IMPACT OF URBANIZATION ON PERCEIVED LABOR COST CHANGES IN MANUFACTURING INDUSTRIES IN HEBEI OF CHINA

CHEN LISHA

A thesis submitted in fulfilment of the requirements for the award of the degree of Doctor of Philosophy (Management)

Faculty of Management
Universiti Teknologi Malaysia

SEPTEMBER 2014

To my beloved mother, father and husband

ACKNOWLEDGEMENT

There are so many people to thank for helping me in preparing this thesis. First of all, I wish to express my sincere appreciation to Prof. Dr. Amran Bin Md Rasli, my supervisor, for his valuable guidance and encouragement. Prof. Dr. Amran is such a wonderful person and an excellent supervisor, who is knowledgeable, kind and witty. He was always encouraging and supportive of my work, and his contagious optimism and enthusiasm made the tough writing process enjoyable. Without the guidance and encouragement from Prof. Dr. Amran, my thesis would not have been possible.

I am also thankful to my external supervisor Prof. Dr. Wang Jinying in Hebei University for his valuable guidance and advices, from which I have benefitted and learnt a lot. And I am also very thankful to Assoc. Prof. Dr. Rosman Md Yusoff and Dr. Lim Guan Choo for their comments and advices at the proposal stage. Besides, I would like to place on record my sincere gratitude to all those people who helped me, my friends and those who participated in the Expert Opinion Assessment, the interview and survey questionnaire.

Last but not the least, I want to express my sincere thanks to my family members, in particular, my father in law, Prof. Dr. Sun Jianfu, who motivates, supports and encourages me to pursue the doctoral study.

ABSTRACT

The past five decades have witnessed unprecedented economic growth in China. One of the major elements that accelerated this rapid economic growth, especially in manufacturing sectors, is the relatively low labor cost of China. However, labor cost in manufacturing industries of China continues to rise in recent years. Therefore, this study was designed to investigate the rising labor cost from a new perspective based on urbanization as well as its impact on the change of labor cost. A sequential exploratory design as a mixed method was used. Initially, qualitative data were collected and analyzed, and the results were used to develop the survey questionnaire. The qualitative data comprised document reviews, interviews and expert opinion assessments on the components of the labor cost and the impact factors of urbanization on labor cost. Quantitative data were collected from a survey of 200 manufacturing industries in Hebei province. The results of the qualitative data analysis showed that the major components of labor cost consist of social insurance, wage, job training and welfare costs. Social insurance has the most and fastest rise in cost. In addition, six factors of urbanization proposed by the experts are policy factor, human capital investment factor, living costs factor, population factor, economic factor, and individual factor. However, based on the quantitative data analysis, only the first three factors are statistically significant. From the study, it is concluded that there are three implications: model development to address the theoretical contribution, recommendations for the government on policy making and living cost control, and proposals for the employers to minimize negative impact of increasing labor cost.

ABSTRAK

Lima dekad yang lalu telah menjadi saksi kepada pertumbuhan ekonomi yang belum pernah berlaku di China. Salah satu elemen utama yang mempercepatkan pertumbuhan ekonomi yang pesat ini, terutamanya dalam sektor-sektor pembuatan, ialah kos buruh yang rendah di China. Walau bagaimanapun, kos buruh dalam industri pembuatan di China terus meningkat sejak mutakhir ini. Justeru itu, kajian ini dilakukan untuk mengkaji peningkatan kos buruh dari perspektif baharu berasaskan pembandaran dan kesannya kepada perubahan kos buruh. Reka bentuk penerokaan berjujukan sebagai kaedah gabungan telah digunakan. Pada mulanya data kualitatif dikumpulkan dan dianalisis dan kemudian dapatannya digunakan untuk membangunkan soal selidik kajian ini. Data kualitatif terdiri daripada tinjauan dokumen, temu bual dan penilaian pendapat pakar tentang komponen kos buruh dan faktor-faktor kesan pembandaran kepada kos buruh. Data kuantitatif diperoleh daripada kaji selidik ke atas 200 buah industri pembuatan di wilayah Hebei. Dapatan analisis data kualitatif menunjukkan bahawa komponen utama kos buruh terdiri daripada insurans sosial, penggajian, latihan kerja dan kos kebajikan. Insurans sosial mengalami kenaikan dan peningkatan paling cepat dari segi kos. Selain itu, enam faktor perbandaran yang dicadangkan oleh pakar-pakar turut mengalami kenaikan dan peningkatan, iaitu faktor polisi, faktor pelaburan modal insan, faktor kos sara hidup, faktor penduduk, faktor ekonomi dan faktor individu. Namun demikian, berdasarkan analisis data kuantitatif hanya tiga faktor yang pertama secara statistiknya adalah signifikan. Kajian ini merumuskan tiga implikasi, iaitu model pembangunan untuk memenuhi sumbangan teori, cadangan kepada kerajaan tentang dasar dan kawalan kos sara hidup dan cadangan kepada majikan untuk meminimumkan kesan negatif daripada peningkatan kos buruh.

TABLE OF CONTENTS

CHAPTER		TITLE		PAGE	
		DECL	ARATION	ii	
		DEDI	CATION	iii	
		ACKN	NOWLEDGEMENTS	iv	
		ABST	RACT	v	
ABSTRAK		vi			
		TABL	E OF CONTENTS	vii	
		LIST	OF TABLES	xii	
		LIST	OF FIGURES	xiv	
		LIST	OF APPENDICES	xvi	
1	INTR	ODUCT	TION		1
	1.1	Backgro	ound		1
		1.1.1	Labor Cost in Manufacturing Industries of China		2
		1.1.2	Urbanization Process of China		7
	1.2	Stateme	ent of the Problem		14
	1.3	Objectiv	ve of the Study		16
	1.4	Researc	h Questions		16
	1.5	Signific	ances of Study		17
	1.6	Scope a	nd Limitation		18
	1.7	Why He	ebei Province		19
	1.8	Researc	h Process		23
	1.9	Definiti	on of Terms		25
	1.10	Plan of	Thesis		27

2	REV	IEW OF	LITERA	ΓURE	29
	2.1	Introdu	ıction		29
	2.2	Theoretical Base of the Study		30	
		2.2.1	Labor M	igration Theories	30
			2.2.1.1	Lewis Migration Model	30
			2.2.1.2	Todaro Migration Model	33
		2.2.2	Wage De	etermination Theories	35
			2.2.2.1	Equilibrium Price Wages Theory	35
			2.2.2.2	Human Capital Investment Theory	37
	2.3	Urbani	ization, Url	oan Life and Change	39
		2.3.1	Urbaniza	ation and Economic Development	40
		2.3.2	Populati	on and Population Movement	42
		2.3.3	Urban L	ife and Living Costs	45
		2.3.4	City Dev	veloping Strategies and Policies	47
		2.3.5	-	of Urbanization on Urban Structures gy Demand	51
			2.3.5.1	Urban Production	51
			2.3.5.2	Mobility and Transport	52
			2.3.5.3	Infrastructure and Urban Density	53
			2.3.5.4	Private Households	53
	2.4	Chang	ing Labor (Cost in China	54
		2.4.1	Has Chi	na Reached Lewisian Turning Point?	55
		2.4.2	Factors in China	that Impact the Change of Labor Cost	56
			2.4.2.1	Living Cost Rising: Inner Driven	57
			2.4.2.2	Change on Demand and Supply of Labor Market: Root Cause	58
			2.4.2.3	Government Policies: Direct Promotion	58
			2.4.2.4	Economic Globalization: Outer Propel	58
	2.5	Theore	etical Fram	ework	59

					ix
	26	Conce	ptual Mode	el	61
		2.6.1	Variable	s and Related Researches	62
			2.6.1.1	Economic Factor as a Variable	62
			2.6.1.2	Population Factor as a Variable	63
			2.6.1.3	Policy Factor as a Variable	64
			2.6.1.4	Living Cost as a Variable	66
			2.6.1.5	Human Capital Investment as a Variable	67
			2.6.1.6	Individual Factor as a Variable	68
		2.6.2	The Cor	nceptual Model	69
3	MET	THODOI	LOGY		71
	3.1	Introdu	action		71
	3.2	Mixed	Methods 1	Design	73
		3.2.1	The Exp	oloratory Sequential Design	73
		3.2.2	Sequent	ial Design for this Study	74
	3.3	Data C	Data Collection Procedure		76
		3.3.1	Qualitat	ive Methods	76
			3.3.1.1	Document Review	76
			3.3.1.2	Interview	77
			3.3.1.3	Expert Opinion Assessment	80
		3.3.2	Quantita	ative Methods	82
			3.3.2.1	Population and Sample	82
			3.3.2.2	Survey Questionnaire	87
		3.3.3	Reliabili	ity and Validity	91
	3.4	Data A	analysis Pr	ocedure	92
		3.4.1	Qualitat	ive Data Analysis	92
		3.4.2	One Wa	y ANOVA	93
		3.4.3	Kendall	's Coefficient of Concordance (W)	93
		3.4.4	Descript	tive Analysis	94
		3.4.5	Multiple	e Regression Analysis	94
	3.5	Resear	ch Hypoth	eses	95

4	RES	ULTS			97
	4.1	Introdu	action		97
	4.2	Qualita	ative Analy	ysis	98
		4.2.1	Docume	ent Review	98
		4.2.2	The Inte	rview	101
	4.3	Qualita	ative-Quan	titative Analysis	108
		4.3.1	Expert (Opinion Assessment	108
		4.3.2	Kendall	's Coefficient Test	111
	4.4	Quanti	tative Ana	lysis	114
		4.4.1	Descript	ive Analysis	114
			4.4.1.1	Demographics and Characteristics of Respondents	115
			4.4.1.2	Descriptive Analysis on Perceived Change of Labor Cost	116
		4.4.2	Factor a	nd Reliability Analyses	117
			4.4.2.1	Factor Analysis	117
			4.4.2.2	Reliability Analysis	119
		4.4.3	Normali	ty Test	120
			4.4.3.1	Skewness and Kurtosis Tests	120
			4.4.3.2	Histograms and Q-Q Plots	121
		4.4.4	One Wa	y ANOVA	122
			4.4.4.1	Size of the Enterprise	122
			4.4.4.2	Ownership of the Enterprise	125
		4.4.5	Multiple	e Regression Analysis	128
			4.4.5.1	Test of Collinearity	130
			4.4.5.2	Test of Heteroscedasticity	132
		4.5	Summar	У	133
5	CON	CLUSIC	ON		135
	5.1	Introdu	ıction		135

5.2	Manufacturing Industries of China, and Components of Labor Cost are Rising?	Which
5.3	RQ2: How Do These Components of Laboratory Change in Manufacturing Industries of China, there Differences Based on the Size and Owner the Enterprises?	and are
	5.3.1 The Change of Labor Costs in Manus Industries of China	facturing 139
	5.3.2 Differences of Labor Cost Change Base Background of the Enterprises	ed on the
5.4	RQ3: What are the Factors that Impact the Cl Labor Cost under the Urbanization Process i (from A Theoretical Perspective)?	•
5.5	RQ4: How do these Factors Impact the P Change of Labor Cost in Manufacturing Indu China	
	5.5.1 Policy Factors	147
	5.5.2 Human Capital Investment	149
	5.5.3 Living Cost	151
5.6	Implications	152
	5.6.1 Implications of Model Development	152
	5.6.2 Implications for Government	155
	5.6.3 Implications for Employers	158
5.7	Future Study	161
REFERENC	EES	163
Appendices A	A-I	184-240

LIST OF TABLES

TABLE NO.	TITLE	PAGE
1.1	Overview of Hebei Province in 2011	21
2.1	Strategies and Policies of Urbanization in China	48
2.2	Summary of the Attributes and Related Researches for Economic Factor	63
2.3	Summary of the Attributes and Related Researches for Population Factor	64
2.4	Summary of the Attributes and Related Researches for Policy Factor	65
2.5	Summary of the Attributes and Related Researches for Living Cost	66
2.6	Summary of the Attributes and Related Researches for Human Capital Investment	68
2.7	Summary of the Attributes and Related Researches for Individual factor	69
3.1	Summary of Methodology	72
3.2	Profile of the Interviewees	79
3.3	Top Ten Manufacturing Industries of Hebei Province by Gross Industrial Output Value in 2011	85
3.4	Number of Enterprises in Different Sizes of the Three Dominant Manufacturing Industries in Hebei Province	86
4.1	Information of Interviewed Enterprises and Methods of Interviewing	102
4.2	Summary of the Interviewees' Responds on the Components of the Labor Cost of the Enterprise	103

4.3	Views of Interviewees on Rising Labor Cost in China	105
4.4	Demographic Information of the Experts	109
4.5	Results of the First Round Expert Opinion Assessment	110
4.6	Results of the Second Round Expert Opinion Assessment	111
4.7	Results of the Third Round Expert Opinion Assessment	112
4.8	Results of the Fourth Round Expert Opinion Assessment	113
4.9	Profiles of Responded Manufacturing Enterprises	115
4.10	Descriptive Analysis for the Perceived Change of Labor Cost	116
4.11	Factor Structure Matrix and Reliability	118
4.12	Cronbach's Alpha Coefficients for the Five Factors	120
4.13	Results of Skewness and Kurtosis Test	121
4.14	Differences of Perceived Labor Cost Change in Terms of Different Enterprise Sizes by ANOVA	123
4.15	Descriptive Specifications of Differences in Terms of Enterprise Size	123
4.16	Results of Post Hoc Test in Terms of Enterprise Size	124
4.17	Differences of Perceived Labor Cost Change in Terms of Different Enterprise Ownerships by ANOVA	125
4.18	Descriptive Specifications of Differences in Terms of Enterprise Ownership	126
4.19	Results of Post Hoc Test in Terms of Enterprise Ownership	127
4.20	Regression Model Summary for Perceived Labor Cost Change and Urbanization Factors	129
4.21	Coefficients of Regression between Perceived Labor Cost Change and Urbanization Factors	129
4.22	Correlations Scores between Perceived Labor Cost Change and Urbanization Factors	131
4.23	Collinearity Diagnostics	131

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
1.1	Labor Costs of Selected Economies and Countries	3
1.2	Average Hourly Compensation Costs of Manufacturing Employees in China by Components of Compensation, 2002-2009	4
1.3	The Average Wage Increase Rate of Employed Persons in Urban Units and the Per Capita GDP Growth Rate	5
1.4	Urbanization Process in China, 1949-2011	8
1.5	Urbanization Process and Major Historical Events in China, 1949-1977.	9
1.6	Location of Hebei Province	21
1.7	Research Strategy	24
1.8	Concepts and Relationships of Wage, Income, Labor Compensation and Labor cost	26
1.9	Plan of Thesis	28
2.1	Lewis-Ranis-Fei Phases of Economic Development	32
2.2	The Equilibrium Price Wage	36
2.3	Impact of Urbanization on Economic Growth	41
2.4	The Impact of Urbanization on Urban Energy Demand	52
2.5	Factors that Influenced Labor Cost Changing in China	57
2.6	Initial Theoretical Framework	60
2.7	Improved Theoretical Framework	61
2.8	Conceptual Model	70

3.1	The Exploratory Sequential Design	74
3.2	Sequential Design for this Study	75
4.1	Average Wage of Employed Persons in Urban Units of Manufacturing Industries of China, 2003-2011	99
4.2	The Growth of Average Wage for Employed Persons in Urban Units of Manufacturing Industries on Provincial Level in 2011	100
4.3	Normal P-P Plot of Regression Standardized Residual	132
4.4	Scatter Plot of Regression Data	133
5.1	Interview Result of the Increasing Components of Labor Cost	137
5.2	Comparison Results for Wage in Terms of Enterprise Ownership	142
5.3	Comparison Results for Social Insurance in Terms of Enterprise Ownership	142
5.4	Comparison Results for Welfare in Terms of Enterprise Ownership	143
5.5	Relationship between Urbanization and Rising Labor Cost	153

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A	Main Indicators of Manufacturing Industrial Enterprises above Designated Size by Industrial Sector in Hebei Province (2011)	184
В	Survey Questionnaire	186
C1	The First Round Expert Opinion Assessment	195
C2	The Second Round Expert Opinion Assessment	197
C3	The Third Round Expert Opinion Assessment	198
C4	The Fourth Round Expert Opinion Assessment	199
D	Factor Analysis	200
E	Reliability Test	208
F1	Normality Test: Labor Cost	209
F2	Normality Test: Human Capital Investment	212
F3	Normality Test: Living Cost	215
F4	Normality Test: Policy Factor	218
F5	Normality Test: Population Factor	221
F6	Normality Test: Individual Factor	224
G	Descriptive Analysis	227
H1	One Way ANOVA: In Terms of Enterprises Size	229
H2	One Way ANOVA: In Terms of Enterprises Ownership	232
I	Multiple Regression	237

CHAPTER 1

INTRODUCTION

1.1 Background

The past five decades have witnessed unprecedented economic growth of China (Lett and Banister, 2009; Zhang, 2013). One of the major elements that accelerated this rapid economic growth, especially in manufacturing sectors, is the relatively low labor cost of China (Waldman, 2004; Ang, 2010). However, in recent years, labor cost in manufacturing industries of China continues to rise. People began to wonder what had impacted the rising labor cost. Undoubtedly, there are many possible impact factors, such as government's macro-control, economic globalization, and currency exchange rate (Banister and Cook, 2011; Liao, 2008; Zhang, 2009). But, in this study, the researcher tries to explain the reason of the rising labor cost from a new perspective – urbanization. To begin with, it is necessary to have a systematic introduction on the background information of the study: the labor cost in manufacturing industries and the urbanization process in China.

1.1.1 Labor Cost in Manufacturing Industries of China

In 2010, China overtook the U.S. as the world's largest manufacturing nation with an annually output of 2.9 trillion USD, accounting for 19.8% of the manufacturing output in the whole world. Value-added of the manufacturing industry accounted for nearly 30% of the GDP of China in 2010 (National Bureau of Statistics of China, 2012). In terms of employment, according to official data, almost 30% (40.88 million people in 2011) of the employed persons in urban units engaged in manufacturing industries (National Bureau of Statistics of China, 2012). As a matter of fact, considering the many small scaled enterprises and enterprises in rural areas that are not included in the official data, the number of employed people in manufacturing industries could be over 100 million (China Council for the Promotion of International Trade, 2014). Therefore, the development of manufacturing industries is essential to both the economic growth and the population employment in China.

The relatively low labor cost is the key for the growing of manufacturing industries and keeping international competitiveness for the Chinese economy during the past three decades. With the proliferation of Chinese products on the international market, there has been increasing interest in the statistics of China's manufacturing industry, particularly for the labor costs in manufacturing industries (Lett and Banister, 2009). The concept of labor cost defined by China is similar to the international practice, it includes wage of employees, social insurance contribution, company welfare, training outlay, labor protection expenditure, residence of employees and other labor cost expenditure. Briefly speaking, labor cost in China mainly has the following features:

Firstly, compared with other developed countries and newly developing countries, labor costs of China are still at a low level. In 2008, with reference to

Figure 1.1, the average hourly compensation of manufacturing industries was only 1.36 dollars per hour in China, while Japan was 27.8 dollars/hour and Taiwan was 8.68 dollar/hour (U.S. Bureaus of Labors Statistics, 2010).

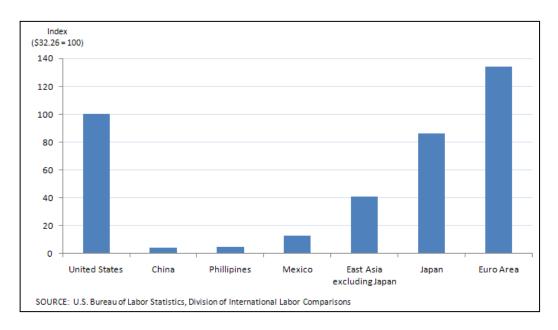


Figure 1.1 Labor Costs of Selected Economies and Countries

Note: "East Asia excluding Japan" refers to Korea, Philippines, Singapore and Taiwan.

"Euro Area" refers to the EU countries which use Euro as currencies at January 1, 2009.

From the perspective of input and output of labor cost, the productivity of China is still lower than other developed countries. For example, in 2010, the labor productivity of China was only \$11,612, comparing with the developed countries like U.S.A (\$102,903), France (\$81,977) and Japan (\$68,764) the labor productivity of China was very low (Japan Productivity Center, 2011). Whereby, the relative advantage of labor cost in international competition is not as obvious as the absolute advantage.

Secondly, the major part of labor cost of China is labor compensation which is composed of wage of employees and social insurance contributed by employers. According to the national sample investment on labor cost, labor compensation

accounts for around 80% of labor cost (Zhang, 2009). Due to the improvement of social security system and regulations on labor protection, social insurance cost is increasing rapidly in recent years. As shown in Figure 1.2, according to the report of U.S. Bureau of Labor Statistics (2012), average hourly compensation costs of manufacturing employees in China continued to increase from 2002 to 2009, of which social insurance cost has increased approximately 336%, higher than the increase of basic wage (146%).

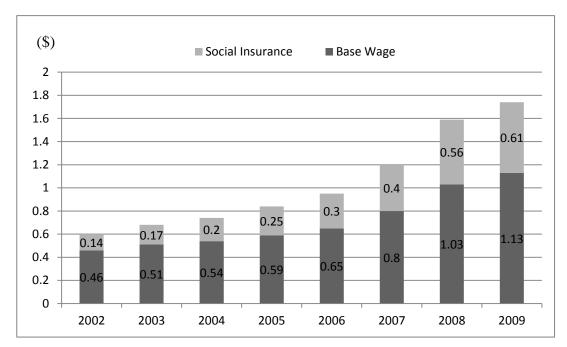


Figure 1.2 Average Hourly Compensation Costs of Manufacturing Employees in China by

Components of Compensation, 2002-2009

Note: Data labels are rounded values.

Source: U.S. Bureau of Labor Statistics, International Labor Comparisons (2012).

Thirdly, there are great diversities among areas and industries. China has a vast territory, and the different economic situation of different places has resulted in a great diversity of labor cost in different areas and industries. Generally speaking, labor costs in eastern coastal areas, foreign invested enterprises, share-holding corporations and modern service industries are relatively higher. Judging by the

average wage of employed persons in urban units by region, in 2010, the average wage of Shanghai was, the highest, 66,115 RMB, Heilongjiang was the lowest of 27,735 RMB, and the average wage of Shanghai was 2.38 times of Heilongjiang. For the average wage by status of registration, in 2010, share-holding corporations Ltd. had the highest average wage, 44,118 RMB, followed by foreign funded units of 41,739 RMB, and urban collective-owned units and other domestic funded units (24,010 RMB and 25,253 RMB respectively) have the lowest wage. By industries, financial intermediation was 70,146 RMB, construction was 27,529 RMB, hotels and catering services was 23,382 RMB (National Bureau of Statistics of China, 2012).

Fourth, the increasing trend of labor cost is basically in accordance with the economic development in China. Figure 1.3 shows the relationship between the average wage increase rate of employed persons in urban units and the per capita GDP growth rate.

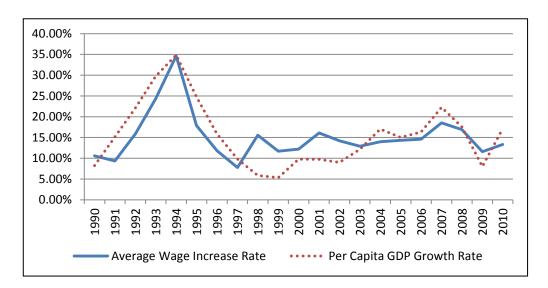


Figure 1.3 The Average Wage Increase Rate of Employed Persons in Urban Units and the Per Capita GDP Growth Rate.

Source: National Bureau of Statistics of China (2012)

As shown in Figure 1.3, in the period of 1997 to 2003 and the year of 2009, the increase rate of average wage were beyond the growth rate of per capita GDP, but for the rest of years were lower than growth rate of per capita GDP. From 2000 to 2010, the average increase rate for wage reached 14.42%.

Finally, the major contributors for the rising labor costs in manufacturing industries of China, especially in urban area, can be briefly summarized in the following aspects:

a) The income of employees continues to rise. In recent years, the rising of commodity prices and inflation are very distinct. In 2006, China's Consumer Price Index (CPI) is 101.5 (previous year is 100), and reached to 104.8, 105.9 in the following 2 years, but decreased to 99.3 as the global economic crisis of 2008 has impacted the general price level in China. However after 2009, CPI continued to rise and reached to 103.3 and 105.4 separately for 2010 and 2011 (National Bureau of Statistics of China, 2006-2011). Thus, people need more money to maintain their usual living standards. In the meantime, housing in urban areas has become a major social as well as economic issue, whereby employers have to increase salaries to allow workers to pay higher rents or mortgages (Balchin, Isaac and Chen, 2000). Additionally, education and medical service costs continue to rise, which also become a major driving force for the increase of labor costs. b) In China, social insurance accounts for approximately 20% of labor costs, and 60% of the non-wage (or indirect) labor costs (Zhang, 2009). The Chinese government has concentrated on the completion of social security system since the 1980s, and with the implementation of social insurance, China has established a formal social insurance system including Basic Pension Insurance, Basic Medical Insurance, Unemployment Insurance, Work Injury Insurance and Maternity Insurance. With the improvement and legislation of the social insurance system, number of contributors has increased continually, implying for a growing social insurance contribution burden for the

employers (in China, the contribution of the social insurance is shared by the government, the employer and the employee).

1.1.2 Urbanization Process of China

With the high speed of economic growth of China, urbanization has accelerated by the increase of urban population and the number of cities and towns (Li and Piachaud, 2006; Wang, Zhou, Sun and Zhu, 2009). Unlike the "parallel-urbanization" (an urbanization process developed synchronously with the economic growth in developed countries) or the "over-urbanization" (which outpaced economic development and industrialization process of some developing countries), the urbanization process in China is known for its unique feature – whereby most of the researchers believe that the urbanization process in China lags behind economic growth (Konrad and Szelenyi, 1974; Ofer, 1980; Lin, Cai and Li, 1994; Dong and Putterman, 2000). From a historical perspective, as shown in Figure 1.4, since the establishment of People's Republic of China in 1949, urbanization in China has demonstrated positive trends. From 1949 to 2011, the urbanization rate has increased by 40.53 %, from 10.64% to 51.27%.

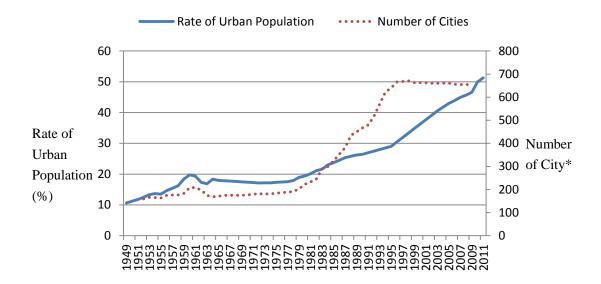


Figure 1.4 Urbanization Process in China, 1949-2011

* According to City Planning Law of the State Council of P. R. China (1989), CITY refers to a municipality directly under the central government, a city or a town based on the administrative division of the state.

Source: National Bureau of Statistics of China (2012)

The most significant turning point of the urbanization process since 1949 is the implementation of the Reform and Open Policy in 1978, which divided the Planned Economy and Market Economy, and greatly influenced every field of economic and social development of China, including the urbanization process. Therefore, the urbanization development of China is usually divided into two parts: before and after the Reform and Open Policy of 1978, or "pre-reform era" and "post-reform era" for short (Mou, 2006; Guang, 2008).

1) Urbanization in Pre-Reform Era

Before the implementation of Reform and Open policy (1978), China was under a highly centralized planned economy system. Urbanization development of this period was greatly influenced by a series of policies and historical events, such as policies to control urban population, first Five Year Plan, the "Great Leap Forward"

campaign and Cultural Revolution. Figure 1.5 shows the timeline of the major historical events and the urbanization development during 1948 to 1977, which will be elaborated in the following sections.

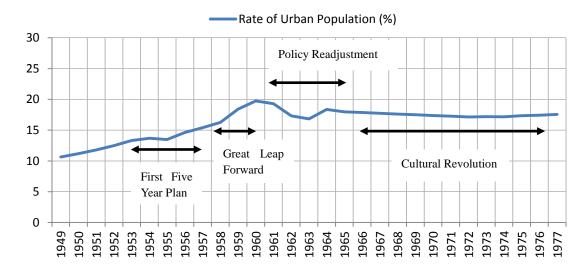


Figure 1.5 Urbanization Process and Major Historical Events in China, 1949-1977

From 1949 to 1952, the socialist country of China was just established, the major task of Communist Party of China (CPC) and the government was to recover the national economy and reorganize the political system. A series of measures were taken, including redistributing of rural land among peasants, confiscating bureaucratic capital, stabilizing price of commodities, and adjusting industrial and commercial policies. Urbanization development of this period (1949-1952) was smooth and synchronized with the economic recovery. After a brief "rehabilitation", the first Five Year Plan was proposed in 1953, aiming at realizing socialist industrialization. In order to imitate the socialism mode of the Soviet Union, the development of heavy industries was given priority. A large number of mining and industrial processing cities were built coinciding with the redevelopment of selected old industrial cities (Kamal-Chaoui, Leman and Zhang, 2009). When the first Five Year Plan was accomplished in 1957, a city industrial system with highly-developed division of labor was set up (Sachs, Hu and Yang, 2003). As more and more rural

labors were absorbed into urban industrial sectors, it had resulted in a heavy burden on agricultural production. The Chinese government subsequently set up a resident registration system, and a temp regulation (*About Setting up Regular Hukou Registration System*) was issued in 1955, requiring all the residents (both rural and urban) to obtain the official approval before changing places of residence, which explained the slight decrease of urbanization rate in 1955. On the whole, the urbanization development of the period from 1949 to 1957 was smooth, and the overall rate of urbanization increased from 10.6% to 15.39%.

In the second Five-Year Plan period (1958-1962), aimed at rapidly transforming China from an agrarian economy into a communist society through rapid industrialization and collectivization, Mao Zedong started an economic and social reform campaign, known as the Great Leap Forward. Massive rural-urban migration was encouraged by the government to supply labors for the heavy industry development. And this situation was deteriorated by a widespread famine in the countryside which resulted in a rapid increase of urban population (McGee et al., 2007). From 1956 to 1960, the urban population increased to 388.8 million, of which 26.6% (103.4 million) was natural increase, while the rest 73.4% was caused of other reasons, such as rural-urban migration and the increase in the number of cities (Li, 1999). On the contrary, the economy sagged because of the natural calamity and the deterioration of the relationship between China and Soviet Union. Facing this situation, the central government issued Nine Measures to Reduce Urban Population and Compress Urban Provisions (The State Council of P. R. China, 1961) to control the increase of urban population. In addition, a readjustment on the Chinese economy was started after the Great Leap Forward campaign to cool off the enthusiasm of rapid industrialization (Sun, 1994). With the shutting down of most heavy industries, rural labors that migrated to the cities during the Great Leap Forward campaign were sent back to the rural areas. Therefore, the urbanization process of the period from 1958 to 1965 was artificially fluctuated which was visually shown in Figure 1.4.

In 1966, Mao launched the Cultural Revolution to unsettle the "ruling class" and keep China in a state of "perpetual revolution" that served the interests of the majority, rather than tiny elite (Feigon, 2002). The Cultural Revolution (1966-1976) caused chaos across the country, and millions were persecuted because of the extreme ideas of eliminating class stratification and old ideologies. Schools were closed and the young intellectuals living in cities were forced to perform hard labor work in the countryside to be "re-educated" by the peasants. 14-18 million urban youth, 10-12% of China's total urban Hukou population, were deprived of their urban Hukou and sent to rural areas during this period (Kamal-Chaoui et al., 2009). The increase of urban population slowed down, and urbanization rate was nearly stagnant. With the deterioration of the relationship with Soviet Union and the threaten of U.S.A, the Chinese government transferred the construction of national defense, science and technology, industry and transport facilities to middle and western areas to prepare for the possible war. As the government invested most of manpower and material resources into remote mountain areas, the urbanization development and constructions of this period were hardly proceed (Guang, 2008). In 1966, urban population accounted for 17.9% of the total population, and it remained the same in 1978.

In general, in the Mao era from 1949-1978, the urbanization pace of China increased slightly in the first 8 year till 1957, but increased sharply during the Great Leap Forward period (1958-1962), and almost remained unchanged during the Cultural Revolution period (Li, 1999; Mou, 2006; Guang, 2008; Wang *et al.*, 2009).

2) Urbanization in Post-Reform Era

After the implementation of Reform and Open policy in 1978, there was a great improvement on economy level, social development and comprehensive national power, the development of urbanization also increased steadily, urbanization

rate increased from 17.92% of 1978 to 46.49% of 2009, and the average year increase rate reached 0.92%, while number of city also rise sharply from 191 to 665. However, since 1978 when the Reform and Open policy was implemented, China was in the stage of transforming from planned economy to market economy, recessive urbanization (although some rural migrants live in cities, they are not formal registered permanent residences, so they cannot join urban social endowment insurance and other social welfare for urban residents) and quasi-urbanization (the public infrastructures in some urbanized small cities and towns are very poor, and although some urban residents have been registered in urban Hukou system, they still need work in agricultural industries.) were the main features of China urbanization process (Guang, 2008).

In 1978 the Chinese government began the reform on the rural economic system and carried out "household contract responsibility system" which aroused the enthusiasm of farmers. In the meantime of rising productivity in rural areas it has brought about large surplus labors which have offered a possibility for the quick urbanization of China. In 1984, a city-centered national economic system reform was issued, the industrial development, infrastructure construction, management level of cities were further improved. After the opening of four Economic Zones (Shenzhen, Zhuhai, Xiamen, Shantou) the government developed another 14 coastal port cities (Dalian, Qin Huangdao, Tianjin, Yantai, and Ningbo etc.), the open policy propelled the economic growth of coastal areas and also accelerated the urbanization development in these areas. During this period, rural township and village enterprises (TVE's) were blooming because markets for land and labor really emerged only in the 1990's and financial institutions were still in the midst of a gradual process of adaptation to market forces (Oi, 1993; Naughton, 1994; Pei, 1999; Sachs et al., 2003). From 1978 to 1991, city number increased by 288, the number of towns rose from 2173 to 12455, and urbanization rate increased by 9.02%.

Since 1992, the socialist market economy of Chinese characteristics was being improved, and urbanization process accelerated because of the motivation of economic growth. The Central Committee of the CPC adopted active financial policies, constructed infrastructures (for example, highways, electric railways, ecological environmental protection projects) and by issuing national debt through banks to make full use of surplus productivity (Gu, Wu and Cook, 2012). The government also carried out policies to encourage the economic development in coastal areas which attracted large number of rural surplus labors, manufacturing industries in coastal cities began to prosper during this time. Meanwhile, the distribution of towns and township enterprises was gradually centralized, and it has had positive influences on the economic development and urbanization process around it. Moreover, the nation became more proactive in international business affairs and policies of relaxing or eliminating restrictions for foreign investment have boosted the development of foreign invested enterprises. This Open Door policy then gradually expanded to inland areas (such as provincial level capitals) and promoted the nationwide urbanization development greatly (Guang, 2008; Meng and Wang, 2011). By the end of 2011, the urbanization rate had reached 51.27%.

At least four driving forces are considered as the factors that facilitate Chinese urbanization in the post-1978 era. First, the implementation of "household responsibility system" in the countryside has greatly increased the agricultural productivity and led to a large amount of surplus labors in the countryside. Second, relaxed state control over population mobility has allowed people to move freely among cities and places. Third, the implementation of open-door policy has encouraged local government to attract foreign investments by establishing "development zones". Most of these zones were located in the economically advanced coastal regions, particularly in the suburb of large cities, such as Shenzhen, Zhuhai, Shantou, Xiamen, and Hainan, creating constant demand for labor (Liang and Ma, 2004; McGee *et al.*, 2007; Logan, 2008). Fourth, the ever growing income

gaps between urban and rural areas have stimulated rural people to move to cities for better lives.

To conclude, the researcher believes that urbanization development process of China before the implementation of Reform and Open Policy of 1978 was mainly artificially controlled by the government, and natural growth of urban population was twisted by a series of historical events. After the implementation of Reform and Open Policy in 1978, which symbolized the beginning of market economy, urbanization development of China is market and economy oriented with government macro control.

1.2 Statement of the Problem

China, as a developing country, is experiencing an unprecedented economic and social development. Urbanization is a natural part of this ongoing development of China, and having profound impacts on promoting economic growth, improving people's living conditions, and integrating social network (Tellnes, 2005; McGranahan and Tocoli, 2006). Although the rapid urbanization have caused a series of problems, such as excessive consumption of land for industrial growth, extended urban-rural income gap, rising living cost in cities, and "urban diseases" like traffic congestion, shortfall in resources and infrastructure capacity as well as environment pollution (Song and Ding, 2007; Wagner, 2008; Ning, 2012), urbanization is "the road that China must take in its modernization drive, and it serves as a strong engine for sustainable and healthy economic growth" according to The National New-type Urbanization Plan (2014-2020) (The State Council of P. R. China, 2014).

The rising labor cost is another inevitable phenomenon of the ever-growing industrialization and modernization of China. Fast-rising wages, worker activism, and intermittent labor shortages that caused by the declining of working age (15-64) population are implying that China is running out of its cheap labors (Minami and Ma, 2009; Das and N'Diaye, 2013). Besides analyzing the consequences of the rising labor cost to the Chinese economy, researchers and scholars also have had a hot discussion on the reasons or the impact factors of the rising labor cost. However, the researcher believes that urbanization and the change of labor cost in China are closely related. Because there is a direct connection between urbanization and labor cost change – rural migrant worker. On one hand, the large number of rural migrant workers has provided cheap labors to the urban labor market; on the other hand, it has accelerated the urbanization process and city development in China. Urbanization is an important phenomenon of social development, it always accompanied with market economy, competition, division of labor, industrialization, and changes in urban life as well. With the economic growth and the quick urbanizing process, the living costs in urban areas, including education fee of children, rent or purchase housing, medical care and other costs, have risen greatly. Thus, people need higher income to maintain a standard life in cities. In addition, knowledge accumulation in urban environments will lead to improved worker productivity, and the productivity growth will stimulate wages (Mincer, 1974; Willis, 1999), meaning urbanization has positive effect on the income of employees by increasing the population education levels. Meanwhile, due to the intense competition, employers will provide job training programs to improve the employees' working proficiency and efficiency and offer more welfare benefits to attract and retain talented people. All of the aforementioned changes are caused by urbanization and will possibly impact labor cost of enterprises. No researcher has done this assessment theoretically or empirically in China. Therefore, this study is designed to test the possible relationship between urbanization and labor cost, and give a rational explanation on the impact of urbanization on labor cost in China.

1.3 Objective of the Study

To examine the impact of urbanization on labor cost, this research has the following objectives:

- 1) To identify the major components of labor cost in manufacturing industries of China, and investigate which component is rising.
- 2) To empirically identify the rising situations of labor cost in manufacturing industries of China, and the possible differences based on the size and ownership of the enterprises.
- 3) To identify the factors those have influenced the change of labor cost under the urbanization process.
- 4) To discuss how the factors of urbanization impact labor cost in manufacturing industries of China and recommend policies for the government and enterprises.

1.4 Research Questions

- 1) What are the major components of labor cost in manufacturing industries of China? And which components of labor cost are rising?
- 2) How do these components of labor cost change in manufacturing industries of China? And are there differences based on the size and ownership of the enterprises?
- 3) What are the impact factors for the change of labor costs under the urbanization process in China?
- 4) How do these factors impact labor costs in manufacturing industries of China?

1.5 Significance of Study

The rising labor cost has drawn lots of scholars and researchers' attention (Cai, 2007; Ceglowski and Golub, 2007; Cai and Wang, 2008; Ang, 2010), and there are also many studies on urbanization (Li, 1999; Madlener and Sunak, 2011; Guang, 2008). But there is still not a systematic analysis on the relationship between labor cost and urbanization, both of which are significantly affected by the economic and social development of current China. Therefore, this study attempts to examine the relationship between urbanization and labor cost, namely how urbanization impact the change of labor cost in China. The study is significant in the following aspects:

First, this study gives a relatively integrated description of labor cost on its components and changing trends in China. And the labor cost in manufacturing industries will be elaborated based on the comparative study on enterprises of different size and ownership. This will offer references for the scholars, researchers and whoever is interested in labor costs study.

Second, urbanization is an important token of social development, studying on the relationship between urbanization and labor cost will expand the theories of urbanization, and be beneficial for the government in making the city developing policies.

Third, research on labor cost, analyzing its changing trends will provide information for the enterprise that are planning or experiencing the transition from labor intensive industries to technic intensive industries. As the rising of labor cost is inevitable in China, manufacturing industries need to maintain market competitiveness through technique innovation and cost reduction. Analysis on the impact factors of the change of labor cost from the perspective of urbanization will

diversify the suggestions and measures on minimizing the negative effect of the rising labor cost for the enterprises.

Fourth, modeling labor cost with urbanization is a fresh combination of the two different concepts. Multiple research methods and data collection techniques are used in the study, and these may be helpful for the other researchers.

1.6 Scope and Limitation

Urbanization is a comprehensive concept of multidiscipline (Wu, 2006). It can be defined and studied from different fields of economics, demography, sociology, and environment science. In this study, theories and literatures on urbanization study mainly focused on the process of urbanization in China and its influence on economy and society from the perspective of demography and sociology. Additionally, urbanization is an abstract expression, while in the research of this study it will use concrete data of population, i.e. urban population's proportion on the total population, to describe the urbanization level of certain area. Furthermore, there are disputes on the urbanization level of China, where some scholars have revised the official data on urbanization level (Zhang and Zhao, 1998; Zhou and Ma, 2003), but a common revising standard is still needed; on the other hand, the official data are more authoritative and comparable, and, more importantly, official data is the major reference for the government making relevant policies. Therefore, data used in this study are official data from China Statistical Yearbook or other official publications.

Labor cost has an international generally accepted concept, to be specific, it includes basic wages, cost-of-living allowances, and other guaranteed and regularly paid allowances, bonuses and remuneration, employer contribution to social insurance, unfunded employee social benefits, cost of training and taxes regarded as

labor costs (International Labor Organization, 1999). Because of the complex contents of labor costs, usually people use compensation or even wage which account for the major part of labor cost to measure the value of labor cost. Unlike compensation measurement way of Bureau of Labor Statistics (U.S.A), industry earnings data from Chinese publications refer only to urban manufacturing units and do not include required employer social insurance payments or other nonwage labor costs (Zamora and Kirchmer, 2010). Therefore, in this study, when using the value of compensation to estimate or analyze the changing trend of labor cost, data are calculated by the researcher based on data on wage and social insurance contributions.

The sample of the study is limited to the manufacturing industries in Hebei province. However, there are two limitations. Firstly, China is a vast country spanning thousands of miles from western deserts to eastern ocean, each province, and even each city has unique economic and social situations, thus a single case cannot stand for other provinces real condition. Finally, as the interpretations of the research findings are inevitable subjective, therefore there are discrepancies between the research results and reality.

1.7 Why Hebei Province

China is a country with vast land, and there are 34 provincial level regions, including 23 provinces (Liaoning, Jilin, Heilongjiang, Hebei, Shanxi, Shaanxi, Shandong, Anhui, Jiangsu, Zhejiang, Henan, Hubei, Hunan, Jiangxi, Taiwan, Fujian, Yunnan, Hainan, Sichuan, Guizhou, Guangdong, Gansu, and Qianghai), 4 municipalities directly under the control of Central Government (Beijing, Tianjing, Shanghai, and Chongqing), 5 Autonomous Regions (Guangxi, Inner Mongolia,

Ningxia, Xinjiang, Tibet), and 2 special administrative regions (Hong Kong and Macao). Because of complicated reasons, such as natural resources, geographical environments and population, there are distinct regional differences in social and economic development. Therefore, choosing a right province to study the impact of urbanization on labor cost and hopefully to reflect the conditions in the whole nation is a difficult and challenging work. Synthesizing complex factors, Hebei province is chosen as the research objective in the end.

Hebei province is located in north of China with an area of 187.7 thousand square kilometers. The topography of Hebei slopes from the northwest to the southeast with complicated and varied landforms. Hebei is the sole province with seashore, plains, lakes, hills and plateaus and has a large quantity and variety of natural resources. Hebei province surrounds Beijing and Tianjin, the Beijing-Tianjin-Hebei economic zone is the economic center of northern China and becomes one of the most powerful regions in overall strength. With a population of 72 million, Hebei province has abundant labor forces, which makes it a labor-exporting province. There are 11 prefecture-level cities in Hebei province, and subdivided into 172 county-level divisions. Figure 1.6 presents the location of Hebei province in the map of China and Table 1.1 gives an overview data of Hebei province in 2011.



Figure 1.6 Location of Hebei Province

Table 1.1: Overview of Hebei Province in 2011

	Hebei Province	Whole Nation*	Rank in Whole Nation*
GDP (100 million RMB)	24,515	472,881	6
Per Capita GDP (RMB)	33,858	35,097	14
Number of Industrial Enterprises above Designated Size**	11,570	325,609	11
Gross Output Value of Industrial Enterprises above Designated Size** (100 million RMB)	39,699	844,268	7
Population	72,405,100	1,347,350,000	6
Household Consumption Expenditure (RMB)	9,551	12,272	21
Average Wage of Manufacturing Industry (RMB)	22,159	24,138	15
Urbanization Rate (%)	45.6	51.27	21

Source: National Bureau of Statistics of China, 2012

^{*} Data of Mainland (31 provinces), not including Hong Kong, Macao and Taiwan.

^{**} Industrial enterprises include mining, manufacturing and production and supply of electricity, gas and water. Designated Size refers to enterprises with an annual sales over 20 million RMB.

With reference to Table 1.1, in 2011, GDP of Hebei province was about 2.451 trillion RMB (US\$379 billion), an increase of 11.3% over the previous year and ranked 6th in the whole nation. The primary, secondary, and tertiary sectors of industry contributed 11.9%, 53.5% and 34.6% respectively (Hebei Economic Statistic Yearbook, 2012), which means secondary industries (including mining, manufacturing, production and supply of electricity, gas and water, and construction) are the major driven forces for the economic growth in Hebei province. And it also can be proved by the number of industrial enterprises and gross output value of industrial enterprises, both of which were higher than the national average level, ranked 11 and 7 separately.

According to the sixth National Census, Hebei province has a population of 71.9 million in the year-end of 2010, and increased to 72.4 million in the year-end of 2011 and 45.6% are urban residents. The large population is a two-edged sword, it provides abundant cheap labor forces, and on the other hand, problems such as fast aging speed and the brain drain become obstacles for the economic growth and society development in Hebei province. Table 1.1 shows that household consumption expenditure and urbanization rate of Hebei province are below the national average level and only ranked 21, which indicates that social development of Hebei province is lagged behind by economic development.

Therefore, the reasons to choose Hebei province can be summarized as: first, Hebei province can represent the average economic and social development condition of China, because no matter economic development or the social development, Hebei province is in the medium position of 31 provincial regions and close to the national average level. Second, the large number of secondary industries could provide sufficient data for the studies on the changing labor cost in manufacturing industries. Third, the urbanization process in Hebei province is found slightly lagging behind economic growth which shares the same condition with the

urbanization development on the national level (Chen, Lu and Liu, 2010). So findings on the impact of urbanization on labor cost changes in Hebei province can be representative of China, and be applied to other provinces for future study. While choosing Hebei province as the research objective may not completely reflect or explain what China is experiencing, it is a good option for this exploratory study.

1.8 Research Process

The thesis of urbanization and labor cost is an exploratory study, rarely research can be found for this topic, thus several questions are proposed in different research phases to make sure the study is a valuable work, such as "is my topic interesting", "is my research doable", and "is my survey is a valid survey"? The research process is shown in Figure 1.7.

The initial works of the research are topic selection, background reading and develop the research strategy. When the topic is deemed as interesting, literature review can be proceeded followed by the development of theoretical framework and conceptual model. As a sequential mixed method is used in this study, qualitative data collection and analysis will be conducted firstly to build to the survey questionnaire. The following work is quantitative data collection and analysis, and the research process will be end after the report is prepared.

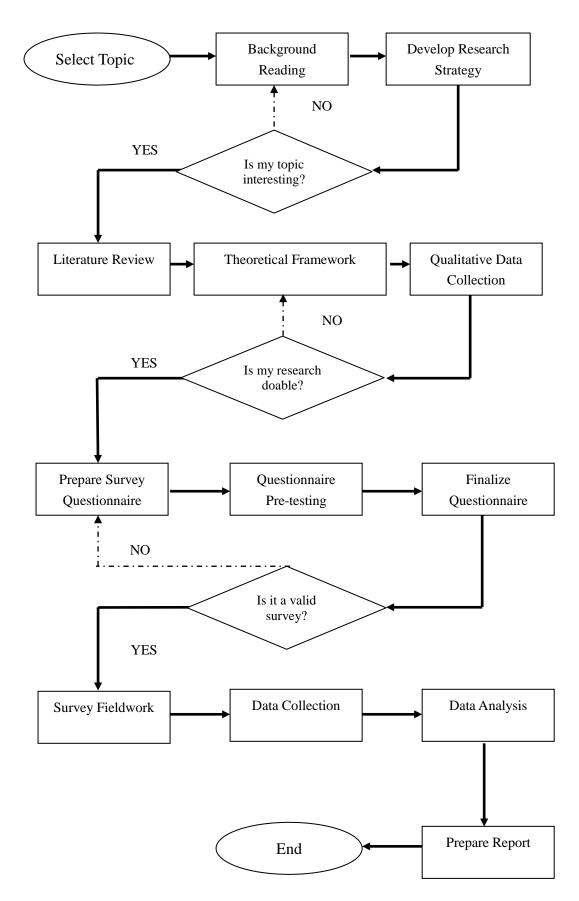


Figure 1.7 Research Strategy

1.9 Definition of Terms

1) Urbanization

Urbanization is a natural part of development (Henderson, 2002), whereby people keep agglomerating in cities, making the scale and numbers of cities to increase accordingly. There are many different definitions of urbanization given by the scholars from multi-perspectives, such as Morikawa (1989) defined urbanization as the transformation process experienced by rural population toward an urban life style, showing as the increase of urban population, the expansion of urban built-up area, the creation of landscape and urban environment with social and life style changes. Werner (1990) defined urbanization as the transformation of economy from rural economics which is labor intensive, sparsely populated and evenly distributed to urban economics which has the basically opposite figures. While the Japanese economist Yamada (1991) believed that the content of urbanization can be divided into two parts: one is the urbanization phenomenon of economic bases; the other is the urbanization phenomenon of social culture (superstructure). From the perspective of the Chinese researchers, Xie and Deng (1996) argued that urbanization is a changing process of human producing modes, living patterns and inhabiting ways which is led by the reform of social productivity; whereas Qi (2004) stated that urbanization ultimately is a form of social evolution of industrialization and economic structure in one country or an area.

For the study of this thesis, the researcher defined that urbanization is a process of the continuous increase of urban population and transforming of industrial structure, and it will gradually integrate urban and rural society through disseminating city civilization to rural areas. Besides, the researcher needs to highlight that the urbanization rate or urban population addressed in this thesis was calculated or refers to the people who are permanent urban residents (with or without

urban *Hukou* – household registration system).

2) Labor Cost

Labor cost means the employer's cost of hiring an incremental unit of labor, all costs of employment are included, not just direct wage payments (Triplett, 1983; International Labor Organization, 1999). To better understand the concepts of labor cost, a comparison among the definitions of Wage, Earning, Labor Compensation and labor cost was presented in Figure 1.8.

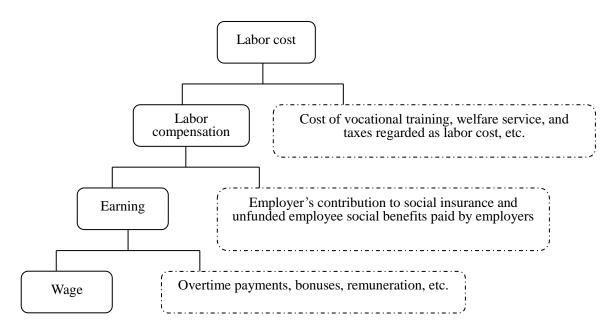


Figure 1.8 Concepts and Relationships of Wage, Income, Labor Compensation and Labor cost Source: Summarized according to the terminologies of International Conference of Labor Statisticians (ICLS), International Labor Organization (ILO), 1999

In Figure 1.8, higher layer means more contents for the item. Wage refers to the basic payment, cost-of-living allowances, and other guaranteed and regularly paid allowances; earning is wage plus overtime payments, bonuses and remuneration; labor compensation includes earning and social insurance cost of the employers; labor cost, on the top layer of Figure 1.4, has the broadest concepts or contents –

including labor compensation and other labor-related cost.

3) Perceived Change of Labor Cost

Perception is the organization, identification, and interpretation of sensory information in order to represent and understand the environment (Schacter, Gilbert and Wegner, 2008). In this thesis, perceptions on the change of labor cost or perceived change of labor cost are defined as the change of labor cost that is measured by observation, insight and experience.

4) Manufacturing Industry

Manufacturing industry includes the physical or chemical transformation of materials, substances, or components into new products. The raw materials are products of agriculture, forestry, fishing, mining or quarrying as well as products of other manufacturing activities (United Nations, 2008). China follows the same definition and classification of manufacturing industry. There are 30 sub-categories of manufacturing industries in China (refers to Appendix A), and based on which the manufacturing enterprises that studied in this thesis are selected.

1.10 Plan of Thesis

There are five chapters in the thesis. Chapter one gives an overview to the thesis and proposes the problem. Chapter two reviews the literatures of urbanization and changing labor cost in China, and discuss the theoretical framework and conceptual models for the study. Chapter three is methodology. In this chapter,

research methods of the study are introduced in details, including data collection methods, data analysis tools, population and sample, and research variables and hypothesis. Chapter four presents the results of the qualitative and quantitative data analyses. And in the end, Chapter five makes a conclusion for each research question, provides implication of model development and implications for the government and the enterprises, and suggests the future studies. Figure 1.9 gives a visual description of the plan of the thesis.

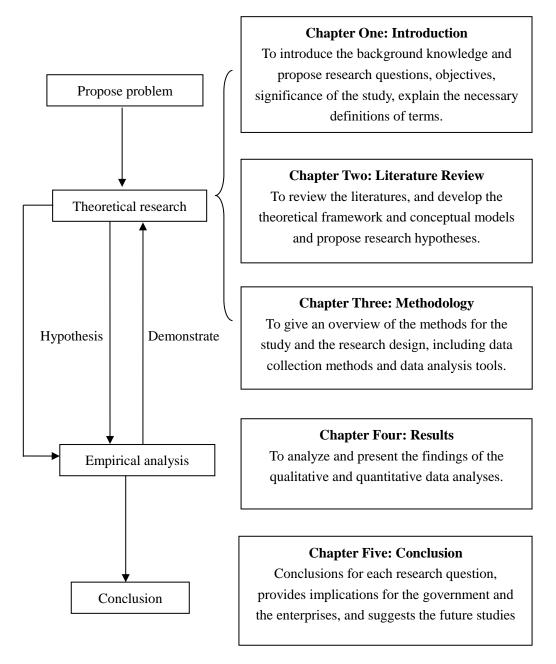


Figure 1.9 Plan of Thesis

In this study, the research on the relationship of urbanization and change of labor cost is based on a series of expert opinion assessments and survey questionnaires which are more micro, and the change of labor cost is evaluated through respondents' perceived change. Therefore, future study may be conducted from the macro perspective, developing a mathematical model and using official statistical data.

REFERENCES

- Ades, A. F. and Glaeser, E. L. (1995). Trade and Circuses: Explaining Urban Giants. *Quarterly Journal of Economics*. (110): 195-227.
- Ahmad, E. and Wang, Y. (1991). Inequality and poverty in China: institutional change and public policy, 1978 to 1988. *The World Bank Economic Review.* 5(2), 231-257.
- Airasian, P. W. and Gay, L. R. (2003). *Educational Research: Competencies Analysis* and Application (7thed.) Englewood Cliffs, N.J.: Prentice-Hall.
- Allison, P. D. (1998). Multiple Regression: A Primer (Undergraduate Research Methods & Statistics in the Social Sciences). London: SAGE Publications.
- Ang, Y. Y. (2010). China's Labor Cost Problem. *The International Economy*. Summer: 40-41.
- Aubert, C. and Li, X. (2002). Agricultural Underemployment and Rural Migration in China: Facts and Figures. *China Perspectives*. 41: 47-58.
- Babbie, E. R. (2012). *The Practice of Social Research* (13rd edition). Blemont, CA: Cengage Learning.
- Bachman, L. F. (2004). *Statistical Analyses for Language Assessment*. Cambridge: Cambridge University Press.
- Balchin, P. N., Isaac, D. and Chen, J. (2000). *Urban Economics: A Global Perspective*. New York: PALGRAVE.
- Banister, J. and Cook, G. (2011). China's Employment and Compensation Costs in Manufacturing through 2008. *Monthly Labor Review*. March: 39-52.
- Baron, A. and Armstrong, M. (2007). *Human Capital Management: Achieving Added Value Through People*. Philadelphia: Kogan Page Limited.

- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. New York: National Bureau of Economic Research.
- Becker, G. S. (1975). *Human Capital: A Theoretical and Empirical analysis, with Special Reference to Education*, 2nd ed. Chicago: University of Chicago Press.
- Becker, G. S. (2002). *The Age of Human Capital*. In Edward, P. Lazear (Eds) *Education in the Twenty-first Century* (pp 3-8). California: Hoover Institution Press.
- Becker, G. S. (2006). Human capital: The concise encyclopedia of economics. Retrieved from http://www.econlib.org/library/Enc/HumanCapital.html.
- Berkhout, P. H. G., Muskens, J. C. and Velthuijsen, J. W. (2000). Defining the Rebound Effect. *Energy Policy*, 28(6-7): 425-432.
- Bertinelli, L. and Zou, B. (2008). Does Urbanization Foster Human Capital Accumulation? *The Journal of Developing Areas*. (41): 171-184.
- Black, D. and Henderson, J. V. (1999). A Theory of Urban Growth. *Journal of Political Economy*. 107: 252-84.
- Blundell, R., Dearden, L., Meghir, C. and Sianesi, B. (1999). Human Capital Investment: The Returns from Education and Training to the Individual, the Firm and the Economy. *Fiscal Studies*. 20(1): 1-23.
- Bolton, P. (1995). Privatization and the Separation of Ownership and Control: Lessons from Chinese Enterprise Reform. *Economics of Transition*, 3(1):1-12.
- By é, P. and Mounier, A. (1996). Growth Patterns and the History of Industrialization.

 International Social Science Journal. 48(4):537
- Cai, F. (2007). *Report of China Population and Labor Problem: No.8*, Beijing: Social Sciences Academic Press.
- Cai, F. (2008). Lewisian Turning Point: New Stage for China Economic Development.

 Beijing: Social Sciences Academic Press
- Cai, F. (2010). Demographic transition, demographic dividend, and Lewis turning point in China. *China Economic Journal*. 7(3):107-119.

- Cai, F., Park, A. and Zhao, Y. (2008). The Chinese Labor Market in the Reform Era.In Loren Brandt and Thomas Rawski (eds). China's Great Economic Transformation. Cambridge: Cambridge University Press.
- Cai, F. and Wang, M. (2008). A Counterfactual Analysis on Unlimited Surplus Labor in Rural China. *China& World Economy*, 16(1): 51-65.
- Cai, F. and Wang, M. (2012). Labor Market Changes, Labor Disputes and Social Cohesion in China. OECD Working Paper No. 307. January.
- Camp, W. G. (2001). Formulating and Evaluating Theoretical Frameworks for Career and Technical Education Research. *Journal of Vocational Education Research*, 26(1): 4-25.
- Ceglowski, J. and Golub, S. (2007). Just How Low are China's Labor Costs. *The World Economy*, 30(4): 597-617.
- Ceglowski, J. and Golub, S. (2012). Does China Still Have a Labor Cost Advantage? Global Economy Journal. 12 (3): 1-30.
- Chan, K. W. (2010a). The Household Registration System and Migrant Labor in China: Notes on a Debate. *Population and Development Review*. 36(2):357-364.
- Chan, K. W. (2010b). A China Paradox: Migrant Labor Shortage amidst Rural Labor Supply Abundance. *Eurasian Geography and Economics*, 51(4): 513-530.
- Charlot, S. and Duranton, G. (2004). Communication Externalities in Cities. *Journal of Urban Economics*. (56): 581-613.
- Chen, J., Guo, F. and Wu, Y. (2011). One Decade of Urban Housing Reform in China: Urban Housing Price Dynamics and the Role of Migration and Urbanization, 1995-2005. *Habitat International*. (35):1-8.
- Chen, J. and Huang, Q. (2001). Comparison of Governance Structures of Chinese Enterprises with Different Types of Ownership. *China & World Economy*. 9(6): 11-21.
- Chen, L. and Estreicher, S. (2011). A New Labor Era: Higher Costs and Greater Pressures. *China Business Review*. 38(2): 26-29.
- Chen, M., Lu, D. and Liu, H. (2010). The Provincial Pattern of the Relationship

- between China's Urbanization and Economic Development. *Acta Geographica Sinica*. 65 (12): 1443-1453.
- Chen, S., Ho, M., Wilson, M. and Rasmussen, E. (2010). Learning from Chinese Enterprises: Chinese Labor Law and Models of Employment relations "with Chinese Characteristics". *The 21st CEA (UK) and 2nd CEA (Europe) Annual Conference. Global Economic Recovery: The Role of China and Other Emerging Economies*. 12-13 July. University of Oxford, UK.
- Chen, X. and Xu, Y. (2012). Analysis on the Labor Cost Changes and Its Cause in Anhui Province. *Journal of Chifeng College: Natural Science Edition*. 24: 119-120.
- Chen, Y., Démurger, S. and Fournier, M. (2003). Wage Differentials and Ownership Structure in Chinese Enterprises. *The Fourth International Conference on the Chinese Economy "The Efficiency of China's Economic Policy*". October 23-24, 2003, CERDI-IDREC, Clermont-Ferrand, France.
- Cheng, T. and Selden, M. (1994). The Origins and Social Consequences of China's Hukou System. *The China Quarterly*. 139: 644-668.
- Cheng, X. (2009). Study on the Population Migration Problems in the Rural Urbanization Process: Based on the Analysis of Lewis and Todaro's Theory. Special Zone Economy. 1:181-183.
- Cheng, Z. Z. (2002). *Urbanization and Economic Growth*. Ph. D. Thesis. Southeastern University of Finance and Economics, Chengdu.
- Chennery, H. B. and Srinivasan, T. N. (1988). *Handbook of Development Economics* (Volume I). New York: North-Holland.
- China Council for the Promotion of International Trade, (2014). "Made in China" Defeat "Made in U.S." is Just a False Impression. Retrieved April. 12, 2014, from http://www.ccpittex.com/cjfx/57986.html.
- Clancy, J., Maduka, O. and Lumampoa, F. (2008). Sustainable Energy Systems and the Urban Poor Nigeria, Brazil, and the Philippines. In Peter Droege (eds).

 Urban Energy Transition From Fossil Fuels to Renewable Power. (pp

- 533-562). Oxford: Elsevier Books.
- Coladarci, T., Cobb, C. D., Minium, E. W. and Clarke, R. C. (2008). *Fundamentals of Statistical Reasoning in Education*. 2nd edition. New Jersey: Wiley.
- Creswell, J. W. (2002). Educational Research: Planning Conducting, and Evaluating

 Quantitative and Qualitative Research. Upper Saddle River, N. J.: Pearson

 Education, Inc.
- Creswell, J. W. and Plano-Clark, V. L. (2010). *Designing and conducting mixed methods research*, 2nd ed. Thousand Oaks, CA: Sage.
- Dalkey, N. C. (1972). The Delphi Method: An Experimental Study of Group Opinion.
 In N. C. Dalkey, D. L. Rourke, R. Lewis and D. Snyder (Eds.). Studies in the Quality of Life: Delphi and Decision-making (pp. 13-54). Lexington, MA: Lexington Books.
- Das, M. and N'Diaye, P. (2013). *Chronicle of a Decline Foretold: Has China Reached the Lewis Turning Point*? IMF Working Paper.
- Davenport, T. O. (1999). *Human Capital: What It Is and Why People Invest It.* San Francisco, California: Thomas O. Davenport and Jossey-Bass Inc.
- Davin, D. (1999). *Internal Migration in Contemporary China*. Hampshire: MacMillan Press.
- Davis, J. and Henderson, J. V. (2003). Evidence on the Political Economy of the Urbanization Process. *Journal of Urban Economics*. (53): 98-125.
- Dong, X. Y., and Putterman, L. (2000). Prereform Industry and the State Monophony in China. *Journal of Comparative Economics*, 28(1): 32-60.
- Ehrenberg, R. G. and Smith, R. S. (2011). *Modern Labor Economics: Theory and Public Policy* (11th Edition). New York: Prentice Hall.
- Enderle, G. (2010). Wealth Creation in China and Some Lessons for Development Ethics. *Journal of Business Ethics*. 96:1-15.
- Ercolani, M. G. and Zheng, W. (2007). An Empirical Analysis of the Lewis-Ranis-Fei Theory of Dualistic Economic Development for China. *Annual Conferenceon Chinese Economist Society*, Changsha, Hunan province, China.

- Ewing, R. and Rong, F. (2008). The Impact of Urban Form on U.S. Residential Energy Use. *Housing Policy Debate*. 19(1):1-29.
- Feigon, L. (2002). Mao: A Reinterpretation. Chicago: Ivan Dee.
- Feng, K. (2013). Government should Transform its Role from All-Round Leading to Part Leading in the New Type Urbanization Process. *Economic Review.* (7): 51-55.
- Foster, J. J., Barkus, E. and Yavorsky, C. (2006). *Understanding and Using Advanced Statistics: A Practical Guide for Students*. New York: SAGE Publications.
- Fowler, F. J. Jr. (1995). *Improving Survey Questions: Design and Evaluation*. London: SAGE Publications.
- Frederickson, J. R., Webster, E., and Williamson, I. O. (2010). Is the Current Accounting Treatment of Education and Training Costs Appropriate? *Australian Accounting Review*, 20(54): 265-273.
- Fu, Y. and Gabriel, S. (2001). Transitions to Private Employment: Earnings Determination, Worker Employment Preferences, and Job Turnover in Urban China. Department of Finance and Business Working Paper Series, No. 01-21, Marshall School of Business, University of Southern California.
- Gallagher, M., Giles, J., Park, A. and Wang, M. (2013). China's 2008 Labor Contract Law: Implementation and Implications for China's Workers. Policy Research Working Paper 6542. The World Bank.
- Garnaut, R. (2010). Macro-Economic Implications of the Turning Point. *China Economic Journal*, 3 (2): 181 190.
- Ge, Y. (2007). What Do Unions Do in China. Working Paper. Available at SSRN: http://ssrn.com/abstract=1031084.
- Goldstein, S. and Goldstein, A. (1991). *Permanent and Temporary Migration Differentials in China*. Honolulu, HI: East-West Population Institute.
- Golley, J. and Meng, X. (2011). Has China Run Out of Surplus Labor? *China Economic Review*, 22(4): 555-572
- Gravetter, F. J. and Forzano, L. B. (2003). Instructor's Manual with Test Bank for

- Research Methods for the Behavioral Sciences. Belmont, CA: Wadsworth.
- Greene, J. C., Caracelli, V. J., and Graham, W. F. (1989). Towards a Conceptual Framework for Mixed Method-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274
- Gu, C., Wu, L. and Cook, L. (2012). Progress in Research on Chinese Urbanization. Frontiers of Architectural Research. 1: 101-149.
- Guang, D. (2008). *The study of the Chinese featured urbanization*. Ph.D. Thesis. Jilin University, Changchun.
- Haager, D. M. (2000). How Do Investments in Human Capital Differentially Effect Gender Income? An Analysis of the Gender Wage Gap. *The Park Place Economist*. 8(1):47-65.
- Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998). *Multivariate Data Analysis*. 5th ed., New York: Prentice Hall International, Inc.
- Han, Q. and Yin, X. (2006). Change for Wage of Foreign Invested Enterprises, Warning for "Made in China". *Sino-Foreign Management*. (9): 66-68.
- Hasenpusch, T. P. (2009). Clearing Services for Global Markets: A Framework for the Future Development of the Clearing Industry. Cambridge: Cambridge University Press.
- He, N. R. (2006). Research on Contemporary Urbanization Theory in China. Ph.D. Thesis. Fudan university, Shanghai.
- He, S., Liu, Y. and Zhou, H. (2012). Why Is It Difficult for the Coastal Industries to Transfer to the Central and Western Regions: An Analysis Based on Regional Salary Differences as Revealed in Recruitment Ads. *China Soft Science*. (1): 160-169.
- Hebei Economic Statistical Yearbook (2012). Beijing: China Statistics Press.
- Henderson, J. V. and Wang, H. G. (2007). Urbanization and City Growth: The Role of Institutions. *Regional Science and Urban Economics*. 37(2): 283-313.
- Henderson, V. (2002). Urbanization in Developing Countries. *The world Bank Research Observer*. 17(1):89-112.

- Henderson, V. (2005). Urbanization and Growth, in Philippe Aghion and Steven N. Durlauf (eds). *Handbook of Economic Growth*. volume 1A. Amsterdam: North Holland.
- Henson, R. K. (2001). Understanding Internal Consistency Reliability Estimates: A Conceptual Primer on Coefficient Alpha. *Measurement and Evaluation in Counseling and Development*. (34): 177-189.
- Hibberd, M. and Bennett, M. (1990). *Questionnaire and Interview Survey*. London: Polic Foundation.
- Hou, L. (2006). The Chinese Enterprises Salary Determination Mechanism under the Economic Globalization Perspective. Ph. D. Thesis, Hunan University.
- Hsu, C. (2007). The Delphi Technique: Making Sense of Consensus. *Practical Assessment Research & Evaluation*. 12 (10): 1-8.
- Hu, X. (2012). Females are Higher than Males in the Proportion of Education Background of College Degree and Above in Chongqing City. Retrieved from http://www.wsic.ac.cn/academicnews/79552.htm.
- Huang, Y. L. (2007). On the Influence and the Tendency of the Rising Labor Force Cost. *Journal of Daqing Normal University*. 28(4):51-53.
- International Labor Organization. (1999). The International Conference of Labor Statisticians.
- Japan Productivity Center (2011). 2011 International Comparison of Labor Productivity.
- Jefferson, G. H. and Singh, I. (1999). *Enterprise Reform in China: Ownership, Transition, and Performance*. Oxford: Oxford University Press.
- Jiang, Z. C. (2008). Analysis on the Reasons for Labor Cost Rising. *Modern Economic Information*. (9):17-17.
- Jones, D. W. (1989). Urbanization and Energy Use in Economic Development. *The Energy Journal*, 10(4):29-44.
- Jones, D. W. (1991). How Urbanization Affects Energy-use in Developing Countries. *Energy Policy*, 19(7):621-629.

- Jones, D. W. (2004). Urbanization and Energy. In Cutler J. Cleveland and Robert U. Ayres (eds) Encyclopedia of Energy, (pp. 329-335). Amsterdam: Elsevier Science.
- Kaiser, H. F. (1974). An Index of Factorial Simplicity. *Psychometrika*, (39): 31-36.
- Kamal-Chaoui, L., Leman, L. E. and Zhang, R. (2009). Urban Trends and Policy in China. OECD Regional Development Working Papers, 2009/1, OECD publishing
- Kang, L. (2011). *Study on the Impact of Children on Family Consumption*. Master Thesis. Southwest Financial and Economic University.
- Kelley, A. C. and Williamson, J. G. (1980). *Modeling Urbanization and Economic Growth*. Laxenburg: International Institute for Applied Systems Analysis.
- Konrad, G. and Szelenyi, I. (1974). Social Conflicts of Under-Urbanization. In M. Harloe of the book. Captive Cities: Studies in the Political Economy of Cities and Regions (pp. 206-226). New York: Wiley.
- Kumar, A. and Kober, B. (2012). Urbanization, Human Capital, and Cross-Country Productivity Differences. *Economics Letters*. 117(1): 14-17.
- Kumbhakar, S. and Zhang, R. (2013). Labor-use Efficiency and Employment Elasticity in Chinese Manufacturing. *Economia e Politica Industriale/Journal of Industrial and Business Economics*. 40(1): 5-24.
- Kwan, F. (2009). Agricultural Labor and the Incidence of Surplus Labor: Experience from China during Reform. *Journal of Chinese Economic and Business Studies*, 7(3): 341-61.
- Leon, D. A. (2008). Cities, Urbanization and Health. *International Journal of Epidemiology*. 37: 4-8
- Lett, E. and Banister, J. (2009). China's manufacturing employment and compensation costs: 2002-06. *Monthly Labor Review* 4: 30-38.
- Lewis, W. A. (1954). Development with Unlimited Supplies of Labor. *Manchester School of Economics and Social Studies*. (20):139-192.
- Lewin, C. (2005). Elementary Quantitative Methods. In Someth, B. and Lewin, C.

- (Eds.). Research Methods in the Social Science. London: Sage.
- Li, B. and Piachaud, D. (2006). Urbanization and Social Policy in China. Asia-Pacific Development Journal. 13(1): 1-24.
- Li, H., Li, L., Wu, B. and Xiong, Y. (2012). The End of Cheap Chinese Labor. *The Journal of Economic Perspectives*. 26(4): 57-74.
- Li, J. (2000). Fertility Policy and Population Ageing in China. *Population Research*. 24(2):9-15.
- Li, R. (1999). Climax and Recession of Urbanization during the Great Leap Forward Period. *Population & Economics*. 5: 42-46.
- Li, X. and Freeman, R. B. (2012). *How Does China's New Labor Contract Law Affect Floating Workers*. NBER Working Paper, February.
- Li, S., Yu, J., Zhu, H. and Liu, X. (2012). The Problems and Countermeasures of Staff Training in the Enterprises. *Journal of Yunnan Agricultural University*. 6(5):20-24.
- Li, Y. (2013). Study on the Dilemma and Countermeasures for Export-Oriented Medium and Small Enterprises. *Business*. (20): 71
- Liang, Z. and Ma, Z. (2004). China's Floating Population: New Evidence from the 2000 Census. *Population and Development Review*. 30(2): 467-88.
- Liao, J. (2007). Analysis on the Increasing of Labor Cost in China: Evidence from Manufacturing Industry. *China Labor*. (3): 25-27.
- Liao, P. (2008). The Reason of Labor Cost Rising Influence of New Labor Contract Law on Labor Cost. *Friend of the Accountant*. (7):92-93.
- Lin, Y., Cai, F., and Li, Z. (1994). *The China miracle: Development strategy and economic reform*. Shanghai: Shanghai People Press.
- Liu, A. Y., Yao, L. F. and Li, Q. C. (2011). Co-integration Analysis on Urbanization and Economic Development in China. *Anhui Agricultural Technique*. (14):52-60.
- Liu, F. (2010). A Study of the Interest Differentiation in the Process of Urbanization.

 Master Thesis. Zhengzhou University, Zhengzhou, China.

- Liu, L., Jing, R. and Long, X. (2008). Analysis on the Influence of Ownership on the Wage and Welfare of Industrial Enterprises in China. *China Management Magazine*. 04: 327-335.
- Liu, L. and Ren, B. (2008). Inner Relation among Wage, Commodity Price and Economic Growth: Empirical Study with Evidence from China. Social Science Research. (1): 72-76.
- Liu, N. and Yang, P. (2013). Urbanization Variation and Narrowing Urban and Rural Gaps from the Perspective of Income Differences between Urban and Rural Areas. *Finance and Economy*. (8): 21-25.
- Liu, Y. (2012). A Study of Wage Differentials between Different Ownership Sectors in China. *The Journal of Quantitative & Technical Economics*. 11: 85-101.
- Liu, Z. and Peng, B. (2013). An Economic Analysis of the Rural-urban Migration in China. *Journal of American Science*. 9(9s):56-63.
- Logan, J., Fang, Y. and Zhang, Z. (2006). Access to Urban Housing. *Conference on Rethinking the Rural-Urban Cleavage in Contemporary China*, Peking University.
- Logan, J. R. (2008). Urban China in Transition. India: Blackwell Publishing.
- Lomax, R. G. and Hahs-Vaughn, D. L. (2013). *An Introduction to Statistical Concepts*. (3rd ed.). New York: Taylor & Francis Group.
- Lucas, R. E. (1988). On the Mechanics of Economic Development. *Journal of Monetary Economics*, 12:3-42.
- Lynn, S. R. (2003). *Economic Development. Theory and Practice for a Divided World*. Upper Saddle River, N.J.: Prentice-Hall.
- Ma, S, Zhang, J and Zhu, X. (2012). The Effect of Minimum Wage on Average Wage and Employment. *Economic Research Journal*. (5): 132-146.
- Madlener, R. and Alcott, B. (2009). Energy Rebound and Economic Growth: A Review of the Main Issues and Research Needs. *Energy*. 34(3): 370-376.
- Madlener, R. and Sunak, Y. (2011). Impacts of Urbanization on Urban Structures and Energy Demand: What Can We Learn for Urban Energy Planning and

- Urbanization Management? Sustainable Cities and Society. 1:45-53.
- Mann, P. S. (1995). *Introductory Statistics* (2nd ed.). New York: Wiley.
- Marriam, S. B. (2001). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass Publishers.
- Marshall, A. (1890). Principles of Economics. London: Macmillan and Co., Ltd.
- McGee, T. G., Lin, G. C. S., Marton, A. M., Wang, M. Y. L. and Wu, J. (2007). *China's Urban Space: Development under Market Socialism.* New York: Routledge.
- McGranahan, G. and Tacoli, C. (2006). Rural-Urban Migration in China: Policy

 Options for Economic Growth, Environmental Sustainability and Equity.

 Human Settlements Working Paper Series Rural-Urban Interactions and
 Livelihood Strategies. IIED 12, London.
- Mei, L. and Xu, Y. (2012). Study on the Dilemma of Optimizing Manufacturing Industry Structure: In the Case of Small and Medium Enterprises in Zhejiang Province. *Business Economy*. (10): 3-4.
- Meng, X. and Bai, N. (2007). How Much have Wages of Unskilled Workers in China Increased? In Garnaut, R. and Song, L. (Ed.), China: Linking Markets for Growth. (pp. 151-75). Canberra: Asian Pacific Press.
- Meng, X. and Wang, Y. (2011). Rural Urbanization under the Background of New Type Situation between Rural and Urban Areas. Beijing: Economic Science Press.
- Miles, M. B., and Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.
- Minami, R. and Ma, X. (2009). The Turning Point of Chinese Economy: Compared with Japanese Experience. Labor Market in the People's Republic of China (PRC) and its Adjustment to Global Financial Crisis Conference. 18-19 June. Tokyo.
- Mincer, J. A. (1958). Investment in Human Capital and Personal Income Distribution. *Journal of Political Economy*. 66(4):281-302.

- Mincer, J. A. (1974). *Schooling, Experience, and Earnings*. New York: Columbia University Press.
- Moretti, E. (2004) .Workers' Education, Spillovers and Productivity: Evidence from Plant-Level Production Functions. *American Economic Review.* 94: 656-690.
- Morikawa, H. (1989). Urbanization and Urban System. Damingtang Press.
- Mou, X. (2006). *Research on Urbanization of China and its Policies*. Master Thesis. University of Electronic Science and Technology of China, Chengdu.
- National Bureau of Statistics of China (1978-2012). *China Statistical Yearbook*. Beijing: China Statistics Press.
- Naughton, B. (1994). Chinese Institutional Innovation and Privatization from below. *The American Economic Review.* 84(2):266-270.
- Neter, J., Wasserman, W. and Kunter, M. H. (1989). *Applied Linear Statistical Models*. (2nd ed.). Homewood: Irwin.
- Ning, Y. (2012). A Study on the Urbanization, Urban Problems and Solution in China. *Social Sciences in Nanjing*. 10: 19-27.
- O'Connor, B. N. (2002). Qualitative Case Study Research in Business Education. The Delta Pi Epsilon Journal. 44(2):80-90.
- O'Donoghue, T. and Punch, K. (2003). *Qualitative Educational Research in Action:*Doing and Reflecting. New York: Routledge.
- Ofer, G. (1980). Industrial structure, urbanization, and socialist growth strategy: An historical analysis, 1940-1970. In Rosefielde, S. (Ed.), *World Communism at the Crossroad* (pp. 131-159). Cambridge: Cambridge University Press.
- Oi, J. C. (1993). Reform and Urban Bias in China. *Journal of Development Studies*. 29(4):129-148.
- Oppenheim, A. N. (1992). *Questionnaire Design, Interviewing and Attitude Measurement*. London, UK: Pinter Publishers.
- Pacione, M. (2009). *Urban Geography: a Global Perspective*. New York: Routledege.
- Parikh, J. and Shukla, V. (1995). Urbanization, Energy Use and Greenhouse Effects

- in Economic Development Results from a Cross-National Study of Developing Countries. *Global Environmental Change*. 5(2): 87-103.
- Park, A., Cai, F. and Du, Y. (2007). Can China Meet Her Employment Challenges?
 Conference on Growing Pains: Tensions and Opportunity in China's
 Transformation, 2-3 November. Stanford University.
- Park, H. M. (2008). Univariate Analysis and Normality Test Using SAS, Stata, and SPSS. Working Paper. The University Information Technology Services (UITS) Center for Statistical and Mathematical Computing, Indiana University
- Pearson, K. (1895). Contributions to the Mathematical Theory of Evolution. II. Skew Variation in Homogeneous Material. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences.* 186: 343-414.
- Pei, X. (1999). Collective Land Ownership: The Power of development and Reform of Rural Industry. *Economic Research*. 6: 45-51.
- Peng, X., Chen, X. and Cheng, Y. (2010). Urbanization and Its Consequences.
 Demography, Vol. II, UNESCO-The Encyclopedia of Life Support Systems
 (EOLSS) Joint Committee. New York: United Nations.
- Peng, Z. (2006). Firm Size, Ownership and Wage. *Journal of Shanxi Finance and Economics University*. 28(6): 8-16.
- Qi, J. (2004). A Study on the Urbanization and Coordinated Rural Economic Growth in China. Ph. D. Thesis. Hubei: Huazhong University of Science and Techology.
- Qin, W. (2009). Analysis of Interactive Relation between Urbanization and Economic Development in the North of Jiangsu Province. *Modern City Research*. 7:64-69.
- Quan, Y. (2012). Trend of International Economic Environment and the Economic Transformation in China. *Forum of World Economics & Politics*. July (4):45-59.
- Ranis, G. (2004). Arthur Lewis's Contribution to Development Thinking and Policy. *The Manchester School*. 72 (6): 712-723.
- Ranis, G. and Fei, J. C. H. (1961), A Theory of Economic Development. *American Economic Review*. (51): 533-565.
- Rasli, A. (2005). IT Competencies and the Conditions for Training Effectiveness: A

- Study on Malaysian University Clerical Workers. Ph. D. Thesis. Roskilde University, Denmark.
- Ren, L. (2010). Analysis on the Root Reason of the Difficulty on Seeing a Doctor.
 Retrieved Jan. 7, 2012, from
 http://www.chinareform.org.cn/society/Medical/Forward/201012/t20101215_54
 944.htm.
- Renaud, B. (1981). *National Urbanization Policy in Developing Countries*. Oxford: Oxford University Press.
- Rong, J. (2008). *Technical Progress, Human Capital and Labor Migration in China*. Ph. D. Thesis. Fudan University, Shanghai.
- Rothwell, W. J. and Kazanas, H. C. (2004). *Improving On-the-Job Training: How to Establish and Operate a Comprehensive OJT Program (Jossey Bass Business and Management Series)*. (2nd ed.). San Francisco: Pferffer.
- Sachs, J., Hu, Y. and Yang, X. (2003). Economic Reform and Constitutional Reform. *Economics*. 2(4): 961-988.
- Schacter, D. L., Gilbert, D. T. and Wegner, D. M. (2008). *Psychology*. New York: Worth Publisher.
- Schmidt, R. C. (1997). Managing Delphi Surveys Using Nonparametric Statistical Techniques, *Decision Sciences*. 28 (3): 763-774.
- Schmidt, R., Lyytinen, K., Keil, M. and Cule, P. (2001). Identifying Software Project Risks: an International Study. *Journal of Management Information Systems*. 12(4): 5-36.
- Schultz, T. W. (1971). *Investment in human capital: The role of education and research*. New York: The Free Press.
- Schultz, T. W. (1972). Human Capital: Policy Issues and Research Opportunities. In T. W. Schultz (Ed.), Human Resources: Fiftieth Anniversary Collaquerim VI National Bureau of Economic Research (pp. 1-84). New York: Columbia University Press.
- Sekaran, U. (2003). Research Methods for Business (4th ed.). Hoboken, NJ: John

- Wiley & Sons.
- Sisson, G. R. (2001). *Hands-On Training: A Simple and Effective Method for On-the-Job Training*. San Francisco: Berrett-Koehler Publisher.
- Sodhi, M. and Tang, C. (2013). Strategies and Tactics of Chinese Contract Manufacturers and Western OEMs (2001-2011). *International Journal of Production Economics*. 146: 14-24.
- Song, Y. and Ding, C. (2007). *Urbanization in China: Critical Issues in an Era of Rapid Growth*. Cambridge, MA: Lincoln Institute of Land Policy.
- Song, Y. and Yan, H. (2011). A Critical Review to Studies on the Psychological Problems and Value Changes of New Generation of Migrant Workers. *Journal of Nanjing University of Science and Technology*. 24 (3): 67-72.
- Spence, M. (2011). The Impact of Globalization on Income and Employment: The Downside of Integrating Markets. *Foreign Affairs*. 90(4): 28-41.
- Sun, G. Q. (2010). *Methodology of Management Research*. Shanghai: Gezhi Publishing House.
- Sun, M. and Fan, C. (2011). China's Permanent and Temporary Migrants: Differentials and Changes, 1990-2000. *The Professional Geographer*. 63(1):92-112.
- Sun, S. (1994). *Controlled Urbanization in China, 1949-1989*. Ph. D. Thesis. Simon Fraser University, Columbia, British.
- Sun, Y. (2012). Income Gap in China and Its Causes. Fortune Time. (3): 27-27.
- Sun, Z. (2008). Has China Reached the "Lewis Turning Point"? Economic Growth and Population Dividend. *Economist*. (1): 117-119.
- Sweetland, S. R. (1996). Human Capital Theory: Foundations of a Field of Inquiry. *Review of Educational Research*. 66(3): 341-359.
- Taylor-Powell, E. and Renner, M. (2003). *Analyzing Qualitative Data*. Madison, WI: University of Wisconsin Extension.
- Tavakol, M. and Dennick, R. (2011). Making Sense of Cronbach's Alpha. International Journal of Medical Education. (2): 53-55.

- Teddlie, C. and Tashakkori, A. (2002). Major Issues and Controversies in the Use of Mixed Methods in the Social and Behavioral Science. In Tashakkori, A. and Teddlie, C. (Ed.), *Handbook of Mixed Methods in Social & Behavioral Research*, (pp. 3-50). Thousand Oaks, CA: Sage.
- Tellnes, G. (2005). President's Column: positive and negative public health effects of urbanization. *European Journal of Public Health*. 15(5): 552-553.
- Teng, Q. and Zhang, T. (2007). Compared the Difference of Staff's Happiness Sense in Different Ownership Enterprises. *Value Engineering*. 26(6): 13-15.
- The State Council of P. R. China. (1958). *Regulations on Hukou Registration of P. R. China*. PRC President's Order (No.91 of the 1st NPC).
- The State Council of P. R. China. (1961). Nine Measures to Reduce Urban Population and Compress Urban Provisions.
- The State Council of P. R. China. (1989). City Planning Law of the P. R. China.
- The State Council of P. R. China. (1994). Suggestions on Intensifying the Construction of Small Cities and Towns. [1994] No. 564.
- The State Council of P. R. China. (2014). *National New-type Urbanization Plan* (2014-2020).
- The 6th National Census Data Bulletin. (2010). Beijing: China Statistics Press.
- Thurow, L. C. (1975). The Optimum Lifetime Distribution of Consumption Expenditures: Reply. *The American Economic Review*. 65(4):753-755.
- Todaro, M. P. (1969). A Model of Labor Migration and Urban Unemployment in Less Developed Countries. *American Economic Review*. 59 (1): 138-148.
- Triplett, J. E. (1983). *The Measurement of Labor Cost*. Chicago: The University of Chicago Press.
- Tsai, C. (2007). The Effect of Work Group Climate on Group Meeting Behavior in a Taiwanese Police Organization. Ph. D. Thesis. Webster University.
- Tu, S. and He, A. (2011). Stock of Rural Surplus Labors in China and Forecast of Its Trend. *Economic and Management Study*. (3): 111-117.
- United Nations (2008). International Standard Industrial Classification of All

- Economic Activities (ISIC), Rev.4. New York: United Nations Publication.
- U. S. Bureaus of Labor Statistics. (2010). Division of International Labor Comparisons. Retrieved Aug. 4, 2013, from www.bls.gov/
- U. S. Bureaus of Labor Statistics. (2012). *International Labor Comparisons*.
 Retrieved Aug. 4, 2013, from www.bls.gov/
- Vasilecas, O., Caplinskas, A., Wojtkowski, G., Wojtkowski, W., Zupancic, J. and Wrycza, S. (2005). *Information Systems Development: Advances in Theory, Practice, and Education*. New York: Springer.
- Wagner, L. N. (2008). *Urbanization: 21st Century Issues and Challenges*. New York: Nova Science Publishers Inc.
- Waldman, C. (2004). The Labor Market in Post-Reform China: History, Evidence, and Implications. *Business Economics*, 10: 50-62.
- Wang, C. (2005). Turning Point for Labor Supply and Demand and Dual Economy Transition in China. *Chinese Journal of Population Science*. (6): 2-10.
- Wang, J. and Gu, Y. (2011). Analysis on the Supply and Demand Relation Trend of the Chinese Labor Market in the Future. *Population Journal*. (3): 3-13.
- Wang, K., Zhou, Z., Sun Z. and Zhu, H. (2009). *The Urbanization Process of China's Characteristics*. Shanghai: Fudan University Press.
- Wang, X. (2013). Revised Urbanization Level in China from the Perspective of Urbanized Population. *Chinese Journal of Population Science*. (5): 87-95.
- Wang, X. and Weaver, N. (2013). Surplus Labor and Lewis Turning Points in China. Journal of Chinese Economic and Business Studies. 11(1): 1-12.
- Wang, Y. (2012). Overview of the Classical Theories on Rural Surplus Labor Migration. *Economic Research Guide*. (3):137-138.
- Wang, Y. and Shang, G. (2006). Evaluation on Urbanization in Hebei Province. Business Studies. (22): 152-156.
- Weinryb, B. D. (1957). The Impact of Urbanization in Israel. *Middle East Journal*. 11(1): 23-36.
- Werner, Z. H. (1990). Urban Economics (Chinese Version). Beijing: Social Science

- Press.
- Wheeler, C. H. (2006). Cities and the Growth of Wages among Young Workers: Evidence from the NLSY. *Journal of Urban Economics*. 60(2): 162-184.
- Wiersma, W. (2013). *The validity of surveys: Online and offline*. Retrieved December, 10, 2013, from http://papers.wybowiersma.net/abstracts/Wiersma,Wybo, The_validity_of_surveys_online_and_offline.pdf
- Wilk, M. B. and Gnanadesikan, R. (1968). Probability Plotting Methods for the Analysis of Data", *Biometrika* (Biometrika Trust). 55(1): 1–17.
- Williams, A. (2003). How to Write and Analyze a Questionnaire. *Journal of Orthodontics*. 30(3): 245-252.
- Williamson, J. (1988). *Migration and Urbanization*. In Chenery and Srinivasan (Ed.), *Handbook of Development Economics*, North-Holland: Amesterdam.
- Willis, R. J. (1999). Wage Determinants: A Survey and Reinterpretation of Human Capital Earnings Functions. In Ashenfelter, O. and Card, D. ed., Handbook of Labor Economics, Vol.1, Ch.10. North Holland: Elsevier.
- World Bank (2007). *China Quarterly Update, September 2007*. Washington, DC: World Bank.
- Wu, J. (2006). *Institutional Barrier and Innovation of Urbanization in China*. Ph. D. Thesis. Xibei University, Shanxi.
- Wu, M. (2000). A Handbook of Statistical Analyses Using SPSS. Beijing: Railway of China Press.
- Wu, M. (2010). Questionnaire Statistical Analysis Practice: SPSS Operating and Application (Wenjuan Tongji Fenxi Shiwu: SPSS Caozuo Yu Yingyong).Chongqing: Chongqing University Press.
- Wu, W. and Rosenbaum, E. (2008), Migration and Housing: Comparing China with the USA. In Logan, J. (Ed.), *Urban China in Transition* (pp. 250-267). Oxford, UK: Blackwell Publishing.
- Wu, X., Perloff, J. M. and Golan, A. (2004). Government Policy Effects on Urban and Rural Income Inequality. CUDARE Working Papers.

- Xia, Q., Song, L., Li, S. and Appleton, S. (2011). Effect of Public Sector and SOEs on Wage Inequality of Urban China: 1988-2007. 3rd CIER/IZA Workshop: Current Labor Market Issues in China. Beijing, China.
- Xie, J. (2012). Ratio of Housing Price to Income. Sanlian Life Week. (49):60-61.
- Xie, W. and Deng, W. (1996). *Urban Economics*. Beijing: Tsinghua University Press.
- Xin, Y. and Li, J. (2007). Influence of Labor Cost Rising on Economy in China. *Journal of Guizhou University of Technology*. 9(1):32-35.
- Xin, Y. (2010). Impact Factors for Labor Cost of China Manufacturing Industries. *Price Monthly.* 2: 65-69.
- Yang, D. T., Chen, V. W. and Monarch, R. (2010). Rising Wages: Has China Lost Its Global Labor Advantage? *Pacific Economic Review.* 15(4): 482-504.
- Yang, H. Q. (2002). *Labor Economics*. Beijing: China Renmin University Press.
- Yap, L. (1977). The Attraction of Cities: A Review of the Migration Literature. *Journal of Development Economics*, 4: 239-264.
- Yin, J. and Zhang, J. (2010). The Trend of the Minimum Labor Costs in Beijing and Its Enlightenment. *Reformation & Strategy*. 26(2): 157-159.
- Yu, J. and Qu, B. (2010). Human Resources Management Strategy for China Medium and Small Sized Enterprises Based on Social Responsibility Standard System. Science & Technology Progress and Policy. 27(9): 141-144.
- Yu, W. and Jensen, HG. (2010). China's Agricultural Policy Transition: Impacts of Recent Reforms and Future Scenarios. *Journal of Agricultural Economics*. 61(2): 343-368.
- Zamora, E. and Kirchmer, J. (2010). Compensation costs in manufacturing across industries and countries, 1975–2007. *Monthly Labor Review*. 133(6): 32-54.
- Zeng, Y. (1991). Impacts of Urbanization on Population Development in China. *Ren Kou Xue Kan*, (2): 1-5.
- Zenglein, M. J. (2008). *Marketization of the Chinese Labor Market and the Role of Unions*. Global Labor University Working Papers. No. 4.
- Zhang, A. and Chen, L. (2007). Quantitative Analysis Methods. Shanghai: Fudan

- Press.
- Zhang, B. (2008). Factors that Impact the Rising of Labor Cost in China and Its Influence. *China Economic & Trade Herald*. 10: 21-24.
- Zhang, B. (2009). *Trend and Consequence of Labor Cost Changing in China*. Bejing: China Jihua publishing house.
- Zhang, L. (2013). China Economy is in the Smooth Growth Phase and will not "Hard Landing". Retrieved on 8 November 2013, from http://finance.sina.com.cn/china/20130722/085416197948.shtml
- Zhang, L. and Zhao, S. (1998).Re-examining China's "Urban" Concept and the Level of Urbanization. *China Quarterly*. (154): 330-381.
- Zhang, L. Zhang, X., Yang, X. and Li, D. (2008). Positive Analysis on Choosing Dominant Industries of Hebei Province. *Journal of Shijiazhuang Railway Institute (Social Science)*. 2(1): 30-33.
- Zhang, X., Yang, J. and Wang, S. (2010). *China has reached the Lewis Turning Point*. IFPRI Working Paper 000977.
- Zhai, M. (2011). How to Establish Effective Salary Management System. Occupation. (11): 27-28.
- Zhao, Y. (2001). Causes and Consequences of Return Migration: Recent Evidence from China, CCER Working Paper, No. E2001010, Peking University.
- Zhou, Y. and Ma, J. (2003). China's Urbanization Levels: Reconstructing Comparable Time-series Data Based on the Fifth Population Census. *China Quarterly*. (173): 184-204.
- Zhu, N. (2002). The Impacts of Income Gaps on Migration Decisions in China. *China Economic Review*. (13): 213-230.
- Zhu, N. (2014). China Unveils Landmark Urbanization Plan. Retrieved Feb. 12, 2014. from http://news.xinhuanet.com/english/china/2014-03/16/c_13319049 5.htm.