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Working Paper Nos. 31–33
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Zakir Husain Centre for Educational Studies
School of Social Sciences, Jawaharlal Nehru University
New Delhi-110 067, India

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International Migration and Diaspora Studies Project

Zakir Husain Centre for Educational Studies
School of Social Sciences
Jawaharlal Nehru University
New Delhi 110067, India
Tel: +91 11 26704417
Email: imds.jnu@gmail.com

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Migration and Morality: Sovereign Finance and Dehumanized Immigrants¹

Amiya Kumar Bagchi

Institute of Development Studies Kolkata, India

Abstract

The paper challenges the liberal view of morality and governance in the national and international arena on the ground that it fails to provide a proper framework for guarding the human capabilities and rights of all human beings, including migrants. It sets out the basic contours of an alternative framework of policy-making.

Keywords: Morality, Governance, Capabilities and rights, Migration, Policy-making.

1. Introduction

Morality is both a relational and a universal concept. It is defined as a human being's behaviour with regard to other beings and to things outside herself in so far as it impinges on the fortunes of other beings. In a more restricted sense, it bears on the fortunes of other human beings. Hence morality necessarily has to assume certain basic propositions about how the lives of human beings are affected by socio-economic and political institutions and changes in them. The liberal theory of justice, which underlies much of the discourse about 'basic needs', 'poverty alleviation' and so on takes inequality to be a fact of life. It seeks to design policies without trying to alter a social and political arrangement that reproduces and often aggravates structures of inequality worldwide. Applied to migrants (immigrants), policies arising out of that minimalist view of morality only address how 'illegal' immigrants can be treated more humanely, or how the grosser forms of discrimination against minority communities constituted by immigrants can be ended.

This paper challenges the minimalist perspective on morality. It also challenges the view that socio-economic inequality will always be with us and that the goal of sensible policy can only be the provision of primary goods and alleviation of poverty in micro contexts. Such a frame of policy-making neglects the macro-structures and policies that reproduce and exacerbate inequality and poverty. Gross international inequality and poverty are the root causes of streams of 'illegal' migrants and refusal to treat those can only yield ad hoc solutions which leave the migrants in a disadvantaged position.

Two seismic changes in the international politico-economic order can be singled out as the factors underlying the aggravation of inequality internationally and within countries. These are the placing of finance as the sovereign governor of the fates of most market economies

¹ I thank participants in the Colloque, 'Mondialisation, migration et droits de l'homme' organized by the Université de Genève on 16-17 January 2006 and to Jasodhara and Barnita Bagchi for insightful comments, without incriminating them for my mistakes.

and the collapse of the Soviet bloc spanning the landmass of Northern Eurasia. The effects of both have been the disabling of the state as the regulator of economic institutions and as the provider of social security for the disadvantaged section of population. Before they gave up their model of socialism, the Eastern European states took full responsibility for education, health and access to work for the population. The total abdication by the state of that responsibility has created an enormous movement of population within and out of those states. The movement often takes the form of trafficking of women². The social democratic Western European states are also clipping away the social protection of the sick, the elderly and the unemployed. On the other side, divergent movements in the growth of the working age population (themselves largely the product of unequal access to health care and education in the rich and the poor countries) have produced new tensions in the policies relating to labour and immigrants, especially in the richer countries. While international capital movements are not only permitted but even falsely glamorized as the harbinger of innovation and greater efficiency, the states are introducing increasingly draconian regulations to control immigration and deny the basic human rights to the so-called illegal immigrants. A proper ethical framework for informing policy-making at the national and international levels needs to address these contradictions and tensions if it is to be a step forward for ensuring fuller freedom for all human beings.

In the wake of an increase in terrorist attacks against various targets in several countries of the world, the security approach to migration has found greater favour with policy-makers. There are three basic objections to this approach. First, it is likely to have only a short-run impact, while increasing the cost of surveillance and protection of the borders. Secondly, the measures taken by the authorities in the countries concerned, such as the USA and UK, have often violated the constitution and laws of those countries and abridged the freedom of their own citizens. They have often been thrown out on those grounds by the courts. Thirdly and most fundamentally, they take away many of the basic human rights of immigrants, including their right to life and freedom, with little redress from any higher authority: states effectively practise terrorism against immigrants, especially those who are stigmatized as 'illegal' immigrants, even though they might have lived in the host country for many years, often in menial jobs that the natives, very often descendants of earlier immigrants won't perform.³

The search for an alternative paradigm must start with the basic hypothesis that it is the enormously increased inequality between incomes of different countries that has led to a surge of migration from developing and transition economies. A more decent international order, with the promise of what the ILO calls 'decent work' for most people in most countries would minimize the need for migration and the eruption of irrational anger expressing itself as terrorism. The restoration of the IMF to its original function of minimizing turbulence in the balances of payments of different countries, the scrapping of most of the WTO provisions that damage both agriculture and industry of developing countries, the scrutiny of all money transfers at both the point of origin and the point of

² For an analysis of the reasons for the growth of trafficking of women in different parts of the world, see Banerjee, 2003, Facio, 2003 and Poulin, 2003.

³ On 10 April 2006, hundreds of thousands of so-called illegal immigrants, mainly of Hispanic origin, demonstrated in cities against a bill passed in the lower House of the US Congress that would 'speed up deportation, tighten border security and criminalize illegal immigrants' *New York Times*, 11 April 2006..

deposit so as to prevent the hemorrhage of the kind that Russia suffered throughout the 1990s and Sub-Saharan Africa and Latin America has suffered throughout the last thirty years or more, and restoring the necessary public provisioning of the state are some of the planks out of which a seaworthy policy vessel might be constructed to guide the global polity of the future.

2. Migration in the Age of Globalization II

Human beings are migratory animals and it is by migrating across seas and land that they have established their colonies on the known continents, except the very inhospitable Antarctica (Diamond, 1992). But like most other animals, they have also had a sense of territoriality. However, rights of territoriality were flexibly exercised until the rise of modern, so-called rational-bureaucratic states.⁴ Pastoral and agricultural communities in many regions of the world lived symbiotically side by side.

How do we then treat migrants? The simplest answer is that migrants are human beings and they should enjoy the same rights as any other human beings. This answer, however, runs up against the modern state system, under which the states treat their own citizens and citizens of other states differently. The problem becomes even more complicated when people become refugees and stateless. Not all refugees are stateless, but many of them refuse to return to the jurisdiction of states of which they are citizens and many states refuse to take back persons who claim to be citizens of those states.

Migration within the borders of a given state is probably a more important stream, quantitatively speaking, than migration across international borders. In the People's Republic of China alone, estimates of actual and potential numbers of migrants range from 150 million to 500 million persons, whereas the currently accepted estimate of the number of international migrants is 200 million (GCIM, 2005, p.1). The treatment of internal migrants also raises many issues of morality and justice, and most of them are of the same nature as come up in treating questions of international migration.

We will deal briefly with the most important issues of internal migration before moving on to those of treatment of international migrants. The common cause behind internal migration on the part of free agents is the search for better incomes, better environment, better education and other facilities. But there are many who are coerced into migration, such as women forced into sex work, bonded labourers in the sugarcane or cotton fields, or brick kilns of South Asia, and other unfree workers in many other developing regions. Under conditions of modern economic growth, this has generally meant moving out of rural to urban areas, out of agriculture into industry or services as the main occupation, or moving from areas of slow growth or stagnation to fast-growing areas. In the developed countries, the major movements out of agriculture into industry or services had more or less been completed by the third quarter of the twentieth century. But, of course, movements of people among the developed countries, virtually all of which are members of the OECD still go on. While such movements took place at a fast rate, they posed major problems of urban congestion, shortages of housing, clean water and infrastructural facilities, renewal of decaying

⁴ See, for example, the description of exchanges between agriculturists and pastoralists, and of transhumant migrations in precolonial Senegambia, in Curtin, 1975, chapter 1.

habitations and so on, and those problems, while less acute than, say, in 1900, have not gone away.

The developing countries today face very similar problems but the dimensions of those problems are much greater because the population masses involved are about three to four times those of the developed countries. They are also more acute because various ideological and structural reasons have rendered resources available for meeting the challenges more scarce. But the challenges will ultimately have to be tackled at the local level by the people of the developing countries themselves, even as they struggle against the international socio-economic order that drains the resources of the Third World and cripples the concerned states' capacity to plan for a humane process of structural change.

Several epochal changes in the developing countries have intensified the problems caused by internal migration. The first is the construction of dams, factories or opening up of mines in regions mainly populated by economically and politically underprivileged communities. Many of the projects were earlier mainly carried out by the state, even if the state in most countries was complicit in the projects of the local landlords or capitalists. But with the rise of neo-liberalism the private sector has assumed a leading role and the protective regulation earlier installed by the state has been stripped away, leaving the affected people even more vulnerable to the pressures of the market. That market is often backed by the force of the police or musclemen of the corporate sector. Secondly, in many cases in which the state has faced resistance against such acts of displacement, it has resorted to forcible resettlement of the oustees and ethnic mixing with the majority community in order to dilute the strength of the popular resistance. Thirdly, in recent times, especially after the coming into operation of the WTO regime, agriculture, which still supports about half the work force of the developing world, is facing a severe crisis. Unemployment and imminent starvation are forcing hundreds of millions of peasants off the land. At the same time, the rate of growth of employment in services and industry is far lower than that of the labour force in developing countries (ILO, 2004a).

In India, the Sardar Sarovar Project, under which a very big dam has been constructed, thereby submerging the houses and fields of thousands of mainly Adivasis or tribal peoples in the Narmada valley, has attracted international attention (Baviskar, 1995/2004; Paranjape and Joy, 2006). The Sardar Sarovar Project, which has been executed despite the protests of a big social movement spearheaded by the Narmada Bachao Andolan, under the leadership of Medha Patkar, has a submergence area of 360 square kilometers and has displaced about 150,000 persons. In Bangladesh, the Kaptai river project submerged about 40 percent of the agricultural land of the people of the Chittagong Hill Tracts (Adnan, 2004). There are several aspects that are common to both these projects, namely, that both have involved displacement of indigenous peoples who had survived for thousands of years as forest dwellers, and using forest products and shifting cultivation as their means of livelihood, that the project displacing them would mainly benefit farmers and other members of the majority community through the provision of electricity and irrigation and that in both cases, the oustees were promised rehabilitation by the state and that promise was carried out in a niggardly fashion, if at all, leaving the already marginalized communities as slum-dwellers or squatters eking out a miserable living. Such stories of the pushing back of indigenous peoples into inhospitable land and their further displacement leading to their forced migration have been repeated all over the developing world and the currently affluent North America and Australia and are going on right now. The threat of such forced migration has increased many

times under the neoliberal regime that, among other things, aims to privatize many goods and resources that had earlier been considered inviolably public goods.

Under conditions of capitalist growth, displacement and coerced migration take place also because of the working of cumulative causation feeding on economies of spatial agglomeration and increasing returns within firms and among networks of firms (Bagchi, 2005a). First,

When, for some reason, a particular city or region attracts customers and firms, and economic agents in general cluster in that locality, division of labour becomes more complex both within and between firms. The greater specialization through division of labour itself generates economies of scale. In addition, learning by doing and by experimenting makes individuals and organizations more efficient. ... in process industries, larger volumes of production lead to economies of scale. With modern information-intensive technologies, larger firms also exploit economies of scope. Many of these processes can be path-dependent, generating implicit and idiosyncratic advances in knowledge. They confer further benefits on an established industrial or financial cluster (Ibid, p. 20).

Second,

The profits generated through the first set of factors enable the capitalists operating there to accumulate more capital, and to increase their advantage in comparison with those who operate in less-favoured locations. The experience of successful operation of dynamic firms induces the managers and capitalists to venture on further innovations. Moreover, the dynamic cluster acts as a beacon to capitalists and entrepreneurs from other regions (Ibid, p. 20).

Third,

Workers leave a declining location and migrate to the dynamic clusters. A predominant fraction of such migrants tend to consist of young adults, and in many situations, adult males. The expanding cluster gets the benefit of adult workers whom it had not fed from childhood or educated (when the workers have skills and/or formal education), and the capitalists can offer lower wages than would have ruled if the migration had not taken place (Ibid, pp.20-1).

We will have to remember these factors of inequalizing forces causing migration and, very often on a selective basis, also in the international context. The selectiveness may be caused by mindless destruction of the habitats of already disadvantaged communities or by deliberate policies for attracting low-wage nurses, domestic servants or heavy manual work or for using the special skills of doctors, engineers, software specialists who have been trained at a high cost by a poor country.

When internal displacement occurs through the working of state-sponsored or market-driven development, the moral issues are starkly clear. Any concept of public morality that places both the substantive and formal freedom of persons at the centre of its discourse would want society to provide for the people who have been forced into a situation of destitution through no fault of their own. Without such provision human lives will be lost or rendered intolerable and the freedom of choice that upholders of negative liberty value will be rendered meaningless. On the other hand, substantive freedom will be badly curtailed or lost altogether if the people who are displaced and coerced into migration because of state action or the depredations of an unregulated market cannot give expression to their discontent about the changes they are victims of. When women and children are trafficked within a state and especially across state borders, they are often rendered voiceless through the complicity

of the employers and the police authorities. As pointed out already, neo-liberalism has badly damaged the capacity of the state to provide even the so-called safety nets of the most disadvantaged sections of population, including coerced migrants, let alone the inputs necessary for them to live as free human beings with dignity and self-respect. Moreover, the creation of many new states in the wake of the disintegration of the Soviet Union and Yugoslavia has led to an enormous increase in trafficking.

3. Theories of justice and morality and their bearing on the ethics of treatment of migrants

The usual systems of morality or justice have been built on the assumption that they apply to persons who are subjects or citizens of particular states. They owe their origin mostly to the context of the modern mercantile-absolutist states in Europe in the sixteenth and seventeenth centuries and the continual wars in which they were involved for acquiring a hegemonic position (Bagchi, 2005, chapter 4). Hugo Grotius (1625/1998) put forward the basic system of laws governing relations between states. But that system primarily dealt with relations between states in peace or war, and did not throw much light on how states should treat people whose status as citizens or residents straddled several territorial jurisdictions.

Conventional political philosophy, including the dominant version of political liberalism, has little to offer in the way of insight into the ethical or political problems surrounding international migration. For such philosophy takes the existing system of states to be given and has very little to offer beyond what had been accepted as the norm between 'civilized states' from the time of Grotius onward.

A discourse on the morality of migration, internal or international, has to negotiate three overarching structures governing the fate of all human beings. These are the prerogatives of the modern state, the regime of property rights as mediated through the marketing in a property-owning society, and the governance of the family and the power of adult males over women and children.⁵

One of my claims would be that, the dominant strands of political liberalism, in its 'social' or 'democratic' variants (to borrow a classification made by Plant, 2004), in fact contradict their consequentialist approaches to questions of public morality and justice in treating the market as an unanalyzed institution that is a fact of life and thereby not only produces false answers about the different ways markets perform but also yield the high ground to neo-liberalism that has made short work of the 'social' or even the 'democratic' variant of political liberalism.

John Rawls has been arguably the most influential philosopher of political liberalism since the 1960s, as far at least as academic discourse is concerned. John Rawls's theory of justice as fairness demands that everybody enjoys certain inalienable liberties, that 'fair' opportunities for advancing themselves should be available to all citizens, and that only those differences in economic and social arrangements should be tolerated that would be accessible to everybody and maximally benefit the most disadvantaged sections of the population (Rawls, 1971/1999; Van Parijs, 2003). Compared with many other versions of liberalism, Rawls's work possesses at least two virtues. First, it is an explicitly 'political' theory of justice that underpins his

⁵ The trafficking of women and children is often facilitated by a strong patriarchy, but we will not have the space to discuss it in this paper.

corpus. There is no pretence that the principles of justice apply to some ideal society, without a state endowed with a monopoly of coercive power. Secondly, the principles of justice are primarily macro-social in nature and are not principles that should guide individual behaviour, as Rawls has insisted in the numerous restatements he has engaged in (see, for example, Rawls, 1974, 1999). It is a consequentialist theory and, therefore, judgments about enforcing certain rules necessarily involve analysis of the processes by which the results encoded in the principles of justice are to be achieved.

Since Rawls's theory is based on the notion of a contract implicitly or explicitly entered into by citizens of a democratic state, it is virtually impossible, without altering the structure of the basic axioms, to extend it into the international arena. This was explicitly recognized by Rawls when he wrote an essay on the 'law of peoples' (Rawls, 1999). Not only is it difficult to extend the Rawlsian approach to problems of citizens who are not members of the state to which the principles of justice apply by contract, it is also exclusionary since as Rawls made clear in his numerous writings, including his *Political Liberalism* (Rawls, 1993), it cannot apply to nations that do not have the background institutions of his conception of 'the reasonably just societies of well-ordered peoples' (Rawls, 1999, p. 17). As Sen (2002, p. 458) pointed out:

The Rawlsian exercise involves institutional reasoning among people "who are born into that society in which they lead their lives" (Rawls, 1993, p.23). What is a matter of concern here is the absence of some procedural insistence on forceful scrutiny of local values that may, on further scrutiny, turn out to be preconceptions and biases that are common to a focal group.

Thus Rawlsian democracy may end up by encoding racism, gender discrimination, not to speak of class biases, directed against strangers or even citizens who do not belong to the focal group.

Rawls has also insisted that his principles of justice will be embedded in production relations that, following James Meade (1964), he has dubbed as a 'property-owning democracy' (Rawls, 1987/1999, p. 419). Given the importance of this construct in Rawls's conceptual architecture, it is surprising that the students of Rawls have devoted so little analytical scrutiny to it. In the *Cambridge Companion to Rawls*, for example, there are only two casual references to it (Freeman, 2003, pp. 221, 279).

Rawls has sharply distinguished his concept of a property-owning democracy from that of a welfare state (Rawls, 1987/1999, p. 419):

One major difference is that the background institutions of property-owning democracy, with the system of (workably) competitive markets, try to disperse the wealth and capital, and thus to prevent a small part of society from controlling the economy and indirectly political life itself. Property-owning democracy avoids this, not by redistributing income to those with less at the end of each period, so to speak, but rather by ensuring the widespread ownership of productive assets and human capital (educated abilities and trained skills) at the beginning of each period, all this against a background of the equal basic liberties and fair equality of opportunity. The idea is not simply to assist those who lose out through accident or misfortune (although this must be done), but instead to put all citizens in a position to manage their own affairs and take a part in social cooperation on a footing of mutual respect under appropriately equal conditions.

However, the outcome of the working of a property-owning democracy may violate some of the basic principles of justice laid down by Rawls. First, if by workable competition, we

mean perfect competition, then in equilibrium, some persons may starve as a result of the working of the market, if the state does not intervene (Coles and Hammond, 1995). Secondly, as Atkinson (1995) has argued, if workable competition includes the possibility that some markets are monopolistic then groups of people may be unable to access goods and services because the monopolists find it profitable to raise prices and change qualities of those goods and services so much that they go out of reach below a threshold income. Even if everybody starts with equal physical assets, the market can enrich some in such a way that the outcome of monopolistic competition leads to their being denied Rawls's 'primary goods' and hence damage the capabilities stressed by Sen (1987).

In countries that had a landlord class using both market and non-market coercion, the deprivation of the peasants and the emergence of a landless class of workers was built into the institutional framework (see, for example, Habib, 1965/1995, 1983/1995). But even under legal systems that gave rights to land initially only to actual cultivators, the working of the market produced a class of landless workers. This was true as much of the northern states of the USA as of, say, Denmark at the end of the nineteenth century. In the industrial sphere, the market led to ever-greater concentrations, and when mergers and take-overs were permitted, to greater centralization of economic power. The protection of the actual cultivators or small producers in industry against dispossession could be achieved only through the continuous intervention by the state, say, through the operation of Sherman Act in the USA, or continuous monitoring of land transfers as used to be exercised in South Korea.

Rawls's programme would in fact involve a periodic redistribution of all assets in society, something that no welfare state has attempted. There are two different ways of demonstrating that in a market economy, with chance associated with external factors such as harvest fluctuations or changes in trade patterns or with endogenous factors such as competition or innovations, themselves spurred by competition, a skewed distribution of assets and income would be generated. One is theory of proportionate effect of a variable subjected to random shocks originally propounded by J. C. Kapteyn in 1903. Under the propulsion of such an effect some members of the population who are subjected to these shocks would acquire larger values of assets and incomes and others would get lesser shares of the assets and incomes and an unequal distribution of assets and income would be inevitable if no purposive action is taken to interfere with this process (Aitchison and Brown, 1957, chapter 3).

Another, connected set of factors would work through the processes of increasing returns to scale and spatial agglomeration that we have sketched earlier. Karl Marx's theory of the tendency for concentration of capital in a few firms and the associated tendency of smaller firms to being gobbled up by larger ones leading to centralization of capital would fit into this schema. The Marxist tradition includes Joseph Steindl's theory relating increasing concentration of economic power in a few firms and the resulting tendency for deficiency of effective demand facilitating such concentration, and Baran and Sweezy's characterization of the post-World War II global capitalism as a further development of monopoly capital (Steindl, 1952; Baran and Sweezy, 1966). In a parallel development, Schumpeter (1942) stressed the creative destruction wrought by innovations facilitating the growth of oligopolistic firms and further fomenting the growth of such firms.

The failure of Rawls or many advocates of welfare capitalism to analyse the nature of the market and its continual transformation under advanced capitalism and their assumption that

they can leave the market to be handled by capitalists while they tackle the undesirable consequences of the market has played into the hands of neo-liberals. If markets are taken to be 'naturally' given, then any interference with that market in the form of state or trade union regulation of wages is considered to be unnatural. A fiscal crisis of the welfare state results when that regulation is supported by typical measures of social insurance associated with the welfare state, while a low tax regime for the rich is instituted in the belief that it will encourage thrift and enterprise, or alternatively, it will check capital flight. That crisis then provides a strong argument for the neo-liberals to do away with most state regulation that is allegedly against capitalist enterprise.

In order to grasp the enormity of dislocation that has fuelled migration, especially migration across borders, we have to briefly analyse the political economy of neo-liberalism.

4. The Global Project of neo-liberal Capitalism in the Phase of Finance-led Globalization II

Although neo-liberalism began its triumphant march in the U.K. and U.S.A., it was a global project from the beginning. It is not accidental that the problems of international and internal migration have acquired new dimensions as neo-liberalism has progressively succeeded in stripping the state of most of its functions other than providing security to the property of the rich and the transnational firms. It is also not accidental that the earlier phase of finance-led globalization was also associated with a huge swell of migration. Between 1846 and 1924 an estimated 48.17 million people moved out of Europe into other continents (Massey, 1988, Table 1). Most of that movement took place from the 1870s to 1913. A much smaller number of people from China, India and other colonial and semi-colonial lands were taken as indentured labourers, mostly to serve in the plantations and mines of the tropical regions. The inter-continental European migration was supported by a massive flow of European, chiefly British, investment to the lands where Europeans settled. That foreign investment was in its turn sustained by large flows of tribute and European profits in the nonwhite dependencies of the British, Dutch and other European powers with substantial possessions in Asia, Africa and Latin America (Pollard, 1985; Bagchi, 2005, chapters 13 and 16).

The European migration in the late nineteenth century was driven by the structural transformation attendant on industrialization, and also by the quickening of population growth in several regions brought about by declining infant and adult mortality. Germany became a net immigration country from the 1890s and overseas, the USA became the principal destination for European migrants. The total proportion of population as of 1900 migrating overseas from individual European countries ranged from 1.3 per cent for France, 8.0 per cent for Germany to 29.2 per cent for Italy, 30.1 per cent for Portugal, 35.9 per cent for Norway and 40.9 per cent for British Isles (Massey, 1988, Table 1). The extra-European destination countries were able to absorb these immigrants not only because of the flows of foreign investment received by them but also because of the immense degree of support given by domestic policies in those countries to both public and private investment. The governments of Germany, the USA, Australia, Canada all instituted stiff tariff protection against foreign manufactures, and they built up the infrastructure through generous grants. The concerned governments were also involved in extending education and public health care in various forms. Moreover, in the European heartland, workers' bargaining power improved through their own struggles, through the tightening of the labour market because of migration

and government policies to look after the young and the old when so many working adults were migrating abroad. Of course, the European settlers also grabbed the land and resources of native populations in the USA, Canada, Australia, South Africa and Rhodesia (today's Zambia and Zimbabwe). Such acts of usurpation would not be open to today's impoverished migrants, but MNCs continue to usurp common property resources all over the world.

The global situation under finance-led Globalization II since the 1970s is in many respects quite different from what obtained in the first phase of finance-led globalization. From the beginning, the policies were aimed at curbing worker power, making the state retreat from any activities that were judged not to be in the interest of capital and push back the bargaining ability of primary producers, especially the producers of oil. The transnational banks domiciled in the USA, UK, Switzerland, France and Germany successfully corralled the petrodollars arising out of the quadrupling of the oil price in 1973. In a connected development, the major countries of Latin America were pushed into a debt trap that closed on them in 1982. In the so-called rescheduling of the debt of the heavily indebted countries, the trap door was lifted just as far as it allowed the countries to work a treadmill for generating a stream of service payments, without ever getting out of the trap. The domestic investment capacity of practically all the developing countries, except those of East Asia, was badly battered exactly when they needed to invest more not only in physical capital and economic infrastructure but also in health, education and technology appropriate for providing employment to a burgeoning labour force.

In the history of capitalism as we have known it, armed combat and political domination have from the beginning played an important role as instruments of competition (Bagchi, 2005). This was true also of the two phases of finance-led globalization, namely, that between 1870s and 1914 and the current phase starting around 1971.

5. Theories of justice confronted by facts of globalization

We have seen earlier that because the 'social' or 'democratic' versions of liberalism fail to analyse the markets in capital and labour power as they really work, and as they have worked since the financial engineers wreaked havoc on government support for social sectors or productive investment in all countries that they could cajole or bully and on the co-ordination functions of the IMF or World Bank except in so far as they could act as gendarmes at the behest of capital. Through that failure they left the field wide open for neo-liberal policy-makers all around the world. When we come to the ethical aspects of the way international economy has been shaped by financialization and finance-led globalization, the Rawlsian version does not advance a step beyond what Grotius might have said. The 'law of peoples' can apply, properly speaking, only to properly ordered societies with institutions that are clones of the US system of governance. They also would apply to peoples which have non-liberal but decent governments. Rawls does not define what he means by a decent, non-liberal government. Leaving that aside, can 'peoples' be held responsible for indecent governments ruling over them? Moreover, Rawls imposes on the peoples the responsibility of taking control of their numbers—a responsibility that Grotius did not know of. This is the influence of the neo-Malthusian policy-makers who think that governments can control fertility and the growth of population, if necessary, by direct or indirect coercion (politely called incentives). In fact, such policies have generally failed and, of course, many such policies violate the

freedom of choice beloved of liberals. Did Rawls have Hitler's demand for the *Lebensraum* needed for the *Volk* in mind when he wrote that?

In his law of peoples, Rawls would give citizens the right to emigrate. Would this right make sense if people also did not have the right to immigrate into some other country? Thus unfortunately, the Rawlsian corpus has very little to offer by way of guidance to seekers after justice or morality in international relations. In fact, the general trend of his argument might support the action of a so-called democratic society in imposing its rule over another country because its government is judged to be indecent and is accused of systematically violating human rights since that democratic society does not transgress the international laws that obtain only between decent societies.

We have earlier mentioned that the developing economies were caught in a debt trap in the 1980s. Both actual financial innovations effected by the major financial powers led by the USA and UK and ideological constructs by economists played their role in this entrapment of the developing countries. In the early 1970s, stock exchanges of both Chicago and New York introduced derivatives of future prices of commodities, which included options on increasingly sophisticated variants of delivery systems in terms of dates and instruments. Concurrently Fischer Black, Robert Merton and Myron Scholes constructed the fallacious formula of option pricing (for a short account of the theory see <http://nobelprize.org/economics/lareates/1997/press.html>, accessed on 9 April 2006). It was assumed by them that it is always possible to find out the fundamental values of profit to be made from the ownership of a share in a firm or in a stock of goods, and anchor the formula for option pricing on those fundamental values. But it was well known that prices in the stock market are governed largely by sentiment and operators' guesses about how other operators in the market would behave (for a classic demonstration, see Keynes, 1936, chapter 12). But despite that, in 1997, the Nobel Prize for economics was awarded to Merton and Scholes (Black had died by then). The unreliability of the Black-Merton-Scholes formula was dramatically demonstrated when around August 1998, Long Term Capital Management, a hedge fund that had been founded in 1993, among others, by Merton and Scholes, almost went bankrupt, with a huge exposure to banks in Europe (including the Union Bank of Switzerland, the biggest bank in Europe at the time) and the USA. It was rescued by a bailout operation orchestrated by the Federal Reserve Bank of New York but it was finally liquidated in early 2000 (<http://www2.sjsu.edu/faculty/watkins/lcm.htm>, accessed on 9 April 2006).

In the same year when the Black-Merton-Scholes theory was formulated, Ronald McKinnon (1973) and Edward Shaw (1973) published books both of which alleged that developing countries suffered from what they called 'financial repression'. The charge was based on the fact that some governments in developing countries tried to regulate money markets in the interest of economic development: the rate of interest allowed to depositors and the loan rate of interest of banks were both subjected to legally specified upper limits and credit was often directed to uses that the respective governments considered to have a priority from the point of view of economic and social development. According to the McKinnon-Shaw doctrine, the regulation of interest rates by the government, rather than their determination in a free market and their direction into designated uses, damages economic growth by discouraging saving and by misallocating resources. This doctrine in its turn is utterly without theoretical or empirical foundation. First, a credit market does not work like a market for apples. Intending borrowers cannot get more credit just by offering higher rates. Credit markets are always characterized by rationing: this was known to most students of

monetary economics and the logic of credit rationing has been rigorously brought out by a number of economists (see, for example, Stiglitz and Weiss, 1981). Secondly, in capitalist economies investment drives saving and individual saving intentions, stimulated though they may be for some savers by higher rates of interest earned on their savings, cannot lead to a nationally higher rate of investment and growth unless the investors act in a venturesome manner: in many cases, a low interest regime can stimulate higher rates of investment. After World War II most governments of Western Europe and Japan followed low-interest policies and managed to clock up high rates of growth. In more recent times, the high-growth economies of East Asia, including China, South Korea and Taiwan, have followed policies that would be castigated as financial repression, with great benefit to their economies (Amsden and Chu, 2003; Bagchi, 2005b).

The beginning of the 1970s has been dated as the end of the Golden Age of capitalism (Marglin and Schor, 1990). The rate of economic growth had reached a new high in Western Europe, Japan and the USA during 1950-1970. In Western Europe, this growth had been supported by immigration from Southern Europe, Turkey, North Africa and the former colonies of Britain and France, with very different treatments in respect of citizenship in different countries (Hansen, 2003). As the economic growth slowed and unemployment levels rose, by 1973, practically all the labour-importing countries of continental Europe ceased to be countries of immigration (Ibid, p.26).

As far as the developing countries were concerned, again in 1973, a big gusher of finance, to be used for entrapping them, came under the control of transnational banks. The Organization of Petroleum Exporting Countries (OPEC) quadrupled the price of oil in 1973. Most of the additional revenue resulting from that step accrued on the one hand to the big transnational corporations (TNCs) in the oil industry, all of which were domiciled in the USA, UK and other European countries, and to the kingdom of Saudi Arabia, Kuwait, Iran, the sheikhdoms of the Persian Gulf, and Indonesia - all of which were client states of the USA or UK. The Saudi kingdom and the sheikhdoms were unable or unwilling to use their augmented wealth for industrializing their countries. So the funds were invested in transnational banks of the G7 countries, which in turn lent them mostly to those developing countries, which were run by dictators or juntas owing their power to US support. When US interest rates were raised in the beginning of 1980s, these debts became unserviceable and virtually all major Latin American countries, including those that had already introduced neo-liberal economic reforms became trapped. The structural adjustment programmes (SAPs) mandated by the IMF and the transnational banks with full support of the US government devastated Latin America.

The advocates of neo-liberal reforms have spread the canard that the developing countries had done worse under some degree of state direction and protection of home industries in the 1960s and 1970s than they did thereafter. Investigations by international bodies such as the UNCTAD and individual researchers have shown that most of the developing countries had higher rates of economic growth and advances in human development indices between 1960 and 1980 than they have attained since then (Weisbrot et al., 2001; Bagchi, 2005, chapters 22 and 23; WOM, 2005, chapter 9).

Some of the basic reasons for the SAPs setting back these economies are well known. But it may still be useful to mention them here, because I find that many discussants of new waves of migration from Latin America, the Caribbean and Africa tend to keep silent over

them. First, by squeezing domestic expenditure severely, the SAPs badly damaged incentives to invest. The raising of interest rates under the SAPs both curtailed investment by firms and led to the bankruptcy of many businesses that could not meet their obligations. This in turn often led to a banking crisis, which aggravated the problems further, as was witnessed with dramatic effect in the case of Indonesia in 1997-98 and in the case of Argentina during 2001-02. With vastly diminished incomes of the citizens and the obligation to pay foreign debtors, even apart from the pressure of the minimalist state, the governments of the highly indebted countries were forced to sell off many productive enterprises owned by them: these sales were made generally to foreign enterprises at fire sale prices since the currency of the country concerned had by then been drastically devalued and only foreign firms of hard currency areas had the resources to bid for them.

The justice or even the legality of full capital mobility across international borders has not been discussed in the literature, although many of the problems of both developed and developing countries in Globalization Phase II arise from this footloose behaviour of capital. Take any firm employing labour. It is taken as axiomatic in some branches of the Anglo-Saxon literature centred on the interests of shareholders that the latter are only risk-bearers in a firm. On the contrary, the employees also bear risk as do many of the subcontractors or suppliers of the firm, and in some cases, even consumers (if, for example, the firm is the only easily accessible seller of some essential drug in a poor country). In the current phase of globalization, firms have been allowed to shift their operations from one country to another without consulting the interests of workers. That kind of relocation or the employment of low-wage workers at the cost of locally employed higher-wage workers have been the basis of the populist politics of restricting immigration (Crisp, 2003; Spencer, 2003) and even some 'leftist' economists (e.g., Rowthorn, 2004) have supported such moves. Borjas (2004) and Rowthorn (2004) have both argued that immigration of any worker will have a depressing effect on the wages of the locals, especially in pockets of high unemployment. Such views have been contested (Kleinman, 2003; WOM, 2005, chapter 9). I am not here entering into this particular branch of the immigration debates. As regards the argument of Borjas, one simple point is that the USA is now kept afloat by the rest of the world sending more than \$2 billion dollars a day to that country to meet its balance of payments deficit. A large part of the foreign funds comes from controllers of client states or from businessmen who are directly or indirectly responsible for creating deprivation and unemployment in their home bases. A large part of the 'legitimate' US earnings accrues from arms sales to states which have been put into conflict situations or rendered insecure through the activities of the NATO member countries, led by the USA. Moreover, neither Borjas nor Rowthorn takes account of the fact that the financialization that has benefited the gnomes of Wall Street or Threadneedle Street has led to a decline in rates of investment in most of the G7 countries (Stockhammer, 2004), and that decline has been blamed by Rowthorn (1995) earlier for rise in unemployment rates in Europe. To analyse the effects of immigration in developed countries without taking into account these overarching factors is akin to the proverbial attempt to measure the effect of the weight of the fly on a boat when the fly is sitting on an elephant, without measuring the elephant's weight.⁶

⁶ The usual analysis of the effect of immigration of skilled rather than unskilled labour is in many cases flawed on two counts. First, with structural change, many skilled persons are rendered unskilled: the task of a responsible government would be to try and retrain the people so affected rather than let

With a rampaging market for firms and mergers and acquisitions reaching new records in terms of the value of assets and the numbers of workers affected, none of the ordinary stakeholders can be sure where their jobs, their supply contracts or their skills will end up and whether they will have anything left at the end of the deal. But the concerned economists or political scientists have not questioned the justice of allowing licentious capital mobility that has caused the problem in the first place.

When it comes to developing countries, the injustice of allowing unrestricted capital mobility is even more glaring. Much of the Third World debt originated in the corruption suffusing dictatorial regimes. When businessmen and politicians in the know thought that the currency of the country concerned was likely to suffer devaluation because of unsustainable balance of payments deficits, they simply exported capital to hard currency areas. It was well known that before the Mexican debt crisis of 1982, as soon as the government borrowed money abroad, almost half of it was deposited in US banks. On top of that dictators knew that they might have to flee at some stage from the wrath of the people, as happened with the Shah of Iran, Ferdinand Marcos, Mobutu and many others. What is the justice of refusing to hand over the ill-gotten assets of the former Shah of Iran to the Iranian people? Why did it take so long for Swiss banks to hand over only a fraction of the billions that Sani Abacha stole from the people of Nigeria? Abacha died in 1998, but only a part of the money lodged in Swiss banks was returned to Nigeria, and under the condition that the World Bank would monitor Nigeria's use of the funds (BBC News 9 September 2005: <http://news.bbc.co.uk/2/hi/business/4230884.stm> accessed on 13 October 2005).

It was also known that Abacha's ill-gotten wealth is stashed in the UK, Luxemburg, Liechtenstein and Austria as well. Did those banks ever ask how Abacha had obtained his money in the first place? If that money (altogether several billion US dollars) had been invested in Nigeria, it would have generated income and employment for several thousand Nigerians, and at least part of the incentive to migrate would have vanished. So long as there are countries and institutions which will accept funds without asking any questions, a structure is created for continuous capital flight from all poor, vulnerable economies. As the researches of Boyce and Ndikumana (2002, 2002a) and other scholars have shown, much of the Third World debt is due to capital flight, to which the international agencies and the G7 countries and traditional safe havens such as Switzerland turn a blind eye. Boyce and Ndikumana (2002a) claim that even for Sub-Saharan Africa, the poorest of the major regions of the world, total capital flight exceeds the debt owed by them. Baker and Nordin (2005) have usefully distinguished three kinds of dirty money sluicing around the international economy, dirty money arising from official and political corruption, criminal dirty money, namely, from drug and arms running, human trafficking, racketeering etc., and commercial dirty money. The last, which receives the least official attention, may well be more important than transfers of funds through direct official corruption. 'Businesses try to hide revenue from their country's tax inspectors by, say, directing buyers to deposit money in Western bank accounts. Private studies have estimated such practices in developing countries at 5 per cent to 7 per cent of their total trade, or more than \$ 200 billion per year illicitly transferred

them sink to the bottom of the heap (Bagchi, 2002). More investment would also help in this process. Secondly, many developed countries refuse to recognize the certification of countries sending out migrants, so that trained doctors or engineers may end up as taxi drivers or janitors (Jordan and Düvell, 2003, pp.24-5)..

abroad... Annual foreign aid totals \$50 billion or so, while dirty money is upwards of \$1 trillion per year, half of which passes from developing to and transitional economies to the West' (Ibid).

The scale of international migration as computed by the international bodies monitoring them appears to be daunting (Table 1). But it must be recalled that (a) it is a small fraction of the total world population, that (b) most of the migrants are in developing countries rather than in the developed ones, so that the latter bear only a small fraction of the burden (if it is a burden, which many analysts doubt). A third fact is that a single country, namely, China, may be handling as many as between 120 and 150 million people migrating mostly from country to cities, and it is doing so without any international aid and is managing to raise the living standards of both migrants and residents. It must also be recorded that China is able to do all this because it systematically ploughs back about 40 per cent of its income into investment. It is able to do so because so far it has not allowed the wasting diseases of financialization to enter into its body politic, and because it had effected a transformation of its economy by eliminating the power of landlords and speculative capital. The state still plays a major role in directing all major areas of economic and social improvement.

Table 1: The scale of international migration 1975-2000

Year	Migrants (millions)	World population (billions)	Migrants as per cent of world population	Average annual increase in no. of migrants (millions)	Income group by GDP per capita (US\$)			Ratios	
					Low	Middle	High	High/low	High/middle
1975	85	4.1	2.1	1	150	750	6200	41	8
1985	105	4.8	2.2	2	270	1290	11810	44	9
1990	154	5.3	2.9	10	350	2220	19590	56	9
1995	164	5.7	2.9	2	430	2390	24930	58	10
2000	175	6.1	2.9	2	420	1970	27510	66	14

Source: ILO, 2004, Table 1.2

Note: The figure for 1990 includes the potential migrants from the break-up of the Soviet Union, when many ethnic Russians (and members of other ethnic groups) settled in territories other than those of their ascribed origin were expected to be denied citizenship in their settlement states and therefore forced to migrate.

6. A sketch of an ethical policy on migration and immigration

Many of the usual normative discourses in the portals of respectable academia and the more powerful international bodies, and the background forces shaping the pressures for international (and national) migration turn out to be justifications for repressive measures under which the trouble-makers (read asylum-seekers) and unwelcome migrants may be shot with impunity and/or as stop-gap humanitarian measures to alleviate the agony of the sufferers. In the same portals, selective, skill-specific immigration is approved of, and the ill-effects of opening such side doors on the developing countries and the culpability of developed country governments and employers is often overlooked (for exceptions see Özden and Schiff, 2006, a study sponsored by the World Bank, and GCIM, 2005, a study carried out by the Global Commission on International Migration set up by the United Nations). While the agony continues, palliative, humanitarian measures will be absolutely necessary. But a long-term, morally appealing solution to the problem of migration would

require the dismantling of the structure that continues to promote finance and the interests of capital at the cost of all human values.

There are several troublesome areas of treatment of international migrants which cause controversies, or even worse, about which a studied silence is maintained in the literature. In some ways, the treatment of skilled migrants has received most attention from researchers and policy-makers. But the treatment of stateless persons, of trafficking of persons, especially women, and finally, of so-called 'irregular' or 'illegal' migrants pose many ticklish issues.

Let us first turn to the case of migration of skilled or educated persons from poor countries. According to Özden and Schiff (2006a, p.10):

Among the positive externalities that are lost with the emigration of educated workers are (a) the positive effect on the productivity of colleagues, employees, and other workers; the provision of key public services with positive externalities, such as education and health, particularly for transmissible diseases; (c) the fiscal externalities associated with the fact that they pay are larger than the public services they consume and the public funds expended in their education; and (d) their contribution to the debate on important social issues and their impact on policy and institutions.

We can only mention the grievous effect of inducing the selective migration of highly skilled professionals such as doctors or nurses from developing countries to the affluent lands. In some of the poorest nations in the world, such as the countries of Central America and the Caribbean islands, in 2000 CE, more than 50 percent of their university-trained graduates had been living abroad (Docquier and Marfouk, 2006). There are more Ethiopian doctors practising in Chicago than in the whole of Ethiopia or that the number of Jamaican migrants with tertiary education is 3.7 times the number of such people staying at home (WOM, 2005, chapter 8). Since 2000 CE again, 'nearly 16000 African nurses have registered to work in the UK alone. Only 50 out of 600 doctors trained since independence are still practicing in Zambia. And it is estimated that there are currently more Malawian doctors practising in the northern English city of Manchester than in the whole of Malawi' (GCIM, 2005, p.24). Thus doctors and nurses trained at great cost by these desperately poor countries are being lost to rich nations while the Sub-Saharan Africa continues to be a region of health disaster, plagued by HIV/AIDS, tuberculosis, endemic malaria and poverty-related diseases such as diarrhoea and other gastro-enteric disorders.

Not only the health care, scientific and economic progress are threatened by this brain drain, but the ability of poor countries to protect the biological and genetic resources on which they have depended for survival for millennia is also gravely damaged by that drain. Under the Biodiversity Convention and under the TRIPs clauses of the WTO agreement, the poorer countries are allowed to protect their plant genetic resources (Correa, 2000, chapter VI). But how can they protect them if they do not have scientists who can describe and classify them? According to Koen Maes, Belgian-born head of invertebrates at the Kenyan National Museum in Nairobi, in 2002:

There were no specialized taxonomists in the whole of Africa. ...It takes eight to ten years to train a taxonomist, but none are coming along in Africa. 'They are the real fossils', Maes added. He himself was to be let go at the end of the year, he said. After seven years in Kenya, his contract was not being *renewed*. 'No funds', Maes explained (Bryson, 2004, p. 441).

On the other side of the coin, there is brain waste which benefits nobody except the migrants who may seek to escape unemployment or abysmally low wages at any cost (Özden, 2006). Ordinary graduates, doctors, scientists from developing countries and Eastern Europe migrate to the EU countries, Australia and the USA and perform menial jobs, either because their home country certification is not recognized in the host countries or because they cannot find the jobs that fit their skills.

The migration of women has increased enormously in recent years and pose special problems in the ethical and legal treatment of such migrants. 'In 2000, the number of migrant women exceeded the number of migrant men in Latin America, and the Caribbean, North America, Oceania, Europe and the former Soviet Union. In Africa and Asia, however, the migrant men were in the majority' (GCIM, 2005, p. 15).

The case of stateless persons is the most difficult. Persons may be effectively stateless because they have been driven out of their usual homes and neither their home country nor the country to which they have been forced to migrate is willing to bear the cost of their rehabilitation. The cases of Palestinian refugees in West Asia and Rwandan refugees in Africa are perhaps the most notorious examples of such victims of ethnic cleansing or genocide, but such victims may be found in many other regions of the world. The UN High Commission for Refugees (UNHCR) may take care of a fraction of these victims and whole generations of people spend their lives in refugee camps. According to the UNHCR, at the end of 2004, there were 19.4 million refugees and asylum-seekers around the world, that is, 10 percent of the estimated migrant population of 200 million (<http://www.unhcr.org/cgi-bin/texis/vtx/statistics>, accessed on 10 April 2006).

But there are stateless people who are not necessarily refugees. In several countries of West Asia such as Kuwait and the United Arab Emirates, there are several hundred thousand inhabitants called *bidun jinsiya* in Arabic, meaning 'without nationality'. Most of them are supposed to have originated in Iran or South Asia. They have no security while they have lived all their lives in some of these countries and may be expelled any time, as happened to half of the population of *bidun* in Kuwait after the 1991 Gulf War (IOM, 2005, pp. 53-54).

The cases of the so-called irregular immigrants have attracted considerable attention because of the atrocities committed against them by developed country governments in the name of enforcing their laws. One of the worst and most publicized incidents occurred on 26 August 2001. The Norwegian steamer MV Tampa responded to an Australian Coastal Surveillance alert that an Indonesian boat was sinking and rescued 460 people on the boat. But the Australian Prime Minister refused landing permission to those boat people who were Afghans who had arrived in Indonesia. Ultimately, 150 of them were taken by New Zealand and the rest were landed in the tiny island state of Nauru (Suter, 2001; Crisp, 2003, p. 85). Australia's action was clearly against international law and human rights. The current Australian government has been notorious in its treatment of asylum seekers and 'illegal' immigrants, keeping them isolated in detention camps, and some of the detainees sewed up their lips in protest (Jordan and Düvell, 2003). 'The International Centre on Migration Policy Development estimates that some 2000 migrants die each year trying to cross the Mediterranean from Africa to Europe. According to Mexican consulates, about 400 Mexicans die trying to cross the border into the USA each year' (GCIM, 2005, p. 34). Many Asian immigrants also die when the traffickers deliberately scuttle them into the Mediterranean

when a naval patrol chases a boat carrying such immigrants. Others die trying to cross other seas and the Sahara desert in an attempt to make into a coveted destination.

Trafficking of women raises particularly delicate issues (Poulin, 2003; Trépanier, 2003). When women are employed as domestic servants or for so-called home care, they may be subjected to various kinds of exploitation beyond what they are supposed to do. All 'irregular' or 'illegal' immigrants suffer from the severe handicap that they cannot have any legal redress against their employers. When such immigrant women are sex workers, then their handicap becomes even greater, if in the host country sex work is an illegal activity. In such cases, the traffickers often get away under the usual police procedures but the women face severe penalties. While many feminists and other activists consider sex work a demeaning activity, legalizing sex work at least frees women sex workers from harassment both by pimps and the police. On the other hand, it has been claimed that legalizing sex trade has led to a larger flow of trafficked women from most countries of Latin America and the Caribbean (Facio, 2003).

Given the contradictions caused by the state system and the deliberate violation of both human rights and international law, the only morally defensible stance is that of what might be called cosmopolitan egalitarianism. Beitz (1979/1999) has convincingly argued that neither moral realism or rather, moral cynicism in international affairs, nor an international communitarianism that privileges all domestic institutions equally because they are supposed to reflect a consensual agreement are morally defensible stances if we value every human being equally (cf. Sen, 2002). I have argued above that a cosmopolitan liberalism that Beitz advocates will not work to protect the persons at risk under the current regime of national and international migration since it privileges non-interference with the operation of footloose finance and monopolistic firms concentrating economic power in their grasp. Thomas Nagel (2005) refuses to fully scrutinize the claims of cosmopolitan morality and instead engages in the delineation of a politically oriented international morality. But his argument there runs on issues of whether richer states have the responsibility of aiding poorer states. He again takes not only the international property rights arrangements of a liberal state as his background structure but also refuses to scrutinize the origins and justice of the current international economic and political order characterized by deep inequality.

The only defensible moral stance if we want to protect the human rights of everybody, including those of migrants is to ignore the barriers erected by institutions of states and exclusionary communities, as Amartya Sen (2004) has argued. But in order to even begin to work towards an international order that can address some of the basic issues, certain fundamental changes in the current arrangements governing movements of capital and labour have to be brought about. I can only sketch the needed alterations in the following paragraphs.

1. There should be a regulation of the export and import of capital in all countries. As we have argued above, unregulated capital movements hurt the interests of workers, and not only workers, of all countries. Transparent and internationally monitored movements of capital can benefit all countries and can both stem the migration of labour from poor countries.
2. The export and import of capital by means of trading in derivatives should be disallowed. Derivatives are primarily instruments of speculation and not instruments for minimizing risk. This is certainly true when they involve movements of funds across borders. So banning most derivatives will dampen the enterprise of financial

engineers. But as we know, the world has been awash with currency, banking and economic crises since the financial engineers were allowed to shape the money and credit markets any way they liked.

3. The state should be fiscally empowered to spend on social sectors so that standards of education, health care and conditions of work can be continuously upgraded. If capital flight and tax evasion by the rich can be minimized, there will be an enormous gain of revenue by the citizens and by the state, which can then spend money on several projects. First of all, especially in developing countries, it can spend more on education, sanitation and health care. It can expand the urban infrastructure in countries that are undergoing rapid structural transformation. In all countries, it can spend more on decent relocation of families and workers adversely affected by technological change and restore the basic features of the welfare states in affluent nations that have been badly damaged by neo-liberalism.
4. If preference is given to immigrants with skills, then part of the taxes originating from earnings of those persons should be returned to the home bases of the immigrants on a regular basis, at least until the costs of providing the extra education to the immigrants are recovered. Such steps will not interfere with the freedom of individuals and families to migrate but will at least partly take care of glaring misdirection of skilled persons mentioned above.
5. Citizenship should be granted to willing immigrants after a brief period. The current practices of the developed and developing countries in controlling immigration obviously violate some basic human rights. As Kymlicka (2003) has argued, the acceptance of immigrants is closely associated with the way citizenship is defined. Canada had been one of the few countries which had welcomed immigrants and had tried to integrate them into Canadian society, while recognizing that many of them had different ways of relating to another, with different kinds of religious bonds and so on. But as the disasters of the 1990s propelled ever larger numbers of people to migrate, the attitudes of the developed countries hardened. But in the wake of 9/11 and the attack that the USA, UK, Australia and their allies mounted on Iraq in 2002, in clear violation of international law, without facing any sanctions from the rest of the world, the actions of those countries towards asylum-seekers who are automatically treated as 'terrorists' until proved otherwise have been more inhuman than any time in the history of those countries (see, e.g., Chang, 2002). The British government has introduced a so-called anti-terrorism bill that will allow it to detain any suspects for up to 90 days without any charges being filed which had drawn the ire of normally reticent judges and jurists in Britain, who warned that the judges must not be deprived of the power to review the actions of the police, if justice was not to suffer a fatal miscarriage (Travis, 2005; Travis and White 2005). The proper thing to do would be to restore the traditional habeas corpus rights, the foundation of the claim for the fairness of British justice, for everybody, including asylum-seekers and suspected terrorists and punish them only if they are really guilty of some offence besides having the wrong skin pigmentation or wrong religion.

What I have suggested above is only a sketch. But I do not think it is millenarian. It will sit well with various other proposals for rendering the global financial system more stable, proposals for uniform labour standards (e.g., Palley, 2004), for defining members of a global

community (e.g., Jordan and Düvell, 2003) and so on. In any case, given the fact that the so-called international community of policy-makers has mismanaged the world economy so badly, as far as the lives and security of the majority of mankind, it is high time we seriously discussed schemes for radical structural change rather than palliatives (such as structural adjustment with a human face) have failed so publicly and so blatantly. Ernst Bloch (1959/1986) was recalling the dreams of previous generations and weaving some of his own during the years when the civilized world as he had known it in Europe was collapsing all around him. Some of the proposals made by me may also have resonance in discussions of feasible socialism, which have resurfaced, ironically enough, after the collapse of the Soviet bloc (Kymlicka, 2002, chapter 5). My proposals will also require the empowering of the United Nations rather than the G7 governments, the World Bank, the WTO or the IMF as the forum for deciding issues of global governance.

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The Role of Migration in Re-structuring Innovation Systems

Binod Khadria* and Jean-Baptiste Meyer**

*Jawaharlal Nehru University, India

**Institute of Research for Development, France

Abstract

The paper discusses the role of migration in shaping the innovation systems in affected countries. The first section clarifies how the stereotypical benefits of high skill migration are nullified by three dynamic conflicts of interest between the source and the destination countries viz. age, wage and vintage. It also argues that the relationship between diaspora knowledge networks (DKN) and development in the home countries is a complex one. The second section explains the divergence in stakes in the restructuring of the innovation systems between the developed destination countries and the developing origin countries. The formulation of the National Innovation System (NIS), introduced by Freeman (1987, 1995), seems to contextualise these divergences due to restructuring of technology transferred by the migrants. It has been argued that differences in NIS are important explanations of uneven development patterns worldwide. The transfer of technology and innovations has never been easy. Typically, high levels of skill and technical competence are needed in the recipient country. The innovation process surely comprises an area of economic behaviour in which uncertainty and complexity are absolutely central characteristics of the environment; empirical approaches to the problem must therefore take far greater cognizance of the processes that underlie the output of innovation. The third section talks about the changing scenario of global redistribution of the S&T capacities where in comparison to the earlier dominance of the traditional triads of North America, Western Europe and Japan, countries like China, Australia, Brazil and India are emerging as significant attractors of brains i.e. of scholars and students. The fourth section discusses the mutuality of benefits derived by both the sides through scholarly mobility. The fifth section analyses the example of development of the Indian IT industry and its linkages with the dynamics in North America, through NRIs (non-resident Indians) sheds light on how the highly skilled expatriate networks connect dispersed human resources in S&T with their countries of origin and generate a significant impact on innovation processes back home. The role of migration in restructuring innovation systems in origin and/or destination countries thus has debatable twists! But because there are always two sides of the coin, it depends upon how one tosses it, to get to see the side one wants up – both sides vying for “heads I win, tails you lose” kind of outcome. In other words, the debate requires a balanced perspective for arriving at a win-win situation, which can be brought about through equitable adversary analysis or EAA.

Keywords: *Migration, Innovation Systems, Highly skilled, Diaspora Knowledge Networks, Science and Technology.*

1. Of Stereotypes and Bandwagons in Migration of the Highly Skilled

Generically speaking, the developing countries' losses arising from international migration of their highly skilled educated workers and tertiary-level students to the developed countries (popularly called the 'brain drain') are of two categories, viz., (i) loss of scarce resources invested in human capital formation (i.e., of inputs - costs and subsidies going into education

and health of the workforce), and (ii) loss of essential skills produced (i.e., of output - the educated workforce and its enhanced productivity).¹ On the other side of the debate, three stereotypes of benefits arising to the developing countries of migrants' origin have been highlighted to establish that the unequal exchange is after all in favour of the developing countries: (a) Remittances, (b) Return migration, and (c) Transfer of technology.² Strangely, the benefits derived by the receiving countries are not being talked about at any meaningful length, but their costs in terms of cultural dilutions arising from allegedly slow integration of the foreign population have received lot more attention in the policy circles.³

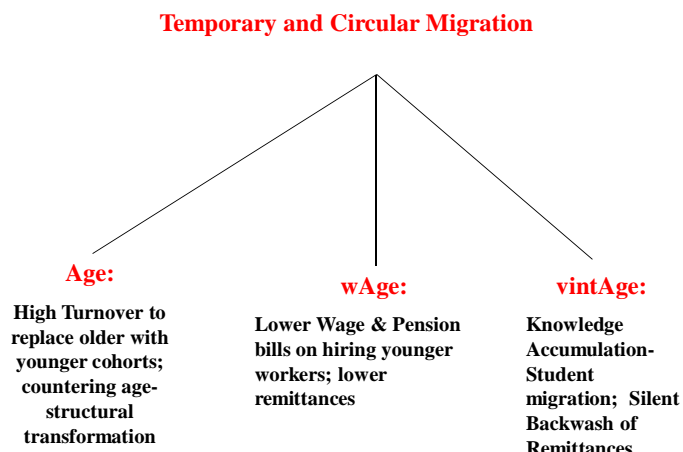
Of the three stereotypes of benefits to the developing countries, the bandwagons of the first two have of late been attracting the proponents, of remittances and return migration, intrinsically to subdue the hue and cry about brain drain leading to the 'investment loss' and the 'skill loss' respectively. Ironically, these have underplayed the facts that (i) remittances have been arising mostly from unskilled and low-skilled migrants and that too from those going from the lesser developed to relatively more developed countries of the global South itself (relative to the high skilled migrants in the developed countries, who remit less and invest more for their own profit - not necessarily for development in the country of origin per se), and have many negative 'side-effects' on development if not on growth, and (ii) that return migration have mostly comprised the low-skilled aged migrants (who are hired as temporary migrants when young and then sent back to countries of origin or shunted around in other countries as 'circular migrants' when they get older). The "dynamic conflict of interests" (Figure 1) between the developed destination and developing origin countries over these two benefits have been analysed as of "age", and "wage" by Khadria in the inaugural 2009 issue of the *India Migration Report* (Khadria 2009b). Remarkably, the third possible benefit to the developing countries, viz. that arising from the transfer of technology, has been pre-empted by subtle mutations of accumulation of knowledge in the developed countries – through 'recruitment' (read 'enrolment') of tertiary-level students ('semi-finished human capital' a la Majumdar 1994) from the developed countries as "future workers" (Tables 1 and 2), leading to what Khadria analyses as the third dynamic conflict of interest, viz., "vintage" (Khadria 2006a, 2009a, 2009b).

¹ Sen, Amartya. 1980. "Labour and Technology" in *Policies for Industrial Progress in Developing Countries*, eds. Cody, J., H. Hughes and D. Wall. Oxford: Oxford University Press, pp. 121-158

² Khadria (1999) would call them 'money', 'man-hours' and 'machines' (or '3M') to introduce generic terms in place of the specific terms.

³ "Identified as a major policy challenge for EU Member States, integration of migrants is one of the growing areas of interest for the EU. In spite of the increasing focus by governments on the importance of economic migration, linked directly to labour shortages and demographic trends in Europe, there is increasing evidence of xenophobia and racism in our societies. The European context is marked by a serious backlash in attitudes against immigration and a tendency by politicians to foster the 'fortress Europe' by multiplying legal obstacles for migration." See, European Programme for Integration and Migration at <http://www.epim.info/>

Figure 1: Dynamic Conflict of Interests leading to Mutation of the Brain Drain



Source: Conceived and Designed by Binod Khadria

Table 1: Top Countries of Origin of International Scholars in the United States, 2008 & 2009

Rank	Country of Origin	2008	2009	% of Total (2009)	% Change (2008-09)
	WORLD TOTAL	1,06,123	1,13,494	100.0	6.9
1	China	23,779	26,645	23.5	12.1
2	India	9,959	10,814	9.5	8.6
11	Brazil	2,071	2,363	2.1	14.1
15	Russia	1,945	1,628	1.4	-16.3
16	Mexico	1,396	1,371	1.2	-1.8

Source: Open Doors 2009 Report on International Educational Exchange

Table 2: Top Countries of Origin of International Students in the United States, 2008 and 2009

Rank	Country of Origin	2008	2009	% of Total (2009)	% Change (2008-09)
	WORLD TOTAL	6,23,805	6,71,616	100.0	7.7
1	India	94,563	1,03,260	15.4	9.2
2	China	81,127	98,235	14.6	21.1
7	Mexico	14,837	14,850	2.2	0.1
13	Brazil	7,578	8,767	1.3	15.7
24	Russia	4,906	4,908	0.7	0.0

Source: Open Doors (2009) Report on International Educational Exchange

In the 1970s and 1980s, UNCTAD called 'brain drain' the "Reverse Transfer of Technology" from developing to developed countries. Thereafter, initially it was the UNDP's TOKTEN programme, which was considered the flag bearer for "transfer of knowledge" back to countries of origin "through expatriate nationals" visiting homeland for short periods of interaction with local counterparts.⁴ Subsequently, suddenly in the late 1990s onwards the

⁴ Interest in mobilizing the experience of expatriate professionals from the third world remained unfocused until 1977, when UNDP started working with several developing countries to reverse losses caused by the massive exodus of their specialists and to transform part of the enormous brain drain into brain gain. TOKTEN began in Turkey following a three-week visit to the UNDP-assisted Karadeniz Technical University from a senior mechanical engineer of Turkish origin based in California. The engineer's remarkable success in communicating substantive know-how (as well as candid criticism) to his Turkish colleagues suggested that such expatriates were uniquely equipped to

focus was shifted to give the term “brain gain” itself an altogether new meaning. The term henceforth ceased to imply the benefits the developed destination countries derived on the flip side of the losses that brain drain inflicted on the developing countries of origin. Instead, it became a catchphrase to imply the large scale return of those high skill migrants to their home countries like India who had lost their jobs in the wake of the American recessions that ended up in the bursting of the IT bubble at the turn of the century. Gradually, the focus shifted away from the unidirectional physical visits and returns home of the expatriates. The focus has since been more on the IT revolution-led high speed communications and networking that led to the emergence and feasibility of the business process outsourcing (BPO) to India, and some other countries of origin with noticeable stocks of highly skilled workforce. Subsequently, this has also given rise to the talk about diaspora knowledge networks, DKN in short.

Currently, emergence of the diaspora knowledge networks (DKN) has changed the way in which high skilled mobility is looked at [See Section 5 of this paper]. The debate surrounding the links between diasporic networks and its role in development in the home countries is divided into two distinct lines of arguments. On the one hand, there are scholars who take a pro-diaspora position while thinking the various ways to foster home country’s economic growth (equating “growth” with “development”). On the other hand, some other researchers are skeptical about the straightforward link between diaspora engagements in homeland development. The former group tends to celebrate the success stories of diaspora activities leading to some kind of development (read ‘growth’) in source countries; whereas the latter group is more cautious about drawing aggregations and generalisations on the basis of a few select evidences. This divide provides a very pertinent context to situate and examine the role of migration in restructuring of the innovation systems in the countries of origin and destination from two different perspectives.

2. Diverging Stakes in the Restructuring Innovation Systems

The diverging pattern of development between the developed destination countries and the developing origin countries is not a new phenomenon at all. However, the formulation of the National Innovation System (NIS), introduced by Freeman (1987, 1995), seems to contextualise these divergences due to restructuring of technology transferred by the migrants. It has been argued that differences in NIS are important explanations of uneven development patterns worldwide. “The NIS is a network of institutions in the public and private sectors whose activities and interactions initiate, import, modify and diffuse new technologies” (Freeman 1987). Three key elements of NIS are *institutions, interactions and capacities* to create and use new and economically viable knowledge (Lundvall 1992; Nelson 1993).

carry out consultancies in their homelands. On the initiative of the UNDP Resident Representative in Turkey at the time, the Government promptly set up the first TOKTEN project in 1977. In the twenty years since the programme's inception, 5,000 TOKTEN volunteers have completed assignments in 49 developing countries in a wide spectrum of fields. Nearly all areas are covered, from public administration to management of enterprises, from agricultural research to computer technology. Since 1994, the programme has come under the umbrella of the United Nations Volunteers (UNV) programme.

Francis Bacon is said to have observed almost 400 years ago that three great mechanical *inventions* – printing, gunpowder, and the compass – had “changed the whole face and state of things throughout the world; the first in literature, the second in warfare, the third in navigation.”⁵ According to Rosenberg, what Bacon did not observe was that none of these inventions, which so changed the course of human history, had originated in Europe, although it was from that continent that their worldwide *innovations* began.⁶ What is seriously argued is that, historically, it was the European capacity to innovate new technologies irrespective of their origin that has been the vital factor. The Europeans engaged in aggressive innovations of inventions and techniques that had originated in other cultures (Rosenberg 1982, 246). The new innovations brought immense improvements in productivity that transformed the lives of all participants.

Rosenberg points out one essential aspect of innovations to be highly relevant to the prospects for successful transfer of technology (1982, p.246). According to him, one innovation could not be extensively exploited in the absence of others, or the introduction of one innovation made others more effective. Thus, part of the secret of the vast productivity improvements associated with the new industrial technology was that the separate innovations were often interrelated and mutually reinforcing, e.g. in metallurgy, power generation, and transportation. This also applies to high quality skill formation in software expertise leading to the production of world class IT professionals, scientists or sportsmen, because innovations require large number of enrolments, with a small number among them likely to become the innovators (Majumdar 1983). This is how the British technologies had spread (combination of innovations and innovators, some of them even migrants), first to Western Europe, then to the United States and later, to other selected countries where conditions were favourable: skilled labour, entrepreneurship and, sometimes, capital playing a critical role - in the early stages in bringing in the new textiles, transport, power, and engineering technologies to Western Europe. The recipients of British technologies were, therefore, in a distinctly favorable position. They could industrialize through the mere transfer of already existing technologies, without having to reinvent them. This ability to industrialize through borrowing rather than independent invention is the basic advantage of being a latecomer. But this ability is neither universally nor homogeneously distributed across the world, and certainly not among the developing countries.

Rather, economic coexistence with advanced industrial societies entails a continual threat for the lesser nations (Rosenberg 1982, p.247): “Sophisticated, dynamic technology in the possession of such societies will generate innovations with very deleterious consequences to the less developed countries.” Rosenberg has referred to numerous examples of the substitution of new products for old ones upon which some less developed countries had been heavily dependent – synthetic fibres for cotton and wool, plastics for leather, some nonferrous metals and other natural products, synthetic for natural rubber, synthetic detergents for vegetable oils in the manufacture of soap, and so on. He stressed the point that an economy with no command over advanced technologies may be highly vulnerable to

⁵Francis Bacon, *The New Organon* (The Bobs-Merrill Co., Indianapolis, 1960), p.118, cited in Rosenberg 1982, p. 245.

⁶Rather, these inventions represented successful instances of technology transfer – possibly, in all three cases, from China.

sudden changes in demand generated by these technologies abroad, and may have only limited opportunities for adjusting.

Moreover, the transfer of technology and innovations has never been easy. Typically, high levels of skill and technical competence are needed in the recipient country (See Figure 2). It is hardly a coincidence that, in the nineteenth and early twentieth centuries, the countries that were mostly successful in borrowing foreign technologies leading to innovations were those that had well-educated populations. Furthermore, technologies ...function within societies where their usefulness is dependent upon managerial skills, upon organizational structures, and upon operation of incentive systems like patents (Rosenberg 1982, p.249; Khadria 1990; Khadria 1993). These caveats are intended to suggest that the successful transfer of technology depends greatly upon the specific domestic circumstances in the recipient country. There are barriers in the local adaptation of technology – poor infrastructural facilities, lack of standardization, red tape, and corruption affect the transfer of technology even to India.

Figure 2: Generic Categories of Knowledge & Services Workers

Transnational Skills: Labour Market for Knowledge Workers						
<i>Occupation-tied Career-specific</i>	<i>Education</i>	<i>Know- ledge</i>	<i>Experi- ence</i>	<i>Train- ing</i>	<i>Activity</i>	<i>Occupation-wide Generic Category</i>
Scientist, Engineer	Third Level R & D	○	○	○	Invention, Innovation	<u>Creator & Innovator</u> IT Professionals
Educator, Trainer	Third Level S & T	○	○	○	Communication, Transformation	<u>Teacher</u> Students
Executive, Supervisor	Third Level Business, Commerce	○	○	○	Finance, Management	<u>Manager</u> Nurses
Localized Skills: Labour Market for Service Workers						
Semi- Professionals, Technicians, Craftsmen	Second Level - Vocational	○	○	○	Facilitation, Operation, Correction	<u>Operators</u>
Semi-skilled, Unskilled	First level - Literacy	○	○	○	Production, Construction	<u>Labourers</u>
Knowledge: Know-why		Experience: Do-how		Training: Know-how		

Source: Adapted from Khadria (1999)

In discussing the migration-induced innovations in the country of origin, certain distinctions are highly important. Perhaps the most basic question is whether these technologies occur in industries that compete directly with those of the initiating country, or whether the relationship between the technologies is complementary (Rosenberg 1982, p.260). Much of the technology that was transferred from Britain to other developed countries in Western Europe, for example, was in competitive industries, whereas most of the

technology transferred to developing countries (mostly the colonies) was in industries that complemented British industry. In the future, one of the key stakes of the industrial countries when technology is transferred to the less developed countries will be their capacity to continue to generate new technologies, especially new products – and the rate at which these can be generated (Rosenberg 1982, p.276). There are now powerful forces at work, many themselves the result of technological innovations – improvements in communication and transportation – that are speeding up the diffusion of new technologies from the center to the periphery. These centrifugal tendencies are powerfully assisted by the multinational firms, which, through their large-scale foreign investments and licensing activities, have become the most powerful institution for the spread of new technology in between the World War II and the new millennium.

The hype about the positive role of high skill migrants the multinational firms engage in the “north-south” flow of innovations often distracts attention from the fact that large majority of foreign investment of multinational firms has continued to go to *other* advanced industrial economies (Rosenberg 1982, p.234). Economic theory tells us that capital should flow from capital-abundant rich countries to capital-scarce poor countries. In practice, that has not been the case as developed countries have consistently attracted the bulk of global FDI flows.⁷

Lingering risks in many emerging markets of developing countries, and the benefits of advanced *institutions, interactions and capacities* created by infrastructure and a superior overall business environment in developed countries have tended to outweigh the attractions of greater market dynamism and lower costs in the home-country markets. Even the high-skill migrants and diaspora groups, who prefer to diversify their investments across various developed parts of the globe, invest smaller volumes of innovative resources in homelands. This activity has been an integral part of the new pattern of industrial specialization that have come to characterize the most advanced economies: “Advances in IT, telecommunications, biotechnology, new materials, and nanotechnology are directed by the needs of large corporations in search of increased profit. Scientific and technological research is restructured under mechanisms such as outsourcing and offshore-outsourcing, which allow corporations to have southern scientists at their service, transfer risk and responsibility (like the Bhopal gas disaster), and capitalize on the benefits by amassing patents. This has led to an unprecedented mercantile approach to scientific work under a short-term perspective and with little social concern.”⁸ Thus, if we consider FDI of American enterprises in manufacturing subsidiaries in 1969, about 73 percent went to Europe and Canada, 15 percent to Latin America, and 12 percent to all other areas. (See Raymond Vernon, *Sovereignty at Bay*, Basic Books, New York, 1971, p. 65). Today, in 2008, some 80 percent of cross-border merger and acquisition sales were still in developed countries (*The Economist*, 15 March, 2010).

Indeed, the pervasiveness of uncertainty in the innovation process is ignored by most of the empirical studies. The innovation process surely comprises an area of economic behaviour in which uncertainty and complexity are absolutely central characteristics of the environment; empirical approaches to the problem must therefore take far greater cognizance of the processes that underlie the output of innovation. Given the possibility for more rapid

⁷“World economy: Global FDI - the rocky road to recovery”, Economic Intelligence Unit, *The Economist*, 15 March 2010

⁸ Lester and Piore 2004, cited in Delgado Wise et al 2010, *Concept paper for PGA*

diffusion of technologies, the capacity to generate new technologies will play an even greater role in the economic destinies of the industrial countries. This is because the time available to exploit their lead with respect to any given technology is bound to decline.⁹ However, the importance of these disadvantages should not be exaggerated. For one thing, the coin has two sides (Rosenberg 1982).

3. The Changing Geopolitics of S&T: From the Triad to the Multi-Polar World

The traditional mobility of the highly skilled used to be aligned on the North-South divide of S&T capacities. Since the post-second World War, the brain drain reflected this global asymmetry, with international flows of scientists and engineers mainly shaped by a centre periphery relationship (Oteiza 2010). Until the late 1990s this scheme prevailed. However, in 10 years time, the situation has changed and a dramatic evolution towards a global redistribution of S&T capacities is currently underway. Interestingly, the mobility of knowledge workers is a crucial factor in these processes which, in return, deeply modify the conditions and directionality of future flows.

Up to 2000, scientometrists (specialists of S&T statistics) used to describe the world as dominated by the so-called "Triad", constituted of North America, Western Europe and Japan (UNESCO 1998). Input as well as output indicators showed a sharp contrast between this set of countries and the rest of the world. Investments made in R&D and human resources, as well as publications and patents were massively concentrated in the 3 major blocks (see 1995 figures below, table 3).

Table 3: World share of GERD (Gross Domestic Expenditure in Research and Development), scientific publications and patents by main regions

Regions	GERD 1995	GERD 2005	Publications 1995	Publications 2006	Patents (USPTO) 1995	Patents (USPTO) 2005
Western Europe	28.0	24.2	35.1	39.3	20.0	15.5
North America	37.9	35.6	38.0	30.2	51.5	53.5
Latin America	1.9	1.8	1.1	2.6	0.2	0.1
Arab States	0.4		0.1		0.0	
Sub-saharan Africa	0.5		0.8		0.1	
Japan & NICs	18.6	13.2	10.1	7.6	27.3	21.3
China	4.9	11.8	1.6	7.0	0.2	0.4
India	2.2		2.1		0.0	
Oceania	1.3	1.3	2.8	2.6	0.6	0.7
Others	4.3	12.1	6.1	10.7	0.1	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: UNESCO (1998) and OST (2008)

Consequently, these places of highly intensive knowledge production used to foster and polarize innovation dynamics. The number and proportion of scientists and engineers in these regions were much higher than in other parts of the world (see table 4 below, 1995 figures).

This was a stable system fed, maintained and reinforced by an equivalent and parallel higher education asymmetric distribution worldwide. The major provider of university degrees and biggest magnets of foreign students were located in Triad countries, mainly the United States and Western European countries, especially the UK, France and Germany. These alone concentrated more than half of the flows (see below and Graph 1).

⁹This is why MNC firms have shown a strong preference for FDI over other options, such as licensing.

Table 4 (S&E workforce per main regions of the world)

Regions	S&E 1991 (thousands)	S&E/pop (°/°) 1991	S&E 2005 (thousands)
EEC	611.4	1.9	1314
USA	949.3	3.8	1395
Latin America	162.9	0.5	
Sub-saharan Africa	35.0	0.1	
Japan	582.8	4.7	705
China	410.5	0.4	1120
India	119.0	0.1	
Oceania	47.5	2.3	99

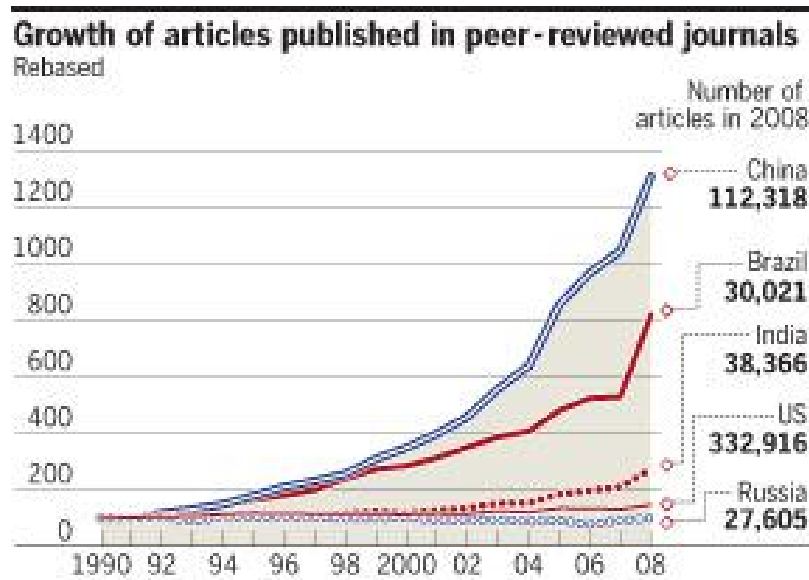
Source: OST (1994) et (2008)

Today, the situation is quite different yet it is evolving quickly.

First, since the mid-2000s, the classical input output scientometric indicators refer to a “Quadriad”, including China in addition to the 3 traditional powers (OST 2008). In a context of massive investment in R&D in many places in the world, the share of China has increased considerably (table 3, 2005 figures). This translated quickly into a surge of publications and – though a bit more slowly- of patents. At the same time, the increase of science related personnel from 1991 to 2005 was of 173% for China while of only 115% for Europe, 48% for the USA and 21% for Japan. China has become a major provider of R&D employment (table 4).

Interestingly, more recent and partial data show that this expansion is not isolated and that it is accelerating. A study requested by the Financial Times to Thomson Reuters shows a noticeable and rapid increase of emerging countries compared to the US and Russia (to be thus distinguished in the BRICs dynamics; see graph 1).

Graph 1: Growth of Articles Published in Peer-reviewed Journals



Source: Thomson Reuters, Web Science Database

Though the US still publishes, in 2008, 3 times more than China, 9 times more than India and 11 times the quantity of Brazil - in mainstream international science - the difference in

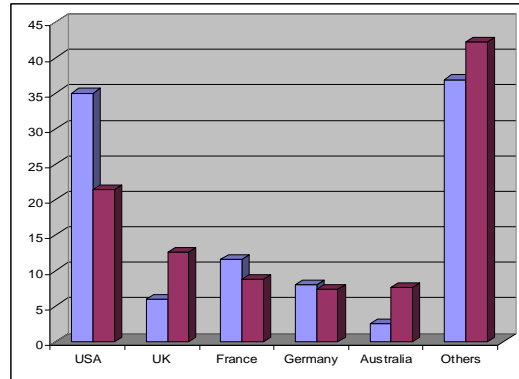
trends is striking (Cookson 2010): stability on the one hand and marked growth on the other hand.

The emerging place of China is frequently underlined (Hepeng 2007, Padma 2010) and it is indeed the most outstanding. Various reports focusing on competitiveness highlight the technological breakthrough led by this country which has passed Germany and is 3rd behind only the USA and Japan in patents records today (Hepeng 2008, Sri Raman 2009, Le Monde 2010). However, China is not alone in this process and the developments witnessed there may increasingly be observed in other countries and regions of the world. India and Brazil seem to be, indeed, on similar tracks though with some differences (Fan 2008, Massarini 2008). The big emerging giants lead the way in a significant and substantial effort of the developing world to catch up with knowledge based economies in the North (Ogodo 2009). Investment has increased a lot between 2002 and 2007: three times more rapidly for R&D spending, while the number of researchers more than doubled during the same period (compared with 9% in the rest of the world, Dickson 2009). However, this effort is unequal, with some countries especially LDCs (less developed countries) being left behind.

In higher education, the evolution to a more balanced distribution is also perceptible. In 1970, the USA and Western Europe represented almost half of the world student population in higher education. Today, they are less than the 4th part of it. Meanwhile, the part of Latin America has increased 2 fold (from 6 to 12%), the one of Arab & sub-saharan countries has almost multiplied by a factor of 3 (from 3 to 8%) and Asia/Pacific has jumped from 24 to 43% (UNESCO 2009).

This shift of gravity centre is having an incidence on the relative attraction of students in international mobility. For the last 20 years, 5 countries have been the magnets of foreign students. However, changes are visible: while more than 1 out of 3 international students used to go to the USA in 1990 they are only slightly more than 1 out of 5 today; meanwhile the share of Australia went up from 2.5 % to 7.6%, overtaking one of the 3 major traditional host in Europe: Germany. And other newcomers are closing the gap. During the last ten years, traditional attractors have lost 6 points. And while traditional followers are still there (Russia and Japan for instance) others like South Africa, China, New Zealand and Korea are gaining significance and influence.

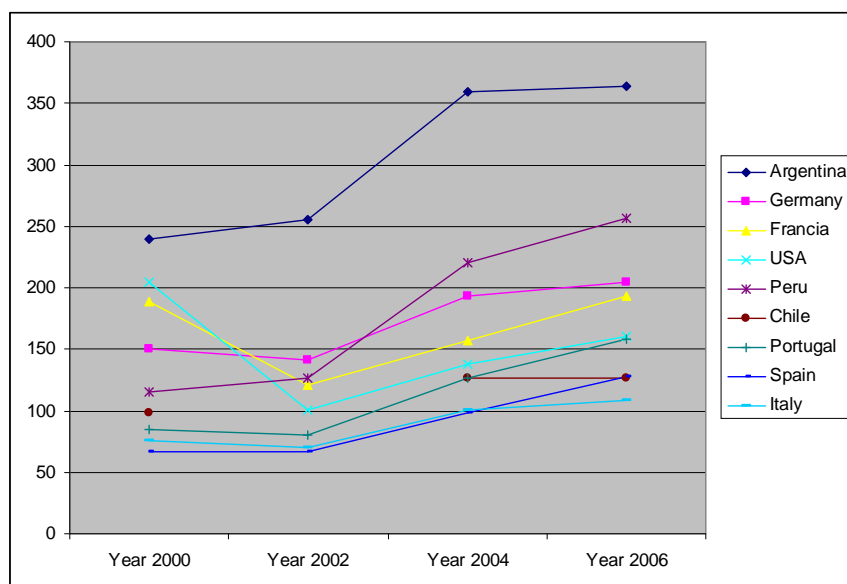
What all these fast, though irreversible, changes indicate is that the conditions shaping the flows of S&T personnel are going through major transformations. Therefore, the actual moves are likely to evolve along the same lines : less concentration, more actors, diversity of situations. This is what new reports with prospective dimensions underline (EU 2009, Global Market Institute 2010). The pattern of migration will correspond to the global circulation paradigm even more than today, with displacements of people according to knowledge specialization rather than to overall educational asymmetrical developments. To think of the world mobility tomorrow, no doubt the global brain drain approach should not enjoy any revival. The picture has become more complex and deserves more descriptive dynamic analysis than ever before, to draw relevant public policies.

Graph 2: Major Receiving Countries of Students in International Mobility between 1990 (blue) and 2007 (purple)

Source: UNESCO (1990a) and (2009)

4. Mobility and Cooperation: Beyond National Systems of Innovation?

The prospective reports mentioned above highlight the importance that mobility and migration of the highly skilled will have in the near future, as well as for longer term developments of S&T production systems. A concern for EU or US innovation systems so far, is the current relative depreciation of S&E careers in these areas combined with aging workforce in the same fields, which might require compensation through sectoral international mobility (Global Market Institute 2010). At the same time, complementarities might be organized, between EU countries' strengths in chemistry, astronomy, pharmacology or physics and US or Asian abilities in information technology, electronics or biotechnology (EU 2025). The expected expansion of Chinese and Indian student population in western countries will certainly go hand in hand with new inflows towards the 2 Asian countries (EU 2009). This phenomenon is already perceptible in the last Unesco Global Statistics of Higher Education (see above and graph 2). But beyond students and not exclusively in Asia, the new attraction of emerging poles is also noticeable in anecdotal evidence or particular statistics. The Chinese Academy of Science has, for instance, announced it aims at attracting 1500 high level foreign scientists for temporary or durable stay on collaborative research projects. Meanwhile, the 100-Talent programme, which has already attracted more than 1300 Chinese scientists back to the country, is expanded (Zhiguo 2009). At the same time, Brazil, a country attracting Latin American advanced students in droves, is seeing an increase of foreign scientist entries. While, the total number increases by 30% between 2000 and 2006, from 2105 to 2733, the share of Europeans alongside American neighbours is sharply rising up (Nunes and Batista 2010).

Graph 3: Major Countries of Origin of Foreign Scientists in Brazil (2000-2006)

Source: Census of Brazil (2006)

At the same time, the compulsory grant system ensures a high return rate of students, especially Phd holders (Ramos and Velho 2010).

In many ways, what the emerging countries are doing is to take advantage of a normal mobility of scientists. Science has indeed always been characterized by a circulation of its individual carriers/practitioners (Dedijer 1968, Gaillard and Gaillard 1997, Meyer et al. 2001).

The reason why scientists' mobility is intrinsic to scientific activity lies in the complex operations implied by research practice. If scientific results are indeed codified knowledge, *par excellence*, science in the making is highly localized and involves a lot of tacit knowledge. This can almost exclusively be exchanged through human contacts and continuous collective work. For the last decades, numerous authors have emphasized the importance of networks in all activities linked to S&T innovation. Their international dimension has significantly increased for the last 20 years as the growth of co-publications involving authors from various countries testify.

How are national states coping with such a phenomenon? How is mobility concretely used in ever more interdependent national systems of innovation (see paragraphs above on this NIS)?

For some authors, the internationalization of science and technology happens through a pattern of unequal relationships. Subjects defined by strong teams in OECD countries dictate the orientations for those less equipped, staffed and connected, poorer and not on the very front of pioneering activities, located elsewhere. Even if scientists in these countries manage to obtain good results through creative activities, they always act in fields largely shaped by the others (in theoretical or conceptual terms, for instance). This corresponds to a subordinated integration into the international division of scientific labour, according to some authors (Kreimer and Zabala 2007, Losego and Arvanitis 2008). In this scheme, the return of a junior researcher to the country of origin after graduating (Phd) abroad, means

dissemination of the laboratory's (where this person was trained) standards and practices and therefore, the subordination of subsequent researches to these external influences. In such a position, the peripheral lab works on a limited scope of tasks while the central one combines various inputs and coordinates the others. Mobility and scientific exchanges are not neutral and may thus lead to some kind of subcontracting, in that perspective.

The functional division of labour is particularly visible in the US academic system and its recruitment of advanced foreign students, not only to attend courses but also as research or teaching assistants. These are able to follow on their studies and develop individual research projects for doctorate degrees, thanks to the professional position they get and the resources that go along with it. At the same time, university departments may continue with their scientific programmes, in spite of a lack of interest and sluggish enrolment of native American students in S&E fields. These arrangements between migrant populations and United States organizations taking benefit of it, have been identified in other fields of activity, in the case of Mexico (Delgado Wise 2007). Interestingly, this symbiotic logics has been highlighted as, possibly, the next step of the US capitalist system development. Scientific services provider in emerging countries will constitute a strong supply to all firms and industries in the US, at a cheaper price and better conditions than if based in the US and with domestic workforce. Ultimately, this integration of both new scientific giants abroad and "post-scientific" America will even mean less reliance on foreign talents at home (Zachary 2008). Without going that far, several authors recently point to the shared benefits involved by the multiplication of networks of interdependence among scientific poles through, students and scientists exchanges. The emergence of Oceania/Far East transnational dynamics (between China and Australia for instance) are described as very stimulating for all parties growth prospects (Turpin et al. 2010). In the same manner, Brazilian authors plead for a larger opening up of their country, to guarantee quality improvement in addition to resource major endowment. They recommend to facilitate studies abroad, to avoid compulsory return and, instead, to develop expats connections and diaspora knowledge networks, to avoid parochialism at home and upgrade intellectual standards (Balbachevsky 2009, Ramos and Velho 2010).

5. Implementing Redistribution: Diaspora Knowledge Networks

Today, hundreds of highly skilled expatriate networks of all sorts connect dispersed human resources in S&T with their countries of origin. In order to understand how they can have a significant impact on innovation processes back home, we analyse one example, highly significant: the development of the IT industry in India and its linkages with the dynamics in North America, through NRI (non-resident Indians) there¹⁰.

The Indian IT revolution may be sequenced into three waves:

1. 1965-1980: the birth of an Indian IT industry;
2. 1980-1995: the 'body-shopping' stage; and
3. 1995 to the present: the outsourcing turn.

The first wave saw the slow growth of an indigenous IT industry and the emigration of fresh graduates to complete their studies in American universities, some of them coming from prestigious Indian institutions like the Indian Institute of Technology (IITs). At that

¹⁰ Following pages are part of an article written with Eric Leclerc (see Leclerc and Meyer 2007)

time, the excellence of these institutions was known only amongst academic circles; their current fame is partly due in fact to the successful migrants' retrospective evaluation of the institutions. In these pioneers' biographies (Deb 2004), it appears that they had been convinced to move to the USA either through the contact with some visiting American professors or through networks of Indian academics both in India (e.g. Professor Ramamurthy in IIT Madras) and in America (Professor Amar Bose in MIT). Following the emigration path of Indian medical students, these engineers found job opportunities in the American IT labour market through the links between academic and entrepreneurial networks. To experience successes in the entrepreneurial world, they have had to break down the so-called glass ceiling.

Indian software engineers have then become reputation builders because of the increasingly well known quality of their work. During this first wave, the impact of the diaspora factor on the IT industry in India was weak. The nascent Indian IT industry was substituting import in the hardware segment with the withdrawal of IBM, and creating indigenous software behind a heavy import-duty barrier.

The second wave strengthened the links between the diaspora and the home industry with the growth of the 'body-shopping' activity, induced by the expansion of the global information economy. The human resource software shortage, first in the United States, and later in other OECD countries, has attracted a foreign workforce on site. India has been the main source country for these cyber workers or ironically called 'techno-coolies'. Derogatorily labelled as 'body-shopping', Heeks (1989) describes this practice in the following terms: 'This is the process by which Western firms send a list of staff requirements to Indian software companies, who then send the required 'bodies' overseas to work for that client'. But Heeks ignored the central role played by the diaspora in the mobilisation of their countrymen, through informal contacts at the beginning, revealing the job opportunities in the United States. The analysis of the body-shopping model (Xiang 2002) reveals the pivotal role played by the diaspora as gate-keepers at the receiving end of this international movement of IT workers. At the peak period in 2000, there were nearly 1000 firms engaged in body shopping in the United States. The diaspora was more than a reputational intermediary during the second wave; it had become an actor in this international production system. Even though it is difficult to assess the national origin of the firms hidden behind the less derogatory term of consultancy, all the observers attribute a large share to Indians.

This model had a tremendous impact on the Indian IT industry whose exports grew from US\$ 12 million in 1982 to US\$ 4 billion in 1990. All the major Indian firms—even some hardware firms like HCL—converted themselves to this business model. With the OECD countries' shortage of human resources appeared the mushrooming of new IT training firms like NIIT, Aptech, etc. that spread all over the subcontinent. During the entire second wave, these private training firms built the Indian comparative advantage in the low end skill segment that complemented the prestigious IIT. As the body-shopping model has been identified in different countries like Australia (Xiang 2004) and Malaysia (Leclerc 2006), i.e., not only in the United States, it is a robust proof of the involvement of the Indian diaspora in the growth of its home industry. Under various labour markets and different immigration policies, indeed, we might have expected more efficient actors than the diaspora members to manage these foreign workers, but it has not been the case. They also had an influence on the political agenda in India, one well-known case being the technology missions initiated by Sam Pitroda, a high profile NRI, under the prime ministerial tenure of Rajiv Gandhi in the mid-

eighties. Chakravarty (2000, p.5), arguing that 'the American high-tech NRI also plays a pivotal role in legitimating a relatively new technocratic development agenda in India', contradicted the statement by Lucas (2004, p. 224) that 'the more fundamental economic reforms came to India after 1990 with little participation from the Indian diaspora'. It is analytically not justified to separate the liberalisation process of 1991 from the first attempt of economic reforms that occurred precisely in this sector with the new IT policy of Rajiv Gandhi in 1984.

The mid-1980s have also constituted the starting point of the third wave, the outsourcing turn, with a new business model of Overseas Development Centre (ODC), the first one set up in Bangalore by Texas Instrument and General Electric in 1984–85. It took a decade for this movement to pick up, with the previous body-shopping model continuing alongside. Pandey *et al.* (2004, p.11) noted that 'It is worth pointing out that the shift to the new business model was gradual because the savings even after sending Indian IT programmers to the US were quite large and many IT companies continued to follow the old model and send their programmers to the US, the UK and Canada'. The diaspora factor became more important during this third wave for two reasons. Firstly, it was more convenient for the multinational corporations (MNCs) to send employees of Indian origin to manage these ODCs to leverage the local difficulties. To handle the bureaucracy at various levels and the incomplete infrastructure, the MNCs required their cultural and linguistic skills. The members of the diaspora at managerial position even played a crucial role to convince their American colleagues to engage in this adventure (Sahay *et al.* 2003). Secondly, the pioneers who had by this time achieved big successes in the Silicon Valley started to invest their time and money to open firms in India. Through associations like TiE (Lal 2006, p. 79) or SIPA (Saxenian 2000), they helped new IT entrepreneurs in India with their advice and contacts in the Silicon Valley to find capital. A recent survey of their involvement in venture capital in Bangalore shows that nearly 50 per cent of the new Indian firms received some money from the diaspora (Upadhyaya 2004) and the city served as a "corridor" for return of many Indian IT professionals from abroad (Khadria 2004; Khadria and Leclerc 2006).

Summarizing the 3 sequences, a growing involvement of the Indian diaspora in the development of the IT industry at home may be observed. The export-oriented model of the Indian IT industry after 1980 is strongly related to the share of the Indian diaspora in the American IT industry. In the second and third waves, the Indian IT diaspora became a catalyst in building new business models, rescaling the IT industry in India from the nation-state level to a global size. This is not to portray the Indian diaspora as the one and only factor—MNCs and Indian firms have also to be reckoned with—but to recognise that it played a role as pro-active mediator and not only a dormant intermediary.

A second argument about the diaspora factor is its involvement in the creation of knowledge intensive activities at home. For the vast majority of the Indian students during the first wave, and for the Indian IT engineers during the second, their sojourns in America was an opportunity to update their technical knowledge. The second and third waves served not only towards updating knowledge but also to change their work habits when they worked onsite in US firms. This was done with the help of the Indian diaspora through specific programmes designed to cater to their needs. The former completed their graduation in prestigious American universities and became researchers (and even directors e.g., Dr Arun Netravali) for the US government or private laboratories like IBM, Microsoft and Bell Labs, and in certain cases became renowned inventors.

From figures of the US National Science Board, Pandey *et al.* (2004, p.8) remarks that 'Between 1985–2000, Indian students constituted the largest group among all foreign-born communities in terms of the number of US doctoral degrees awarded in computer and information sciences' and concludes that 'the Indian presence is likely to grow even further in the US technology sector'. Therefore, if the Indian IT industry plans to use cutting-edge technology, it has to collaborate with labs in America, where it interacts with members of the Indian diaspora, unless they produce these technologies on their own. As the US R&D budget is \$265 billion compared to India's \$3.15 billion, the relationship will certainly last for some time. Today, some of them are financing Indian students in US universities, like Venkatesh Shukla who helped 900 students with his "Foundation for Excellence", or Prabhu Goel and Kanwal Rekhi who decided to sponsor 15,000 students.

But since 2000, a new trend is developing rapidly in India, the outsourcing of R&D Centres on the previous model of Business Process Outsourcing. In 2003, around 100 MNCs had already decided to implement R&D facilities in India, mostly in the IT sector but also in other fields like automobiles (DaimlerChrysler, Delphi, etc.) and chemicals (Akzo Nobel, DuPont, Monsanto, etc.). In this latest phase, the Indian diaspora has had the same importance as during the process of outsourcing business. Members of the diaspora initiated the movement, and set up new labs in India on behalf of the MNCs.

Knowledge has also been transferred through donations from successful diaspora members to higher education institutions in India. Obviously the IITs have in the past been the prime beneficiaries. Many Indian professors abroad spend their sabbatical year teaching there. Management skills are a very important input for the Indian IT industry to compete on the global scale.

The process of knowledge transfer from the diaspora to the Indian IT industry occurred in various ways along the time line. In America, this transfer started with the programmes conducted by members of the Indian diaspora to update the knowledge of cyber workers. Today, cutting edge knowledge is acquired by Indian students directly in American universities and laboratories, like that of the IT pioneers, and with their financial help. But knowledge activities are also reaching India directly with the outsourcing of R&D facilities by MNCs. This trend might convince more members of the diaspora to return to India with their embedded knowledge. That is what occurred after the downturn of the US IT industry in 2001. Nearly 40,000 IT workers on H-1B visas became unemployed and had to fly back to India. These people who had already spent two or three years in America found job opportunities back home because Indian firms needed middle level managers. In contrast to the workers from Kerala who had to escape from the Gulf in 1991, and who became unemployed back in India, the IT workers were in a better position with the outsourcing turn that coincided with their return. This combination of outsourcing and return boosted the industry's developments, with India being a direct beneficiary but with worldwide expansion too. In their recent study of 225 IT firms, Commander *et al.* (2004, p.25) observe that although only 8.5 per cent of Indian firms are owned by Indians abroad or return migrants, between 45 to 55 per cent of the managers, conceptualisers and developers had a relevant experience abroad (p. 27). Even in Indian IT firms, half of the top rank employees have for some time been a member of the Indian diaspora abroad.

The Indian case presented above does not pretend to be a model or to exhaust the possibilities and methods for synergies between diasporas and local innovation systems. It

shows without ambiguities that such transnational networks can have positive impacts on both origin and host countries, transferring capacities in the former while stimulating restructuring in the latter. This win-win virtuous circularity, made of long distance trans-spatial mutual adaptation, has been noticed more generally beyond the Indian case (Saxenian 2006). To take advantage of such a potential also requires definite public - migration, innovation and social- policies (Meyer 2010).

6. Conclusions

Are the transnational knowledge networks pointing towards post-national systems of innovation? We may, in fact, notice that the upsurge of emerging S&T capacities in the South do result from a massive governmental involvement emphasizing thus the role of the State. However, this rapid expansion is also the result of diasporas inputs and dynamics, therefore of transnational initiatives, along with MNCs strategies. What is needed nowadays to help organize relevant policies is to know more about these mix of actors and their relations and to start designing instruments to monitor and support their promising activities¹¹.

The diaspora option, because it is holistic in identity, would also foster the emphasis that the GCIM (2005) report has made in stating, "...the traditional distinction between skilled and unskilled workers is in certain respects an unhelpful one, as it fails to do justice to the complexity of international migration...While they may have different levels of educational achievement, all of them could be legitimately described as *essential workers* (emphasis added)." While the dichotomy between skilled and unskilled migrant workers is unwarranted, lately India has drawn disproportionately high worldwide attention to the success stories of its highly skilled human resources doing remarkably well in the world labour markets abroad – the IT professionals, the nurses, the biotechnologists, the financial managers, the scientists, the architects, the lawyers, the teachers and so on – there being almost a fray for them amongst the developed countries – the German Green Card, the American H1-B visa, the British work permit, the Canadian investment visa, the Australian student visa, the New Zealand citizenship, all mushrooming to acquire Indian talent embodied in workers as well as students. In comparison, the Indian labour migrants in the Gulf had for long been considered more of a responsibility for India. To neutralise this imbalance and empower the Indian labour migrants, the interest of the stakeholders in the Gulf (and South-east Asia too) are gradually being looked into, and innovative programmes are being introduced¹². The developments following the institution of the "Pravasi Bhartiya Divas" (*Expatriate Indians Day*) and constitution of a separate ministry of the Government of India reflect a break from the

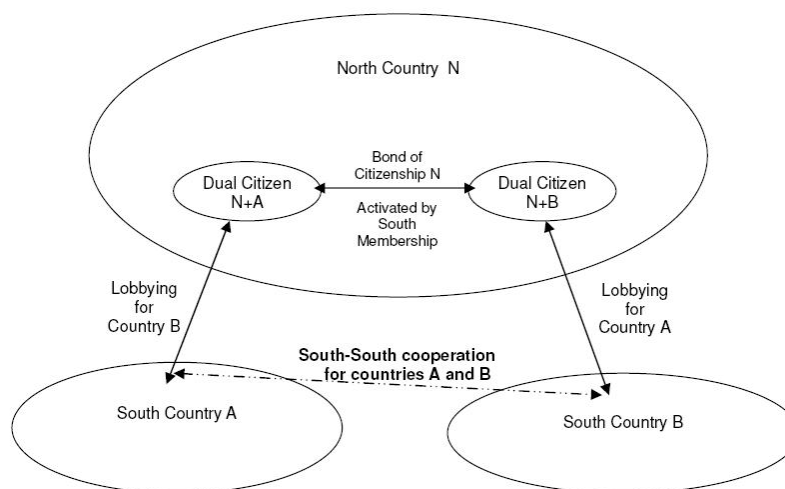
¹¹ The CIDESAL research and development project is an experimental initiative in this direction : Creation of Knowledge Diasporas Incubators in Latin America, <http://www.msh-m.fr/cidesal>

¹² The Ministry of Overseas Indian Affairs, Government of India, for example, has taken several initiatives including signing of Memorandum of Understanding (MoU) with the UAE (December 2006), with Kuwait (April 2007), with Oman (November 2008), and with Malaysia (January 2009). The MOUs mainly intend to enhancing employment opportunities and bilateral cooperation in protection and welfare of workers and lay down the broad procedures that the foreign employer shall follow to recruit Indian workers (MOIA 2009). Government of India had also set up the annual Rs.16 million India Community Welfare Fund (ICWF), which will be operated through India's diplomatic missions in 18 nations mostly in the Middle East and Africa. Initially established for three years, the fund will be utilized for carrying out welfare activities for overseas Indian citizens who are in distress (Economic Times August 22, 2009).

past – a confidence emanating from a paradigm shift towards India taking pride in its diaspora, and vice-versa.

The role of migration in restructuring innovation systems in origin or destination countries thus has debatable twists! But because there are always two sides of the coin, it depends upon how one tosses it, to get to see the side one wants up – both sides vying for “heads I win, tails you lose” kind of outcome. In other words, the debate requires a balanced perspective for arriving at a win-win situation, which can be brought about through what Khadria proposed as the Equitable Adversary Analysis or EAA.¹³ EAA will facilitate a balanced debate and discussion on what are the stakes for the developed and the developing countries both. It involves stepping into each other’s shoes and trying to defend the interest and position of the adversary rather than oneself. This would bring forth a better appreciation of the costs (or the likely ‘injuries’ or harm) of each of the two contending parties by the other side rather than one’s own, which normally occupy the minds of the negotiators in bilateral (and multilateral) negotiations. Adversary analysis would, thus, provide a sympathetic analysis of the problems associated with remittances that a source country receives, and the problems of social harmony and unemployment possibly created in a destination country when its labor market is thronged with foreign skilled workers. However, what is required would be not only a level playing field but, going beyond that, an equitable commitment allowing the stronger party to have empathy for the weakness of the other side. In fact, the equitable adversary analysis in migration need not be limited to bilateral negotiations, but could be custom-designed as a strategy of multilateral negotiations as well, where all or most southern countries can together represent the South as a whole, provided it is preceded by successful consolidation of south-interests through South-South cooperation. “Equitable adversary analysis” could also be the right and most balanced instrument to operationalise what Khadria calls “a third-country development model of migration” (Khadria 2009b).

Figure 3: South-South Cooperation in Innovations for Third-country Development



Source: Conceived and drawn by Khadria (2009a).

¹³ Khadria 2009a, 2009b; see Sen 1980, 1997; and Applbaum 2000.

To operationalise such “third-country development model of migration” through cooperation between members of the South countries, it should be possible to create regional or sub-continental umbrella networks of the diasporas across countries (Figure 3). For example, other than overseas Chinese investing in *homeland* China, the Korean diaspora has invested in *host land* China. The rapid economic growth of South Korea has made it a significant source of foreign investment in China. One Chinese region that has received significant attention from South Korea investors is Yanbian. Yanbian Prefecture, bordering North Korea, has a total population that has increased from 0.83 million in 1950 to 2.14 million by 1993. While Koreans are still the largest ethnic group in Yanbian, as a proportion of the total population, it has steadily declined from 63 percent of the total in 1949 to 40 percent in 1993. Nevertheless, available information indicates that the South Korean diaspora is still the one that has bestowed its resources on the Chinese prefecture and its towns (Wu 1998, 94-97).

Table 5: Comparative Labour Force Characteristics in Select Countries (1999/2000)

Brain Drain (Survey 2000)		Labour Productivity: GDP/Employee Per Hour	Health, Safety and Environment: Management takes care	Social Responsibility: Private Business takes care	
Rank	Country	PPP-US\$	Score (0-10)	Rank (1-47)	Score (0-10)
1	US	32.60	7.181	15	6.646
6	GERMANY	30.30	7.690	19	6.400
7	IRELAND	32.56	6.700	22	6.167
9	JAPAN	24.45	6.364	27	5.879
10	SWITZERLAND	25.62	7.933	14	6.653
11	AUSTRIA	29.74	7.933	22	7.593
13	UK	24.39	6.900	26	5.880
14	THAILAND	4.83	5.581	36	5.395
18	AUSTRALIA	28.33	7.361	17	6.515
21	ISRAEL	23.42	6.000	32	5.692
23	BRAZIL	8.26	6.167	24	6.042
24	FRANCE	32.35	6.489	25	6.000
25	SINGAPORE	21.10	7.443	5	7.377
26	ITALY	32.35	4.976	38	5.200
27	MEXICO	11.48	5.838	21	6.222
30	SOUTH KOREA	14.79	5.200	39	5.029
32	MALAYSIA	10.09	5.657	30	5.714
33	TAIWAN	18.66	6.533	23	6.067
35	TURKEY	7.92	5.290	28	5.871
36	ARGENTINA	16.23	4.574	40	4.959
37	INDONESIA	2.80	4.898	45	4.163
38	SWEDEN	25.71	7.789	9	7.193
39	CANADA	27.21	7.516	11	4.709
40	CHINA	2.87	6.733	20	6.292
41	NEW ZEALAND	20.60	7.754	7	7.193
42	INDIA	2.15	4.152	43	4.709
43	VENEZUELA	7.30	4.952	37	5.268
44	PHILIPPINES	4.21	5.474	29	5.789
45	RUSSIA	8.09	2.902	47	3.415
46	COLOMBIA	7.95	5.080	35	5.440
47	SOUTH AFRICA	20.20	6.367	18	6.433

Source: IMD World Competitiveness Report 2009; and *World Economic Forum, Global Competitiveness Report 2009.

Table 6: Comparative Labour Force Characteristics in Select Countries (2008/2009)

Brain Drain (2009)		Labour Productivity: GDP/Employee Per Hour (2008)	Health, Safety and Environment: Management takes care*	Social Responsibility: Private Business takes care (2009)	
Rank	Country	PPP-US\$	Score (0-10)	Rank (1-57)	Score (0-10)
7	US	47.78	5.88	38	4.88
18	GERMANY	41.26	6.01	26	5.51
6	IRELAND	49.63	6.23	30	5.35
10	JAPAN	37.28	6.13	9	6.52
4	SWITZERLAND	36.59	6.10	13	6.32
3	AUSTRIA	44.71	6.14	6	6.61
26	UK	39.08	6.07	25	5.53
30	THAILAND	6.76	5.52	14	6.21
13	AUSTRALIA	39.24	6.20	11	6.35
31	ISRAEL	35.78	5.82	37	4.88
14	BRAZIL	11.01	5.24	19	5.86
28	FRANCE	50.14	6.22	39	4.82
15	SINGAPORE	36.36	6.22	16	6.13
47	ITALY	41.47	5.99	53	3.71
37	MEXICO	14.37	5.48	36	4.94
57	SOUTH KOREA	25.33	5.99	15	6.16
29	MALAYSIA	16.51	5.90	10	6.39
32	TAIWAN	29.70	6.20	34	5.02
22	TURKEY	21.06	5.32	32	5.21
35	ARGENTINA	17.36	5.54	57	3.26
25	INDONESIA	4.09	5.20	43	4.56
9	SWEDEN	40.48	6.22	5	6.65
23	CANADA	37.33	6.30	8	6.55
52	CHINA	4.70	5.72	46	4.38
54	NEW ZEALAND	29.50	6.43	12	6.34
16	INDIA	3.27	4.82	29	5.39
56	VENEZUELA	14.40	5.22	20	5.83
42	PHILIPPINES	4.22	5.07	22	5.72
55	RUSSIA	17.95	5.65	55	3.63
46	COLOMBIA	9.59	5.34	31	5.26
57	SOUTH AFRICA	17.32	3.60	4	6.88

Source: IMD World Competitiveness Report 2009; and *World Economic Forum, Global Competitiveness Report 2009.

The above tables (Tables 5 and 6) set a “double challenge” of public policy for the sending countries of the South: First, to convince their own “capable” scientific diaspora communities abroad to rethink the innovation system in homeland as a “bottom up” creation and enhancement of sustainable productivities of labor through development of *institutions, interactions and capacities* for education and health rather than “top down” innovations in business and industry - one comprehensive, the other dispersed; one long-term, the other immediate. It is not just a matter of willingness; in many instances, it would entail long periods of struggle in creating those decision-making and priority-setting discerning capabilities amongst the leaders of the migrant community to appreciate the logic that a large population with purchasing power in pocket only would provide the sustainable market in which they would be able to sell their products of innovation effectively and profitably. Secondly, they must be able to convince the countries of destination in the North (and the other countries of origin within the South as well) as to where lies the distinction between most ‘painful’ and most ‘gainful’ socio-economic development impacts of the migration of citizens – whether skilled or unskilled: For the high-income receiving countries of the North, the winning situation would arise because these destination countries would then be able to continue to attract knowledge workers from South countries like India, China, Pakistan, the Philippines and so on - both young professionals and youthful students - and ameliorates

their own problems of aging population, cumulating pension liabilities, as well as of sustaining their lead in innovations through latest vintages of knowledge embodied in the latest generations of graduates and students –what Khadria calls the advantages of Age, Wage, and Vintage respectively (Khadria 2006a).

The “equitable adversary analysis” of costs as well as benefits of restructuring innovation systems would help countries of the South press and persuade for international norms in the Mode 4 negotiations of the GATS in WTO on the issue of movement of ‘natural persons’ as service providers under trade, which is just another description for propagating the temporary entry route for non-nationals, as opposed to circular mobility through permanent migration and dual citizenship. That the temporary route – operationalised by the “open and shut” migration policies of the recipient countries of the North - has been full of *vulnerabilities* for their migrants at the micro level (those beginning with the varying consular practices), and one that leads *to instabilities* of the ‘cobweb disequilibrium’ variety in their education, skill formation and R&D, as well as the labor markets at the macro level must be conveyed emphatically. Frequent policy changes in the destination countries further put the migrants at a great disadvantage. British migration policy, for example, has seen many trials and tribulations lately. This kind of instability leads to policy asymmetry. One way of taking the first concrete step towards upholding a demand for guaranteed removal of these two key elements from practice would perhaps be that the South countries must not only think but actually show South-South cooperation, rather solidarity in creating intra-south innovation systems. Possibilities from new configurations like BRIC (Brazil, Russia, India, China) or emerging configurations like, what Khadria (2010) would call, the RSEs or ‘Rising Southern Economies’ (BRIC plus South Africa and Mexico) could be the new ground for such hope about South-South cooperation in innovations of what he calls the ‘third-country development model’ of migration.

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Household Capabilities: A Different Approach for Explaining International Migration from Rural Punjab¹

Dr Puran Singh

SCD Govt. College, Ludhiana (Punjab)

Abstract

The main issues which have been taken up for investigation in this paper are:

- *Is the cross-border migration process sensitive to capability of the household? Is the intensity of migration higher for those migrant households who are better placed in terms of household capabilities?*
- *Does the choice of destination countries by migrant households depend upon the material capability of households to finance migration, the existence of social networks and information flow?*
- *Is the migration propensity higher for traditional migrant villages as compared to remote or non-traditional migrant villages?*

The paper approaches the question on the relations between the cross-broader migration process and the capability of the household. It looks at the substance in different contexts like; the intensity of migration and household capabilities, material capability of household and choice of destination countries; and traditional migrant villages and its migration propensity. The first section of the paper provides an introduction of the chapter. The second section develops the conceptual framework. The third section describes the methodology for data collection. The fourth section presents the evidence and the last section gives the conclusion.

Keywords: Household capability, Migrant household, Intensity of migration, Migrant villages

1. Introduction

Research on migration has consistently shown that international migration is a selective process. It is usually the bright, the skilled and the enterprising among potential migrants who undertake such moves and risks (Sjaastad 1962; Elnajjar 1993). This thesis may be somewhat overstated. After all, the mere possibility of being bright or skilled does not ensure international migration. It should be supported by 'capabilities' in the household in the form of physical, financial, human, and social capital. In other words, capabilities of international migrant households are different from those of non-migrant households. Moreover, the choice of destination is also determined by the capabilities of households. Thus, individuals who originate from households which have higher capabilities, in the defined sense, have a higher propensity to move across national borders than those who originate from households

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with lower capabilities. Those who stay behind are the ones who are either not well positioned in the parameters of household capability or they are not willing and able to migrate. In other words, individual, household, and community characteristics of migrants are likely to be different from those who stay behind at home.

The economy of rural Punjab, which is being transformed with the migration of Punjabi workers in the globalized labor market, forms the basis of the present investigation. The *Doaba* region of Punjab, which among other districts includes the districts of Hoshiarpur and Kapurthala, represents the traditional source of international migration, from where a large number of people joined the British Indian army after the British annexation of the much larger undivided Punjab in 1849, more so after the 1857 war of Independence, in British India. These districts boast of a strong “culture of migration” in the region which, in turn, inculcates an intense propensity to emigrate among the youth to supplement their existing income levels. An important feature of the “culture of migration” is the establishment of international migration as “the right thing to do”, or a modern “rite of passage” for the young population (Massey et al 1993). Those (particularly young males) who do not turn the act of migration into a “rite of passage” are labeled as “lazy, unenterprising, and undesirable” in society (Reichert 1982). The market response to such a culture is a well-developed economic network of middlemen represented by commission-cum-travel agents.

The data from our survey reveals that workers are leaving Punjab's villages at a rapid rate crossing new frontiers, particularly since 1990. In 2008, about 39 per cent of the households in the sampled rural villages participated in the international migration process. To put it differently, more than 12.7 per cent of the population of sampled rural villages of the two selected districts was living outside the country, which directly impacted 39 per cent of the rural households. Another salient feature of these international migrant households has been that they have a similar, high propensity to migrate within India, i.e., to other parts of the country or within the state (29.6 per cent). At the same time, the return migration rate during the households life span is substantially higher in the case of internal migrants (52 per cent) compared to international migrants (2.6 per cent). This is primarily due to the resettlement in the countryside after retirement from army and paramilitary service (84 per cent) by the internal migrants. It is these pensioner households that dominate the international migration process owing to their increased capabilities and risk taking capacities. However, international migration is a preferred option over the army or paramilitary service by the present rural youth. Currently, only 29 per cent international migrant households have their members in the armed services. Thus, rural Punjab provides an ideal setting for the study of international migration.

2. Conceptual Framework

Major research on international migration links international migration propensities to causal push-pull factors but does not explore the linkages between international migration and household capabilities. In recent years, there is a growing awareness in literature about the ability of the household as a critical consideration in the explanation of the size and direction of international migration flows (Nayyar 2002). Alternatively viewed, the migration literature emphasizes causal factors – a necessary condition for migration in an equilibrium model – but underplays the sufficient conditions associated with capabilities. Here, it may be mentioned that the much talked about capabilities are that of the individual as typified by natural talent, skill acquired through training, learning from experience, and abilities or expertise achieved

through education (Nayyar, 2008). These capabilities of an individual are different from endowed natural abilities. And also, these capabilities will vary from individual to individual (Nayyar, 2008). Others do talk about social capabilities but do not go below the level of communities, say grouped in terms of religious entities, caste entities, geographical groupings, etc. (Massey et al, 1993). However, the decision making at such levels is only for laying policies/strategies that indirectly influence individual decisions. The individual decisions are, however, directly influenced by the capabilities of the household of which the individual is an integral constituent. It is the capabilities at the household level that form the base of this paper.

The dynamics of international migration reflects the role of factors at the international, national, household and individual levels. Outcomes are shaped by the interplay of these factors. People of all socio-religious-political-economic classes migrate, but international migration is a selective process that screens and determines which individuals among potential migrants become actual migrants. As economic, social, demographic parameters differ across households their impact on migration decisions also differs across households. For migration is not a simple process of crossing borders as a passive response to causal factors (internal 'push' or external 'pull' forces) that drive the individual to migrate, as some explanations of international migration (Castles and Miller 2003; Solimano 2005) often suggest. However, such a drive to migrate by the individual materializes only when it is substantially backed by the households' capability to hedge the involved risks in the migration act and finance its costs². It is for this reason that the phenomenon of migration often bypasses poor households.

The factors that influence migration are broadly divisible into macro and micro factors. While pull (in destination area) and push (in origin area) factors are broadly the outcome of macro policies of nations that govern the functioning of market forces in their respective economies, the micro factors act as facilitating and enabling instruments that help individuals to pursue their goals in response to available migration opportunities when no such work opportunities exist locally. To be more specific, on one hand, at the macro level, the shortage of labor (demand pull) in developed economies encourages them to liberalize migration policies while the lack of productive employment possibilities in less developed or developing countries encourage migration of its unemployed workforce (supply push) to smoothen (or act as a safety valve) in an otherwise uncertain economic, social and political situation at the home front on the other. Even within a developing country, the law of inheritance that prompts division (and, at times, fragmentation) of land holdings – the main productive asset base of rural society – acts as a strong push factor.

However, the decision to migrate by an individual, at the micro level, is rarely a solo decision. An individual may be motivated by the convergence of hostile local labor market forces but attracted by the optimistic market openings. The information regarding optimistic market openings in the foreign labor markets may reach him through social and economic networks. The capacity to harness such an opportunity depends, obviously, upon the

² The migration risks get enhanced manifold when prospective migrant is kept in dark about the job market or is given only a fictitious job offer letter. S/He is forced to move across nations to avoid arrest and deportation before finding a suitable job at a desired destination. An escape from such a situation often requires substantial financial and emotional support base of the household members at a short notice.

capability of the household to which the individual belongs. For, the desire to migrate must be supported by the capacity to finance the direct as well as indirect costs involved in the process of migration, that is, capability of the household³.

A question arises here: why is the capability of the individual not sufficient for his or her migration? The capabilities of individuals in terms of natural talent, skill level, learning level, and abilities or enterprise lay down the necessary conditions for migration. It is the capabilities of the households that create the sufficient conditions. The capability of the household may not act as a binding constraint for finances needed for migration, if and only if, individuals are given loans without the collateral guarantees. But for emotional and emergency needs, the support base of the household resources continues to be a binding constraint.

What are the elements that determine the capability of a household? The endowment base of a household captures the capability of a household. The endowment base has both tangible and non-tangible components that may be inherited or acquired. The tangible endowment base of a household is captured by such physical assets as land and structures built thereon⁴, machinery required for production and transport activities, liquid or near-liquid financial assets, and household members and their endowed human capital. The non-tangible endowment base of a household is captured by the social and political standing⁵ of the household and its social network.^{6 7}

In an empirical exercise, the capability of a household may, thus, be approximated by physical capital (land and structures built thereon, machinery required for production and transport activities), financial capital (liquid or near-liquid financial assets), the human capital (household members and human capital endowed therein) and social capital (the social and political standing).

³ In sociology, it is the family rather than the household which is the focus. While a family is solely knitted through blood relationships, a household is dominantly knitted through blood ties but may have non-family members as the constituent members. In rural India, the two terms, family and household can, however, be used interchangeably without substantial loss of information.

⁴ Invariably, land resources act as social security and, thus, enhance the risk-taking initiatives. In other words, it acts as a barometer of risk aversion in the sense more the owned land, more is the willingness on the part of potential migrant to take risk in exploring migration possibilities. Of course, there is an upper ceiling when owned land resources become a hurdle in migration acts.

⁵ Social standing of a household may be captured by the family occupation particularly that of the lead member – usually the household head. A household head supplements income flowing from land base (when owned, otherwise not) when he is in active service occupation or is in passive occupation as retired pensioner or works as skilled worker in owned business or as hired skilled or non-skilled worker.

⁶ For migration purposes, social relatives abroad are an asset. Through demonstration effect, they create the urge for migration and, the urge gets strengthened, when they provide the relevant information and promise of financial support to meet migration costs.

⁷ A member of the social network may become an anchor in the migration causal-chain when he sponsors one after other members of the family who, in turn, replicate the process - a migration chain process (Nayyar, 2002; Massey, 1990).

3. The Data

3.1 Structured Questionnaire

To research answers to the above research issues from rural Punjab, at the empirical level, a survey was conducted for collecting primary data because information from secondary sources is either limited or sketchy. Towards this end, a set of structured questionnaires was designed. The survey was conducted through face-to-face interviews with the heads (acting or otherwise) of the sampled households. The questionnaire for sampled villages collected macro information about the whole village and census of families living therein.

3.2 Sampling Design for Villages

The sample of villages was drawn by using the village level 2001 census details of each of the districts of Hoshiarpur and Kapurthala – the epi-centre of *Doaba* belt of Punjab - the historic part from where migrant flows have been ensuing a representative of the most energetic segment of outward looking Punjabi population.

The sample of 20 villages from the above mentioned two districts was selected on the basis of nth method (Random sample). Before starting the process of drawing the sample of villages, some rules were laid down, so that both the districts get proportional representation in our sample. There are 1387 villages in the Hoshiarpur district and 618 villages in the Kapurthala district. Thus, these two districts consist of 2005 villages in total. For the application of the above mentioned method, I first arranged all these villages in ascending order according to the number of households for each of the two districts separately. Then, the first village of each district was chosen randomly from within the first 100 villages of the prepared lists of villages. Since, my intention was to select one percent villages for sample, so subsequent villages were selected after every 100th village (nth village) from the list. Thus, I chose 14 villages from the Hoshiarpur district and 6 villages from the Kapurthala district. In this way, I had 20 villages for our sample out of total 2005 villages of both the districts. There are 2255 households in the 14 sampled villages of Hoshiarpur and 966 households in the 6 sampled villages of *Kapurthala* district.

The survey was carried out from October, 2008 to January, 2009, and , I was able to conduct the survey of 3051 households out of the total households of 3321(as per 2001 village level census) from the 20 sampled villages of both the districts jointly. In other words, I conducted the survey of 95 percent households of 20 villages from both the districts. The survey is in fact in the form of a census which has surveyed all the households except the houses that were locked at the time the survey was carried out because all members of the households were away at the time. Besides, the locked households, presumably of emigrants, or those households where only servants were living, were also excluded. This is partly due to the inability of a household survey in sampled villages to trace families that had permanently left the village at the time of the survey. Second, if individual members of a household had left the village and set up permanent homes elsewhere, they were not considered household members and therefore also excluded from the survey.

Data were collected on a set of characteristics of households that were deemed likely to influence the international migration decisions. The main variables which influence migration decisions and included in the sample are of number of current emigrants(working abroad for a period of one year) , returned emigrants(worked abroad for a minimum period of one year),

the year and destination of emigration, households with relations abroad, current and returned migrants from within the country, occupation of the head of the household, size of land holdings, education of the head, size of the family, the number of adults / males between the age of 15-40 years in a house, the year of migration and destination countries of international migrants. Apart from the other uses, this information helps to compile the migration intensity level of each of the village.

The researcher asked household members to recall labor migration histories of each family member who was not present at the time of the survey. In some cases, respondents were unable to remember their (migrant sons, daughters, etc.) migration history over a long period of time. However, when the migration history of migrant family members was coupled with any real life event such as marriage or birth of a child in the family or international migration of another worker from the relatives and friends or from the village, etc., respondents seemed to be able to report migration history convincingly.

The major limitation of my data stems from joint migration –that is when all members of a household migrated prior to our survey. When this happens, no migration history can be elicited, resulting in an under estimation of migration and migration trends over time. But, as is known that children are more likely to migrate than are household heads, and as long as at least one parent remains in the village, the survey was able to collect histories on all the children.

4. Evidence

4.1 Salient features of International migrant households and non-International migrant households

The data base of 3,051 surveyed households from Hoshiarpur and Kapurthala districts reveals that cross-border migration is more prevalent among those households that have a better land endowment level compared to those that are less endowed with land. Whereas the incidence of cross-border migration is around 30 per cent among the landless and marginal farm households of twenty sampled villages, it is roughly 40-50 per cent among small farm and semi-medium farm households and in the range 60-70 per cent among medium farm and large farm households (Table 1).

The household capability impact is further corroborated when we compare the endowment level of households that participate in the cross-border migration process and those which do not have a single member abroad. The difference is sharply marked when capability variable is land-endowment (3.1 versus 1.3 acres) and social cross-border network connectivity (83 per cent versus 29 per cent). The advantage lead is, however, mild when the other variables are considered as endowment proxies. Average family size of households with cross-border migrants is higher (6) as compared to households without cross-border migrants (5). Similarly, average number of male members in the age group of 15-40 years is higher in households with cross-border migrants (2) as compared to households without cross-border migrants (1). Human capital in the form of years of schooling of household heads is higher (7.6 years) for households with cross-border migrants than that of the households without cross-border migrants (6.6 years). Similarly, internal migration exposure is higher in households with cross-border migrants (29 per cent households) as compared to households without cross-border migrants (22 per cent households).

Table 1: Salient features of households with and without international migrant members (Sampled Households)

Salient Features of Households	Households with international migrants	Households without international Migrants	Total (3051)
Overall: Numbers	1181	1870	3051
Percentage share	38.6	61.4	100.00
Relative importance attached in terms of household's landholding status (in percentages)			
Landless (%)	28.9	71.1	100.00
Marginal Landholding (%)	29.0	71.0	100.00
Small Landholding (%)	40.6	59.4	100.00
Semi-Medium Landholding (%)	48.8	51.2	100.00
Medium Landholding (%)	66.8	33.2	100.00
Large Landholding (%)	62.5	37.5	100.00
Relative importance attached in terms of Asset class			
1. Landholding per household (acres)	3.1	1.3	2.0
2 Family members per household	6.0	4.9	5.3
Male members (15-40 years) per household	1.7	1.1	1.3
Human Capital: Schooling Years of Household Head	7.6	6.6	7.0
Internal migration exposure (% share)	29.4	22.4	25.4
Social capital: Relatives abroad* (% share)	83.1	28.7	49.9
Relative (percent) importance attached in terms of occupation of Head of the household			
Self-employed in Agriculture	46.9	53.1	100.00
Self-employed outside agriculture	27.3	72.7	100.00
Pensioner	60.4	39.6	100.00
Salaried workers	22.4	77.6	100.00
Skilled Worker	48.4	51.6	100.00
6 Laborer	25.3	74.7	100.00

Source: 3051 households (1181 migrant households and 1870 non-migrant households) belong to a sample from 20 villages from Hoshiarpur and Kapurthala districts, surveyed during October, 2008 to January, 2009 by the author.

Note: Number of owned acres by a household is used to define different categories of land holdings. For instance, a holding having less than 2.5 acres is referred as marginal; between 2.5 acres to 5.0 acres as small; between 5.0 acres to 10.0 acres is referred as semi-medium; between 10 acres to 25 acres referred as medium; and above 25 acres referred as large.

*It means members of household living abroad from extended family.

Why do households headed by pensioners, the skilled and the self employed in agriculture display a higher propensity for international migration as compared to households headed by the self employed outside agriculture, labor and salaried job? Family occupation of the head is an important factor for social and economic status of a household in the Indian society.

If the head of household is a pensioner, he will have more experience, better information relating to the migration mechanism for movements of international migration. He will also be more exposed to the available opportunities abroad. He will have more income, assets and savings and, therefore, will possess a higher capacity to take risks involved in international migration.

If the head is a skilled worker, he can have better information of opportunities relating to skill based employment available in other labor importing countries. He will obviously have higher earning capacity and higher worth in raising funds for meeting high migration costs and taking risks of international migration. Moreover, the probability of other members of these households for gaining technical skill will be higher. These people are mostly skilled in construction related activities. And these types of skilled workers are in demand in those countries (mainly Middle East countries) where construction activities are growing. Thus, most of the skilled workers have a tendency to move to the Middle East countries.

If the head is a farmer, his or her worth as an income earner, and fund raiser will be higher. This enables the household to bear the high transaction costs of international

migration. But, at the same time, agriculture being a risky occupation due to its dependence on nature leads such a household to diversify its risks by sending one or more members abroad. Moreover, due to the falling size of land holdings owing to high pressure of population and increasing dependency on mechanized agriculture further aggravates the migratory tendency. Further, the cheap migratory labor available from other states is another contributory factor.

If the household head is manual worker or agricultural laborer, his or her earnings and savings will be lower. He will be lacking collateral assets and thus will be unable to raise funds for meeting migration costs. Moreover, he is risk-averse and does not want to take highly risky international migration. At the most, he can think of migrating to the countries where risks and costs of migration are lower.

If the household head is a salaried person, there are many possibilities. In fact, it is a jumbled situation. If, he is in a high salaried job, young, with small kids, he would prefer to stay with family and give more attention to his family, and will not move. If he is in a high salaried job, in middle age or near retirement, with grown up unemployed children, and possesses good assets, better information, will prefer to settle his or her unemployed children in countries of preference. If he is in less-paid job, young, with small children, he will not move that easily. If he is in less-paid job, and is in middle age or near retirement with grown up unemployed children and possesses meager assets that ill affords him to take risks, he will choose to send his children to less costly and less risky destination countries.

If the household head is self employed outside agricultural activities, such as a petty village Karyana shop, kiosk, small mechanic shop, flour mill, etc, he will have higher exposure, but lower income, lower savings. Hence, his collateral base will be lower. The economic conditions make him risk-averse and in case his household chooses to move, it will choose to move to less costly and less risky migration. But, if household head is self employed outside agriculture activities, such as a big karyana shop, big work shop, grain merchant, fertilizer store, etc, he will have higher exposure, higher income. This household will avoid moving, because of good economic conditions. But, if this household moves for international migration, it will choose most preferred countries. On the basis of above logic, it may be expected that small number of households will move for international migration from self employed occupation outside agriculture.

Table 1 bears out our arguments as it reveals that the pensioner, the skilled and the self-employed in the agricultural occupation, the household's participation in international migration is higher, 60 per cent, 48 per cent and 47 per cent respectively. While that of service, labor and self employed outside agriculture, the household's participation is lower, 22 per cent, 25 per cent and 27 per cent respectively.

4.2 Selected features of international migrant households in terms of their destination countries

The destination countries of rural Punjabi migrants have been grouped under three categories on the basis of transaction costs of migration per migrant for these destination countries. These groupings are, namely, Group A countries (USA and Canada); Group B-countries (all the labor importing countries of Europe, Australia, New Zealand and Japan); and Group C-countries (all the labor importing countries of Middle East and two other countries, namely, Malaysia and Singapore). The Group A and Group B countries belong to the developed and

Group C, to the developing countries. Interestingly, there is a huge difference in the transaction costs of migration between the developed and developing countries and also within the developed countries. At the time of conducting the survey, we learnt that for Group A countries, the cost of migration is unexpectedly high, it varies from rupees 15 lakh to rupees 30 lakh; for Group B countries, it varies from rupees 7 lakh to rupees 10 lakh per migrant; and for Group C countries it varies from rupees 0.8 lakh to rupees 1.2 lakh per migrant. The high transaction costs of migration for moving to Group A and Group B countries may be attributed to the high preference for these countries and hence the excess-demand for these countries. The high preferences for these countries emanate from the desire for a better quality of life and high income. This preference is further strengthened by high probability of permanent settlement, and high probability of immigration of family members to these countries. Due to these positive externalities, these countries have become the most sought-after destinations (i.e., excess demand) by potential migrants; thus giving rise to the higher transaction costs of the intermediaries for moving across borders. Due to high transaction costs of migration to these countries, naturally most of the migrants are drawn from land holdings or financially strong households. As compared with Group A and Group B countries, the transaction costs of migration to Group C countries are lower. It is so because rural labor force from this region has lower preference for moving to this Group of countries. This lower preference for these countries emanates from lower wage rates and absence of externalities attached with migration to these countries due to temporary nature of migration to these countries. Moreover, most of the migration for these countries is of legal nature and involves less risk. Naturally, migration to these countries will be drawn from those households who are risk-averse, and have lower household capabilities. On the basis of the above arguments, it may be expected that migrants tending towards Group C countries would be drawn from those households that are headed by semi-skilled workers, small shop keepers, lower salaried class people, pensioners without land holdings, landless or low income households, because these households are generally risk-averse.

Thus, it may be hypothesized that migrants to Group C countries are most likely to come from households of land-less or small size of land holdings, or from the risk-averse households, from households having less internal migration experience, with less education of household head, with small family size and also with small number of male members of age 15-40 years, whereas those who are moving to Group A and Group B countries come from landed households, higher education of head households, having higher internal migration experience, households having large family size, higher number of male members in the house and households having higher relatives in the destination country.

The survey data indicates that as we move from Group A to Group B to Group C countries in the sampled villages the preponderance of number of migrants per household originating from the sampled international migrant households systematically decline from 3.2 to 2.1 to 1.8 respectively (Table 2). This leads us to ask why there is a variation in the number of migrants per household in different destination countries. Why international migrant households who are participating in Group A and Group B countries send more migrants per household than households moving towards Group C countries. The answers to these questions lie in the endowments of households.

The capability of a household in the form of land is the leading factor in the choice of destination country. As already stated land is the main form of asset which is significant for both earning income and also as a collateral asset in rural areas. As expected the average size

of landholdings is higher (5.1 acres) in those households whose family members have migrated to Group A countries, and is lower (1.7 acres) in those households whose family members have migrated to Group C countries. The average size of land holdings in those households whose members have migrated to Group B countries is 4.1 acres (Table 2). It means the probability of migration to Group A and Group B countries increases with the rise in the size of land holdings of household. Put it another way, higher the size of land holding of household, higher the number of migrants per household moving towards Group A countries and Group B countries and vice versa, and lower the size of land holdings, lower the number of migrants per household moving to Group C countries.

The social networks component of household capabilities also play a significant role in the deciding the choice of destination. The data indicates that (Table 2). Social networks (relatives abroad) act as a powerful magnet for attracting the migrants, and particularly deciding the choice of destination of potential migrants. Among all the international migrant households, more than 83 per cent households had relatives abroad. Those migrating to Group A and Group B countries, almost all households except 3 per cent and 5 per cent had social relatives abroad respectively, while among Group C countries, 29 per cent households did not have any relatives abroad.

The internal migration exposure of a household is also important in deciding the choice of destination country by the potential migrant. It helps in collecting the relevant information relating to various aspects of destination; e.g., employment opportunities, immigration laws, probability of permanent settlement, risks attached, transaction costs of migration, etc. Above all, it develops the habits of moving out of the country. It is interesting to note that, on the whole, about 30 per cent households had internal migration exposure. More than 40 per cent households falling in Group B countries had internal migration exposure, whereas only 19 per cent households belonging to Group C countries had internal migration exposure. From Group A countries, 38 per cent households had internal migration exposure.

The human capital endowment of household capability is also effective vis-à-vis other household endowments, like land and social network. Family size and number of male members of age 15-40 years have been used as proxies for human capital. The average family size of international migrant household is about six members, it is the highest (6.7 members) in those households who are sending their members to Group A countries, followed by Group B countries (6.1 members) and is lowest (5.7) in Group C countries. However, the variation in human capital endowment of household in the form of male members per international migrant household between the ages of 15-40 years is mild, it is 1.8 males per household both for the group A and Group B countries households and 1.6 males for those households participating in Group C countries (Table 2). Thus, human capital endowment of households seems to be relatively less effective in deciding the choice of destination as compared to other household endowments, like land, and social networks.

The information presented in Table 2 shows that around 52 per cent households are in developed countries (i.e., 13 per cent in Group A and 39 per cent in Group B countries) as compared to 48 per cent in Middle East countries (Group C countries), but if we see the number of migrants, 69 per cent migrants are in the advanced countries and only 31 per cent in Middle East exporting countries. Why this variation in the choice of destinations by the migrant households and migrants? Why a higher percentage of households are heading towards the developed countries as compared to developing countries? Surely, this can be

explained with the household capability. Let us start with first, size of land holding of households and then move to occupation of the household for explaining this pattern.

Does the size of landholding of households positively affect the choice of destinations? The data says so. Because land is an important component/determinant of the capability of household and it positively selects the destination country. Among the landless households only 5 per cent moved to Group A, about 17 per cent to Group B, and nearly 78 per cent to Group C countries. But as, we move from landless households to successively higher size of landholding categories of households, the households percentage moving to Group A and Group B countries increases and that of those moving to Group C countries falls. In the marginal size landholding households, 13 per cent households moved to Group A, 48 per cent to Group B countries, and 38 per cent to Group C countries. In the small size landholding households, 19 per cent households moved to Group A, 58 per cent to Group B countries, and 23 per cent to Group C countries. In the semi-medium size landholding households, 25 per cent households moved to Group A, 51 per cent to Group B countries, and 24 per cent to Group C countries. In medium-size of landholding households, 25 per cent households moved to Group A, 47 per cent to Group B countries, and 28 per cent to Group C countries. In the large size landholding households, 33 per cent households moved to Group A and 67 per cent to Group B countries. From this size of landholding, no household moved to the Group C countries.

Thus, it is clear that size of landholding plays an important role in deciding the choice of destination by migrant households.

Table 2: Selected characteristics of migrant households in terms of transaction cost of migration to destination countries

Characteristics	Countries grouped in terms of the transaction costs of migration (as in winter of 2008)			
	Developed	Developing		Overall
	Group A (USA & Canada) (Rs 15 to Rs 30 lakh per migrant)	Group B (European countries & Australia & New Zealand) (Rs 7 to Rs 10 lakh per migrant)	Group C (Middle East countries, Malaysia & Singapore) (Rs 0.8 to 1.2 lakh per migrant)	
1. Number of migrants per household	3.24	2.06	1.23	1.80
2. Land holding per household (Acres)	5.13	4.05	1.70	3.05
3. Family members per household	6.73	6.11	5.66	5.92
4. Male adults (15-40 years) per household	1.80	1.78	1.62	1.71
5. Human capital: Schooling years of household head	8.30	7.86	7.21	7.60
6. Social Capital: Relatives abroad	97.37	94.53	70.80	83.40
7. Internal migration exposure of households	38.16	40.26	18.70	29.55
8. Overall position of International Migrant households:				
a) Relative shares of households	12.87	38.70	48.43	100
b) Relative shares of migrants	24.3	44.67	31.1	100.0
8.1 Amongst landless households				
a) Households (% shares)	4.68	17.59	77.73	100.0
b) Migrants (% shares)	8.19	22.26	69.72	100.0
8.2 Amongst marginal holding households				
a) Households (% shares)	13.14	48.40	38.46	100.0
b) Migrants (% shares)	25.09	54.36	20.56	100.0
8.3 Amongst small holding households:				

a) Households (% shares)	18.54	58.05	23.41	100
b) Migrants (% shares)	27.80	58.97	13.23	100.0
8.4 Amongst semi-medium households				
a) Households (% shares)	24.65	50.70	24.65	100
b) Migrants (% shares)	35.74	50.49	13.77	100.0
8.5 Amongst medium households				
a) Households (% shares)	24.29	47.14	28.57	100.0
b) Migrants (% shares)	51.37	36.61	12.02	100.0
8.6 Amongst large households				
a) Households (% shares)	33.33	66.67	00.00	100.0
b) Migrants (% shares)	6.67	93.33	--	100.0
9. Relative importance attached in terms of occupation of head of the household				
a) Self-employed in agriculture	21.38	56.27	22.36	100.00
b) Self-employed outside agriculture	10.45	26.87	62.27	100.00
c) Pensioner	16.80	60.25	22.95	100.00
d) Salaried worker	18.07	34.94	46.99	100.00
e) Skilled Worker	00.56	10.51	88.94	100.00
f) Laborer	00.50	7.46	92.04	100.00

Source: 1181 migrant households belong to a sample of 3051 households from 20 villages from Hoshiarpur and Kapurthala districts, surveyed during October, 2008 to January, 2009 by the author.

Does the occupation of the head of household significantly influence the choice of destinations? The occupation of the household head reveals the social and economic status of household. As stated above, there is a huge variation in the transaction costs of migration for different destination countries. We have also argued above that the risk taking and cost bearing capacity of households with different occupations is different. Thus, the choice of destination by the potential migrant household will be determined by the capabilities of these households. It has been argued above that the households headed by pensioners, self employed in agriculture, and service households are better endowed with tangible and intangible assets. So, members of these households will prefer to move to the developed (Group A and Group B) countries, and their preference for developing (Group C) countries will be lowest. The information given in Table 2 bears out this fact.

As expected, from self-employed household head in agriculture households, more than three-fourth (78 per cent) moved to the developed countries. Out of these 78 per cent households; 22 per cent moved to Group A and 56 per cent moved to Group B countries. And remaining 22 per cent moved to the developing countries (Group C). Similarly, from pensioner occupation household head households, more than three-fourth (77 per cent) of these households moved to developed countries; i.e., 17 per cent to Group A and 60 per cent to Group B countries. Remaining one-fourth (23 per cent) of these households moved to the developing (Group C) countries. However, from salaried occupation household head households, there is a small edge of households moving to Group A and Group B countries. Little above half (53 per cent) moved to developed countries; i.e., 18 per cent moved to Group A and 35 per cent to Group B countries. Little less than half (47 per cent) moved to developing (Group C) countries.

In contrast to the pensioner, the agricultural and the salaried household head households, the manual labor, the skilled labor and the self employed households outside agriculture household head households are not only participating in lower number in international migration (Table 2.1), but also are largely migrating to Group C countries. The data in Table 2.2 shows that only very small number of households from manual labor household head

households (8 per cent) moved to the developed countries; i.e., one per cent moved to Group A and 7 per cent moved to Group B countries. In contrast, a huge number (92 per cent) moved to developing (Group C) countries. Similar is the case with skilled household head occupation households, only a small number (11 per cent) moved to the developed countries; i.e., one per cent moved to Group A and 10 per cent moved to Group B countries. And a large number of households moved to Group C countries (89 per cent). Among the self employed outside agriculture household head occupation households, relatively a small number (37 per cent); 10 per cent moved to Group A and 27 per cent moved to Group B countries. A majority of these households (62 per cent) moved to the developing (Group C) countries.

Thus, from the above discussion, we may conclude that the various components of household capability play a significant role in the selection of the destination country. The households who are endowed with strong components of household capability moved to the developed countries and those who are endowed with weak components of household capability moved to the developing countries. In other word, it is the degree of the strength of the components of the household capability which mattered in the selection of the destination country.

4.3 Explaining the intensity of migration among the migrant households with household capability

Since all the households cannot have equal level of household capability, the intensity of migration would be different among the migrant households. In other words, there would be dissimilarity in the intensity of migration in the migrant households. The information presented in Table 3 shows that 64 per cent of the households had sent one member abroad, 19 per cent had sent two, 5 per cent had sent three, 6 per cent had sent four, and 6 per cent had sent five or more members abroad. It is interesting to note that only 28 per cent of the migrants come from 38 per cent of the landless migrant households, while 72 per cent of the migrants come from 62 per cent of the landholding migrant households. This shows that even among the international migrant households, migrants are concentrated among landholding migrant households (Table 2 and Table 3). What explains this type of pattern among different migrant households? Can this type of pattern also be explained by the household capability? To search for answers to these questions, we have used different parameters of household capability of international migrant households. In other words, like propensity to migrate, the intensity of migration can also be explained by the household capabilities. Those households which have higher household capability in the defined sense would be sending higher number of migrants per household abroad. It can be seen from the Table 3 that the value of all the parameters of household capability rises when we move from those households that had sent only one member to those who had sent progressively higher and higher number of family migrants. The size of landholding of those households who had sent only one member is only 1.9 acres, while those who had sent five or more members abroad are 9.0 acres. The number of family members per household is 5.4 for those who had sent one family member abroad, and 9.2 for those who had sent five and above. Similarly, number of male adults (15-40 years of age) per household is 1.46 for those households who had one member abroad and 2.63 those who had five or more family members abroad. The schooling of head is 7.29 years for those households who had sent one member abroad, and 8.53 years for those households who had five or more family members abroad. Those

households who had sent only one member abroad, 77.5 per cent had relatives abroad, while those households who had sent five or more members abroad, 99 per cent had relatives abroad. The internal migration exposure of those households who had one member abroad is 22.5 per cent households and those households who had five or members abroad is with 24.3 per cent of households. Thus, it is clear from the above discussion that the intensity of migration is significantly impacted by the different parameters of household capability.

The intensity of migration is also distinct when we look at it from the perspective of destination countries. Among the migrant households who had sent one member abroad, three-fifth (61.1 per cent) households had sent their family member to the Middle East countries; one-third (33.5 per cent) to European countries; and only 5.4 per cent to North American countries. Among the migrant households who had sent two members abroad ; more than two-fifth (41.1 per cent) had sent family members to European countries, nearly two-fifth (39.8 per cent) to Middle East, and near one-fifth (19.1 per cent) to North American countries. Among the migrant households who had sent three members abroad; nearly half (49.1 per cent) had sent their family members to European countries; more than one-fourth (27.3 per cent) to the North American countries; and less than one-fourth (23.6 per cent) to the Middle East countries. Among the migrant households who had sent four members abroad; three-fifth (59.1 per cent) of the households had sent their family members to European countries and two-fifth (40.9 per cent) to North American countries. And, among the migrant households who had five or more family members abroad; 57 per cent households had sent their family members to European countries and remaining 43 per cent to North American countries. Thus, it is clear that migration intensity is quite different among different destination countries. The number of migrants per household, it seems, is what determines the size or relative importance of destinations. The migration intensity is higher in those households who had sent their family members either to the Group A or Group B countries.

When we analyze the intensity of migration from the landholdings perspective, we see that intensity of migration among the landless migrant household is lowest, and when we move to the higher size of landholdings the intensity of migration rises. Of the landless households, nearly 77 per cent had one member abroad, while only 1 per cent had five or more members abroad. Of the marginal landholding households, 63 per cent had one member abroad, and 5 per cent had five or more members abroad. Of the small size land holdings households, 49 per cent had one member abroad, and 9 per cent had five or more members abroad. Of the semi-medium household, 43 per cent had one member abroad, and 14 per cent had five or more members abroad. Of the medium size of land holdings, 57 per cent had one family member abroad, and 13 per cent had five or more members abroad. Of the large size of landholdings households, 60 per cent had one member abroad, while 20 per cent had five or more members abroad. Thus, it is clear that intensity of migration is lower among the landless households, and it increases as we move to upper side of land holding households' categories. In other words, migration intensity is closely linked to the size of land holdings.

When we look at the intensity of migration from the perspective of the household head's occupation, we also find an interesting insight. As we move progressively from one member migrant households to five or more members migrant households, we find that the share of self-employed in agriculture and pensioner household rises, while that of self-employed outside agriculture, service, skilled labor, and labor households falls. In other words, the

migration intensity is higher among the self-employed agriculture and pensioner households than that of self-employed outside agriculture, service, skilled labor and labor households. This insight is quite in line with the household capability, as the household capability is higher among the preceding households than the latter households.

Thus, we may conclude that the classification of the migrant households on the basis of their intensity of migration can be attributed to their differences in the household capabilities. The households who had sent large number of family members abroad did so because they are better placed in terms of different parameters of household capabilities.

Table 3: Migration intensity in terms of household capabilities of sampled migrant households

Characteristics	Households with number of migrant members					
	One	Two	Three	Four	Five or more	Overall
1 Migrant Households (Nos.)	759	230	55	67	70	1181
2 Percentage share	64.28	19.49	4.67	5.61	5.95	100.00
3 Landholding per Household (Acres)	1.93	3.295	6.29	6.21	9.0	3.05
4 Family Members per Household	5.37	6.51	7.38	6.23	9.17	5.92
5 Male adults (15-40 years) per household	1.46	2.1	2.29	1.79	2.63	1.71
6 Human Capital: schooling years of Household Head	7.29	7.69	7.82	9.39	8.53	7.60
7 Social Capital: Relatives abroad (%)	77.48	90.47	92.72	98.48	98.57	83.40
8 Internal Migration Exposure of Households (%)	22.52	28.14	25.45	42.42	24.28	29.55
9 Relative Importance attached in terms of destination countries (percentage)						
a) North America (Group A)	5.43	19.05	27.3	40.9	42.9	13.34
b) European countries	33.51	41.13	49.1	59.1	57.1	38.57
c) Middle East Countries	61.1	39.8	23.6	0	0	48.08
Overall	100.0	100.0	100.0	100.0	100.0	100.0
10 Relative Importance attached in terms of household's landholding status (Percentages)						
a) Landless (%)	76.6	17.6	2.7	2.0	1.1	100.0
b) Marginal Landholding (%)	62.9	19.5	5.1	7.0	5.4	100.0
c) Small Landholding (%)	49.3	22.7	6.9	11.8	9.4	100.0
d) Semi-Medium Landholding (%)	43.3	23.4	5.0	5.7	13.5	100.0
e) Medium Landholding (%)	57.1	18.6	7.1	4.3	12.9	100.0
f) Large Landholding (%)	60.0	0	20.0	0	20.0	100.0
Overall (%)	64.2	19.6	4.7	5.6	5.9	100.0
11 Relative importance attached in terms of occupation of head of the household (percentage)						
a) Self-employed in agriculture	27.4	40.3	47.3	51.5	67.1	34.6
b) Self-employed outside agriculture	4.8	3.9	5.4	3.0	2.9	4.4
c) Pensioner	18.4	23.8	16.4	36.4	24.3	20.7
d) Salaried job	7.3	6.9	5.5	9.1	2.9	7.0
e) Skilled labor	20.7	12.1	12.7	0	2.9	16.4
f) Labor	21.5	13.0	12.7	0	0	16.7
Overall	100.0	100.0	100.0	100.0	100.0	100.0

Source: 1181 migrant households belong to a sample of 3051 households from 20 villages from Hoshiarpur and Kapurthala districts, surveyed during October, 2008 to January, 2009 by the author.

4.4 International migration patterns among different villages and household capabilities

Do the migration propensities differ for potential migrant households who originate from traditional migrant villages as compared to those who originate from remote or non-traditional migrant villages? This section examines the migration propensities of households among different villages and the international migration patterns among 20 sampled villages. It shows that disparities in the intensities of migration can also be understood in terms of household capabilities. All the villages are classified into three categories on the basis of migration proportion. It is interesting to note that this classification of villages matched with the historical classification (historical or traditional villages are those which are sending migrants abroad for a very long period. The non-historical or non-traditional villages are those that entered into international migration domain recently). The village distribution (Table 4) as per the migration proportion is as follows: High proportion international migrant villages (Group 1 villages), range from 47 per cent migrant households in a village to 71 per cent migrant households (represented by five villages and 790 Households); medium proportion international migrant villages (Group 2 villages), range from 25 per cent to 47 per cent migrant households (represented by 10 villages and 1,518 households) and low proportion international migrant villages (Group 3 villages), range from 8 per cent to 25 per cent migrant households (represented by five villages and 743 households). Group 1 and Group 2 villages are also called historical or traditional migrant villages and Group 3 villages are called non-historical or non-traditional villages.

The information presented in Table 4 shows that there are great disparities in the propensities of international migration by villages in these two districts, with certain villages systematically sending abroad more people than others. The highest participation (60 per cent) of households in international migration is from Group 1 villages; followed (41 per cent) by Group 2 villages and is lowest (12 per cent) from Group 3 villages. The story with number of migrants per household is similar. As expected from the household migration propensity, the data also confirms that the number of migrants per household, is highest in Group 1 villages (1.3 migrants per household), followed by Group 2 villages (0.7 migrants per household) and lowest in Group 3 villages (0.2 migrants per household). In other words, on an average, every 100 households from Group 1 villages send 130 migrants, Group 2 villages send 70 migrants and Group 3 Villages send just 30 migrants. Even within the village groups, there is a large variation (Appendix Table 2). In Group 3 villages, the percentage of migrant households ranges from as low as 8 to 25 per cent, in Group 2 villages it ranges from 31 per cent to 46 per cent, whereas in Group 1 villages it varies between 47 per cent to as high as 71 per cent. The average range in these sampled villages is from 8 per cent to 71 per cent (Appendix Table 1).

Is this variation in the proportion of international migration among different villages due to the difference of the capabilities of households among different villages?

Table 4: International migration propensities among different village Groups in terms of household capabilities

Characteristics	Group 1 villages	Group 2 villages	Group 3 villages	All villages
1 Migration intensity range (% migrant households)	47- 71	25-47	8-25	8-71
2 Number of Villages	5	10	5	20
3 Nos. of HHs	790	1518	743	3051
4 Nos. of Migrant HHs	473	619	89	1181
5 Average Migrant intensity (row 4/row 3*100)	59.9	40.8	12.0	38.5
6 Migrants per HHs (Nos.)	1.3	0.7	0.2	0.7
7 Percent of HHs having Relatives abroad	75.4	54.3	13.6	50.0
8 Percent of internal migrant HHs	34.1	17.1	29.3	29.4
9 Land holdings per HH (acres)	2.6	1.9	1.3	2.0
10 Family size per HH (Nos.)	5.5	5.5	4.9	5.3
11 Male members per HH (Nos.)	1.4	1.6	1.1	1.3
12 Education of Head of HH (Years)	6.9	6.8	7.5	7.0

Source: 3051 households (1181 migrant households and 1870 non-migrant households) belong to a sample from 20 villages from Hoshiarpur and Kapurthala districts, surveyed during October, 2008 to January, 2009 by the author.

The two parameters of household capabilities, namely size of land holdings and relatives abroad seem to determine this variation. In the high proportion migrant villages (Group 1 villages), average size of land holdings is the highest (2.6 acres) whereas in lower proportion Group 3 villages average size of land holdings is at lowest (1.3 acres), and in the medium proportion Group 2 villages, average size of land holdings is 1.9 acres. It should be noted that there is a variation not only in the size of the land holdings in the different groups of villages, but there is also a variation in the value of lands. The price of land varies between Rs 10 lakh to Rs 20 lakh per acre in the Group 1 and Group 2 villages, whereas in Group3 villages it varies between Rs 5 lakh to Rs 10 lakh (according to our discussion at the time of conducting the survey).

Similarly, social networks also seem to play an important role in determining different migration patterns in different villages. As the social capital (the number of relatives abroad) accumulates in some traditional migration villages, it initiates a process of “Cumulative Causation” in those villages which lead to self-sustaining flow of migration. On the other hand, some remote villages with little or no initial international migration or with little social capital (fewer relatives abroad) go into cumulative inertia. Thus, the effect of social network on migration is not uniform across different villages. It may be argued that social networks function in different ways for different villages. Due to different degrees of the strength of social network mechanisms in different villages, it leads to a different impact on the pattern of village migration. These effects create persistent differences in village migration patterns over the time. In other words, social networks generate differential migration outcomes/propensities for households and villages. There is a large difference of social network assessed by different villages (Table 4). From Group 1 villages, 75 per cent households reported relatives living abroad, from Group 2 villages, 54 per cent households reported relatives living abroad, whereas from Group 3 villages, only 14 per cent households reported relatives living abroad (Table 4). It implies that given the key role of social networks in supporting migration across borders, Group 1 and Group 2 villages are well advanced in the international migration process, whereas the Group 3 villages remain laggards in the prevailing process of international migration. Group 1 and Group 2 villages with historical migration background boost the international migration culture and receive high remittances. On the other hand, the Group 3 villages with little or no initial international migration become increasingly isolated from any direct benefits of international migration.

Looking at the internal migration exposure of the households, Group1 villages also lead with 34 per cent households having internal migration exposure, while it is lowest with Group 2 villages with 17 per cent households having internal migration exposure. From Group 3 villages, 29 per cent households are involved in the internal migration experience; it is because most of the people from these villages are involved in current internal migration and had lower proportion of households with returned internal migrants, whereas in Group 1 and Group 2 villages higher proportion of households had returned internal migrants. This type of phenomenon has some realistic implications. Group1 and Group 2 villages have over the time developed the international culture of migration and the youth of these villages prefer international migration to internal migration, whereas in Group 3 villages there is a no culture of international migration, and most of the youth prefer services within the country.

Other endowments of households-size of household, size of male members and education of the head are almost similar in all villages. Thus, these endowments of households seem to play fewer roles in differentiating the intensities of international migration among different villages.

5. Conclusion

It is found that household capabilities play a significant role in determining the propensity (flow) of international migration. Our results show that the propensity of international migration is more prevalent among those households that are better endowed with household capabilities in terms of all the selected parameters as compared to those that are less endowed. International migrant households are markedly better equipped with all the parameters of household capability as compared to non-cross border migrant households. In terms of occupation of household head, the propensity of cross-border migration is higher in pensioner, skilled, and self-employed in agriculture households to that of labor, service, and self-employment outside agriculture households. Secondly, household capabilities also significantly determine the intensity of cross-border migration. The households better endowed with household capabilities have a higher number of migrants per household as compared to the households that are less endowed. Thirdly, the findings presented in this paper provide empirical support for the hypothesis that household capabilities play a prominent role in the selection of destination of migrant households and migrants. The results show that capability parameters of Group A and Group B countries are on higher side than Group C countries. From this, it may also be concluded that the selection of a destination country reflects a compromise on the part of the migrant household between lower risk and costs versus preferred destination. Thus, the rationality originating from this phenomenon implies that most of the migrant households or migrants moving into the Group C countries (For this Group of countries costs of migration and risk is less as compared to Group B and Group C countries) are from landless households or from those family occupation households such as the manual labor, or the semi-skilled labor households, or small self-employed outside agriculture households. These households have less capacity to bear high migration costs and risks. And many of the households destined for Group A and Group B countries are from the landholding households, or from pensioner households, or services households, whose capacity to bear high migration costs and risks is higher. Lastly, Migration propensities are higher from traditional migrant villages as compared to non-traditional villages. Our results show that the flow of international migration is lower from the non-traditional migrant and remote villages (Group 3 villages) and higher from traditional migrant villages (Group 1 and Group 2 villages).

Appendix

Appendix 1: Mutual relationship among different parameters of capability of household among the international migrant households

Category of landholding households	% of Households having internal migration exposure	% of Households having relatives abroad	Number of migrants per household	Years of school education of head	Family size of Household	Number of male members age 15-40 years per household
Landless	19.0	73.0	1.26	6.5	5.8	1.7
Marginal	38.0	88.0	1.45	8.0	5.3	1.5
Small	26.0	91.0	2.13	8.6	5.8	1.6
Semi-medium	20.0	92.0	2.6	8.7	7.0	2.0
Medium	23.0	91.0	3.58	9.2	8.9	2.2
Large	100.0	100.0	4.00	14.0	7.5	1.5

Appendix 2: International Migration intensities of 20 sampled villages

Name of village	Total Households	International migrant HHs	Percentage of International migrant HHs	Migration intensity based Group
Ullah	62	5	8.1	III
Mundian Rangra	33	3	9.1	III
Murad pur Guru	122	13	10.7	III
Pandori	478	61	12.8	III
Kolian	48	12	25.1	III
Talwandi Mehma	269	84	31.2	II
Dhaliwal	94	30	31.9	II
Theh Kanjla	8	2	33.3	II
Rawal	13	5	38.5	II
Jabo Sudhar	90	35	38.9	II
Nangal Maruf	75	30	40.0	II
Mayo Patti	129	53	41.1	II
Paddi Sura singh	445	188	42.2	II
Husain Pur Guru	145	63	43.4	II
Dandewal	99	46	46.5	II
Nainowal Jattan	167	79	47.3	I
Fateh pur Kalan	65	32	49.2	I
Sher Pur Pukhta	183	92	50.3	I
Kaulpur	124	64	57.6	I
Bhadas	402	284	70.7	I
Overall	3051	1181	38.7	

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