

**A SOCIOLOGICAL STUDY OF SKILLED NRIs'
RETURN FROM THE UNITED STATES TO INDIA:
THE PHENOMENA OF BRAIN GAIN**

*Dissertation submitted to Jawaharlal Nehru University
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MASTER OF PHILOSOPHY

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Declaration

This dissertation entitled “**A SOCIOLOGICAL STUDY OF SKILLED NRIs’ RETURN FROM THE UNITED STATES TO INDIA: THE PHENOMENA OF BRAIN GAIN**” submitted by YANG JEONG WON to the Centre for the Study of Social Systems, School of Social Sciences, Jawaharlal Nehru University, New Delhi, in partial fulfilment of the requirements for the award of the degree of Masters of Philosophy, is an original work and has not been submitted, in part or full, for any other degree or diploma of any University.

Yang Jeong Won

Certificate

We recommend that the dissertation be placed before the examiners for evaluation.

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Chapter I

Introduction

Unless we are in 21st century, the age which is familiar with the term ‘migration’, there is no single standard definition of who is international migrant. UN (1998) defines a migrant as “any person who changes his or her country of usual residence,” though residence may refer to a change of residence or of residential status.¹ And International Organization for Migration (IOM) refers migrants as people living outside their place of birth. The common feature from these two international organizations, migrants is people who decide oneself to leave and re-create their life in another place (Steen 1992).

In the last two and half centuries, far larger movement of population have occurred than ever before, migration considered one of the defining global issues. Now about 214 million people are living outside of their place of birth, which is about 3.1 percent of the world’s population. Although their percentage of world population is bit low, total number of migrants has not fallen and shows fast increase of the total number of international migrants than of the number of world population. For example, International migrants’ number increased more than double that 75millions in 1960 to 175 million in 2000, while the number of world population only doubled from 3 billion to 6 billion during the same period. (IOM 2005, UN 2006, World Migration Report 2011)

Table.1. Number of international migrants and percentage of grow rate and of the population

| Number of International migrants (IM) (millions) | | | | Average annual rate of growth of the number of IM (percentage) | | |
|--|------|-------|-------|--|---------|-----------|
| 1970 | 1980 | 1990 | 2000 | 1970-80 | 1980-90 | 1990-2000 |
| 81.5 | 99.8 | 154.0 | 174.9 | 2.0 | 4.3 | 1.3 |

Source: World Migration Report 2005

¹ Tourist and business travelers are therefore not included in the international migration statistics, as their movements do not involve a change in their usual place of residence.

Since international migration regarded as a crucial and inevitable element of the economic and social life of every State, discussion on migration involves many dimensions, related to labour migration, family reunification, security, irregular migration, migrants' right and lots of other works.

Among the various dimensions, studies of labour migration get the most awareness because labour migration is based on employment purpose and have potential of significant financial benefits for both sending and receiving countries.² Migrants who are mostly related to labour migration are economic migrants who are leaving their habitual place of residence to settle outside of home country in order to improve quality of life by employment route. Economic migrants constitute the fastest growing category of migrants and emigration of skilled persons is considered important for the level of skills make the different economical effects.

Of 175 million people living outside their country of birth in 2000, approximately 163 million individuals had chosen to cross the borders by their own will for better economic and/or social opportunities (UNFPA Report, 2004). Consequently, economically developed region become the major receiving countries as they can provide better opportunities for migrants than their origin countries. And those receiving countries are mostly OECD countries and the U.S is on the top rank. Especially, with revise of government policy toward skilled immigrants, skilled immigrants in the U.S increased rapidly. To see the table 2, comparing six traditional countries of immigration in OECD, the numbers of skilled immigrants was major in Australia and Canada in 1991. While the share of all immigrants is quite low, U.S radically accepted more immigrants, in 2001 the number of skilled immigrants grew 14.6 times over the decade.

Canada also indicates number of skilled immigrants is increased that two North American countries of immigration, together accounted for as much as 70 percent of the admissions of skilled immigrants into these six countries. (Kuptsch and Fong 2006: 15) However, how much they grew, all six countries shows increase of the number

² International Dialogue on Migration Series. No. 7, "Managing the movement of People: What can be Learned for Mode 4 of the GATS?", 2004. Published by Migration Policy, Research and Communications Department (MPRC) of the International Organization for Migration

refers that demand of skilled workers is increasing. Especially demand of temporary skilled workers is increasing as table 2 indicating.

While the percentage share of the skilled in US immigration has not risen, the growth of admissions under temporary schemes shown in Table 3 has been huge. Much of the growth has been due to temporary admissions under H-1B visas. In 2000 the US accounted for over 56 percent of admissions to these countries under similar temporary schemes. Other countries Australia, New Zealand and United Kingdom also shows great demand of temporary skilled workers that their number is more than number of skilled immigrants in Table 2.

Table 2. Admission of skilled immigrants in selected countries, 1991, 1999 and 2001.

| Country | Number (thousands) | | | Share of all immigrants (percentage) | | |
|----------------------------|--------------------|------|-------|--------------------------------------|------|------|
| | 1991 | 1999 | 2001a | 1991 | 1999 | 2001 |
| Australia ^b | 41 | 35 | 54 | 37 | 42 | 60 |
| Canada ^c | 41 | 81 | 137 | 18 | 47 | 55 |
| New Zealand | | 13 | 36 | | 47 | 68 |
| United States ^d | 12 | 57 | 175 | 18 | 22 | 17 |
| Sweden | 0 | 3 | 4 | 6 | 8 | 10 |
| United Kingdom | 4 | 32 | 40 | 7 | 33 | 32 |

^a Data for the United States referring to 2002.

^b Skilled category including family members with certain tested professional qualifications and linguistic aptitudes.

^c Skilled workers category including assisted relatives who are not point tested.

^d Employment-based preferences category including family members of skilled workers.

Source: See Table II.12 in UN Department of Economic & Social Affairs, *World Economic and Social Survey 2004 International Migration*, New York, which cites OECD's SOPEMI as source.

Source: Kuptsch, Christiane and Fong, Pang Eng (2006: 14)

Table 3. Temporary workers admitted under skill-based categories, selected countries, 1992-2000

| Country | Thousands | | | | |
|----------------|-----------|------|------|------|------|
| | 1992 | 1997 | 1998 | 1999 | 2000 |
| Australia | 41 | 82 | 93 | 100 | 116 |
| Canada | 70 | 75 | 80 | 85 | 94 |
| New Zealand | | 27 | 30 | 39 | 48 |
| United States* | 143 | | 343 | 423 | 505 |
| France | 5 | 5 | 4 | 6 | 8 |
| United Kingdom | 54 | 80 | 89 | 98 | 124 |

* Number of admissions under H-1B visas, not the number of persons

Source: Table II.13 in UN Department of Economic & Social Affairs, *World Economic and Social Survey 2004 International Migration*, New York. The UN cited as source OECD's SOPEMI report *Trends in International Migration, annual Report 1992-2001* and 2003 Editions and US Department of Homeland Security, Office of Immigration Statistics (2003).

Source: Kuptsch, Christiane and Fong, Pang Eng (2006: 15)

When where those skilled migrants come from? According to ILO report, the expectation of largest flows of the highly skilled workers will from developed countries. However, upset their belief, the origin work force is from the small developing countries. (Kuptsch, Christiane and Fong, Pang Eng. 2006:16)

1.1 Brief statement of Indian migration and its increasing importance

India has the long history of migration to other country for thousands of years but Indians' large scale migration began in the 1830s with the abolition of slavery in the British(1834), French(1846), and Dutch(1873) colonies which caused the labour deficit on plantations industry. Large numbers of cheap and unskilled workers leave India as indentured labour to fill this shortage in the Guyana, Jamaica, Trinidad, Fiji, Mauritius, South Africa, Malaysia, and Singapore as well as neighboring countries as Sri Lanka and Burma, the countries which were under British, Dutch and French colonies (Khadria 2006, Kuznetsov 2006). And until now, People of Indian origin represent a significant proportion of the population in those countries - Mauritius (60.35%), Trinidad and Tobago (39.04%), Guyana (51.01%), Surinam (35.00%) and Fiji (41.34%). In contrast, while Indians are in small portion, they are significant

foreigners in some developed countries - United Kingdom (2.10%), Canada (2.6%) and America (1.60%) with their high-level of skills.

From the history of Indian migration, more than circumstances of homeland which lead their citizens to go out, economic and political situation of host countries which make foreigners to be accepted were the key point.

Indians' movement occurred from the mid-nineteenth century. Most of them were from rural backgrounds and possessed *little* but their agricultural knowledge and *capacity for hard work* (Brown 2008: 39). As India was incorporated into British Empire about 1.5 million of Indian migrated to the British and European colonies in Africa, Southeast Asia, Fiji and the Caribbean as plantation labour and railway workers under indenture system (Clarke et.al. 1990).

Started from 1970-80 with oil boom and ongoing, Indians, mostly composed of un-, semi- and low skilled labour were went to Gulf countries because there were demand of foreign workers in oil industry and infrastructure construction.

Recent flows of Indians are mostly toward developed countries - United Kingdom (2.10%), Canada (2.6%) and America (1.60%). The skilled peoples are looking for the better opportunities in abroad and developed countries accept them because possession of high level of skills is the thing what developed countries wanted and they are ready to use their skill. Also most are from middle- upper class and educated that their background and profile guarantee their status, accepted in developed countries much better than people who are uneducated and un-skilled.

Among the countries, the US shows special interest to Indians. In 1960, Indian immigrants composed only 0.1 percent of all foreign born in the U.S. Until the end of the 1960s, the U.K has been main recipient of Indian migrants. However modification of immigration law in 1965 turns over Indians' flow from the UK to America. For U.S Immigration and Nationality Act Amendments of 1965 eliminate quotas by region of origin and substitute selection criteria based mainly on family ties with U.S citizens or permanent U.S residents,³ opportunity to settle down in the US has been wider.

³ This dispensation of quotas encouraged family reunions that US citizens could bring in spouses, unmarried minor children and parents, while even those who had permanent residence only and not citizenship were given preference for the importation of spouses and children. (Brown, 2008: 55)

Strong pulling from the US make Indians to keen on migration, their proportion among the foreign born slowly grew that in the 1980 was 1.5 percent. Another major expanded opportunity for foreigners is H-1B visa since 1990 which is focused on skilled persons. As we see table4 below, the movement of Indians toward the US increased radically in 1970s and 2000s which is result of two legal movements. Of the 1.5 million Indian foreign born in the United States in 2006, 34.4 percent entered the country in 2000 or later, with 35.6 percent entering between 1990 and 1999, 17.3 percent between 1980s and 1989, 9.7 percent between 1970 and 1979, and the remaining 3.0 percent prior to 1970.⁴

Table4. Persons obtaining Legal Permanent Resident Status

| | 1950-59 | 1960-69 | 1970-79 | 1980-89 | 1990-99 | 2000-09 |
|--------------|-----------|-----------|-----------|-----------|-----------|------------|
| Total | 2,499,268 | 3,213,749 | 4,248,203 | 6,244,379 | 9,775,398 | 10,299,430 |
| India | 1850 | 18,638 | 147,997 | 231,649 | 352,649 | 590,464 |

Source: Homeland Security (2011), 2010 Yearbook of Immigration Statistics

Today the overseas Indians numbers over 20 million, area-wisely spread, the largest of the Asia region, and the third largest in the world, after China and the UK (Rajan 2003, cited from World Migration Report 2005: 123). According to Migration and Remittances Fact book 2011 by World Bank, stock of Indian emigrants is 11,357 thousands or 0.9 percent of population in 2010. The motivations for their movement were not only due to high level of unemployment in India. The job opportunities for highly skilled human resources like trained engineers, physicians and scientists, promise of better-quality lifestyle, and shortage of skilled workers in medical and engineering in the United States affected as major pulling factors (Chacko 2007). For H-1B and employment based visa gave priority to highly trained and educated professionals, new Indians who have intensive skills and good education have built their ‘home’ in town and cities all across the U.S, established their network. (Kapur 2003, Bhatia 2007, Khadria 2006)

⁴ Terrazas.A., 2008, US in Focus, Indian Immigrants in the United States, Migration Information Source, *Migration Policy Institute*, <http://www.migrationinformation.org/usfocus/display.cfm?ID=687>

Now Indians are third largest foreign-born community after Mexican and Filipino immigrants that about 1.6 million of Indian immigrants are residing in the U.S. Although illegal migrants are quite abundant, Indians are important community in the U.S for their number and economic power. The driving force for Indian in recent is due to the new visa program called H-1B that may be issued maximum 65,000 to aliens during each fiscal year, focused on highly skilled as non-immigrant status. This new legislation gave priority to highly trained and educated professionals. As a result, large numbers of skilled workers mainly comprised the recent immigrants who had higher education and were professionally well qualified. And furthermore they had continued to invest heavily in good education for their children as they received from parents (Brown 2008: 55).

Therefore, movement of skilled labour was regarded in India as 'brain drain' since they were India's cream of highly skilled professionals and valuable human capital, needed for development of India.⁵ In perspective from skilled Indians, the promise of a materially superior lifestyle, shortage of knowledge workers in the U.S was good chance and continued high level of unemployment in India push them that looks U.S labour market more greener.⁶ Gradually, over the 1970s onwards in 1990s, especially with software boom and rising economy of the U.S attracted numerous high skilled and educated Indian with H1-B visa, mainly IT professionals. Even the H1-B is temporary employer-sponsored visas for workers in "specialty occupations, this also permits a foreigner sponsored for Legal Permanent Residence (i.e., a green card) by their employers.⁷

Not only initially as workers, as students, Indians came to attended graduate school or for higher education and have a tendency to stay to build their job career. So, India faced fierce brain drain due to those skilled and semi-finished skilled (students) workforce are trying to go abroad, especially to U.S.

⁵ Tomas Hammar, Grete Brochmann, Kristof Tamas and Thomas Faist (1997), 'International Migration, Immobility and Development: Multidisciplinary Perspectives', *Berg*, p. 316/ pp. 93

⁶ International Migration Papers 49(2002), Skilled Labour Migration from Developing Countries: Study on India, by Binod Khadria, p. 81/ pp.11

⁷ Udai Tambar, Editor (2007), 'Movement of Global Talent: The Impact of High Skill Labor Flows from India and China', *The Trustees of Princeton University*, pp. 42

However fortunately, after migration, immigrants keep in touch with their homeland. The developments of technology facilitate migrants to build the connection with no trouble than ever also in its speed that to keep the frequent contact with homeland, more than just mailing becomes so easy.

Although it is generally easy to regard about the migrants that if he or she has frequent contact with India seems like have less homesick and not necessarily required to return once they are settled down in the US. Also, since migrants go abroad with their own decision for the better opportunity, they might not come back to their homeland unless their home offers the better choice.

Since 2000, return of migrants was not that significant. But recently, from a decade ago, their heading to home is now noticeable. As skilled returnees back to home with enhanced skills, ideas and knowledge acquired abroad, business contacts, accumulated savings and other human and capital assets which are significant contributions of local economies, there is increasing expectation from skilled migrants' return.⁸ Therefore, government of India, since the rapid expansion of IT and the IT-enabled industry in India, encouraged a large number of IT professionals to return, expecting skilled returnees to set up business ventures. Not only in IT industry, a range of professionals are welcomed and their return movement and ideas constitutes the reverse of brain drain, called 'brain gain'.⁹

1.2 Aim, Scope and Methodology of the Study

It is required to see in the motive of skilled overseas Indians' return to homeland through their return phenomenon. Since the reason of their migration to the U.S was for economical opportunity which was not available in India, it is requested the balanced point whether the return of skilled Indians can be real brain gain which have no intention to return for temporary.

⁸ International Migration Policy Programme (IMP) in collaboration with UNFPA(2004), 'Meeting The Challenges of Migration: Progress Since the ICPD, P. 96/ pp. 38

⁹ Binod Khadria and Jean-Baptist Meyer. 2010. "The Role of Migration in Re-structuring Innovation Systems" Final Draft for PGA Discussion on 5th Nov in Mexico City

From the previous researches about skilled migration, the return phenomena is identified as transnational migration, recognizing that return of skilled workers as movement of searching an opportunity.

Through the return pattern, the key argument of this paper is NRIs' return purposes are not only for economic reasons, but also for emotional and cultural reasons.

Even though the Indian economic condition as well as their job market is not very suited for their return, sometimes their expectations are not met and they are left wanting for better amenities to help them.

Since the Indian return phenomena from the U.S are recent, this work tries to use the newspaper articles which are mainly revealing the opinion of the returnees through interview to know the purpose of return.

Scope: 'Skilled' 'NRIs' came 'from the U.S'

:Who is skilled? In this work, we will regard the skilled as professionals and highly educated student who has high possibility to become a professional.

'NRIs' are the migrants who have the Indian citizenship and PIOs are migrants who don't have citizenship of India.

For the analysis, the paper used data by international organizations such as International Organization of Migration, International Labour Organization, and World Bank. Also, to know the status of Indian skilled migrants in the major receiving countries, U.S, the OECD publication and U.S statistics are used.

1.3 Outline of the study

This paper is structured as follows:

The first chapter provides the general information of Indians' migration to the

U.S, the following chapter reviews previous studies about 'skilled' Indian's migration especially after 1990s to get the theoretical base for explanation of return phenomena of skilled NRIs. In the next chapter, we examine the return movement of skilled NRIs from the U.S; how their life was in the U.S and what makes them to decide to come back. Regarding skilled NRIs' return as brain gain, the fourth chapter discusses whether their return is the real brain gain. Chapter five provides some suggestions that are needed to be provided by government of India in return phenomena of skilled NRIs in order to manage them as asset of India. Last chapter is the conclusion chapter.

The paper opens by reviewing how international migration of skilled has been interpreted in the academic literature. Second, the paper follows a transnational approach in identifying feature of the skilled NRIs' return from the United States. Third, the paper sees the limitation of brain gain that India is not facing the real gaining of brain.

Chapter II

Literature review of Skilled Migration and Indians' movement to the U.S

International Organization for Migration (IOM) released in World Migration Report 2011, estimated 214 million people are living out of their country of origin in 2010 and this number is around one of thirty people in world population. Interesting thing is international migrants are congregated on few countries like OECD countries and the top three receiving countries are United States, Germany, and France. Still low-skilled migration dominates in absolute terms both to the OECD and to non-OECD countries, emigration rates for highly skilled persons exceed total emigration rates in all regions. (ILO, 2004a: Executive Summary).

According to the database on Immigrants in OECD countries (2010), almost 70 percent of 110 million migrants in 89 receiving countries above 15 years old are living in OECD countries. Dividing these migrants into level of skill, 46.8 millions are low skilled migrants, 37.5 million migrants with intermediate skill level (35%) and highly skilled are 23 million. The low skilled are mainly from Africa region and highly skilled migrants are from Asian countries, especially India and China. Those highly skilled migrants' educational attainment, share of tertiary education is higher than among the native citizens in nearly all countries (OECD working paper 114)¹⁰, play a key role in today's knowledge economy and the demand of their skills are increasing.

Lots of studies have talked about mobility of skilled human capital since they are not only able to circulate between countries but also work in a global labour market that become the major resource of both sending countries and receiving countries'

¹⁰ Dumont, Jean-Christophe, Spielvogel, Gilles, Widmaier, Sarah (2010), "International Migrants in Developed, Emerging and Developing Countries: An Extended Profile", OECD Social, Employment and Migration Working Papers No.11 ,

economic development. While skilled human capital is relatively small in number, their influence is bigger than low skilled human capital, the attention toward their movement is increasing; researches are released from sending and receiving countries, as well as international organizations and institutions for skilled migration is global phenomenon.

About flow of emigrants whether they are highly skilled or not, generally ‘push-pull model’ is used to explain what makes them move. Push factors are from home countries drive people to leave and pull factors are from destination countries attract them to come, generally the major push factors are political unrest, rapid population growth, poverty, as well as lack of economic opportunities, includes low employment rate. The pull factors are labour demands and aging populations, quality of life and releasing restrictions on immigration from relatively more developed countries (IOM 2011, ICPD 2004).

This is based on microeconomic theories of migration, view migrants as rational actor. From this perspective, individual is rational actor and their decision of migration is ‘rational’ choice. Migrants’ choice between to go or to stay is based on assessment of the cost/risk and the benefits of migration; when the economical advantages are exceeding the costs, life in host country is effective than in home country, people decide to move to maximize their benefits. As Campbell argues economic matters stimulate stronger than social things in migration decision. (Campbell 2001:161, cited from Harvey 2011: 70), migration of highly skilled is mostly toward developed countries where the capability to satisfy economical advantages is more than developing countries.

“It is universally acknowledged that economic motivators are stronger than social ones (such as children’s education) in determining a decision to emigrate.”

1.2 Perspective change of Skilled Migration from developing country : from Brain Drain to Brain Gain

Though human history is full of conflict, war, and unpredictable events, migration never stops and it expresses the people's desire to have a better life. The spread of globalization, reduction of barriers of flows; including from goods, capital to services, ideas, and information which is invisible, stimulate the movement of people. With these shared resources, people find it easier and faster to establish and continue the connection between countries than before. Moreover, the consequence of globalization intensified human mobility in large scale and the psychological distance between the host countries and home land become shorten that people maintain their identities and network across the territorial boundaries.

Here, migration of highly skilled persons, also as a part of international labour market, enlarged their scale through globalization. While they migrated before the current globalization set in, the growing demands of skilled workers from developed countries woo their movement further, especially when developed countries experience demographic shortages in certain sectors in their economies. The capacities of highly skilled workers from developing countries satisfy host countries, become the attractive and essential resource (World Migration Report 2003: 222).

While the immigration of skilled workers are gaining of brain to developed countries, it is reverse to source countries that regarded as 'brain drain', which is not welcomed for several decades. World Migration Report 2003 released by IOM described brain drain as the cross-border movement of highly skilled persons (brain) who stay abroad for a longer period of time. More specially, they defined it emigration of trained and talented individuals from the country of origin to another country resulting in a depletion of skills resources in the origin country. At this point, trained and talented individuals are highly skilled persons who have studied or are currently studying for a university degree or possessing equivalent experience in a given academic field. Most migrants in these professional categories leave their country of origin in order to maximize the return on their investment in education and training by moving in search of the highest paid and/or most rewarding employment (Iredale 2002). Portes

also argued that key driver of professionals' emigration is lack of job that can't satisfy the professionals' aspirations in their homeland. (1976)

The notion of brain drain gets severe concerns from origin countries due to highly skilled professionals motivates other highly skilled workers to migrate when diaspora in the host country is well established and their life is successful than in the origin country(ICPD 2004). The lack of those professionals who are the major agents in key sectors such as industry, communications, health and other service sectors; delaying in economic, industrial development and impeding technological transfer possibilities in origin country therefore gets the negative attention.# The worse, professionals have the low probability of return to home.

Therefore, about the phenomena of brain drain, from sending countries as Asia, Africa and Latin America is 'losing' of skilled human capital, and it is 'gaining' for receiving countries, mostly the developed countries.

However, the professionals' emigration attained positive viewpoint towards the end of the 1990s when the international community focused on the contribution of migrants to the development of both sending countries and receiving countries, the notion of brain drain is being replaced by 'gaining of brain' in sending countries (WMR 2011, 107). The changing point to brain drain is highly related with idea of transnationalism. While migration was seen as one-way phenomenon, (Gmelch 1980) transnationalism focused on migration process and activities that immigrants develop and maintain social relations with their original and received countries together in the global era (King and Christou, 2008). To make this possible, development of transportation and communication technology are requisite, people move easily between different national, linguistic, and cultural spaces. It can be seen as weakening of importance of the 'place' for migrant can keep both professional career and family contact wherever they are.

In perspective of transnationalism, the place where migrant is presenting is not so much important, rather whether he or she is 'connected' becomes important thing. Gradually pattern of skilled persons' migration is away from its fixed and unidirectional which was permanent loss. Now movement of highly skilled is

regarded as skills 'sharing' from receiving country.# Also, migrants' connection between sending and receiving country is across the borders of nation-states that more than social ties, economic and political interactions with homeland is reinforced (Faist 2000, Setven Vertovec, 2009). For example, the remittances and investment from the host country have positive effect on development of home country, or at least to household (OECD 2009). To utilize the benefits which sending countries can get from their overseas people, some countries have their own policies.

From the side of migrants, to bridge with ideas of transnationalism, they can share the benefits which they acquired while residing in the host country. For example, the remittances and investment from the host country by migrants, whether small or large amount it is, have positive effect on development of home country, or at least to household. (OECD 2009) Also, the skills and the knowledge that gained from developed countries can transfer to remaining members in the home country. Even if people do not permanently return, their frequent contacts and movements can contribute to growth of home economies for returnees bring back human, financial and social capital.# So, migration is no more means separated with home rather regarded as one of mode to develop migrants' home land.

In certain extend, because the return of professionals has proved their positive impacts on home country with capital, knowledge and improved skills (OECD 2009, WMR 2005, Portes 2007, Chand 2009) and they obtained the image of fluid and continuous, state policy reincorporates their migrants (Ley & Kobayashi 2005). Moreover, skilled migrants, themselves strengthen loyalty and sense of nationalism in global world (Sabharwal) when they have intention of return, their multiple belonging is now seen as asset for home country. In consequence, major sending countries changed their policy toward skilled migration-from preventing to encouraging their movement with expectation of return. As one of global labour pattern (King 2000), in depth researches about return movement of skilled migrants are in need for the further efficiency of their positive impact.

Previous literature survey reports about the return migration were not that much positive before idea of transnationalism comes out. While return migration has been studied with development of home country, from the many studies, it is regarded as

failure of new life- unsuccessful, the failed immigrants, or the retired. For example, Cerase (1974) categorized four motivation of returning- failure, conservatism, retirement, and innovation. In his study of Italian returnees from the U.S, the innovation is the only positive point on development of home country. However, Fisher et al. argued that the economical benefits from return migrants were poor that image of 'return for innovation' is rare. Also Harris and Todaro(1970), interpret migration as flows of rational individuals taking decision to improve their standard of living by migrating to places where they can be more productive and valued themselves maximize. So, if they return, it means failure of their rational decision that life in host country is not that bright as they predicted lift their home; fail to find employment and fail to integrate.

From the further studies, the viewpoint of return migration turns to 'success'. According to Stark (1991), migration is strongly related to origin households that migrants are leaving their usual residency to improve the situation at home; households send out the best-suited individuals to gain an income elsewhere. He views return as the result of successful integration in host country, because this will increase income and lessen livelihood risks for their family in origin countries that make easy to achieve their goal. Also, observe return migration as planned movement that migrants go abroad for a limited period of time not permanently but indefinitely, until they accomplish their target.

With increasing notion of transnationalism, emigration of skilled persons is not the terminal of their movement, resulted as brain drain. Sustaining relation which bond migrants with their homeland brought the idea of brain gain by return of migrants and their human capitals. Especially their acquired knowledge, experiences which are unable to get in the homeland becomes the major source of development of home country.

Indians migration to the United States since 1990s

It was between 1900 and 1910, the first significant wave of Indian immigration took place as agricultural workers to California, mostly Sikhs from Punjab. However at

that time, the immigration from India was not very active due to anti-Asian sentiment in the U.S, consequently Indians were denied citizenship and were also not able to own land from 1923 (Brown 2007).

After independence, the 1965 was turning point of immigration flows. The U.S government revised their immigration laws to abandon the national origins quota, the number of Indian immigrants increased rapidly that 18,638 persons got legal permanent resident status (Green Card) in 1960s while it was only 1,850 persons in 1950s. The migrants who came after 1965 had different profiles to compared to earlier migrants. While Indians who came in the late 19th were mostly unskilled male labour from north-central India; Haryana, UP and Bihar and Tamil Nadu, the new comers were came from all over the India, but especially from south-west India; Gujarat, Kerala and Andhra Pradesh dominantly. For the new legislation gave priority to highly trained and educated professionals, new Indians who have intensive skills and good education have built their 'home' in town and cities all across the U.S, established their network. (Kapur 2003, Bhatia 2007, Khadria 2006)

The motivations for their movement were not only due to high level of unemployment in India. The job opportunities for highly skilled human resources like trained engineers, physicians and scientists, promise of better-quality lifestyle, and shortage of skilled workers in medical and engineering in the United States also affected as major pulling factors (Chacko, 2007). And since 1990, Indian immigration to the U.S grew rapidly again. In 1960s, Indian immigrants composed only 0.1 percent of all foreign born in the U.S., their proportion among the foreign born slowly grew that in the 1980 was 1.5 percent, in 2000 became 3.3 percent, and in 2006, Indian immigrants occupied 4.0 percent of all immigrants. Of the 1.5 million Indian foreign born in the United States in 2006, 34.4 percent entered the country in 2000 or later, with 35.6 percent entering between 1990 and 1999, 17.3 percent between 1980s and 1989, 9.7 percent between 1970 and 1979, and the remaining 3.0 percent prior to 1970.

The driving force for such increase was due to the new visa program called H-1B that may be issued maximum 65,000 to aliens during each fiscal year, focused on highly skilled as non-immigrant status.

To qualify as a special occupation, an individual is required to have at least bachelors or higher degree or its equivalent for the position, and occupations are not limited to computer systems analysts and programmers, physicians, professors, engineers and accountants. However, computer related occupation group were almost half of H-1B visa holders in 2009, and it is Indians who get almost half of H-1B visa. More than employment based route, H-1B visa becomes the major route for skilled NRIs to join in the U.S economy. (see the table 1, 2)

Table1. Persons obtaining legal permanent resident status by broad class of admission -2010

| | Family-sponsored preferences | Employment based preferences | Immediate relative of U.S citizens | Refugees and asylees | Diversity | Other | Total |
|-------|------------------------------|------------------------------|------------------------------------|----------------------|-----------|--------|-----------|
| Total | 214,589 | 148,343 | 476,414 | 136,291 | 49,763 | 17,225 | 1,042,625 |
| India | 14,636 | D31,118 | 21,831 | 1,324 | 58 | 195 | 69,162 |

Source: 2010 Yearbook of Immigration Statistics by office of Immigration Statistics, U.S Department of Homeland Security (2011)

Table2. Non-immigrant Temporary worker admissions in selected countries- 2010

| World Total | 2,816,525 | | |
|--|------------------|----------------|---------------|
| | India | Mexico | China |
| Total | 305,530 | 516,647 | 40,508 |
| Workers in specialty occupation (H1B) | 138,431 | 30,572 | 19,493 |
| Seasonal agricultural workers (H2A) | - | 127,046 | 6 |
| Seasonal non-agricultural workers(H2B, H2R) | 170 | 50,736 | 27 |
| Workers with extraordinary ability/ achievement (O1, O2) | 694 | 4,082 | 611 |
| Athletes, artists, and entertainment (P1- P3) | 2016 | 22,901 | 2,106 |
| Intra company transferees (L1) | 68445 | 49,650 | 7,923 |
| Treat trader & investor (E1-E3) | 461 | 98,291 | 872 |
| Other | 95313 | 133,369 | 9,470 |

Source: 2010 Yearbook of Immigration Statistics by office of Immigration Statistics, U.S Department of Homeland Security (2011)

Majority of Indians migrated to United State as legal non-immigrants, H-1B visas provided a major route of legal access to the U.S. Highly skilled Indians, especially those working in the computer industry, have been by far the largest beneficiaries of H-1B visas. With this temporary visa or legal permanent status, Indians are third largest foreign community in the U.S. Fortunately, in the transnational era, Indians keep their ties with homeland. Indians show their strong ethnic identification by frequent contact with homeland and the connection is from direct to indirect way. 53% of Immigrants visit India at least once every two years, 97% watch Indian TV channels several times a week, 94% view Indian Internet sites several times a week, 92% read an Indian newspaper or magazine several times a week, and 90% have an Indian meal several times a week (Kapur, 2004). Some Indians are almost compulsive about their children attending music and dance classes and taking Sanskrit lessons. They thereby tend to adhere to their roots and create their own cultural ambience interacting, be as an 'Indian' by creating themselves 'Indianness'. Also, NRIs regularly contacted family in India by telephone, email, Internet and sending gifts on special date, furthermore, sustained their ties with periodic visits to their family members and held on their Indianness.

As time goes by U.S required more and more skilled migrants, the new comers have the different profile to compare with previous decade's migrants, even better than native-born Americans.

Prashad(2000)¹¹ writes that between 1966 and 1977, 83 percent of Indians who migrated to the United States were highly skilled professionals composed of about "20,000 scientist with Ph.D's 40,000 engineers, and 25,000 doctors"(75). These professional Indians have made their "home" in suburban diasporas in town and cities all across America.

Indian –Americans today are one of the wealthiest and best educated communities in the United states. According to the U.S census of 2000, their median household income income was \$60.093 compared with \$ 41,110 for non-hispanic white families.

¹¹ Prashad, V., 2000. *The Karma of Brown Folk*. University of Minnesota Press, Minneapolis

According to the American Community Survey of the U.S census bureau(2006), the Indian American population in U.S grew from almost 1,67,000 in 2000 to 2,319,000 in 2005; a growth rate of 38%, the highest for any Asian American community and among the fastest growing ethnic group in US after Hispanic Americans. Indian Americans are the third largest Asian –American ethnic group, after Chinese –Americans and Filipino –Americans. Over 58% of all Indian Americans over the age of 25 had a college degree, compared to the national average of 26 %; over 40 % have a masters or Doctoral degree compared to a national average of 11 % (USINPAC, 2006)

In the field of education, the NRIs are well represented and they occupy senior positions in academia- in leading universities and research institutions. Three of them have been the recipients of the Nobel Prize. Some of them are already volunteering their time in faculty positions in India, working on ongoing research projects or in new areas, thereby helping in the extension of latest knowledge and techniques, and in the setting up of infrastructure for furthering the frontiers of learning. Those brains' life in the U.S is usually represented as success of migration with economical wealth and political powers they are exercising are remarkable in the U.S. Consequently Indians in the U.S have reputation as 'model minority'; accommodation rather assimilation and successful adoption in the host country while maintaining their close ties with homeland (Gupta 1997).

While they are coming the U.S for economical benefit, when asked, why you decided to leave India, 78 percent of respondents cited economic reasons, 23.4 percent family reasons, and the rest (3.8 percent) noted 'social and political reasons' (Kapur 2010: 75). NRIs are connecting with homeland through economic ways also that they do not lock their wealthy in the U.S Non-resident Indian deposits have grown significantly to account for a substantial

According to Migration Policy Institutions (2010), size and distribution of Indians in the U.S are as below.

There were about 1.6 million foreign born from India residing in the United States in 2008 on

There were 1,622,522 foreign born from India residing in the United States in 2008, accounting for 4.3 percent of the country's 38.0 million immigrants.

Relative to other groups, the Indian-born population in the United States grew rapidly during the 1990s and 2000s, increasing by 1.2 million — or about 65,000 per year — since 1990. Between 2007 and 2008, the Indian foreign-born population surpassed the Chinese and Hong Kong-born population to become the third largest immigrant group in the United States after immigrants from Mexico and the Philippines (see Table 3; see also the pie charts showing the top 10 countries of birth of immigrants residing in the United States over time here.).

Table 3. Total and Indian Foreign-Born Populations, 1960 to 2008

| Year | Number | | Share of all foreign born | Rank ^(a) |
|------|--------------|-------------|---------------------------|---------------------|
| | Foreign born | Indian born | | |
| 1960 | 9,738,091 | 12,296 | 0.1% | 42 |
| 1970 | 9,619,302 | 51,000 | 0.5% | 30 |
| 1980 | 14,079,906 | 206,087 | 1.5% | 16 |
| 1990 | 19,797,316 | 450,406 | 2.3% | 12 |
| 2000 | 31,107,889 | 1,022,552 | 3.3% | 4 |
| 2008 | 37,960,773 | 1,622,522 | 4.3% | 3 |

Notes: ^a Rank refers to the position of the Indian born relative to other immigrant groups in terms of size of the population residing in the United States in a given census year.

Source: Data for 2000 from the 2000 census; data for 2008 from the American Community Survey 2008. Data for earlier decades from Campbell Gibson and Emily Lennon, "Historical Census Statistics on the Foreign-Born Population of the United

States: 1850 to 1990" (Working Paper No. 29, US Census Bureau, Washington, DC, 1999).

Nearly three-quarters of Indian immigrants in 2008 were adults of working age.

Of the Indian immigrants residing in the United States in 2008, 6.9 percent were minors (under age 18), 73.5 percent were adults of working age (between 18 and 54), and 19.5 percent were seniors (age 55 and older).

Of the total foreign-born population in the United States in 2008, 7.4 percent were minors, 69.0 percent were of working age, and 23.6 percent were seniors.

Nearly three-quarters of Indian foreign-born adults had a bachelor's degree or higher.

In terms of academic achievement, Indian immigrants were better educated than other immigrants and the native born. In 2008, 73.6 percent of Indian-born adults age 25 and older had a bachelor's degree or higher compared to 27.1 percent among all 31.9 million foreign-born adults and 27.8 percent of all 168.1 million native-born adults. An additional 8.6 percent had some college education or an associate's degree compared to 16.4 percent among all immigrant adults and 30.8 percent of all native-born adults.

On the other end of the education continuum, 8.9 percent of Indian-born adults had no high school diploma or the equivalent general education diploma (GED), much lower than both the 32.5 percent among all foreign-born adults and the 11.7 percent among native-born adults. About 8.9 percent of Indian immigrant adults had a high school diploma or GED compared to 21.9 percent among all foreign-born adults and 29.8 percent among native-born adults.

Indian immigrant men were more likely to participate in the civilian labor force than foreign-born men overall.

In 2008, Indian-born men age 16 and older were more likely to participate in the civilian labor force (85.1 percent) than all foreign-born men (80.5 percent). Indian-born women (55.5 percent) age 16 and older were less likely to participate in the

civilian labor force than other immigrant women (57.1 percent).

Over one-quarter of employed Indian-born men worked in information technology.

Among the 713,000 Indian immigrant male workers age 16 and older employed in the civilian labor force in 2008, 27.0 percent reported working in information technology; 20.2 percent in management, business, and finance; 10.7 percent in other sciences and engineering; and 10.6 percent in sales (see Table 2).

One-third of employed Indian-born women worked in management, business, and finance and in information technology.

Among the 384,000 Indian-born female workers age 16 and older employed in the civilian labor force in 2008, 15.7 percent reported working in management, business, and finance, and 13.6 percent reported working in information technology (see Table 2). Indian-born women were also concentrated in administrative-support occupations (11.8 percent) and sales (10.6 percent).

Table 4. Occupations of Employed Workers in the Civilian Labor Force Age 16 and Older by Gender and Origin, 2008.

| | Indian foreign born | | All foreign born | |
|---|---------------------|---------|------------------|-----------|
| | Male | Female | Male | Female |
| Persons age 16 and older employed in the civilian labor force | 713,094 | 384,481 | 13,630,931 | 9,505,339 |
| Total percent | 100.0 | 100.0 | 100.0 | 100.0 |
| Management, business, finance | 20.2 | 15.7 | 10.7 | 10.4 |
| Information technology | 27.0 | 13.6 | 4.0 | 1.9 |
| Other sciences and engineering | 10.7 | 5.4 | 4.1 | 2.2 |
| Social services and legal | 0.8 | 1.3 | 1.1 | 2.0 |
| Education/training and media/entertainment | 4.4 | 7.7 | 3.4 | 7.1 |
| Physicians | 4.3 | 5.7 | 1.2 | 1.0 |
| Registered nurses | 0.2 | 5.5 | 0.4 | 3.4 |
| Other health-care practitioners | 2.1 | 5.6 | 1.0 | 2.9 |
| Health-care support | 0.4 | 2.4 | 0.6 | 5.4 |
| Services | 4.3 | 6.1 | 17.4 | 25.7 |
| Sales | 10.6 | 10.6 | 7.5 | 10.5 |
| Administrative support | 4.1 | 11.8 | 5.3 | 14.7 |
| Farming, fishing, and forestry | 0.2 | 0.2 | 2.6 | 0.9 |
| Construction, extraction, and transportation | 5.3 | 1.4 | 25.9 | 3.3 |
| Manufacturing, installation, and repair | 4.9 | 4.6 | 14.6 | 8.5 |

Source: 2008 American Community Survey.

Indian immigrants were less likely to live in poverty than natives.

About 16.4 percent of Indian immigrants lived in poverty in 2008 compared to 37.9 percent of all immigrants and 28.7 percent of the native born.

Chapter III

Skilled NRIs' Return Phenomena

Although government of India started to concern their overseas Indian, still there are few studies about skilled Indian returner from developed countries, especially at individual level. The study focus on returnees whether they will bring economical benefits to India or not, rather than when, why and how the return migration decided. However, there are lots of individual interviews telling their stories about return to home and their narrative illustrate not only economical factors but also because of the sense of belongingness.

Grabbing of Emerging Opportunities

One of the main issues regarding the skilled NRIs is that they are 'economic migrants' who choose to emigrate their home country searching for better economic opportunities - The higher expectation of lifestyle, higher wages, and better job opportunities are some of the pulling factors that attract skilled Indians in large scale. However it has come into light through the literature survey that these NRIs are now gradually retuning to India. The retuning of those migrants clearly shows that India's economy is emerging, and providing job opportunity to those skilled labors which was absent before.

To lead India's economy to global market is IT industry which is knowledge based. While earlier Indian economic was unable to generate job opportunities to knowledge workers, now proved their competitiveness in the world.

IT industry started from 1980s, shown speedy growth in the country and its importance by percentages share of GDP.

Table 3.1 India's Gross Domestic Product by sectors (percentages)

| | 1997-98 | 1998-99 | 1999-2000 | 2000-01 | 2001-02 | 2002-03 | 2004-05 |
|-------------|---------|---------|-----------|---------|---------|---------|---------|
| Services | 45.8 | 46.6 | 48.3 | 48.9 | 49.5 | 50.8 | 57.2 |
| Agriculture | 26.5 | 26.4 | 25 | 23.8 | 23.9 | 22 | 20.8 |
| Industry | 27.7 | 28 | 26.7 | 27.3 | 26.6 | 27.2 | 22 |

Source: EIU (2004), CSO, Economic Survey, 2005, Government of India.

The table 3.1 illustrates the different path between service sector and agriculture sector. While industry sector shows almost similar during a decade, service sector has increased and agriculture sector decreased. The cause of such of difference is on Indian economic structure which is strongly depends on agricultural industry. For example, India increased her economic growth rate to 6.7% between 1992-93 and 1996-97, this dropped to 5.5% from 1997-98 to 2001-02, and 4.4 % in 2002-03. The main reason of this decline is poor rain on agricultural output. Opposite may be true, when the India received plenty of rainfall and got good agricultural produce, India's economy also showed growth rate to 8.2%. Such fluctuations alerted government of India to search for a way to protect their economy. So instead of agriculture, they promoted the growth of service sector, policies of government of India also play a important role. Indian government chooses service sector which has '*high income elasticity of demand for services, cost-reducing and variety-enhancing technological advances, and changes in the method of organizing production favoring increased outsourcing*' (World Bank 2004, Cited from World Bank 2005).

With the growing demand of services from the global and liberalization of domestic economy that have attracted significant investment, IT industry got the foothold to grow fast in the global level and gradually enhanced their reputation.¹²

Now the IT industry's contribution to India's GDP is 3.5 percent in 2004 and accounts for 65 percent of the global market for offshore IT services. They are now provide the

¹²World Bank 2005, India: India and the Knowledge Economy Leveraging Strengths and Opportunities, Report No. 31267-IN, Finance and Private Sector Development Unit, South Asia Region, Washington, D.C.

job opportunities to young and skilled talents, it is also attractive chance for overseas professionals to join this growth.

An interest in IT industry was planned under Rajiv Gandhi's slogan, "*Forward to the Twenty-first Century*" in 1980s (Lessinger). Therefore, between two parts in IT industry, Software and Hardware industry, India focuses on software development as it is not a capital intensive and have high prospect for global market share. Also, Software does not have the problems of technical delays in satisfying the commitments of foreign buyers for they can transfer the outcome (customized developed software) through the internet (Lal, 2006). Therefore, software industry has been selected as bandwagon of economic development of India and India is facing the economic boom that shows rapid growth in economy based on IT industry.

Another background of development of IT industry is based on the idea that knowledge has competitiveness.¹³ To look at the developed countries they increased their per capita income through effective use of knowledge. Government of India is also looking forward to manage the use of knowledge more effectively to raise the productivity and reduce poverty which led to build up their competitiveness. The success of IT industry in India, encourages overseas citizens to join the development process. The role of returned NRIs is also important for the development of IT industry in India. NRIs, as knowledge spillover agents (Tripple and Maier, 2007), knowledge has been transferred to the IT industry, accelerate its growth. As they are equipped with the knowledge and experiences, the demand of NRI IT professionals is increasing that even at the government level, of India also wants them to return to India. Therefore from the brain drain of 1960s and 1970s, subsequently India is facing 'brain gain' in the twenty-first century.

Bangalore, India's Silicon Valley, is now the wooing NRIs who have required skills that proven in the most competing market, US. Therefore, when NRIs returns to India they are not treated as same as other professionals who have been working in the county. NRIs, with competitive knowledge and experience, take higher position and higher salary.

¹³. Ibid.

Besides Bangalore, Hyderabad and National Capital region are the most preferred destination for these returnees. It has been seen that most of returnees are first-generation expatriates, and follow their parents, second-generation Indians living in US are also returning. (Saritha Rai, 2005). For the second generation also, the opportunities in the IT industry

NASSCOM estimates that 25,000 engineers and scientists returned from the US to India from 2001 to 2004. They estimate further that about 10-15 percent of these returnees are US citizens and an additional 15 percent are US permanent residents (Green Card holders). (Taeube, Sonderegger, 2009).

Another knowledge based industry is healthcare sector that Indian diaspora has get its reputation and major NRIs employer; here mainly includes biotechnology, contract research and manufacturing, clinical research and pharmaceuticals.

Healthcare, According to E&Y Report, the Indian biotechnology sector was valued at USD 4 billion in 2010-11, growing at nearly 21% in value over 2000-2010. It is estimated that as of 2012, the Indian CRAMS sector (Contract Research and Manufacturing) will be valued at USD 7.6 billion growing at a CAGR of 47.2% from 2007 till 2012. Express Pharma envisaged that by 2011 India would be conducting 15% of all global clinical trials. About the outlook for healthcare sector, opportunities for NRIs is in no wonder as Kris Lakshmikanth Founder CEO of The Head Hunters India Pvt Ltd gave the comments as below:

"India is fast becoming a hub for outsourcing in the healthcare sector. Multinational companies like Pfizer, Novartis, Eli Lilly etc look at India as a skilled and cost effective hub to outsource certain functions. This includes research in areas like stem cell and vaccinations, contract research and clinical research. While the employees of these outfits are largely from within India, the leadership team of these units is typically those with global experience. Typically, those with a post doctoral qualification with research experience in the US would fit the bill,"¹⁴

With the development of technology, its impact on medical industry lets transcontinental medical consultations. Also outsourcing of activities like laboratory

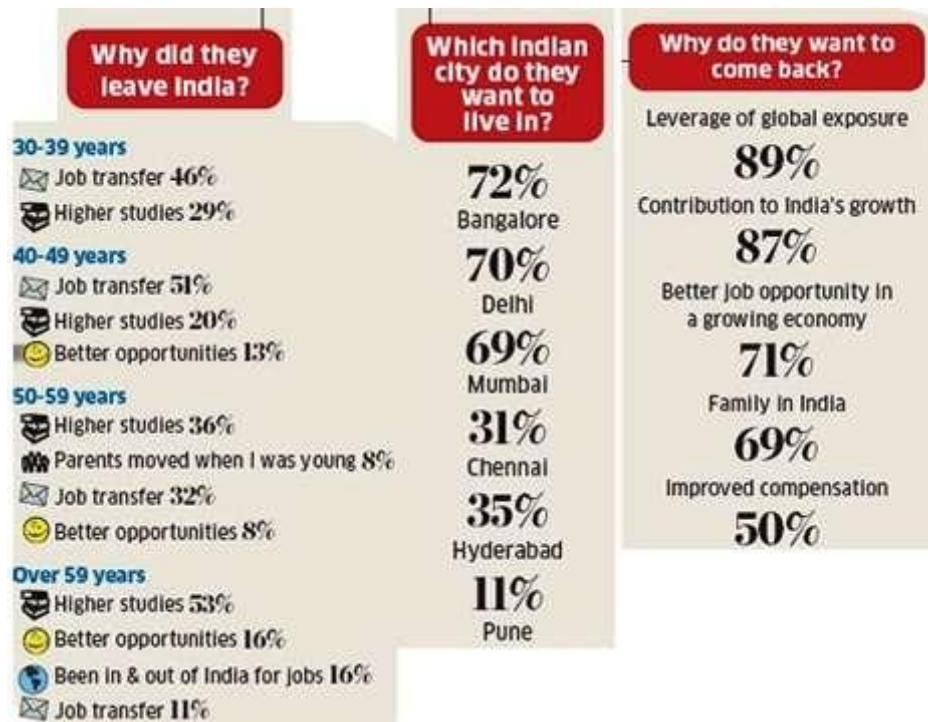
¹⁴ source: 2 Feb, 2012, Economic times, "5 sectors in India that are hiring NRIs and expats right now

investigations, medical transcriptions, software development, and telemedicine has become easier. India, gets the advantage of this progress, start medical tourism based on big cities, attract foreign patients who want to seek care in India with same quality but in cheaper price.¹⁵ For the expansion of medical tourism, healthcare industry required lots of doctors who have a global experience to treat their foreign patients. For their continuance development, and get global reputation as their IT industry, competing of their qualified doctors and nurses are welcomed by homeland.

Indian diaspora associations in the medical profession have helped set up world class corporate hospitals and super specialty health care establishments in India. These have often been set up by returning Indian doctors or by groups of non resident doctors in partnership with local doctors. The Indian diaspora of health professionals has also helped procure the latest equipment and technology, thus raising the standards of healthcare in the country. The reputed Apollo group of hospitals, India's first corporate hospital chain, was set up by Dr. Pratap Reddy, a returning Indian doctor from the United States.

¹⁵ Sunita Reddy and Imrana Qadeer, 2010, "Medical Tourism in India: Progress or Predicament?" Economic & Political Weekly May 15, 2010 Vol xlv No. 20

Figure1. The reason of leave, the major cities of returnees, reason to comeback.



Source: [web: online] Accessed on date 12/5/2012 URL:
http://articles.economictimes.indiatimes.com/2011-06-27/news/29705996_1_start-ups-nris-job-market/2

We can observe from the above figure that the reason for leaving India is the better job opportunity and the expectation for the better standard of living. Most of them transfer their job and some of them leave India for the higher studies and later settle there because of the higher availability of job opportunity and higher wages as compare to their home country.

The city they prefer after coming back to India is Bangalore, Delhi, Mumbai, Chennai, Hyderabad and Pune as their professional workplace also. They wanted to come back because of the emerging economic opportunities, family factor and improved compensation.

Now, India is famous for large scale exporting of professionals, while continuously training and sending them abroad with the support from the government. Such kind of training and promoting their skills generates the new employment opportunities for

returnees who are based on that skills background (Portes 2007), number of skilled NRIs estimated to increase.

Myth of Return: Emotional Ties

Most of NRIs, who might have an intention to come back but without knowing the proper time of return always have the idea of return (King, 1986). No matter whether they are living in the host country with economic or socio-cultural contentment, the notion about 'home' has special meaning to NRIs. For the NRIs, home is the place of there they are rooted, the source of support life in the U.S. The migrant's links with India are rooted mainly in nostalgia and draw sustenance from their cultural affiliations to India (Kapoor, Mehta and Dutt, 2004; Sahoo 2006).

For skilled NRIs are highly successful group, it is likely that they have adapted well to the host country culture as they have low language problems and legal residences. On the other side, they are under the pressure to be as a part of the U.S main stream society, the 'white establishment' (Chand 2009). To be accepted in the new home smoothly and not to get discriminated at least, Indians are required to understand and affiliate well and further 'support' the America culture. It does not mean Indians are betraying to homeland, rather it is one of way that Indians become a featured foreigners as they are regarded 'exceptional' (Bhattacharya 2008).

Therefore, once they decide to return it is more than job opportunities in the homeland that are just part of the equation. Add in rapidly increasing economic growth standards of living, a traditionally rich social life, improving schools and infrastructure, attractive housing, and strong family and cultural ties, the temptation to return home permanently may be irresistible.

Return is often accompanied by considerable ambivalence (King 2000). On one side, returning migrants are back in their own culture — which is familiar; NRIs no longer need to have tension about foreign language, about being a foreigner, about being treated as a minor. They take pleasure in seeing old friends and re-identifying themselves by adapting to the local way of life. However on the other side, King cites

several anthropological studies that explore the ways returnees must display their 'success' (Haour-Knipe and Davies 2008).

Also among the some second generation, while they don't have any experience or memories in India, they wanted to return to their parent's homeland. Their return might not accompany with it identity matter, second-generation Indians moved to India because it was their parents' homeland and they keep or expect to deepen their emotional connection to the country.¹⁶

Recent emigrant might often experience sense of responsibility due to the educational capital they had gained from India before they emigrated, their feeling of responsibility leads to investment and give back to India some of his earnings. Since a large percentage of overseas Indians who migrated during the more recent waves were availed of an elite education at public institution.

Vikram Sheel Kumar, returned Indian who found his own healthcare and hospital said, *"In India, there is a social hierarchy. But entry barriers to create something new are very low"*. He was born in the US, he moved to India in the 1980s. He studied in the US between 1995 and 2007. Harvard educated, he is now in India seeding new start-ups and helping his family business.

While he is not an NRI, but PIO, when he was asked why did he come back, his answer is that he can never forget his country, *always wanted to return to India*. while he is facing the difficulty to adapt in India, he tries extra hard to do be Indian and is learning the tabla, plays squash and cricket and has a yoga instructor which reminds him of traditions of India.

Keeping the Indianness

For the last decades, NRIs tried to maintain a sense of ethnic self-identity against the

¹⁶ Sonali Jain, 2010, "For Love and Money: Second-generation Indian Americans 'Return' to India"

assimilatory forces of the U.S. Yet the first generation, themselves retain cultural heritages, the challenges are from second generation who were born in the U.S or reared in the U.S culture since they were children. Second generation are relatively more 'Americanized' than their parents generation, consequently have less or no identity and nostalgia of home, the languages, caste cultures, religious activities, traditions which might be very much present in their parents due to their Indian upbringing.

Children are the number one reason why many NRIs try to return home to India. According to one research, only 3 per cent says they are returning due to job loss, around 10 per cent plan their return to provide better education to their kids in India. Another interview with NRI doctor, a senior consultant physician at Apollo Hospitals, who lived in the U.S for 13 years gave up her practice in Tampa, Florida for the similar reason. She moved to India for a personal cause - to raise her children here. Echoing the sentiments of many non resident telugus, she wants her children to grow up knowing their extended family and their culture here.

Parents might comfort that their children will be exposed to 'Indian family values'. However many of Indian children born in America don't feel at home with the Indian system of education. Fortunately India has changed, there are plenty of international schools in India that have the same infrastructure and teaching methods as in the USA, of course these school fee might be expensive than other public schools, but the returnees prefer it to provide their wards with quality education on par with what they received when they were in the U.S.

In some cases the longing to return is present in second generations also. First generation might seek to combine a comfortable lifestyle with sense of belonging. While second generation did not confess nostalgia for homeland like their parents, they did state a desire about indianness that by learning and knowing their language and culture and reconnecting with Indian aspect of their Indian American identities.

Chapter IV

Analyzing of Return pattern: The Limits of Brain Gain

From the statistics, indicating the economic condition such as GDP and FDI growth rate, India has proved their development in economy for the past two decades till now. This advancement attracts overseas Indians from the US to share the benefit together, especially in IT industry which leads such development as we could observe from previous chapter. However, through profiles of returnees and the narratives from returnees and remaining skilled Indians, some limitation of economic development of India is getting evident.

4.1 Small Window to Get the Opportunities

Does Indian economy have capacity to accept their qualified returnees into their industry? Since India is headed for knowledge based economy, skilled workers, especially from developed countries are required to take the role of vehicle for expansion of skill intensive sectors with their global experience.

IT industry, is well known for its strong competitiveness in the global market and growing demand of skilled labour, has strong intention to hire skilled NRIs. During the first quarter of 2011-2012, around 30 percent of NRI professionals are employed in this industry. They are ready to employ skilled human capital and number of returning in the IT industry is increasing (see chapter 3). However, another industry which also requires the skilled NRIs is medical industry, the situation is not that rosy as IT industry.

Although there is no detailed information about the number of skilled returnees from the U.S, lots of studies state that IT experts are the largest group among the returnees. Especially through the two reports, published by OECD and U.S department of home

security, we can support this idea that return of professionals is only significant among IT industry.

According to the OECD report published in 2011, in the United States, occupations in construction, finance, retail trade, and professional and technical services cut down foreign born employees between 2007 and 2010. The number of foreign born workers in professionals and technical services which is skilled Indian thick area decreased 80,000, and in percentage is 6.1 %. The changes in the number of the H-1B visa holder in fiscal year 2008 and 2009 also indicate the notable decrease of Indians to compare with China and Canada, the second and third largest origin country of H-1B beneficiaries. The annual report of characteristics of specialty occupation workers for fiscal year 2009 provides information that the number of all beneficiaries in decreased 22 percent from 276,252 in 2008 to 214,271 in 2009. Especially number of Indian is decreased significantly that while China and Canada origin workers are decreased 10 percent from 2008 to 2009, 31 percent of reduction is among Indian. Also, from the distribution by industry, computer related industry which is the Indians dominated shows the big drop to compare with other industries.

Table 4.1 H-1B Petitions Approved by Country of Birth of Beneficiaries

| Country of Birth | All beneficiaries | | Percent change |
|------------------|-------------------|----------------|----------------|
| | FY 2008 | FY 2009 | |
| Total | 276,252 (100%) | 214,271 (100%) | -22% |
| India | 149,629 (54.2) | 103,059 (48.1) | -31% |
| China | 24,174 (8.8) | 20,855 (9.7) | -13% |
| Canada | 10,681 (3.9) | 9,605 (4.5) | -10% |

Source: U.S. Citizenship and Immigration Services, 'Annual Report on Characteristics of Specialty Occupation Workers (H-1B) for Fiscal Year 2009', published by U.S. Department of Homeland Security

Table 4.2 H-1B Petitions Approved by Detailed Industries

| Industry | All beneficiaries | | Percent change |
|--|-------------------|-------------------|----------------|
| | FY 2008 | FY 2009 | |
| Total | 276,252 | 214,271 | -22% |
| Industry known | 257,164 (100%) | 197,246 (100%) | -23% |
| Computer system Design & Related services | 108,970 (42.4) | 66,236 (33.6) | -39% |
| Colleges, Universities & Professional Schools | 26,145(10.2) | 22,991 (11.7) | -12% |
| Architectural, Engineering & Related services | 10,420 (4.1) | 8,247 (4.2) | -20% |
| Management, Scientific & Technical Consulting services | 8,654 (3.4) | 7,147 (3.6) | -17% |
| Elementary and Secondary Schools | 7,537 (2.9) | 6,192 (3.1) | -17% |
| General Medical and Surgical Hospitals | 6,111 (2.4) | 5,670 (2.9) | -7% |

Source: U.S. Citizenship and Immigration Services, 'Annual Report on Characteristics of Specialty Occupation Workers (H-1B) for Fiscal Year 2009', published by U.S. Department of Homeland Security

Through table 4.1 and 4.2, it is not sure whether Indians return to home by their own intention or not, but decrease in interest in the host country turns to increase of home country, in computer related industry. The data in table 4.2 from medical and surgical hospitals industry shows that the number of returnees was only 7 percent while other industries the fall was at least more than 10 percent. It means, still job opportunities in the U.S as health care related professionals are brighter than other industry and as compared to IT industry.

Looking at another table, it becomes obvious that professionals in health care industry are not much fascinated by homeland. The table below indicates changes of employment rate between 2007 and 2010. For both native born and foreign workers are decreased radically in construction industry. However, health care services and

hospitals, social assistance, food manufacturing and education services which are generally related to social and domestic services show increase among foreign born workers. The important thing is those increased industries have less propensity to vulnerable by economic crisis.¹⁷

Health care related industry is major part India exporting their professionals as well as IT experts. As IT professionals are trained in IIT, most of such medical professionals are educated in All-India Institute of Medical Sciences, the country's best medical school. The reason of leaving India was also similar as IT professionals, for the better opportunity, building career in the host country. Their first plan might be return with valued skills and their home country provided better career opportunities as they could find in the U.S, but the condition in India is not as they expected.

There are more than 38,000 physicians of Indian origin in the United States, about 5 percent of the total. About Indians and people of Indian origin are medical students and residents, constituting about 10 percent of the total in the United States. Indians represent the largest non-Caucasian segment of the U.S medical community.¹⁸ However in India side, there are abundant nurses and doctors that emigration of these professionals are not regarded serious.

¹⁷ OECD (2011), International Migration Outlook: SOPEMI 2011, OECD Publishing, pp. 37

¹⁸ book- Diaspora networks and the international migration of skills-how countries can draw their talent abroad,pp. 76

B. United States, changes between 2007 and 2010

| | Native-born | | Foreign-born | | |
|---|--------------|-------|--------------|-------|--|
| | Change (000) | % | Change (000) | % | |
| Health care services, except hospitals | 473 | 6.6 | 111 | 8.8 | Health care services, except hospitals |
| Hospitals | 250 | 5.1 | 100 | 24.9 | Social assistance |
| Public administration | 141 | 2.3 | 89 | 20.4 | Food manufacturing |
| Arts, entertainment, and recreation | 96 | 4.1 | 63 | 5.1 | Educational services |
| Educational services | 86 | 0.8 | 47 | 12.0 | Agricultural |
| Personal and laundry services | 49 | 3.1 | 31 | 6.1 | Public administration |
| Motion picture and sound recording industries | 40 | 11.4 | 28 | 6.7 | Repair and maintenance |
| Utilities | 36 | 3.3 | 21 | 2.4 | Hospitals |
| Waste management and remediation services | 32 | 9.1 | 18 | 1.7 | Transportation and warehousing |
| Beverage and tobacco products | 23 | 10.6 | 18 | 28.1 | Waste management and remediation services |
| Plastics and rubber products | -235 | -39.0 | -39 | -38.0 | Publishing industries (except internet) |
| Administrative and support services | -267 | -6.4 | -53 | -14.0 | Computer and electronic products |
| Transportation equipment manufacturing | -281 | -14.7 | -54 | -20.4 | Primary metals and fabricated metal products |
| Real Estate | -289 | -14.0 | -57 | -40.2 | Furniture and fixtures manufacturing |
| Primary metals and fabricated metal products | -303 | -19.3 | -73 | -18.6 | Real Estate |
| Finance | -428 | -10.9 | -80 | -27.5 | Textile, apparel, and leather manufacturing |
| Retail trade | -524 | -3.9 | -80 | -6.1 | Professional and technical services |
| Wholesale trade | -546 | -15.4 | -99 | -4.3 | Retail trade |
| Transportation and warehousing | -632 | -12.3 | -136 | -19.5 | Finance |
| Construction | -1 952 | -22.6 | -826 | -28.0 | Construction |

Note: Industries are derived from the Census 2002 Classification.
Sources: Current Population Surveys.

As OECD report (2007), around 2000, while number of nurses working in OECD countries are fifth largest (22,786) followed by Philippines (110,774), U.K (45,638), Jamaica (31,186) and Germany (31,623), expatriation rate is merely 2.6 percent while Jamaica is 87.7 percent and Philippines is 46.5 percent. Case of doctors is the same-number of doctors working in OECD countries is 55,794 that absolutely larger than other countries, expatriation rate is only 8 percent. Means, number of health professionals are working abroad do not seem to have been particularly affected by domestic workforce shortage.¹⁹ One medical professional trained from the west said in Mullan's research '*civil corruption, the absence of good regulation of hospitals, the lack of credentialing, and the generally uncontrolled and uncoordinated health care system*' as a problem.

So it is difficult to say that India is enthusiastic to utilize their health care professionals' ability as much as IT experts. While there lots of articles dealing with return of brains to India, it should be made clear that most of returnees are IT professionals. Pharmacy and healthcare, automobiles and manufacturing and financial services sectors are also the major employer of NRI returnees, nonsystematic work process make trained workforce hesitate to comeback and those industries are not yet developed as IT.²⁰ The lack of opportunity in healthcare industry can be interpreted as lack of opportunity for women for those jobs are women intensive.

¹⁹ OECD 2007, Immigrant Health Workers in OECD countries in the Border Context of Highly Skilled Migration, International Migration Outlook: SOPEMI

²⁰ /072011, IT professionals moving back home from Silicon Valley, NRIs worldwide

Table 11: Characteristics of migrant women aged 15 and over by origin, 2005/06

| Region of origin | Foreign-born population 15+ (thousands) | | | Women (%) | Low-educated (%) | | | High-educated (%) | | |
|--|--|---------------|---------------|--------------|------------------|-------------|-------------|-------------------|-------------|-------------|
| | Men | Women | Total | | Men | Women | Total | Men | Women | Total |
| Africa | 4,757 | 4,189 | 8,947 | 46.8 | 39.6 | 45.6 | 42.4 | 29.7 | 25.2 | 27.6 |
| Morocco | 1,167 | 939 | 2,106 | 44.6 | 57.3 | 64.3 | 60.4 | 16.5 | 13.4 | 15.1 |
| Other North Africa | 1,302 | 1,102 | 2,403 | 45.8 | 42.7 | 50.0 | 46.0 | 26.2 | 21.7 | 24.1 |
| Sub-Saharan Africa | 2,288 | 2,149 | 4,437 | 48.4 | 28.7 | 34.9 | 31.7 | 38.6 | 32.4 | 35.6 |
| Asia | 9,750 | 10,675 | 20,425 | 52.3 | 21.4 | 25.3 | 23.4 | 46.3 | 42.2 | 44.2 |
| China | 1,253 | 1,470 | 2,723 | 54.0 | 24.4 | 27.4 | 26.0 | 46.8 | 42.9 | 44.7 |
| India | 1,462 | 1,297 | 2,759 | 47.0 | 13.9 | 19.4 | 16.4 | 66.9 | 59.6 | 63.5 |
| Philippines | 965 | 1,526 | 2,491 | 61.3 | 12.8 | 14.3 | 13.8 | 49.4 | 53.5 | 51.9 |
| Other Asia | 6,070 | 6,382 | 12,452 | 51.3 | 24.0 | 28.7 | 26.4 | 40.8 | 35.9 | 38.3 |
| South America and the Caribbean | 12,761 | 12,268 | 25,030 | 49.0 | 47.3 | 43.2 | 45.3 | 15.2 | 18.7 | 16.9 |
| Mexico | 6,018 | 4,762 | 10,780 | 44.2 | 60.4 | 58.7 | 59.7 | 6.7 | 8.4 | 7.4 |
| Other South America and the Caribbean | 6,717 | 7,480 | 14,197 | 52.7 | 35.4 | 33.2 | 34.2 | 23.0 | 25.4 | 24.2 |
| North America | 971 | 1,105 | 2,076 | 53.2 | 15.9 | 15.3 | 15.5 | 49.7 | 47.9 | 48.7 |
| Oceania | 617 | 635 | 1,251 | 50.7 | 20.2 | 21.4 | 20.8 | 32.1 | 34.0 | 33.0 |
| Europe | 15,878 | 17,484 | 33,362 | 52.4 | 33.3 | 37.8 | 35.6 | 26.4 | 25.0 | 25.7 |
| EU 27 | 10,455 | 11,641 | 22,096 | 52.7 | 28.8 | 33.0 | 31.0 | 30.4 | 27.9 | 29.1 |
| Turkey | 4,058 | 4,605 | 8,663 | 53.2 | 35.8 | 39.7 | 37.9 | 21.8 | 22.9 | 22.4 |
| Other Europe | 1,365 | 1,237 | 2,603 | 47.5 | 59.9 | 73.6 | 66.4 | 9.9 | 6.4 | 8.2 |
| Total | 44,774 | 46,402 | 91,176 | 50.9 | 34.9 | 36.4 | 35.6 | 28.4 | 27.9 | 28.2 |

Note: Excluding persons with unknown education.

Source: DIOC 2005/06

TABLE 4: INDIAN PERSONS AND WOMEN AMONGST SCIENCE AND ENGINEERING FACULTY IN U.S. HIGHER EDUCATION, BY TEACHING FIELD, 1997

| Region of origin of faculty | Total S&E | Physical Sciences | Life Sciences | Math & Computer Sciences | Social Sciences | Engineering |
|-----------------------------|-----------|-------------------|---------------|--------------------------|-----------------|-------------|
| Total Science & Engineering | 224,707 | 37,020 | 53,055 | 44,375 | 65,509 | 24,748 |
| % | (100.0) | 100.0) | (100.0) | (100.0) | (100.0) | (100.0) |
| U.S. origin | 179,689 | 29,598 | 45,502 | 32,976 | 55,870 | 15,753 |
| % of total faculty | (80.0) | (80.0) | (85.8) | (74.3) | (85.3) | (63.7) |
| Foreign origin | 45,009 | 7,422 | 7,553 | 11,399 | 9,639 | 8,955 |
| % of total | (20.0) | (20.0) | (14.2) | (25.7) | (14.7) | (36.3) |
| Female | 6,447 | 1,156 | 2,043 | 1,182 | 1,845 | 221 |
| % of foreign persons | (14.3) | (15.6) | (27.0) | (10.4) | (19.1) | (2.5) |
| Asian origin | 23,559 | 3,541 | 3,250 | 6,315 | 4,630 | 5,823 |
| % of total | (10.5) | (9.6) | (6.1) | (14.2) | (7.1) | (23.5) |
| % of foreign | (52.3) | (47.7) | (43.0) | (55.4) | (48.0) | (65.0) |
| Female | 3,104 | 612 | 826 | 730 | 876 | 60 |
| % of Asian persons | (13.2) | (17.3) | (25.4) | (11.6) | (18.9) | (1.0) |
| Indian origin | 6,876 | 688 | 1,014 | 2,086 | 1,491 | 1,597 |
| % of total | (3.1) | (1.9) | (1.9) | (4.7) | (2.3) | (6.5) |
| % of foreign | (15.3) | (9.3) | (13.4) | (18.3) | (15.5) | (17.8) |
| % of Asian | (23.2) | (19.4) | (31.2) | (33.0) | (32.2) | (27.4) |
| Female | 832 | 115 | 320 | 289 | 94 | 14 |
| % of Indian persons | (12.1) | (16.7) | (31.6) | (13.9) | (6.3) | (0.9) |
| % of Asian female | (26.8) | (18.8) | (38.7) | (39.6) | (10.7) | (23.3) |
| % of foreign female | (12.9) | (9.9) | (15.7) | (24.5) | (5.1) | (6.3) |

Source: Computed and compiled by the author from National Science Foundation, *Science and Engineering Indicators 2000*, vols. 1 & 2, Tables 4-46 to 4-48., United States.

Note: Data includes first job of post-secondary teaching at four-year colleges and universities in the U.S.; does not include faculty in two-year or community colleges, or those who teach as a secondary job.

Even women have the knowledge related to science and engineering, the opportunity door is narrow for them. As two of tables above show, Indian Women in the U.S are most highly educated among migrant women in the U.S. Their professional character is indicated by the rate of Indian women amongst science and engineering faculty in U.S. To compare with rest of Asian women, the rate of Indian women who are in quite abundant that one of five foreign faculties are from India. Especially they are considerable in Math & Computer Sciences that Indian women are almost 40 percent of among from Asian females and 24.5 percent among all foreign females. However their rate is few in engineering which is welcomed sectors from India, it might be better to stay in the U.S if she is pursuing career.

Another migrants group who are not having the advantages from homeland is students. Different with women who are supposed to 'excluded', students are 'excluding' themselves from the opportunities.

Students as regarded as semi-finished human capital (Majumdar 1994, Cited From Khadria 2007), have high possibility to contribute to homeland's development as well as receive the benefits once they return. Some research about foreign students' return plan, students in the higher degree shows low intention to go back to homeland. Stay rates by country origin vary considerably, with about 20-25% of doctoral completers from Brazil and Indonesia indicating plans to stay in the United States, but over 80% of those from China and India and between 60 and 70% from Peru, Iran and Nigeria. (OECD 2009, 172)

Potential and effective mobility of US doctoral graduates

| | Percentage of students who intended to stay in US after studies | Percentage of students who had received a firm offer of work from a US employer |
|--------------|---|---|
| India | 81.5 | 60.5 |
| China | 80.5 | 57.5 |
| Nigeria | 64.5 | 32.5 |
| Argentina | 61.5 | 50.0 |
| Israel | 52.5 | 43.5 |
| Turkey | 51.0 | 31.5 |
| Chile | 49.0 | 29.0 |
| South Africa | 30.0 | 28.0 |
| Brazil | 27.5 | 20.0 |

Source: OECD (2000) and Tremblay (2004).

While India is well known for strong family ties, students in the U.S. are showing low intention of return to home, where their family is. Study by Alberts and Hazen (2005) shows that among the foreign student in the U.S, Indians students have belief that a degree from a US university would offer their job opportunities back home. About the return intention, one Indian female student Romi said, in the U.S, women have the greater freedoms to enjoy their life, and India is too strict.

“Of course I enjoy the freedom here. If I don’t want to cook, I can ask my husband to cook or I can order pizza; in India that wouldn’t work.”

Another student Charu’s interview indicates that how young Indian feels about their country, and family relationship.

In the four years I have been here I feel that there is nothing to go back to. (...) To go back would be going back into the folds of the community. I think in India I live for my family. Here I live for me.”

From the statement above, it reveals that sense of individualism becomes reinforced that while they have a role as a student in India, in the U.S, they can concentrate on their own life. So once they migrate, the sense of attachment becomes fragile. Except 2009, India keeps the top ranking as a sending of students to the U.S. (Open doors annual report, 2010).

According to MPI research the Indian foreign born made up 9 percent all foreign academic- student admissions to the United States in 2009. Out of 895,392 foreign academic-student (F-1visa) admissions, 80,251 or 9.0 percent were from India. The

2009 number of Indian-born academic student admissions was lower than in 2008 (85,067) but higher in 2007(74,276). Lots of Indian students are leaving but the reason of low return intention is due to the opportunities in the U.S. The data of the NSF study shows that about 47 percent of the foreign student on temporary visas who earned doctorates in 1990 and 1991 were working in the United States in 1995. In turn, the majority of the foreign doctoral recipients in 1990-91 coming from India (79 percent) and China (88 percent) were still working in the U.S. in 1995.²¹

While foreign students were coming for academic purpose, immigration law of US is generous to students that allowing them to work in the U.S after completing their degrees in the U.S. So, by taking up employment in the U.S, students are not needed to go back although they are no more in student status and start to build career in the U.S. To support this, U.S has rapidly increased the number of temporary visas granted to the graduates of its own universities. This route finally makes the way to permanent residence for qualified international students (Rizvi, 2006).

Fail to meet the Psychological Satisfaction

To change the angle to returnees, we can ask, whether they are satisfied with their decision to return or not. While NRIs come back to home, they might have their own people, social circle and wanted to serve home country, not always hospitalities are waiting for returnees.

Since they 'left' their 'homeland' pursuing for the 'opportunities', returnees and sometimes face the disgrace from other Indians. Called as 'non required Indian' or 'not real Indian', returnees are treated as turncoat in the society. It can be explained the reason of returnees are mostly toward big cities that have less prejudice against them. Since the big cities are familiar with westernized culture and try to be more global, have quite open mind to the returnees. Returnees themselves also make the NRIs clusters to share the experiences, information and emotional things to adopted and assimilated in home country which is not as before. One interview with a skilled NRIs woman reveals the difficulties to live again in the India. She wants to save

²¹ Solimano.A, 2002, "Globalizing talent and human capital: implications for developing countries", United Nations Publication

money and return to India to maintain her culture intact but finally she found it difficult to adjust back home after having got used to the lifestyle abroad.²²

The role of government revealed from lots of studies that they stimulating the feelings of indebtedness, patriotism, and belonging among the diaspora. With the changed perspective toward diaspora, 'from Non Reliable Indians based on territory and state building to sons of the soil, based on ethnicity '. Also the High Level Committee (HLC) report defined the diaspora as : "*Indians who migrated to different parts of the world and have generally maintained their Indian identity*" (HLC 2001).

This approach leads the substance investment from the diaspora under the name of 'nationalism' to contribute for poverty reduction and raise up the underdevelopment part of India. Then, what does government of India do for returnees? In many cases, as Portes (1999:467) notes:

"sending governments do not want their immigrants to return, but rather to achieve a secure status in the wealthy nations to which they have moved and from which they can make sustained economic and political contributions in the name of patriotism and home town loyalty".

In India's case, India' Ministry for Overseas Indian Affairs (MOIA) was established in 2004 to address the lack of government policy coordination on migration. The ministry has programs that reach out to the Indian diaspora, in particular to youth. One program, Know India, is a three-week internship to promote social, economic, and cultural awareness of India among the second and subsequent generations of emigrants and finally let them participate in economic progress of the country has made. However the study from the MPI notes that only few second generations know about this program.

Another initiative, the Scholarship Program for Diaspora Children, is designed to assist emigrants in enrolling their children in Indian institutions of higher education. Other activities range from hosting an annual diaspora conference to facilitating diaspora investment. However those programs are far from being able to fulfill the

²² S.Uma Devi,2002, Globalization, Information technology and asian Indian women in U.S, EPW, PP. 4423

desire of first generation to let their second generation understand India. Also, the internet website itself is not working properly that there are limit to get the exact information.

According to Pravasi Bharatiya(2011), the demand from the home country to their overseas citizens were various, include health, education, technology, medical, and the development of North East area that would facilitate their investment in every part of India while the demand from the overseas citizen was only having the proper voting rights. However even on that request, NRIs meet the following reactions:

“they don’t pay taxes in India”;
“the danger of “instability” forced by their “foreign funds”
“they cannot understand the needs of the people of his constituency”;

NRIs themselves, facing the difficulties in home country decide that instead of returning back, eventually remained abroad, adopted a foreign citizenship. But still hang on the “myth of return,” continually seeking to trade off physical reincorporation for long-distance economic alliance, mostly in the form of massive philanthropic investments and try to give back with moral obligation and loyalty.

Government of India misuse NRI’s loyalty that what they want from the returnees are their economical impact on India. Therefore, fail to meet the satisfaction, facing just too many burdens make them to hesitate to return. Just as when India faced a huge balance of payments crisis in 1991, government of India looked NRIs as a problem solver. To the government, NRIs were looked upon as a means to 'bail India out of its economic crisis' and they 'had the *duty* to rescue their mother country' (Lall 2001:169, cited from Sinha and Kerkhoff 2003)

Economic recession of host country

Generally immigrants are at risk of losing their job during economic downturns in the host country. In reverse, when the host country meets the economic upturn, the gate entry to the host country becomes wider to foreign workers.

In the economic history of the U.S, US faced several crises since the end of World War II, like the Great Depression in 1930s, fail of monetary policy and Black Monday during 1980s, collapse of junk bonds and financial crisis in 1990s²³, and economic recession during 2008-2009.

It is since 2000 that the social and economic conditions in the US affected on number of NRIs noticeable. For example, the number of NRIs was increased because there were demands of skilled NRIs in IT field. Scare of Y2K and Internet- telecom boom created opportunities for computer expert. It was a opportunity to Indian firms that skilled Indians solved the Y2K problem and NRIs proven their skills to the world. So when the US had increased its H-1B quota from 65,000 in 1998 to 130,000 in 1999 and then to 195,000 in 2003 with IT boom, majority of H-1B visa was approved to Indian.

However, due to backwash of 9/11 attack brought fierce depression in US economy that NRIs' unemployment reached 5.7% in 2001. Also, with IT bubble, flocks of professionals were sent back to India, having lost their H-1B visa contracts (Jonker 2008). *New York Times* reported there were 35,000 "returned nonresident" Indians in the Indian city of Bangalore in 2004 and *The Economist* noted that during 2003-05, approximately 5,000 tech-savvy Indians with more than five years' experience in America returned to India (Jain, 2010).

Taking into account that the H-1B programe continues to meet the needs of business in a global economy while maintaining a balance of protections for US workers, the weakness of NRIs status is revealed by these cases.

Recently, the study about China and India highly skilled workers in the Canada and the US reveals returnee's profile. Their finding was it is common among returnees to have master or PhD degrees, almost 80 percent of them regard home countries offering better career opportunities. Socially, quality of life and family reason are also strong pulling from homeland said 90 percent of Indians.

²³ <http://www.rediff.com/money/2008/feb/14spec.htm>

On the other hand, a there are believe that 32% of the Indian students that home country offers better opportunities than the U.S. Since the U.S is still attracting skilled migrants, economic recession in recent year changed these situation, derivate reverse of drain of brain to brain gain for the origin countries. About the increasing return flow of highly-skilled migrants are reported as the better opportunities in homeland but it is as well as consequence of the global recession. While media in India focused on homeland's opportunities, the reason to make their opportunities greener is economic recession in the U.S.

As we see from chapter two, the main route for Indians to the U.S is temporary working visa, H-1B. US also relies heavily on the temporary migrant program, H-1B visa, to recruit skilled international migrants. Once get the H-1B visa, able to remain in the US for up to six years and many find ways to adjust their status to permanent residency. Achievement of Green card is through their employers that they are applying instead of workers. Therefore, skilled workers who might have the visa, it is reinforcing indentured servitude (SF Chronzicle, cited from Devi 2002:4427). Allowing migrants status to legal permanent residence is depends on employers and it gives leverage and makes an unequal employment relationship between skilled workers and employers. Therefore as the U.S economy is in recession, high possibility of loss the job for their temporary character, grant more power to employer and have to keep work under unfair condition. This work contract may not use their skills adequately, means many are employed in occupations that utilize their human capital and technical skills; but without permanent residency. They are disfranchised politically and the long wait for green card application processing makes H-1B visa holders and their family fatigue²⁴ that make them to think heading back to home is better.

Manjunath, who also co-founded the Returned NRI Association, says,

“with the crash in financial systems and the stock market, the West is struggling to cope up with its inflation, unemployment and the GDP growth.

²⁴ Wei Li and Lucia Lo, 2009, New Geographies of Highly-skilled Chinese and Indian Migrations?, in Annual Conference 2009Times? Economic Crisis, geo-political transformation and the emergent migration order, Centre on Migration, Policy and Society, University of Oxford

Many NRIs, who have lost their jobs in the west, are now seeking the safety of a secure job in India without compromising much on the job satisfaction and other comforts.”²⁵

²⁵ Anupama Ramakrishnan, “Back home again”
<http://www.deccanherald.com/content/184181/back-home-again.html>

Chapter V

Conclusion

Throughout the study, we see the movement of Indian brains that how they left and comeback to India to observe the return of NRIs can be referred as 'brain gain'. To examine, we looked not only economic aspect, but also social aspect and political aspect. While the main reasons of return are emotional ties and economical opportunities, what satisfy their purpose is strongly depends on government.

We can't deny that when Indians left India is due to economical purpose. From the chapter 2, we saw that since the way of success are opened to Indians, they choose to go the U.S. New life in the U.S is quite successful for NRIs that they got the reputation as 'model minority'. They get the economic success, had political power and enjoy the culture of India even though they are living as minority. Connection with homeland was also good that they went to homeland frequently for the business trip and attending to family events or contact through e-mail or phone. Also they get the news of India through the internet and also sent their earnings to India whatever the purpose is. Since their life in the US is successful, it seems like there is no reason to comeback.

Through the previous studies shows the highly skilled migrants are more likely to stay in the host country and in case of India also show the similar tendency. If they are returning, then it is temporary visit rather than permanent return. However, NRIs are return with permanent intention to settle down because their nationality is belongs to India, they are citizens of India.

Since India faced economic boom in 1990s, increasing demand of skilled workers makes government to seek their qualified NRIs to return. As it proved by increasing amount of remittance, working for India and keeping sense of Indianness in themselves and second generation, NRIs show their loyalty to India and return with expectation that home country is the last station of their migration. Therefore, citizens home should be the place they can go whenever they want, feel as 'home, sweet home'

and their return movement should not be regarded as an economic matter.

However, their return patterns and profile of returnees indicate that a successful return is limited to a specific group of NRI and the sense of Indianness or belonging is difficult to meet though they returned. What stands out from this phenomenon is that the Indian government is not ready to accept and use their returnees and their skills. Furthermore, still the most of skilled NRIs are remaining in the US; it is an impetuous approach that India is facing brain gain. The further efforts by the government of India are required for the real brain gain. Based on the character of returnees, I suggest some of the role to the government as Edward JW Park, director of the Asian Pacific American Studies Program at Loyola Marymount University in Los Angeles said, it is not just the individuals who are making decisions, it's the government who enacts strategic policies to facilitate things.

First, diversity in developing industry is required. Since India focused on the IT industry, now they are at a global level that becomes an NRI's destination who thought before there were no opportunities in India. Still in India, lots of knowledge-based industries are not developed as IT industry level. From the media, demand for skilled workers is noted in other industries as pharmacy, healthcare, manufacturing, banking and financial services are inquiring of skilled workers, especially NRIs who have global experience. Development of those selected for sure leverage India's economic level and provides better and wider opportunities to skilled NRIs in this area. Students also can see the various job opportunities in home, going abroad is no more necessary for their future success.

Second, make a special inclusive scheme for women. While women are half of their skilled NRIs and highest educated among the immigrants women in the U.S. The low rate of women's return intention can be interpreted as women are enjoying their professional life at least better than in India and what makes the difference is gender equal culture. Even in India, number of working women has increased but most of them are working in low level jobs. This happens because in India, the role of women that women themselves tried to concentrate on their home. Therefore women, come back to India might have high possibility to quit their job. So for women who want to work, the choice can be two - to get the job that required minimum level of skills so

that without struggling in the office with heavy work, women go back to home in regular time, and do housework. However such of managing the life between housework and office is difficult and is wasting women's skills which have lots of potential. Therefore, in industrial level, and government level, special scheme for women is required that let them work in the workplace where match with their skills and concentrate on work, in India also.

Third, intensive care for the second generation would promote NRI's return. While government of India is doing some kind of programs for second generation such as Know India Program, only few people knows it and not that attractive to fulfill the expectation of returnees and return planners. This leads psychological displeasure with homeland that makes returnees to migrate again or just to keep stay in the host country for the return planners. Although they returned, without knowing about India and unfamiliar with Indian culture and society would make them just as foreigner. But what we have to remember is skilled NRI's second generation also having the high human capital, they are future of skilled professionals who can lead to India by their permanent return. Furthermore, knowing India widely and deeply would lead them to be an agent of bridging and tighten the relation between India and U.S not only in economic terms, politically but also in socio-cultural ways if they know about India in the field. Therefore, more than just providing the fact or showing the sightseeing of India, let them have experience by self with other NRIs group will make them to understand India in effect.

Finally, the elastic way of thinking is required as NRI's have character of trans-national migrants. Whenever they want, they can go abroad again. It can be the U.S or another country. However, since NRIs keep show their heart toward India, government should be always ready to welcome them. Especially about dual citizenship, India still not permits. If India regards overseas Indians as their real citizens then its better to open their political border and share the economic and socio-cultural elements together, because they are not Indian when they are only bring the profit to India.

Through this study about the return of skilled NRIs who are returning with knowledge, idea and skills that bring with them great expectation from their motherland and vice

versa also. As this present juncture it would be difficult for India to accept all the return migrants with all their skills, but in due course as India's economy progresses it would be possible for her to accept them and leverage their resources to the benefit of the country as well as their personal well being. However to grab transnational emigrants' heart it is difficult to India that their return is in partial.

References

- Bhattacharya Gauri. 2008. “The Indian Diaspora in Transnational Context: Social Relations and Cultural Identities of Immigrants to New York City”, *Journal of Intercultural Studies*, 29: 1, pp.65 -80
- Brown. Judith. M. 2008. *Global South Asians: Introducing the Modern Diaspora*, Cambridge University Press.
- Communicating Effectively about Migration, World Migration Report 2011, International Migration Organization
- Dumont, Jean-Christophe, Spielvogel, Gilles, Widmaier, Sarah. 2010. “International Migrants in Developed, Emerging and Developing Countries: An Extended Profile”, OECD Social, Employment and Migration Working Papers No.11 ,
- Elizabeth Chacko.2007, “From brain drain to brain gain: reverse migration to Bangalore and Hyderabad, India’s globalizing high tech cities”, *GeoJournal* Vol.68, pp. 131–140
- Hammar, T., Brochmann, G., Tamas, K., and Faist, T., 1997. “International Migration, Immobility and Development: Multidisciplinary Perspectives”, *Berg*.
- Harvey, W,S. 2011. British and Indian Scientists Moving to the United States”, *Work and Occupations*. Vol. 38(1), pp. 68
- HLC. 2001. Report on the India Diaspora. High Level Committee On Indian Diaspora, Dehli: Indian council of world affairs
- Heike C. Alberts and Helen D. Hazen. 2005. “There are always two voices: International Students’ Intentions to Stay in the United States or Return to their Home Countries” *International Migration* Vol. 43 (3). pp.131-154

Homeland Security, 2010 Yearbook of Immigration Statistics

International Migration Report 2002, New York United Nations Publication

International Dialogue on Migration Series. No. 7, "Managing the movement of People: What can be Learned for Mode 4 of the GATS?", Published by Migration Policy, Research and Communications Department (MPRC) of the International Organization for Migration

International Migration Policy Programme (IMP) in collaboration with UNFPA(2004), 'Meeting The Challenges of Migration: Progress Since the ICPD, P. 96

Jain.S., 2010. "For love and money: Second generation Indian Americans 'Return' to India", *Migration Policy Institute*

Jeetendra D. Soni, 2009. "Brain Drain to Brain Circulation-In Indian context." Lecturer in Geography, Government Degree College, Syalde, Almora, Uttaranchal, INDIA

Jonker.K. 2008. "Comparative Study of Return Migration Policy- Targeting Highly Skilled in Four Major Sending Countries" MIREM Project

Kapur, Devesh. 2003. "Indian Diaspora as a Strategic Asset, *Economic and Political Weekly*, Vol. 38, No. 5, pp. 445-448

Khadria,B. 2002. "Skilled Labour Migration from Developing Countries: Study on India". International Migration Papers 49.

_____. 2007. "Diasporas in Development", *Asian Population Studies*, Vol.3(2), pp.103-114

_____.& Meyer, Jean-Baptist. 2010. "The Role of Migration in Re-structuring Innovation Systems' Final Draft for PGA Discussion on 5th Nov in Mexico City

Mary Haour-Knipe and Anita Davies, 2008, "Return Migration of Nurses",
International Centre on Nurse Migration

Masud Chand. 2009. "Leveraging Diaspora Human Capital: Brain Circulation of the
Indian Diaspora", ASAC Niagara Falls

OECD AT 50 – INTERNATIONAL MIGRATION OUTLOOK: SOPEMI 2011

OECD 2009, International Migration Outlook, Special Focus: Managing Labour
Migration beyond the Crisis, SOPEMI

Osten Wahlbeck. 2002. "The concept of diaspora as an analytical tool in the study of
refugee communities", *Journal of Ethnic and Migration Studies*. Vol.28(2),
pp.221-238

Portes Alejandro, 1976, "Determinants of the Brain Drain", *International Migration
Review*, Vol. 10(4)

Rizvi.F., 2005. "Rethinking "Brain Drain" in the Era of Globalisation", *Asia Pacific
Journal of Education*, Vol. 25(2), pp. 175-192

Smitha Radhakrishnan. 2008. "Examining the 'Global' Indian Middle Class: Gender
and Culture in the Silicon Valley/Bangalore Circuit", *Journal of Intercultural
Studies*, Vol.29(1), pp.7-20

Solimano.A, 2002, "Globalizing talent and human capital: implications for developing
countries", Santiago, Chile, August 2002 , United Nations Publication

Sunita Reddy and Imrana Qadeer, 2010, "Medical Tourism in India: Progress or
Predicament?" *Economic & Political Weekly* May 15, 2010 Vol. xlv (20)

Taeube,F and Sonderegger, P. 2009. "Cluster Lifecycle and Diaspora Effects: Evidence
from the Indian IT cluster in Bangalore", Paper to be presented at the
Summer Conference 2009 On CBS - Copenhagen Business School

Tambar, U., ed. 2007, 'Movement of Global Talent: The Impact of High Skill Labor Flows from India and China', *The Trustees of Princeton University*.

U.S. Citizenship and Immigration Services, 'Annual Report on Characteristics of Specialty Occupation Workers (H-1B) for Fiscal Year 2009', published by U.S. Department of Homeland Security

Venkatraghavan, Deepa Economic times, "5 sectors in India that are hiring NRIs and expats right now" in Economic Times

Vertovec, S.1997. "Three meanings of diaspora, exemplified among South Asian religions', *Diaspora*, Vol. 6(3): pp. 277-99.

Wei Li and Lucia Lo, 2009, New Geographies of Highly-skilled Chinese and Indian Migrations?, in Annual Conference 2009 "Times? Economic Crisis, geopolitical transformation and the emergent migration order", Centre on Migration, Policy and Society, University of Oxford

World Migration Report: Costs and Benefit of International Migration 2005, International Organization for Migration

Web sits:

Batalova, J. and Terrazas, A. 2010. "Frequently Requested Statistics on Immigrants and Immigration in the United States". *Migration Policy Institute*. Available in URL: <http://www.migrationinformation.org/feature/display.cfm?ID=818>
Accessed on 4th June, 2012

Goyal, Malani. NRIs return to India: What's driving this rush? In Economic Times
URL:http://articles.economictimes.indiatimes.com/2011-06-27/news/29705996_1_start-ups-nris-job-market/2 accessed on Jun 27, 2011, at 04.33am

Trippl, M., & Maier, G., 2007. "Knowledge Spillover Agents and Regional

Development”, DYNREG, Working Papers
URL: http://articles.economictimes.indiatimes.com/2012-02-02/news/31013571_1_healthcare-sector-clinical-research-infrastructure-sector accessed on Feb 2, 2012, at 12:23 am

<http://www.rediff.com/money/2008/feb/14spec.htm>

Bibliography

- Adkoli B. V., 2006, “Migration of Health Workers: Perspectives from Bangladesh, India, Nepal, Pakistan and Sri Lanka”, Regional Health Forum, Vol 10, No 1
- Agarwal Vinod B., 1983, “Foreign Students' Demand for United States Higher Education”, Eastern Economic Journal, Vol. 9, No. 4, p.p. 309-323
- Agarwal Vinod B., Winkle Donald R., 1984, “Migration of Professional Manpower to the United States”, Southern Economic Journal, Vol. 50
- Agarwal Vinod B., Winkler Donald R., 1985, “Migration of Foreign Students to the United States”, The Journal of Higher Education, Vol. 56, No. 5, p.p. 509-522
- Ahmed S. Amer, Walmsley Terrie L., 2008, The Liberization of Temporary Migration : India’s Story”
- Alarcon Rafael, 1999, “Recruitment Processes Among Foreign-Born Engineers and Scientists in Silicon Valley”, American Behavioral Scientist
- Alberts Heike C.and Hazen Helen D., 2005, “There are always two voices: International Students. Intentions to Stay in the United States or Return to their Home Countries”, International Migration Vol. 43
- Anupama Tadamarla, 2011, Recrutments Process Outsourcing: Key Changes and Opportunies for Indian Tanlent, Vol 1, No.3

- Audrey Kobayashi, David Ley, 2005, "Back to Hong Kong: return migration or transnational sojourn?", Global Networks, Blackwell Publishing Ltd & Global Networks Partnership
- Baker Bryan c., 2007, "Trends in Naturalization Rates", DHS Office of Immigration Statistics homeland security
- Bhandari Laveesh, Malik Payal, 2008, India's Talent Migration Whitepaper Version
- Bhattacharya Gauri, "The Indian Diaspora in Transnational Context: Social Relations and Cultural Identities of Immigrants to New York City", Journal of Intercultural Studies
- Biaoa Xiang, 2004(Aug), "A South Perspective Towards an Emigration Perspectives", Economic and Political Weekly
- Biaoa Xiang, Shen Wei, 2009, "International Journal of Educational Development, International student migration and social stratification in China", International Journal of Educational Development
- Bidisha Biswas, 2010, "Negotiating the nation: diaspora contestations in the USA about Hindu nationalism in India", Nations and Nationalism 16 (4), pp. 696–714
- Brinkerhoff Jennifer M., 2009, "Creating an Enabling Environment for Diasporas' Participation in Homeland Development", International Organization for Migration
- Brosius Christiane, Yazgi Nicolas, 2007, Constructions of Indian Diasporic Experiences 'Is there no place like home?' : Contesting cinematographic', Contributions to Indian Sociology
- Burki Shahid Javed and Swamy Subramanian, 1987, "South Asian Migration to United States Demand and Supply Factors", Economic and Political Weekly,

- Bussolo Maurizio and Whalley John, 2003, "Globalization in Developing Countries: The Role of Transaction Costs in Explaining Economic Performance in India", Working Paper No. 219, OECD Development Center
- Campbell, E. K. (2001). Preference for emigration among skilled citizens in Botswana. *International Journal of Population Geography*, 7, 151-171.
- Capuano Stella, 2009, "Student Mobility and Highly Skilled Migration: Theory and Evidence", Università degli Studi di Torino
- Castles Stephen, 2002, "Migration und Community Formation under Conditions of Globalization", *IMR Volume 36 Number 4*, University of Oxford
- Castles Stephen, 2007, "Migration and Development: Perspectives from the South", International Organization for Migration
- Chacko Elizabeth, 2007, "From Brain Drain to Brain Gain: Reverse Migration to Bangalore and Hyderabad, India's globalizing high tech cities.
- Chakravartty Paula, 2000," The Emigration of High-Skilled Indian Workers to the United States: Flexible Citizenship and India's Information Economy", Working Paper 19
- Chand Masud, 2009, "Leaveraging Diaspora Human Capital : Brain Circulation of The Indian Diaspora", ASAC
- Chanda Rupa, 2009, "The Skilled South Asian Diaspora and its Role in Source Economies", ISAS Working Paper No. 34
- Charusheela S., 2007. "The Diaspora at Home" *Cultural Dynamics*, Vol.19, No. 2/3, pp. 279-299, Sage publication

- Commander, S., Chanda, R., Kangasniemi, Mari, Winters, L. Alan. 2004. "Must Skilled Migration Be a Brain Drain? Evidence from the Indian Software Industry", *Institute for the Study of Labor*, Discussion Paper No. 1422
- Das Gupta, Monisha. "What Is Indian about You?: A Gendered, Transnational Approach to Ethnicity" *Gender and Society*, Vol. 11, No. 5 (Oct., 1997), pp. 572-596
- Dasgupta Simanti Das. 2008, "Success, Market, Ethics: Information Technology and the Shifting Politics of Governance and Citizenship in the Indian Silicon Plateau", *Cultural Dynamics* Vol.20. No. 3. pp. 213-244, Sage Publication
- Dasgupta, S., Das. 1998, "Gender Roles and Cultural Continuity in the Asian Indian Immigrant Community in the U.S.", *Sex Roles*, Vol.37, No. 11/12, pp. 953-974
- Department of Economic and Social Affairs International Migration Report 2002 United Nations New York, 2002
- Devi S. Uma, 2002, "Globalisation, Information Technology and Asian Indian Women in US", *Economic and Political Weekly*, Vol. 37, No. 43, pp. 4421-4428
- Dickinson Jen, Bailey Adrian J., 2007, "(Re)membering Diaspora: Uneven Geographies of Indian Dual Citizenship", University of Leeds.
- Docquier Frederic, 2007, *Skilled Migration: The Perspective of Developing Countries* Bar Ilan University, Stanford University.
- Docquier Frederic, Lohest Olivier, and Marfouk Abdeslam, 2007, "Brain Drain in Developing Countries", *The World Bank Economic Review*, Vol. 21, No. 2, pp. 193–218
- Domingues Manon, Santos Dos, Postel-Vinay Fabien, *Econ J. Popul*, 2003,

“Migration as a source of growth: The perspective of a developing country”

Dreher Axel, 2005, “Student Flows and Migration: An Empirical Analysis” Working Paper No. 1490, Institute for the Study of Labor

Dumont Jean-Christophe, Spielvogel Gilles and Widmaier Sarah, 2010, “International Migrants in Developed, Emerging and Developing Countries: An Extended Profile, Directorate for Employment, Labour and Social Affairs”, Working paper, OECD Social, Employment and Migration

Dustmann Christian and Yoram, “Return Migration: Theory and Empirical Evidence”, University College London

Elkins David J., 1997, “Globalization, Telecommunication, and Virtual Ethnic Communities”, *International Political Science Review*, Vol. 18, No. 2, pp. 139-152

Ewers C. Michael, Lewis Joseph. M., Michael, 2008 , *Risk and the Secularisation of Student Migration to the United States*, Blackwell Publishing Ltd

Finch Tim, Latorre Maria, Pollard Naomi and Rutter Jill, 2009, “Shall We Stay Or Shall We Go? Re-migration trends among Britain’s immigrants”, Institute for Public Policy Research

Findlay Allan M. and Stam Alexandra, 2006, “International student migration to the UK: Training for the global economy or simply another form of global talent recruitment?”, Centre for Applied Population Research University of Dundee

Findlay Allan M., 2010, “An Assessment of Supply and Demand-side Theorizations of International Student Mobility”, *International Migration* Vol. 49 (2)

Foner Nancy, 1997, “The Immigrant Family: Cultural Legacies and Cultural Changes” *International Migration Review*, Vol. 31, No. 4,

Gambino Christine, Gryn Thomas, 2011, “The Foreign Born With Science and

Engineering Degrees: 2010”, American Community Survey Briefs

Gmelch George, 1980, “Return Migration, Annual Review of Anthropology”, Vol. 9, Annual Reviews

Gordon James and Gupta Poonam, 2004, “Non-Resident Deposits in India: In Search of Return?”, Economic and Political Weekly, Vol. 39, No. 37, pp. 4165-4174

Grogger Jeffrey, Hanson Gordon H., 2008, “Income Maximization and the Selection and Sorting of International Migrations”, Working Paper 13821

Gupta Deepti, 2011, “Return Migration Trends of Software Professional and Its Impact on Socio-Economic, Vol 1, No.3

Gupta Monisha Das, 1997, ““What Is Indian about You?”: A Gendered, Transnational Approach to Ethnicity”, Gender and Society, Vol. 11, No. 5, pp. 572-596

Haas Hein de, 2010, Migration and Development: A Theoretical Perspective¹, IMR Vol. 44 No. 1, pp. 227–264, University of Oxford

Haas Hein de, Fokkema Tineke, Fihri Mohamed Fassi, 2009, “Return migration as failure or success?”, The determinants of return migration intentions among Moroccan migrants in Europe, International Population Conference Session 93: Europe and the Maghreb: demographic ties

Haque Nadeem U. and Kim Se-jik, 1994, Human Capital Flight: Impact of Migration on Income and Growth.

Harvey William S., 2009, “British and Indian Scientists in Boston Considering Returning to their Home Countries”, Wiley Inter Science (www.interscience.wiley.com)

Hofer Michael, Rytina Nancy and Campbell Christother, 2006, “Estimates of the Unauthorized Immigrant Population Residing in the United States: January

2006” DHS Office of Immigration Statistics, homeland security

Homeland Security, 2010 Yearbook of Immigration Statistics

Iredale robyn, 2001, “The migration of professionals : theories and typologies, , international migration’, Vol 39

Jaffrelot Christophe, 2009, “The India-US Rapprochement : State-driven or Middle Class-driven?”, India Quarterly: A Journal of International Affairs

Jiang Xiaoxiao, 2009, “Performance of Asian Americans in the US Labor Market”, M.A. Texas Tech University.

Kapur Devesh, 2003, “Indian Diaspora as a Strategic Asset”, Economic and Political Weekly, Vol. 38, No. 5, pp. 445-448

Khadria Binod and Meyer Jean-Baptiste, 2010, “The Role of Migration in Restructuring Innovation Systems”, PGA Discussion on 5th Nov in Mexico City (Version 2)

Khadria, Binod. 2001, “Shifting Paradigm of Globalization: The Twenty First Century Translation towards Generics in Skilled Migration from India”, international migration, Vol. 39

Khadria Binod, 2002, “Skilled Labour Migration From Developing Countries-Study on India”, International Migration Papers 49

Khadria Binod, 2003, “Case-Study of the Indian Scientific Diaspora”, IRD editions

Khadria Binod, 2003, “DG Expert Perspective: Brain Drain and Return Migration: Advantage India?”, New Delhi, India

Khadria Binod, 2006, “INDIA: Skilled Migration to Developed Countries, Labour Migration to Gulf”

- Khadria Binod, 2006, "International Competition for S&E Students and Workers: An Evaluation of Trends and Policies in India and Southeast Asia", Asia Research Institute, National University of Singapore, and Jawaharlal Nehru University, New Delhi
- Khadria Binod, 2006, "Migration between India and the UK", Jawaharlal Nehru University, New Delhi and Asia Research Institute, National University of Singapore
- Korra Vijay, 2011, Short Duration Migration in India: An Appraisal from Census 2001, Working Paper 442
- Kuhn Peter, McAusland Carol, 2006, "The International Migration of Knowledge Workers: When Is Brain Drain Beneficial?" Institute for the Study of Labor
- Kuznetsov, Y. (ed.), 2006. *Diaspora Networks and the International Migration of Skills How Countries Can Draw on Their Talent Abroad*. Washington DC: World Bank
- Lahneman William J., 2005, "Impact of Diaspora Communities on National and Global Politics", Report on Survey of the Literature, University of Maryland
- Lal, K. 2006. Institutional Environment and the Development of Information and Communication Technology in India, in *The Information Society: An International Journal*, 17(2), pp. 105-117
- Lessiger Johanna, "Investing A Transnational Strategy among Indian Immigrants in the United Statee or Going Home?", Southem Rrian Institute, Columbia University
- Lie John, 1995, "From International Migration to Transnational Diaspora, Contemporary Sociology", Vol. 24, No. 4, pp. 303-306, American Sociological Association

- Lowell B. Lindsay, 2001, "Some Developmental Effects of the International Migration of Highly Skilled Persons", International Migration Paper 46
- Lowell Lindsay, Findlay Allan and Stewart Emma, 2004, Optimising Highly Skilled Migration from Developing countries, Migration Working Paper 3
- Madhok Rajan, 2009, "British Global Health Challenges: The Indian Conundrum", Journal of Medical Practitioners, Vol 2, No. 3
- Mani Sunil, 2009, "High Skilled Migration from India: An Analysis of its Economics Implications, Working Paper 416
- Manohar Namita-Naomi, 2009, Memories of BHARITYA NARIS (Indian Women): Gender, Work and Family in Transnational Migration, University of Florida
- Manpower, 2008, (Dr. Laveesh Bhandari and Payal Malik, Indicus Analytics) India's Borderless Workforce
- Marchal Bruno and Kegels Guy, 2003, "Health workforce imbalances in times of globalization: brain drain or professional mobility?" international journal of health planning and management (www.interscience.wiley.com).
- Margaret Walton-Roberts, 2004, "Globalization, national autonomy and non-resident Indians", Contemporary South Asia 13(1), p.p53-69.
- Massey Douglas S., "The Social and Economic Origins of Immigration", Annals of the American Academy of Political and Social Science, Vol. 510, World Population: Approaching the Year 2000 (Jul., 1990), pp. 60-72
- Mathew P. M., 2004(Jan), "A Question Mark on Kerala Model Return Migrants", Economic and Political Weekly
- Matusitz Jonathan and Payano Pam, 2011, "The Bollywood in Indian and American Perceptions : A Comparative Analysis", India Quarterly: A Journal of

International Affair

- Mayda Anna Maria, 2005, "International Migration: A Panel Data Analysis of Economic and Non-Economic Determinants' Institute for the Study of Labor
- Mayr Karin, Peri Giovanni, 2008, "Return Migration as a Channel of Brain Gain", Working Paper 14039
- Mehta Raj and Belk Russell W. 1991, "Artifacts, Identity, and Transition: Favorite Possessions of Indians and Indian Immigrants to the United States, The Journal of Consumer Research, Vol. 17, No. 4, pp. 398-411
- Meijering Louise and Hoven Bettina van, 2003, "Imagining Difference: The Experiences of 'Transnational' Indian IT Professionals in Germany", Area, Vol. 35, No. 2, pp. 174-182
- Migration Policy Institute for the Department of International Development, 2004, Beyond Remittances: The Role of Diaspora in Poverty Reduction in their Countries of Origin A Scoping Study
- Mohammad Amin, Aaditya Mattoo. 2005, "Does Temporary Migration Have to Be Permanent?" Monger Randall and Mathews Megan, 2011, "Nonimmigrant Admissions to the United States: 2010", homeland security
- Moorti Sujata, 2007, "Imaginary Homes, Transplanted Traditions: The Transnational Optic and the Production of Tradition in Indian Television", Journal of Creative Communications
- Mullan Fitzhugh, 2006, "Doctors for the World: Indian Physician Emigration", Health Affairs, 25, no.2
- Muzaffar, C., 2007. "The Rise in Remittances to India- A Closer Look The Rise in

Remittances to India: A Closer Look”, *Migration Policy Institute*. Available in URL: <http://www.migrationinformation.org/Feature/display.cfm?ID=577>

Narayana K. V., 2003, “Changing Health Care System”, *Economic and Political Weekly*, Vol. 38, No. 12/13, pp. 1230-1241

Okazak Sumie, 2002, “Influences of Culture on Asian Americans' Sexuality”, *The Journal of Sex Research*, Vol. 39, No. 1

Oonk, G. (ed.), 2007. *Global Indian Diasporas: Exploring Trajectories of Migration and Theory*. IIAS: Amsterdam University Press.

Panda Rajaram, 2009, “Migration Remittances : The Emerging Scenario”, *India Quarterly: A Journal of International*

Patterson Rubin, 2006, “Transnationalism: Diaspora-Homeland Development”, *Social Forces*, Vol. 84, No. 4, pp. 1891-1907, University of North Carolina Press

Pessar Patricia, 1999, “Engendering Migration Studies: The Case of New Immigrants in the United States”, *American Behavioral Scientist Policy Research on Migration and Development*, June 2003.

Poros, V. Maritsa, 2001 “The role of migrant networks in linking local labour markets: the case of Asian Indian migration to New York and London”, *Global Networks* 1, 3, p.p 243–259

Portes Alejandro, 1976, “Determinants of the Brain Drain”, *International Migration Review*, Vol. 10, No. 4

Portes Alejandro, 1997, “Globalization from Below: The Rise of Transnational Communities”, Princeton University

Portes Alejandro, 2007, “The ANNALS of the American Academy of Political and Social Science of the Evidence, Migration, Development, and Segmented Assimilation: A Conceptual Review”, Sage

- Portes Alejandro, 2008, "SOCIAL CAPITAL: Its Origins and Applications in Modern Sociology", Princeton University
- Purkayastha Bandana, 2003, "Skilled migration and cumulative disadvantage: the case of highly qualified Asian Indian immigrant women in the US", University of Connecticut
- Raj Kamla, 2010, "Indian Diaspora, Globalization and Transnational Networks: The South African Context"
- Reddy Sunita, 2010(May), "Imrana Qadeer, Medical Tourism in India: Progress or Predicament?", Economic & Political Weekly
- Ripsman Norrin M., Paul T. V., 2005, "Globalization and the National Security State: A Framework for Analysis", International Studies Review, Vol. 7, No. 2, pp. 199-227.
- Rizvi Fazal, 2006, "Rethinking "Brain Drain" in the Era of Globalisation", Asia Pacific Journal of Education, University of Illinois.
- Rutten Mario and Patel Pravin J., 2003, "Caste-based Differences and Contested Family Relations: Social linkages between India and Britain", Etnofoor, Vol. 16, No. 1
- Rytina Nancy, 2006, "Estimates of the Legal Permanent Resident Population in 2006 Office of Immigration Statistics, Immigration Statistics homeland security
- Salt, J. 1997, "International Movements of the Highly Skilled", OECD Social, Employment and Migration Working Papers, No. 3, OECD Publishing.
- Sami Mahroum, 1999, "B. Highly Skilled Globetrotters: The International Migration of Human Capital", Joint Research Center of the European

Commission, Seville

Saran Rupam, 2007, "Model Minority Imaging in New York: The Situation with Second Generation Asian Indian Learners in Middle and Secondary Schools"

Saunders Jennifer B., 2007, "I don't eat meat!: Discourse on food among transnational Hindus", *Contributions to Indian Sociology*, 41(2); pp. 203-223

Schuerkens Ulrike, 2005, "Transnational Migrations and Social Transformations: A Theoretical Perspective" *Current Sociology*, Vol. 53(4): 535–553, SAGE Publications

Selected Works of Rogers Brubaker, 2005, "The 'Diaspora' Diaspora Ethnic and Racial Studies Vol. 28 No. 1, pp. 1-19, University of California

Sheppard Eric, 2002, "The Spaces and Times of Globalization: Place, Scale, Networks, and Positionality", *Economic Geography*, Vol. 78, No. 3, pp. 307-330

Sidhu Ravinder K., 2011, "Re-Thinking Student Migration Trends, Trajectories and Rights", Working Paper Series no. 157, Asia Research Institute

Singh Supriya, 2006, "Towards a sociology of money and family in the Indian Diaspora", *Contributions to Indian Sociology*

Sinha Kathinka and Kerkhoff Ellen Bal, 2003, "Eternal Call of the Ganga: Reconnecting with People of Indian Origin in Surinam", *Economic and Political Weekly*, Vol. 38, No. 38, pp. 4008-4021

Sokefeld Martin, 2006, "Mobilizing in transnational space: a social movement approach to the formation of diaspora" *Global Networks* 6, 3 , p.p 265–284

Soonm Jan-Jan, 2010, "The Determinants of Students' Return Intentions: A Partial Proportional Odds Model", University of Otago

- Taeube Florian, 2009, "Cluster Lifecycle and Diaspora Effects: Evidence from the Indian IT Cluster in Bangalore", Indian Institute of Management
- Thomson Robin, 2007, "The South Asian Diaspora A Missed Opportunity? South Asian Concern.", Encounters Mission Ezine
- Tsagarousianou Roza, 2004, "Rethinking the concept of diaspora: mobility, connectivity and communication in a globalised world", Vol. 1(1): Communication and Media Research Institute ,University of Westminster
- Varadarajan Latha, 2006, "Out of Place: Re-thinking Diaspora and Empire", SAGE Publications
- Varma Roli, Varma Daya R., 2009, "The Making of Indian Immigrant Entrepreneurs in the US", Economic Political Weekly
- Vertovec Steven , 2002, "Transnational Networks and Skilled Labour Migration"
- Vertovec Steven, 1999, "Three meanings of 'diaspora', exemplified among South Asian religions", *Diaspora* 7 (2), University of Oxford
- Wagner Christian, 2010, "India's Soft Power : Prospects and Limitations", *India Quarterly: A Journal of International*
- Walters Nathan P., Trevelyan Edward N., 2011, "The Newly Arrived Foreign-Born Population of the United States: 2011", American Community Survey Briefs
- Wei Li and Lucia Lo, 2009, "New Geographies of Highly-skilled Chinese and Indian Migrations?", in Annual Conference 2009 "Times? Economic Crisis, geopolitical transformation and the emergent migration order, Centre on Migration, Policy and Society", University of Oxford

- Wellman Barry,” Little Boxes, Glocalization, and Networked Individualism”,
University of Toronto
- Wickramasekara Piyasiri, 2002, “Perspectives on Labour Migration 5 E Policy
responses to skilled migration : Retention, return and circulation”,
International Labour Programme
- Wickramasekara Piyasiri, 2009, *Diasporas and Development: Perspectives on
Definitions and Contributions.*
- World Bank, Macmillan Palgrave. 2006. “Remittances, and the Brain Drain”
International Migration, Ca–glar Ozden and Maurice Schiff.
- World Bank, *Migration and Remittances Factbook 2011*, 2th ed.
- World Bank. 2005. *India: India and the Knowledge Economy Leveraging Strengths
and Opportunities.*
- World Bank. 2009. *World Development Report Factor Mobility and Migration*
- World Migration Report. 2008. *Managing Labour Mobility in the Evolving Global
Economics*
- Xavier, C. 2011, Experimenting with Diasporic Incorporation: The Overseas
Citizenship of India, in *Nationalism and Ethnic Politics*, 17 (1), pp. 34-53.
- Zachariah K. C., Gopinathan Nair P. R. S. Rajan Irudaya. 2001. “Return Emigrants in
Kerala: Rehabilitation Problems and Development Potential, Working Paper
No. 319.
- Zachariah K. C., S. Rajan Irudaya. 2011. “From Kerala via the Gulf Emigration
Experiences of Return Emigrants”