

# SKILLED MIGRATION FROM INDIA TO THE UNITED STATES: CONTEXTUALIZING IN THE BACKDROP OF GLOBAL ECONOMIC CRISIS

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## Abstract

*The paper focuses on skilled migration and student mobility as an important variant from India to the United States in a global recessionary silhouette. Skilled migration of human resources has been traditionally designated as brain drain, but the present trends of globalisation has ensured innovation in information technology, rise of multinationals, globally recognized qualifications and brain circulation. The emphasis is on assessing immigration barrier like H1B visa restrictions, limits on outsourcing of Indian workers in the United States, as also prospects of remittance income for India in a period of financial crisis.*

## I. INTRODUCTION

Highly skilled migration has been defined in a different way in various times. 'Brain drain' was in vogue during the nineteen fifties and sixties, emphasising the unspecified pessimistic impact on the European nations of the physical mobility of the highly skilled towards the conventional countries like the US, Canada, Australia etc. Generally, the term is used to denote flight of human capital (mostly trained by the developing countries at the expense of tax payer's money) from the developing countries to the developed world, leading to pauperisation of human resource in the less developed countries. Afterward the term 'brain gain' was coined since destination plus source countries might be benefited from the migrating of the highly skilled (IOM, 2005), whilst Mattoo, Neugu, Özden (2008) put forward the reverse impact of out-migration as 'brain waste'. Lindsay-Lowell cs., (2004) invented the 'brain strain' concept, emphasising that migration could be both positive and negative for the origin countries. A fusion emerged while migration of the highly trained was supposed as 'brain circulation' by Saxenian, (2002) or as 'transmigration' put forward by Danby, (2004). Brain circulation is the beginning of a rounded development where all and sundry might be wealthier. From brain drain theory, research has of late shifted focus to brain circulation. GATS agreement of the WTO under Mode 4 encompasses

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movement of natural persons. GATS mode 4 appears to present the best of both hemispheres for endorsing circulation at least in theory. Whereas GATS has been in effect since the execution of the Uruguay Round in 1995, its significance for global migration is inadequate. Nowadays, the preponderance of labour flows between countries is directed by guidelines designed, monitored and enforced by labour importing nations. Globalisation has ensured cross border flow of capital, technology, ideas as well as manpower. Telecommunication revolution, the universal acceptability of English language and the worldwide business networks accredited by WTO and most of the countries ensure that skilled workers are employed in many countries according to the necessity of the production, distribution and marketisation of end products. Brain circulation is entrenched in the worldwide flow of expertise, investment in addition to the media (Castells, 2000)<sup>1</sup>. Thus, the modern concept of brain circulation entails migration of the highly skilled not from periphery to core and vice versa, but is perceived as decentralised collaborative flows of dexterousness, funds and know-how between economies with dissimilar areas of expertise. (Saxenian, 2006). Regardless of a mammoth hypothetical and experiential literature on migration it is still unfeasible to draw a systematic international quantitative scenario of skilled migration. So, discussions revolving around the so-called brain drain or brain gain often remain inconclusive as it is difficult to prove the exact nature of impact of human mobility on the source as well as receiving countries (Dunnewijk, 2008). Appleyard (2002) however, comes across that international migration belonging to the “highly skilled” category as characterised by dichotomy. Primarily five discrete subcategories, are traced like scientists; entrepreneurs; senior managers and executives; technicians; and engineers and students.

The study stresses on skilled migration pattern from India to the United States, as the US receives the maximum share of skilled diaspora from India. The present analytical discourse largely depends on explaining the trends of skilled migration of population who possess above graduation degree according to the Indian system of education. As a passing reference, the student mobility pattern from India to the United States has been discussed along with student perception of those who aspire to study in the US regarding choice of course, changing job market in America, and changing policy issues. As the US is the most preferred destination for the Indian students, and most of the students pursuing higher education in the American campuses opt for technical courses like various engineering courses including IT, nuclear physics, genetic engineering, aeronautical engineering, nano technology etc. apart from management courses and social sciences and humanities; the attempt has been made to discuss student mobility also because scholars after graduating from the American universities form a vast section of skilled diaspora in the US. The paper also will focus on worldwide economic recession and ensuing policy alterations in the world in general and the US in particular.

## II. DATA SOURCES

The present study draws data from secondary as well as primary sources. Data is derived from independent and published research works, studies conducted by

institutions like Yale University, Open Doors Report 2008 published by the Institute of International Education, World Migration Report 2008, World Bank, and data obtained by conducting field surveys conducted among the students of IIT Kanpur and the prospective students preparing to appear in GRE and GMAT for pursuing higher education in the United States.

### III. METHODOLOGY

The research is primarily descriptive type, and the discourse analysis heavily draws upon recent data available. Information generated through field survey conducted among Kanpur IIT students of computer engineering discipline and survey among the scholars of GRE and GMAT mainly aims at gauging the perception of students having propensity to migrate regarding the impact of recession on the prospects of employment in the US. While 15 students were surveyed in Kanpur IIT in 2009; in the case of students appearing in GRE and GMAT, 35 students responded to the survey. The IIT scholars were asked (1) Whether they are interested to work in United States if H1B visa restrictions are released (2) Are they interested to pursue higher studies in the American campus (3) Questions were asked about their job prospects in outsourcing industry (4) Whether the prospective students after they finish studies in the US institutions will come back to India. The candidates of GRE and GMAT, were asked the following questions: (1) The course of study they would like to pursue in the institutions of USA (2) Perception about H1B visa restrictions (3) Whether they are willing to work in India after completing their studies in the United States. The sample for the study is selected on the basis of stratified random sampling, because among the skilled manpower, only a handful of sectors like IT, business administration and technological fields produce a lion's share of skilled diaspora.

A parallel online survey was conducted among the students of 14 US higher education institutions.

### IV. SKILLED DIASPORA AND THE AMERICAN SUPREMACY

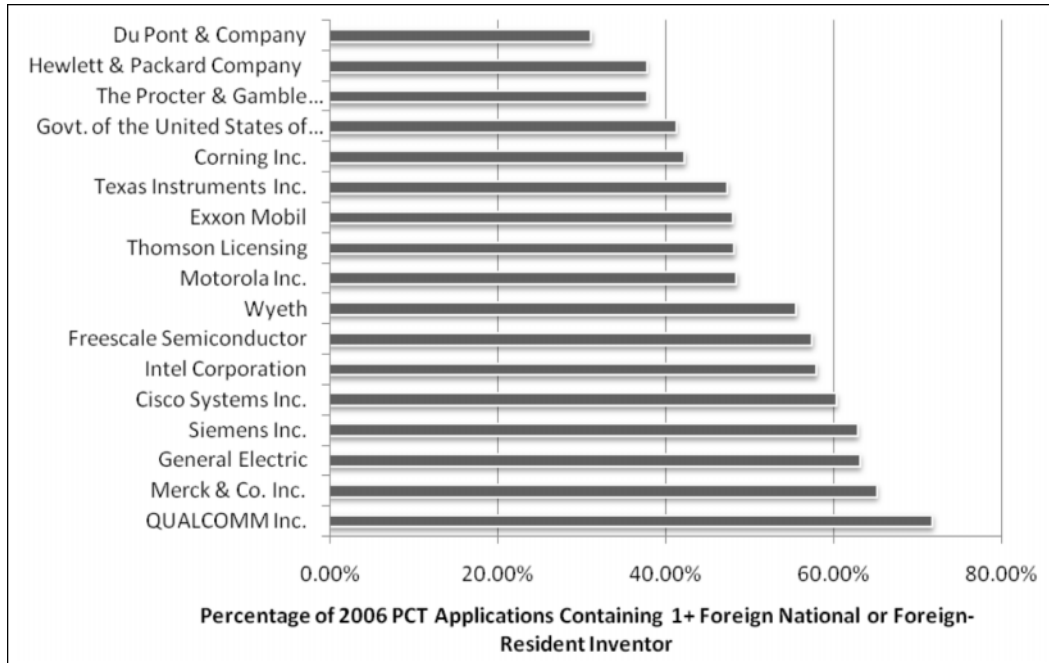
The developed countries are in the final phase of demographic transition. So, the mature labour force on the verge of retirement belonging to the industrialised nations necessitated the liberal immigration policies in countries like the United States during the 90's decade and early half of 21<sup>st</sup> century. Subsequently, the Indians were the major beneficiaries of the H1B visa. In the same vein, prior to recession, UK had Highly Skilled Migrant Programme (HSMP) and Australia pursued Skilled Temporary Resident Programme (STRP). The US, UK, Australia and Canada are major destinations of Indian skilled migrants. Other industrial countries like Germany, Singapore, and Japan are steadily gaining attractiveness for the Indian professionals (Bhandari *et al.* 2008). The migration of India born skilled manpower to the US is largely controlled by multinationals operating in microelectronics, informatics and telecommunications sectors (Holton, 1998, p. 55). However, the emergence of biotechnology in the 21<sup>st</sup> century should ensure shift in

favour of biotech scientists migrating to the US. Availability of grants and fellowships in biotechnology compared to other fields of academics ought to facilitate easier skilled migration from India to the US. Even though the key beneficiary is the IT sector in recent times, the Indian doctors also move to the US. The Yale report (<http://yaleglobal.yale.edu/display.article?id=3340>) suggests about 38000 India born physicians practicing medicine in the US in 2004 while about 12000 Indian students pursuing medicine in the American medical institutions. The majority of Indian medical students earning higher degree in medicine in the US are due to severe scarcity of medical seat for obtaining MD degree in India. It is considered easier to get MD degree in the US than India also due to lower level of competition for MD degree in the United States and greater acceptance of American degrees all over the world.

Mature American baby boomers used to be the best-educated human resources as they joined the labour force about three decades ago. Based on creative policies like the GI Bill of 1944, the US baby boomers attained almost 40 per cent of college-level graduation rates in this period, contrary to 20 to 25 per cent learning stage accomplished by existing British, German, French, or Japanese during the late 1960s and 1970s. The year 2008 is the benchmark from where the Americans born following World War II has started retiring. As a result, loss of huge numbers of accomplished baby boomers now stare the US at their face. Loss of skilled workers will be felt by the American economy in the long run, but the present recessionary trends have brought political as well as social compulsions to restrict foreign workers to the glare of media hype. Kirkegaard<sup>2</sup> finds the erosion of talent a worrying factor for the US in their society. The standard educational attainment of the Americans in current decades is a cause of distress. The tertiary-level graduation rates among modern US labour market entrants is unique in the OECD, belonging to age group of 25 to 34, is the equivalent compared to their baby boomer parents, of the age cohort of 55 to 64; hovering below 40 per cent. Consequently, it is apprehended that in impending days as many skilled Americans will stop working as will come into the labour force. The following table explains America's over dependence on immigrant brain power.

America's meteoric rise to international superpower status, and triumph in the Cold War was largely due to the most highly skilled workers in the world. Nevertheless, America's worldwide "skill leadership" is facing threat in the 21<sup>st</sup> century. In addition, as America fell short of continuing to advance wide-ranging educational standard throughout the preceding 30 years, the world has progressed enough. American labour market competitors now scarcely make the international skills top-10 list. The US faces for the first time the prospect of becoming skillfully deficient country. Especially, over the past twenty years, highly skilled diaspora have assumed an imperative responsibility in America's information technology propelled economic growth. The professional know-how, uphill struggle and earnestness stimulated the technology boom ever since the early nineties decade. The debate about how H 1B visa lowers the wages of American technology personnel,

**Table 1**  
**Foreign National and Foreign Resident One Inventor Contributions to PCT Applications Filed in the United States by Corporations**



Source: Wadhwa *et al.* (2007)

and dislodges the US employees, and off-shores (Bangalored) American jobs is fuelled by the heat of subprime crisis of the US that sparked the global economic meltdown.

The United States is an important destination for skilled workers availing of H 1B visa as well as for Indian students pursuing higher education in the US, mostly with ambition to get a job in the US. Interestingly, the US hosts about 19.7 per cent of all global migrants from less developed countries. Hitherto, the United States is the origin country for merely 1.2 per cent of the intercontinental migrants. Like United States many developed countries during recessionary period are now following policies to discourage immigration. Paradoxically, Hanson, (2009:4) argues that labour mobility makes migrants considerably wealthier but their prosperity has unassuming effects on net incomes in receiving nations. During financial crisis, the well-off nations face certain political compulsions also, particularly in view of unprecedented unemployment level in those countries. The United States has been the hard hit country due to high unemployment rate. Economic heavyweights were disappeared in the heat of financial meltdown. All these led the US in the 1990's to assuage their tough approach towards immigration.

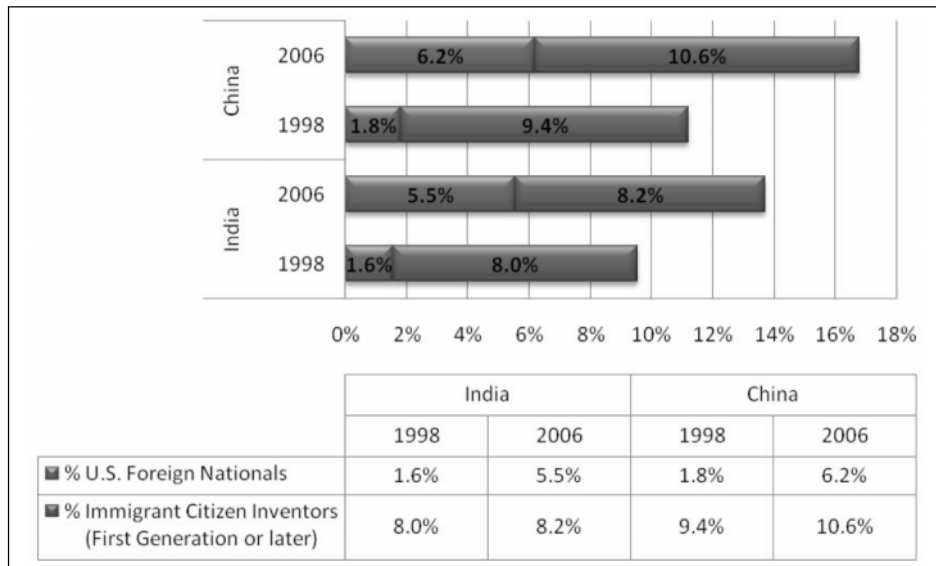
The geographical boundaries appear ineffective as the skilled persons constantly immigrate and emigrate as an integral part of brain circulation. India's technical

pro prowess has accelerated the progress of the globalisation of the IT industry accompanied by globalising Indian skills. Consequently owing to technological innovations in the IT industry substantial amount of investment was drawn by the IT sector through past few years. The IT industry even in a global recessionary period has remained a decidedly vivacious industry. H 1B visa advanced to the Indian techies is an outcome of Indian resourcefulness. In the condition of a healthy economic milieu during past decades, the much coveted H 1B and L1 visa were allowed for thousands of skilled Indian diaspora for working in the United States. The demand for H 1B visa was skyrocketing until the world monetary system went topsy-turvy from 2008.

### Student Mobility as Skilled Migration

In contemporary knowledge and information age, substantial information generation, knowledge management, knowledge utilisation, and knowledge propagation have become the catchphrase of the 21<sup>st</sup> century. As a consequence, countries for instance the United States have made relaxation in their immigration policies to draw sophisticated proficiency in IT, pharmaceutical, biotech and drug manufacturing, in addition to other advanced fields prior to September 11 disaster. The IT and other associated industries have pressurised the US government to double H 1-B visas from 65,000 to 130,000. This excluded thousands of students study in the U.S. institutions from around the world (Altbach, 2004). Several researches prove that a majority of Indian students engaged in higher education in

**Table 2**  
**Indian and Chinese Contribution Towards International Patent Applications Filed in 1998 and 2006**



Source: Wadhwa *et al.* (2007)

the US, never return to India. Given the popularity of courses like MBA, IT and biotechnology among the Indian students in the American campuses; it seems to be plausible that a majority of the skilled diaspora form a significant share of brain bank in the US (Bhuimali *et al.* 2006). The relative advantage of the United States due to its control of brain bank may be gauged from the fact that about 50 per cent of all US science and engineering human resources possessing doctorates are immigrants. The following table depicts the contribution of expatriate talent in American economy.

The growing student mobility is because U.S. higher education is unmatched in its vivacity, excellence, and diversity. The table below depicts student migration over the years from India to the United States.

**Table 3**  
**Student Mobility from India to the United States**

<i>Year</i>	<i>No. of Students from India</i>	<i>% of Total Foreign Students in US</i>
2008/09	103,260	15.4%
2007/08	94,563	15.2%
2006/07	83,833	14.4%
2005/06	76,503	13.5%
2004/05	80,466	14.2%
2003/04	79,736	13.9%
2002/03	74,603	12.7%
2001/02	66,836	11.5%
2000/01	54,664	9.9%
1999/00	42,337	8.2%

*Source:* Open Doors Report 2009

The Open Doors 2009 data reports on enrolments in 2008/09 founded on a wide-ranging survey of roughly 3,000 recognised U.S higher education institutions of all categories and sizes, concerning international scholars at all levels of study. The results do not echo the exact impact of the economic recession, because decisions to study in the United States were made before the monetary consequences were fully experienced in the sending countries. The following table depicts the growth of Indian students to the US. Most of the developing countries send students to the US.

Although detailed data is still unavailable, it may be assumed that international educational trade witnessed a downturn during recessionary period. The American institutions of higher learning have been facing scarcity of funding during recessionary period. However, the restricted degree of globalisation in India's institutions and right financial management of India's banking sector has protected the Indian establishments from the depredation of worldwide financial depression

**Table 4**  
**Countries Sending Most Students to the USA**

<i>Rank</i>	<i>Country</i>	<i>2008 / 09</i>	<i>+/- change YOY</i>
#1	India	103,260	+9%
#2	China	98,510	+21%
#3	South Korea	75,065	+9%
#4	Canada	29,697	+2%
#5	Japan	29,264	-14%
#6	Taiwan	28,065	-3%
#7	Mexico	14,850	+0.1%
#8	Turkey	13,263	+10%
#9	Vietnam	12,823	+46%
#10	Saudi Arabia	12,661	+28%

*Source:* Open Doors Report 2009

in 2008 – 09, as noticed in archetypal American organisations. Ranging from the Ivy League universities to lesser known colleges in the US, diminishing proceeds and the dilapidated worth of endowments have resulted in joblessness, annulment of latest construction works and even slash in enrollment figures. But according to enrollment advertisers, the slump is not widespread across the US. A few states for example, Texas and Wyoming possess a tax base in oil or minerals besides being not part of the financial decline. So educational hiring has been stable. The preponderance of states with hard-hit manufacturing base or with tax deficit, though, has harshly truncated hiring in the commerce along with academic segments. Graduates keen to enter academic circles have equally experienced a much tougher marketplace. Scholars belonging to the baby-boom age group, appointed in the late 1960s, were anticipated to have started retiring at this time. This would have resulted in an unparalleled requirement for assistant professors but, disinclined to coop up much lesser benefit levels, a considerable number of senior professors are putting off retirement at present (Schrock, 2009). Nevertheless, the economic turnaround in the last quarter of 2009-10 has been made possible due to impressive industrial recovery in the United States, India, China etc. accompanied by industrial recovery and surge in demand. Despite weak monsoon in India, Dubai financial crisis, the unemployment problem in America or the rising costs of fossil fuel; the global economy is all set to grow in the coming days.

## **V. GLOBAL RECESSION AND IMMIGRATION BARRIERS: WHAT NEXT?**

The Human Development Report (2009:4) observes that the present recession has made migrants predominantly susceptible. Although the global economy is in the process of recovery, but still recessionary pressures are not negligible. Some destination countries have intensified the enforcement of migration regulations in ways that may infringe on migrants' rights. Traditionally, the liberal immigration



policy of the United States has enabled the country to tap the finest talents from all corners of the globe. Many India born famous academicians and scientists like Amartya Sen, Chandrasekhar and Mani Bhowmik have successfully pursued career in the United States and enriched the global community, made possible only due to favourable US immigration policies towards nurturing talent. The global recessionary trends having its epicenter in the United States itself sparked the massive trends of unemployment everywhere in the world and the crisis of job loss and unemployment was most severe in the US. The current debate in America regarding immigration of workers from third world countries like India empowered by H1B visa by replacing comparatively expensive American workers is largely rooted in the unemployment crisis in the US. The US high-skilled immigration strategies have lately become perceptibly more restraining. The American visa policy allows hiring high-skilled workers on H-1B visas amounting to 65,000 plus 20,000 available to immigrant graduates with higher degrees from US universities. Following the onset of recession, fierce debate has erupted in the US over H 1B. The Indians found the European immigration policy comparatively less inaccessible. The 2008 scheme for an EU “Blue Card” was to allow high-skilled staff from outside the European Union to work in numerous EU countries. As the United States is distressed by faster ageing process compared to other OECD countries, the US immigration regulations have at this time become less forceful, whilst concurrently tightening directive of low-skilled and immigration on humanitarian ground<sup>3</sup>. As the financial meltdown has gripped the rest of the world, more restraining immigration strategies are being taken up to guard the neighbouring labour market and also as an answer to a declined demand for overseas workers. Italy, the Russian Federation and Kazakhstan have reduced their respective quotas. The U.K. for the first time is lifting up academic and monetary necessities for migrants seeking to settle in the U.K. in the extremely skilled migrant class. Since, labour migration specifically is an essential element of modern global financial, political and social existence; flexible, logical and inclusive policies are the need of the day for effective management of migration. Proof for Europe advocates as put forward by (Mayda, 2006; Facchini and Mayda, 2008) shows that the labour market along with financial cost of immigration as well add to hostility to distant labour inflows; and it is obvious that the flow of skill from India to Europe ought to see a downward trend until the green shoots of economic revival are converted into real gains in future. Migration being an indispensable ingredient and corollary of globalisation, necessitates that the wellbeing and wants of migrants are entirely factored into policy response intended to supporting fiscal resurgence, with the help of anti-protectionism procedures, stimulation of global trade etc. As protectionism in trade needs complete evasion, so should protectionism in individual mobility be opposed, because human mobility may be part of the answer, not the predicament (IOM, 2009). Kleemans, et al. (2009) find negative people’s responses regarding preference to migrants when jobs are given bypassing the native people. But simultaneously, more than 75 per cent of respondents in the 2005/2006 World Values Survey as mentioned by Kleemans et al did not object to having a migrant as their fellow citizen. These

outlooks point to obvious prospects for building a broad agreement around better treatment of migrants. Hatcher (2001) has found several legal hurdles also, which like all other developing countries could be hurdle for the Indian skilled workers also. So far developing countries have established countless impediments in utilizing GATS provision. Primarily, the inadequate pledge by urbanised countries is a key problem to GATS benefits for less developed countries. Developed nations have more obligations in GATS under other forms than in mode 4 that entail movement of natural persons. Developing countries regularly grumble against the unwarranted biasness of the system in favour of the developed nations, and also in favour of multinationals. The MNCs are at the vanguard regarding the claim for bigger liberalisation of GATS as exemplified in the actions of the European Services Forum. Secondly, widespread immigration obstacles in developed countries in opposition to service providers from developing countries act as barrier to skilled people's mobility. There are several areas where tangible improvements can be made including standardizing and expanding occupations or market access. Developing nations, particularly India, have been lobbying for expansion of Mode 4 service definitions. The European Service Forum has recommended the simplification of administrative procedures through a special GATS visa. Several areas exist where concrete up gradation may be finished including regulating and growing professions or market admission. Developing countries, predominantly India, have been demanding for growth service definitions under the auspices of Mode 4.

A pertinent question is whether the strategy of the developed countries to limit immigration flow from developing countries justified in terms of economical sustainability? Hanson (2009) argues that in a neoclassical financial system, the best possible immigration plan would be to permit the free entry of overseas workers. However, labor-importing nations firmly put a ceiling on labour inflows. Obstacles to immigration partly mirrors domestic political antagonism to open restrictions, with those mainly resisting to labour inflows being the employees and taxpayers nearly all of whom are exposed to the undesirable consequences of in-migration on labour markets plus monetary accounts. Immigration barricades might also stand for a second-best strategy that governments implement in line not to worsen deformation allied with domestic social-insurance agendas that they are indisposed to dismantle.

Experience suggests that immigration alters income-distribution within a country, giving birth to frontrunners and losers. Indians after migrating to the US due to visa power and the Indian students after getting degrees from the American universities have traditionally contributed to the success of American production system due to high end skill they possess and also due to cheaper wage they receive. In the United States, winners are the MNCs hiring foreign workers, and also customers who purchase the immigrants' produce (Cortes, 2008); whereas losers comprise low skilled local employees that vie with immigrants for employment (Borjas, 2003). Hanson, Scheve, and Slaughter (2007) find the American taxpayers at the receiving end as they bear the economic expenses of immigration. The fresh

debate over the policy of hiring cheap labour from developing countries may not be good news for India at least in the short term, but the issue of American taxpayers has received a considerable attention in the US in a period of economic turmoil. The skilled migration to the United States will be curtailed because of H 1B visa policy of 2009. Indian citizens who mostly join the information technology industry were issued about 22000 visas out of the 65,000 H 1B work visas that the United States issues every year. H 1B is a non-immigrant visa granted to skilled and educated foreign workers. If the stringent policies against hiring foreign staff are implemented, it may cause severe erosion in the profitability of companies. In India reform processes in social and economic sectors have ensured growth and development of the country. The Indian economic institutions have successfully thwarted the negative impact of economic downturn. As a result, a reverse migration of skilled persons from north to south is nowadays a discernible phenomenon. The Indian software professionals are commanding almost equivalent salary in India also after moving to Bangalore from Silicon Valley. But the US is not only example in espousing policies opposed to outsourcing of jobs and reducing foreign personnel. Millions of Indians in the banking and construction industries in the Gulf countries have been jobless and they prefer to return home. Deferment of priority processing for immigrant IT experts in Australia and Germany imposing new strict immigration laws are other examples of immediate reaction of various countries to global recession. In United States lobbying for visas by giant high technology MNCs like Dell, Microsoft, Google, Nokia etc. has become important factor. These companies sponsor the largest numbers of H1B visa holders from India. The share of far-off guest recruits in the form of H1B visas for skilled workers across American industries are studied and researches suggest that industries spending more on lobbying the administration on immigration thrive in getting hold of a bigger number of visas. So, evidently employers are the biggest beneficiaries of such lobbying activities. It appears that skilled immigration brings profit to employers, because inflows of cheap and skilled labour enhance the marginal product of capital. So, skill-intensive industries gain a large amount from skilled immigration, in with tune with their importunate lobbying for visas (Facchini, Mayda, and Mishra, 2008). Studies conducted by Banerjee (2006) reveal exploitative nature of H1B visa to some extent. In the late 1990s, business lobbies, mainly governed by the IT sector, referred to severe deficiency of skilled employees and pleaded to the US Congress to elevate the yearly H 1B limit from 65,000 in order that additional foreign recruits could be hired for IT profession. Because the staff on this visa was above all being appointed by subcontractors to serve as contract people, and not essentially as direct workforce of the lobbying corporations that wanted flexibility of labour, it was in these lobbies' concern to push for more visas because that would broaden the team of flexible indentured human resources at their disposal.

As the Indian skilled employees are found to be "tied down" to their subcontracting firms, it becomes difficult for the contract employees to leave their companies and get a better job. Moreover, since the visa hardly provides eligibility to get employment independently, H-1B workers must sign up themselves with

and rely on subcontractors to obtain lawful employment status. Government, policy and research statistics are in dark about precisely what quantity of the H-1B populace in IT, or Indian IT trained on this visa, are employed not as direct staff with customers or consulting firms, but as bond workers for subcontractors. It must need mention that the much hyped H 1B visa has fewer takers in the year 2009, since the US monetary crisis has weakened the global confidence regarding the American capitalist management. The visa fraud in the US has marred the reputation of H 1B visa also.

The field survey conducted by this author in April 2009 reveals a changing face of India. About 42 per cent of the IIT students responded in favour of working in the US, while a majority 78 per cent responded in favour of a US degree provided the degree will help them doing better in their career. Despite recent move by the American administration to impose restrictions on outsourcing, almost 66 per cent respondents feel that outsourcing industry has a bright future in the long run. Therefore, working in outsourcing industry is still relevant once the recession will be over. The coveted destination status of the US as employment opportunity is now a thing of the past, since 95 per cent students are not interested to continue working in the US, even if they are offered jobs in the United States. Among the aspiring students, 29 out of 35 students were found to be preparing for MBA course in the US institutes, and rest of the students were aiming for nuclear science (4) and genetic engineering (2). The ongoing debates concerning limited access of immigrants and visa restrictions have worried all the respondents as evident from the survey. They feel that it is unjustified to put visa barrier because market rule of demand and supply will be ignored in the process, and the American production system will lose its competitive advantage in a high cost economical set up. The aspiring candidates seeking admission in MBA in the US are found to be worried about bank finance as well as limited fellowship opportunities in a recessionary period. As a rule, out of 29, most of the respondents (26) are not enthusiastic to stay back in the US, because they perceive India's growing economy and healthy salary structure is a strong pulling factor for reverse migration back to India.

A similar survey was conducted among the US institutions. The survey received responses from 14 US higher education institutions from various types mentioned below. Doctoral/research institutions formed the major group of respondents, with 79.5 per cent, followed by associate's institutions with 8 per cent. Baccalaureate institutions represented 5 per cent of respondents, followed by Master's institutions with 8 per cent. 5 were public institutions and 9 were private institutions.

The survey was conducted in the line of IIE (2010) study. In India the students (50) pursuing master's degree in the University of Calcutta and Jadavpur were asked in November, 2009 about the most preferred destinations for higher education abroad. United States topped the most preferred list (84.3 per cent), followed by United Kingdom (9 %), Canada (4.7%), Southeast/East Asia (1.1%),

Continental Europe (0.9%) and Australia (nil). The survey conducted among 62 students of the NRI Associations of 7 US universities exposed some strong points and limitations for the United States as a destination for Indian students. The majority (89%) of respondents cited the excellence or category of academic curriculums as their chief *raison d'être* for studying abroad. Judging against the United Kingdom, Continental Europe, Southeast/East Asia, Australia and the Middle East, the United States was considered to be possessing excellent higher education system plus broad variety of schools and programs on top of being hospitable toward international students, offering a first-rate standard of living and for being a secure place to study. Nonetheless, the United States got the poorest ratings due to high tuition-fees, costly school application procedure as well as long distance from India.

### **Skilled Migration, Remittance Issues and Concluding Remarks**

The economic recession in the United States has resulted in unemployment at unprecedented level. The skilled migration from India in the form of recruitment of skilled persons, enrolment of students in the American campuses, brain circulation etc. are undergoing declining phase. Regarding student mobility, a downturn is observed even in the case of the most reputed institutions of the United States. The renowned institutions such as, Harvard, Wharton, Kellogg, MIT Sloan, NYU Stern, Duke and Michigan used to be the dream end of Indian scholars till recently. But in the wake of new monetary turmoil, these institutions no longer guarantee top-dollar occupations. A new study by the University of California, Berkeley suggests, approximately 84 per cent of Indian students with 76 per cent of Chinese students in the US believe it will be hard to hit upon a profession in their turf in the US. Banks were also reluctant till recently to extend educational loan to international students including MBA students. However, with gradual improvement in the US economy demand for MBA is again returning. Some students during the survey responded negatively to visa limitations on business establishments accepting Troubled Asset Relief Programme (TARF) – a bailout endowment funded by the government to aid US companies emerge out of recession. The prospects of international students are the biggest hit due to visa limitations. At this time, many Indian students in the West are laying a bet on their motherland. Asian schools like China Europe International Business School in China, Indian School of Business, National University of Singapore and Asian Institute of Management in the Philippines etc. are acquiring popularity among international students due to their global status and low expenses. Students unanimously agree about the quality of these centres of excellence because the yield of these institutes will get their dues in the long-standing basis<sup>4</sup>. The issue of brain drain and loss of skilled persons have rattled India like other developing countries for long time. Although, rapid improvements in communication technology have ensured virtual brain circulation, brain gain and also the concept of brain bank in India, the necessity of skilled persons like doctors serving in the remote and rural areas of India can be denied at our own peril. It is logical to ensure the services of intelligent people for

further betterment of India. It will be pertinent to take a cue from South Africa regarding minimizing the ill impact of brain drain, as the country resorts to delaying immigration of skilled persons; ensuring a minimum period of social service in the country itself. Emigration can be delayed by involving strategies like including some element of public service in the agenda. In India discussions are in vogue about compulsory service of doctors in India's rural areas for few years after their training so that they can pay back what they owe to society. Even imposition of exit tax on the emigrating IIT graduates at the rate of Rs. One and half lakh for each student is being considered by the government; as obvious from press reports. However, improving standard of higher education in India at least in some sectors and growth of economy has ensured reverse migration of skilled persons to India in recent decades. In a market driven system, it seems implausible to prohibit people to migrate abroad. Thus, improvement of domestic condition in the long run is the answer.

India receives high remittance earnings from the skilled diaspora settled in the United States. Recession has resulted in fall in remittance income and a number of developing countries of origin e.g., Morocco, Sri Lanka, Philippines, and from the United States to Latin America and the Caribbean, about 71 per cent of Hispanic immigrants in America informed of sending fewer remittances home in 2008 compared to the previous year (Lopez et al., 2009 ). Even the latest (World Bank, 2009 and UNDP, 2009: 4) studies suggest downward revision of remittance flows. A sharper decline of 5.8 per cent in 2009 is also anticipated. Migration and Remittances Factbook 2008 of the World Bank (2008) estimates India receiving \$27 billion as remittance income in 2007. There are three causes of risks. Firstly, if the crisis lasts longer, the decline in remittance and migration flows would persist longer. Second source of risk is erratic movements in the exchange rates posing danger to dollar denominated predictions. Further, if the exchange rates of remittance sources remain weak at their current levels compared with the US dollar, it would cause an even bigger decline in remittance flows to less developed countries. Lastly, the political response to feeble employment markets in destination countries could cause further tightening of immigration controls. This type of fall should not indicate any meaningful loss of purchasing power of remittances for the beneficiaries; but the retreating dollar volume can result in complexity for governments to meet external payment commitments. A sturdy dollar would entail that Indian immigrants in the US can send lesser remittances and still be capable to acquire the same amount of goods and services for their recipients in India. Nonetheless, a stronger dollar also suggests that merchandise plus services and possessions in India are appreciably cheaper in dollar terms that may cheer Indian migrants to send extra remittances for investments. In the latter case there is a rush in remittance flow since the neighbouring money is devalued next to the US dollar – was manifested in the US-Mexico passageway in October 2008, and is happening now in South and South East Asia, and to an extent in Moldova and Tajikistan. The following table shows remittance flows to developing countries.

**Table 5**  
**Remittances to Developing Countries 2002-2008 (\$ mils)**

	2002	2003	2004	2005	2006	2007	2008
Total	115,502	143,345	163,535	194,174	228,800	264,896	282,793
Annual change	21%	24%	14%	19%	18%	16%	7%
East Asia and Pacific	29,477	35,402	39,077	46,586	52,841	57,988	62,307
Annual change	47%	20%	10%	19%	13%	10%	7%
Europe and Central Asia	13,729	16,027	22,556	31,660	38,830	50,804	53,530
Annual change	11%	17%	41%	40%	23%	31%	5%
Latin America and Caribbean	27,918	35,219	41,728	48,716	57,384	61,000	61,095
Annual change	15%	26%	18%	17%	18%	6%	0%
Middle-East and North Africa	15,211	20,361	23,034	24,150	26,656	32,075	34,500
Annual change	4%	34%	13%	5%	10%	20%	8%
South Asia	24,137	30,366	28,694	33,092	39,615	43,824	50,942
Annual change		26%	-6%	15%	20%	11%	16%
Sub-Saharan Africa	5,030	5,970	8,445	9,969	13,475	19,204	20,418
Annual change		19%	41%	18%	35%	43%	6%

Source: Ratha, D. *et al.*, (2008)

Confronted with failing employment, several destination countries are tightening migration management. Even as tightening immigration is perhaps politically eye-catching in short term, it is also estimated to extend the modification to the fiscal catastrophe by lessening the labour market flexibility that industry requires for economy and continued existence. The Indian skilled migrants are in general cheaper and more flexible compared to national recruits. Many anecdotal reports of brain circulation are in air, suggesting perplexing reports from different sectors of economy. In the United States, while the number of migrants employed in manufacturing and construction has declined in recent months as the crisis has deepened, employment in wholesale and retail trade has held up, and the number of those employed in restaurants and hotels has increased (World Bank, 2009).

HDR (2009:92) observes:

“...given the global recession of 2008/09, it is especially important to assess the impact of migration on host communities and countries. There is no evidence of significant adverse economic, labour market or fiscal impacts, and there is evidence of gains in such areas as social diversity and capacity for innovation. Fears about migrants are generally exaggerated. These findings ...suggest the possibility of creating virtuous circles through policy measures that enhance and broaden the benefits of mobility. This would increase migrants’ economic and social contributions to both destination and origin communities and countries.”

The skilled migration to the United States and back has witnessed a temporary setback largely due to global economic recession, widespread unemployment in the United States, and erosion of profit of companies. The prospect of world economy is all set to recover in another couple of years, and accordingly India's prospect of skilled manpower will increase in future, and also the outsourcing industry of India.

### Notes

1. Castells, M. (2000), in: "The Information Age: Economy, Society and Culture", Vol I, The rise of the Network Society, Second Edition, 2000, Blackwell Publishers, Oxford., quotes his own work: Castells, 1972, "La Question Urbaine", Paris: Maspero.
2. See Jacob Funk Kirkegaard's article in Yale Global online.
3. World Migration Report 2008, See page 61.
4. See Economic Times, New Delhi, 20th May, 2009.

### References

- Altbach, P. (2004), Globalization and the University: Myths and Realities in an Unequal World. *Tertiary Education and Management*, 10(1), 3–25.
- Appleyard, Reginald (2002), World in the Mirror of International Migration, Scientific Series: *International Migration of Population: Russia and the Contemporary World*, 10, Moscow, MAX Press.
- Banerjee, Payal (2006), Indian Information Technology Workers in the United States: The H-1B Visa, Flexible Production, and the Racialization of Labor, *Critical Sociology*; 32 (425), 430-431.
- Bhandari, Laveesh and Payal Malik (2008), *India's Talent Migration*, Whitepaper, , Version November 2, 2008, prepared for Manpower Inc. Indicus Analytics. Website: <http://www.docstoc.com/docs/5005871/India's-Talent-Migration—An-Indicus-Manpower-Whitepaper> (accessed on 13.5.2009).
- Bhumali, Anil and Bhaskar Chaudhuri (2006), "Globalisation and Higher Education: The Developing Countries Need a Paradigm Shift", *South Asian Journal of Human Rights*, 61-82.
- Borjas, George J. (2003), The Labor Demand Curve is Downward Sloping: Reexamining the Impact of Immigration on the Labor Market, *The Quarterly Journal of Economics*, November.
- Cortes, Patricia (2008), "The Effect of Low-Skilled Immigration on U.S. Prices: Evidence from CPI Data," *Journal of Political Economy*, University of Chicago Press, 116(3), 381-422, 06.
- Danby (2004), Contested States, Transnational Subjects, Towards a Post-Keynesianism without Modernity, In: *Postcolonialism Meets Economics*, Zein-Elabdin, E. and S. Charusheela Eds.), Routledge , London and New York.
- Devan, J. and P. S. Tewari (2001), "Brains Abroad." *The McKinsey Quarterly*, Number 4: Emerging Markets.
- Facchini, Giovanni, and Anna Maria Mayda. (2008), "Individual Attitudes towards Immigrants: Welfare-state Determinants across Countries." *Review of Economics and Statistics*.
- Hanson, Gordon H. (2009), *The Governance of Migration Policy*. The Governance of Migration Policy, Human Development Reports Research Paper 2009/2, United Nations Development Programme, April, pp. 26.
- Hanson, Gordon H., Kenneth Scheve, and Matthew J. Slaughter (2007), "Local Public Finance and Individual Preferences over Globalization Strategies." *Economics and Politics*, 19(2007), 1-33.



- Hatcher, M. (2001), "Movement of Persons: A business perspective on removing barriers under the GATS". Paper presented at the International Pallas Forum Conference, Nijmegen, 28 – 29.
- Holton R. J. (1998), *"Globalization and the Nation-State"*. London, Macmillan Press Ltd.
- Human Development Report, *Overcoming Barriers: Human Mobility and Development* (2009), UNDP, 4.
- Human Development Report: *Overcoming Barriers: Human Mobility and Development* (2009), United Nations Development Programme (UNDP).
- IIE (2010), *Attitudes and Perceptions of Prospective International Students from India*, An Institute of International Education Briefing Paper, February.
- IOM (2005), *Mainstreaming Migration into Development Agendas*, International Organisation for Migration, Geneva, Switzerland, available at: [http://www.ppl.nl/books/ebooks/IOM\\_Red\\_Book\\_08.pdf](http://www.ppl.nl/books/ebooks/IOM_Red_Book_08.pdf). (accessed on 12.4.2009).
- IOM (2009), *The Impact of the Global Economic Crisis*, Policy Brief, March, 8.
- King, R. (2000), Generalizations from the History of Return Migration. *Return Migration: Journey of Hope or Despair?* (ed). B. Ghosh. Geneva, International Organization for Migration.
- Kirkegaard, Jacob Funk (2008), *US High-Skilled Immigration Policy: A Self-Inflicted Wound*, Peterson Institute for International Economics, *Yale Global Online* July 1. Yale Center for the Study of Globalization.
- Kleemans, M. and J. Klugman. (2009), "Public Opinions towards Migration." *Human Development Research Paper No. 53*. New York: United Nations Development Programme, Human Development Report Office.
- Lindsay-Lowell B., A. Findlay and E. Stewart (2004), *Brain Strain, Optimising Highly Skilled Migration from Developing Countries*, Asylum and Migration Paper 3, August.
- Lopez, M. H., G. Livingston and R. Kochhar (2009), "Hispanics and the Economic Downturn: Housing Woes and Remittance Cuts", Pew Hispanic Center, 8 January, Washington, D.C., <http://pewhispanic.org/files/reports/100.pdf> (website accessed on 21.5.2009).
- Mattoo, A., I. Neagu and C. Özden, (2008), Brain Waste? Educated Immigrants in the US Labor Market, *Journal of Development Economics*, 87, 255-269.
- Mayda, Anna Maria. (2006), "Who is Against Immigration? A Cross Country Investigation of Individual Attitudes towards Immigrants." *Review of Economics and Statistics*, 88 (3), 510-530.
- Open Doors Report (2008), Institute of International Education.
- Open Doors Report (2009), Institute of International Education.
- Ratha, Dilip (2008), Migration and Development Briefs, [www.worldbank.org/prospects/migrationandremittances](http://www.worldbank.org/prospects/migrationandremittances) (website accessed on 19.5.2009).
- Saxenian, A. (2000), *Brain Drain or Brain Circulation? The Silicon Valley-Asia Connection*, Harvard University Asia Center: Modern Asia Series Fall 2000 Modern Asia Series.
- (2001), *The Silicon Valley Connection: Transnational Networks and Regional Development in Taiwan, China and India*. "Report for University of Pennsylvania Institute for the Advanced Study of India project on" *The Context of Innovation in India: the Case of Information Technology Study*.
- (2002), "Brain Circulation: How High-Skill Immigration Makes Everyone Better Off." *The Brookings Review*, Winter 2002, 20 (1), 28-31.
- Saxenian, A. L. (2006), *The New Argonauts, Regional Advantage in A Global Economy*, Harvard University Press.

Schrock, John Richard (2009), US: Job Prospects Plummet, *University World News*, 12 April, Issue: 0071.

United Nations Development Programme Annual Report (2009), UNDP, 4.

Wadhwa, Vivek; Guillermina Jasso; Ben Rissing; Gary Gereffi and Richard Freeman (2007), *Intellectual Property, the Immigration Backlog, and a Reverse Brain Drain : America's New Immigrant Entrepreneurs*, Part III, Ewing Marion Kauffman Foundation, August.

World Bank (2008), *Migration and Remittances Factbook*.

World Bank (2009), *Migration and Development Briefs*, Washington, D.C.

World Migration Report (2008), Institute for the Study of International Migration, Georgetown University, Washington, D.C., 61.