Earnings and English Language: Asian Indians, Chinese and Japanese Men in the United States, 2000

Past research shows that knowing the language of the receiving country is a crucial variable in determining the extent of assimilation and subsequently the earnings of the immigrants. There have not been however recent studies using the latest available 2000 Census data comparing the Asian Indians, Chinese and Japanese in this regard. The three groups provide an interesting mix in terms of their language ability, level of development of their respective sending countries and historical presence in the United States. This paper using the 2000 United States Census data examines the relation between English language ability and the earnings for Asian Indians, Chinese and Japanese men. The dependent variable is; b) per capita per hourly income. The independent variable is English language ability and controls are age at entry, education, years of stay, martial status, occupation.

United States has one of largest immigrant population in the developed world. One of the most recently released reports by the US Census Bureau reports that 33.5 million foreign born resided in the United States (US henceforth) representing 11.7 percent of the total US population (Larsen 2004). Such a considerable percentage of immigrant population has expectedly been a subject of debate among policy makers and researchers alike. Not only has the volume of immigration in the US increased, there has been a change in the composition too (with respect to the countries of origin). For instance, the fourth phase of migration that began in 1965 and continues to date is characterized by people from the developing countries of Asia and Latin America which is in sharp contrast to the first phase (1820-60) consisting mainly of those with European origins –majority being English but there were also Scots, Scot –Irish, Germans, Dutch, French and Spaniards. The following table presents an adequate evidence of this shifting composition during the past four decades.

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¹ From the beginning of the 19th century to date, experts recognize four phases of immigration; a)1820-60 b) 1881-1915 c) 1915 -1964 d) 1965- to date (Martin and Widgrent 2000).

Table 1 US Immigrants (in percentage) by World Region of Birth, 1960s to 1990s

Region/Year	1960-69	1970-79	1980-89	1990-99
Latin America	38	41	42	51
Asia	11	35	43	30
Europe	40	20	11	13
Canada and other	11	5	5	6
Total	100	100	100	100

Source: Martin and Midgley 2003.

The motivation for the present study stems from the following a) Asian immigrants have not been a much studied group especially in relation to the immigrants from Latin American countries²; b) despite the well acknowledged heterogeneity among immigrants from the different Asian countries, substantial research at more disaggregated levels comparing one group from the other, (with few exceptions like Chiswick 1983; Schoeni 1997; Iceland 1999), is lacking thus calling for an updated study of Asian immigrant population; c) language ability is one of the most vital human capital components in determining the economic rewards of the immigrants in the host country and the use of English depends a host of demographic characteristics like education age, nativity, duration of stay (in the US) (Stevens 1992).

In specific terms, this paper will examine one aspect of the immigrant population and that is the influence of English language ability on the earnings of three of the large Asian immigrant groups – Asian Indians, Chinese and Japanese who are considerably different from each other in terms of their geographic location, historical presence in the US and average English language ability.

The structure of the paper is as follows. The first section very briefly describes the review of the existing literature. The second section provides a brief background of the

² A very large and rising proportion of Latin American immigration greatly explains the focus on the issues surrounding population inflow from the former region. (See Table 1).

three immigrant communities in the US. Section three lays down the question. The following section spells out the data set and lists the dependent and the independent variables. The final section states the significance and limitations of the study.

I Review of the Literature

There are various theoretical perspectives put forward that attempt to address the twin questions of a) why does migration take place and b) why it continues. Thus accordingly, the theoretical underpinnings to the issue of immigration which is a process rather than an event, can be two fold; a) level why international migration occurs? b) what determines and/or explains the experiences of immigrants?

The theories that explain the initiation of immigration are; a)Neo-classical economics –macro and micro theory b) New economics of migration c) Dual labor market theory d) World systems theory e) Network theory f) Institutional theory g) Cumulative causation h) Migration systems theory³ (Massey et.al 1993). World systems theory, segmented labor market theory and neo-classical macro-economics explain why developed countries attract immigrants. Social capital theory and world systems theory explain how structural links emerge to connect areas of origin and destination. Neo-classical micro –economics and the new economics of labor migration are concerned with those people who become international migrants and are therefore considerably closer to the micro level theory of human capital discussed later. The theory of cumulative causation describes how international migration promotes changes in personal motivations and socio-economic structures to give immigration a self-perpetuating and dynamic character (Massey 1999).

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³ I have not elaborated on each theory separately. Massey et.al (1993) contains a detailed review of the various theories.

Regardless of the theory or set of theories that one chooses to subscribe to, evidently, economic gains from immigration is an overwhelming motivation to migrate and the current migration flows being from the developing countries with income levels much lower than that of the US corroborates that⁴. The labor market experiences of the immigrants therefore become crucial. And past research in this area both in the US and other developed countries alike has demonstrated that immigrants and natives have different labor market outcomes (Chiswick 1978, Dustmann and vanSoest 2003).

The commonly used theoretical perspectives to explain the performance of the immigrants and therefore potentially the perpetuation of immigration are; a) human capital theory; b) immigration/ assimilation theory and c) racial discrimination theory. I discuss each of them in turn. According to human capital theory individuals are rational actors and make a decision to migrate based on the cost-benefit calculation (of their net worth in their countries of origin and destination). The core assumption here is that markets are perfectly competitive and individuals are rewarded on the basis of their human capital endowments with international migration being one of the forms (of human capital investment) along with education, work force experience (Becker 1964).

Immigration/assimilation theory states that recent immigrants are likely to have less of the characteristics associated with higher earnings than the native born in the initial years of immigration (Chiswick 1978; McManus, Gould and Welch 1983). Recent arrivals, they have less knowledge of the customs and the language; have less information about the job opportunities and less firm specific skills relevant to the receiving country. Thus because knowledge and skills are not perfectly mobile across countries, other things remaining the same, immigrants would initially have earnings significantly lower than the

⁴ This is not to ignore the refugee and other types of migration due to political reasons.

native born but the gap would narrow the longer they are in their destination country (Chiswick 1978). The rate at which earnings gap between immigrants and natives narrows with years since migration is called the assimilation rate. Years since immigration therefore becomes a crucial variable; the relationship being more the number of years of stay in United States, higher is the socio-economic status of the immigrant communities (Duleep and Dowhan 2002; Massey 1981). But since immigrants are a select group that is those who are motivated ambitious and bright manage to migrate, the migrants as a group do succeed in assimilating in the labor market. Selectivity is particularly an important issue in reducing the costs of assimilation and differs by various ethnic groups. For instance, in an analysis of the earnings of the three groups of Asian men -Chinese, Japanese and Filipinos, selectivity was identified as major factor explaining the higher level of earnings of Japanese vis-a-vis Filipinos (Chiswick 1983). Thus, given that, both assimilation and selection effects are in operation, it is not surprising that there is a clear disagreement among researchers with regard to the subject of wage convergence between the immigrants and native born (Bean et.al 2004; Minns 2000).

Racial discrimination theory says that the range and quality of economic opportunities available to minority group members gets reduced owing to discrimination. Discrimination results from competition for scarce resources and space and serves to protect group solidarity. Often times, such economies are characterized by split labor markets where the price of labor for the same work varies across ethnic groups (Iceland 1999).

It is clear that the above theoretical perspectives that explain the experiences of immigrants are not competing ones and an examination of the impact of language ability is demonstrative of that.

Language is a facet of assimilation and also considered a capital that has drawn a lot of theoretical and empirical interest (Pendakur and Pendakur 2002). The standard social science approach to analyzing the process of language attainment is based on the human capital model in which acquiring the dominant language is viewed as an investment (to improve economic opportunities) (Espinosa and Massey 1997).

One of the earliest research work by Chiswick's (1978) identified English language ability as a critical factor affecting earnings of foreign born immigrants in the United States particularly those migrating from countries where English is not a native language. It has been shown using the decennial census that immigrants in the United States who are proficient (in English) earn 15 to 20 percent more than immigrants who have not mastered the English language (Chiswick and Miller 1992, 1997 and 1999). Borjas (1994) reports similar research examining the relationship between English language proficiency and earnings of immigrants. There are more specific studies that focus on the impact of English language proficiency on the earnings of certain immigrant groups. In this context, unsurprisingly, there has been noteworthy work in examining the effect of English language proficiency of Hispanic and Mexican immigrants (McManus, Gould and Welch 1983; Espinosa and Massey 1997). Almost all the findings point in the direction of English language deficiency having a negative effect on the rate of growth of earnings after controlling for education⁵.

⁵ There is evidence to show that education received in the US (as opposed to that not received in the US) makes a significant positive impact on gaining English language proficiency (Schoeni 1997).

While most of the above studies use, native white Americans as a comparison group, there are studies albeit few, that compare immigrant groups with each other. One such study shows that while all immigrants who do not speak English are pushed down the occupational ladder, Hispanics experience this effect to a greater extent than Asians (Kossoudji 1988).

II A Brief Background of Chinese, Asian Indians and Japanese in the US

Given that 17.9 percent population speak a language other than English combined with theoretical as well empirical evidence supporting English language ability as a critical variable in determining earnings of the immigrants; the objective of the present paper is to examine the impact of (English) language proficiency on the earnings of three large Asian immigrant groups; Asian Indians (Indians henceforth), Chinese and Japanese. Though Asians as a group (in contrast to the immigrants from Latin America) are on the high socio-economic end (Bean and Stevens 2003) yet the heterogeneity with respect to average English language ability, exposure and immigration histories among the above three groups provides a worthwhile analytical framework. The following tables are evidence to some of that heterogeneity.

Table 2
Percentage of Chinese, Indian and Japanese Immigrants to Asian and Total
Immigrants in the US, 1820-1998 and 1971- 1998

	Percentage of Immigrants		Percentage of Immigrants		Immigration in the period
	to Total Immigrants		to Asian Immigrants		1971-1998 as a percentage of
	1820 -1998	1971-1998	1820-1998	1971-1998	that in the period 1820-1998
Chinese	1.95	4.34	15.08	12.27	64.87
Indians	1.16	3.72	8.98	10.64	94.57
Japanese	0.80	0.81	6.20	2.28	29.41

Source: Fong 2002.

Table 3
English Language Ability for Chinese, Indian and Japanese, 1990

English Language Ability/Occupation	Do not speak	Managerial	Professional
(Percentage)	English very well		
Chinese	63.1	14.3	19.6
Indian	26.6	14.1	30.0
Japanese	58.7	21.3	17.8

Source: Fong 2002.

Table 4
Population Distribution (in percentage) of Immigrant Chinese, Indian and Japanese
Population US Region, 1990

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Region/Ethnicity	West	Mid-West	Northeast	South	Total
Chinese	52.4	8.1	27.0	12.4	100
Indian	23.1	17.9	35.0	24.0	100
Japanese	75.9	7.5	8.8	7.9	100

Source: Fong 2002.

Indians are among the most recent of the three groups of immigrants which is in contrast to the experience of the Japanese who nearly stopped migrating by 1971⁶. In contrast, volume of Indian immigration grew phenomenally during the period after 1965 and has been doing so to date. While there were 4713 number of Indians who migrated between 1901- 1910, the figure for the period between 1961-1970 is 27189. The data for the last decade between 1991-2000 shows the number as 363,060 (Lai and Arguelles, 2003).

Also, Indians are more dispersed than the Chinese and Japanese in terms of the regional concentration which plausibly can be explained by the geographic trajectories followed historically. In addition, a quick look at the above tables, convey an association between the English language ability and occupational distribution with more

⁶ Consequentially, there is a large percentage of Japanese who are not foreign born and whose one or both parents are Japanese.

Indians being concentrated in the high end occupational category of professionals. A more updated statistics relating to the 2000 Census data corroborates such an association.

Table 5
Select Socio-Economic Characteristics for Chinese and Indians (in percentage), 2000

Socio-economic Characteristic	Chinese	Indians
English Language Ability		
Does not speak English	5.58	0.38
Speaks very well	38.43	67.51
Socio-economic index	53.10	59.90
Occupation		
Managerial, Professional and specialty	46.53	57.54
Educational Attainment		
No school completed	3.24	0.59
Masters and above	35.45	44.51

Source: 5 percent sample of US Census 2000 (Integrated Public Use Micro Sample data 2000)

Thus, Chinese, Indians and Japanese as mentioned earlier provide an interesting analytical framework. Japanese and Chinese are one of the oldest immigrant groups and both 'suffer' from the language disadvantage. Indians have higher language ability relative to Chinese and Japanese. Unlike immigration from Japan, that from China and India continues and is on the rise. Also, China and India, unlike Japan are both developing countries and hence theoretically, the skill transferability should happen to a more limited extent in the case of the immigrants from the former two countries.

III Research Questions

Given that focus of the present paper is on language ability in relation to the performance in the labor market, the substantive questions that will be asked are; a) what is the employment and earnings profile of the Chinese, Indians and Japanese immigrants in the year 2000 relative to the native born white population? b) how does the fact that Asian Indians on an average have an advantage with the English language (relative to

Chinese and Japanese) affect earnings, holding education constant? c) does not knowing English well affect the Chinese, Indians and Japanese to the same extent? The following testable hypotheses can be said to emerge from the above questions:

Hypotheses 1: increase in years of stay in the United States is associated with increases in income levels for all the groups but less so as compared to the native born white population.

Hypotheses 2: holding education constant, Chinese and Japanese, relative to Indians should experience a greater increase in income levels over time as their English speaking ability increases.

Since 1990s witnessed an unprecedented boom in the technology sector with most of the jobs created as a consequence being taken by immigrants in general and Indians in particular, a comparison over the decade from 1990 to 2000 would be provide interesting insights on the experience of immigrants.

IV Data, Sample and Variables

The data base that will be used for the above analysis is the Integrated Public Use Micro Sample (IPUMS henceforth) for the year 2000. IPUMS is a 5 percent sample of the US Census data.

My specific sample will consist of men⁷ in the age group 25-65 and those; a) who report their ethnicity as White and are born in the US; b) those who report their ethnicity as Indian, Chinese or Japanese and are born outside of the US ⁸. I further restrict the

⁷ It is well known in the literature that experience of men and women vary substantially and with increasing proportion of women immigrants from the Asian countries, exclusion of women from the analysis leaves a lot of room for an adequate analysis of immigrant experience. For the purposes of the present paper, I still choose to confine my study to men in the interest of keeping the analysis wieldy and feasible.

⁸Thus my sample potentially includes those immigrants who are not born in their home countries. Though, based on some earlier analysis with Chinese and Indians, I expect most of them to be born in their home countries.

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sample to those who are in the labor force and are employed. I understand the selection bias that such a restriction would create considering that those who are in the labor force but not employed may be in such a situation precisely because they cannot speak the language The analysis will be at the individual level and the comparison category will be and native born non-Hispanic White will be included as the control group.

The key dependent variable is per hourly earnings. The total income earned by the person is a sum of income wage, which are the pre income tax wage and salary income, pre income tax non farm business and/or professional practice and pre income tax earnings of a tenant farmer, sharecropper or operator of his/ her own farm. This is because it would help to capture marginal productivity and also discrimination if any. Total earnings may be higher for immigrants because they work greater number of hours.

The set of independent and control variables that I will use can be organized as; socio –economic and demographic;

Socio—economic - education — educational attainment, public or private school; employment status; labor force status; usual occupation; usual hours worked per week; work experience; families with income below poverty level; persons with income below poverty level; total family income (household income is not there); Duncan socio-economic index; whether working five years ago; whether in college five years ago; year of immigration; years in the US; linguistic isolation; language spoken at home; English speaking ability

Demographic –region of residence; urban/ rural residence status; family size (no household size); age of the oldest and youngest child; relationship to the household head; age; sex ratio; marital status

All the above mentioned variables are directly available from the data set except work experience which has been generated. One way it could be generated is by subtracting the years of education and the age of entry to school which is normally six from the age of the person (age of the person – years of education – six). This is however not without limitations namely; a) it does not capture the entry and exit in to the labor force and b) does not tell anything about the quality of the work experience. The former limitation may not be so much of a concern in this case when the sample is of men in the age group 25-65 who do not have long spells of voluntary unemployment.

V Significance and Limitations

The present analysis will aid in resolving in some current debates harbored by the increasing rates of immigrant population on the role of immigrants in the US economy with respect to their contributions, impact on the employment opportunities for the native born, time required to assimilate in the US economy. An updated description of the three main Asian immigrant communities who are distinct yet have been performing on the higher socio-economic end will provide a good comparison point with the other large immigrant community in the US, namely the Latino. Even though the data is a cross sectional one, one can get a temporal sense of the immigrant's experience by using the variable 'duration of stay' (which gives information on years lived in the US in categories like 0-5, 5-10, 11-15,16-20 and 21 and more years).

Despite the richness of the data set, the analysis will suffer from limitations; a) English language ability pertains to only the spoken proficiency. There is evidence that reading and writing proficiencies have varying and significant impact on earnings; b) English language ability is self-reported; c) it is difficult to address the selection bias in a

cross-sectional data since those who are staying back are essentially 'survivors'; d)there is no information with regard to the legal status of the immigrants. Considering the possibility that not having a legal status may work as a disincentive to invest in learning the language, the analysis may be biased (Espinosa and Massey 1997).

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