



LUND UNIVERSITY  
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**Master Programme in**

**International Economics with a Focus on China**

# **Institutional Alterations and Economic Growth**

***-- Focus on Hangzhou's household (Hukou) registration system***

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*Abstract:* In the recent three decades, the great development of China's economy cannot separate from its institutional alterations. Hukou system, an institution with Chinese feature, is a kind of "passport" that admitted in the country. This thesis aims to investigate the Hukou system and its impact on labor migration, and more specifically, how Hangzhou's Hukou system impacts local economic growth. The result shows that Hukou system manages the labor migration between rural-urban areas and inter-cities. Hangzhou's slack Hukou system significantly and positively influences the Hangzhou's labor mobility and economic growth.

*Key words:* Institutional alterations, economic growth, Hukou system, Hangzhou, labor migration, labor mobility

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# Chap. 1 Introduction

Since the late 20th century, one of the most prominent and remarkable achievements in Asia is the rise of China. From being one of the under-developed countries, China emerged to become the world's second largest economy. The rising international status is also given by its development.

The relationship between China's rise and the institutional alterations is inseparable. Under the command economy, a Chinese citizen's job and position was arranged by central government. They were not allowed to find jobs in other place that was different from government's arrangement. It means that their jobs were given by central government and they cannot find other jobs for all their life. In other words, everything was planned and controlled by central government. Thus, command economy is also called planned economy. After the reform and opening up in 1978, China gradually transformed from centrally planned economy to socialist market economy and the labor force was freed. Hence, people were gradually free to find a satisfied job in other cities. After then, labor market was appeared gradually, but still, there are limitations in terms of freedom. Until now, the freedom of migration is still restricted by Hukou system. Hukou system, as one unique institution and instrument of China, has great influence on labor mobility. Hukou system is synonymous with Hukou registration system or Huji system in China. It is a system that manages and controls labor migrations between rural-urban areas and inter-cities. Although current Hukou system is much looser and people are allowed to working and living in other cities, they are not free to enjoy the local public services. For example, children of non-local residents cannot enjoy local compulsory education if they cannot own local hukou even if they lived here for several years (Although the local government provides the primary school for migrant workers, the education quality is not as good as local formal primary school). Nevertheless, it is no doubt that the slack Hukou system influences the labor mobility in China.

## 1.1 Purpose

The purpose of this thesis is to evaluate the impact of Hukou system on labor migration.

More specifically, focus is to find out how Hangzhou's slack Hukou system influences its economy growth. It also investigates the effect of the Hukou system from different perspectives (the entrepreneur and the worker).

## **1.2 Problem and Research question**

After the reform and opening up, Hukou system was much looser than the previous period. Then, Hangzhou, a typical eastern city, its economy grew rapidly after the reform. The relationship between Hangzhou's rapid development and its institutional alterations is inseparable. How is the impact on the regional economy after the alteration of Hukou system since the reform?

Therefore, my research questions are: *What are the main characteristics of Hangzhou's current Hukou policy? How does Hangzhou's slack Hukou system influence its economy?*

## **1.3 Limitations**

The limitations of this study are mainly concentrated on the research object and research time. Firstly, due to the case of this study is about Hangzhou that is an eastern city of China, it is a relatively developed city and cannot represent most of cities in China. Secondly, OLS regression model is introduced to figure out the correlation between labor mobility and economic growth in generalized extent. However, it is restricted by a small sample size because of the lack of statistical yearbook. Therefore, we can only do the conclusion within this period (1998-2013). The last but not least, this study focuses on research the immigrants from other cities, but cannot explain the transformation between intra-city's agricultural hukou and non-agricultural hukou.

## **1.4 Outline**

The thesis is divided into seven parts. In the first part is introduction that starting with a general introduction about the topic, research question and purpose, and limitations. The second part is background that present a briefly introduction of the Hukou registration system and Hangzhou city. In the chapter of literature review, I would like to present lots

of previous researches about the institutional alterations, labor market, economic growth and Hukou system. The methodology part is going to introduce the method and data that I used. Then in the chapter of Hukou system in Hangzhou, I would like to introduce the specific Hukou policy in Hangzhou and the effect of Hukou policy. The findings part will exhibit my research results of the model testing and interviews, then give a comprehensive discussion. The thesis ends with the conclusion. In this part, I will conclude the thesis process and results, then give a comprehensive and further discussion about the topic.



## **Chap. 2 Background**

Since the reform in 1978, China has transformed from centrally planned economy to socialist market economy. Nevertheless, there still exist some institutions, which are contrary with market economy. One of the most typical institutions of China, which is called Hukou registration system (Household registration system), plays a vital role in management of labor market.

### **2.1 Hukou registration system**

Hukou system, which refers to household registration system required by law, is a unique institution in China. Hukou system likes a kind of passport that admitted in the country. In 1954, China issued and implemented the first constitution, which ruled citizens have the right of freedom of migration and living. The “Rules of Household registration of the People’s Republic of China” was enacted in 1958, which symbolized the formal creation of Hukou system (Song, 2014). Having referred to geographic and family member relationship, it is the first time that all Chinese citizens were categorized into “agricultural hukou” and “non-agricultural hukou”. At that time, Chinese central government officially used Hukou system to control the movement of people between urban and rural areas. The Hukou system is properly called "Hujì" in China. Actually, the creation of Hukou system marked that Chinese citizens lost the right of freedom of migration. In 1975, the constitution formally cancelled the rules of migration freedom that established in 1954. These rules never have been restored. During the period of planned economy (before 1979), government restricted migration of residents rigorously (Chan & Zhang, 1999). It is very difficult for transforming from “agricultural hukou” to “non-agricultural hukou” (Bao, Bodvarsson, Hou & Zhao, 2011). However, after the reform and opening up, the Hukou system has been confronted with a serious of reforms and has been loosen gradually. I will give the details in later chapter. Having compared to the period of command economy, current people with agricultural hukou can acquire more opportunities, such as finding a decent vocation and settling in cities.

The essence of Hukou system is a management of labor migration (Li & Hong, 2013).

Hukou system restricts and controls the flow of populations. Thus, it has significant influence on the development of local economy. After improving, the current Hukou system in China is rather complicated. With the development of urban integration, however, the boundary of agricultural and non-agricultural hukou is becoming more and more vague. Therefore, it is no doubt that Hukou system is going to disappear in the future. In fact, this is what the governments are trying to do. According to premier Li's speech at the Third Session of the 12th National People's Congress (2015), governments should concentrate on the Hukou system reform and implement the relaxation of Hukou migration policy, such as abolish the payment of residence permit. Governments gradually reduce and cancel the gap between local and non-local hukou.

## 2.2 Brief about Hangzhou

Hangzhou, a provincial capital and largest city of Zhejiang Province, is the center of education, economy and culture. Hangzhou is located in the east of China and it is also the entrance of Hangzhou Bay on China's coast which between Shanghai and Ningbo. Hangzhou has been one of the most notable and prosperous cities in China's history and is famous as its beautiful natural scenery. Hangzhou's West Lake is its best-known attraction.

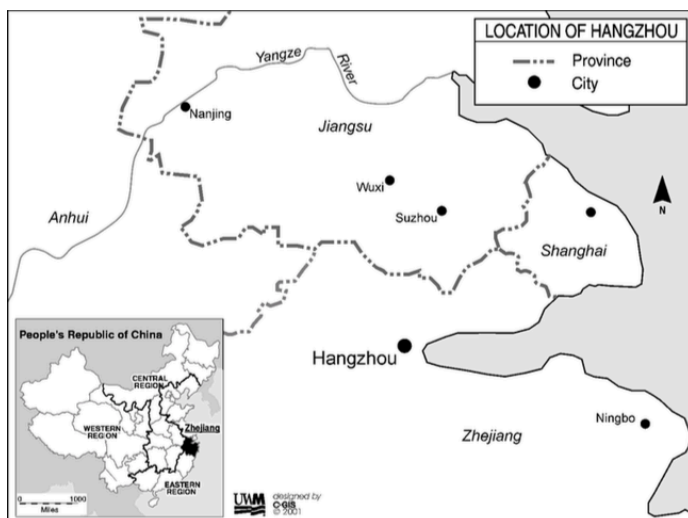


Figure 2. Location of Hangzhou

Hangzhou is classified as a sub-provincial city (totaling 15 sub-provincial cities in China). Hangzhou Metropolitan Area, which formed by Hangzhou, is the fourth largest metropolitan area in China. As well as, it is one of core cities of Yangtze River Delta. Hangzhou is not only enjoyed the superior location, but also being known for its rich industry and incomparable scenery. Furthermore, as a prominent city of Yangtze River Delta, Hangzhou's economy always ranked the top in China.

According to the China Statistical Yearbook (1983), at the beginning of reform (1982), Hangzhou's GDP was ¥5.019 billion and ranked nineteenth in China. The permanent resident population was 5.261 million. Its GDP per capita was approximate 954 Chinese Yuan.

*Table2. Hangzhou's economy and population in 1982 and 2013 (Hangzhou Statistical Yearbook)*

	GDP	Permanent resident population	GDP per capita
1982	¥ 5.019 billion	5.261 million	¥ 954
2013	¥ 834.352 billion	8.844 million	¥ 94791

However, compared with recent year (2013), Hangzhou's GDP in 2013 is approximate 834.352 billion Chinese Yuan. This number ranked tenth in Chinese cities. Hangzhou's permanent resident population was 8.844 million in 2013 (Hangzhou Statistical Yearbook, 2014). Its GDP per capita is approximate 94791 Chinese Yuan. It almost doubles 100 times! Although the inflation is taken into account, the gap and changes of economy are still spectacular.

Hangzhou, benefited from the Beijing-Hangzhou Grand Canal and the convenience of trading ports, as well as owned rich silk and food industry, was an important commercial hub in history. Later, relied on growth of shanghai on import and export trade, Hangzhou's light industry was developing rapidly. After establishing the position of tourist city, at the same time, the service industry of Hangzhou developed rapidly. Nowadays, the e-commerce industry in Hangzhou is booming and plays an increasing important role in Hangzhou's economy development. (The head office of Alibaba, which owns China's biggest online shopping platform Taobao, is located in Hangzhou).

# Chap. 3 Literature Review

## 3.1 Institutional changes and economic growth

There are a huge number of international research literatures about the relationship between institutional change and economic growth. According to North (1989), he contrasts the institutional evolution of intra-America, America-England and England-Spain, which with different institutional developments, to get the result shows that different economic consequences are produced by different institutional paths. Since the reform and opening up in 1978, Chinese central government adopted a series of polices and measures for transforming the Chinese economy from a central planning economy to a socialist market economy (Naughton, 2007). The core ideology is decentralization, which means more fiscal and administrative power devolved from central government to local governments (Wang & Ma, 2014). For example, fiscal federalism, which refers to the transfer of fiscal authority from central government to local governments, is most remarkable and notable during the process of decentralization (Naughton, 2007). Plenty of literatures and evidence support that fiscal decentralization is positive and significant relevant to local economic growth (Jalil, Feridun & Sawhney, 2014). According to Tamilina and Tamilina (2014), during the institutions formed, the economic institutional index strongly affects the economic growth rate of economies via the evolutionary institutional alterations (Tamilina and Tamilina, 2014). China's legal reforms, which so called "institutional innovations", play an important role in underpinning China's fast-growing economy (Yueh, 2013), such as the fiscal decentralization that mentioned above promoted the rapid development of China's market economy. As well as, Lo and Li (2011) indicate that the achievement of institutions of the market is the driving force of China's economic growth. China's institutional transformation from planned economy to market economy makes China's economy take off (Naughton, 2007). Therefore, it is crystal clear that there is a significant relationship between China's institutional alterations and its economic growth. Especially, institutional changes on labor market in China are remarkable and important for its economic growth.

### **3.2 Labor market and economic growth**

According to the Cobb–Douglas production function, economic growth depends on labor, input of capital and total factor productivity. Labor is one of the most crucial ingredients in capital production. It is impossible to substitute labor for capital in social production (Solow, 1956). The inflow of labor positively influences the productivity because of inflow of people with a lot of productivity potential (manpower, capital, technique and so forth) which allows increase in outputs. Even for the broad industrial production, the number of labor force with an enormous extent determines the productivity (Kuznets, 1957). Astra (2014) indicates in the research that one of the main factors that ensures constant and stable improvement and growth of economy is the growth of labor productivity. Therefore, we can suppose that the number of labor is significant and positive with the economic growth in general. Tang (2014) gives an example of Shenzhen, which was a very small town near the border between Hong Kong and mainland China. The development and growth of Shenzhen have a heavy reliance on the labor concentration.

After the reform and opening up, Chinese rural labor force was freed and allowed to work in the industrial manufacture in cities (Naughton, 2007). The large number of labors that move from agricultural industry to industrial manufacture is significant and beneficial for the development of economy (Subramanian, 2014). Meanwhile, the labor flow enhances the reciprocity on experience. According to Boschma, Eriksson & Lindgren (2014), the intra-regional labor flows between skill-related industries impacts positively on regional productivity growth. A change in education spending on human capital affects output through enhancing productivity (Qadri & Waheed, 2014). In other words, the improvement of labor quality is positive for the economic growth. Through the examination of large amount of data, Hanushek and Kim (1995) demonstrate that the quality of the labor force has a consistent, stable and strong influence on economic growth. As well as, the further research indicates that China's public sector labor restructuring is one of most important reforms related to Chinese market reforms (Dong & Xu, 2009). Labors are not guaranteed by governments to have a job in state sector, instead, they have to work for private sectors. This reform creates the privatization in a

great extent.

### **3.3 The Hukou system**

Hukou system is synonymous with household registration system in China and was formally created in 1958. According to geographic and family member relationship, all Chinese citizens hold either an “agricultural” or “non-agricultural” hukou that refers to geographic and family member relationship (Song, 2014). Under the planned economy, the policies and measures that restrict the migration of urban and rural population played a vital role in the implement of strategy of urbanization and the rapid development of industrialization (Cheng & Selden, 1994). After the reform and opening up, the devolution of administrative power, the management of the hukou system is also devolved from central government to lower-level governments.

Therefore, the power of Hukou management and hukou-related policy-making was gradually devolved from central government to local governments (Chan, 2010). Then, local governments have more power to enforce their own policies and measures (Chan, 2009). As a consequence, local governments have right to establish and enact local policies and measures to manage its hukou admission criteria and the number of new local hukou they admit each year within their jurisdictions (Wang, 2005). Therefore, Hukou system, China’s unique institution, are adopted by different local governments in different ways.

Hukou system, a system with Chinese feature, affects labor market and economy (Song, 2014). As I mention before, Cobb–Douglas production function indicates that economic growth depends on labor, input of capital and total factor productivity. The meaning of Hukou registration system is the management of population migration. Due to the population itself is labor and carrier of capital, thus the change of Hukou registration system affect the flow of production factors, and then further affect the urban economy growth (Li & Hong, 2013). Hukou system is also impact on local labor market with the level of wage. According to Song (2014), workers with rural hukou earn lower wages than works with urban hukou. He also indicates that workers with rural hukou are less

likely to be hired in the high-wage sector in urban areas compared to workers with local urban hukou (Song, 2014). Thus, the hukou system is negatively impact on rural-to-urban migration.

From the view of function, Hukou system is the gate of urbanization. On the one hand, with the loose of Hukou system, urbanization developed rapidly. On the other hand, we have to consider the blindness of market and avoid the negative impact of overspeed and excessive urbanization (Zhang, 2010). According to Cai, Wang and Du (2002), the labor market distortions affect China's regional economic growth. And then they also indicate that abolishing or freeing of the Hukou system is crucial for labor mobility and economic growth (Cai, Wang & Du, 2002). Thus, we can regard the alteration of Hukou system as a kind of reform of labor market. China's reform of labor market is quite successful and positive for its development of economy. As Du and Yang (2014) said, China gained the first demographic dividend from promoting economic growth when its demographic transition and growth rapidly developed in the past few decades. The policy of childbirth encouragement in the beginning of foundation of state provides plenty of labor resource for China's development in later years and the policy of family planning controls the population to achieve the reasonable allocation of resources. The increase of labor mobility, which posed by the relaxation of Hukou system, will lead to more pronounced core-periphery outcomes (Bosker, Brakman, Garretsen & Schramm. 2012). Due to the local officials, who have power on Hukou management, are more eager to have reform to attract the talent and the wealthy to the city, as well as, to exploit the possibility of cheapest labor. The current slack Hukou system allows labors concentrates from rural and relatively under-developed areas to urban and relatively developed areas. Abundance of low-skill labors guarantees its low-price. It is no doubt that current Hukou is obviously an important system for sustaining super-low-cost Chinese labor in the international market. Therefore, the slack Hukou system works well in maintaining Chinese labor owns the comparative advantage on cost in the global market and even is crucial for Chinese position of "world factory" (Chan & Buckingham, 2008).

# Chap. 4 Methodology

## 4.1 Research approach

In research, the research approach is often referred to deductive and inductive approaches. The deductive approach always works from the more general and theoretical to the more specific. While the inductive approach works with another way, move from the specific observations to the generalizations and theories (Saunders, Lewis & Thornhill, 2009). Either Deductive or inductive is theoretical and ideological approach. The practical method should be introduced into research.

Approaching the research question and literature review, a picture of Hukou system and Hangzhou's economic situation should be given. In this study, I am going to explore the impact of Hukou system to local economic growth. Hypothesis will be put forward based on the theory that mentioned above. In order to test the hypothesis, the OLS regression model is conducted to test the correlation between Hukou system and economic growth. The method of OLS regression model is considered as a kind of quantitative analysis. Thus, it is best and reasonable that works with deductive approach.

Then, in order to quantify the conceptual Hukou system, the total number of migrations is introduced. The labor mobility (the total number of migrations) works well on the explanation of the degree of Hukou system. It means that the more migration of population, the much looser Hukou policy. Then, it is much easier to investigate the relationship between labor mobility and GDP growth rate. Thus, the first research method is experimental strategy that included quantitative method. The experimental strategy concentrates on and aims to figure out the causal connections between variables (Thomas, 2004). In this case, an OLS regression model is erected as the main method. Secondly, in order to best provide an understanding of the perspective from non-local workers, the case study strategy is integrated as a complement into the research method as well. The case study strategy, which includes interviews, and analysis of documentary records, aims to generate a rich and complex understanding by examine single cases (Thomas, 2004). There are two main methods used in this study: OLS regression model and



interviews. The implementation of mixed method increases the validity and generalizability (Easterby, Thorpe & Jackson, 2012).

## 4.2 Research design

Research design could be categorized into three types: descriptive research, exploratory research and explanatory research (also referred to as causal research) (Saunders, Lewis & Thornhill, 2009). The descriptive is used to describe characteristics of persons or matters being studied (Saunders, Lewis & Thornhill, 2009). It can only do answers for “how it works” (Thomas, 2004). The exploratory often relies on secondary research such as literature review, data. It is used to seek new insights and determine the best research design and method (Saunders, Lewis & Thornhill, 2009). The explanation (Causal) emphasizes to investigate the relationships between variables. “Explanation is concerned with asking “why” questions” (Thomas, 2004). It is used to explain the cause-effect relationships (Brains, Willnat, Manheim & Rich, 2011). In this study, I will start with exploratory research and then do more descriptive research, end with some try of explanation research.

### *OLS regression model*

Due to this study is going to investigate the correlation between labor mobility and GDP growth rate, I decide to use OLS regression model to test.

According to Cobb-Douglas production function, economic growth depends on the input of labor and capital, and total factor productivity.

$$Y = AL^{\beta}K^{\alpha}$$

Y denotes that total production; L denotes that the input of labor; K denotes that the input of capital; A denotes that total factor productivity.  $\alpha$  and  $\beta$  denote that the output elasticities of capital and labor, respectively.

Based on this function, I can combine with our case and restructure the factors of function as following:

$$Y = f(A, K, L)$$

Y denotes that GDP growth rate; A denotes that technological advance; K denotes that the input of capital; L denotes that the input of labor.

Input of capital is the investment in fixed assets. Input of labor is total number of employees in a city. Let's take no account of technological advance, due to it is difficult to be quantified and measured in the actual operation. The essence of Hukou system is a management of labors (Li & Hong, 2013). Hukou system restricts and controls the flow of populations. In order to quantify the conceptual Hukou system, we can consider use total number of labor migration. As I mentioned in previous chapter, there is a relationship between labor quality and economic growth. Thus, I am going to use the total number of college graduates to represent the labor quality in a city. Thus, the new function can be exhibited as following:

$$GDP \text{ growth rate} = f(\text{employees}, \text{investment}, \text{graduates}, \text{labor\_mobility})$$

$$\begin{aligned} \text{growth\_rate}_i &= \beta_1 + \beta_2 \text{employees}_i + \beta_3 \text{investment}_i + \beta_4 \text{graduates}_i \\ &+ \beta_5 \text{labor\_mobility}_i + \mu_i \end{aligned}$$

growth\_rate denotes GDP growth rate; employees denotes the number of employees in one year; investment denotes the investment in fixed assets in one year; graduates denotes the number of college graduates in one year; labor\_mobility denotes the total number of people migrated in and out in one year; i denotes different years.

### *Interview and Case study*

Due to the lack of data, I would like to introduce interviews and case study to investigate the Hukou system and its effect further. At the end of March 2015, I go back to China and have a fieldwork about my research. In order to investigate the effect of Hukou system for labor mobility and non-local labors, I decide to have interviews for

Hangzhou's manufactory. Due to most of non-local workers are people without high educated, most of them concentrate in the manufacturing factory in Hangzhou. I thus decide to do my interviews in manufactories in Hangzhou. The objects of investigation are owners of those manufactories, workers without local hukou and workers with local hukou. Actually, it is not easy to have an interview for a busy businessman because they will never spend one second to talk with a strange student. Especially in China, businessmen are always sensitive for questions from strangers because they are vigilant against competitors. It means that I have to contact them with the intermediary. Fortunately, my father and cousin are both businessmen and they know some businessmen friends. In spite of this, it is still no easy to make appointments with businessmen. Finally, under help of my father and cousin, two factories' owners promise one hour to me for the interview. As well as, I do other interviews for non-local workers in order to obtain the different opinions from businessmen. (See appendix 2)

The merits of these interviews, in my opinion, are they give me plenty information about my questions. It is quite crucial for me to collect the information from questions about their comments for current Hukou system and their attitude for the non-local labors, such like "Do you think that the slack Hukou system is positive with your company's performance?", "What's your comment for current Hukou policy?" and "Is there any distinction on wage or welfare between local and non-local workers?". However, there are also some shortages existed. Due to the limited time, I cannot collect enough samples to have interviews. Thus, there may be some bias in responses of interviews because of few samples.

### **4.3 Method of gathering the data**

The main theoretical concepts are introduced in the literature review. Applying that framework in principle, the interview is designed to collect relevant opinions and data from local residents and non-local workers. The interview is used by obtaining language data through discovering perceptions and provides an in-depth understanding from the experience of businessmen and workers. Simultaneously, the face-to-face interview is beneficial for investigator to gain more information from interviewees' responses,

attitudes and behavior. Thus, it is necessary to collect information from interviews. These two businessmen, who own a firm or manufactory, recruit a larger number of non-local workers for producing every year. They have a sense on the changes of labor market. They thus can present a sensitive perspective for this research. Then from the viewpoint of non-local workers, it can be clearly expressed to us that practical and effective comment about the Hukou system.

The second hand data of variables of OLS regression model is all given by Hangzhou Statistical Yearbooks from 1999 to 2014, such like GDP, GDP growth rate, total number of employees, investment in fixed assets, total number of graduate, and total number of people moved in and out (See appendix 1). The channel of data gathering is the China Data Online, which is issued by the Lund University libraries, and the Hangzhou's Bureau of Statistics, which is issued by Hangzhou's government. Although we know the fact that maybe some fake data existed more or less, we cannot have better choice actually. Therefore, we can fully trust the source of the data because it comes from the authority.

#### **4.4 Reliability and Validity**

According to Thomas (2004), reliability and validity are two important characteristics and terms in research design that is used to evaluate the investigation. Reliability refers to the quality of measurement and consider about the "repeatability" or "consistency" of research measures (Trochim & Donnelly, 2006). Validity includes internal validity and external validity. It considers that "does the research reflect the reality?" and "can be generalized?" (Thomas, 2004).

##### *Reliability*

All of data, which used to test OLS regression model, come from the Hangzhou Statistical Yearbook that issued by the authority. Thus we can fully trust the source and facticity of data in this study. Since it is notable that the interviewer's characteristics, attitudes and behavior will influence interviewees' response (Thomas, 2004). I thus gain the knowledge about how to do interview, and also do much training and preparation

before the formal interview. According to Thomas (2004), the phases of interview can be structured through three main phases: Opening phase (Greetings and Contextual questions), Question-answer phase (Questioning, Listening, Recording, Timekeeping, Pacing and Maintaining rapport) and Closing phase (Thanks and Follow-up). I follow these steps seriously and finish the interview.

### *Validity*

Validity can be divided into internal validity and external validity (Thomas, 2004). Internal validity asks the evidence can reflect the reality under investigation and external validity asks the results can apply beyond the specific situation investigated. For the internal validity, due to the results is given by the reliable and authoritative data, we can trust that this investigation is valid. All of interviews with businessmen and workers are semi-structured face-to-face interviews. Interviewees would be openly and honestly share information in a quiet and comfortable place where they do not feel restricted or uncomfortable. Hence, valid findings are produced by successful interviews. For the external validity, OLS regression model is introduced to figure out the correlation between labor mobility and economic growth in generalized extent. Due to the restriction of small sample size, the interview is also introduced as a complement. The object of interviews is representative because they are typical in Hangzhou. Their firm and manufactory are small and medium-size that belong to the mainstream scale in Hangzhou. Moreover, as I mention before, there are two main methods used in this study: OLS regression model and interviews. The implementation of mixed method increases the validity and generalizability (Easterby, Thorpe & Jackson, 2012).

# Chap. 5 The Hukou System in Hangzhou

## 5.1 The evolution of the Hukou system in China

Hukou system is a unique institution in China. In history, it was changed and adjusted many times. There are two main phases of Hukou system since it was established (Song, 2014).

Phase1: 1958 - 1979. Under the command economy, farmers were banned to go into cities for working and were restricted to do farm work and tilling food. Hukou system played a crucial role in strictly managing rural hukou holders migrating to cities during this period (Chan, 2012; Tang, 2013). In 1958, the enactment of “Rules of Household registration of the People’s Republic of China” symbols that the formal creation of Hukou system. Chinese central government implemented the first step of strictly restriction and governance for the free flow of population. As well as, it is the first time that all Chinese citizens were categorized into two different ways: “agricultural hukou” and “non-agricultural hukou”.

*Table 5. Types of hukou status (Song, 2014)*

	Agricultural hukou	Non-agricultural hukou
Living in the registered place of Hukou	Local agricultural hukou	Local non-agricultural hukou
Not living in the registered place of Hukou	Non-local agricultural hukou	Non-local non-agricultural hukou

Any legal conversion of hukou status from “agricultural hukou” to “non-agricultural hukou” (“nongzhuangfei” in Chinese) and the change of the location of hukou registration were required by government’s approval (Song, 2014). However, the criterion for converting from “agricultural hukou” to “non-agricultural hukou” was stipulated by the central government and was very strict and tight. Thus, during the Mao’s era, it is very rare that migrated between rural area and urban area even included the illegal migration (Wu, 1994).

Phase 2: 1980 – today. Due to China’s reform and opening up, China transformed from centrally planned economy to socialist market economy gradually. More fiscal and administrative power devolved from central government to local governments that included the administrative power of Hukou management and Hukou-related policy-making. Hence, local governments gained more power to establish and enact local policies and measures to manage its hukou admission criteria and the number of new local hukou they admit each year within their jurisdictions. After the land reform in 1980, household responsibility system was generalized across the country. Rural labor force was freed and rural labors were allowed to work in cities (Naughton, 2007). In 1984, the enactment of “the State Council’s notification of problems about famers go and settle into towns” symbols that the strict Hukou system began to slack. It means rural labors were free to go into cites to find a job. They had no responsibility to stay the birthplace to till land. The decentralization of Hukou system incents large number of rural labors crowd into cities for work and enormously promote labors’ mobility. However, with the increase of labor migration, the urban stresses of metropolises are also inflating. Due to the limitation of urban resources, local governments have to improve their criteria and requirements to prevent excessive population and protect limited urban resources.

## **5.2 Hangzhou’s current Hukou system**

Different cities have different Hukou system. Also, Hangzhou’s Hukou system has been changing over years. According to Hangzhou’s policy of migration (2015), the items of Hangzhou’s current Hukou policy could be concluded into four types.

1. Introduction of talents. Government enacts a serious of policies and measures to encourage and incent those talents who with a full-time diploma in shortage program of common colleges or a full-time bachelor or above degree in common universities, with intermediate or above qualification of technical position, with a patent of invention, and their family members’ migration. What is more, talents with master or above degree can enjoy policy of settling before working.
2. Purchasing house. The policy of purchasing house has been changing during two

decades in terms of labor mobility. It requires that people have to purchase a house that meets the requirements in Hangzhou's main urban districts. The requirement is different between different districts. It is important to note that if one of a couple is Hangzhou registered resident, then another one cannot gain Hangzhou's hukou through purchasing a house. They have to gain a degree and been introduced as a talent or live with their spouses for couple of years to gain Hangzhou's hukou.

3. Reunion of relatives. There are three types for reunion of relatives. Husband-wife reunion, minor children reunion and elderly parents reunion are allowed to migrate. Husband-wife reunion means that one of over three years couple is already gain Hangzhou's hukou and another one can apply Hangzhou's hukou. Minor children reunion means that minor children with non-local hukou can gain Hangzhou's hukou if their parents are Hangzhou's citizens. Elderly parents reunion means that elderly parents with non-local hukou can gain Hangzhou's hukou if their sons or daughters are living in Hangzhou and already gained Hangzhou's hukou. It is asked you have relatives with Hangzhou's hukou no matter in which ways.

4. Investment. Cities in China strive to attract investment, as well as Hangzhou. Businessmen can gain Hangzhou's hukou if they invest a sum of money that requested, and also pay the taxes that requested.

These requirements have been changing over years, but the primary items are stable. With the increase of labor mobility, the Hukou policies are likely to be more complicated. Non-local people are legal to live Hangzhou without Hangzhou's hukou. Current Hukou system allows to non-local people working and living here, but they cannot enjoy the local social security and public services. For example, if one person is ill, who without Hangzhou's hukou, he or she can go to hospital and get treatment, but he or she has to pay the medical fee by himself / herself and cannot get reimbursement because they have no local medical insurance. In spite of this, there are some merits that given by Hangzhou's current Hukou system. Compared with other similar cities in Yangtze River Delta, the requirement of Hukou system in Hangzhou is relatively lower. Firstly, the requirement of introduction of talents is not high. The requirement of Hangzhou's hukou



system at least is bachelor degree. Secondly, the alternative items of migration are various. Many types of migration are supported by Hangzhou's Hukou system.

### **5.3 The effect of the Hukou system on the labor market**

Since the creation of Hukou system, the labor migration and mobility has been concentrated and controlled by China's government, especially the labor migration between rural-urban areas. Since the 1958, Hukou system is a basic and pronounced feature on labor migration of intra-country of China. As time went by, the restriction of Hukou system is declining. However, it still works effectively on labor mobility and is the prominent feature in a wide extent. Hukou system is a kind of passport that existed within one country. After evolving of several decades, current Hukou system is rather complicated. It not only restricts the migration between rural areas and urban areas, but also works on the obstacle of labor migration between inter-cities. It is inseparable that individual hukou and the resource and service that he or she allocated and enjoyed.

Same as other cities, Hangzhou's Hukou system got loosen after the reform and opening up. Based on the wave of industrialization in China, a huge number of labors from rural and other cities crowded into Hangzhou. This huge number of labors meets the demand of labor resource from the city. Therefore, the remarkable economy growth of Hangzhou has a heavy reliance on labors' increase. Although current Hukou system has become much slack and allow more differences existed, the requirement of hukou policy still strict. This kind of restriction with high requirement greatly reduces the benefits of migration but improves the cost of migration, especially for those people who move to metropolises, such like Hangzhou. Therefore, the domestic migration in China is limited. Most of migrations are just temporary, even are return movement. Hundreds of millions of people are bounded in the original registered places by the Hukou system and unable to give full play to production. According to statistics on the total number of people moved into Hangzhou, the number is likely to decline after reaching peak in 2003 (160.31 thousands persons). It is not only relevant to the higher and higher requirements of hukou policy, but also relevant to the balancing of the gaps of regions in China.

# Chap. 6 Findings

## 6.1 Estimations

### *Hypothesis*

In order to figure out the relationship between Hukou system and economic growth, I select total number of people migrated in and out to represents and reflects the alteration of Hukou system. Then I introduce GDP growth rate to shows the change of economic growth. In this study, I want to research the relationship between Hukou system and economic growth. I thus start with investigating the correlation between labor mobility and GDP growth rate.

H1: there is a relationship between labor mobility and GDP growth rate.

### *Data description*

In order to figure out the relationship between Hukou system and economic growth, I picture a graphic to show how the labor mobility and the GDP growth rate going during those years. Actually, we can have a general sense for the relationship from this graphic before the regression test. In this graphic, the labor mobility represents the total labor migration and growth rate represents GDP growth. The data of total labor migration and GDP growth rate are summarized from Hangzhou Statistical Yearbook from 1999 to 2014. It is worthwhile to note that due to the GDP growth rate we introduced are real GDP growth rate rather than nominal GDP growth rate. Thus, the inflation will be taken into account and subtracted out. And then, according to Hangzhou Statistical Yearbook, the designated base year is 1978. Hence, the real GDP growth rate can be figured out. (See appendix 1)

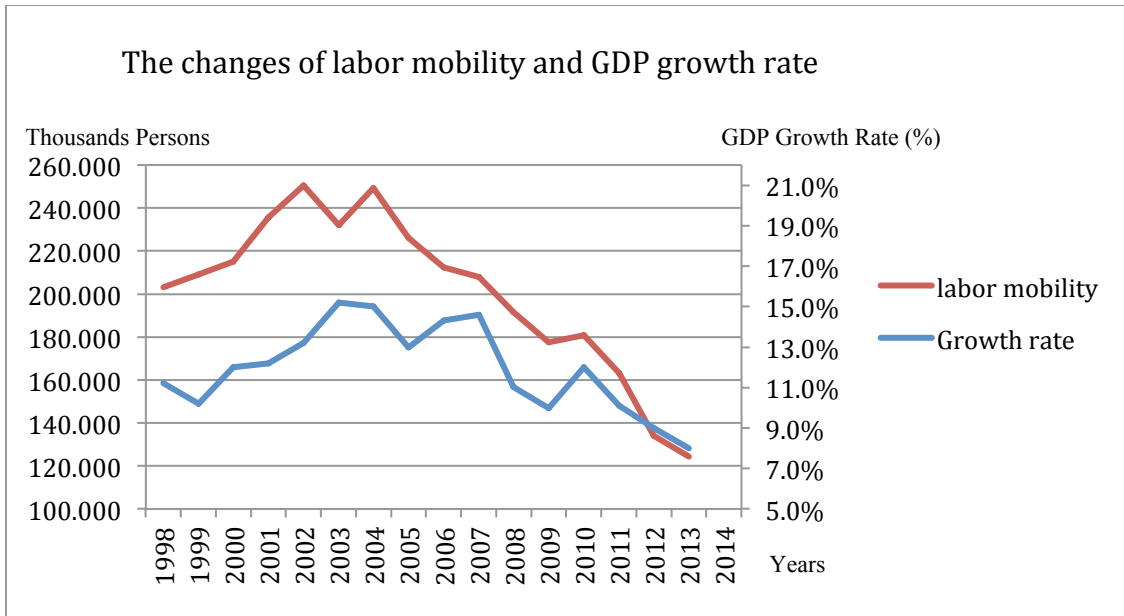


Figure 6.1. The changes of labor mobility and GDP growth rate (Hangzhou Statistical Yearbook)

According to this graphic, the trends of total number of migrations and GDP growth rate are exhibited clearly. It is not difficult to find that there is some kind of strong and positive relationship between total number of migration and GDP growth rate because of the same trend they have. Then we can find that the “labor mobility” is likely to decline after reaching peak in 2004. According to Hangzhou’s Hukou policy in 2005, the government relaxes the strict conditions to attract certain high-skilled labor while simultaneously restricting the policy concerning the reunion of relatives. Thus, it is obvious that the labor mobility declines. But we cannot difficult to imagine that the labor quality is improving. It is most of local governments desired that improve the ratio of people with high education and keep the population increase stably. Then, we can find the GDP growth rate decrease after 2007. It is because of the consequence that the financial crisis in 2008 around the world.

### Result analysis

After inputting the data that collected above (See appendix 1), STATA is used to establish the OLS regression model. Then, the results of regression exhibited as following:

Table 6.1 Results of OLS regression

Growth rate	Coefficient	P>t
Employees	-.0235246	0.263
Investment	.000056	0.579
Graduates	.0006473	0.067
Labor_mobility	.0006215	0.003
_cons	.0643584	0.508
Observations: 16		
R square: 0.8296		

The table above shows the results of OLS regression. Firstly, we concentrate on the R-square, which is 0.8296 that means there is a strong correlation existed in this model. Secondly, let's concentrate on the coefficients of variables. We can see that investment, graduates and labor\_mobility are all positive with the GDP growth rate, while employees is negative with the GDP growth rate. It can prove that labor\_mobility is positive with the economic growth. Then we focus on why employees is negative with the GDP growth rate. The graphic below shows the changes of employees and GDP growth rate.

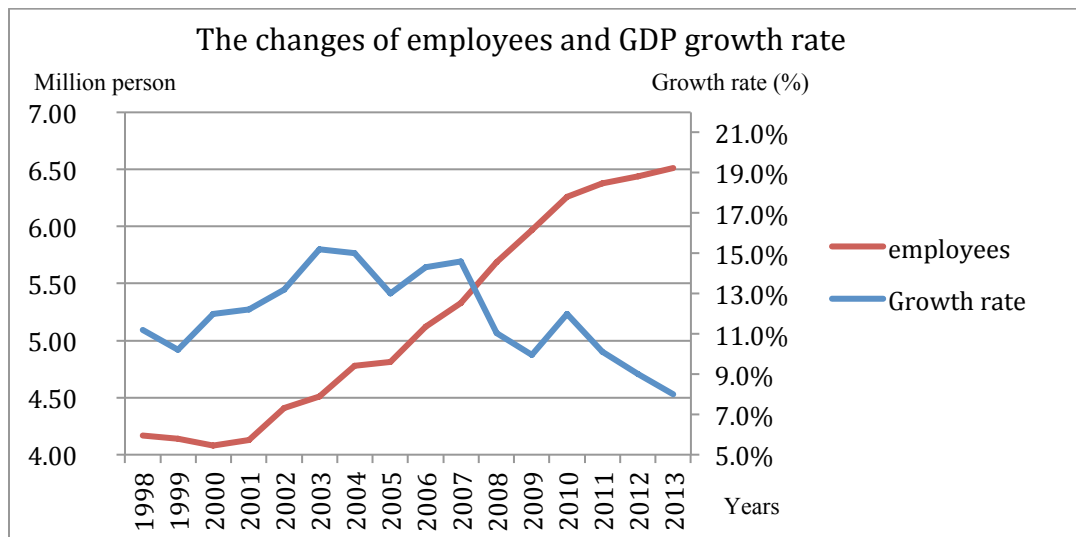


Figure 6.2. The changes of employees and GDP growth rate (Hangzhou Statistical Yearbook)

It is clear to find that before 2007, employees looks like positive with the GDP growth rate, while after 2007, the situation is opposite. Nevertheless, the overall trends show they

have negative relationship. Hence, for the long term, it shows that employees is negative with GDP growth rate. Then, let's move to the variables' validity and focus on the p-values. The significance level of this model is 5%. We can see that the p-value of employees and investment are too large. The p-value of labor\_mobility is 0.003 and smaller than significance level 5%. It shows that there is a significant relationship between labor\_mobility and GDP growth rate. Therefore, we can prove that there is a positive relationship between the slack Hukou system and economic growth indirectly.

*Checking for multicollinearity*

Now we are going to test if there is multicollinearity in our sample.

*Table 6.2 Results of VIF test*

Variable	VIF	1/VIF
Employees	45.53	0.021962
Graduates	19.03	0.052562
Investment	19.00	0.052645
Labor_mobility	5.30	0.188527
Mean VIF	22.21	

The result shows that the VIF of variable of employees, graduates and investment are high and the VIF of variable of labor\_mobility is not high. However, the mean VIF is 22.21, and it means we have to consider that there is multicollinearity in this model. Actually, we can assume that these three variables (employees, graduates, investment) impact each more or less. For example, many of graduates will stay and live in Hangzhou after their graduations, and then they will be a part of employees. Hence, it is not difficult to imagine that these two variables will impact each other.

*Checking for heteroskedasticity*

In order to test if there is heteroskedasticity in this model, I am going to introduce White's test to examine.

White's test for Ho: homoskedasticity

Against  $H_a$ : unrestricted heteroskedasticity

chi2(14) = 14.93  
Prob > chi2 = 0.3830

Cameron & Trivedi's decomposition of IM-test

Source	chi2	df	p
Heteroskedasticity	14.93	14	0.3830
Skewness	2.24	4	0.6925
Kurtosis	1.89	1	0.1692
Total	19.05	19	0.4533

Figure 6.3. Result of White's test

From the table above, we can find “Prob > chi2 = 0.3830”, it means the probability equals to 0.3830 and larger than significance level (5%). Hence, we do not reject  $H_0$ . Then the result of the test indicates that there is homoskedasticity in our sample.

## 6.2 Interviews

Due to the limited data of my model, I can only trace back to 1998. Thus, I further do interviews as a complement to investigate the Hukou system and its effects. Two interviews concentrate on entrepreneurs and two for employees. It is used for figuring out empirical experience for Hukou system from local and non-local residents and workers. (See appendix 2)

### Case 1

Xing Ming, a resident of Hangzhou, is the owner of Hangzhou Mingshi Costume's Auxiliary Materials Co., Ltd. His company established in 2004 and located in Yuhang District that belonged to Hangzhou and non-local workers account for 60% to 70%. His company is engaged in producing and processing costume's auxiliary materials, such as costumes' labels, hangtags and so on. The production pattern heavily relies on manufacturing.



*Figure 6.4. Pictures of Ming's firm*

He says that there is no difference between the degree of difficulty for recruiting local and non-local labors. Compared to labors' hukou, they pay much attention to labors' ability, responsibility and reputation. What's more, he emphasized that many workers left without prior notice after working for a couple of months. It caused great trouble for his company because he has to look for someone instead. Therefore, he hopes to find workers who have a long term plan for working here. Actually, due to the looser Hukou system, many labors from other provinces wander among the main cities in Yangtze River Delta for finding a job with higher wage. They do not care where they stay, as long as the wage is satisfied. As well as, they do not care for having bad reputation because no one knows him or her in this place. However, the extremely enormous demand of labor market ignores their shortcomings. Be the opposite of non-local labors, local labors pay much attention on the reputation. Because they grew and lived here, also they don't want to go to other places to find a job. Thus, they are willing to have a long term and stable job. Therefore, in the non-local-led labor market, firms are more likely to find stable labor relation.

When it comes to whether the slack Hukou system will influence his firm's performance, he answers that it is certain that slack Hukou system will influence firm's performance. Compared with previous tight Hukou system that people was restricted in place of domicile to work, current slack Hukou system accelerates China's labor mobility and gathers labors toward the market with more potential. Therefore, western surplus labor flows to eastern cities and accelerates eastern cities developed rapidly. However, this

influence depends on the market's demands. In the current market that supply exceeds demand, current Hukou system does not promote firm's performance too much. It is because that Hangzhou is a typical eastern city with lots of non-local labors and it's quite easy for his firm to recruit enough workers. Thus, the surplus labor that is attracted by the slack Hukou system does not impact his firm too much.

It is definitely that current Hukou system is much looser than beginning, as well as, it is going to be more and more looser even been cancelled in the future. However, judging from situations of China's metropolises in recent years, with more and more conditions have been added into local Hukou policies, the difficulty of requirements of metropolises' Hukou policies are increasing gradually. Take the example of Hangzhou, at the 90s, you can settle in Hangzhou if you have undergraduate diploma. Although the slack Hukou system adopt more liberal conditions to promote labor mobility, however, the requirement of conditions become more and more complicated, such like the modification of requirement of settling down with purchasing houses and so on. Therefore, due to the slack Hukou system, a growing number of people crowded into metropolises. In order to reduce the stress of urban resources, the Hukou policies of eastern metropolises are likely to more and more complicated.

When it comes to whether the current Hukou system should be cancelled, Ming says that it is a trend that current Hukou system is going to be abandoned rather than we think. Hukou system, which is used to help China achieve modernization and rapid development, is the product of history. As well as, it will be cancelled and replaced in the future. It will be restricted that labors move away from rural area to urban area, as well as labors migrate from small cities to big cities. It is certain that the abrogation of Hukou system will accelerate the labor mobility and talent aggregation. Hence, it is quite inconsistent with China's further development and mixed with different views. He thinks that China's government can imitates and refers to foreign experience during the process of replacing and abrogating Hukou system. It is no doubt that the relatively developed area and relatively under-developed area are existed in any place around the globe. How to properly distribute and balance labor resource without Hukou system is the main task that China's government is facing.



## Case 2

Yayun Chen, a woman comes from Zhuji (a city in Zhejiang Province), is a common worker in Hangzhou Mingshi Costume's Auxiliary Materials Co., Ltd. She has been working and living in Hangzhou until now since 1994. Although she already lived in Hangzhou for a long period, her hukou still cannot settle in Hangzhou and she cannot enjoy Hangzhou's welfare and services as well.



Figure 6.5. Picture of Chen and her workshop

When it comes to whether the non-local hukou will influence her job searching in Hangzhou, she unhesitatingly answers “certainly!”. No matter the difficulty of job searching and public service, there is obvious distinguish with worker with local hukou. Compared with non-local workers, local workers are much easy to find a job. Nevertheless, non-local workers can feel distinguished and discriminated during the job searching. What's more, generally speaking, the wage and welfare of local workers are higher than non-local workers. It is may be because that the personal and private emotion. After all, they have been living in same place.

Although it is a kind of luxury for her that moves into Hangzhou, she never gives up for paying attention on Hangzhou's Hukou policies. She hopes that someday she can make her dream come true because of the better social treatment. The requirement of current Hangzhou's Hukou policies is too difficult to meet for her. If you want to settle in Hangzhou, then you have to meet one of these requirements: 1. Living as a dependent with your immediate family; 2. Introduced as a talent if you gain high education diploma; 3. Purchasing a house that meets the requirement. She neither has immediate family nor

owns high education diploma. She even cannot afford a house in Hangzhou because the average house price in Hangzhou is so expensive for her. Hence, no matter which requirement is too difficult for her.

According to her memory, around 1996 that the third year she arrived in Hangzhou, the Hukou policy was limited within the introduction of talents and purchasing houses. It means that non-local people who settle in Hangzhou either own high education diploma or was rich. There is no other Hukou policy for settling. With the loosening of Hukou system, more and more conditions were added into the Hukou policies. Nevertheless, with the development of society and increase of labor mobility, the requirement and difficulty of Hukou system are increasing.

She comments the Hukou system with shrugging: the requirement is too high to achieve. She adds that current companies rarely accept fresh graduates' hukou and help them solve the problem of settling. She also gives an example about her daughter who is a senior student of one university in Hangzhou. Like most common senior students, she is facing the problems of finding a job and choosing settle in Hangzhou or not. During the period of university, she can settle in Hangzhou temporarily because of studying. In spite of this, she has to find a new institution or company to keep her personnel files and hukou after graduating, as long as she does not purchase a house. Nevertheless, it is very difficult for her to find a company to help her solve the hukou problem in the current situation. Especially the private firms, it is a kind of heavy burden for them to solve the graduates' hukou problem. Therefore, in their opinion, they would like to cancel the Hukou system if they cannot gain Hangzhou's hukou. It seems like a gate to keep them out of this city.

### *Case 3*

Mr. Pan is the second businessman that I interviewed. He is the owner of Tonglu Yifan Manufactory of Vehicles' Fans that located in Tonglu County that belong to Hangzhou. This manufactory established in 1989 and is engaged in the manufacturing of vehicles' accessories, mainly in vehicles' fans. The non-local workers account for 40% in this

manufactory. Similar with Ming's firm, the production pattern has a heavy reliance on manufacturing.



*Figure 6.6. Picture of Mr. Pan's manufactory*

About the situation of wage and welfare for local and non-local workers, Mr. Pan says that they get equal pay for equal work. It means that as long as the worker meet the requirements of firms will get the same payments of wage and welfare.

When it comes to whether it is much easier to recruit non-local labors, he answers that due to the rapid development of China's economy, central and western regions' developments speed up and narrow the gap with eastern region. Thus, the gap between relatively developed regions and relatively under-developed regions is reducing and the difficulty of non-local labors recruiting is increasing. The development of local economy, which non-local labors registered, is attracting them to stay and work. They prefer to stay at their hometown to work rather than go to other places. Hangzhou's labor market is relatively engorged compared with central and western regions. At the same time, he also mentioned that it is difficult to recruit competent and long-term workers although there is abundant labor force existing in the market.

Mr. Pan thinks that current slack Hukou system certainly impacts his manufactory's performance. Similar with Ming's company, they both mentioned that the labor mobility increased because of the slack Hukou system and common workers are more likely to quit. They prefer to constantly change jobs to seek better wages and welfares rather than be confined to one company or one city. That is the reason why it is difficult to recruit

satisfactory workers that we mentioned before. In the viewpoints of company and manufactory, they would like to have long term and stable contract with workers rather than constantly recruit new workers via labor markets.

When it comes to the comments on Hangzhou's hukou policy, he says that in spite of Hukou system has been loosen gradually in the past three decades, but the requirements and conditions progressively became much higher and complicated. He expresses that he can understand this situation because, after all, the competitive stress is increasing year by year. In order to guarantee the proper allocation of limited resources, governments have to control and manage the labor mobility and migration. As well as, he mentions that the residents who live in cities are would like to move to surrounding suburbs and villages because of better living environment. Compared with main urban districts, surrounding counties and suburbs are suitable for living. Residents in counties and suburbs can enjoy the same public services with main urban districts in terms of public transport, medical treatment and so on. Therefore, a growing number of residents move to suburbs.

When it comes to whether the current Hukou system should be cancelled, he answers that those residents who live in relatively superior regions are in favor of the existence of the Hukou system. Because they can enjoy better children education, medical treatment, housing subsidies, public transport, social security programs and so on. It likes a kind of protection and privilege.

#### *Case 4*

Mr. Huang, born into Henan Province, is an employee of a company in Hangzhou. He lives in Hangzhou until now since 2008. Although it is not a long time, he already has gained the Hangzhou's hukou and is a resident of Hangzhou city.

He gained his master's diploma in 2006 and has worked two years in Hangzhou. According to the policy of introduction of talents, he is be up to the standard and gained the Hangzhou's hukou. After his payment of social security fund and individual income tax, he met the requirement for purchasing houses in Hangzhou and purchased a house

with loan. Nowadays, like other citizens of Hangzhou, he can enjoy public services that supported by Hangzhou's hukou. He is a typical people that settled in Hangzhou, and meet two conditions of Hukou policy that introduction of talents and purchasing houses.

When it comes to if the non-local hukou will influence his job searching in Hangzhou, he says that there is little impact on job searching if you own high educated certification actually. And that for Hangzhou's current hukou policy, I can gain Hangzhou's hukou before finding a job because of the master's diploma. The meaning of you own a master's diploma is that you meet the conditions of introduction of talents. What is more, there is no difference with local employees on the wage and welfare.

He adds that Hangzhou is an admirable city and has been the top of China. It located in the Yangtze River Delta and works well on economic development. Compared with Shanghai, Hangzhou's living environment is praised by people. Thus, he supposes that it is a good choice for settling and living in Hangzhou.

Compared with the hukou policy in his hometown, Hangzhou's is much complicated and high required, especially in terms of purchasing houses. Due to Hangzhou's house price has been in the top of China, the difficulty of purchasing a house is relatively much greater. In spite of Hukou system is much looser after the reform, however, with the increase of labor mobility, the requirement is also increasing. He sighs that it is fortunate that owns the master's diploma and the support of his parents to purchasing the house.

### **6.3 Discussion**

Based on the preceding regression model, we can get the conclusion that there is a positive and strong relationship between total number of migration and GDP growth rate. However, considering the lack of data, then I also do interviews to complete the analysis. I hope to get the empirical and real situation of labors from the case studies.

There are a thousand Hamlets in a thousand people's eyes. It is discrepant for everyone even with the same Hukou policy. From the sentences of two businessmen, we can conclude that they pay much attention to labors' quality, reputation and long-term contact

rather than labors' hukou. However, from the words of labors, we can find that they believe their hukou influence to their work. They will consider a lot about the wage and a serious of problems, such as children's education. They hope to achieve the maximization of benefits through constantly shifting the work and work place. Nevertheless, local workers have no worries about these kinds of problems. They just want to find a suitable job for living rather than worried about the medical insurance and children's education. It is the biggest difference between local workers and non-local workers. Hukou system is the cause that makes the unequal situations between labors. Non-local workers have no sense of belonging for cities and no sense of responsibility for firms. Therefore, it is very common that constantly shifting works and work places.

From the perspective of Hukou system, however, it can be seen from the simple longitudinal comparison that the policy of introduction of talents is relatively looser. Local governments strive to attract more talents into economic and cultural construction and speed up the local development. Compared with the policy of introduction of talents, the policy of reunion of relatives is much strict. Governments have been keeping and controlling the number of residents in a relatively stable state. From the horizontal comparison, compared with relatively under-developed area, the Hukou policy is much strict in relatively developed area of economy and culture. It is positive for preventing that excessive population stress to urban burden and stabilizing cities' population.

All in all, the Hukou policies that made by local governments aim to introduce talents simultaneously control the population, strongly support people with high educated, high-tech and high property to migrate in and promote local development and construction.

## Chap. 7 Conclusion

Hukou system is a particular institution that with Chinese characteristics. Since its enactment in 1958, Hukou system is strictly controlled by governments as a tool that works on the management of labor migration. After the reform and opening up, Hukou system gained its relaxation and allowed labors to find jobs in other places. The slack Hukou system promotes the labor mobility. In this thesis, two main tasks are put forward to investigate: the impact of Hukou system on labor migration and how Hangzhou's slack Hukou system influences its economy growth.

According to the literature review, the slack Hukou system increases the labor mobility, and then promotes local economy development. In later chapters, a picture of devolution of Hukou system and Hangzhou's Hukou policy should be given. After the reform and opening up, the administrative power of Hukou policy devolved from central government to local governments. Local governments relax their local Hukou policy in order to attract talents and investments to develop local economy. Therefore, the Hukou system is likely to be increasing loose. In recent years, however, those metropolises such like Hangzhou gradually improve their requirements of Hukou policy in order to stabilize local population and protect local resource distribution. Hence, the difficulty of migrating to Hangzhou is increasing. Nowadays, four main types of Hangzhou's current Hukou policy are summarized: Introduction of talents, Purchasing houses, Reunion of relatives, and Investment. Hangzhou's government strives to attract the talent and the rich with relatively low requirements and variously alternative items of migration. The essence of Hukou system is a management of labor migration and controlling the labor mobility. The slack Hukou system is benefit for the labor mobility. After the estimation of OLS regression model, a crucial fact is exhibited that labor mobility strongly and positively related to economic growth. The interview presents that the Hukou system significantly impact on labor market. Therefore, it can be concluded that Hangzhou's slack Hukou system significantly and positively influences the Hangzhou's economic growth.

*Reliability*

According to the literature review, we figure out the research approach and theoretical framework. The research methods in this thesis are OLS regression model and interviews in order to figure out the correlation of labor mobility and economic growth. All of data, which used to test OLS regression model, come from the Hangzhou Statistical Yearbook that issued by the authority. Thus we can fully trust the source and facticity of data in this study. For the interview, the object and the interview questions are selected and considered after learning the knowledge of research method. The formal interviews are implemented after preparation and training. Therefore, the result can be guaranteed by the theoretical and empirical investigation

### *Validity*

There are two main methods used in this study: OLS regression model and interviews. The implementation of mixed method increases the validity and generalizability (Easterby, Thorpe & Jackson, 2012). OLS regression model is introduced to figure out the correlation between labor mobility and economic growth in generalized extent. Due to the restriction of small sample size, the interview is also introduced as a complement. The object of interviews is representative because they are typical in Hangzhou. Due to the results is given by the reliable and authoritative data, we can trust that this investigation is valid. All of interviews that given by businessmen and workers are semi-structured face-to-face. Interviewees would be openly and honestly share information in a quiet and comfortable place where they do not feel restricted or uncomfortable. Hence, valid findings are produced by these research approaches.

### *Further research*

The turning point of Hukou system is the reform and opening up, it symbolizes the beginning of relaxation of Hukou system. However, the result of OLS regression model is produced by a short period (1998-2013), the further research can be concentrated on comparison of the pre-reform and post-reform. For the research method, the lager sample size of interviews could be taken into account as well.



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# Appendix 1

## Data of OLS Regression Model

<b>Year</b>	<b>GDP growth rate</b>	<b>Employees (Million)</b>	<b>Investment in fixed assets (Billion yuan)</b>	<b>Graduates (Thousand)</b>	<b>Labor mobility (Thousand)</b>
1998	11.2%	4.17	36.37	14.73	203.225
1999	10.2%	4.14	43.55	15.86	209.093
2000	12.0%	4.08	51.55	17.00	215.153
2001	12.2%	4.13	63.10	22.76	235.456
2002	13.2%	4.41	76.98	27.21	250.453
2003	15.2%	4.51	100.67	41.19	232.013
2004	15.0%	4.78	120.52	53.29	249.330
2005	13.0%	4.81	138.67	63.99	226.152
2006	14.3%	5.12	146.07	80.07	212.458
2007	14.6%	5.33	168.41	90.94	207.923
2008	11.0%	5.69	198.05	97.78	191.474
2009	10.0%	5.97	229.17	96.10	177.395
2010	12.0%	6.26	275.31	101.68	180.930
2011	10.1%	6.38	310.00	104.49	163.280
2012	9.0%	6.44	372.28	107.48	134.054
2013	8.0%	6.51	426.39	108.69	124.360

## Appendix 2

### Questions of interviews

#### *For businessmen*

- Q1: What's your name?
- Q2: What's your company's name?
- Q3: What industry your company involved in?
- Q4: When is your company established?
- Q5: What is ratio of the non-local workers in your company?
- Q6: Is there any distinction on wage or welfare between local and non-local workers?
- Q7: How do you feel about recruiting non-local workers in recent years? Easier or not?
- Q8: Do you think the slack Hukou system is positive with your company's performance?
- Q9: What's your comment for current Hukou policy?
- Q10: Do you think that current Hukou system should be cancelled? Why?

#### *For workers*

- Q1: What's your name?
- Q2: Where is your hometown?
- Q3: When you moved to Hangzhou?
- Q4: Do you think non-local hukou influence your job searching in Hangzhou?
- Q5: Is there any discrimination on your wage or welfare because of non-local hukou?
- Q6: Have you ever considered settling in Hangzhou?
- Q7: Do you think it is difficult to gain Hangzhou's hukou?
- Q8: If you have been noticing Hangzhou's Hukou policy?
- Q9: Do you think the Hukou system is becoming loose in recent years?
- Q10: What's your comment for current Hukou policy?
- Q11: Do you think that current Hukou system should be cancelled? Why?