INFLUENCE OF U.S. IMMIGRATION LAWS ON CHINESE IMMIGRATION,

UNITED STATES, 1980 TO 2002

A Thesis

by

HUA LUO

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

May 2005

Major Subject: Sociology

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Approved as to style and content by:

Dudley L. Poston, Jr. (Chair of Committee)	Holly Foster (Member)
Don E. Albrecht (Member)	Rogelio Saenz (Head of Department)

May 2005

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ABSTRACT

Influence of U.S. Immigration Laws on Chinese Immigration,

United States, 1980 to 2002. (May 2005)

Hua Luo, B.A., Shanghai University of Finance and Economics

Chair of Advisory Committee: Dr. Dudley L. Poston, Jr.

Historically, Chinese immigrants to the United States are a special group. They were or almost were banned from 1882 to 1968. Since in 1968 the United States abolished national origin quotas and eliminated national, race, or ancestry as a basis for immigration, thousands of Chinese immigrants came to the United States. The total population of Chinese immigrants to the US between 1980 and 2002 was 911,220, whereas it was 136,843 between 1891 and 1979. Not only did the population of Chinese immigrants have great change, the quality of Chinese immigrants also had substantial difference from those immigrated in the last century. However, there are very limited literatures focusing on the dynamics of Chinese immigration in these twenty years, which is the most important time period for Chinese immigration.

The following study tries to describe the dynamics of Chinese immigration to the United States between 1980 and 2002; and analyze the influence of the American immigration laws on Chinese immigration. The dynamics of Chinese immigrants are described and analyzed by different migration categories. Other social and economic factors are added to comprehensively understand the change of Chinese immigration.

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I am deeply grateful to the thesis committee, Dr. Dudley L. Poston, Dr. Holly Foster, and Dr. Don Albrecht. Their important comments and suggestions improved this thesis during its stages of development.

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I gratefully acknowledge the important contribution of Dr. Don Albrecht and Dr. Holly Foster, for spending their precious time on this manuscript. They contributed a substantial amount of thoughtful comments and suggestion in order to help this thesis really take shape.

Last but not least, I want to thank my dear husband and parents, for their encouragement and love. I really appreciate my mom and dad for all that you have given me in my life. Finally, and most importantly, to my husband, Xi Xiaohua, thank you for always being there for me, without which I would not have even started my study here. This thesis is dedicated to you.

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CHAPTER I

INTRODUCTION

As a temporary Chinese student to the United States, my visa application had been refused twice before I came to the U.S. in 2002. Before 1998, most Chinese students who got admission and funding from American universities were allowed to the U.S. However, things changed since 1999. Many potential Chinese migration applicants, including students with adequate funding, were refused by the American embassy. After the tragedy of 9-11 in 2001, it becomes more difficult to get visa for Chinese migration applicants. In my first visa interview in June 2002, there were about four hundred applicants waiting in line, most of them are students applying for F-1 visa. Only less than 50 percent applicants of that day got their visa before I was refused right before they closed door. I did not get the visa until the third interview in December 2002. And I have to postpone my graduate study from the fall of 2002 to the spring of 2003.

The deterioration of migration situation to the U.S. is influenced by many factors, such as immigration policy, economy, politics, and international relationships. My personal experience caused my interest on the dynamics of Chinese migration to the U.S. and the influence of the U.S. immigration laws on Chinese immigration.

Immigration is increasingly of demographic importance to the United States. By the end of twentieth century, immigration had become the major component of population change in the United States. Moreover, almost 20 percent of all births in the United States now occur to foreign-born mothers. Among all immigrants, the proportion

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This thesis follows the style and format of *Demography*.

from Asia keeps increasing. In 2002, China alone accounted for 5.8% of the total

immigration to the United States (U.S. Citizenship and Immigration Services, 2004).

Historically, Chinese immigrants to the United States are a special group. They were

banned for almost a century and rapidly increased in recent years. From 1882 to 1943 the

United States Government severely curtailed immigration from China to the United

States. Since 1965 when the United States abolished national origin quotas and

eliminated national origin, race, or ancestry as a basis for immigration, thousands of

Chinese immigrants have come to the United States every year, and the Chinese

immigrant population increased tenfold.

The socioeconomic status of Chinese in America has undergone significant

improvement. In recent years, some sociologists and policy makers have regarded the

Chinese as one of the most "successful minorities" of America (Wong, 1980).

The transition of Chinese immigration cannot be detached from the changes of U.S.

immigration laws. Immigration laws usually express various demands of the national

economy and politics. Of course the economy is the most important consideration of

policy makers. Other factors, such as international relationships and election competition,

also play roles. For example, changes in immigration law to protect the wages of national

laborers sometimes result from pressures of labor unions based on political

considerations instead of economic needs. These factors, which control the enactment and

adjustment of immigration laws, influence the changes of immigration directly. Some

immigration laws function as they are intended, but some do not. For example, the 1986

Immigration Reform and Control Act produced some dramatic short-term decreases in

undocumented immigration. However, a large amount of evidence has suggested that, in the long run, undocumented immigration persists virtually undaunted (Baker, 1997).

Although numerous studies focus on the development of Chinese-born Americans and their influence in the United States, there is limited research examining changes in population size and composition of Chinese immigrants in recent years. How do Chinese immigrants change from the lowest working caste, who were mostly engaged in hard physical jobs, to one of the most "successful minorities" of America? Are the immigration laws of the United States a critical factor for changes in Chinese immigration, or do they not function as they are intended?

Because the flow of Chinese immigration was almost stagnant from the 1880s to the 1960s and increased rapidly since the 1970s, describing and analyzing the changes of Chinese immigration to the United States from 1980 to the 2000's are very important in studying Chinese immigration. Also in this thesis, I will try to describe the influence of the economy and other sociological factors on Chinese immigration to explain the changes of Chinese immigration in recent years. It is not surprising that there is a higher immigration rate during economic booms and a lower rate during economic depressions. I will introduce more in the following chapters about these factors, which may have effects on international immigration, and I will test for their effects in my thesis.

I would like to explain why I decided to focus on Chinese immigration between 1980 and 2002. International immigration is influenced by the conditions of both destination and origin countries. Two facts may account for the dramatic increase of Chinese immigration after the 1970's. First, the Amendments to the Immigration and Nationality Act, which were passed in 1965 but did not go into effect until 1968,

abolished national origin quotas and eliminated national origin, race, and ancestry as a basis for immigration to the United States. The passage of the 1965 Amendments represents a new epoch of Chinese immigration to the United States after a nearly 80 year ban or near ban. Second, since the People's Republic of China was founded in 1949, China closed the door to Western Countries for more than 30 years. During the period between 1949 and 1978, Chinese international migration policy was one-sided towards socialist countries at the core of the former Soviet Union and was carried out on a small scale. The prohibition of exiting from China acted as a negative determinant of Chinese American migration. In 1978, China launched the new policy on social and economic reforms and opened the door to all countries. The year of 1978 can be regarded as the dividing line of Chinese international policy from "closed" to "open". Therefore, the dramatic increase of Chinese immigration is not only caused by the Amendments of the U.S. immigration laws, but also by the policy reforms in China. The period between 1980 and 2002 is relatively stable for studying the effect of the U.S. immigration laws without the interruption of policy changes in the origin country.

Since the passage of the Chinese Prohibition Act in 1882, the number of Chinese immigrants to the U.S. was so minimal that it was easy to be overlooked. Since Amendments to the Immigration and Nationality Act have been put into effect in 1968, the flow of Chinese immigration increased sharply and caught up with the developing trend of total immigration to the United States. Figure 1 shows the population of permanent immigrants whose last residence was in China, for the years between 1891 and 2000. Chinese immigrants numbered 1,973 in the decade from 1950 to 1960, which was only 0.08 percent of total immigrants, and suddenly increased to 27,189 in the next

decade. Chinese immigrants reached 124,326 between 1970 and 1980 and almost tripled

from 1980 to 1990. In the 1990s, Chinese immigrants numbered 419,114, which was 4.6

percent of all immigrants to the United States. Figure 1 suggests that the 1965

Amendments to the Immigration and Nationality Act, which abolished the immigration

limitation based on nation origin, are a reason for the turn in the course of Chinese

immigration to the United States.

Figure 1. Permanent Immigrants Claiming China as Last Residence, 1891-2000
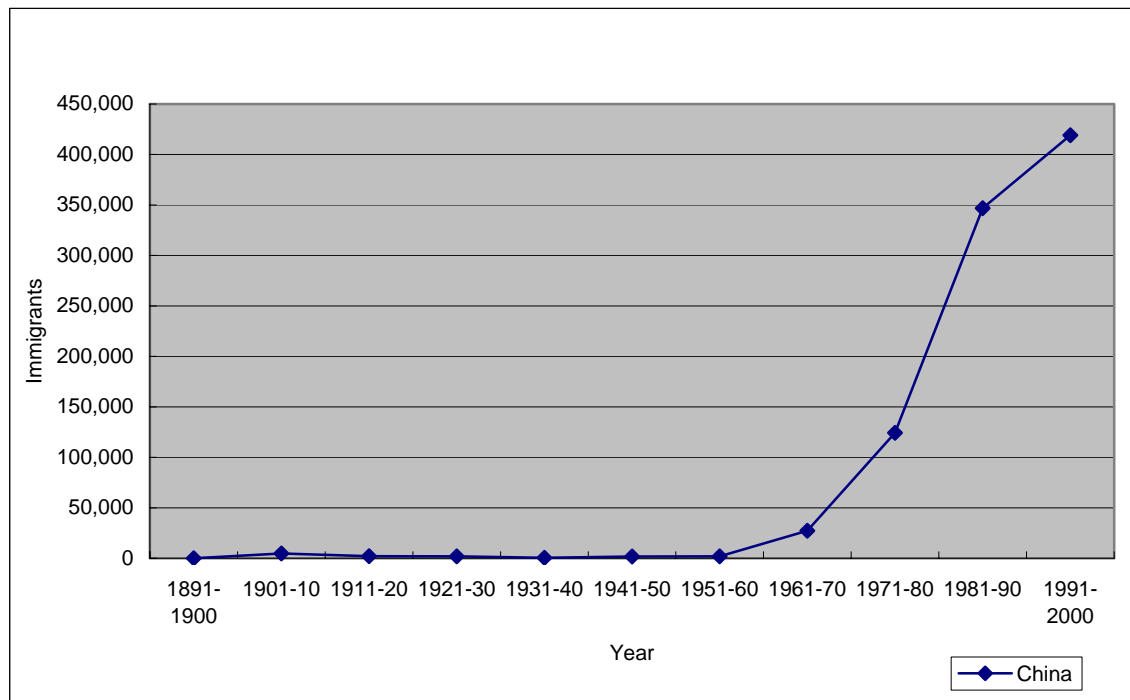
To make the changes of Chinese immigration more clearly, I compare them with

total immigration to the United States in the same period and show the results in figure 2.

Before the 1970s Chinese permanent immigrants were too few to be shown together with total permanent immigrants to the United States.

Figure 2. Permanent Immigrants from All Countries and from China, 1891-2000
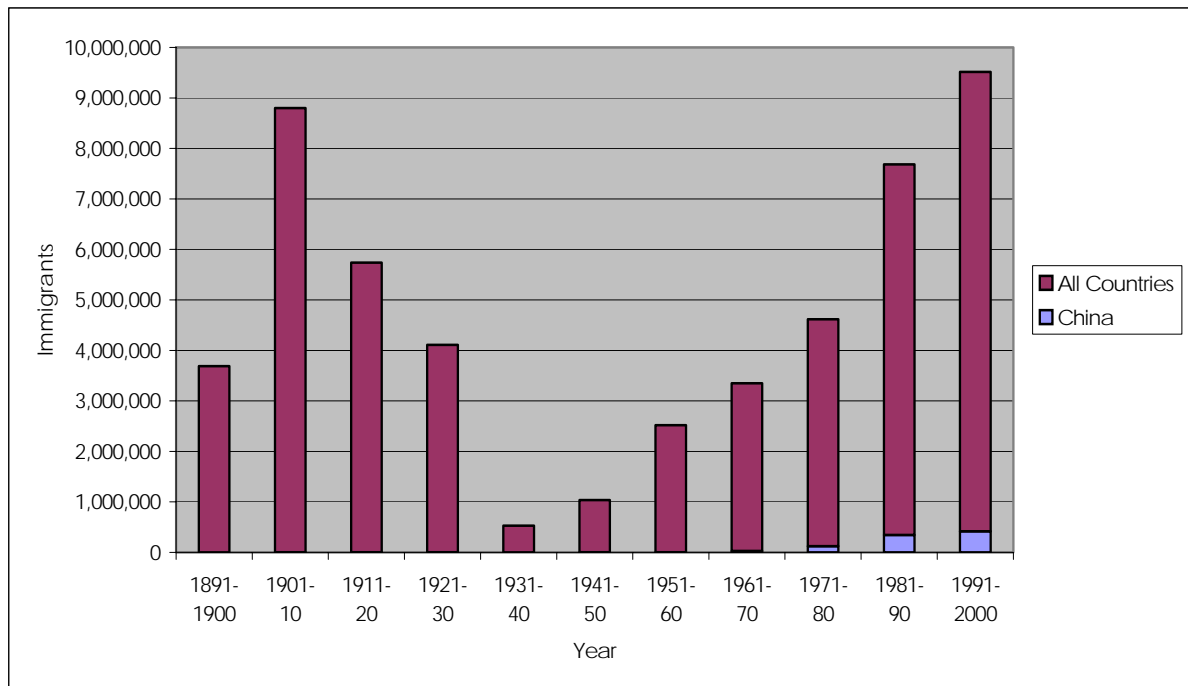
There are many potential explanations, sociological, political, and economic, to understand the changes of Chinese immigration. However, if we study Chinese immigration after 1980 by focusing only on the data from 1980 to 2002, its development does not always smoothly increase as was shown in figure 1 and figure 2. Figure 3 shows the trend of permanent and temporary immigration from China between 1980 and 2002. Figure 3 shows that the dynamics of temporary immigrants are very different from that of permanent immigrants. Compared with the continual increase of temporary immigrants, the trend of permanent immigrants fluctuates although it goes up in the long term. The

dramatic increase of permanent immigrants in 1993 and 1994 is likely to result from the

Chinese Students Protection Act passed in 1992.

Figure 3. Permanent Immigrants Claiming China as Last Residence and Temporary
　　　　　Immigrants Claiming China as Country of Citizenship, 1980-2002
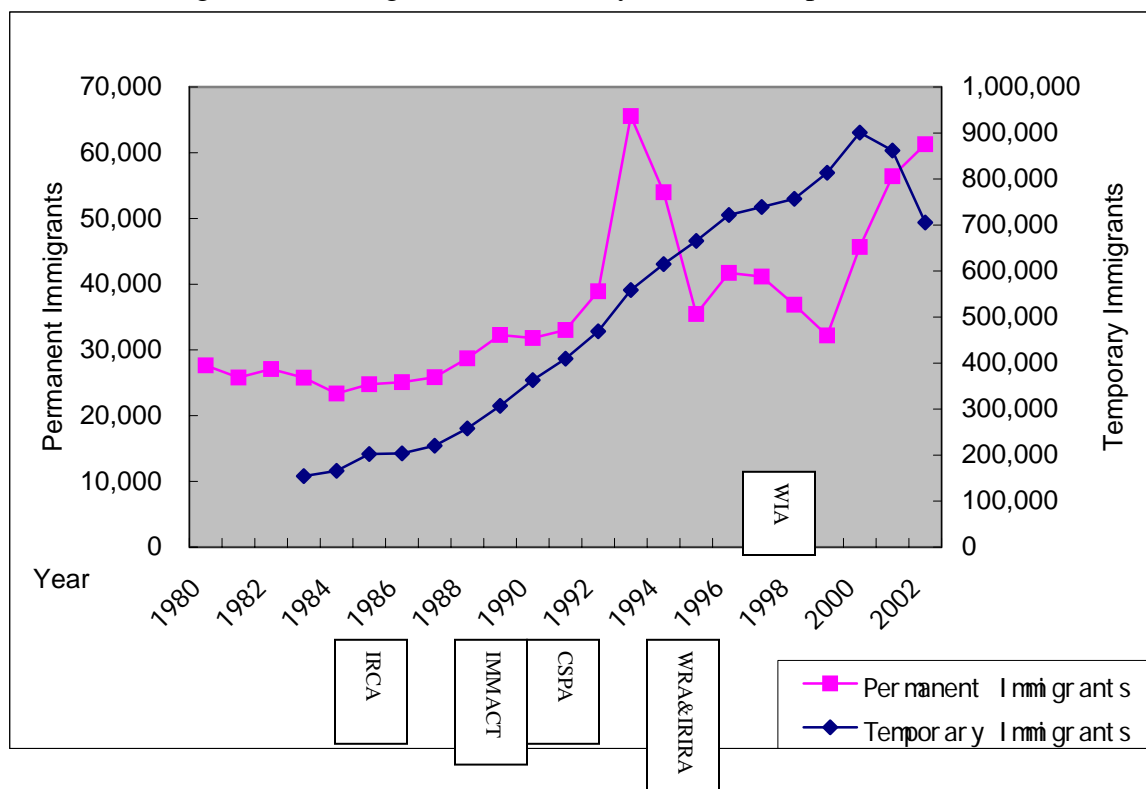
Are changes of Chinese immigrants related with the amendments of immigration

laws of the United States, or not? And how do U.S. immigration laws influence

permanent Chinese immigrants and temporary Chinese immigrants? Also I will describe

and explain the characteristics of Chinese immigration, which may differ from

immigration from other origins.

The central goals of my thesis will be: 1) describe the changes of Chinese

immigration to the United States from 1820 to the present, 2) analyze how immigration

laws and their changes influence the trend of Chinese immigration under the effects of

other social and economic factors. This research contributes to the blank while very limited studies focus on the dynamics of Chinese immigration in recent years and the effects of U.S. immigration laws on Chinese immigration. Most previous research focused either on the social and economic development of Chinese immigrants after they were already in the United States or on the history of Chinese immigration to the United States in the early years before 1980. My research will contribute to the body of immigration literature in that it will offer a comprehensive description of Chinese immigration between 1980 and 2002, which is an important period in the immigration history from China to the United States.

In the next chapter, I will review the relevant literature starting with sociological theories about international migration. Then I will examine the literature related to the history of Chinese immigration since 1849. After that, several substantial changes of the U.S. immigration laws will be reviewed. Chapter three will discuss the data to be used in this thesis and explain the methodology. Also in chapter three, I will introduce and explain the hypothesis and the dependent and independent variables, which will be used in this research. In Chapter four, I will describe the dynamics of Chinese immigration. In Chapter five, I will present the relationship between dependent variables and independent variables by describing the demographic and economic contexts of Chinese immigration. The results of the regression models will be presented and discussed, as well as whether the hypotheses were upheld. Finally, in Chapter six, I will discuss the implications of this research, areas for further study, and other conclusions.

CHAPTER II

LITERATURE REVIEW

In this chapter, I will review the relevant literature regarding international migration in general in order to construct my hypotheses and select the various independent variables to be examined in this study. International migration itself is a broad field with a variety of individual aspects. This review of literature is meant to highlight major studies and thoughts in each area.

Theoretical Perspectives

A variety of theoretical models have been proposed to explain why international migration occurs. Each of them has different concepts, assumptions, and frames of reference. Various theories try to account for causal processes of international migration at different levels of analysis—the individual, the household, the national, and the international. Massey et al. (1993 p433) suggested that these different perspectives are not inherently incompatible. For example, the individual is led by the desire for income maximization while at the same time the household tries to minimize risk, and the macro migration context is shaped by national and international conditions. So I will review several migration theories from both macro and micro perspectives to find the potential influential factors for my study of Chinese immigration.

Neoclassical Economics: Macro Theory

Neoclassical Economics is one of the oldest theories of international labor migration. According to this theory and its extensions, international migration is caused by geographic differences in the supply of and demand of labor. Countries with enough

labor relative to capital have lower average wages whereas countries with limited labor relative to capital have higher average wages. According to the interaction of labor supply and demand curves, the difference of wages causes labor flowing from low-wage countries to high-wage countries to get a new equilibrium between the supply and demand of labor. As a result of this movement, the supply of labor decreases and wages increase in the capital-poor countries and the supply of labor increases and wages decrease in the labor-poor countries (Todaro, 1976).

Another access to the equilibrium between labor and capital is through the flow of capital from capital-abundant countries to capital-scarce countries. The return of capital from capital-scarce countries is high according to international standards and thus attracts investment. The movement of capital also includes human capital, which is represented by high-skilled workers, such as managers and technicians. The movement of this human capital—skilled workers, should be distinguished from international labor movement. "Even in the most aggregated macro-level models, the heterogeneity of immigrants along skill lines must be clearly recognized" (Massey, et al. 1993, p433). Neoclassical Economics has contributed to shaping public thinking and has provided the intellectual basis for many immigration policies with its simple and compelling conceptions and explanations.

Neoclassical Economics: Micro Theory

In contrast to the macroeconomic model, the microeconomic model indicates that individuals migrate because they are rational and thus make cost-benefit calculations and pursue the maximization of net profit, usually monetary, from movement. International migration is conceptualized as a form of investment of human capital. People move to the

place where they can be the most productive and profitable but before they can benefit from the movement, "they have to undertake some investment, such as the costs of traveling, the costs of maintenance while moving and looking for work, the effort involved in learning a new language and culture, the difficulty experienced in adapting to a new labor market, and the psychological costs of cutting old ties and forging new ones" (Massey, et al. 1993 p434).

Individuals tend to migrate to the places where the anticipated net returns are greatest over some time horizon (Borjas. 1990; Massey, et al. 1993). The "expected destination earning" is calculated by the estimated earnings corresponding to the individual skills in the destination country and considering the possibility of finding work there. Massey et al. (1993, p435) indicated that international movement stems not only from international differentials in earnings but also from international differentials in employment rates. The interaction of earnings and employment rates produces the expected earnings in the destination countries. For example, White, Bean and Espenshade. 1990 and Massey, et al. 1994 examined Mexico-US migration in an effort to evaluate public policy. Their results were generally consistent with predictions derived from neoclassical theory. The effect of the unemployment ratio was strong and negative, while that of the wage ratio was strong and positive. As wages in the United States rose relative to those in Mexico, the monthly flow of undocumented migrants increased; and as unemployment in the United States rose relative to that in Mexico, the flow decreased.

Individual human capital characteristics, such as education, work experience, training, and language skills, can improve the expected remuneration and probability of employment in the destination countries and therefore increase the likelihood of

international movement, other things being equal. As a result, individuals within the same country can display very different proclivities to migrate (Massey, et al. 1993, p436).

According to Neoclassical Economics, international movement does not occur in the absence of differences in earnings and/or employment rates between countries (Massey, et al. 1993). On the other hand, migration will not stop until the international differentials of earning have been equalized. The size of the differentials in expected returns determines the size of international flow of migration between countries. The micro-level economic aspect suggests that governments control migration through policies that affect expected earnings in sending and/or receiving countries. For example, policies which increase the wages in the origin counties or raise the costs of migration may prevent international migration and policies which increase the employment rate and wages in the destination countries help to increase the migration.

The New Economics of Migration

In recent years a new theoretical paradigm, New Economics, has risen to challenge many of the hypotheses and assumptions of neoclassical economics. The New Economics of Migration is distinguished from Neoclassical Economics at the point that migration decisions are not made by isolated individual actors, but by larger units of related people, typically families or households. The purpose of migration is not only to maximize individual income, but also to minimize family risks and evade market failures (Stark & Levhari, 1982; Stark, 1984; Massey et al. 1993). Households tend to decrease their economic risks by diversifying member's locations. While some family members work in the local markets, other family members may be sent to foreign labor markets. In the event that the local economy is depressed and cannot supply enough income, the whole

family can rely on those members working in the foreign labor markets (Massey, et al. 1993, p436).

This theory suggests that families in developed countries can minimize their risks by private insurance and public welfare, but in developing countries these institutional mechanisms for managing risks are imperfect, absent, or inaccessible to poor families. It is the absence of methods for managing risks within local markets that motivates families in developing countries to diversify risks by migration. Holding constant the effect of expected income, international migration reduces the risks faced by households. Based on the evidence available to date, the new economics of migration and the neoclassical model appear to complement each other in explaining international migration (Massey, et al. 1994).

Dual Labor Market Theory

In contrast to Neoclassical and New Economic Theory, Dual Labor Market Theory sets its sights away from rational decisions made by individuals and argues that international migration stems from the intrinsic labor demands of modern industrial societies. Piore (1979, Massey, et al. 1993, p440) argued that international migration is not caused by push factors in sending countries, but by pull factors in receiving countries. The demand of international migration is inherently built into the advanced industrial markets and economies. Four basic characteristics of modern industrial economies thus cause international migration:

1. Structural inflation.

Wages not only mirror the supply and demand of labor markets, but also represent status and prestige to the jobs to which the wages are attached. As a result, wages offered

by employers are not entirely free to respond to changes in the supply of workers. Raising wages for unskilled workers at the bottom of the hierarchy will shake the relationship between status and remuneration. If the employers want to attract unskilled workers by raising wages, wages of all workers on the upper grades have to be increased to keep them in line with social expectations. This problem is called structural inflation. Therefore it costs employers more than the increased wages paid to low-level workers if employers attract native workers by raising wages during times of labor scarcity. Instead, employers tend to seek easier and cheaper solutions by hiring immigrant workers who will accept low wages to meet the labor demand (Massey, et al. 1993, p441).

2. Motivational problems.

The relationship between wages and social status is influenced not only by the motivation of employers hiring native workers, but also by the motivations of workers taking jobs at the bottom of any hierarchy. This theory suggests that people work not only for income, but also for social status. Native workers are always reluctant to degrade their status to take the bottom jobs, while employers need workers who work only for money with little consideration for status or prestige. For a variety of reasons, immigrants satisfy this need, at least at the beginning of their immigration. Immigrants are seeking money to improve their living conditions and keep their legal status in the destination countries. Moreover, immigrants usually view themselves as members of home countries instead of members of destination countries. The low wages in developed countries are still regarded as generous in developing countries, and foreign labor and hard-currency remittances carry considerable honor and prestige (Massey, et al. 1993).

3. Economic dualism.

There are two kinds of production methods in capitalist markets. One is capital-intensive methods, and the other is labor-intensive methods. This dualism creates distinctions among workers, leading to a bifurcation of the labor force. Workers in the capital-intensive primary sectors get stable, skilled jobs working with the best equipment and tools. Workers in this sector are mostly well educated and high skilled. Their jobs are complicated so that workers must be equipped with good technology and working-experience. Workers in this sector have working contracts with the employer, which keeps workers away from unemployment risks at certain time periods. In the labor-intensive secondary sector, however, workers hold unstable, unskilled jobs. They may be laid off at any time with little or no cost to the employer. Low wages and unstable conditions of the labor-intensive sector make it difficult to attract native workers, who are instead attracted to the capital-intensive sector. To fill the shortfall in demand within the secondary sector, employers turn to immigrants (Massey, et al. 1993).

4. The demography of labor supply.

Historically, women and teenager were the main entry-level workers, who took jobs with lowest wages and social status. However, with the development of industrial societies, these two sources of entry-level workers shrunk over time with demographic changes. First, the female populations have become one of the primary labor sources. Women are not satisfied with only low-level jobs with low wages and status and are more engaged in careers with both high social status and high income. Second, the extension of education and drop in fertility rates in modern societies prevent teenagers from joining labor markets. "The imbalance between the structural demand for entry-level workers and the limited domestic supply of such workers has increased the underlying, long-run

demand for immigrants" (Massey, et al. 1993, p443).

Network Theory

"Migrant networks are sets of interpersonal ties that connect migrants, former migrants, and nonmigrants in origin and destination areas through ties of kinship, friendship, and shared community origin" (Massey, et al. 1993, p448). Migrant networks increase the likelihood of migration because they decrease the migration costs and risks and increase the expected net returns to migration. The first migrants who leave for a new destination country always take the highest risks and costs. Because of the nature of kinship and friendship, each new migrant needs to have a set of friends and relatives in his/her social network. The potential costs and risks of following migrants in the social network of former migrants are substantially lowered with the help and support of former migrants. Migrant networks help new migrants find jobs and have a higher and more stable income. And some of these people are thereby induced to migrate, which further expands the set of people with ties abroad.

In the United States, a literature on the "immigrant multiplier effect" has been developed because US immigration law allocates more immigrant visas on the basis of family ties to persons already in the country (Jasso & Rosenzweig, 1990). According to US immigration law, legal resident aliens are eligible to apply for the entry of their spouse and children subject to certain numerical limitations. Immigrants who naturalize to US citizenship are eligible to apply for the entry of their spouse, unmarried children, parents without numerical limitation, and married children subject to certain numerical limitations (Massey, et al. 1994).

Although family chaining may not be as great as theoretically possible, it is

nonetheless significant. Jasso and Rosenzweig (1986) estimate the immigrant multiplier to be around 1.2 for each immigrant worker. That is, for each new immigrant admitted as a laborer rather than as a relative, 1.2 additional immigrants can be expected to arrive within ten years. As a result, even though immigrants are selected to enter as skilled workers, more new immigrants, who are not selected according to their skills, follow by making use of family reunification provisions

Background of Chinese Immigration to the United States

In many respects, the motivations for Chinese to come to the United States are similar to those of most other immigrants, who came to the United States to seek better economic opportunity. Chinese immigration can be distinguished according to three main periods: 1849-1882, 1882-1965, and 1965 to the present. The first period began shortly after the California Gold Rush and ended abruptly with the passage of the Chinese Exclusion Act of 1882. The earliest Chinese immigrants came to California in 1849 following the discovery of gold there in 1848. By 1882, when the first national exclusion law was passed, 288,000 Chinese had entered the country—many of them, however, had returned to China before 1882 (Black, 1963).

Like most other immigrants, Chinese immigrants came to the United States as labourers in search of work and wages. During the high growth period of the frontier economy between 1850 and 1880, thousands of Chinese were brought to the United States under the indenture system working as miners, railroad builders, land workers, and agriculturists in the western US. They first came to the mines as cooks, laundrymen and other jobs too menial for American and European adventurers, and later to work on

building the Canadian Pacific and the Central Pacific trans-continental railroads. In this period, the United States was in great shortage of workers. The owners of large factories, vineyards, orchards and hopfields were much in favor of Chinese immigration. Chinese immigrant workers were preferred also because they tended to be docile, amiable, and capable (Black, 1963).

Throughout most of the second period, except for diplomats, merchants, and students and their dependents, which were an extremely small number, Chinese immigration was banned to the United States. From 1882 to 1943 the United States Government severely curtailed immigration from China to the United States. This federal policy resulted from a concern over the large numbers of Chinese who had come to the United States in response to the need for inexpensive labor, especially for the construction of the transcontinental railroad. Competition with American workers and a growing nativism brought pressure for restrictive action, which began with the Act of May 6, 1882. Passed by the 47th Congress, this law suspended the immigration of Chinese laborers for ten years; permitted those Chinese in the United States as of November 17, 1880 to stay, travel abroad, and return; prohibited the naturalization of Chinese; and created the Section 6 exempt status for teachers, students, merchants, and travelers. These exempt classes would be admitted upon presentation of a certificate from the Chinese government (NCS, 2004).

The next significant exclusionary legislation was the Act to Prohibit the Coming of Chinese Persons into the United States of May 1892. Referred to as the Geary act, it allowed Chinese laborers to travel to China and reenter the United States, but its provisions were otherwise more restrictive than preceding immigration laws. This Act

required Chinese to register and secure a certificate as proof of their right to be in the United States. Those who failed to have the required paper or witness would be put into prison or deported. Other restrictive immigration acts affecting citizens of Chinese ancestry followed. The Chinese ban continued in force until 1943, when an annual quota of 100 was assigned to Chinese who wished to enter the U.S. (King & Locke, 1980). President Franklin D. Roosevelt signed an Act to Repeal the Chinese Exclusion Acts in 1943 because China and the United States were allies during World War II. This Act of 1943 also lifted restrictions on naturalization. However until the Immigration Act of October 1965, numerous laws continued to have a restrictive impact on Chinese immigration (NCS, 2004).

In the second period, those Chinese already in the United States were confined to segregated ghettos, called Chinatowns, in major cities and isolated regions in rural areas across the country. Because the Chinese were deprived of their democratic rights, they made extensive use of the courts and diplomatic channels to defend themselves. The Civil Rights movement in the 1960s, particularly the enactment of the Civil Rights Act of 1964 and the Immigration and Nationality Act of 1965, brought in a new period of Chinese American immigration. With these new laws, Chinese immigrants were liberated from a structure of racial oppression. The former legislation restored many of the basic rights that were earlier denied to Chinese Americans. Thousands of Chinese people came to the United States each year to reunite with their families. Chinese Americans were mobilized to demand racial equality and social justice.

Two types of Chinese immigrant laborers have entered the United States since the 1970s. The first type consists of highly selected and well-educated Chinese. The second

type is made up of thousands of unskilled Chinese immigrant laborers who have entered

the United States to search for low-level work and wages. Many of the second category

came to the United States via illegal access or family chains. Some of them became

residents later through Amnesties and some did "Black work" (illegal job) without legal

status.

In my thesis, I will focus on the dynamics and causality of legal Chinese

immigration. When I reviewed related literatures, studies on the dynamics of Chinese

American immigration during the recent twenty years were very limited. Most studies

focus on the social and economic transitions of Chinese immigrants who were born or

have been living in the United States. In fact, after the 1980s the size of Chinese

immigration to the United States in twenty-two years has are almost 7 times of the total

Chinese immigration in the last one hundred years. The total number of Chinese

immigrants to the US between 1980 and 2002 is 911,220, whereas the total number of

Chinese immigrants between 1891 and 1979 is 136,843. My thesis may contribute to fill

some of the voids in describing and analyzing the dynamics of Chinese immigration

between 1980 and 2002.

Immigration Laws of the United States

Given worldwide disparities, free entry should induce unlimited flows, leading to a

drastic jump toward worldwide equalization. But many of the countries to which people

would like to go usually restrict entry. This means that, in the final analysis, it is the

policies of potential receivers which determine whether movement can take place or not.

"The effective constraint on the numbers migrating would soon become the immigration

legislations of the destination countries" (Bhagwati, 1984, Zolberg, 1989). According to

the US Citizenship and Immigration Services (2004), the term "immigration laws"

includes all laws, conventions, and treaties of the United States relating to the

immigration, exclusion, deportation, expulsion, or removal of aliens. The Immigration

and Nationality Act (INA) was created in 1952. Before the INA, a variety of statutes

governed immigration law but were not organized in one location. The McCarran-Walter

bill of 1952 collected and codified many existing provisions and reorganized the structure

of immigration law. The Act has been amended many times over the following years

(USCIS, 2004).

US immigration policy has two broad purposes. One is to preserve opportunities for

legal immigrants, refugees, and asylees to enter the United States; and the second is to

control the number of illegal immigrants living in the country (Espenshade, Baraka, &

Huber, 1997). Timmer and Willamson (1998) indicated that immigration policy had been

influenced by labor market conditions, and by immigration forces, which had their impact

on labor market conditions. An unsaturated labor market pressed to loosen the

immigration limitation, and a saturated labor market pressed to tighten the limitation.

Although, employers carry a great deal of weight in the determination of economic

policies, "in liberal democracies public policy seldom reflects the interests of capitalists

alone…In most capitalist democracies, organized labor was able to achieve some market

protection by imposing limiting conditions on labor importation" (Zolberg, 1989).

Immigration policies in most cases are the results of compromises between capitalists'

demands for adequate and cheap labor and workers' needs for wage and employment

protection.

Labor importation is not only founded on economic grounds, but also on considerations of social stability. A very important purpose of immigration restrictions is to minimize the social tensions caused by the presence of a large number of foreigners. There are numerous examples in history that social tensions may result from cultural conflictions, miscommunication due to language problems, and employment competition.

In the 1960s the United States appeared determined to further relinquish the use of alien labor because immigration from Europe, which was almost the exclusive source of international immigration to the United States at that time, no longer figured as a sufficient source of labor (Jones, 1960; Zolberg, 1989). In 1965, with the passage of the Amendments to the Immigration and Nationality Act, the United States abolished national origin quotas and eliminated national origin, race, or ancestry as a basis for immigration to the United States. The Amendment in 1965, which did not go into effect until 1968, set up the principle of equality of treatment for all countries. The 1965 Amendments replaced the national-origins system as the basis for allocating approximately 153,000 annual immigration places among the countries of the world with a system that provides (1) a worldwide ceiling of 290,000 annual admissions; (2) equality of treatment for all countries on a first come, first served basis up to an annual limit of 20,000 persons each country; and (3) preference for relatives of persons already living in this country, reserving a small number of places for political refugees and for meeting U.S. occupational needs (Fogel, 1980). It was not until the Immigration and Nationality Act Amendments was put into effect in 1968 that Chinese immigration began to increase sharply on the basis of a very limited Chinese ancestry population already in the United States.

Since the mid-1970s legislative initiatives have mostly involved efforts to limit immigration (Bean & Steven 2003). The United States has reaffirmed their long-established immigration policies which, collectively, constitute a protective wall against international immigration, but leave open small doors for specific flows. One of the doors was provided to kinds of alien labor, who are in demand by US employers; one was provided to relatives of legal immigrants and US citizens; and another was provided to relatives of persons already living in the U.S. The shape of international migrations to the United States depends in large part upon how these doors are manipulated (Zolberg, 1989). Controlling and selecting immigrants of alien labor are always a main purpose of immigration laws. Foreman-Peck (1992) argued that individuals receive their incomes from one of the following three sources: wages, profits, or land rents. A critical question is whether immigrant and native labor are complements or substitutes in production: if they are substitutes, then immigration hurts wages of the natives. If governments want to maximize the native labor interests, they tend to apply more restrictive immigration laws. Foreman-Peck categorized two types of immigrants: skilled and unskilled. It might be that skilled immigrant labor was a complement to domestic labor, whereas unskilled immigrant labor was a substitute. We would then expect to see a policy that encouraged the immigration of skilled and discouraged the immigration of unskilled workers.

The 1986 Immigration Reform and Control Act (IRCA86) offered two new policy tools to control illegal immigrants, a large part of whom are unskilled workers. First, IRCA86 created civil and criminal penalties for employers who knowingly hire aliens not authorized to work in the United States. Second, IRCA86 provided one-time authorized legalization for undocumented immigrants who had resided in the United States in an

unlawful status since January 1, 1982 no matter whether they entered illegally, or as temporary visitors with authorized stay expiring before that date or with the Government's knowledge of their unlawful status before that date (USCIS, 2004). This reform produced some dramatic short-term changes in migration dynamics. "In the years following IRCA's passage, some undocumented immigrants went home (Hagan, 1994); some delayed coming (Donato, Durand & Massey, 1992); and some may came forward to adjust to legal status" (Baker, 1990; 1997, p5). But numerous evidence shows that IRCA86 has little long-term effect on undocumented immigration. Although US Border Patrol apprehensions dropped nearly 50 percent in the three years after IRCA's passage, they returned to the pre-IRCA level later (Bean, Edmonston & Passel, 1990; Donato, Durand & Massey, 1992; Donato, 1993; Baker, 1997).

Baker (1997) also suggested that IRCA86 tilts toward Mexicans as they designed and implemented the program. For example, the INS battled in the courts to exclude applicants who did not fit the typical profiles of the Mexican undocumented immigrant "entering without inspection". In addition, INS especially hire temporary employees for office duty who either are Hispanic or who speak Spanish in several key sites—Houston and Los Angeles. On the basis of these observations, Baker (1997) described the population composition under the influence of IRCA86. She indicated that the legalized population lags far behind other groups of US workers in education. Median education level is seven years for the entire legalized immigrant population. Thus it appears that most numerous amnesty beneficiaries are low-educated, non-English-speaking undocumented immigrants in the southwestern United States. The amnesty is not designed mainly on the consideration of human capital. An evidence of IRCA86's

endeavor for the legalization of low-educated immigrants was the creation of alternatives to the IRCA-mandated "English/Civics" test for permanent residence.

In 1990, there was a significant adjustment of the US immigration Act, which is called the Immigration Act of 1990 (IMMACT90). IMMACT90 revised the numerical limits and the preference categories used to regulate legal immigration. It also established several transitional programs that ended in 1994. Like the 1986 Act, the 1990 Immigration Act tried to address both international and domestic concerns. The United States tried to set up such an immigration policy that is flexible and balanced the country's economic needs with its humanitarian principles. This Act was mostly suitable for the post Cold-War era and adapted to a new age of global social relations. IMMACT90 established the largest ever quotas both for family preferences (465,000) and for labor migrants (140,000), as well as 55,000 spouses and children of legalized aliens and 40,000 diversity immigrants in fiscal years 1992-1994. Beginning in 1995, the lower overall level of immigration (675,000) consists of an increase in family-sponsored immigrants to 480,000, continuation of 140,000 employment-based immigrants, and conversion of the temporary diversity into a permanent category of 55,000 visas annually. IMMACT90 also established a numerical minimum of 226,000 for family-sponsored preferences (USCIS, 2004).

IMMACT90 maintained a preference system for legal immigrants rooted in family relationships and job skills. In 1990, Congress made the largest changes in family-sponsored preferences over previous laws with the modification of the second preference category. The second preference includes spouses and minor children (under 21 years old) of legal permanent residents and unmarried sons and daughters (21 years old or more) of

legal permanent residents. IMMACT90 reserves 77 percent of second preference visas for spouses and children, and 75 percent of these visas are exempt from the country-specific limitation. This change effectively reduced the number of visas for adult children beginning in 1992 and increased the number of visas available for spouses and minor children. Exemption from the per-country limit also allowed spouses and minor children of legal permanent residents from particular countries to immigrate to the United States (UCIS, 2004).

In addition to increasing the level of employment-based immigration, IMMACT90 allotted a higher proportion of visas to highly skilled immigrants. Prior to IMMACT90, 27,000 visas were issued to highly skilled immigrants and their family members and 27,000 were issued to unskilled workers and their family members. Beginning in 1992, approximately 110,000 visas were made available to highly skilled immigrants and only 10,000 to unskilled workers (USCIS, 2004).

The Chinese Student Protection Act of 1992 (CSPA92) was a bill sponsored by Nancy Pelosi, Representative of California, which granted permanent resident status to Chinese immigrants who were in the United States after June 4, 1989 and before April 11, 1990. The stated purpose of the act was to prevent the political persecution of Chinese students in the aftermath of the Tiananmen Protests of 1989. One provision of the act was that permanent residency statuses granted to Chinese nationals under the act would be subtracted from the immigration spaces available in later years. Ironically, the primary beneficiaries of this act were undocumented immigrants from Fujian Province who were not students at all (Encyclopedia Home, 2004).

CSPA was regarded as an amnesty to Chinese immigrants. The significance of

CSPA to Chinese immigrants can be compared with the 1986 Immigrant Reform and Control Act to Mexican beneficiaries. The passage of CSPA resulted in the climax of Chinese immigrants legalization and transition from temporary immigrants to permanent immigrants between 1980 and 2002.

In 1996, the Personal Responsibility and Work Opportunity Reconciliation Act (the Welfare Reform Act, or WRA96) was signed into law by President Bill Clinton. This law overturned the original US welfare policies by eliminating the entitlement of support for poor families, and requiring able-bodied persons who receive government assistance to work (Espenshade, Baraka, & Huber, 1997). Specifically, the WRA96 circumscribed the eligibility of immigrants for public benefit programs by creating a four-tier system. "The broadest eligibility is reserved for US citizens; next come refugees and asylees; newly limited access is imposed on legal immigrants; and illegal immigrants remain ineligible for almost all social programs" (Espenshade, Baraka, & Huber, 1997). Prior to the enactment of the 1996 welfare reform bill, US citizens, legal immigrants, and refugees were equally eligible for most public benefit programs. To strengthen the effects of the Welfare Reform Act, the Immigration Reform and Immigrant Responsibility Act of 1996 (IRIRA96) was passed to combat illegal immigration and create higher standards of financial self-sufficiency for the admission of sponsored legal immigrants. The IRIRA96 had three significant means to circumscribe immigration access to public benefits: 1) established measures to control US borders, protect legal workers through worksite enforcement, and remove criminal and other deportable aliens; 2) placed added restrictions on benefits for aliens; and 3) miscellaneous limitation provisions, such as the limit on the ability of F-1 students to attend public schools without reimbursing those

institutions.

Espenshade, Baraka and Huber (1997) argued that the combined effects of the 1996 immigration and welfare reforms did not produce unintended, and possibly undesirable consequences. They noted that the 1996 reform measures might reduce legal immigrants and incentive illegal immigrants. At the same time, the welfare reforms of the 1996 incentives led to more eligible legal immigrants becoming nationalized so that the actual cost savings attributable to benefits circumscribe for immigrants will be smaller than expected. They suggested that 1996 immigration and welfare reforms would reduce the volume of future US legal immigration and produce a legal immigrant stream with a higher average level of skill and income.

In 1998, Congress passed the American Competitiveness and Workforce Improvement Act (WIA98). In enacting the WIA98, Congress believed that the United States was facing a severe shortage of workers qualified to perform skilled information technology jobs, although it had recognized that evidence of a shortage was inconclusive. Under WIA98, the annual ceiling of H-1B petitions valid for initial employment was increased from 65,000 to 115,000 in fiscal years 1999 and 2000 and 107,500 in 2001. (USCIS, 2004)

The purpose of WIA98 is to protect native American workers by preventing employers from hiring low-skilled aliens or aliens with lower salaries instead of native workers. Under the Act, two new requirements will apply to those employers with 15% or more of their workforces composed of H-1B workers. These businesses, designated as "H-1B-dependent," will be subject to the attestations where they petition for H-1Bs without masters degrees in high technology fields or where they plan to pay the H-1Bs

less than $60,000 a year. Congress intends thereby to target companies most likely to abuse the system--job contractors/shops who are seeking aliens without extraordinary talents (only bachelors degrees) or offering relatively low wages. Other employers, who use a relatively small number of H-1Bs, will not have to comply with the new attestations unless they have been found to have willfully violated the rules of the H-1B program. (USCIS, 2004)

The recruitment attestation requires an employer to have taken good faith steps to recruit American workers for the job an H-1B alien will perform and to offer the job to an American worker who applies and is equally or better qualified than the alien. An employer must offer an H-1B alien benefits and eligibility for benefits on the same basis, and in accordance with the same criteria, as the employer offers to American workers. Potential penalties include "back pay, civil monetary penalties of violation ($5,000 per willful violation, and $35,000 per violation where a willful violation was committed along with the improper layoff of an American worker), and debarment from the H-1B program for from 1 to 3 years". (USCIS, 2004)

After the destruction of the twin towers on September 11, 2001, both the general public and policy makers paid more attention to U.S. immigration laws. More than 27.9 million temporary immigrant admissions were counted in the Immigration and Naturalization Service's Temporary immigrant Information System during fiscal year 2002. This represents a decrease of more than 4.9 million since 2001, or 15.0 percent. This is the second consecutive year of annual decrease, and the largest percent decrease since 1982-83 (USCIS 2004). However, with the dramatic decline of immigrants after the attack, the recession of the U.S. economy, which started before 9-11, was accelerated.

This fact shows that "economic vitality in an increasingly interdependent global economy depends to a large extent on the substantial flows of immigrants, both permanent and temporal. U.S. immigration law is now a part of the dilemma of providing security for citizens and facilitating the movement of international migrants" (Bean & Steven 2003).

In this chapter, I have reviewed the literature of migration theories, the background of Chinese immigration to the United States and US immigration laws. We have seen through the literature how economic and social factors potentially influence migration behavior. The review of Chinese immigration background shows the history of Chinese immigration to the United States and the reasons why the time period studied in this thesis is important. Through the introduction of U.S. immigration laws, we have elementary understanding of the policy intentions of significant U.S. immigration laws. I now turn to the next chapter to present the data source, methods and research hypotheses of this study.

CHAPTER III

DATA, METHODOLOGICAL PROCEDURES, AND HYPOTHESES

In this chapter, I first describe the data set that will be used in this thesis. Next I describe and explain ROBUST and OLS regression models along with methodological procedures. After that, the dependent variables and various independent variables will be introduced and discussed. Finally, I end the chapter by discussing the hypotheses that will guide this thesis.

Description of the Data

The data on the dependent variables in this analysis come from the U.S. Citizenship and Immigration Services (USCIS). USCIS is formerly known as the Immigration and Naturalization Service. USCIS provides various kinds of information about immigration. First, the USCIS website publishes files on all immigrants to the United States, transient visitors, undesirable aliens, violators of immigration and naturalization laws, and petitioners for naturalization. The immigration fact sheets published by USCIS are a compilation of recent statistics and historical data on the national origins and residence of permanent and temporary immigrants in the United States. This public information portal provides easy access to a chronology of immigration-related information as well as a portal to information arranged by topic. Second, USCIS provides information on laws, regulations and interpretations controlling immigration and the work of the immigration-related bureaus of the Department of Homeland Security.

There are many sources of laws governing immigration. A main source of immigration laws is statutes enacted by Congress. Most of the laws affecting immigration are contained in the Immigration and Nationality Act. Although the provisions of most statutes affecting immigration are reflected in the INA, many are not codified in the INA and must be found in other legislations.

According to the Immigration and Nationality Act, international immigrants are categorized into two classes: "Immigrants" and "Nonimmigrants". To make the definition clearer, I use the names "Permanent Immigrants" and "Temporary Immigrants" corresponding to "Immigrants" and "Nonimmigrants" in the glossary of INS. Permanent Immigrants (Immigrants) are defined as persons lawfully admitted for permanent residence in the United States. Permanent immigrants are comprised of two types: The first are aliens living abroad who apply for an immigrant visa at a consular office of the Department of State. Once issued a visa, they may enter the United States and become legal immigrants when they pass through the port of entry. The other are aliens already living in the United States, including certain undocumented immigrants, temporary workers, foreign students, and refugees, who file and apply for adjustment of status to lawful permanent residence with the Immigration and Nationality Services (USCIS 2004).

Temporary immigrants (Nonimmigrant) are aliens admitted to the United States for a special purpose and temporary period but not for permanent residence (USCIS, 2002). Although the typical temporary immigrant is a tourist who visits the United States for a few days to several months, there are numerous classes of nonimmigrant admission, ranging from students to ambassadors (USCIS, 2002). In this thesis, both permanent immigrants and temporary immigrants from China are included and compared with each

other.

According to the definitions of The Immigration and Nationality Act (INA), I classify Chinese temporary immigrants who come to the United States as the skilled and the unskilled. INA, as amended by the Immigration Act of 1990 and the American Competitiveness and Workforce Improvement Act of 1998, regulates H-1B policy as well as guides H-1B procedures. An H-1B temporary worker is an alien admitted to the United States to perform services in "specialty occupations," based on professional education, skills, and/or equivalent experience. In order to get an H-1B visa to temporarily work in the United States, an immigrant must meet one of the following criteria:

"1) hold a bachelor or higher degree as required by the specialty occupation from an accredited U.S. college or university;

2) possess a foreign degree determined to be equivalent to a bachelor or higher degree as required by the specialty occupation from an accredited U.S. college or university;

3) have any required license or other official credential to practice the occupation (for example, architect, surveyor, physical therapist) in the state in which employment is sought; or

4) have, as determined by the INS, the equivalent of the degree required by the specialty occupation acquired through a combination of education, training, and/or experience. Specialty occupations include computer systems analysts and programmers, physicians, professors, engineers, and accountants" (USCIS, 2004).

Historical data on all H-1B were combined with H-1A and H-1C as H1 before fiscal year 2000. H-1A and H-1C are aliens who come temporarily to the United States to

perform services as registered nurses. Temporary workers under H2 are aliens who come to the United States to perform other temporary services or labor if unemployed persons capable of performing such services or labor cannot be found in the country. In the files of CIS, H2 is label as "other temporary workers" whereas H1 is labeled as "workers of distinguished merit and ability". So I decide to use data of H1 as skilled workers and data of H2 as unskilled workers in this study.

There are several limitations of the data from the USCIS. First, not all data about permanent and temporary Chinese immigrants begin with 1980 and end in 2002. There are gaps in the historical temporary immigrant data series due to the unavailability of arrival and departure records for 1980, 1981 and 1982. And there are no reliable data available for 1997 because of a dataset change. I will begin some analyses with years a little later than 1980 or annualize the data based on available data to make up for the unavailable data.

Second, the data system records arrivals via the collection of INS Form I-94; thus, the data represent each arrival event during the year rather than the actual number of individuals admitted. Temporary immigrants in several classes of admission may enter (and leave) many times in any given year, such as students, intracompany transferees, and visitors for business.

Third, there are several different types of classification of immigration origin used in the data of USCIS. One is based on the last permanent residence of immigrants, one is based on country of birth, and the other is based on the citizenship of immigrants. Although in some cases, there are different sets of data corresponding to each classification, there are not in other cases. I use data of Chinese immigrants in terms of

their availability and completeness and pay less attention to the consistency of a classification standard for different immigrant types. Actually, the immigration trends of these different classified data sets are very similar, particularly in the case of Chinese immigration.

In Chinese history, China is a country with an individual culture and a relatively restrictive immigration policy. The well-know migration policy of China is "close the door and lock the country". Even in today's China, immigration policy is much more rigid than emigration policy, although today China is more open than before. The reasons for the restrictive immigration attitude of China are complicated. An important factor is that China already has the biggest population in the world. A large number of immigrants may place more pressure on the burden of population. Besides the restrictive immigration policy of China, twofold citizenship is prohibited by the Chinese Constitution. Chinese government does not accept anyone having citizenship of China and other countries simultaneously. Although there are some differences, data of Chinese immigrants based on last permanent residence are very similar to those based on citizenship or birth place.

Last but not least, data of Chinese temporary immigrants from USCIS include both People's Republic China (China mainland) and Taiwan. USCIS records temporary immigrant visas for the China mainland and Taiwan together and there is no way to distinguish them from each other. Thus I have to describe and analyze them together.

The main data I use for the independent variables come from the U.S. Census Bureau (USCS), Bureau of Labor Statistics in the US Department of Labor (Bureau of Labor Statistics, or BLS) and National Bureau of Statistics of China. USCS provides annual aggregate and individual information from 1980 to 2000. The statistics on the

USCS website contain a collection of social and economic conditions in the United States. Also, Chinese population data are included in the international statistics. The Bureau of Labor Statistics is the principle agency for the Federal Government of the United States in the broad field of labor economics and statistics. BLS is an independent statistical agency within the Department of Labor that collects, processes, analyzes, and disseminates essential statistical data to institutions, government officers and the general public.

Methodology

Robust Regression Model of PIR

The method of Robust regression model in my thesis is used to minimize errors by using iteratively reweighted least squares with Huber and bi-weight functions. OLS regression parameter estimates are obtained by calculating squared errors over and over until we find the coefficients that give us the smallest squared errors. Better than OLS, Robust regression procedures use "numerical" methods instead of simple "brute force" method to obtain parameter estimates. It does well in dealing with outliers. (Poston, 2003). The influence of special Chinese Student Protection Act may cause outliers in the data of permanent immigration rate. After I compare the results of OLS model and Robust regression model, I decided to use Robust regression models to test PIR of Chinese immigrants.

OLS Regression Models of TIR and SIR

Ordinary Least Squares regression models will be used to test the effects of

the U.S. immigration laws and other socioeconomic factors on Chinese temporary

immigration and skilled immigrant workers. OLS regression is a technique for

calculating the regression equation that minimizes the sum of the squares of the

error terms; that is, the differences between the observed values for the dependent

variable and the predicted values for the dependent variable. The OLS formula of

linear multiple regression model is:

$$Y = a + b_1X_1 + b_2X_2 + \ldots + b_iX_i + e$$

Those independent variables, which are highly correlated with immigration rates,

will be combined with dummy variables of immigration laws in multivariate regression

models. My units of regression analysis will be years. Each variable is supposed to have

23 cases by years from 1980 to 2002. For each regression model, only two independent

variables will be used. A major contribution of multiple regression is that it enables us to

test if a previous bivariate relationship is spurious, that is, if the previous bivariate

relationship is not a real one but is caused by the fact that the two variables in the

bivariate equation are both caused by a third variable not included. Before undertaking

the regression analysis, the dynamics and contexts of Chinese immigration from 1880 to

the present will be described.

As well as OLS and Robust analyses, time series analysis is introduced to

compare results with the former analyses. Time series analysis accounts for the

fact that data points taken over time may have an internal structure (such as

autocorrelation, trend or seasonal variation) that should be accounted for. The

great advantage of time series regression analysis is that it is possible to both

explain the past and predict the future behavior of variables of interest.

Immigration rates are observations drawn over time and may be influenced by

time noise. However, the results of time series regression on Chinese immigration

rates turned out to be very similar as OLS regression. So I still use Robust and

OLS models in this thesis.

Dependent Variables

As I noted above, legal immigrants are placed in two categories: Permanent

immigrants (Immigrants) and Temporary immigrants (Nonimmigrants). Permanent

immigrants are persons lawfully admitted for permanent residence in the United States.

Permanent immigrants are comprised of two types: The first is aliens living abroad who

apply for an immigrant visa at a consular office of the Department of State. Once issued a

visa, they may enter the United States and become legal immigrants when they pass

through the port of entry. The other are aliens already living in the United States,

including certain undocumented immigrants, temporary workers, foreign students, and

refugees, who file and apply for adjustment of status to lawful permanent residence with

the Immigration and Nationality Services. Temporary immigrants are aliens admitted to

the United States for a special purpose and temporary period but not for permanent

residence (USCIS, 2004). There are numerous types of nonimmigrant admission, ranging

from students to ambassadors. In this thesis, I will study changes in both permanent

immigrants and temporary immigrants from China and compare the different effects of

U.S. immigration laws on each group separately.

In terms of IMMACT90 and WIA98, U.S. immigration laws allot a higher proportion

of visas to highly skilled immigrants. Chinese immigrant workers, who came to

temporarily work in the United States with H1 or H2 visas, will be described and analyzed in this study. Chinese H1 and H2 immigrants comprise a very small percentage of total H1 and H2 immigrants. However, Chinese students, who come to study in the United States with F1 or M1 visas, always rank among the top three countries. Chinese students are over 10 percent of total foreign students coming to the United States each year since 1983. And Chinese students are a very important resource for permanent immigrants and other types of temporary immigrants, such as H1 immigrants. It has been noted by the US embassy that more than 90 percent of Chinese students who study in the US do not return to China after graduation, and most of them stay in the US and because to permanent immigrants or H1 workers. They are a very special immigrant group among Chinese immigrants and will be described separately.

The dependent variables of my regression models are:

1. Permanent Immigration Rate

    $PIR = $ Permanent Immigrants$_t$ / China Population$_t$

2. Temporary Immigration Rate

    $TIR = $ Temporary Immigrants$_t$ / China Population$_t$

3. Skilled Immigrant Rate (SIR)

    $SIR = $ Chinese Skilled Immigrant Labors$_t$ / Total Skilled Immigrant Labors$_t$

Independent Variables

Theories developed to understand the contemporary processes of international migration posit causal mechanisms that operate at widely divergent levels of analysis. According to the migration theories reviewed above, there are four especially important factors dealing with international immigration in the global economy: Labor Market Effects, Economic

Conditions, Migration Networks, and Immigration Laws. Factors measuring the political environment are not included in the consideration of independent variables. Sociologists have found no evidence that changing political institutions and franchises systematically affect the degree and direction of policy change (Timmer & Williamson, 1998). Another reason for excluding political variables is that significant political change was minor in the time period of this study.

Variables of Labor Market

According to Neoclassical Economic Theory, international migration, like its internal counterpart, is caused by geographic differences in the supply and demand of labor. There are several assumptions contained in this perspective: First, the international migration of workers is caused by differences in wage rates between countries. Second, international flows of human capital—that is, highly skilled workers—respond to differences in the rate of return to human capital, which may yield a different pattern of migration from that of unskilled workers. Third, labor markets are the primary mechanisms by which international flows of labor are induced. There are several independent variables that may be used to test the effects of Labor Market conditions:

a. Average wage of China,

This is the average yearly wage of Chinese worker. The unit of average wage of the Chinese worker is the official currency unit, the Yuan. One dollar equals around 8.3 Yuan. The data of average wage of Chinese workers are from National Bureau of Statistics of China. However, the statistics do not consider the influence of inflation. This limitation may affect the analysis results.

b. Average wage of the U.S.,

This is the average weekly wage of American worker. The unit of average wage of American worker is the dollar. The data are from the United States Department of Labor, Bureau of Labor Statistics. The calculation of weekly wage is based on the value of the dollar in 1983. So the inflation effect has been excluded from the data set.

c.   Unemployment rate of the U.S.,

This is the unemployed population compared to the total population of the U.S.

d.   Unemployment rate of China.

This is the unemployed population compared to the total population of China.

Variables of Economy

For Economic Conditions of the origin country and destination country, the independent variables I use in this study are:

a.   GNP of China,

This is the general national product of China in each year. The unit is the official currency unit of China, the Yuan.

b.   GNP of the U.S.

This is the general national product of the U.S. in each year. The unit is the dollar.

Variables of Immigration Laws

Between 1980 and 2002, three substantial changes of immigration laws of the U.S. are included in my regression models:

a.   National Immigration Act in 1990 (IMMACT90),

b.   Personal Responsibility and Work Opportunity Reconciliation Act, and Illegal Immigration Reform and Immigrant Responsibility Act in 1996 (WRA96 & IRIRA96).

c. American Competitiveness and Workforce Improvement in 1998(WIA98)

Some of these immigration laws have long-term effects until new laws change their regulations, and some have only a one-time function on immigration. On the one hand, IRCA86 offered one-time authorized legalization for undocumented immigrants who had resided in the U.S. in an unlawful status since January 1, 1982. And on the other hand, it created civil and criminal penalties for employers who knowingly hire aliens not authorized to work in the U.S. Although the second policy tool of IRCA86 may have a long-time influence on immigration, research shows it has few long-term effects (Hagan, 1994; Baker, 1990, 1997; Bean, Fdmonston & Passel, 1990; Donato, Durand & Massey, 1992; Donato, 1993; Baker, 1997). Therefore, IRCA86 will not be used as an independent variable in regression models.

CSPA92 is to offer Chinese students protection from political persecution. It offered permanent resident status to Chinese immigrants who were in the U.S. after June 4, 1989 and April 11, 1990. Its effects on Chinese immigration are one-time except for the extension of Chinese immigration network. I will show the influence of CSPA92 on Chinese immigration, but will not use it in regression models.

According to Network Theory, interpersonal ties connect migrants, former migrants, and nonmigrants in origin and destination areas through ties of kinship, friendship, and shared community origins. They increase the likelihood of international movement because they lower the costs and risks of movement and increase the expected net returns to migration. However, the number of populations, who regard themselves as Chinese and reside in the U.S., is only available from the decennial Census. Annual data on Chinese networks in the U.S. are not available. I hope that it can be covered in future

researches.

Hypotheses

According to the reviewed immigration theories, previous research and empirical tests, I have developed several hypotheses that will be tested with OLS regression models in this thesis. Specifically, the hypotheses are:

1. According to "Neoclassical Economics" theory, migration occurs from countries with limited labor relative to capital have lower average wages to countries with limited labor relative to capital have higher average wages. Individuals migrate to pursue the maximization of net profit. I hypothesize that all PIR, TIR and SIR are in direct proportion to the average wage of the U.S., and in inverse proportion to the average wage of China.

2. The importance of employment to Labor market is shown in many migration theories, such as "Neoclassical Economics", "New Economics", and "Dual Labor Market Theory". It is apparent that individuals migrate from countries where it is difficult to find jobs to countries where it is easier. I hypothesize that the unemployment rate of the U.S. is in inverse proportion to all Chinese immigration rates, and the unemployment rate of China is in direct proportion.

3. There are several reasons for me to expect the GDP of China to be in direct ratio to Chinese immigration rates. First, In light of the "New Economics" theory, economic development of sending regions should not reduce the pressures for international migration. Second, with the development of the

economy, more Chinese are able to afford the costs of international migration. Individuals have to afford migration costs before they migrate. Even twenty years ago, the migration cost to the U.S. is too high to be afforded by most Chinese. Third, economic development provides more opportunities of communication and migration between the two countries. The development of international business and cooperation accelerates international communication. Last but not least, most Chinese believe that the U.S. economy is still much more advanced than China even with the development of Chinese economy. Migration to the U.S. is regarded as admirable and honorable in China.

4. Just as with the GNP of China, GNP of the U.S. is hypothesized to be in direct ratio to the migration rates of Chinese immigrants. The prosperity of the American economy attracts immigrants to pursue wealth. The GNP of the U.S. may be more attractive than the employment rate and average wage of the U.S. because migrants are short of information about those local economic indexes of the destination country.

5. The Immigration Act of 1990 (IMMACT90) increased the numerical limits and revised the preference categories used to regulate legal immigration. The preference system is rooted in family relationships and job skills. I suppose that skilled Chinese temporary immigrants, who came into the U.S. with H-1 visa, increased after IMMACT90, whereas unskilled temporary immigrants, who came with H-2 visa, decreased or were little influenced by IMMACT90. Both Chinese permanent immigrants and temporary immigrants are should

be positively influenced by IMMACT90.

6. The Personal Responsibility and Work Opportunity Reconciliation Act in
    1996 (WRA96) and the Immigration Reform and Immigrant Responsibility
    Act of 1996 (IRIRA96) circumscribed the eligibility of immigrants for public
    benefit programs. However, I do not think that the two immigration-related
    laws of 1996 will have significant influences on Chinese immigration.
    Chinese legal immigrants are well known for industry and frugality. They
    seldom depend on public benefit programs, especially in destination
    countries.

7. The American Competitiveness and Workforce Improvement Act (WIA98)
    increased the annual ceiling of H-1B petitions valid for initial employment
    from 65,000 to 115,000. The direct beneficiary of WIA98 was skilled
    immigrant labors, who are also the main source of Chinese permanent
    immigrants. Both Chinese permanent and temporary immigrants are
    supposed to increase with the influence of WIA98.

In this chapter I have described the data sets that will be used in this thesis. The
dependent variable has been defined, as have the independent variables that will be used
separately to test different models. I have shown that OLS and Robust regression models
are appropriate statistical methods to use for my thesis. Finally, I have proposed
hypotheses based on my review of relevant literature and previous correlation tests. In the
next chapter, I will describe the dynamics of Chinese immigration.

CHAPTER IV

DESCRIPTION OF CHINESE IMMIGRATION AND ITS RELATIONSHIP WITH

THE U.S. IMMIGRATION LAWS

In this chapter, the dynamics of Chinese immigration will be described in light of their categories. The trends of Chinese immigration will be compared with total immigration from all countries by categories. Then the effects of immigration laws of the U.S. on Chinese immigration will be described. The changes of immigration rates are also shown as change rates to help describing the changes of Chinese immigration.

Permanent Immigrants

Table 1 shows the total Chinese population, permanent Chinese immigrants, immigration rate, and change rate of immigration. The immigration rate of permanent immigrants was $2.81e^5$ in 1980 and reached $4.77 e^5$ in 2002. Chinese permanent immigrants increased sharply in 1993 and 1994. Chinese immigrants who received permanent resident status in 1993 are above or almost two times as much as those in any earlier year. From 2000 to 2002 there is another increase of Chinese permanent immigrants. Change rates of Chinese permanent immigrants are always going up and down around zero. The highest increases are in 1993 (69%) and 2000 (42%). The change rate of permanent Chinese immigrants is calculated as:

R_{change} =(Permanent Immigrants$_t$ – Permanent Immigrants$_{t-1}$)/Permanent Immigrants$_{t-1}$

Table 1. Permanent Immigrants Claiming China as Last Permanent Residence, 1980-2002

Fiscal Year	Permanent immigrants from all Countries	Permanent immigrants from China	Chinese Population (1,000)	Immigration Rate (0/00)	Change Rate (0/0)
1980	530,639	27,651	984,736	0.0281	
1981	596,600	25,803	997,001	0.0259	-6.68
1982	594,131	27,100	1,012,490	0.0268	5.03
1983	559,763	25,777	1,028,357	0.0251	-4.88
1984	543,903	23,363	1,042,756	0.0224	-9.36
1985	570,009	24,787	1,058,008	0.0234	6.10
1986	601,708	25,106	1,074,523	0.0234	1.29
1987	601,516	25,841	1,093,726	0.0236	2.93
1988	643,025	28,717	1,112,866	0.0258	11.13
1989	1,090,924	32,272	1,130,729	0.0285	12.38
1990	1,536,483	31,815	1,148,364	0.0277	-1.42
1991	1,827,167	33,025	1,163,607	0.0284	3.80
1992	973,975	38,907	1,177,482	0.0330	17.81
1993	904,292	65,578	1,190,571	0.0551	68.55
1994	804,416	53,985	1,203,434	0.0449	-17.68
1995	720,459	35,463	1,215,787	0.0292	-34.31
1996	915,900	41,728	1,227,767	0.0340	17.67
1997	798,378	41,147	1,239,459	0.0332	-1.39
1998	654,451	36,884	1,250,366	0.0295	-10.36
1999	646,568	32,204	1,260,107	0.0256	-12.69
2000	849,807	45,652	1,268,853	0.0360	41.76
2001	1,064,318	56,426	1,276,883	0.0442	23.60
2002	1,063,732	61,282	1,284,276	0.0477	8.61

SOURCE: U.S. Department of State, Bureau of Consular Affairs, Visa Office.

Do the American immigration laws have the same effects on immigration from all countries as on Chinese immigration? Figure 4 shows the trends of permanent immigration from all countries and from China.

Figure 4. Permanent Immigrants from All Countries and from China, 1980-2002
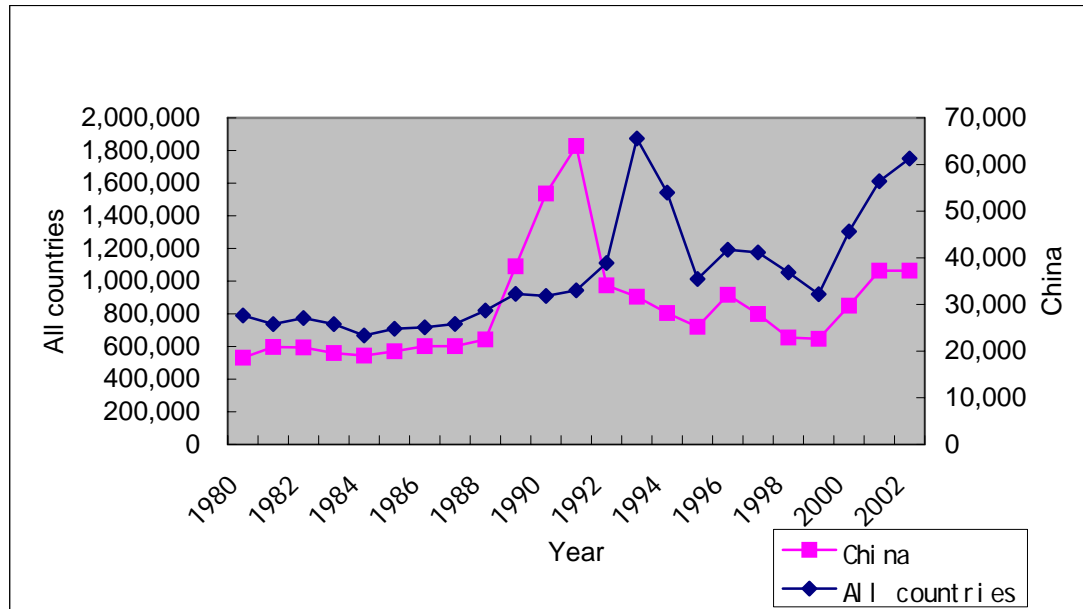
The trend of all countries is very similar to the trend of China before 1989 and after 1996 (Figure 4). The climax of all countries occurred three years ahead of that of China. Legal immigration to the United States has undergone a number of changes during recent years, with the rate of immigration increasing from about 600,000 in 1986 and 1987 to a peak of 1.8 million in 1991, and then falling back to around 660,000 in 1998. A rise in total immigration from 1987 to 1991 has been attributed to changes in immigration law (IRCA86), which granted legal status to undocumented immigrants who had been in the United States continuously since 1982 or had worked in agriculture. IRCA86 has also

been cited as a reason for an increased number of pending "adjustment of status" applications and subsequent reduction in the number of approved applications. Between 1991 and 1998, the total number of admitted immigrants declined every year except 1996; immigration levels in 1998 were approximately the same as they had been eleven years earlier (USCIS, 2004).

Changes of permanent immigration from all countries are partially explained by the impact of the Immigration Act of 1990 (IMMACT90), which revised the annual ceiling on immigration and the preference categories used to regulate immigration. IMMACT90 increased the level of employment-based immigration and allotted a higher proportion of visas to highly skilled immigrants.

Compared with permanent immigration from all countries, the level of permanent immigration from China has fluctuated from 1989 to 1994. IRCA86 does not show a significant influence on Chinese permanent immigration. Different from immigrants from all countries, the immigration rates of China in years after 1986 do not obviously increase. Because IRCA86 is a one-time amnesty, it means that Chinese immigration does not benefit a lot from it.

Compared with the fluctuations of the change rate, the immigration rate of permanent Chinese immigrants is relatively stable except for the climax in 1993 and 1994. The influence of IMMACT90 showed up in the later years after 1990. Combined with the effects of CSPA92, immigration rate of Chinese permanent immigrants (PIR) increased from 0.0277 to 0.0284 in 1991, 0.033 in 1992. Chinese immigrants, including illegal immigrants who entered the U.S. from China, took advantage of this amnesty of 1992. PIR in 1993 was almost twice as high as in other years. It is 0.055 in 1993 and 0.045 in

1994. Because permanent resident statuses granted to Chinese national under the act would subtract from the immigration spaces available in later years, the PIR in 1995 dropped to 0.029. In 1996 the permanent immigration rate went up to 0.034. The Passage of WRA96 and IRIRA96 were on September 30, 1996. So their restrictive effect on aliens and immigration was reflected after 1996. The PIR dropped a little in 1997 and 1998. On October 21, 1998, WIA98 established more restrictions for employing immigration labor while at the same time increasing H1-B quotas. WIA98 may cause more Chinese immigrants, who came to the U.S. years ago and are applying for permanent resident, to be unemployed and thus were not eligible to apply for Green Cards via employment. This is a possible reason for the decrease of PIR in 1999 to 0.0256. But during 2000 and 2002, the PIR went up again to 0.0477 in 2002, which was only a little lower than in 1993.

Figure 5 shows the difference between the immigration rate and the change rate. The trend of the change rate fluctuates more than that of the immigration rate.

Figure 5. Immigration Rate and Change Rate of Permanent Chinese Immigrants, 1980-2002
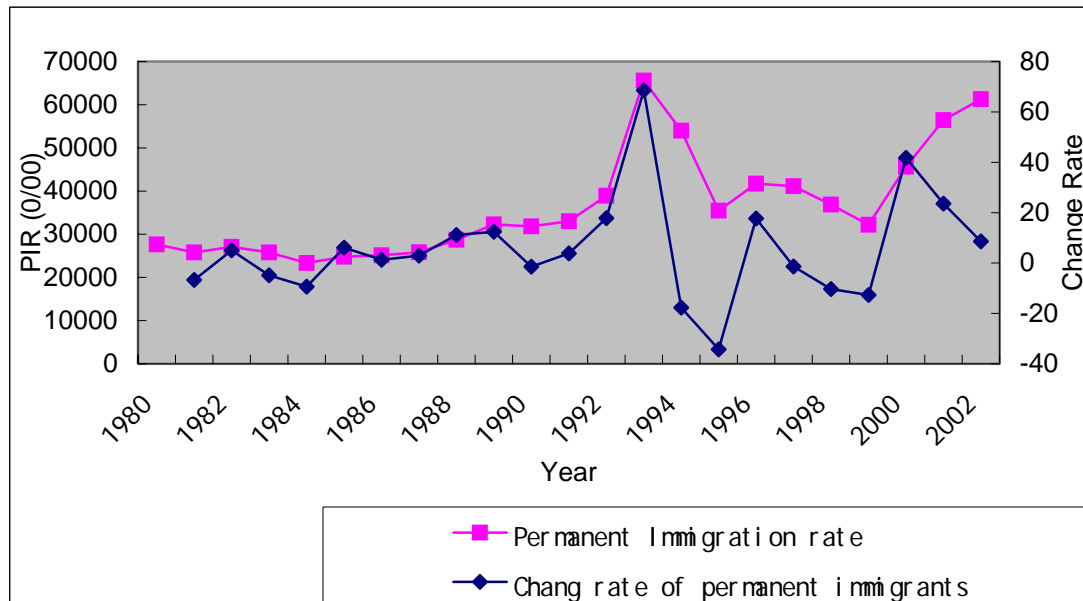
Temporary Immigrants

Table 2 describes the data of temporary immigrants between 1983 and 2002 whose citizenship is Chinese. The statistics of temporary immigrants by country of citizenship started in 1983. So the data for 1980, 1981 and 1982 are not available. Compared with data on temporary immigrants by country of last residence, data by country of citizenship are still more complete and therefore are used in this thesis. Change rate of temporary Chinese immigrants is calculated as:

$R_{change} = ($ Temporary Immigrants$_t$ –Temporary Immigrants$_{t-1})/$ Temporary Immigrants$_{t-1}$

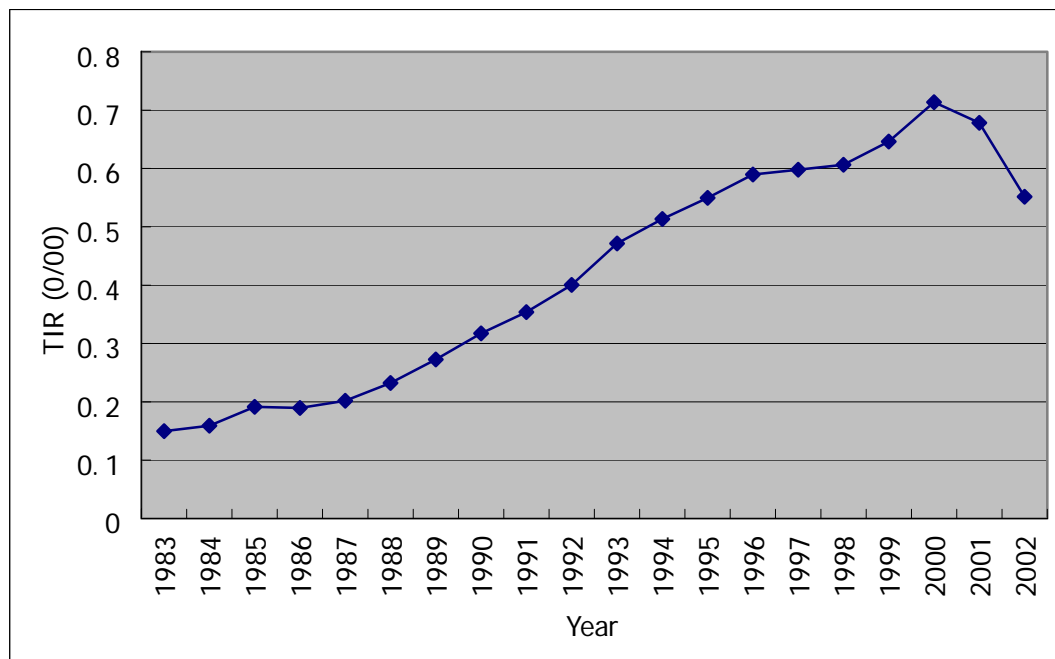Table 2. Temporary Immigrants Claiming China as Country of Citizenship, 1983-2002

Fiscal Year	Temporary immigrants from all countries	Temporary immigrants from China	China Population (10,000)	Immigration rate (0/00)	Chang Rate(0/0)
1983	9,849,458	154,220	102,836	0.015	
1984	9,426,759	166,012	104,276	0.016	6.16
1985	9,675,650	202,447	105,801	0.019	20.19
1986	10,471,024	203,830	107,452	0.019	-0.86
1987	12,272,866	220,521	109,373	0.020	6.29
1988	14,591,735	258,008	111,287	0.023	14.99
1989	16,144,577	307,117	113,073	0.027	17.15
1990	17,574,055	362,834	114,836	0.032	16.33
1991	18,962,520	409,740	116,361	0.035	11.45
1992	20,793,847	469,211	117,748	0.040	13.16
1993	21,446,993	558,648	119,057	0.047	17.75
1994	22,118,706	615,250	120,343	0.051	8.95
1995	22,640,539	665,632	121,579	0.055	7.09
1996	24,842,503	721,724	122,777	0.059	7.37
1997*	27,379,066	739,139	123,946	0.060	1.45
1998	30,174,627	756,975	125,037	0.061	1.52
1999	31,446,054	813,536	126,011	0.065	6.64
2000	33,690,082	900,749	126,885	0.071	9.96
2001	32,824,088	861,930	127,688	0.068	-4.91
2002	27,907,139	705,596	128,428	0.055	-18.61

(SOURCE: U.S. Department of State, Bureau of Consular Affairs, Visa Office.)
* 1997 data of Chinese temporary immigrants is estimated by annulizing data of 1996 and 1998.

Figure 6 shows immigration rates of temporary immigrants whose citizenship was Chinese. Because data on temporary immigrants in 1997 are not available, I annualized the data of years adjacent to 1997 with a geometric method to make up for the absent data. The immigration rate of temporary immigrants keeps rising until 2001 when the 9-11 tragedy occurred in the United States.

Figure 6. Temporary Immigration Rate of Chinese Immigrants, 1983-2002

If we compare Chinese temporary immigrants with total temporary immigrants from all countries, the trend of the former is very similar to the latter (Figure 7). Although China has the biggest population in the world, Chinese temporary immigrants comprise a small percentage of total temporary immigrants to the US. Chinese temporary immigrants are only 2.4 percent of total temporary immigrants to the United States between 1983 and

2002 (Figure 7), while Chinese permanent immigrants are around 4.6 percent of total

permanent immigrants to the US.

Figure 7. Temporary Immigrants from All Countries and China by Country of
        Citizenship, 1983-2002
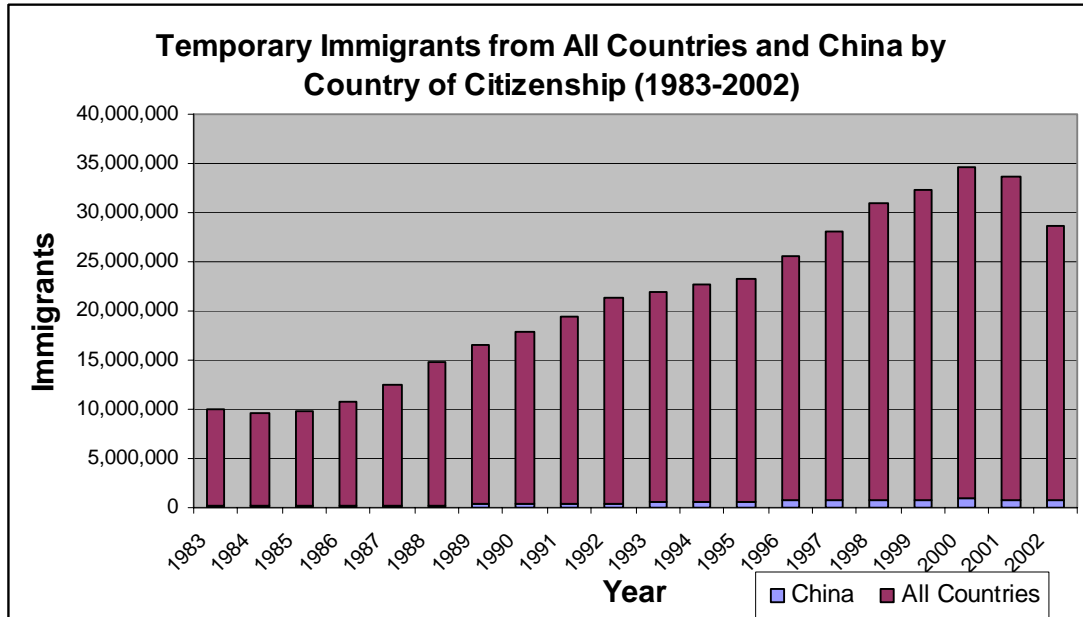
Figure 7 shows that the change rate of Chinese temporary immigrants did not

develop in the same trend as the temporary immigration rate (TIR). The influence of

immigration laws on the change rate of temporary Chinese immigrants is more obvious

than on the temporary immigration rate (see figure 7 and figure 8). We clearly see each

increase or decline in the change rate of Chinese temporary immigration occurring in the

years of significant immigration laws.

Figure 8. Change Rate of Temporary Chinese Immigrants, 1983-2002
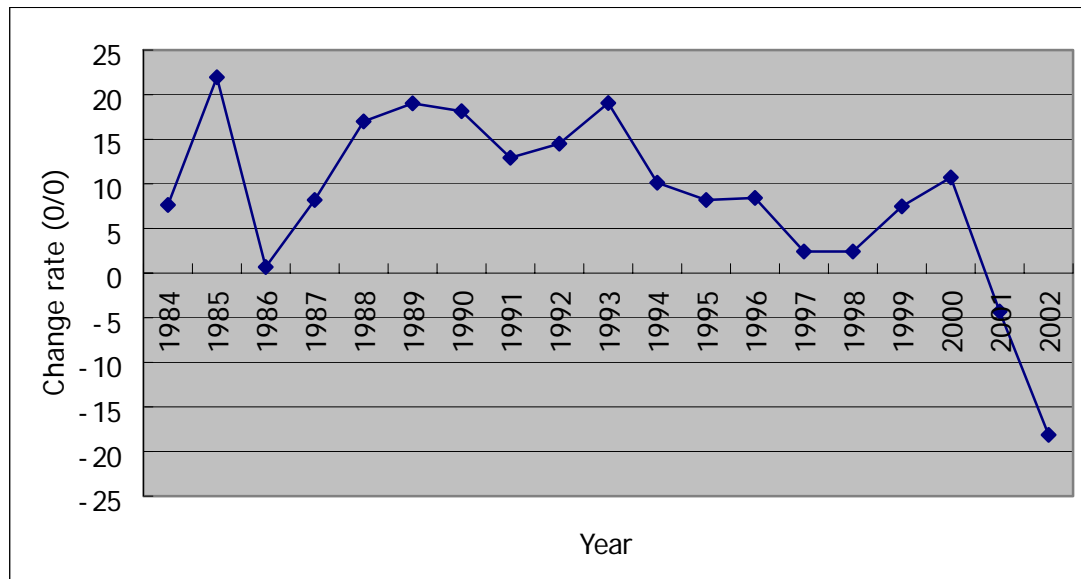
All through the 1980's and the 1990's, TIR of Chinese immigrants went on increasing. There are numerous factors that may explain the increase of Chinese temporary immigration, such as the development of the economy and global markets. In 1986, TIR dropped a little and change rate was negative. This is the only year of TIR decrease between 1983 and 2000. Because IRCA86 was not put into effect until the end of 1986, the change of TIR in this period may not result from IRCA86. In fact, IRCA86 focused on the penalty of employing illegal immigrants and offered one-time amnesty for those already living in the U.S. It had less of an effect on legal temporary immigration. However, IRCA86 increased permanent immigration in the later two to three years after 1986. The extension of permanent immigration networks should promote temporary immigration. In light of the description of PIR of Chinese immigrants, IRCA86 does not show a significant influence on Chinese permanent immigrants.

After the operation of IRCA86, TIR of Chinese immigrants increased gradually.

TIR increased around 14 percent each year from 1988 to 1993. IMMACT90 established the largest ever quotas both for family preference and for labor migrants. Chinese temporary immigrants, of whom labor and relatives of origin immigrants are the main components, also benefited from it. After 1994, the growth of TIR became slower and the change rates were below 10 percent each year. In 1997 and 1998, the change rates of TIR were as low as 1.5 percent but still positive. The change rate increased to 6.64 in 1999 and 9.96 in 2000. The increase of H-1B quotas under WIA98 promoted Chinese temporary immigration in some extent. The drop of Chinese temporary immigration in 2001 and 2002 was identical with the drop of total temporary immigration to the U.S.

Skilled and Unskilled Temporary Immigrant Workers and Students

Because the selective immigration policy of the United States prefers skilled and well-educated immigrants to unskilled immigrants, the policy intention and effects of immigration law as well as other socioeconomic factors may be different for skilled immigrants than for unskilled immigrants. As noted above, I classify Chinese temporary immigrant workers into two categories: the skilled and the unskilled. The definitions of skilled and unskilled immigrants are based on the immigrant classification of the USCIS. H1 immigrants, which include high skilled and high educated H-1B workers and professional nurses (H-1A and H-1C), are defined as high-skilled workers, whereas H2 immigrants, who are permitted to come in without H1 eligibility, are more likely to be unskilled workers.

Chinese H1 and H2 immigrants are only a very small proportion of total H1 and H2 immigrants. Between 1984 and 2002, Chinese H1 immigrants were at the highest

level in 2001 with a population of 17,213 (almost 4.5% of H1 immigrants from all

countries in 2001). From 1991 to 2001, Chinese H1 immigrants continued increasing

until the tragedy of 9-11. From 1984 to 2002, total Chinese H1 immigrants were 100,934

and comprised 3.3% of H1 immigrants from all countries in this period. Between 1984

and 2002, Chinese H2 immigrants went to its peak in 1991 with a population of 1,922

(more than 4.8% of H2 immigrants from all countries); most of the time the population

did not go over one thousand. Compared to the continual increase of Chinese H1

immigrants since 1995, H2 immigrants from China between 1999 and 2002 dropped to

below 100 each year. Compared to the increase of H2 immigrants from all countries since

1999, Chinese immigrants dropped to a level less than one-tenth of that of former years.

Total H2 immigrants from China between 1984 and 2002 are 8,571, which is a little less

than one percent of H2 immigrants from all countries in this period. Table 3 presents data

on immigrants who came into the United States with H1 and H2 visas from China, as

well as from all countries between 1984 and 2002.

Chinese H1 immigrants numbered only 471 in 1984 and reached 15,895 in 2002,

which is almost 33 times greater than that of eighteen years ago. Unlike Chinese H2

immigration, Chinese skilled workers almost continued increasing in those eighteen years.

Especially after 1995, Chinese immigrants entering to the United States with H1 visas

increased consistently until the tragedy on September 11, 2001.

Table 3 shows H1 and H2 immigrants from China and all countries. The

immigrant rates of Chinese immigrants in H1 and H2 categories are calculated by

dividing Chinese immigrants by total immigrants. The change of Chinese immigrants rate

represents the changes of proportion of Chinese immigrants over total immigrants.

Chinese H1 immigrants were less than two thousand before 1991. From 1991, Chinese H1 immigrants increased to 2,863, a twofold increase from 1990; the Chinese immigrants rate increased from 1.45 to 2.43. Since 1991, the Chinese immigrants rate was always over 2.3 percent. In fact, the Chinese immigrants rate continued ascending in the 1990s from 2.43 in 1991 to 3.21 in 1998 to 4.47 in 2001. Compared with H1 immigrants, Chinese H2 immigrants have no obvious increase trend, in terms of either absolute number or rate.

There are two possible facts to explain the different trends of Chinese immigrant labor. First, immigration law in the U.S. continued to be heavily based on a preference system rooted in job skills. IMMACT90 allotted a higher proportion of visas to highly skilled immigrants. Prior to IMMACT90, the visa quotas of unskilled workers were equal to those of highly skilled workers. Since IMMACT90, the visa quotas of highly skilled workers are ten times more than those of unskilled workers. This may explain the obvious increase of H1 immigrants beginning in 1991. WIA98 increased the annual ceiling of H-1B petitions for initial employment from 65,000 to 115,000 in 1999 and 2000 and 107,500 in 2001. This may explain another huge increase of H1 immigrants from 1999 to 2001.

Table 3. Immigrants Coming into the U.S. with H1 and H2 Visas: China and All
Countries, 1984-2002

Year	Workers of Distinguished Merit and Ability (H1)	All Countries (H1)	H1 Rate (%)	Other Temporary Workers (H2)	All Countries (H2)	H2 Rate (%)
1984	471	42,473	1.11	30	23,362	0.13
1985	856	47,322	1.81	182	24,544	0.74
1986	1,084	54,426	1.99	411	28,014	1.47
1987	1,604	65,461	2.45	130	28,882	0.45
1988	1,435	77,931	1.84	559	32,966	1.70
1989	1,765	89,856	1.96	486	49,247	0.99
1990	1,458	100,446	1.45	644	41,266	1.56
1991	2,863	118,038	2.43	1,922	39,972	4.81
1992	2,764	117,340	2.36	828	34,414	2.41
1993	2,778	99,506	2.79	245	31,295	0.78
1994	2,733	112,005	2.44	478	28,872	1.66
1995	3,525	124,086	2.84	611	25,587	2.39
1996	4,384	146,504	2.99	436	23,980	1.82
1997*	6,073	194,001	3.13	577	38,092	1.51
1998	7,761	241,498	3.21	717	52,203	1.37
1999	11,384	302,860	3.76	56	68,187	0.08
2000	14,888	356,170	4.18	96	84,754	0.11
2001	17,213	384,847	4.47	50	100,082	0.05
2002	15,895	371,746	4.28	113	102,615	0.11
Total	100,934	3,046,516		8,571	858,334	

 * Data in 1997 are not available and are estimated with data in 1996 and 1998.

Chinese H1 immigration grows in almost exactly the same way as H1 immigration from all countries. This suggests that immigration laws and other socioeconomic factors have similar effects on Chinese H1 immigration and on total H1 immigration. However, Chinese H2 immigration is completely different from H2 immigration from all countries (see Figures 9 and 10). The extremely small population of Chinese H2 immigrants may be the main reason for the difference of Chinese H2 immigration from total H2 immigration.

The three countries with the largest number of H2 immigrants to the United States are Jamaica, Mexico and Canada. In 1984 they comprised 74.8% of all immigrants who came to the United States with H2 visas, and in 2002, 81.4%. It is hard to demonstrate the effects of immigration policies and other socioeconomic factors on Chinese H2 immigration because they have too small population. I include the data of Chinese H2 immigrants in this thesis in order to describe the dynamics of Chinese unskilled workers to the United States rather than to explain the changes.

Figure 9. Skilled Immigrant Labor to the United States: China and All Countries, 1984-
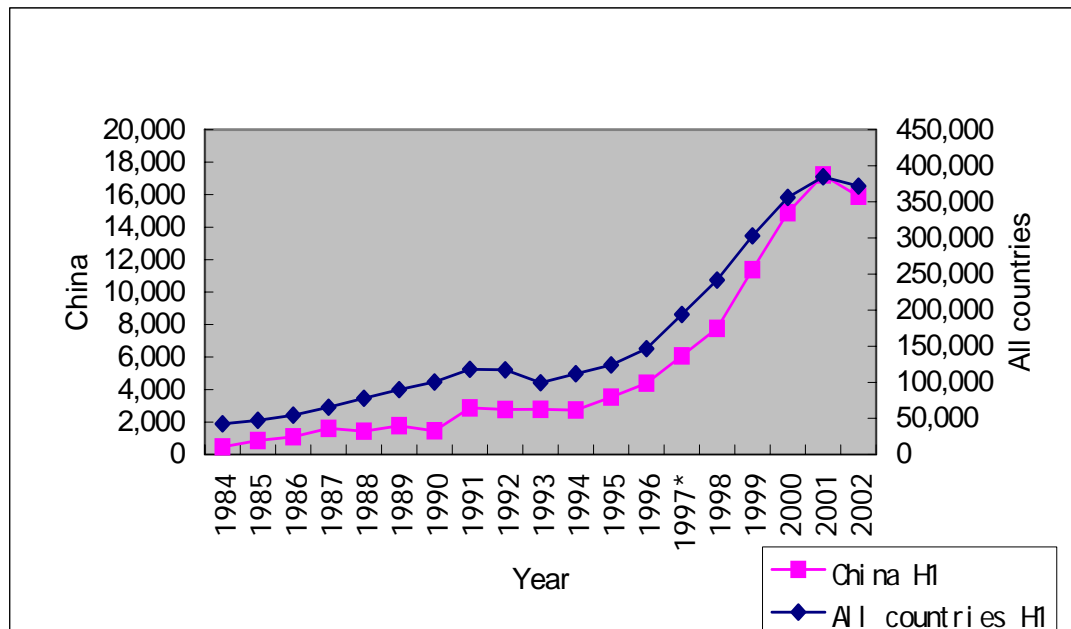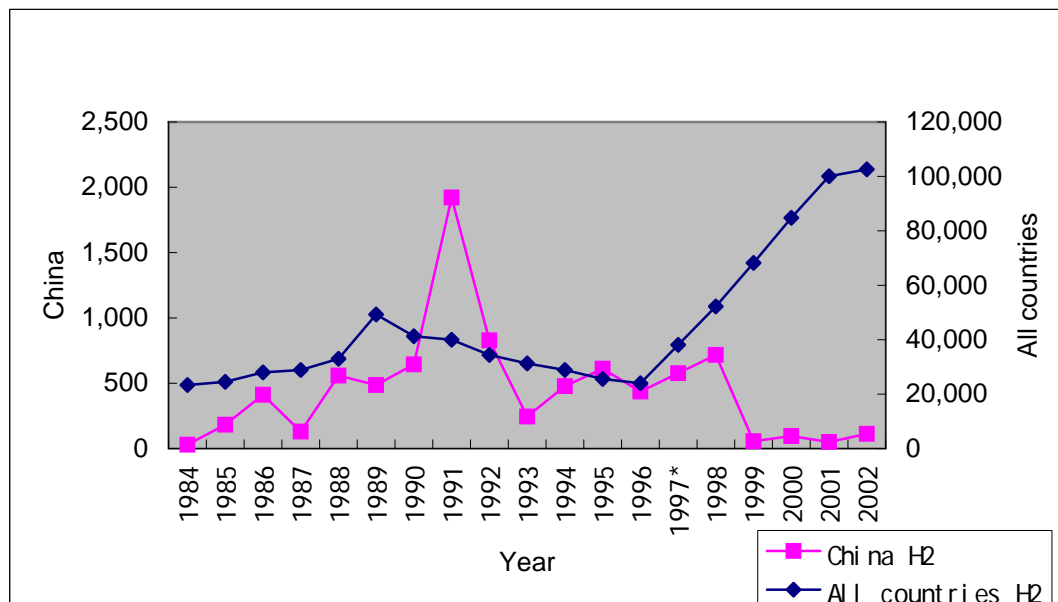   2002

Figure 10. Unskilled Immigrant Labor to the United States: China and All Countries,
1984-2002

Chinese immigrants are classified into numerous categories. Among all categories, students from China are a special immigrant group because the population of Chinese students (F1 visa) has a higher rank than the other immigrant categories. From the 1990s to the 2000s, the F1 (student) and F2 (dependent) immigrants always rank in the top two or three, while the total population of Chinese temporary immigrants ranks in around tenth place. Besides that, Chinese students are the most important resources for permanent Chinese immigrants and other types of temporary Chinese immigrants, such as H1 immigrants. A large part of Chinese H1 immigrants are transferred from other immigrant categories, especially F1 students. This trend has become more substantial in recent years. Figure 11 shows the numbers of Chinese students from 1983 to 2002. The population of Chinese students kept increasing between 1980 and 2001.

Figure 11. Temporary Immigration Students Whose Citizenship is Chinese, 1983-2002
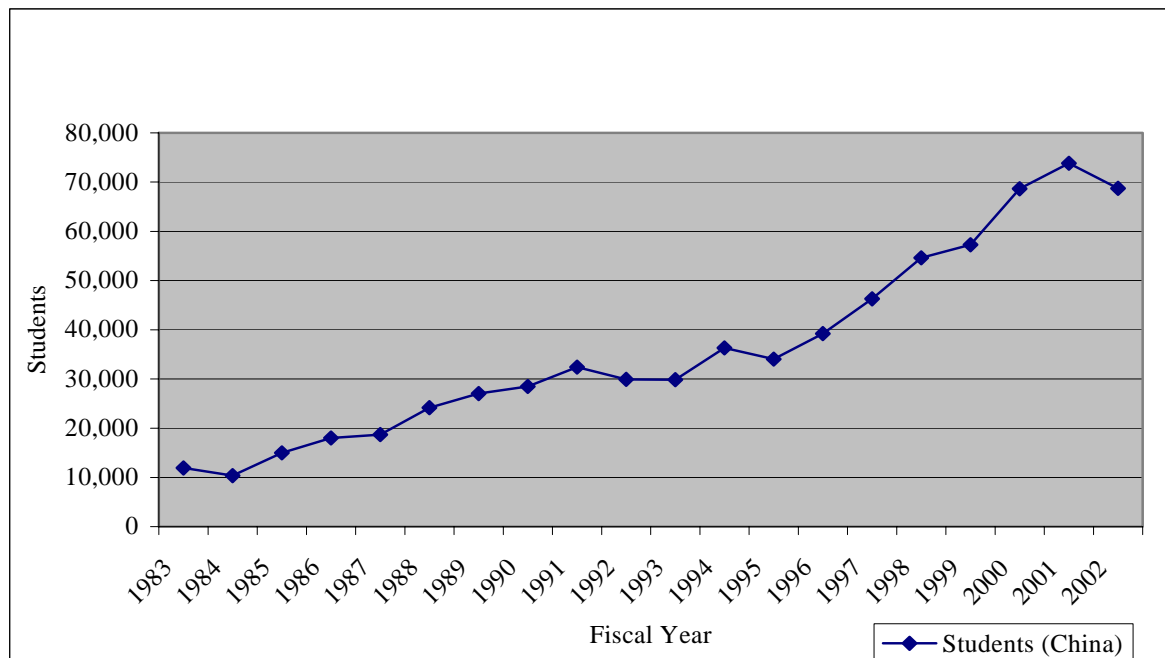
The trend of Chinese students is very similar to the trend of total Chinese temporary immigrants. Therefore, the description of the relationship between Chinese student immigrants and immigration laws will be skipped here.

In this chapter, I described the trends of Chinese immigration between 1980 and 2002 using available data. Chinese immigration is classified into several categories and I described each individually. For each category of immigrants, the relationship between Chinese immigration and American immigration laws was described and explained. In the next chapter, I will analyze the basic statistical relationships between economic contexts and all kinds of Chinese immigration. Then the regression model will be estimated and discussed.

CHAPTER V

RESULTS

This chapter is composed of two parts: one is comprised of basic correlations between Chinese immigration and economic contexts; and the other is comprised of regression results. In the first parts, the variables of economic contexts will be compared with Chinese immigration by categories. The correlations between economic factors and Chinese immigration will show the relationship between Chinese immigration and economic development in both China and the U.S. In the second part, the effects of immigration laws are examined with both bivariate and multivariate regression models.

Correlations between Chinese Immigration and Economic Contexts

Chinese immigrants to the United States between 1980 and 2002 consisted of several different categories immigrating for various reasons. What kinds of contexts of the United States may influence these migration flows? The change of each Chinese immigration category should be associated with conditions of the U.S. economy and migration networks, as well as with immigration laws. From the 1980s to the early 21st century, the United States economy is continually at the top of the world. However, the U.S. also experienced economic recessions during the past twenty years. Unemployment rates and average earnings went up and down between 1980 and 2002.

The US economy from 1980 to 1982 was in a recession period with rising unemployment rates and descending average earnings of employees. The unemployment rate in 1982 and 1983 reached 9.7 and 9.6, which are the highest from1980 to 2002. Although there was a rebound in 1984, average weekly earnings of employees in private

enterprises dropped since1985 and reached the lowest in 1991. Between 1991 and 1996, weekly earnings were at a low level but rose again from 1997 to present. However, unemployment rates did not go the same way as average earnings. After 1983, unemployment rates dropped gradually until 1991. In 1992, unemployment rate increased to 7.5 and began to drop after that. The descending trend existed until 2001. In 2001 and 2002 the unemployment rate has gone up again.

Does economic recession and prosperity have effects on the stream of Chinese immigration? To answer this question, I compare the trends of kinds of economic factors and Chinese immigrants. There is a great difference between the results for permanent immigration and for temporary immigration. The economic factors I choose to describe and compare with immigration rates are the independent variables pertaining to the economy and labor markets.

The Economic Contexts of Chinese Permanent Immigration

Table 4 shows the correlation of economic factors and permanent immigration rate (PIR) of Chinese immigrants. I have asterisked the significant correlations.

Table 4. Correlation between Economic Variables and PIR.

|	PIR	Chinese Average Wage	Chinese Unemploy Rate	Chinese GNP	US Average Wage	US Unemploy Rate	US GNP
PIR	1.0000						
Chinese average wage	0.3966	1.0000					
Chinese unemploy rate	0.2455	0.4002	1.0000				
Chinese GNP	0.4839*	0.9888	0.3902	1.0000			
US average wage	-0.3324	0.0766	0.2952	-0.0027	1.0000		
US unemploy rate	-0.2591	-0.7975	-0.2600	-0.7959	-0.1802	1.0000	
US GNP	0.5912*	0.9469	0.1811	0.9550	-0.1734	-0.7857	1.0000

* $p<0.05$

Source: U.S. Bureau of Labor Statistics, U.S. Citizenship and Immigration Services, &
National Bureau of Statistics of China, 2004.

In the following figures, economic variables are compared over the years with PIR of

Chinese immigrants one by one. The difference between them may imply some

information about the causality of the development of immigration and economy.

a. Permanent immigration rate vs. unemployment rate of China,

Figure 12. Permanent Immigration Rate vs. Chinese Unemployment Rate, 1980-2002
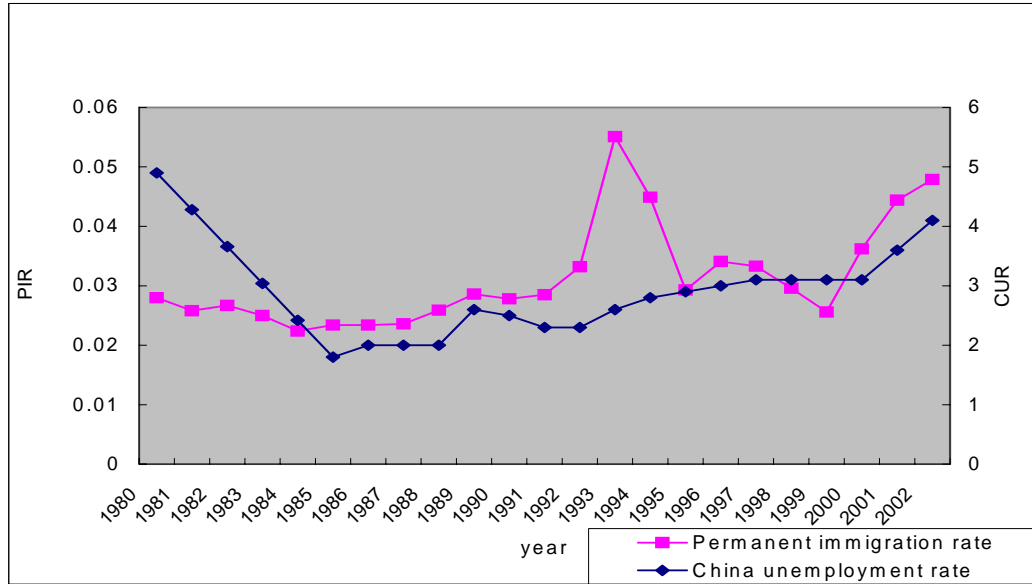
Source: National Bureau of Statistics of China & U.S. Census Bureau.

Data of unemployment rate of China are unavailable in 1981, 1982, 1983 and 1984. The absent data were estimated with a geometric method (Figure 12). We can see from figure 12 that the trend of the Chinese unemployment rate is different from the trend of Chinese permanent immigration. The correlation between permanent immigration rate and Chinese unemployment rate is 0.2455, which is a weak level.

b. Permanent immigration rate vs. unemployment rate of the United States

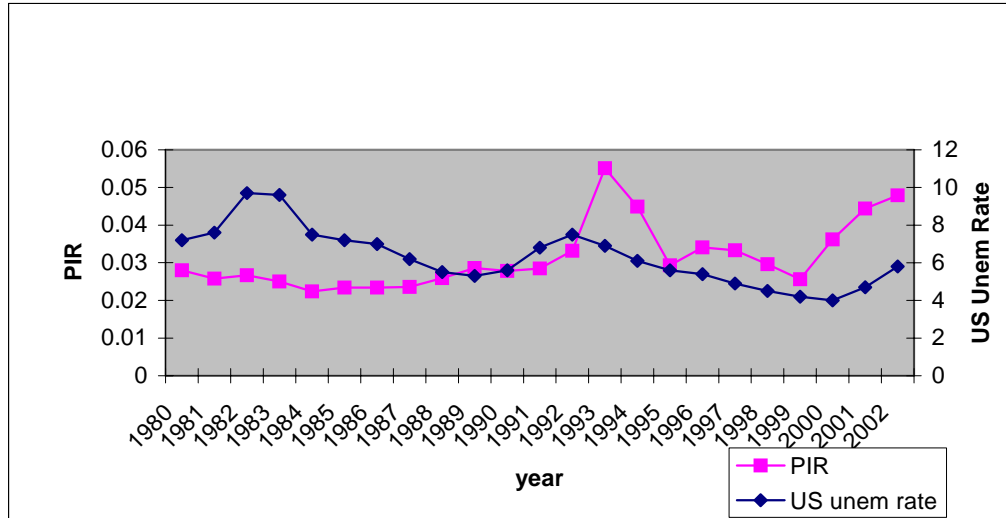Figure 13. Permanent Immigration Rate vs. U.S. Unemployment Rate, 1980-2002

Source: U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics.

Seen from Figure 13, the unemployment rate of the U.S. is not statistically related with PIR of Chinese immigrants, either positively or negatively. The correlation is –0.2591, which represents a weak negative correlation. This finding is interesting because many sociologists believe that changes in the economy of the destination country, especially those pertaining to the labor market, have important effects on international immigration (Bean & Stevens, 2003; Massey, et al. 1993). However, I do not find evidence for this viewpoint in the case of Chinese permanent immigration.

In fact, the number of Chinese immigrants who received permanent resident status in the U.S. does not fluctuate much in the 1980s and the 1990s, except for the dramatic increase in 1993 and 1994. After 2000, Chinese permanent immigrants have higher increase rates than before. Of course, although no significant relationship is shown between unemployment rate of the U.S. and Chinese permanent immigration, it does not

necessarily mean that conditions of U.S. labor market have no effects on immigration from other countries.

c.   Permanent immigration rate vs. average wage of China

Figure 14. Permanent Immigration Rate vs. Chinese Average Wage, 1980-2002
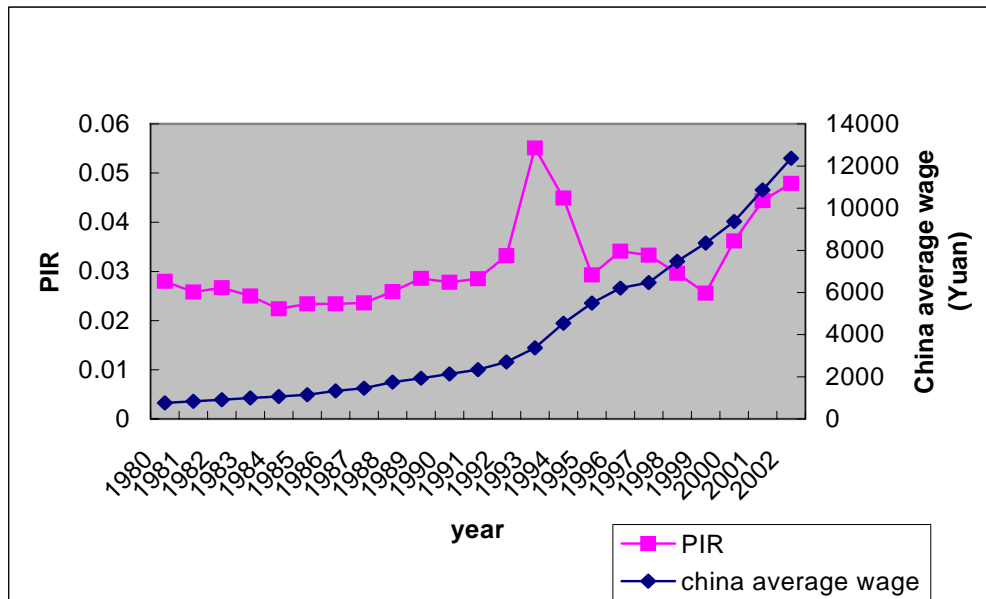
Source: National Bureau of Statistics of China & U.S. Census Bureau.

Like Chinese unemployment rates, data on Chinese average wage are not available between 1981 and 1984 and are estimated using a geometric method. Figure 14 shows that during 1980 to 2002, the Chinese average wage kept increasing, while Chinese permanent immigration fluctuated. The correlation between PIR and Chinese average wage is 0.3966, which is a moderate correlation. As well as the employment rate, income is an important factor of the labor market. However, the limitation of data may bias the results. The data of Chinese average wage, which come from the National Bureau of Statistics of China, does not eliminate the influence of inflation. There were several

inflations in China between 1980 and 2002. This problem may bias the results.

d. Permanent immigration rate vs. average wage of the United States

Figure 15. Permanent Immigration Rate vs. U.S. Average Wage, 1980- 2002
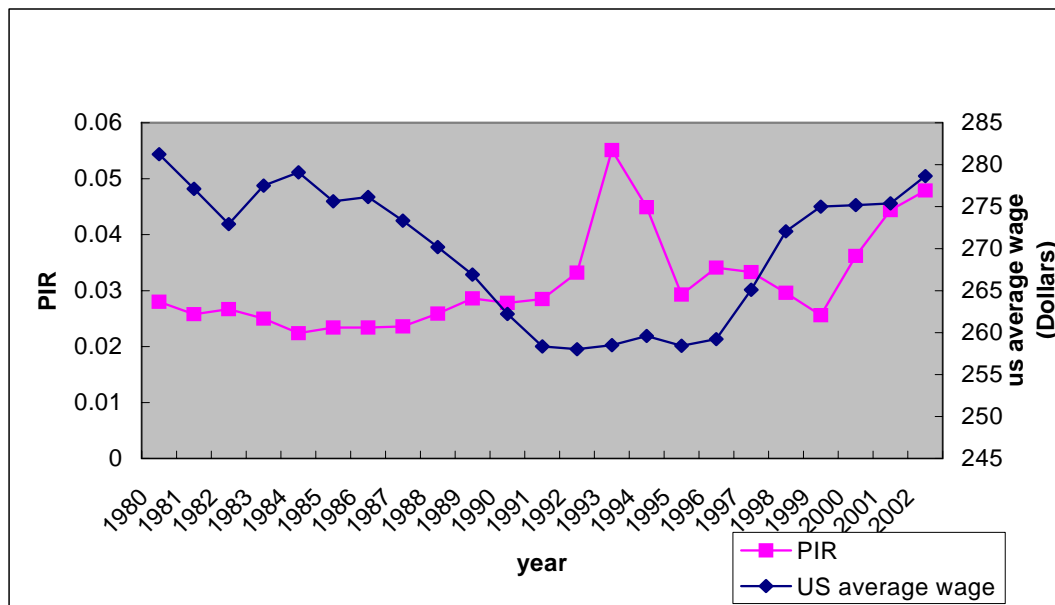
Source: U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics.

From Figure 15, we can see that the trend of PIR of Chinese immigrants is opposite
to the trend of average wage of U.S. The correlation of PIR and average wage of U.S.,
which is –0.3324, does not provide evidence for support this hypothesis. This is
interesting because according to Neoclassical Economics, individuals tend to migrate to
the places where the anticipated net returns are greatest. A possible reason for the low
correlation is the effects of other influential factors. Average wage of U.S. in figure 14 is
a weekly average wage calculated on the basis of the U.S. dollar value in 1982.

e. Permanent immigration rate vs. Chinese GNP

Figure 16. Permanent Immigration Rate vs. Chinese GNP, 1980-2002
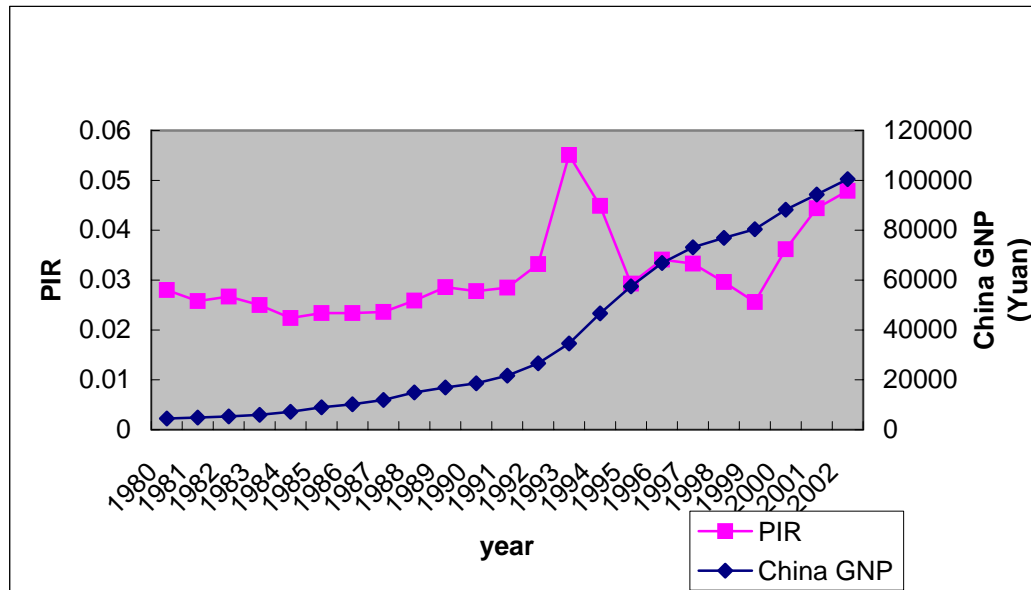
Source: National Bureau of Statistics of China & U.S. Census Bureau.

During 1980 to 2002, Chinese GNP kept increasing whereas PIR of Chinese

immigrants tended more to fluctuate (Figure 16). The correlation between them is 0.4839,

which is a moderate correlation. This correlation is statistically significant.

f. Permanent immigration rate vs. U.S. GNP

Figure 17. Permanent Immigration Rate vs. U.S. GNP, 1980-2002
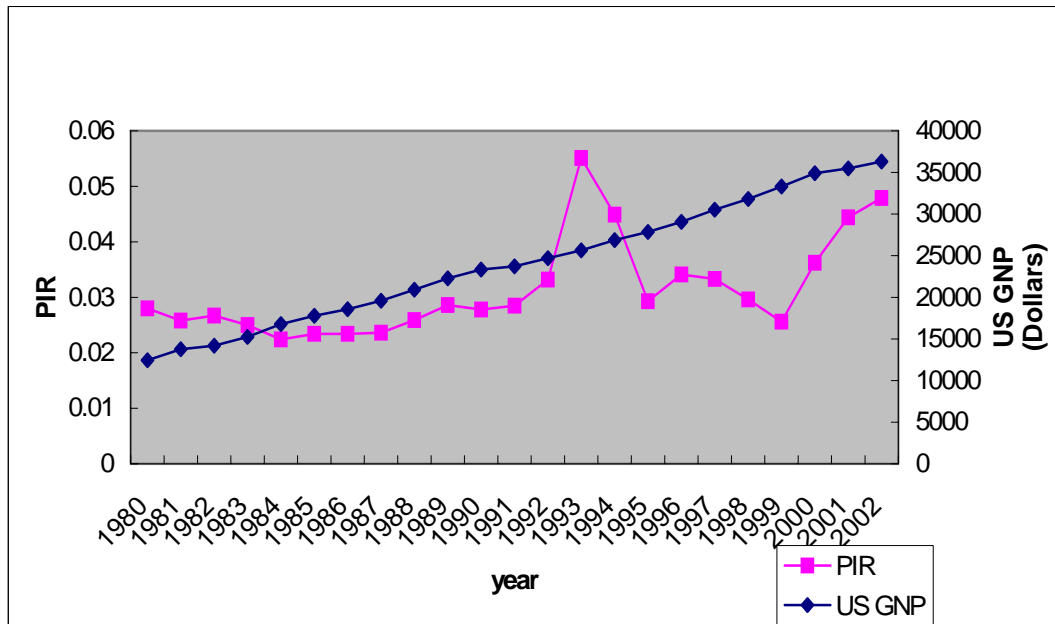

Source: U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics.

The correlation between PIR and GNP of U.S. is 0.5912, which is a moderate correlation. It also is statistically significant. Figure 17 shows that the trend line of PIR is close to the trend line of U.S. GNP.

The graphs of PIR and economic factors provide limited evidence of the relationships between Chinese permanent immigration and the economy of origin and destination. The results are different from my hypotheses. Most immigration theories are based on economic structure and benefits. Many sociologists argued that economic contexts are important to immigration flows (Massey, et al. 1994; Bean & Stevens, 2003). The economic growth of the destination country is likely to influence the reaction of natives to immigration as well as the migration motivation of immigrants (Bean &

Stevens, 2003). Why do those economic and labor market factors show such little influence on Chinese permanent immigration? I will discuss possible reasons in the conclusion chapter.

The Economic Contexts of Chinese Temporary Immigration

One purpose of my thesis is to examine the difference between trends of temporary Chinese immigration and those of permanent Chinese immigration. The following graphs show how the temporary immigration rate (TIR) of Chinese immigration is correlated with factors of economic contexts.

There are two issues to be mentioned here. First, the data of temporary immigrants from Chinese are not available for 1980, 1981 and 1982. I estimated the number of immigrants for these three years by annualizing the available data. Second, total temporary immigrants to the U.S. in 2002 decreased by 15 percent compared with 2001 because U.S. migration policy become more restrictive and rigid in the wake of the 9-11 tragedy. This suddenness may bias the actual relationship of TIR and the independent variables, both economic contexts and immigration laws. Therefore I exclude the case of TIR in 2002 from my analysis.

Table 5 shows the correlation between variables of economic contexts and the temporary immigration rate (TIR):

Table 5. Correlation between Economic Variables and TIR

	TIR	Chinese Average Wage	Chinese Unemploy Rate	Chinese GNP Wage	US Average Rate	US Unemploy	US GNP
TIR	1.0000						
Chinese average wage	0.9448*	1.0000					
Chinese unemploy rate	0.3017	0.4002	1.0000				
China's GNP	0.9696*	0.9888	0.3902	1.0000			
US average Wage	-0.2180	0.0766	0.2952	-0.0027	1.0000		
US unemploy rate	-0.7222*	-0.7975	-0.2600	-0.7959	-0.1802	1.0000	
US GNP	0.9746*	0.9469	0.1811	0.9550	-0.1734	-0.7857	1.0000

Source: U.S. Bureau of Labor Statistics, U.S. Citizenship and Immigration Services, & National Bureau of Statistics of China, 2004.

a. Temporary immigration rate vs. unemployment rate of China

Figure 18. Temporary Immigration Rate vs. Chinese Unemployment Rate, 1980-2002
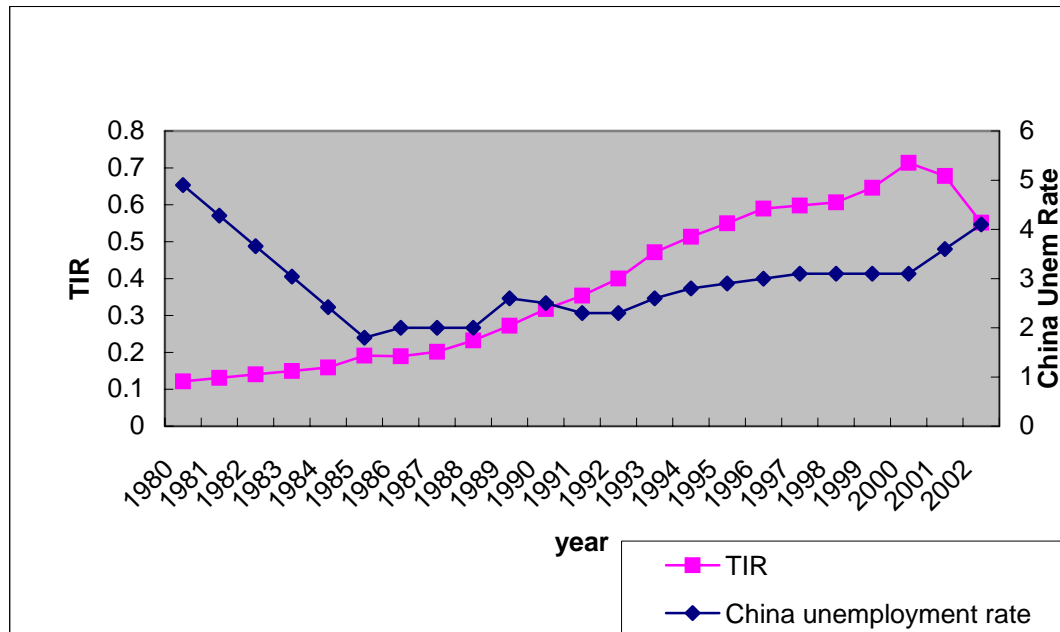
Source: National Bureau of Statistics of China & U.S. Census Bureau.

Figure 18 does not show a strong correlation between TIR and the unemployment rate of China. The correlation is 0.3017, which is a weak correlation. The data on unemployment rate of China may not be accurate. The Chinese government always does not call those who are dismissed by state-owned enterprises unemployed. Instead, they use the word "Xiagang", which means that workers leave their job positions. Those "Xiagang" workers are not included in the unemployed population. However, the "Xiagang" workers have become a serious social problem in China. The correlation between TIR and China unemployment rate is likely to be influenced by the accuracy of the data.

b. Temporary immigration rate vs. U.S. unemployment rate

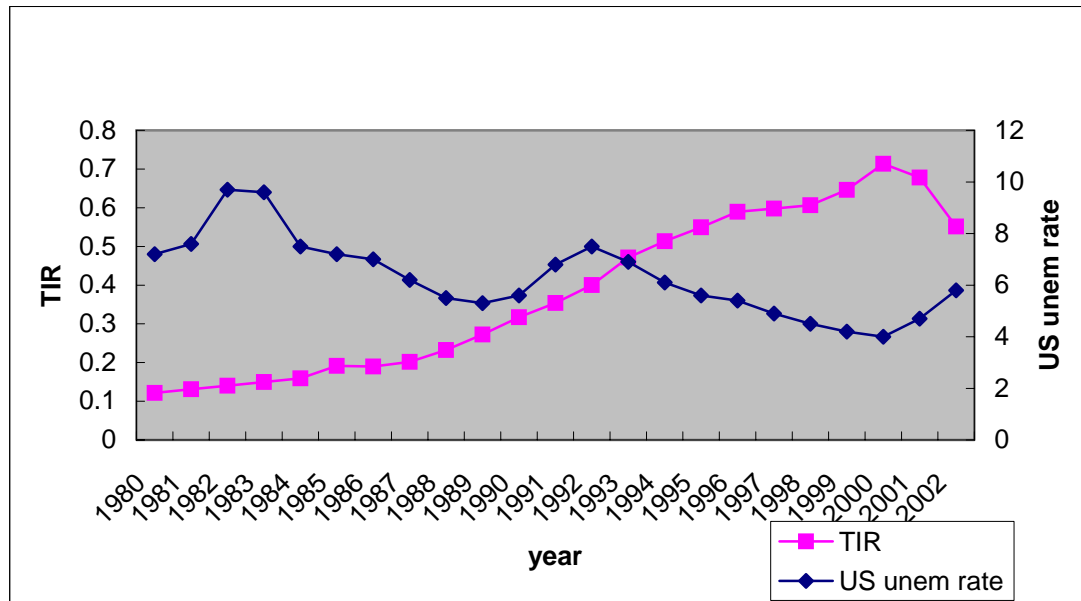Figure 19. Temporary Immigration Rate vs. U.S. Unemployment Rate, 1980-2002

Source: U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics.

The correlation of TIR and unemployment rate of U.S. is –0.72, which is a strong negative correlation. It is statistically significant. As shown in figure 19, the trends of US unemployment rate and temporary immigration rate of Chinese immigrants go in contrary ways. The negative relationship between unemployment rate of U.S. and TIR of Chinese immigrants is in accord with my hypotheses (Massey, et al. 1994; Bean & Stevens, 2003).

c. Temporary immigration rate vs. Chinese average wage

Figure 20. Temporary Immigration Rate vs. Chinese Average Wage, 1980-2002
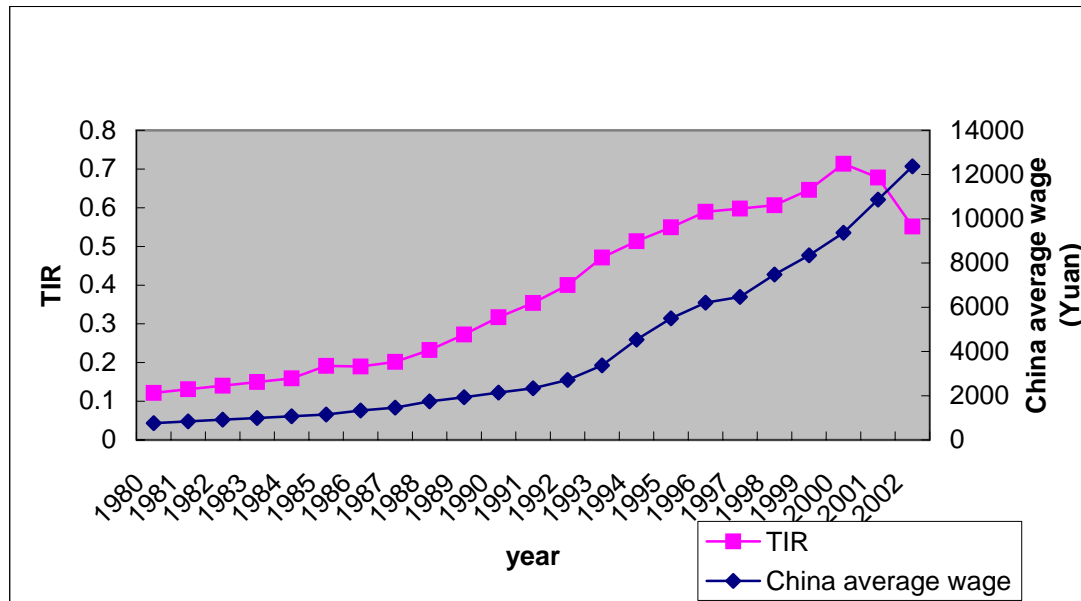
Source: National Bureau of Statistics of China & U.S. Census Bureau.

The coincidence of the trends of TIR and average wage in China shows a positive relationship between TIR of Chinese immigrants and Chinese average wage, except for the decrease of TIR in 2001 and 2002 (Figure 20). The correlation between them is 0.94, which is a very strong correlation. The hypothesis is that Chinese average wages are positively related with temporary immigration from China. However, as I mentioned above, the data on Chinese average wages do not account for inflation. My conclusion may be biased by this limitation.

d. Temporary immigration rate vs. U.S. average wage

Figure 21. Temporary Immigration Rate vs. U.S. Average Wage, 1980-2002
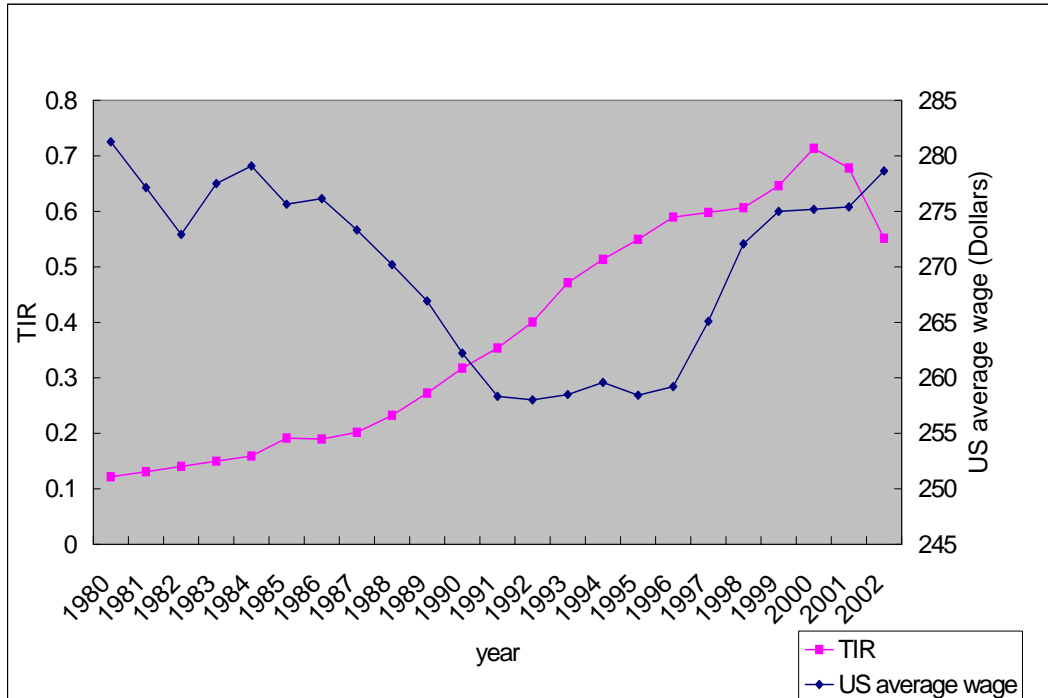
Source: U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics.

The correlation index between TIR and average wage of U.S. is –0.22, only a moderate negative correlation (Figure 21). It is interesting because supposedly, the higher the growth of wages, the less likely are the natives against international immigration (Timmer & Willamson, 1998). However, this hypothesis is not supported in this case.

e. Temporary immigration rate vs. Chinese GNP

Figure 22. Temporary Immigration Rate vs. Chinese GNP, 1980-2002
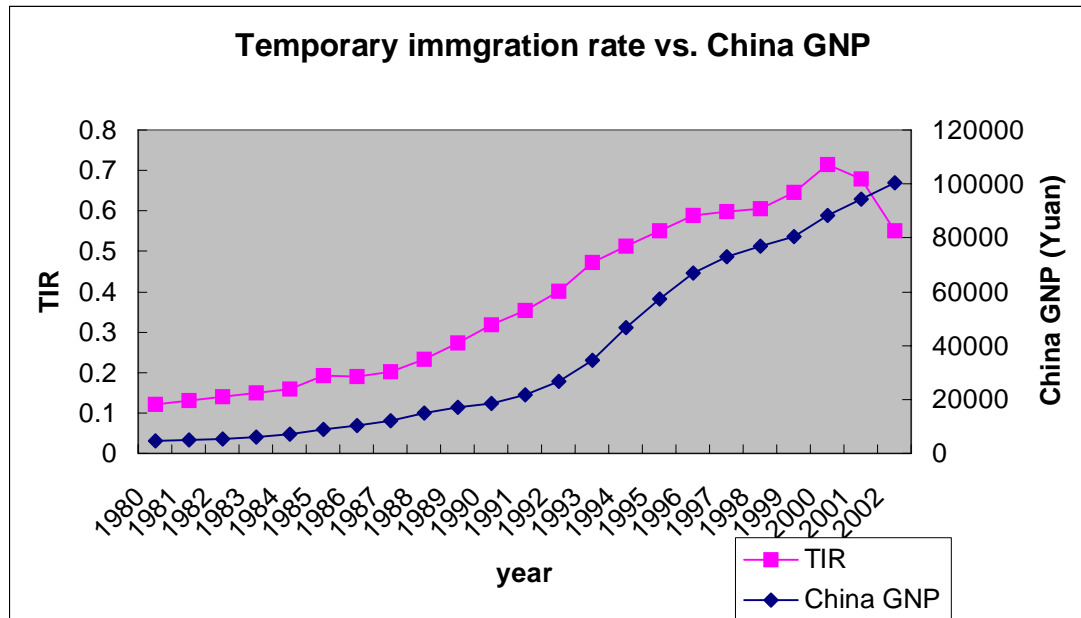
Source: National Bureau of Statistics of China & U.S. Census Bureau.

The growth of GNP in China matches the trend of TIR of Chinese temporary immigrants very well except for the decrease of TIR in 2001 and 2002 (Figure 22). The correlation is 0.97, which is a strong correlation. Unlike other countries where economic development tends to restrain emigration, Chinese international migration, especially those who migrated from China to the United States and Western Europe, is to some extent promoted by the economic growth of the origin country. There are three reasons for this promotion: First, economic development make migration cost affordable to more Chinese. Second, the development difference between the United States and China is still large enough to attract Chinese migrants even with the development of the Chinese

economy. Third, economic communication and international business provide more

chances for temporary immigration between the two countries. TIR of Chinese

immigrants is thus expected to be positively related with the growth of Chinese GNP.

g. *Temporary immigration rate vs. U.S. GNP*

Figure 23. Temporary Immigration Rate vs. U.S. GNP, 1980-2002
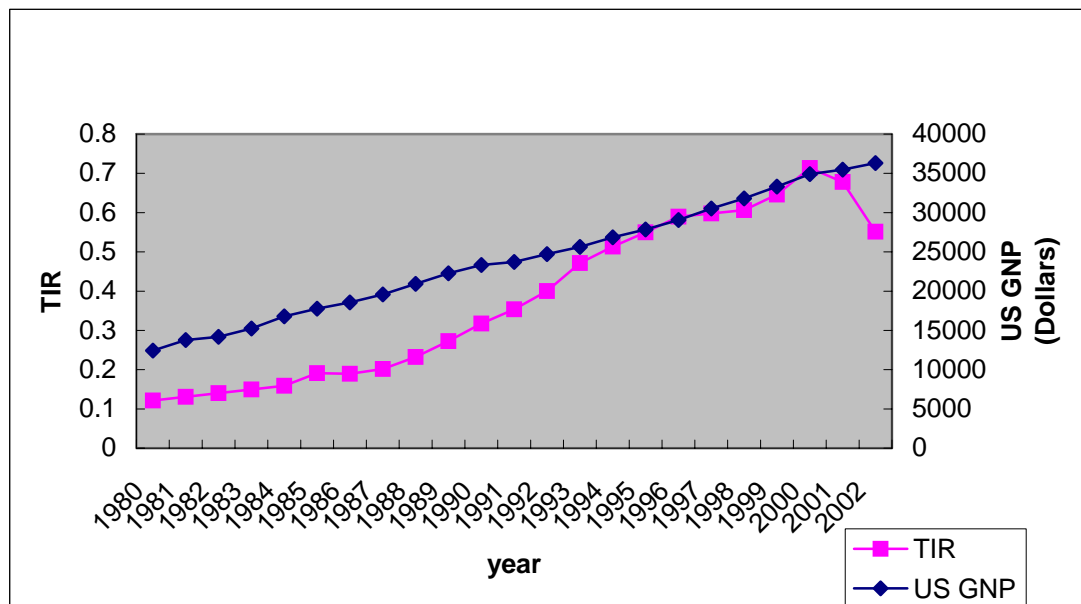

Source: U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics.

The correlation index between TIR and US GNP is 0.97,which is a very strong

correlation (Figure 23).

The Economic Contexts of Chinese H1, H2, and Student Immigration

Another purpose of this study is to examine the trends of immigration workers,

which are distinguished treated by American immigration laws and more greatly affected

by the changes of economic contexts. Immigration policy to some extent showed the will

of voters. The larger the weight of labor interests, the more restrictive the immigration

policy. I noted above there are two types of immigrants: skilled and unskilled. According

to Foreman-Peck (1992), skilled immigrant labor is likely to be a complement to

domestic labor, whereas unskilled immigrant labor is likely to be a substitute. A lot of

research focuses on the impact of immigration on wages and unemployment in

destination countries (Foreman-Peck, 1992; Hatton & Williamson, 1998; Timmer &

Williamson, 1998). In my thesis, skilled immigrant rate is a dependent variable to see the

effects of U.S. immigration laws and other socioeconomic factors. I used immigrants

with H1 visas to represent skilled immigration labor and immigrants with H2 visa for the

unskilled. The correlations between economic factors and H1 and H2 are shown in table 6.

Table 6. Correlations between Economic Variables and Immigrants with H1 and H2 Visas, and Immigrant Students

	H1	H2	Students
China's Unemployment Rate	0.8265*	-0.2733	0.8725*
China's average wage	0.9447*	-0.3818	0.9559*
China's GNP	0.9205*	-0.3300	0.9281*
U.S. Unemployment Rate	-0.6570*	0.4464	-0.8752*
U.S. Average Wage	0.2773	-0.6655*	0.4029
U.S. GNP	0.9071*	-0.2756	0.9121*

Source: U.S. Department of State, Bureau of Consular Affairs, Visa Office.

From table 6, we can see that H1 Chinese immigrants are strongly correlated with most variables except average wage of the U.S., whereas H2 Chinese immigrants do not show much of an association.

As I mentioned above, international students from China (immigrants to the U.S. with F1 and M1 visas) are a special group of Chinese immigrants. I compute the correlation between Chinese students and the economic factors and obtain a very similar result as with skilled immigration labor from China (see Table 6). In fact, most Chinese H1 workers are transferred from student status (F1).

Results of Regression Test

Permanent Immigration Rate (PIR)

The Regression results are shown in table 7. In the regression models, all the dummy independent variables reflecting the immigration laws have statistically significant effects on PIR of Chinese immigrants. The all coefficients are positive, which mean that all immigration laws included in my thesis promote the development of Chinese permanent immigration. However, are these significant relationships spurious because other influential factors are not included? I will add other independent variable as well as immigration laws into multivariate regression models to see whether the effects of immigration laws are still significant.

Table 7. Robust Regression Results of the U.S. Immigration Laws on Permanent
Immigration Rate of Chinese Immigrants

Permanent immigration rate	Slope	Sd.
IMMACT90	.0071*	.0018
Cons	.0255*	.0013
WRA96 & IRIRA96	.0083*	.0030
Cons	.0275*	.0015
WIA98	.0113*	.0034
Cons	.0281*	.0014

* $p < 0.05$

Among the economic and labor market variables, the correlation of U.S. GNP and

PIR is statistically significant and the highest (0.5912). Because there are only 23 cases

from 1980 to 2002 (including missing cases), only two independent variables are used in

a Robust regression model. To test for the effects of each immigration law, I use US GNP

and one of the immigration laws as independent variables to construct a regression model.

Table 8 shows the Robust regression results of PIR:

Table 8. Robust Regression Results of the U.S. Immigration Laws and US GNP on Permanent Immigration Rate of Chinese Immigrants

Permanent Immigration Rate	Slope	Sd.
IMMACT90	.00359	.00403
US GNP	3.94e-07	.78e-07
Cons	.01850*	.00515
WRA96 & IRIRA96	.00032	.00406
US GNP	5.98e-07*	2.46e-07
Cons	.01520*	.00527
WIA98	.00548	.00360
US GNP	5.09e-07*	1.89e-07
Cons	.01702*	.00426

* $p<0.05$

US GNP is significant at 95 percent confident level in the regression models with WRA96 & IRIRA96 and with WIA98. Although the coefficients of US GNP are significant and positive, their low numbers mean that US GNP has limited effect on Chinese permanent immigration. For example, for every one Yuan increase of Chinese average wage, the PIR of Chinese immigrants increases 5.09e-07 thousandth without any change of IRCA96.

Different from the results in bivariate regression models, none of the coefficients of IMMACT90, WRA96 & IRIRA96 and WIA98 is statistically significant.

Temporary Immigration Rate (TIR)

The regression model to test TIR of Chinese immigrants is an OLS model. Because of the influence of the 9-11 tragedy and the resulting decrease of temporary immigrants, I

exclude the TIR of 2002 from the regression model. First, the effects of immigration laws

on TIR are examined one by one with bivariate regression models (Table 9).

Table 9. OLS Bivariate Regression Results of the U.S. Immigration Laws on Temporary
Immigration Rate of Chinese Immigrants

Temporary Immigration Rate	Adj R-squared	Slope	Sd.
	0.8064		
IMMACT90		.3649*	.0388
Cons		.1914*	.0274
	0.5200		
WRA96 & IRIRA96		.3552*	.0729
Cons		.29322*	.0347
	0.3286		
WIA98		.3535*	.1053
Cons		.3257*	.0389

* $p < 0.05$

All coefficients of immigration laws are statistical significant in the bivariate

regression models. This may be because the TIR of Chinese immigrants went on

increasing between 1980 and 2001. To examine the reliability of the effects of

immigration laws, I add other independent variable in the regression models.

The U.S. GNP has the highest correlation (0.97) with TIR of Chinese immigrants.

So I use it to build the multivariate regression models with immigration laws. Like the

regression models of PIR, two independent variables, U.S. GNP and one immigration law,

are used in one regression model. The results of the multivariate regression models are

shown in table 10.

Table 10. OLS Regression Results of the U.S. Immigration Laws and US GNP on
        Temporary Immigration Rate of Chinese Immigrants

Temporary Immigration Rate	Adj R-squared	Slope	Sd.
	0.9759		
IMMACT90		.1047*	.0258
US GNP		2.22e-4*	1.86e-06
Cons		-.2015*	.0344
	0.9550		
WRA96 & IRIRA96		-.0025	.0340
US GNP		2.87e-4*	2.06e-06
Cons		-.3024*	.0440
	0.9556		
WIA98		-.0170	.0350
US GNP		2.91e-4*	1.73e-06
Cons		-.3105*	.0391

* $p < 0.05$

Different from the results of bivariate regression model, the coefficients of

WRA96 & IRIRA96, and WIA98 once again are not statistically significant. Only the

slope of IMMACT90 is significant with US GNP in the regression model. After

IMMACT90 went into effect, the TIR of Chinese immigrants increased .1047 thousandth

compared with the years before IMMACT90 went into effect with US GNP kept constant.

The coefficients of US GNP in all regression models are significant and positive, but are

small.

Skilled Immigrant Rate (SIR)

Skilled immigrant labor is one of the preferences of American immigration policies.

SIR is calculated by comparing Chinese H1 immigrants with total H1 immigrants. The

change of SIR indicates the change of the proportion of Chinese skilled laborers among

all skilled immigrant laborers. The proportion of Chinese skilled immigrant laborers to total skilled immigrant laborers is higher than the proportion of Chinese unskilled immigrant laborers in total unskilled immigrant laborers. The American immigration laws (IMMACT90 and WIA98) included discriminating regulations to encourage skilled immigrant laborers and discourage unskilled immigrant laborers.

Table 11 shows the regression results of immigration laws and skilled Chinese immigrant laborers, with US GNP has been added as the second independent variable. The coefficient of WIA98 on SIR of Chinese immigrants is statistically significant. It means that after WIA98 went into effect, the proportion of Chinese skilled immigrant laborers in total skilled immigrant laborers increased 0.60 percent, with US GNP kept constant.

Table 11. OLS Regression Results of the U.S. Immigration Laws and U.S. GNP on Skilled Immigrant Rate of Chinese Immigrants

SIR	Adj R-squared	Slope	Sd.
	0.8547		
IMMACT90		-.0396	.2931
US GNP		.00015*	.00002
Cons		-1.1019*	.4840
	0.8620		
WRA96 & IRIRA96		.2947	.3178
US GNP		.00012*	.00002
Cons		-.6578	.5657
	0.8894		
WIA98		.6000*	.2675
US GNP		.00011*	.00002
Cons		-.3988	.4389

* $p < 0.05$

In this chapter, I described the correlations between the economic variables and Chinese immigration. Next, I tested and examined the effects of immigration laws on various categories of Chinese immigration using regression models. In the next and last chapter, I will further discuss the regression results and summarize the description and analyses of the previous chapters.

CHAPTER VI

CONCLUSIONS AND IMPLICATIONS

A major contribution of the research conducted in this thesis has been to advance our understanding of patterns of Chinese immigration to the U.S. from the beginning of the 1980s to the beginning of the 2000s. The effects of immigration laws of the U.S. on Chinese immigration have been described and examined in the previous chapter. There are some findings that are important to highlight as I conclude this thesis. It will also be necessary to discuss the limitations of this research and present some considerations for future study.

In chapter four, I described the relationship between Chinese immigration and immigration laws. In chapter five, hypotheses were tested with regression models. Because there are at most only 23 cases between 1980 and 2002, exact conclusions for the hypotheses are difficult to obtain. In this thesis, I only conducted elementary description and estimation for the trends of various Chinese immigrations and their relationships with immigration laws of the US and the economy of both China and the U.S.

Summary of Findings

Although the PIR and TIR of Chinese immigrants increased to some extent after 1986, the effects of IRCA86 on Chinese permanent immigration are not as great as on total permanent immigration (Figure 4). IRCA86 resulted in the climax of total permanent immigration between 1980 and 2002. Not like total permanent immigration, Chinese immigrants did not take much advantage of this amnesty.

At the end of 1992, CSPA92 offered another chance for Chinese immigrants to get permanent resident status. This immigration law (CSPA92) resulted in the climax of Chinese permanent immigration between 1980 and 2002. Ironically, the primary beneficiaries of this Chinese Student Protection Act were illegal Chinese immigrants from coastal provinces instead of Chinese students (http://www.brainyencyclopedia.com, 2004). Because CSPA92 only focus on those Chinese immigrants who had already been in the U.S. when CSPA92 was constituted, it had little influence on Chinese temporary immigration.

IMMACT90 has significant effects on Chinese temporary immigration. The coefficient of IMMACT90 on TIR of Chinese immigrants is significant and positive. The TIR of Chinese immigrants increased 0.105 thousandth after IMMACT90 went into effect with US GNP kept constant. When tested with US GNP together, its effect on PIR is not significant. It shows that the effects of IMMACT90 on Chinese permanent immigration may be accounted for by the influence of US GNP. IMMACT90 itself has no significant effect on the PIR of Chinese immigrants.

IMMACT90 did not benefit Chinese skilled workers any more than total skilled workers from all countries. The level of Chinese H1 immigrants among total H1 immigrants did not change significantly when IMMACT90 went into effect. This means that the effects of IMMACT90 on Chinese H1 immigrants are the same on total H1 immigrants with US GNP kept constant. Compared with 1,458 in 1990, the population of Chinese H1 immigrants double to 2,863 in 1991, and stayed above 2,700 in the following years until the next great increase in 1995.

As I expected, WRA96 and IRIRA96 do not show significant effects on both PIR

and TIR of Chinese immigrants. Actually, the PIR of Chinese immigrants dropped from 0.0332 in 1996 to 0.0256 in 1999. And the change rate of Chinese temporary immigrants dropped from 7.37 in 1996 to 1.45 in 1997 and to 1.52 in 1998. However, the coefficients are not significant. The coefficient of WRA96 and IRIRA96 on Chinese H1 immigrants is positive and significant. This means that Chinese skilled workers continue increasing under the new law.

Regression models shows that the effects of WIA98 on PIR and TIR are not significant in models also including US GNP. The effects of WIA98 on Chinese H1 skilled workers are greater than on total immigrant skilled workers. WIA98 significantly increased the proportion of Chinese H1 immigrants of total H1 immigrants. And WIA98 also promoted the absolute population of Chinese H1 immigrants.

The economic contexts show multifarious effects on different types of Chinese immigration. China GNP and US GNP have statistically significant effects on PIR of Chinese immigrants. However, their coefficients are somewhat low. The coefficients of the other economic and labor market variables, average wage and unemployment rate of China and the U.S. are not significant on PIR. Chinese average wage, US unemployment rate and GNP of China and the US are significantly correlated with TIR. However, the coefficients are all low. The trends of these economic factors are close to the trends of TIR of Chinese immigrants. The effects of Chinese unemployment rate and US average wage on TIR are not significant.

The regression results of economic factors on Chinese skilled workers are very similar to the results on TIR. This is understandable because Chinese skilled workers are an important part of Chinese temporary immigrants and show a very similar trend as the

latter.

Conclusions and Implications

In my findings, immigration laws of the U.S. play an important role in controlling

Chinese immigration. US immigration laws established discriminative measures about

different kinds of immigration. Their effects on particular types of immigration are

different. Although IRCA86 was not analyzed in regression model, its effects on Chinese

immigration was described and compared with immigration from all countries. IRCA86

has no great influence on both permanent and temporary Chinese immigration.

IMMACT 90 shows a significant effect in increasing the TIR of Chinese immigrants.

IMMACT90 increases the visa quota of employment-based immigration, especially the

visa quota of skilled workers. IMMACT 90 originally set an annual limitation of 65,000

H-1B workers permitted each fiscal year. IMMACT90 established the largest ever visa

quotas for family preferences and for labor migrants. IMMACT90 reflected the needs for

skilled labor in developing an American high technique economy, and a more open

migration policy in adapting to new global social relations after the Cold-War era.

Chinese temporary immigration is just one of the beneficiaries of all temporary

immigrants. However, the effects of IMMACT90 on Chinese permanent immigrants are

not as significant as on temporary immigrants. The effects of IMMACT90 on PIR might

be concealed by the effects of CSPA92.

CSPA92 has a significant effect on Chinese permanent immigration. It resulted in

the climax of PIR between 1980 and 2002. Because permanent resident statuses granted

to Chinese immigrants under CSPA92 are subtracted from the immigration spaces

available in later years, the PIR of Chinese immigration dropped to the level before CSPA92 after 1995.

WIR96 & IRIRA96 has no significant effects on both Chinese permanent and temporary immigrants. Chinese immigrants are well known for their industry and frugality. Their independence and industry are likely rooted in Chinese traditions. In the major part of China's history, peasantry, who met all their needs by self-working, is dominant in society. The state has a loose control on individuals compared with the situations in Western countries. The concepts of public welfare and insurance are absent or incomplete all through Chinese history. Even in contemporary China, public welfare and insurance systems fall behind the times. Most Chinese immigrants, who are influenced by Chinese traditional culture, work hard and make a frugal life even in the destination country with good welfare system. This may explain why WRA96 &IRIRA96 has less of a restrictive effect on Chinese immigrants than on total immigrants from all countries.

WRA98 is the immigration law that focuses on immigrant labor. On the one hand, WIA98 established a more rigid punishment on employers hiring foreign laborers. And on the other hand, under WIA98, the annual ceiling of H-1B petitions valid for initial employment was increased from 65,000 to 115,000 in 1999 and 2000 and 107,500 in 2001 (CIS, 2004). Under WRA98, the level of Chinese H1 immigrants increased their proportion among total H1 immigrants, which means that WRA98 has greater effect promoting Chinese skilled workers than total skilled immigrant workers. For example, in 2000 China ranked among the top 2 of H-1B beneficiaries from all countries, only behind India. The upsurge of a high technique industry in the U.S. greatly stimulates the

immigration from the third world, especially India and China. The high-speed development of high technique industry created a great deal of job opportunities as well as profits. The former main sources of skilled immigrant labor, Western European and Japan, are not able to meet the demands. American employers turn to the third world countries to look for more highly skilled workers. In the report of Temporary Admissions Fiscal Year 2000, it is said "Beneficiaries born in India dominate the H-1B program, representing nearly half of the total. A distant second beneficiaries from People's Republic of China, accounting for 9 percent….of the top twenty countries, the People's Republic of China and Taiwan had the highest percentage of beneficiaries with at least a master degree (79 and 73, respectively)" (USCIS, 2001)

The changes of economy and labor market in China and the U.S. show a complex set of relationships with different kinds of Chinese immigration. Generally, their effects on Chinese immigration are not as great as I expected. The development of the economy and society in the U.S. is much more advanced in China. Although China is experiencing high-speed economic development since the 1980s, it still greatly lags behind the United States. So the fluctuation of economic factors, including average wage, unemployment rate and GNP, do not greatly influence the disparity between the two countries. No matter how much the American average wage changes, the wages migrants earned in dollars are still generous and admirable in China. Migration to the U.S. is still regarded as a "Golden Road" for most Chinese. Another effect of economic contexts is that the development of the Chinese economy and global markets accelerates international communication and migration. Therefore, economic and social developments of China affect Chinese immigration rate positively rather than negatively.

There is also another reason partly accounting for the changes of Chinese immigration. In some situations, individuals make migration decisions based on outdated and one-sided migration information. These problems also exist in Chinese migrations. The information system in China, including statistical information, is often dated. Furthermore, the rigid administrative control on the public media restricts public accessibility to real information, and thus injures the trust of common people to official news. In China, person-to-person information propagation is very popular and is regarded as more reliable than official sources. Many Chinese evaluate their future migration benefits based on hearsay, which is likely to be partial, outdated and contorted. On the other hand, in China, migration to developed countries is looked on as admirable and honorable for both the individual and his/her family. Former migrants are reluctant to tell the truth if they suffered from their migration experience because they do not want to lose others' respect. There is a Chinese saying among migrants: "Report good things and hide bad news". Therefore, most migration information spreading among the Chinese tends to be one-sided good news.

While migration leads to high income to them, migrants lose their networks and vested interests in the origin country. The migration decision can only be made when the expected migration benefits is big enough to compensate for the losses and migration costs. With the development of the economy and society in China, many migrant Chinese feel disappointed when faced with the truths of migration. The lack of information transparency may explain why the increase of Chinese permanent immigrants is not as fast as that of Chinese temporary immigrants. Chinese temporary immigrants in 2001 increased 4.6 times that in 1983, while Chinese permanent immigrants increased only 1.2

times in the same period.

Of course, besides the influence of economic contexts and information propagation, the slower increase of permanent immigrants and the faster increase of temporary immigrants, especially skilled workers, are also controlled by the regulations of U.S. immigration laws.

Limitations

The research involved in this thesis has some data missing so I used a geometric method to estimate and make up for the gaps. However, this may have biased the regression results and influence my conclusion. Another limitation of this study is that I focus only on Chinese immigrations between 1980 and 2002. Because there are at most 23 cases in my study, I can have only two independent variables in any regression model. There are two reasons why I focus on this time period. First, Chinese immigrations to the U.S. is concentrated in these decades. Second, the yearly immigration data, which I obtained from the U.S. Citizenship and Immigration Services, are only available for this time period. However, the dummy variables of immigration laws only distinguish the time period before and after the law went into effect, while many factors might influence migration behaviors at any time. Two independent variables are not enough with which to make conclusions about the effects of immigration laws. So in this thesis, I also described and suggested the causality and dynamics of Chinese immigrations.

Another limitation is that individual data of Chinese immigrants are not available. International immigration is not only about macro level issues but also about those at the micro level. Individual information, both qualitative and quantitative, can help to

understand the mechanisms of individual's migration behaviors. In future study, I hope to use individual data to compare the difference between old and new Chinese immigrants. The migration motivation, education level, social status and income of individual immigrants should be included in description and analyses.

There are also other variables that could have been beneficial in my research. For example, network theory is an important theory of migration. I had planned to use the size of the population who claim to be Chinese and live in the United States to represent network of Chinese immigration. However, annual data of Chinese population in the U.S. are not available.

It will be very valuable if a survey of Chinese immigrants, especially those "new immigrants", can be conducted in the United States. Chinese immigrants are playing a more and more important role in American economy and society. Although a relatively small absolute population, the proportion of Chinese immigrants among total immigrants keeps increasing. Both U.S. citizens and immigrants are facing up to more serious problems about the culture and language conflicts with the increase of Chinese immigrants. Chinese H-1B workers, F-1 students and their dependents are becoming one of the mainstreams of total H-1B and F-1 immigrants and of Chinese "new immigrants". In the era of high technology, those highly educated and skilled laborers will play a more important role in the American economy. There is certainly a great deal of work remaining in the area of Chinese immigration. The research reported in my thesis is only the beginning.

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