bitterness: New perspectives on China's great leap forward and famine*. Vancouver: UBC Press, pp.226–250.
66. Brown, P., and Park, A., 2002. Education and poverty in rural China. *Economics of Education Review*, 21, pp.523–541.
67. Brueckner, J., 2000. Fiscal decentralization in developing countries: The effects of local corruption and tax evasion. *Annals of Economics and Finance*, 1, pp.1–18.
68. Brugger, B., 1981. *China, liberation and transformation, 1942-1962*. Rowman & Littlefield.
69. Brugger, B., and Reglar, St., 1994. *Politics, economy and society in contemporary China*. California: Stanford University Press Stanford.
70. Brun, J.F., Combes, J.L., and Renard, M.F., 2002. Are there spillover effects between coastal and noncoastal regions in China? *China Economic Review*, 13(2–3), pp.161–169.

71. Brunetti, A., and Weder, B., 2003. A free press is bad news for corruption. *Journal of Public Economics*, 87, pp.1801–1824.
72. Bryman, A., and Burgess, B., 2002. *Analyzing qualitative data*. London and New York: Routledge.
73. Button, K., 1998. Infrastructure investment, endogenous growth, and economic convergence. *Annals of Regional Science*, 32(1), pp.145–62.
74. CSB (National Bureau of Statistics of China), 2007 , 2011. *China statistical yearbook*. Beijing: Chinese Statistics Press.
75. Cai, F., 2002. The resistance of Chinese laid-off workers in the reform period. *The China Quarterly*, 170(June), pp.327-344.
76. Cai, F., Wang, D., and Du, Y., 2002. Regional disparity and economic growth in China: the impact of labor market distortions. *China Economic Review*, 13(2–3), pp.197–212.
77. Callinicos, A., 1983. *Marxism and philosophy*. Oxford: Oxford University Press
78. Candelaria, C., Daly, M., and Hale, G., 2009. Beyond Kuznets: persistent regional inequality in China. *Federal Reserve Bank of San Francisco*, pp.1–27.
79. Cartier, C., Castells, M., and Qiu, J.L., 2005. The information hasless: inequality, mobility, and translocal networks in Chinese cities. *Studies in Comparative International Development*, 40(2), pp.9–34.
80. Cass, D., 1965. Optimum growth in an aggregative model of capital accumulation. *The Review of Economic Studies*, 32(3), pp.233–240.
81. Chambers, D., Wu, Y., and Yao, H., 2008. The impact of past growth on poverty in Chinese provinces. *Journal of Asian Economics*, 19(4), pp.348–357.
82. Chan, J., and Pun, N., 2010. Suicide as protest for the new generation of Chinese migrant workers: Foxconn, global capital, and the state. *The Asia-Pacific Journal*, 37, pp.2-10.

83. Chan, K.K., 2005. Religion in China in the twenty-first century: some scenarios. *Religion, State and Society*, 33(2), pp.87–129.
84. Chan, K.W., 1992. Economic growth strategy and urbanization policies in China, 1949–1982. *International Journal of Urban and Regional Research*, 16(2), pp.275–305.
85. Chan, K.W., 2009. The Chinese HuKou system at 50. *Eurasian Geography and Economics*, 50(2), pp.197–221.
86. Chan, K.W., and Buckingham, W., 2008. Is China abolishing the HuKou system? *The China Quarterly*, 195(1), pp.582–605.
87. Chan, K.W., and Wang, M., 2008. Remapping China 's regional inequalities, 1990–2006: A new assessment of de Facto and de Jure population data. *Eurasian Geography and Economics*, 49(1), pp.21–56.
88. Chan, K.W., and Zhang, L., 1999. The HuKou system and rural-urban migration in China: processes and changes. *China Quarterly*, 160, pp.818–855.
89. Chan, N., 2003. Land acquisition compensation in China – problems & answers. *International Real Estate Review*, 6(1), pp.136–152.
90. Chang, G.G., 2001. *Coming collapse Of China*. Random House.
91. Chang, G.H., 2002. The cause and cure of China 's widening income disparity. *China Economic Review*, 13(4), pp.335–340.
92. Chang, G.H., and Wen, G.J., 1997. Communal dining and the Chinese famine of 1958–1961. *Economic Development and Cultural Change*, 46(1), pp.1–34.
93. Charlton, B., and Andras, P., 2003. *The Modernization Imperative*. Imprint Academic.
94. Chau, A.Y., 2010. *Religion in contemporary China: revitalization and innovation*. Routledge: London and New York.
95. Chen, B., and Feng, Y., 2000. Determinants of economic growth in China: private enterprise, education, and openness. *China Economic Review*, 11(1), pp.1–15.

96. Chen, G., Li, S., and Yin, X., 2008. Corruption and Chinese economic growth—Empirical perspective [Fubaiyuzhongguojingjizengzhang—Shizhengzhuyi de shijiao]. *Economic Society System Comparison*, 3, pp.59–68.
97. Chen, G., and Li, S., 2010. Chinese corruption, income distribution, and income inequality [Zhongguo de fubai, shourufenpei he shouruchaju]. *Economic Science*, 2, pp.55–68.
98. Chen, J., and Fleisher, B., 1996. Regional income inequality and economic growth in China. *Journal of Comparative Economics*, 22(2), pp.141–164.
99. Chen, M., and Qiao, R., 2002. 90 million farmers in town: what do the cities give you. *China Reform*, 9.
100. Chen, Y., 2010. Under the same Maoist sky: accounting for death rate discrepancies in Anhui and Jiangxi. In: K. Manning and F. Wemheuer, eds., *Eating bitterness: New perspectives on China 's great leap forward and famine*. Vancouver: UBC Press, pp.197–225.
101. Chen, Y.P., Liu, M., and Zhang, Q., 2010. Development of financial intermediation and the dynamics of urban-rural disparity in China, 1978-1998. *Regional Studies*, 44(9).
102. Chen, Z., and Lu, M., 2008. From segmentation to integration: The political economy of urban-rural economic growth and social harmony. *Economic Research Journal (JingjiYanjiu)*, 1, pp.21–32.
103. Chen, Z., and Lu, M., 2016. *Toward Balanced Growth with Economic Agglomeration: empirical Studies of China 's Urban-Rural and Interregional Development*. Springer Berlin Heidelberg.
104. Cheng, S., 2008. How can western China attract FDI? A case of Japanese investment. *Annals of Regional Science*, 42(2), pp.357–374.
105. Cheng, T.J., 1994. The origins and social consequences of China 's HuKou system. *The China Quarterly*, 139(September), pp.644–668.

106. Cheng, Y.H., 2007. China 's overall Gini Coefficient since reform and its decomposition by rural and urban areas since reform and opening-up. *Social Sciences in China*, 4.
107. Cheung, S.N.S, 1969. *Theory of share tenancy with special application to Asian agriculture and the first phase of Taiwan land reform*. University of Chicago Press.
108. Chi, W., 2008. The role of human capital in China's economic development: review and new evidence. *China Economic Review (Chinese)*, 19(3), pp.421–436.
109. China Daily, 2007. Urban compulsory education fees to be exempted. *China Daily*.
110. Chow, G., 2006. Are Chinese official statistics reliable? *CESifo Economic Studies*, 52(2), pp.396–414.
111. Chowdhury, S., 2004. The effect of democracy and press freedom on corruption: an empirical test. *Economics Letters*, 85, pp.93–101.
112. Clifford, N., and Valentine, G., 2003. *Key methods in geography*. London: SAGE Publications Ltd.
113. Coase, R.H., 1937. The nature of the firm. *Economica*, 4(16), pp.386–405.
114. Cochran, W.G., 2007. *Sampling techniques*. John Wiley & Sons.
115. Coes, D.V., 2008. Income distribution trends in Brazil and China: evaluating absolute and relative economic growth. *Quarterly Review of Economics and Finance*, 48(2), pp.359–369.
116. Cole, M., Elliott, R.J.R., and Zhang, J., 2009. Corruption, governance and FDI location in China: A province-level analysis", *The Journal of Development Studies*, 49(4), pp.1494–1512.
117. Coleman, J.S., 1990. *Foundations of social theory*. Cambridge/MA/London: Belknap Press of Harvard University Press.

118. Conquest, R., 1991. *Excess deaths and camp numbers: some comments*. Taylor & Francis.
119. Credit Suisse, 2010. *Analysing Chinese Asia Pacific/China*.
120. Croll, E., 2011. *Feminism and Socialism in China*. Routledge.
121. Cummings, W., 1996. Asian values, education and development. *Compare*, 26(3), pp.287–304.
122. Curwin, K.D., and Mahutga, M.C., 2014. Foreign direct investment and economic growth: new evidence from post-socialist transition countries. *Social Forces*, 92 (3), pp.1159-1187.
123. Darlington, Y., and Scott, D., 2003. *Qualitative research in practice: Stories from the field*. Taylor & Francis.
124. Davin, D., 2005. Women and Migration in Contemporary China. *China Report* 41(1), pp. 30-38.
125. Davis, D., 1992. Job mobility in post-Mao cities: increases on the margins. *The China Quarterly*, 132, pp.1062–1085.
126. Davis, K., and Moore, W.E., 1945. Some principles of stratification. *American Sociological Review*, 10, pp.242–249.
127. Dawkins, C.J., 2003. Regional development theory: conceptual foundations, classic works and recent developments. *Journal of Planning Literature*, 18(2), pp.131–172.
128. Dean, K., 2003. Local communal religion in contemporary South-east China. *The China Quarterly*, 174(June), pp.338–358.
129. Deng, X., 1983. Liberate ideas, be practical, united toward the future. In: *Selected Works By Deng Xiaoping (1975–1982)*. Beijing: People's Publishing House.
130. Deng, Y., and Moore, T.G., 2004. China views globalization: toward a new great-power politics? *Washington Quarterly*, 27(3), pp.115–136.

131. Denscombe, M., 2007. *The good research guide: for small-scale social research projects*. Third ed. Maidenhead: Open University Press.
132. Dewoskin, K., and Stones, I.J., 2006. Facing the China corruption challenge. *Far Eastern Economic Review*, 169(7), pp.37–40.
133. Ding, C.R., 2003. Land policy reform in China: assessment and prospects. *Land use policy*, 20(2), pp.109–120.
134. Ding, D.Z., and Warner, M., 2001. China ' s labour-management system reforms: breaking the 'Three Old Irons' (1978–1999). *Asia Pacific Journal of Management*, 18(3), pp.315–334.
135. Ding, Q.J., and Hesketh, T., 2006. Family size, fertility preferences, and sex ratio in China in the era of the one child family policy: results from national family planning and reproductive health survey. *British Medical Journal*, August 17, pp.333–371.
136. Ding, X.L., 2005. *Debates on Chinese Developing Model*. Beijing: Social Science Literature Press.
137. Dirlik, A., and Meisner, M.J., 1989. *Marxism and the Chinese experience: issues in contemporary Chinese socialism*. New York: M.E. Sharpe.
138. Dixit, A., 1973. *Models of dual economies*. Springer.
139. Dixon, R., and Thirlwall, A.P., 1975. A model of regional growth-rate differences on Kaldorian lines. *Oxford Economic Papers*, 27(2), pp.201–214.
140. Dmitriev, V. K., 1974. Economic Essays on Value. *Competition and Utility*, London.
141. Domenach, J.L., 1995. *The origins of the great leap forward: the case of one Chinese province*. University of Hawai'i Press.
142. Dong, B., and Torgler, B., 2012. Causes of corruption: Evidence from China. *Journal of Policy Modeling*, 34(6), pp.932–947.

143. Dong, X.-y., 2003. *China's urban labour market adjustment: a summary of literature review*. Available at: <http://info.worldbank.org/etools/docs/library/74068/china/readings/oct28/dong28engl.pdf>.
144. Dodds, K., Xu, M., and Unwin, T., 2009. Rethinking Imbalanced Regional Development and Spatial Inequality in China. *Working Paper, Department of Geography*, RHUL.
145. Drakakis-Smith, D., 1996. Sustainability, urbanization and development. *Third World Planning Review*, 18(4).
146. Du, W., 1992. Characteristics and policy issues in the aging of China's population. *China Economic Review*, 3(1), pp.75–83.
147. Duanmu, J.L., 2011. The effect of corruption distance and market orientation on the ownership choice of MNEs: evidence from China. *Journal of International Management*, 17, pp.162-174.
148. Démurger, S., 2001. Infrastructure development and economic growth: an explanation for regional disparities in China? *Journal of Comparative Economics*, 29(1), pp.95–117.
149. Démurger, S., Sachs, J., and Hu, Y., 2002. The Relative contributions of location and preferential policies in China's regional development [Diliweizhiyuyouhuizhengceduizhongguodiqujingjifazhan de xiangguangongxian]. *Economic Studies*, 9, pp.14–23.
150. Démurger, S., et al., 2002a. Geography, economic policy and regional development in China. *Asian Economic Paper*, 1(1), pp.146–197.
151. Démurger, S., et al., 2002b. The relative contributions of location and preferential policies in China's regional development: being in the right place and having the right incentives. *China Economic Review*, 13(4), pp.444–465.
152. Dudley, L.P., and Yaukey, D., 1992. *The population of modern China*. Springer US

153. Easterlin, R.A., 1972. Does economic growth improve the human lot? In: P.A. David and M.W. Reder, eds., *Nations and Households in Economic Growth: Essays in Honour of Moses Abramovitz*. Stanford University Press.
154. Easterly, W., 2007. Inequality does cause underdevelopment: Insights from a new instrument. *Journal of Development Economics*, 64, pp.755–776.
155. Eatwell, J., 1998. *The new Palgrave: a dictionary of economics*. First ed. New York: Palgrave Macmillan.
156. Ebenstein, A., 2010. The “missing girls” of China and the unintended consequences of the one child policy. *The Journal of Human Resources*, 45(1), pp.87–115.
157. Edlund, L., Li, H.B., Yi, J.J., and Zhang, J.S., 2003. Sex ratios and crime: evidence from China’s one-child policy. *IZA Discussion Papers* 3214.
158. Edward, P., 2006. Examining inequality: who really benefits from global growth? *World Development*, 34(10), pp.1667–1695.
159. Ehrlich, P.R., and Ehrlich, A.H., 1990. *The population explosion*. New York: Simon and Schuster.
160. Erikson, R., and Goldthorpe, J.H., 1992. *The constant flux. A study of class mobility in industrial societies*. Oxford: Clarendon Press.
161. Fan, C., and Wei, X., 2006. The law of one price: Evidence from the transitional economy of China. *Review of Economics and Statistics*, 88(4), pp.682–697.
162. Fan, C.C., 1995. Of belts and ladders: state policy and uneven regional development in post-Mao China. *Annals of Association of American Geographers*, 85(3).
163. Fan, C.C., 1997. Uneven development and beyond: regional development theory in post-mao China. *International Journal of Urban and Regional Research*, 21(4), pp.620–639.

164. Fan, C.C., 2002. The elite, the natives, and the outsiders: Migration and labor market segmentation in urban China. *Annals of the Association of American Geographers*, 92(1), pp.103–124.
165. Fan, C.C., 2006. China's eleventh five-year plan (2006-2010): from "getting rich first" to "common prosperity." *Eurasian Geography and Economics*, 47(6), pp.708–723.
166. Fan, C.C., 2008. Migration, Hukou, and the Chinese city, in China urbanizes: Consequences, strategies, and policies. In: S. Yusuf and A. Saich, eds., *China urbanizes: Consequences, strategies, and policies*. [online] Washington, DC: The World Bank, pp.65–90. Available at: <http://china.usc.edu/App_Images/Fan.pdf> [Accessed 17 May 2009].
167. Fan, C.C., and Sun, M., 2008. Regional inequality in China, 1978–2006. *Eurasian Geography and Economics*, 49(1), pp.1–17.
168. Fan, C.Z.S., 2001. Incentives and corruption in Chinese economic reform. *Journal of Economic Policy Reform*, 4(3), pp.195–206.
169. Fan, L.S., 2003. Popular religion in contemporary China. *Social Compass*, 50(4), pp.449–457.
170. Fan, S., Kanbur, R., and Zhang, X., 2011. China's regional disparities: Experience and policy. *Review of Development Finance*, 1(1), pp.47–56.
171. Fan, S., Zhang, L., and Zhang, X., 2004. Reforms, investment, and poverty in rural China. *Economic Development and Cultural Change*, 52(2), pp.395–421.
172. Fan, W., Treyz, F., and Treyz, G., 2000. An evolutionary new economic geography model. *Journal of Regional Science*, 40(4), pp.671–695.
173. Fang, C., Wang, D., and Du, Y., 2002. Regional disparity and economic growth in China. *China Economic Review (1043951X)*, 13(2/3), p.197.
174. Fang, C., Zhang, X., and Fan, S., 2002. Emergence of urban poverty and inequality in China: evidence from household survey. *China Economic Review (1043951X)*, 13(4), p.430.

175. Farrell, J., 1994. Social equality and educational expansion in developing nations. In: T. Husén and T.N. Postlethwaite, eds., *The International Encyclopedia of Education*. Oxford: Pergamon.
176. Farrell, J., 1999. Changing conceptions of equality of education—forty years of comparative evidence. In: F. Robert and C. Torres, eds., *Comparative Education - The Dialectic of the Global and the Local*. Maryland: Rowman & Littlefield.
177. Fedorov, L., 2002. Regional inequality and regional polarization in Russia, 1990-99. *World Development*, 30(3), pp.443-456.
178. Feng, Q., 2012. A state-owned-coal mine has been sold to the cadre. http://club.china.com/data/thread/1011/2748/32/24/7_1.html.
179. Feng, W., Cai Y., and Gu, B.C., 2012. Population, policy, and politics: how will history judge China's one-child policy? *Population and Development Review*, 38, pp.115–129.
180. Fewsmith, J., 2013. *The logic and limits of political reform in China*. Cambridge: CUP.
181. Fields, G.S., 2007. How much should we care about changing income inequality in the course of economic growth? *Journal of Policy Modeling*, 29(4), pp.577–585.
182. Fleisher, B.M., 2006. Inequality, market development, and sources of growth in China under accelerating reform. *China Economic Review*, 17(3), pp.237–238.
183. Fleisher, B.M., and Chen, J., 1997. The Coast–Noncoast Income Gap, Productivity, and Regional Economic Policy in China. *Journal of Comparative Economics*, 25(2), pp.220–236.
184. Flowerdew, R., and Martin, D., 2005. *Methods in human geography: A guide for students doing a research project*. Second ed. England: Pearson Education Limited.

185. Fogel, R.W., 1986. Nutrition and the decline in mortality since 1700: some preliminary findings. In: S.L. Engerman and R.E. Gallman, eds., *Long term factors in American economic growth*, NBER. University of Chicago Press, pp.439–555.
186. Fong, V.L., 2002. China's one-child policy and the empowerment of urban daughters, *American Anthropologist*, 104(4), pp.1098–1109.
187. Fong, V.L., 2004. *Only hope: coming of age under China's one-child policy*. Stanford: Stanford University Press.
188. Fosu, A.K., 1992. Political instability and economic growth: evidence from sub-Saharan Africa. *Economic Development and Cultural Change*, 40(July), pp.829–841.
189. Fotheringham, S., and Rogerson, P., 2013. *Spatial analysis and GIS*. CRC Press.
190. Friedman, B., James, E., Kane, C., and Queisser, M., 1996. *How will China care for its aging population? PRD discussion paper*, World Bank, Washington, DC.
191. Fu, X., 2004. Limited linkages from growth engines and regional disparities in China. *Journal of Comparative Economics*, 32, pp.148–164.
192. Fu, X., and Wu, L., 2006. Technology efficiency, capital deepening and regional differences [Jishuxiaolv, zibenshenhuayudiquchayi]. *Economic Studies*, 10, pp.52–61.
193. Fujita, M., Mori, T., Henderson, J.V., and Kanemoto, Y., 2004. Spatial distribution of economic activities in Japan and China. In: *Handbook of Regional and Urban Economics*, vol. IV. Amsterdam: North Holland.
194. Fujita, M., and Mori, T., 2005. Frontiers of the new economic geography. *Papers in Regional Science*, 84, pp.377–407.
195. Gaetano, A.M., and Jacka, T., 2004. *On the move: Women and rural-to-urban migration in contemporary China*. Columbia University Press: New York.

196. Gainsborough, M., 2003. Corruption and the politics of economic decentralisation in Vietnam, *Journal of Contemporary Asia*, 33(1), pp.69–84.
197. Gansu Statistical Bureau (GaSB), 1996. *Gansu statistical yearbook, (various annual issues)*. Beijing, China: China Statistics Press.
198. Gansu Statistical Bureau (GaSB), *Gansu statistical yearbook*, 2007. Beijing, China: China Statistics Press.
199. Gansu Statistical Bureau (GaSB). *Gansu statistical yearbook*, 2008. Beijing, China: China Statistics Press.
200. Ganzeboom, H., Luijck, R., and Treiman, D.J., 1989. Intergenerational class mobility in comparative perspective. *Research in Social Stratification and Mobility*, 8, pp.3–84.
201. Gao, M., and Yao, Y., 2006. Gender gaps in access to health care in rural China. *Economic Development and Cultural Change*, 55(1), pp.87–107.
202. Gao, T., 2005. Labor quality and the location of foreign direct investment: evidence from China. *China Economic Review*, 16(3), pp.274–292.
203. Gao, Y., 2004. “Shifting” phenomenon and its explanations—discussions on the relationships between economic growth and educational gender equality (in Chinese). *Universities Center for China Studies, The Chinese University of Hong Kong*, [online] 18(2006). Available at: <<http://www.usc.cuhk.edu.hk/wkwzdetails.asp?id=2938>>.
204. Gaubatz, P., 2008. Commercial redevelopment and regional inequality in urban China: Xining’s Wangfujing? *Eurasian Geography and Economics*, 49(2), pp.180–199.
205. Gewirtz, S., Ball, S.J., and Bowe, R., 1995. *Markets, Choice and Equity in Education*. Buckingham and Philadelphia: Open University Press.
206. Gibbs, A., 1997. Focus groups. *Social research update*, Issue 19. University of Surrey.

207. Giddens, A., Duneier, M., and Appelbaum, R.P., 2003. *Introduction to sociology*. WW Norton.
208. Giner, J.M., and Giner, G., 2004. An interpretative model of foreign direct investment in China: an economic policy approach. *China Economic Review*, 15(3), pp.268–280.
209. Goel, R.K., and Nelson, M.A., 2005. Economic freedom versus political freedom: Cross-country influences on corruption. *Australian Economic Papers*, 44(121–133).
210. Goel, R.K., and Nelson, M.A., 2010. Causes of corruption: History, geography and government. *Journal of Policy Modelling*, 32, pp.433–447.
211. Goldthorpe, J.H., 2007. Outline of a theory of social mobility. In: *On Sociology*. Stanford University Press.
212. Golley, J., 2002. Regional patterns of industrial development during China's economic transition. *Economics of Transition*, 10(3), pp.761–801.
213. Golley, J., 2007. China's western development strategy and nature versus nurture. *Journal of Chinese Economic and Business Studies*, 5(2), pp.115–129.
214. Goodchild, M.F., 2000. Spatial analysts and GIS practitioners: The current status of GIS and spatial analysis. *Journal of Geographical Systems*, 2(1), pp.5–6.
215. Gong, T., 1994. *The politics of corruption in contemporary China: An analysis of policy outcomes*. Westport, Conn./London: Praeger.
216. Gong, T., 2006. Corruption and local governance: The double identity of Chinese local governments in market reform. *Pacific Review*, 19, pp.85–102.
217. Goode, W.J., and Hatt, P.K., 1981. *Methods in social research*. U.K.: McGraw-Hill Book Company.
218. Gornick, J.C., and Jacobs, J.A., 1998. Gender, the welfare state and public employment. A comparative study of seven industrialized countries. *American Sociological Review*, 63, pp.688–710.

219. Gou, R., 2005. Cong chengxiangruxuejihuikangaodengjiaoyugongping (Equality in access to higher education being assessed from the opportunities between urban and rural students). *JiaoyuFazhangYanjiu (Educational Development Research)*, 5(29–31).
220. Graeff, P., and Mehlkop, G., 2003. The impact of economic freedom on corruption: Different patterns for rich and poor countries. *European Journal of Political Economy*, 19, pp.605–620.
221. Gravier-Rymaszewska, J., Tyrowiczb, J., and Kochanowiczd, J., 2010. Intra-provincial inequalities and economic growth in China. *Economic Systems*, 34(3), pp.237–258.
222. Gregorio, J.D., and Lee, J., 2002. Education and income inequality: new evidence from cross-country data. *Review of Income and Wealth*, 48(3), pp.395–416.
223. Gries, P.H., and Rosen, S., 2004. *State and Society in 21st Century China: Crisis, Contention and Legitimation*. Routledge Curzon: New York and London.
224. Grudens-Schuck, N., Allen, B.L., and Larson, K., 2004. *Methodology brief: focus group fundamentals*. Iowa State University Digital Repository @ Iowa State University Extension Community and Economic Development Publications.
225. Grusky, D.B., and Weisshaar, K.R., 2001. *Social stratification: class, race, and gender in sociological perspective*. Westview Press.
226. Gu, C.L., Shen, J.F., Wong, K.Y., and Zhen, F., 2001. Regional polarization under the socialist-market system since 1978: a case study of Guangdong province in South China. *Environment and Planning A*, 33(1).
227. Guan, M., 2014. Temporal and spatial process: urbanisation driven by rural-urban migration in China, 1949-2010. *International Journal of Migration and Residential Mobility*, 1(1).
228. Guo, S., 2005. Analysis on higher education development in rural areas. *Liaoning Jiao Yu Yan Jiu*, 10, pp.41–44.

229. Guo, Y., 2008. Corruption in transitional China: An empirical analysis. *The China Quarterly*, 194(1), pp.349–364.
230. Gustafsson, B., and Li, S., 2000. Economic transformation and the gender earnings gap in urban China. *Journal of Population Economics*, 13(2), pp.305–329.
231. Gustafsson, B., Li, S. and Sicular, T. eds., 2008. *Inequality and public policy in China*. New York: Cambridge University Press.
232. Gustafsson, B., and Li, S., 2002. Income inequality within and across countries in rural China 1988 and 1995. *Journal of Development Economics*, 69(1), pp.179–200.
233. Haggett, P., 1965. *Locational analysis in human geography*, London: Edward Arnold.
234. Hamel, J., Dufour, S., and Fortin, D., 1993. *Case study methods*. Newbury Park, California: SAGE Publications, Inc.
235. Hannum, E., 1999. Political change and the urban-rural gap in basic education in China: 1949–1990. *Comparative Education Review*, 43(2), pp.193–211.
236. Hannum, E., 2003. Poverty and basic education in rural China: Villages, households, and girls' education. *Comparative Education Review*, 47(2), pp.141–159.
237. Hannum, E., 2005. Market transition, educational disparities, and family strategies in rural China: evidence on gender stratification and development. *Demography*, 42(2), pp.275–299.
238. Hannum, E., and Kong, P., 2002. Family sources of educational gender inequality in rural China: A critical assessment. *Paper presented at the annual meetings of the National Academy of Education (Toronto, October 2002)*.
239. Hannum, E., and Wang, M., 2006. Geography and educational inequality in China. *China Economic Review* (1043951X), 17(3), pp.253–265.

240. Hannum, E., and Xie, Y., 1994. Trends in educational gender inequality in China: 1949–1985. *Social Stratification and Mobility*, 13, pp.73–98.
241. Hao, R., and Wei, Z., 2010. Fundamental causes of inland-coastal income inequality in post-reform China. *Annals of Regional Science*, 45(1).
242. Hao, Y., and Johnston, M., 1995. China's surge of corruption. *Journal of Democracy*, 6(4), pp.80–94.
243. He, Z., 2000. Corruption and anti-corruption in reform China. *Communist and Post-Communist Studies*, 33(2), pp.243–270.
244. Heath, A. ed., 2006. *Ethnic minority disadvantage*. Oxford: Oxford University Press.
245. Hebel, J., 2003. Social welfare in rural China. *The Journal of Peasant Studies*, 30(3-4), pp.224–251.
246. Heikkila, E.J., 2003. East Asian development issues. *Journal of the American Planning Association*, 69(1), p.93.
247. Hering, L., and Poncet, S., 2010a. Income per capita inequality in China: the role of economic geography and spatial interactions. *The World Economy*, 33, pp.655–679.
248. Hering, L., and Poncet, S., 2010b. Market access and individual wages: evidence from China. *Review of Economics and Statistics*, 92, pp.145–159.
249. Hertel, T., and Zhai, F., 2006. Labor market distortions, rural-urban inequality and the opening of China's economy. *Economic Modelling*, 23(1), pp.76–109.
250. Hesketh, T., Li, L., and Zhu, W.X., 2005. The effect of China's one-child family policy after 25 Years. *The New England Journal of Medicine*, September 15.
251. Hesketh, T. and Zhu, W. X., 1997. The one child family policy: the good, the bad, and the ugly. *British Medical Journal*, 314(7095), pp.1685–1687.

252. Hettne, B., 1995. *Development theory and the three worlds: towards an international political economy of development*. Halsted Press.
253. Higgins, M., and Williamson, J.G., 1999. Explaining inequality the world round: cohort Size, Kuznets Curves, and openness. *NBER Working Paper No. 7224 Issued in July 1999*.
254. Hilali, A.Z., 1997. China 's population growth: policy and prospects. *China Report*, 33(1), pp.1–34.
255. Hiniker, P.J., 1977. Revolutionary ideology & Chinese reality: dissonance under Mao. library.wur.nl.
256. Hirschman, A.O., 1958. *The strategy of economic development*. New Haven: Yale University Press.
257. Hirschman, A.O., and Rothschild, M., 1973. The changing tolerance for income inequality in the course of economic development: With a mathematical appendix. *The Quarterly Journal of Economics*, 87(4), pp.544–566.
258. Ho, C.-y., and Li, D., 2008. Rising regional inequality in China: policy regimes and structural changes. *Papers in Regional Science*, 87(2), pp.245–259.
259. Ho, K.Y., and Tsui, A.K.C., 2004. Analysis of real GDP growth rates of greater China: an asymmetric conditional volatility approach. *China Economic Review*, 15(4), pp.424–442.
260. Hollander, S., 1985. *The Economics of John Stuart Mill*. ISBN:063114045X.
261. Holz, C. A., 2002. Institutional constraints on the quality of statistics in China, *China Information*, 16(1), pp.25–67.
262. Holz, C.A., 2004a. China 's statistical system in transition: challenges, data problems and institutional innovations. *Review of Income and Wealth*, 50(3), pp.381–409.
263. Holz, C.A., 2004b. Deconstructing China 's GDP statistics. *China Economic Review*, 15(2), pp.164–202.

264. Holz, C.A., 2006. Why China's new GDP data matters? *Far Eastern Economic Review*, 169(1), pp.54–57.
265. Hong, L.K., 1987. Potential Effects of the One-Child Policy on Gender Equality in the People's Republic of China. *Gender and Society*, 1(3), pp.317–326.
266. Hope, K.R., and Edge, W.A., 1996. Growth with uneven development: Urban-rural socio-economic disparities in Botswana. *Geoforum*, 27(1), pp.53-62.
267. Howitt, R., 1993. "A world in a grain of sand": towards a reconceptualization of geographical scale. *Australian Geographer*, 24(1), pp.33-44.
268. Hu, A., 2001. Corruption and social inequality. *Jiangsu Social Sciences*, 3, pp.51–53.
269. Hu, A., 2007. Technology parks and regional economic growth in China. *Research Policy (Guangzhou)*, 36(1), pp.76–87.
270. Hu, D., 2002. Trade, rural-urban migration, and regional income disparity in developing countries: a spatial general equilibrium model inspired by the case of China. *Regional Science and Urban Economics*, 32, pp.311–338.
271. Huang, J.T., Kuo, C.C., and Kao, A.P., 2003. The inequality of regional economic development in China between 1991 and 2001. *Journal of Chinese Economic and Business Studies*, 1(3), pp.273–285.
272. Huang, Y., and Meng, X., 1997. China's Industrial Growth and Efficiency: A comparison between the state and the TVE sectors. *Journal of the Asia Pacific Economy*, 2(1), pp.101–121.
273. Huang, Y.S., 2012. How did China take off? *Journal of Economic Perspectives*, 26(4), pp.147–170.
274. Hui, E.C., and Wong, F.K., 2006. Affordable housing in China. *Habitat International*, 30(2), pp.275–276.
275. Iannelli, C., and Paterson, L., 2007. Education and Social Mobility in Scotland. *Research in Social Stratification and Mobility*, 25, pp.219–232.

276. Ishida, H., Muller, W., and Ridge, J.M., 1995. Class origin, class destination and education: A cross-national study of ten industrial nations. *American Journal of Sociology*, 60, pp.145–193.
277. Israeli, R., 2002. *Islam in China: Religion, ethnicity, culture, and politics*. Lexington Books: Lanham.
278. Iyer, S., Kitson, M., and Toh, B., 2005. Social capital, economic growth and regional development. *Regional Studies*, 39(8), pp.1015–1040.
279. Jackson, M., Goldthorpe, J.H., and Mills, C., 2005. Education, employers and class mobility. *Research in Social Stratification and Mobility*, 23, pp.3–33.
280. Jacobs, G., and Asokan, N., 1999. Towards a comprehensive theory of social development. *Human Choice*.
281. Jessop, B., 1982. *The capitalist state: Marxist theories and methods*. Oxford: Martin Robertson.
282. Jian, T., Sachs, J.D., and Warner, A.M., 1996. Trends in regional inequality in China. *China Economic Review*, 7(1), pp.1–21.
283. Jin, H., Qian, Y., and Weingast, B.R., 2005. Regional decentralization and fiscal incentives: Federalism, Chinese style. *Journal of Public Economics*, 89, pp.1719–1742.
284. Jingchuan Statistical Bureau (GiSB), 2006. *Jingchuan statistical yearbook*. Jingchuan, China. (内部资料)
285. Jones, D.C., Li, C., and Owen, A.L., 2003. Growth and regional inequality in China during the *reform era*. *China Economic Review*, 14(2), pp.186–200.
286. Jones, J.P., Nast, H.J., and Roberts, S.M., 1997. *Thresholds in feminist geography: difference, methodology, representation*. USA: Rowman & Littlefield Publishers, INC.

287. Ju, L., 2014. How it was/is told, recorded and remembered: The discontinued history of the third front construction. *Journal of Historical Sociology*, 28(3), pp.314–343.
288. Jun, J., 2006. Intergovernmental fiscal reform, financial deepening and regional disparity in China: a missing link. *Social Sciences in China*, 27(1), pp.143–159.
289. Kaldor, N., 1970. The case for regional policies. *Scottish Journal of Political Economy*, 17(3), pp.337–48.
290. Kanbur, R., Qian, Y., and Zhang, X., 2008. Symposium on market development and inequality in China. *Economics of Transition*, 16(1), pp.1–5.
291. Kanbur, R., Wan, G., and Zhang, X., 2005. Introduction: growing inequality in China. *Journal of the Asia Pacific Economy*, 10(4), pp.405–407.
292. Kanbur, R., and Zhang, X., 1999. Which regional inequality? The evolution of rural-urban and inland-coastal inequality in China. *Journal of Comparative Economics*, 27(4), pp.686–701.
293. Kanbur, R., and Zhang, X., 2005. Fifty years of regional inequality in China: a journey through central planning, reform, and openness. *Review of Development Economics*, 9(1), pp.87–106.
294. Kane, P., and Choi, C.Y., 1999. China's one child family policy. *British Medical Journal, International edition* 319.7215 (Oct 9), pp.992–994.
295. Karnow, S., 1984. *Mao and China: inside China's Cultural Revolution*. NY: Penguin Books.
296. Ke, S., 2010. Agglomeration, productivity, and spatial spillovers across Chinese cities. *Annals of Regional Science*, 45(1).
297. Kerbo, H.R., 2006. *Social stratification*. McGraw Hill.

298. Khan, A.R., and Riskin, C., 1998. Income and inequality in China: composition, distribution and growth of household income, 1988 to 1995. *The China Quarterly*, 154(June), pp.221–253.
299. Khan, A., and Riskin, C., 2005. China's household income and its distribution, 1995 and 2002. *The China Quarterly*, 182(June), pp.356–384.
300. Khan, M.H., and Jomo, K.S., 2000. *Rents rent-seeking and economic development: Theory and evidence in Asia*. Cambridge/New York: Cambridge University Press.
301. Khasru, S.M., and Jalil, M.M., 2004. Revisiting Kuznets hypothesis: an analysis with time series and panel data. *Bangladesh Development Studies*, 30(3–4), pp.89–112.
302. Kim, J., 2004. Growth of regional economy and income inequality: county-level evidence from Florida, USA. *Applied Economics*, 36(2), pp.173–183.
303. Kim, V.L., 1994. Getting personal: reflexivity, positionality, and feminist research. *Professional Geographer*, 46(1), pp. 80-89.
304. King, J.E., and Howard, M.C., 1985. *The political economy of Marx*. London: Longman.
305. Kitzinger, J., 1994. The methodology of focus groups: the importance of interaction between research participants. *Sociology of health & illness*, 16(1), pp.103–121.
306. Klatt, W., 1970. A Review of China's Economy in 1970. *China Quarterly*, 43(September), pp.100–120.
307. Kliman, A., 2006. Freeman A. Replicating Marx: a reply to Mohun. *Capital & Class*, 88(117).
308. Knight, J., 2008. Reform, growth, and inequality in China. *Asian Economic Policy Review*, 3(1), pp.140–158.

309. Knight, J., Song, L., and Jia, H., 1999. Chinese rural migrants in urban enterprises: three perspectives. *Journal of Development Studies*, 35(3), pp.73–104.
310. Knight, J., and Gunatilaka, R., 2010a. Great expectations? The subjective well-being of rural-urban migrants in China. *World Development*, 38(1), pp.113–124.
311. Knight, J., and Gunatilaka, R., 2010b. The rural-urban divide in China: Income but not happiness? *Journal of Development Studies*, 46(3), pp.506–534.
312. Knight, J., and Song, L., 1999b. *The rural-urban divide: Economic disparities and interactions in China*. New York: Oxford University Press.
313. Koopmans, T.C., 1965. On the concept of optimal economic growth. *AcademiaeScientiarumScriptaVaria*, 28(1), pp.15–100.
314. Kornai, J., 2006. The great transformation of central eastern Europe: success and disappointment. *Economics of Transition*, 14(2), pp.207–244.
315. Kothari, C.K., 2004. *Research methodology: Methods and techniques*. New Delhi: New age international limited publishers.
316. Krugman, P.R., 1999. The role of geography in development. *International Regional Science Review*, 22(2).
317. Krugman, P.R., 1991. Increasing returns and economic geography. *Journal of Political Economy*, 99, pp.483–499.
318. Krugman, P.R., 2011. The new economic geography, now middle-aged. *Regional Studies*, 45, pp.1–7.
319. Krugman, P.R., and Venables, A.J., 1995. Globalization and the inequality of nations. *The Quarterly Journal of Economics*, 110, pp.857–880.
320. Kuznets, S., 1955. Economic growth and income inequality. *American Economic Review*, 45(1).
321. Kuznets, S., 1963. Quantitative aspects of the economic growth of nations. *Economic Development and Cultural Change*.

322. Kuznets, S., 1965. *Economic growth and structure: selected essays*. London: Heinemann Educational Books Ltd.
323. Kuznets, S., 1966. *Modern economic growth, rate, structure and spread*. New Haven CT: Yale University Press.
324. Kvale, S., 2008. *Doing interviews*. SAGE.
325. Lahiri, R., and Dillon, J., 2007. Concerning Kuznets curves, persistent inequality, inflation, and redistribution. *International Advances in Economic Research*, 13(4), p.520.
326. Lai, H.Y., 2002. China ' s western development program: Its rationale, implementation, and prospects. *Modern China*, 28(4), pp.432–453.
327. Lampton, D., 1979. The roots of interprovincial inequality in education and health services in China since 1949. *American Political Science Review*, 73(2), pp.459–77.
328. Lardy, N.R., 1987. Economic recovery and the 1st Five-Year Plan. *The Cambridge History of China*, 1987.
329. Le Gallo, J., and Ertur, C., 2003. Exploratory spatial data analysis of the distribution of regional per capita GDP in Europe, 1980–1995. *Regional Science*, 82(2), pp.175-201.
330. Lee, C.K., 1998. *Gender and the South China Miracle: Two Worlds of Factory Women*. University of California Press: Berkeley.
331. Lee, C.K., 2005. Income inequality, democracy, and public sector size. *American Sociological Review*, 70(1), pp.158–181.
332. Lee, J., 2000. Changes in the source of China ' s regional inequality. *China Economic Review*, 11(3), pp.232–245.
333. Lei, C.K., and Yao, S.J., 2009. *Economic Convergence in Greater China: Mainland China, Hong Kong, Macau and Taiwan*. New York: Routledge.

334. Levin, J., 2001. China's divisive development growing urban-rural inequality bodes trouble. *Harvard International Review*, 23(3), p.40.
335. Lewis, W.C., 1972. A critical examination of the export-base theory of urban-regional growth. *The Annals of Regional Science*, 6(2), pp.15–25.
336. Li, B., and Sen, G., 2003. Social inequalities and wage, housing and pension reforms in urban China, *Asia Programme Working Paper*, 3. Chatham House, London, UK.
337. Li, C., 2003. *Socio-political changes and inequality in educational opportunities in China: Two different trends during 1940 to 2001*. Beijing: Chinese Academy of Social Sciences Press.
338. Li, D., and Tsang, M.C., 2003. Household education decisions and implications for gender inequality in education in rural China. *China: An International Journal*, 1(2), pp.224–248.
339. Li, G.C., 1995. *A glossary of political terms of the People's Republic of China*. Hongkong: Chinese University Press.
340. Li, H., Li, L., Wu, B., and Xiong, Y., 2012. The end of cheap Chinese labor. *Journal of Economic Perspectives*, 26(4), pp.57–74.
341. Li, H., Xu, L.C., and Zou, H., 2000. Corruption, income distribution, and growth. *Economics and Politics*, 12(2), pp.155–182.
342. Li, H., and Zhu, Y., 2006. Income, income inequality, and health: evidence from China. *Journal of Comparative Economics*, 34(4), pp.668–693.
343. Li, H.F., 2009. *Hujixinzhengnengfouxiiyinrencai? (Can the new HuKou policy lure the talents?)*. Available at: <<http://blog.ce.cn/html/95/101095-240652.html>>.
344. Li, J.L., 1995. China's one-child policy: how and how well has it worked? A case study of Hebei province, 1979-88. *Population and Development Review*, 21(3), pp.563-585.

345. Li, P.L., 2002. Introduction to special issue Social Stratification in China since Reform. *Social Sciences in China Today*, Spring 2002.
346. Li, Q., 2003. Factors affecting the push and pull of migration in China. *Chinese Social Science (ZhongguoShehuiKexue)*, 1, pp.125–136.
347. Li, R.J., 2001. *Chengzhehujijiazhi de xianhuayudanhuaguochengfenxi (analysis on the manifestation and diminishing of the value of urban hukou)*. *ShehuiKexue (Social Sciences)*, 9(53–57).
348. Li, S.M., and Wu, J.J., 2007. China Thrives Despite Corruption. *Far Economic Review*, April.
349. Li, W., Park, A., and Wang, S., 2007. School equity in rural China. In: E. Hannum and A. Park, eds., *Education and reform in China*. London and New York: Routledge Gustafsson.
350. Li, Y., 2005. *The structure and evolution of Chinese social stratification*. University Press of America.
351. Li, Y., and Wei, Y.H.D., 2010a. A spatial-temporal analysis of health care and mortality inequalities in China. *Eurasian Geography and Economics*, 51(6).
352. Li, Y.R., and Wei, Y.H.D., 2010b. The spatial-temporal hierarchy of regional inequality of China. *Applied Geography*, 30, pp.303–316.
353. Liang, C.K., Guo, R., and Wang, Q., 2004. Impact of market-oriented policies on China's international tourism and regional economic development. *Services Marketing Quarterly*, 26(1), pp.19–35.
354. Liang, G., 1994. *The practical encyclopaedia of anti-corruption in China and Foreign countries*. Beijing: Xinhua Press.
355. Liang, Y.F., and Gao, T.M., 2007. Empirical analysis on real estate price fluctuation in different provinces of China. *Economic Research Journal*, 2007-2008.

356. Lieberthal, K., 1995. *Governing China: from revolution through reform*. WW Norton New York.
357. Limb, M., and Dwyer, C., 2001. Qualitative methodologies for geographers: issues and debates. Arnold.
358. Lin, S., 2003. *International Trade, Location, and Wage Inequality in China*. WIDER Discussion Paper, No. 2003/61, WIDER United Nations University.
359. Lin, J.Y.F., Cai, F., and Li, Zou.,1998. Competition, policy burdens, and state-owned enterprise reform. *The American Economic Review*, 88(2), pp.422–427.
360. Liu, A.P.L., 1992. The" Wenzhou model" of development and China ' s modernization.*Asian Survey*.32 (8), pp.696–711.
361. Liu, L., 2006. Impacts of market location on rural poverty and income inequality in China. *Chinese Economy*, 39(3), pp.64–78.
362. Liu, R., 2015. Spatial mobility of migrant workers in Beijing China. Switzerland: Springer International Publishing.
363. Liu, S., and Zhang, X., 2007. The features of China ' s sustained high growth and the decline of regional economic disparity. *JingjiYanjiu (Economic Research)*, 10, pp.17–31.
364. Liu, T., and Li, K., 2006. Disparity in factor contributions between coastal and inner provinces in post-reform China. *China Economic Review*, 17(4), pp.449–470.
365. Liu, W., and Wu, W., 2008. Development of local financial systems in mainland China. *Eurasian Geography and Economics*, 49(2), pp.160–179.
366. Liu, Z., 2007. The external returns to education: Evidence from Chinese cities, *Journal of Urban Economics*, 61(3), pp.542–564.
367. Liu, Z.Q., 2005. Institution and inequality: The hukou system in China. *Journal of Comparative Economics*, 33(1), pp.133–157.

368. Long, G., and Ng, M.K., 2001a. The political economy of intra-provincial disparity in post-reform China: a case study of Jiangsu province. *Geoforum*, 32, pp.215–234.
369. Lu, D., 2002. Rural-urban income disparity: impact of growth, locative efficiency, and local growth welfare. *China Economic Review*, 13(4), pp.419–429.
370. Lu, D., 2008. China's regional income disparity: an alternative way to think of the sources and causes. *Economics of Transition*, 16(1), pp.31–58.
371. Lu, M., and Chen, Z., 2006. Urbanization, urban-biased policies and urban-rural inequality in China, 1987-2001. *Chinese Economy*, 39(3), pp.42–63.
372. Lu, M., and Wang, E., 2002. Forging ahead and falling behind: Changing regional inequalities in post-reform China. *Growth and Change*, 33(1), pp.42–71.
373. Lu, X.H., and Wang, Y.G., 2006. Zhongguo “xiang-cheng” renkouqianyiguimo de cesuanyufenxi (1979–2003) (estimation and analysis on Chinese rural-urban migration size). *XibeiRenkou (Northwest Population)*, 23(1), pp.14–16.
374. Lu, Y.L., 2008. Hukouhaiqizuoyong ma? Hujizhiduyushehuifenceng he liudong (does Hukou still matter? The household registration system and its impact on social stratification and mobility in China). *Zhongguoshehuikexue (Social Sciences in China)*, 29(2), pp.56–75.
375. Lucas, R.E., 1988. On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), pp.3–42.
376. Lukács, G., 1971. History and class consciousness: studies in Marxist dialectics. MIT Press.
377. Luo, Y., and Peng, M.W., 1999. Learning to compete in a transition economy: experience, environment, and performance. *Journal of International Business Studies*, 30(2), pp. 269-295.
378. Lv, Q., 2004. *Disparity behind the “grey income”*. China: Xinhua Net.

379. Lyons, T.P., 1997. Development in Fujian: a county-level perspective. *China Economic Review*, 8(2), pp.117–136.
380. Ma, A.C., 2006. Geographical location of foreign direct investment and wage inequality in China. *The World Economy*, pp.1031–1055.
381. Ma, S., and Yu, H., 2001. Fiscal transfer and convergence of regional economy [Caizhengzhuanyizhifuyudiqujingjishoulian]. *Economic Studies*, 3, pp.26–33.
382. Ma, Y.C., 1957. New population theory. *Renmin ribao*.
383. Marceau, D.J., 1999. The scale issue in the social and natural sciences. *Canadian Journal of Remote Sensing: Journal canadien de télédétection*, 25(4), pp.347–356.
384. MacFarquhar, R., 1993. *The politics of China, 1949-1989*. Cambridge University Press.
385. MacFarquhar, R., and Fairbank, J.K., 1991. *The Cambridge History of China*. Cambridge: CUP.
386. MacPhail, F., and Dong, X., 2007. Women's market work and household status in rural China: Evidence from Jiangsu and Shandong in the late 1990s. *Feminist Economics*, 13(3-4), pp.92–124.
387. Mackerras, C., 2005. China's ethnic minorities and the middle classes: an overview. *International Journal of Social Economics*, 32(9), pp.814–826.
388. Maguire, D.J., Batty, M., and Goodchild, M.F., 2005. *GIS, spatial analysis, and modeling*. Esri Press.
389. Mao, Z.D., 1963. *The present situation and our tasks*. Beijing: Foreign Languages Press
390. Malthus, 1798. An essay on the principle of population. *St. Paul's Church-yard, London*.

391. Marangos, J., 2006. Developing a civilised society in transition economies: The Post Keynesian paradigm. *The Journal of Socio-Economics*, 35(4), pp.660–681.
392. Marshall, C., and Rossman, H.B., 1995. *Designing qualitative research*. Second ed. USA: SAGE Publications.
393. Martin, R., and Sunley, P., 1996. Paul Krugman's geographical economics and its implications for regional development theory: A critical assessment. *Economic Geography*, 72(3), pp.259–292.
394. Martin, R., and Sunley, P., 1998. Slow convergence? The new endogenous growth theory and regional development. *Economic Geography*, 74(3).
395. Martin, R., and Sunley, P., 2007. Complexity thinking and evolutionary economic geography. *Journal of Economic Geography*, 7(5).
396. Mauro, P., 1995. Corruption and growth. *The Quarterly Journal of Economics*, 110(3), pp.681–712.
397. Marx, K., 1959. *Capital: An Analysis of Capitalist Production*. Foreign Languages Publishing House.
398. Marx, K., and Engels, F., 1943. *Manifesto of the Communist Party*. Lawrence and Wishart.
399. May, T., 1997. *Social research: issue, methods and process*. Buckingham: Open University Press.
400. McMichael, P., 1996. *Development and social change: a global perspective*. Pine Forge.
401. McQueen, R.A., and Knussen, C., 2002. *Research methods for social science: A practical introduction*. Longman Group United Kingdom.
402. Meisner, M., 1977. *Mao's China*. NY USA.
403. Meng, X., Gregory, R., and Wang, Y., 2005. Poverty, inequality, and growth in urban China, 1986–2000. *Journal of Comparative Economics*, 33, pp.710–729.

404. Ministry of Education (MOE), 1996. *Big issues in 1996 in education*. Available at: <<http://www.moe.edu.cn/edoas/website18/info5006.htm>>.
405. Ministry of Education, 2009. *Six changes in higher education enrollment this year*. Available at: <http://www.edu.cn/09gaozhao_8100/20090603/t20090603_381716.shtml>.
406. Mishan, E. J., 1967. *The costs of economic growth*. London: Staples Press.
407. Mo, P.H., 2001. Corruption and economic growth. *Journal of Comparative Economics*, 29(1), pp.66–79.
408. Mody, A., and Wang, F.Y., 1997. Explaining industrial growth in coastal China: economic reforms ... and what else? *World Bank Economic Review*, 11(2), pp.293-325.
409. Mok, H.K., 2005. Globalization and educational restructuring: university merging and changing governance in China. *Higher Education*, 50, pp.57–88.
410. Mok, K., 1997. Privatization or marketization: educational development in Post-Mao China. *International Review of Education*, 43(5), pp.547–567.
411. Montinola, G., Qian, Y., and Weingast, B.R., 1995. Federalism, Chinese style: The political basis for economic success in China. *World Politics*, 48, pp.50–81.
412. Morduch, J., and Sicular, T., 2000. Politics, growth, and inequality in rural China. *Journal of Public Economics*, 77(3), p.331.
413. Morgan, D.L., 1988. *Focus groups as qualitative research*. U.K.: SAGE Publication.
414. Muldavin, J., 2000. The Paradoxes of environmental policy and resource management in reform-era China. *Economic Geography*, 76(3), pp.244–71.
415. Murthy, S., 1984. Restoring the role of intellectuals. *China Report*, 20(4-5), pp.67–84.
416. Myrdal, G., and Sitohang, P., 1957. Economic theory and under-developed regions. *revistas.bancomext.gob.mx*.

417. National Bureau of Statistics (NBS), 2007. *China's county economy yearbook, 2002–2006*. Beijing: China Statistics Press.
418. National Bureau of Statistics (NBS), 1991–2006. *China population statistical yearbook 1991–2006 (ZhongguoRenkouTongjiNianjian)*. Beijing: China Statistics Press.
419. National Bureau of Statistics (NBS), 2007. *China population and employment statistical yearbook 2007–2011 (ZhongguoRenkou he JiuyeTongjiNianjian)*. Beijing: China Statistics Press.
420. National Bureau of Statistics (NBS), 2001–2011. *China statistical yearbook for regional economy 2001–2011 (ZhongguoQuyueJingjiTongjiNianjian)*. Beijing: China Statistics Press.
421. National Bureau of Statistics PRC. *China statistical yearbook 2006*. Beijing: China Statistics Press.
422. National Bureau of Statistics PRC. *China statistical yearbook 2007*. Beijing: China Statistics Press.
423. National Bureau of Statistics PRC. *China statistical yearbook 2008*. Beijing: China Statistics Press.
424. National Bureau of Statistics PRC. *China statistical yearbook 2009*. Beijing: China Statistics Press.
425. National Bureau of Statistics PRC. *China statistical yearbook 2010*. Beijing: China Statistics Press.
426. National Bureau of Statistics PRC. *China County Level Economy Yearbooks 2002-2006*. Beijing: China Statistics Press.
427. National Bureau of Statistics (NBS), 2000. *Comprehensive agricultural statistical data and materials on 50 years of New China (Xin ZhongguoWushinianNongyeTongjiZiliaoHuibian)*. Beijing: China Statistics Press.

428. National Bureau of Statistics (NBS), 1990. *Historical statistical materials for provinces, autonomous regions and municipalities 1949–1989 (QuanguoGeshengZizhiquZhixiashiLishiTongjiZiliaoHuibian)*. Beijing: China Statistics Press.
429. Naughton, B., 1988. The Third Front: defence industrialization in the Chinese interior. *The China Quarterly*, 115, pp.351–386.
430. Ndulu, B.J., and O’Connell, S.A., 2000. Governance and growth in sub-Saharan Africa. *Journal of Economic Perspectives*, 13(3), pp.41–66.
431. Nee, V., 1991. Social inequalities in reforming state socialism: between redistribution and markets in China. *American Sociological Review*, 56(3), pp.267–282.
432. Nee, V., 1996. The emergence of a market society: changing mechanisms of stratification in China. *American Journal of Sociology*, 101(4), pp.908–949.
433. Neuman, W.L., 2005. *Social research methods: quantitative and qualitative approaches*. Pearson international edition.
434. NFPC, 2010. *National Population & Family Planning Commission of P.R. China*. <http://www.nhfpc.org.cn>
435. Ng, L.F.Y., and Tuan, C., 2003. Location decisions of manufacturing FDI in China: Implications of China’s WTO accession. *Journal of Asian Economics*.
436. North, D.C., 1955. Location theory and regional economic growth. *Journal of Political Economy*, 63(3), pp.243–58.
437. North, D.C., 1995. *The new institutional economics and third world development*. Psychology Press.
438. Novotný, J., 2007. On the measurement of regional inequality: does spatial dimension of income inequality matter? *Annals of Regional Science*, 41(3), pp.563–580.

439. Online, P.D., 2007. Construct harmony society: getting rid of “new three big mountains.”
440. Orloff, A.S., 2002. *Women’s employment and welfare regimes: Globalization, export orientation and social policy in Europe and North America*. Geneva: UNRISD.
441. Østergaard, C. S., and Petersen, C., 1991. *Official profiteering and the Tiananmen Square demonstrations in China*. Institute of Political Science, University of Aarhus.
442. Overmyer, D.L., 2003. Religion in China today: introduction. *The China Quarterly*, 174(June), pp.307–316.
443. Paldam, M., 2002. The cross-country pattern of corruption: Economics, culture and the seesaw dynamics. *European Journal of Political Economy*, 18, pp.215–240.
444. Pannell, C.W., 2007. The China challenge: observations on the outlook for the 21 Century. *Eurasian Geography and Economics*, 48(1), pp.3–15.
445. Papanek, G.F., and Kyn, O., 1986. The effect on income distribution of development, the growth rate and economic strategy. *Journal of Development Economics*, 23 (1), pp. 55–56.
446. Paul, J., 1997. *Post-Dependency: The Third World in an Era of Globalism and Late Capitalism*. *Social Transformation and Human Governance*, 22 (2), pp. 205–215.
447. Pedroni, P., and Yao, J.Y., 2006. Regional income divergence in China. *Journal of Asian Economics*, 17(2), pp.294–315.
448. Pei, M., 2001. The roots of China’s corruption. *Far Eastern Economic Review*, 164(6), p.29.
449. Pei, X.M., 1999. Old Age Support in China: The Role of the State and the Family. *The International Journal of Aging and Human Development*, 49(3), pp.197–212.

450. Pellegrini, L., and Gerlagh, R., 2008. Causes of corruption: A survey of cross-country analyses and extended results. *Economics of Governance*, 9, pp.245–263.
451. People's Daily Online, 2006. Survey: education fees top cause of poverty. *People's Daily Online*.
452. People's Daily Online, 2009. China's GDP is third in the world. *People's Daily Online, Business*.
453. Perroux, F., 1955. A note on the notion of growth pole. *Applied Economy*.
454. Perry, E.J., 1999. Crime, corruption, and contention. In: M. Goldman and R. MacFarquhar, eds., *The paradox of China's post-Mao reforms*. Harvard University Press.
455. Petrakos, G., Rodríguez-Pose, A., and Rovolis, A., 2005. Growth, integration, and regional disparities in the European Union. *Environment and Planning A*, 37(10).
456. Pickles, J., and Smith, A., 1998. *Theorising transition, the political economy of post-communist transformations*. London and New York: Routledge.
457. Population, N., 1989. *Population Statistics, 1949-1985*. Beijing: China Finance and Economics Publishing House.
458. Population, N., and Family Planning Commission of P. R. China, 2010. *Reports on China's migrants population development*. Beijing: China Population Press.
459. Postiglione, G.A., 1992. China's national minorities and educational change. *Journal of contemporary Asia*, 18(5), pp.627–638.
460. Postiglione, G., 2006. Schooling and inequality in China. In: G. Postiglione, ed., *Education and social change in China: inequality in a market economy*. Armonk, NY and London, English: M.E. Sharpe.
461. Postiglione, G.A., 2010. *China's national minority education: Culture, schooling, and development*.

462. Potter, P.B., 2003. Belief in control: regulation of religion in China. *The China Quarterly*, 174(June), pp.317–337.
463. Potter, R.B., 2004. *Geographies of development*. Pearson Education.
464. Powell, G.N. ed., 1999. *Handbook of gender and work*. Thousand Oaks: Sage.
465. Psacharopoulos, G., 1984. Returns to education: A future international update and implications. *Journal of Human Resources*, 20(4), pp.583–604.
466. Putterman, L., 1992. Dualism and reform in China. *Economic Development and Cultural Change*, 40(3), pp.467–493.
467. Qian, X., and Smyth, R., 2008. Measuring regional inequality of education in China: widening coast-inland gap or widening rural-urban gap? *Journal of International Development*, 20(2), pp.132–144.
468. Qiao, B., Martinez-Vazquez, J., and Xu, Y., 2008. The trade-off between growth and equity in decentralization policy: China's experience. *Journal of Development Economics*, 86(1), pp.112–128.
469. Qing, Y., 2005. Factor decomposition of sub-provincial fiscal disparities in China. *China Economic Review*, 16(4), pp.403–418.
470. Qu, Y., 2008. Reflections on the issue of students from extremely poor families in higher education. *Heilongjiang Science and Technology Information*, 23(182).
471. Qu, Y., 2014. The Comparative Study of Household Elderly Care in China, the Philippines, and Japan. *Home Health Care Management & Practice*, April.
472. Quade, E.A., 2007. The logic of anticorruption enforcement campaigns in contemporary China. *Journal of Contemporary China*, 16(February (50)), pp.65–77.
473. Quah, D., 1996. Twin peaks: growth and convergence in models of distribution dynamics. *Economic Journal*, 106(437).

474. Ramsey, F., 1928. A mathematical theory of saving. *Economic Journal*, 38(152), pp.543–59.
475. Ravallion, M., and Chen, S., 2007. China's (uneven) progress against poverty. *Journal of Development Economics*, 82(1), pp.1–42.
476. Rawski, T., 2001. What is happening to China's GDP statistics. *China Economic Review*, 12(4), pp.347–354.
477. Rawski, T., and Xiao, W., 2001. Roundtable on Chinese economic statistics: Introduction. *China Economic Review*, 12(4), pp.298–302.
478. Reher, D.S., 1998. Family Ties in Western Europe: Persistent Contrasts. *Population and Development Review*, 24(2), pp.203–234.
479. Renard, M., 2002. A pessimistic view on the impact of regional inequalities. *China Economic Review*, 13(4), pp.341–344.
480. Riskin, C., 1987. Feeding China: the experience since 1949. *Wider working paper*, WP27.
481. Riskin, C., 1998. Seven questions about the Chinese famine of 1959–1961. *China Economic Review*, 9(2), pp.111–124.
482. Roberts, K., 2001. The determinants of job choice by rural labour migrants in Shanghai. *China Economic Review*, 12(1), p.2001.
483. Roberts, M., Deichmann, U., Fingleton, B., and Shi, T., 2010. *The impact of infrastructure on economic development: using the new economic geography to evaluate China's highway expansion*, Mimeo. Cambridge: University of Cambridge/World Bank.
484. Robeyns, I., 2006. Three models of education: rights, capabilities and human capital. *Theory and Research in Education*, 4(1), pp.69–84.
485. Robinson, G.M., 1998. *Methods and techniques in human geography*. First ed. England: John Wiley and Sons.

486. Rock, M.T., and Bonnett, H., 2004. The comparative politics of corruption: Accounting for the East Asian paradox in empirical studies of corruption, growth and investment. *World Development*, 32(6), pp.999–1017.
487. Rose, S., and Viju, C., 2014. Income inequality in post-communist central and eastern European countries. *Astern Journal of European Studies* 5(1), pp. 5-19.
488. Rostow, W.W., 1956. The take-off into self-sustained growth. *The Economic Journal*, 66(261), pp.25–48.
489. Rostow, W.W., 1960. *The stages of economic growth*. First ed. Cambridge: Cambridge University Press.
490. Rozelle, S., Dong, X.Y., Zhang, L.X., and Mason, A., 2002. Gender wage gaps in post-reform rural China. *Pacific Economic Review*, 7(1), pp.157–179.
491. Rubin, A., and Babbie, E.R., 2008. *Research methods for social work*. Belmont, CA.
492. Ruffin, R., 2003. David Ricardo's discovery of comparative advantage. *History of political economy*, 34(4): 727-748.
493. Sachs, G. ed., 1992. *The development dictionary*. First ed. London: Zed Books.
494. Sargent, T.J., and Wallace, N., 1995. Rational expectations and the theory of economic policy. In: S. Estrin and A. Marin, eds., *Essential Readings in Economics*. New York: St. Martin's Press, pp.366–382.
495. Sato, H., 2006. Housing inequality and housing poverty in urban China in the late 1990s. *China Economic Review*, 17(1), pp.37–50.
496. Saunders, P., 2006. *Social Class and stratification*. Routledge: London and New York.
497. Schumpeter, J.A., 1947. Theoretical problems of economic growth. *The Journal of Economic History*, 7(1), pp 1-9.
498. Schultz, T., 1961. Investment in human capital. *The American Economic Review*, 1(2), pp.1–17.

499. Scoggins, S.E., 2014. Navigating fieldwork as an outsider: observations from interviewing police officers in China. *American Political Science Association. Symposium.*
500. Seers, D., 1979. The birth, life and death of development economics. *Development and Change*, 10(4): 707-719.
501. Sen, A., 1999. *Development as Freedom*. Oxford: OUP Oxford
502. Sen, A., 2000. *Social exclusion: concept, application and scrutiny*. Manila: Asian Development Bank.
503. Shah, A., Shen, C. and Zou, H.-f. eds., 2006. *Regional disparities in China*. First ed. Beijing: People's Publishing House.
504. Shan, J., 2002. A macroeconometric model of income disparity in China. *International Economic Journal*, 16(Part 2), pp.47–64.
505. Shabad, T., 1972. *China's changing map: national and regional development, 1949-1971*. FA Praeger.
506. Shang, B., 2007. Gansu low income welfare and GDP. *Worker' Daily (GongrenRibao)*.
507. Shavit, Y. and Blossfeld, H.P. eds., 1993. *Persistent inequality: Changing educational attainment in thirteen countries*. Boulder: Westview Press.
508. Shavit, Y. and Muller, W. eds., 1998. *From school to work. A comparative study of educational qualifications and occupational destinations*. Oxford: Clarendon Press.
509. Shen, C.L., and Zou, H.F., 2008. China: regional disparities in poverty distribution. *Division of Labour & Transaction Costs*, 3(1), pp.1–17.
510. Shen, J., Wong, K.-Y., Chu, K.-Y., and Feng, Z., 2000. The spatial dynamics of foreign investment in the Pearl River Delta, South China. *The Geographical Journal*, 166(4), pp.312–322.

511. Shenzhen Bureau of Statistics. *Shenzhen statistical yearbook, 2008*. Shenzhen: Shenzhen Statistics Press.
512. Shi, X.Z., 2011. Famine, fertility, and fortune in China. *China Economic Review*, 22(2), pp.244–259.
513. Shirk, S.L., 1993. *The political logic of economic reform in China*. Berkeley: University of California Press.
514. Short, S.E., and Zhai, F.Y., 1998. Looking locally at China's one-child policy. *Studies in Family Planning*, 29(4), pp.373–387.
515. Sicular, T., Ximing, Y., Gustafsson, B., and Shi, L., 2007. The urban–rural income gap and inequality in China. *Review of Income and Wealth*, 53(1), pp.93–126.
516. Silverman, D., 2005. *Doing qualitative research: a practical handbook*. SAGE Publications Ltd.
517. Simon, D., 1997. Development reconsidered; new directions in development thinking. *Geografiska Annaler. Series B, Human Geography*. 79(4), pp.183–201.
518. Smith, A., 1776. *An inquiry into the wealth of nations*. London: Strahan and Cadell, London.
519. Smith, N., 1984. *Uneven development*. New York, NY: Blackwell.
520. Smith, N., 1988. The region is dead! Long live the region! *Political Geography Quarterly*, 7(2), pp.141–52.
521. Smith, N., and Dennis, W., 1987. The restructuring of geographical scale: coalescence and fragmentation of the northern core region. *Economic Geography*, 63(2), pp. 160–182.
522. So, A. Y., 1990. *Social Change and Development: Modernization, Dependency and World-System Theories*. London: SAGE Publications Ltd.

523. Solinger, D.J., 1999a. China's floating population: implications for state and society. In: R. MacFarquhar and M. Goldman, eds., *The Paradox of China's Post-Mao Reforms*. Cambridge: Harvard University Press, pp.220–40.
524. Solinger, D.J., 1999b. *Contesting citizenship in urban China: Peasant migrants, the state, and the logic of the market*. Berkeley, California: University of California Press.
525. Solow, R.M., 1956. A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70, pp.65–94.
526. Song, Y.P., and Tan, L., 2004. On Gender Impartiality in China's Elementary Education. *Collection of Women's Studies*(Fu Nv Yan Jiu Lun Cong), 2(58),pp. 21-27.
527. Sorensen, A.B., 1996. The structural basis of social inequality. *American Journal of Sociology*, 101, pp.1333–1365.
528. Stavis, B., 1976. China's rural local institutions in comparative perspective. *Asian Survey*, 16(4), pp.381–396.
529. Stiglitz, J.E., 1975. The theory of" screening," education, and the distribution of income. *The American Economic Review*, 65(3), pp.283–300.
530. Stiglitz, J.E., 1989. Markets, market failure, and development. *American Economic Review*, 79(2), pp.197–203.
531. Stiglitz, J. E., Ocampo, J.A., Ffrench-Davis, R., Nayyar, D., and Spiegel, S., 2006. *Stability with growth: macroeconomics, liberalization and development*. Oxford: Oxford University Press.
532. Strauss, J., 2007. *The History of the People's Republic of China, 1949-1976*. Cambridge University Press.
533. Sudman, S., and Bradburn, N.M., 1983. *Asking questions: a practical guide to questionnaire design*. San Francisco: Jossey-Bass Publishers.

534. Sullivan, K., and Gilbert, D., 2004. *Research methods and statistics*. Harlow: Pearson.
535. Sutton, S.A., 2009. *Knowledge management guided by economic valuation models, 2009*. Third IEEE International Conference on Space Mission Challenges for Information Technology, 07/2009
536. Sun, Y., 2004. *Corruption and market in contemporary China*. Ithaca, NY: Cornell University Press.
537. Svensson, J., 2005. Eight questions about corruption. *The Journal of Economic Perspectives*, 19 (Summer (3)), pp.19–42.
538. Szelenyi, I., and Manchin, R., 1987. Social policy under state socialism: market, redistribution, and social inequalities in East European socialist societies. *Stagnation and Renewal in Social Policy*.
539. Szirmai, A., 2005. *The dynamics of socio-economic development: an introduction*. Cambridge: Cambridge University Press.
540. Tabuchi, T., 1988. Interregional income differentials and migration: their interrelationships, *Regional Studies*, 21(1), pp.1–10.
541. Tanzi, V., 1998. Corruption around the world: Causes, consequences, scope and cures. *IMF Staff Papers*, 45, pp.559–594.
542. Tanzi, V., and Davoodi, H., 2001. Corruption, growth and public finances. In: A.K. Jain, ed., *The Political Economy of Corruption*. pp.89–110.
543. Tao, J., Zheng, B., and Mow, S.L., 2004. *Holding up half the sky: Chinese women past, present, and future*. The Feminist Press: the City University of New York.
544. Tao, R., 2009. Hukou reform and social security for migrant workers in China. In: R. Murphy, ed., *Labor migration and social development in contemporary China*. London and New York: Routledge, pp.73–95.

545. Tang, W., and Parish, W. L., 2000. *Chinese urban life under reform: The changing social contract*. Cambridge University Press, 2000.
546. Tang, Y.J., 1991. *Confucianism, Buddhism, Daoism, Christianity and Chinese Culture*. Springer.
547. Tarschys, D., 2001. Wealth, values, institutions: Trends in government and governance. In: OECD, ed., *Governance in the 21st century*. Paris: Organisation for Economic Co-operation and Development.
548. Teiwes, F.C., and Sun, W., 1993. The politics of agricultural cooperativization in China: Mao, Deng Zihui, and the "high Tide" of 1955. Routledge.
549. Terhal, P., 1992. Economic growth and political insecurity: towards a multidisciplinary approach. *Development and Security*, 36.
550. Thakur, R., 2005. Social stratification in contemporary China. This article originates from the India-China Comparisons: State and Society workshop held in Leiden, the Netherlands, 27-28 May 2004, organized and funded by the Indian Council for Social Science Research (ICSSR), the Centre d'Etudes et de Recherches Internationales (CERI)
551. Thornton, J., 2001. The Kuznets inverted-U hypothesis: panel data evidence from 96 countries. *Applied Economics Letters*, 8(1), pp.15–16.
552. Tiebout, C.M., 1956. Exports and regional economic growth: Rejoinder. *Journal of political economy*, 64(2), pp.169–199.
553. Timmer, C.P., 2004. The road to pro-poor growth: the Indonesian experience in regional perspective. *Bulletin of Indonesian Economic Studies*, 40(2), pp.177–207.
554. Tisdell, C., 2001. Globalisation and sustainability: environmental Kuznets curve and the WTO globalisation. *Ecological Economics*, 39(2), pp.185–196.
555. Tong, C.S.P., 1999. Production efficiency and its spatial disparity across China's TVEs. *Journal of Asian Economics*, 10(3), p.415.

556. Torres, R., and Momsen, J.H., 2004. Challenges and potential for linking tourism and agriculture to achieve pro-poor tourism objectives. *Progress in Development Studies*, 4(4), pp. 294-318.
557. Treisman, D., 2000. The causes of corruption: A cross-national study. *Journal of Public Economics*, 76, pp.399–457.
558. Treisman, D., 2003. Postcommunist corruption. In: N.F. Campos and F. Fidrmuc, eds., *Political economy of transition and development*. Dordrecht, Netherlands: Kluwer, pp.201–226.
559. Treisman, D., 2007. What have we learned about the causes of corruption from ten years of cross-national empirical research? *Annual Review of Political Science*, 10, pp.211–244.
560. Tsai, C.M., 2001. The causes of regional disparity in China. *Mainland China Studies*, 44(Part T), pp.67–90.
561. Tsang, M., 1994. Costs of education in China: Issues of resource mobilization, equality, equity and efficiency. *Education Economics*, 2(3), pp.287–312.
562. Tsang, M., 1996. The financial reform of basic education in China, *Economics of education review*, 15(4), p.429.
563. Tsang, M., and Ding, Y., 2005. Resource utilization and disparities in compulsory education in China. *China Review*, 5(1), pp.1–31.
564. Tsui, K., 1993. Decomposition of China's regional inequalities. *Journal of Comparative Economics*, 17, pp.600–627.
565. Tsui, K., 2005. Local tax system, intergovernmental transfers and China's local fiscal disparities. *Journal of Comparative Economics*, 33, pp.173–196.
566. Tsui, K.Y., 2007. Forces shaping China's interprovincial inequality. *Review of Income and Wealth*, 53(1), pp.60–92.
567. Turner, S., 2013. Red stamps and green tea: fieldwork negotiations and dilemmas in the Sino-Vietnamese borderlands. *Area*, 45(4), pp.396-402.

568. UNDP, n.d. *China Human Development Report 2006*. New York: UNDP.
569. Ul Haq, M., 1999. *Reflections on human development*. Oxford University Press.
570. United Nations Development Programme (UNDP), 2005. *China 's human development report 2005*. Washington DC: United Nations Development Programme.
571. United Nations Educational, Scientific and Cultural Organization (UNESCO), 1990. Jomtien, Thailand: The World Conference on Education for All.
572. Unwin, T., 1994. *Atlas of world development*. First ed. England: John Wiley and Sons.
573. Van Zanden, J.L., 1995. Tracing the beginning of the Kuznets curve: western Europe during the early modern period. *The Economic History Review*, 48(4), pp.643–664.
574. Vicente, J., and Borge, L., 2000. Inequality and growth: inverted and uninverted U-shapes. *Applied Economics Letters*, 7(8), pp.497–500.
575. Vogel, E.F., 1989. *One step ahead in China: Guangdong under reform*. Cambridge, MA: Harvard University Press.
576. Vogel, E.F., 1991. *Four little dragons: The spread of industrialization in East Asia*. Harvard University Press.
577. WHO, 1999. *World Health Report 1999: Making a Difference*. Geneva: WHO
578. Walder, A.G., 2002. Markets and income inequality in rural China: political advantage in an expanding economy. *American Sociological Review*, 67(2), pp.231–253.
579. Wan, G., 2004. Accounting for income inequality in rural China: A regression-based approach. *Journal of Comparative Economics*, 32(2), pp.348–363.

580. Wan, G., 2007. Understanding regional poverty and inequality trends In China: methodological issues and empirical findings. *Review of Income and Wealth*, 53(1), pp.25–34.
581. Wan, G., 2008. Introduction to the special section: poverty and inequality in China. *Review of Development Economics*, 12(2), pp.416–418.
582. Wan, G., Lu, M., and Chen, Z., 2007. Globalization and regional income inequality: Empirical evidence from within China. *Review of Income and Wealth*, 53(March (1)), pp.35–59.
583. Wan, G., and Zhang, X., 2006. Rising inequality in China. *Journal of Comparative Economics*, 34(4), pp.651–653.
584. Wang, E., 2010. Fiscal decentralization and revenue/expenditure disparities in China. *Eurasian Geography and Economics*, 51(6).
585. Wang, F.L., 2004. Reformed migration control and new targeted people: China's hukou system in the 2000s. *China Quarterly*, 177, pp.115–132.
586. Wang, F.L., 2005a. Brewing tensions while maintaining stabilities: The dual role of the hukou system in contemporary China. *Asian Perspective*, 29(4), pp.85–124.
587. Wang, F.L., 2005b. *Organizing through division and exclusion: China's Hukou system*. Stanford: Stanford University Press.
588. Wang, F.L., 2010. Renovating the great floodgate: The reform of China's Hukou system. In: M. Whyte, ed., *Rural-urban inequality in contemporary China*. Cambridge, MA: Harvard University Press, pp.335–364.
589. Wang, G. and Wong, J. eds., 1998. *China's political economy*. Singapore: World Scientific Publishing Co.
590. Wang, L., 2011. Social exclusion and inequality in higher education in China: A capability perspective. *International Journal of Educational Development*, 31(3), pp.277–286.

591. Wang, L., 2008. Education inequality in China: problems of policies on access to higher education. *Journal of Asian Public Policy*, 1(1), pp.115–123.
592. Wang, M., and Cai, F., 2008. Gender earnings differential in urban China. *Review of Development Economics*, 12(2), pp.442–454.
593. Wang, Q., Shi, G., and Zhang, Y., 2002. Changes in income inequality and welfare under economic transition: evidence from Urban China. *Applied Economics Letters*, 9(15), pp.989–991.
594. Wang, R., 2002. *Political dimensions of county government budgeting in China*. Brighton.
595. Wang, X., 2007. *Grey income and income disparity*. National Economic Research Institute, Working Paper (2007–001), pp. 1–27.
596. Wang, X., 2010. Grey income and national income distribution [Huiseshouruyuguo mingshourufenpei]. *Comparison*, 48, pp.1–29.
597. Wang, X., and Fan, G., 2004. The changing trend and causes of Chinese regional inequality [Zhongguodiquchaju de biandongqushi he yingxiangyinsu]. *Economic Studies*, 1, pp.33–44.
598. Wang, X., and Woo, W.T., 2011. The size and distribution of hidden household income in China. *Asian Economic Papers*, 10(1), pp.1–26.
599. Wang, Y., and Yao, Y., 2003. Sources of China's economic growth 1952-1999: incorporating human capital accumulation. *China Economic Review*, 14(1), pp.32–52.
600. Wang, Z., and Zhai, F., 1998. Tariff reduction, tax replacement, and its implication for income distribution in China. *Journal of Comparative Economics*, 26(2), pp.358–387.
601. Warner, W.L., Meeker, M., and Eells, K., 1949. *Social class in America; a manual of procedure for the measurement of social status*. Oxford, England: Science Research Associates.

602. Waters, J.L., 2006. Emergent geographies of international education and social exclusion. *Antipode*, 38(1046–1068).
603. Watson, J.L., 2010. *Class and social stratification in post-revolution China*. Cambridge: CUP.
604. Weber, M., 1994. *Sociological writings*. New York: Continuum International Publishing Group.
605. Wedeman, A., 2004. The intensification of corruption in China. *The China Quarterly*, 180(1), pp.895–921.
606. Wedeman, A., 2005. Anticorruption campaigns and the intensification of corruption in China. *Journal of Contemporary China*, 14(42), pp.93–116.
607. Wei, S.-j. 1997. *Why is corruption so much more taxing than tax? Arbitrariness kills* (No. w6255). National Bureau of Economic Research.
608. Wei, S.-j., 2000. How taxing is corruption on international investors. *Review of Economics and Statistics*, 82, pp.1–11.
609. Wei, Y.D., 2007. Regional development in China: transitional institutions, embedded
610. Wei, Y.D., and Ye, X., 2004. Regional inequality in China: a case study of Zhejiang province. *Tijdschrift voor Economische en Sociale Geografie*, 95(1), pp.44–64.
611. Wei, Y.H.D., 1999. Regional inequality in China. *Progress in Human Geography*, 23(1).
612. Wei, Y.H.D., 2002. Multiscale and multimechanisms of regional inequality in China. *Journal of Contemporary China*, 11(30), pp 109-124.
613. Wei, Y.H.D., Yu, D., and Chen, X., 2011. Scale, agglomeration, and regional inequality in provincial China. *Tijdschrift voor Economische en Sociale Geografie [Journal of Economic and Social Geography]*, 102(4).

614. Wei, Y.H.D., and Fan, C.C., 2000. Regional inequality in China: a case study of Jiangsu province. *Professional Geographer*, 52(3).
615. Wei, Y.H.D., and Fang, C., 2006. Geographical and structural constraints of regional development in Western China: a study of Gansu Province. *Issues and Studies*, 42(2).
616. Wei, Y.H.D., Li, W.M., and Wang, C.B., 2007. Restructuring industrial districts, scaling up regional development: a study of the Wenzhou model, *China. Economic Geography*, 83 (4), pp 421-444.
617. Wei, Y.H.D., and Ye, X., 2009. Beyond convergence: space, scale and regional inequality in China. *Tijdschrift voor Economische en Sociale Geografie [Journal of Economic and Social Geography]*, 100(1).
618. Weingast, B., 1995. The economic role of political institutions: Market-preserving federalism and economic development. *Journal of Law, Economics, and Organization*, 11, pp.1–31.
619. Weng, Q., 1998. Local impacts of the post-Mao development strategy: the case of the Zhujiang Delta, southern China. *International Journal of Urban and Regional Research*, 22(3).
620. Whalley, J., and Zhang, S., 2007. A numerical simulation analysis of (Hukou) labour mobility restrictions in China. *Journal of Development Economics*, 83(2), pp.392–410.
621. White, G., 1996. Corruption and the transition from socialism in China. *Journal of Law and Society*, 23, pp.149–169.
622. White Papers of the Chinese Government, 2006. Beijing: Foreign Language Press.
623. White Papers of the Chinese Government, 2007. Beijing: Foreign Language Press.

624. Wiederhold, A., 2014. Conducting fieldwork at and away from home: shifting researcher positionality with mobile interviewing methods. *Qualitative Research*, pp. 1–16.
625. Williamson, J.G., 1965. Regional inequalities and the process of national development. *Economic Development and Cultural Change*, 13, pp.1–84.
626. Willis, K., 2005. *Theories and practices of development*. Routledge: Oxon.
627. Woetzel, J.R., 2004. China: the best of all possible models. *McKinsey Quarterly, Special Edition*, pp.114–117.
628. Womack, B., 1986. Where Mao went wrong: epistemology and ideology in Mao's leftist politics. *The Australian Journal of Chinese Affairs*, 16(July), pp.23–40.
629. Wong, G.K.M., and Lu, Y., 2002. Income and social inequality in China: impact on consumption and shopping patterns. *International Journal of Social Economics*, 29(5), p.370.
630. Wong, J., 2001. Understanding recent changes in China's statistical system. *China Perspectives*, 35, pp.56–63.
631. Wong, L., 1994. Privatization of social welfare in post-Mao China. *Asian Survey*, 34(4), pp.307–325.
632. Wong, T.C., Han, S.S., and Zhang, H.M., 2015. *Population Mobility Urban Planning and Management in China*, Switzerland: Springer International Publishing.
633. World Bank, 1992. *Governance and development*. Washington, DC: World Bank.
634. World Bank, 1997a. Helping countries combat corruption: The role of the World Bank. In: *Poverty reduction and economic management*. Washington: DC: World Bank Washington, DC: World Bank.

635. World Bank, 1997b. *Old age security: Pension reform in China*. China 2020 series, Washington, DC.
636. World Bank, 2000b. *Making transition work for everyone: Poverty and inequality in Europe and Central Asia*. Washington, DC: World Bank.
637. World Bank, 2003. *World development report 2003: sustainable development in a dynamic world*. The World Bank: Oxford University Press.
638. World Bank, 2005. *World development report 2005: Equity and development*. New York: Oxford University Press.
639. World Bank, 2007. *World Development Indicators 2007 (CD-ROM)*. Washington, DC: World Bank.
640. World Bank, 2010. *World Development Report 2010*. Washington, DC: World Bank.
641. World Bank, 2011. *Reducing inequality for shared growth in China: Strategy and policy options for Guangdong province*. Washington, D.C.: World Bank.
642. Wu, F., 2004. Urban poverty and marginalization under market transition: the case of Chinese cities. *International Journal of Urban and Regional Research*, 28(2), pp.401–423.
643. Wu, J.-M., 2010. Rural migrant workers and China's differential citizenship. In: M. Whyte, ed., *One country, two societies: Rural-urban inequality in contemporary China*. Cambridge, MA: Harvard University Press, pp.55–81.
644. Wu, T.M., 2003. Urban-rural employment disparity in China's urban informal sector. *Mainland China Studies*, 46(Part 5), pp.127–130.
645. Wu, W., 2001. *Labour mobility in China: a review of the program redressing discrimination against labour migrants 1997–2001*. Beijing: Ford Foundation.
646. Wuwei Statistical Bureau (WuSB), 2003. *Wuwei statistical yearbook*. Wuwei, China. (内部资料)

647. Wu, W.P., 2004. Sources of migrant housing disadvantage in urban China. *Environment and Planning A*, 36(7), pp.1285–1304.
648. Wu, X., and Treiman, D.J., 2007. Inequality and equality under Chinese socialism: The hukou system and intergenerational occupational mobility. *American Journal of Sociology*, 113(2), pp.415–445.
649. Wu, X.G., 2007. Zhongguo de hujizhiduyudaijizhiyeliudong (the Chinese household registration and intergenerational social mobility). *ShehuixueYanjiu (Sociological studies)*, 6, pp.38–65.
650. Wu, X.G. , 2010. Economic transition, school expansion and educational inequality in China, 1990-2000. *Research in Social Stratification and Mobility*, 28(1), pp.91–108.
651. Wu, X.G., and Treiman, D.J., 2004. The household registration system and social stratification in China 1955-1996. *Demography*, 41(2), pp.363–384.
652. Wu, Y., 2005. Economic transition, collective corruption and political reform—An economic analysis based on the experiences of transition in China [JingjiZhuangui, jitifubaiyuzhengzhigaige–Jiyuzhongguozhuanguijingan de jingjixuefenxi]. *Contemporary Economic Science*, 27(2), pp.21–26.
653. Xinhua net, 1959. *Communal kitchens in 1958*. Available at: <<http://news.xinhuanet.com/edu/1959.htm>>.
654. Xinhua net, 2005. *China canceled tuitions and fees for compulsory education in rural areas; farmers benefited 15 billion yuan per year (zhongguoquxiaonongcunzhongxiaoxuexuezafei, nong min meinianshouhui 150 yi)*. Available at: <http://news.xinhuanet.com/edu/2005-12/28/content_3978237.htm>.
655. Xu, K.N., and Wang, J., 2006. An empirical study of a linkage between natural resource abundance and economic development. *Economic Research Journal (Chinese)*, 1, pp.78–89.

656. Xu, L.C., and Zou, H.F., 2000. Explaining the changes of income distribution in China. *China Economic Review (1043951X)*, 11(2), p.149.
657. Xu, Z.Y., and Li, S.T., 2006. Analysis of the recent changes of regional disparity in China (Jinnianlaizhongguodiquchaju de bianhuaqushi). *JingjiYanjiu (Economic Research)*, 7, pp.106–116.
658. Xue, S., 2004. China's statistical system and resources. *Journal of Government Information*, 30(1), pp.87–109.
659. Yan, S.P., 2007. Human capital, institution and wage differences: Empirical evidences of dual labor market in mega Chinese cities. *Management World (GuanliShijie)*, 6, pp.4–14.
660. Yang, C., 2006b. The geopolitics of cross-boundary governance in the greater Pearl River Delta, China: a case study of the proposed Hong KongZhuhaiMacao Bridge. *Political Geography*, 25(7).
661. Yang, C., 2012. Restructuring the export-oriented industrialization in the Pearl River Delta, China: Institutional evolution and emerging tension. *Applied Geography*, 32(1).
662. Yang, C., and Zhao, F., 2004. A macro-economic analysis of administrative corruption [Xingzhengfubai de hongguanjingjixuefenxi]. *Economic Studies*, 9, pp.101–109.
663. Yang, D., 1990. Patterns of China's regional development strategy. *The China Quarterly*, 122(June), pp.230–257.
664. Yang, D., 2000. *Theories and practices of educational equality in China (in Chinese)*. Available at: <<http://www.fon.org.cn/roomofmembers/DONGPING/index.htm>>.
665. Yang, D., and Zhou, J., 2003. *Preliminary research on the indicators of educational equality in China*. Available at: <http://www.usc.cuhk.edu.hk/wk_wzdetails.asp?id=4101>.

666. Yang, D.L., 1998. *Calamity and reform in China: state, rural society, and institutional change since the Great Leap Famine*. Stanford University Press.
667. Yang, D.L., 2006. Economic transformation and its political discontents in China: authoritarianism, unequal growth, and the dilemmas of political development. *Annual Review of Political Science*, 9(1), pp.143–164.
668. Yang, D.T., 2002. What has caused regional inequality in China? *China Economic Review*, 13, pp.331–334.
669. Yang, D.T., 2005. On the economic analysis of China's Great Leap Forward. *China Journal of Economics*, June.
670. Yang, M.M., 1994. *Gifts, favors, and banquets: The art of social relationships in China*. USA: Cornell University Press.
671. Yang, X., and Zhang, D., 2003. Economic development, international trade, and income distribution. *Journal of Economics*, 78(2), p.163.
672. Yao, S., 2000. Economic development and poverty reduction in China over 20 years of reforms. *Economic Development and Cultural Change*, 48(3), p.447.
673. Yao, S., 2001. On regional inequality and diverging clubs: a case study of contemporary China. *Journal of Comparative Economics*, 29, pp.466–484.
674. Yao, S., 2002. Privilege and corruption: The problems of China's socialist market economy. *American Journal of Economics and Sociology*, 61, pp.279–299.
675. Yao, S., Zhang, Z., and Feng, G., 2005. Rural-urban and regional inequality in output, income and consumption in China under economic reforms. *Journal of Economic Studies*, 32(1), pp.4–24.
676. Yao, S., Zhang, Z., and Hanmer, L., 2004. Growing inequality and poverty in China. *China Economic Review* (1043951X), 15(2), pp.145–163.
677. Yao, Y., 2009. The political economy of government policies toward regional inequality in China. In: Y. Huang and A. Bocchi, eds., *Reshaping economic geography in East Asia*. Washington, DC: World Bank, pp.218–240.

678. Ye, X., and Wei, Y.H.D., 2005. Geospatial analysis of regional development in China: the case of Zhejiang province and the Wenzhou model. *Eurasian Geography and Economics*, 46(6).
679. Ye, X.Y., and Leipnik, M., 2013. Beyond Small Business and Private Enterprises in China: Global and Spatial Perspectives. *Entrepreneurship and Economic Growth in China*, 2013.
680. Yeung, Y.M., 2006. An emerging development focus from the Pearl River Delta west to western Guangdong: a research report. *Eurasian Geography and Economics*, 47(2).
681. Yeung, H.W.C., and Lin, G.C.S., 2003. Theorizing economic geographies of Asia. *Economic Geography*, 79(2), pp.107–128.
682. Yi, Z., 1992. Changes in family structure in China. *The Population of Modern China*, pp 535-547.
683. Yin, R.K., 2003. *Case study research: design and methods*. California: Thousand Oaks.
684. Ying, L., 1999. China's changing regional disparities during the reform period. *Economic Geography*, 75(1), pp.59–70.
685. You, J.S., and Khagram, S., 2005. A comparative study of inequality and corruption. *American Sociological Review*, 70(February (1)), pp.136–157.
686. Yu, D., and Wei, Y.H.D., 2003. Analyzing regional inequality in post-Mao China in a GIS environment. *Eurasian Geography and Economics*, 44(7).
687. Yu, D.L., 2006. Spatially varying development mechanisms in the Greater Beijing Area: a geographically weighted regression investigation. *The Annals of Regional Science*, 40(1), pp.173–190.
688. Yu, D.L., 2014. Understanding regional development mechanisms in Greater Beijing Area, China, 1995–2001, from a spatial–temporal perspective. *GeoJournal*, 79(2), pp.195–207.

689. Yu, D., and Wei, Y.H.D., 2008. Spatial data analysis of regional development in Greater Beijing, China, in a GIS environment. *Papers in Regional Science*, 87(1).
690. Yu, J., and Chen, A., 1985. Discussion of the gap between the east and the west and special policies for developing the west. *Journal of Chinese Industrial Economy*, 4, pp.76–81.
691. Yuan, Z., 2005. Closing the Educational Gaps (in Chinese). *The Journal of Beijing Normal University: Social Science Section*, 3, pp.28–36.
692. Zhang, J., Han, J., Liu, P.-W., and Zhao, Y., 2008. Trends in the gender earnings differential in urban China, 1988-2004. *Industrial and Labor Relations Review*, 61(2), pp.224–243.
693. Zhang, K.H., 2005. Why does so much FDI from Hong Kong and Taiwan go to mainland China? *China Economic Review*, 16(3), pp.293–307.
694. Zhang, L., and Wang, G.X., 2010. Urban citizenship of rural migrants in reform-era China. *Citizenship Studies*, 14(2), pp.145–166.
695. Zhang, P., and Xu, M., 2011. The view from the county: China's regional inequalities of socio-economic development. *Annals of Economics and Finance*, 12(1), pp.183-198.
696. Zhang, P.Y., 2008. Revitalizing old industrial base of Northeast China: Process, policy and challenge. *Chinese Geographical Science*, 18(2), pp.109–118.
697. Zhang, Q.H., and Zou, H.F., 2007. Returns to education, productivity, and economic growth in China. *Journal of Comparative Policy Analysis Research and Practice*, 9(3), pp.293–308.
698. Zhang, Q.H., and Zou, H.F., 2012. Regional inequality in contemporary China, *Annals of Economics & Finance*, 2012.
699. Zhang, T., and Zou, H.-f., 1998. Fiscal decentralization, public spending, and economic growth in China. *Journal of Public Economics*, 67, pp.221–240.

700. Zhang, W., 1989. On the transformation and selection of regional economic development strategy in China. *Economic Research (JinjiYanjiu)*, 10, pp.71–6.
701. Zhang, W., 2001. Rethinking regional disparity in China. *Economic of Planning*, 34(Part 1/2), pp.113–138.
702. Zhang, X., Xing, L., Fan, S., and Luo, X., 2008. Resource abundance and regional development in China. *Economics of Transition*, 16(1), pp.7–29.
703. Zhang, X., and Fan, S., 2004. Public investment and regional inequality in rural China. *Agricultural Economics*, 30(2), p.89.
704. Zhang, X., and Kanbur, R., 2001. What difference do polarisation measures make? An application to China. *Journal of Development Studies*, 37(3), p.85.
705. Zhang, X., and Kanbur, R., 2005. Spatial inequality in education and health care in China. *China Economic Review*, 16(2), pp.189–204.
706. Zhang, Y., 2005. *China 's education: expansion of inequality (in Chinese)*. Available at: <<http://www.cuhk.edu.hk/ics/21c/supplem/essay/>>.
707. Zhang, Y., and Goza, F.W., 2006. Who will care for the elderly in China? A review of the problems caused by China's one-child policy and their potential solutions. *Journal of Aging Studies*, 20(2), pp.151–164.
708. Zhang, Y., and Wan, G., 2006. The impact of growth and inequality on rural poverty in China. *Journal of Comparative Economics*, 34(4), pp.694–712.
709. Zhang, Y.X., 2012. Meeting the aging challenge: China's social care policy for the elderly. *China Development and Governance*.
710. Zhang, Z., and Yao, S., 2001. Regional inequalities in contemporary China measured by GDP and consumption. *Economic Issues*, 6(2), p.13.
711. Zhao, S.X.B., 1997. Spatial disparity in China's educational development: an assessment from the perspective of economic growth. *China Information*, 11(4), pp.14–40.

712. Zhao, X.B., and Tong, S.P., 2000. Unequal economic development in China: spatial disparities and regional policy reconsideration, 1985-1995. *Regional Studies*, 34(6), pp.549–561.
713. Zhao, Y., 2000. Rural-to-urban migration in China: the past and the present. In: L. West and Y. Zhao, eds., *Rural Labour Flows in China*. Berkeley: University of California press, pp.15–33.
714. Zheng, Y.W., 2008. Analysis about the potential ideology factors of the higher education in our country to obtain the region difference of opportunity. *Meitan Higher Education*, 26(2), pp.76–79.
715. Zhou, X.B., and Li, K.W., 2011. Inequality and development: Evidence from semiparametric estimation with panel data. *Economics Letters*, 113(3), pp.203–207.
716. Zhou, Y., 2009. Urbanization, rural-urban income gap, and overall income inequality in China—An empirical test of the inverse U hypothesis [Chengshihua, chengxiangchajuyijiquanguojuminzongtishouruchaju de biandong—Shouruchajudao U xingjiashuo de shizhengji. *China Economics Quarterly*, 8(4), pp.1239–1256.
717. Zhou, and Yang, K., 2004. *An essay on the convergence or divergence of economic growth of China*. Working Paper Series.
718. Zhu, L.J., 2003. The Hukou system of the People's Republic of China: A critical appraisal under international standards of internal movement and residence. *Chinese Journal of International Law*, 2(2), pp.519–565.
719. Zhu, J., 2008. Why are offices for sale in China? A case study of the officeselling chain in Heilongjiang Province. *Asian Survey*, 48(July/August (4)), pp.558–579.
720. Zhu, J., 2012. Shadows of the skyscrapers: Real estate corruption in China. *Journal of Contemporary China*, 21(March (74)).

721. Zhu, Y., 2003. The floating population's household strategies and the role of migration in China's regional development and integration. *International Journal of Population Geography*, 9(6), pp.485–502.
722. Zhuang, J., Dios, E.D., and Lagman-Martin, A., 2010. *Governance and institutional quality and the links with economic growth and income inequality: With special reference to developing Asia*. ADB economics working paper series, 193.