Chapter 3 The Link with a Home Country

A Comparative Analysis of Host Country Environments for Diaspora Engagement

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3.1 Introduction

The idea that skilled migration does not necessarily lead to brain drain is not a new one. There are many ways in which people living abroad can stay connected to their home country and contribute to its development. The positive effects of skilled migration can come in the form of remittances, knowledge exchange through professional networks and also through the eventual return of expatriates to their home countries. India represents a good example of such positive effects, as it is now benefiting from reverse flows of investment and the world's highest remittances and flows of expertise. One prominent example of this is the role that the Indian Silicon Valley diaspora has played in the success of the Indian software sector. Like many other bodies, the Indian government has recently redirected its focus, and it has started to hail overseas Indians as heroes. When the Indian Prime Minister Manmohan Singh addressed the diaspora at an annual gathering in January 2010, he spoke of his immense pride in the achievements of the Indian diaspora. Indians overseas were applauded for their achievements, which 'have made a great contribution towards changing the image of India before the world at large' (Singh 2010). Emigration management reforms in India are taking place at a national level through the creation of permanent institutions and through the allocation of resources to cater for their needs. Moreover, the Indian government has signed a number of bilateral cooperation agreements with the main destination countries, and it takes an

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active part in regional and global initiatives for migration management. It is fully aware of the significant role that the countries of destination play in the well-being of migrants and in improving their possibilities to remain connected to India in one way or another.

This chapter therefore focuses on host country institutional environments in several countries, and it looks at opportunities to gain relevant expertise. We argue here that migrants who have successfully settled in their host country are in the best position to contribute to the development of their country of origin. This paper is based on data from the international research project 'Migration, Scientific Diasporas and Development: Impact of Skilled Return Migration on Development in India'. The chapter includes the results of the perspective of the countries of destination. The countries we have selected are France, Germany, the Netherlands and Switzerland and our aim here is to examine migration policies, labour market regulations and other institutional settings that enable or hinder the links that skilled Indians have with the country of origin. All four of the selected countries have seen a recent increase in immigration from India, and they are changing their policies to attract a more skilled labour force. Little is known about the activities of Indian professionals in Europe. Until recently countries in continental Europe rarely appeared on the map of mobile Indian professionals. Therefore, this paper aims to fill two gaps in the existing literature: firstly, it examines the conditions of Indian professionals in new destination countries and, secondly, it explores the impact of structural differences between host countries and their ability to provide a fruitful environment for diaspora engagement in home-country development.

The chapter is based on a thorough policy review of the institutional environment of the host countries and on in-depth interviews with key experts and skilled migrants, as a means of exploring the conditions of skilled Indians in Europe, specifically in the four case-study countries, and their ability and willingness to get involved in home-country development. Primary data have been collected through an online survey on 'Skilled Indians abroad and development', which has been applied to both skilled professionals and postgraduate students of Indian origin who are currently living in the four countries and who are specialised in the fields of information and communication technology, financial and management services, biotechnology and pharmaceutical industry or who are in the academic and research field. In the survey, skilled Indians were asked about their motivations for emigrating, their experiences in the destination countries, their links with their home country, their plans for the future and the perceptions they had regarding their potential to

¹The project is carried out by the Cooperation & Development Centre at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in collaboration with the International Labour Office (ILO), the Institute of Development Studies Kolkata (IDSK) the International Migration and Diasporas Studies (IMDS) Project at the Jawaharlal Nehru University (JNU). It is funded by the Swiss Network for International Studies (SNIS). Under a twofold country of origin/countries of destination perspective, this research seeks to widen the knowledge base on skilled return migration and its impact on development and to explore strategies and potential measures for leveraging the potential of scientific diasporas.

contribute to the development of their home country.² Further information was gathered at additional meetings held in Delhi in September 2011 with key informants and the representatives of embassies and consulates from France, Germany, Switzerland and the Netherlands as well as the Delegation of the European Commission. The aim is to explore the regulatory settings and cooperation and exchange mechanisms that exist for Indian skilled professionals, scientists and students. Excerpts from these testimonies are presented throughout the paper.

This chapter starts with an overview of the Indian population in Europe. It then goes on to explore the theoretical options for the transfer of knowledge and skills, either through a return to the country of origin or else by moving back and forth between the country of origin and the country of destination or through diaspora linkages. The chapter examines the position of the countries of destination with regard to skilled migration and the ways in which they can contribute to tying skilled migration to development goals. The host countries under study are then observed in order to look at the types of policies that are actually put into practice and to discuss the advantages and limitations of such policies. Special attention is paid to the influence that structural differences between the host countries have on the conditions of skilled migrants. The aforementioned knowledge transfer channels are observed to find differences and similarities among the countries. This comparison is made in order to draw conclusions on the significance that structural settings have for links with the home country. The last section presents the empirical data from the survey, and it briefly analyses the specific situation of skilled Indian migrants in the new European destination countries. Good practices to promote the involvement of Indian skilled diaspora in home country socio-economic development are identified throughout the chapter.

3.2 Indians in Europe

Since the 1970s, there has been an increase in the emigration of high-skilled and professional Indians to industrialised countries, and the period from the early 1990s to the start of the twenty-first century saw an important wave of Indian IT professionals emigrating to the USA and some European countries (mainly the UK). However, a number of countries in continental Europe, such as the case-study countries used in our research (France, Germany, the Netherlands and Switzerland), are now emerging as new destinations for skilled Indians, and these countries have witnessed a systematic increase in the inflows and stocks of Indian population over the last few years (see Tables 3.1 and 3.2). This is partly the result of new policies

²So far (information collected on December 5, 2011), the survey has been answered by 652 skilled Indians (507 men and 145 women), 274 based in France, 121 in Germany, 75 in the Netherlands and 182 in Switzerland. Annex 3.1 provides an overview of the basic socio-demographic characteristics of the respondents.

	2000	2005	2006	2007	2008	2009
France	1004	1104	1235	1375	1499	1458
Germany	6544	8364	8911	9367	11403	12009
The Netherlands	661	1217	2011	2526	3454	3069
Switzerland	_	_	_	_	_	_

Table 3.1 Inflows of Indian population in selected countries from 2000 to 2009

Source: OECD. Stat Extracts (Data extracted on 9 Nov. 2011)

Table 3.2 Stocks of Indian population in selected countries

	2000	2005	2006	2007	2008	2009
France	_	_	42627	43474	_	
Germany	35183	40099	41497	42495	43997	45638
The Netherlands	11074	12664	13760	14828	16470	17321
Switzerland	6253	8579	9150	10090	11189	11735

Sources: OECD.stat Extracts (Data extracted on 9 Nov. 2011) for France and the Netherlands; Swiss Federal Office of Statistics for Switzerland; and Statistisches Bundesamt for Germany

to attract skilled people or to adapt existing institutional settings, and it is part of a trend towards the selection of immigrants, especially more skilled ones.

If we take OECD countries in general into consideration, we can see an increase in immigration from India in recent years. Indeed, while yearly net immigration in these countries was about three million people in 2003, the Indian community in these countries was around 1.9 million (about 2.6 % of the total migrant population) in 2008, and approximately 5 % of these people had a third-level education (OECD 2008).

In addition to emigration through recruitment and job opportunities abroad, skilled Indians are also using the academic stream more and more to emigrate as students (Khadria 2008). The OECD estimates show that over 180,000 Indian students were studying abroad in 2008 (OECD 2010a). We can see how Indian students have become a relevant country group in international migration flows in OECD countries. Their share among all foreign students enrolled in third-level education in such countries has increased in the last decade. While students from India represented 4 % of students in 2001, they accounted for 7.3 % by 2009 and were the second largest group among international students in the OECD originating from non-member countries, after students from China who represent the largest group by far, with 18.2 % of all such students (OECD 2011). This is the result of an increase in international mobility in general, but it is also a consequence of foreign student policies becoming a tool in the international competition for skilled persons. Many countries are adapting their migration policies to retain international graduates as skilled workers once they have completed their studies (Kuptsch 2006). This occurs through the so-called 'two-steps migration' process (OECD 2010b); the first step involves attracting international students, and the second step then sees these students retained as skilled long-term workers for the national labour markets.³ The policies of the observed countries establish pathways for foreign graduates to become labour migrants. As we will explain in a subsequent section, possibilities for such status changes already exist in Germany and the Netherlands, and such postgraduation entry pathways for international students are now being established in France and Switzerland.

As far as the main destination countries are concerned, the preferences of Indians highlight the attractiveness that particular education systems hold. This is mainly because of their academic standing, but it is also increasingly a result of the subsequent immigration opportunities offered in the hosting countries (OECD 2011). While the top three destinations, the USA, the UK and Australia, attract 77 % of all Indian students who are enrolled overseas, we have observed that increasing numbers of Indian third-level students have been moving to other destinations such as Canada and New Zealand, as well as to countries in continental Europe such as Germany, France and Switzerland.

It is possible to see clear differences among migrant population in the observed countries. While Europe is generally dominated by migrants with only a primary education, Switzerland stands out in comparison to other countries thanks to the presence of immigrants with high-skill jobs and also the representation that migrants have in the overall employed population. Immigrants represent 20.9 % of all persons in high-skill jobs in Switzerland while this figure is only 9.4 % in France, 9 % in Germany and 8.2 % in the Netherlands (European Commission 2006; Chaloff and Lemaitre 2009). The Database on Immigrants in OECD countries (DIOC) does not provide such detailed information on the immigrant population in Germany and the Netherlands, and therefore, comparisons can only be made between Switzerland and France. Nevertheless, the expected differences in skill composition between the two countries are confirmed (see Fig. 3.1). The majority of Indian migrants in France only have a primary-level education, unlike Switzerland which has a much more favourable skills structure and where nearly half of the immigrant population has a tertiary-level education.

The duration of stay for Indian migrants is also country specific (see Table 3.3). In France, a majority of Indian migrants across different skills levels stay for more than 10 years. The stay in Switzerland is of a more temporary nature, especially in the case of highly skilled migrants. Nearly half of all Indians with a tertiary education stay in Switzerland for less than 5 years. The behaviour patterns of migrants in the host country are closely linked to the planning of their migration project. Whether it is planned as a short-term experience or as a long-term stay, it will have an effect on their efforts to link with the home country and on their attempts to integrate in the host country (Cassarino 2004). If migrants are expecting to stay abroad only for a temporary period, which appears to be the case in Switzerland, they can be expected to make a greater effort to link with the home country.

³ Given that a significant amount of international students increasingly tend to settle in the destination countries, the importance of student mobility in diaspora formation has recently become a relevant area of research (Kumar et al. 2009).

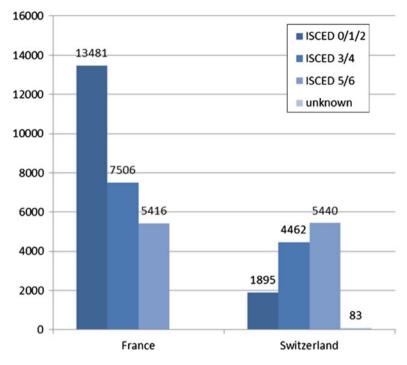


Fig. 3.1 Educational levels of the Indian population in France and Switzerland (ISCED 0: Preprimary education, ISCED 1: primary education, ISCED 2: lower secondary education, ISCED 3: upper secondary education, ISCED 4: postsecondary non-tertiary-level education, ISCED 5: tertiary-type education, ISCED 6: advanced research qualification)

Table 3.3 Duration of stay of Indian population in France and Switzerland, by country of birth

	Up to 5		More than 10		
Duration of stay	years	5-10 years	years	Unknown	
France	All	4270 (16.2 %)	3737 (14.1 %)	13804 (52.3 %)	4592 (17.4 %)
	ISCED 5/6	1003 (18.5 %)	674 (12.4 %)	2875 (53.1 %)	864 (16 %)
Switzerland	All	4343 (36.5 %)	926 (7.8 %)	3135 (26.4 %)	3476 (29.3 %)
	ISCED 5/6	2708 (49.8 %)	474 (8.7 %)	1023 (18.8 %)	1235 (22.7 %)

Source: Own calculations based on OECD.stat, extracted on October 26, 2011

3.3 Theoretical Discussion

Within the migration and development nexus, the role of migrant communities overseas, diasporas or transnational communities (Wickramasekara 2010) in home-country development has increasingly found itself at the forefront of discussions (Lowell and Gerova 2004; de Haas 2006; Kapur 2010). For the most part, the debate on the development potential of migrant practices has usually been focused on financial remittances, insofar as they have represented the largest source of monetary

flows to developing countries from their nationals abroad. However, in the last decade, the renewed interest in other development functions of migrant communities has progressively taken extra-economic dimensions more into account, with special attention now being paid to skilled migrants and the social, cultural and even technological aspects of their transfers, as well as the mechanisms used to channel their resources (Levitt 1998; Kapur 2001; Goldring 2003; Barré et al. 2003; Tejada and Bolay 2010; Levitt and Lamba-Nieves 2011). Despite the uncontested value of the ideas, skills and knowledge embedded in human capital, the extent to which these social remittances of migrants have influenced development still lacks systematic evidence. At a policy level, a rise in the awareness of the importance of knowledge-based activities in the development process has certainly triggered the interest of home countries to try and involve skilled migrants in various strategies that can lead to a strengthening of their scientific and technological capacities, based on the understanding that they can make long-distance contributions.

The main focus of our research into skilled mobility is centred on scientists, other skilled professionals and students living in the countries of destination, as well as on the institutional settings and conditions that facilitate the mobilisation of their social capital (Bourdieu 1986), as well as further resources linked to them, such as skills and knowledge for the benefit of the home country. We argue here, following Bruggeman (2008), that the interpersonal links of social networks and collective action, together with social support and enabling environments, are key determinants for enhancing the benefits of the accumulation of social capital.

Recent research into migrant networks and transnationalism has shown that technological advances in communications and transport have enabled migrants to maintain strong systematic linkages with the society in their home countries. In our research we see transnationalism as the most adequate conceptual framework as far as understanding the different types of connections between the migrants' country of origin and their country of residence and the dynamics in which their resources circulate is concerned. Indeed, today the use of the transnational viewpoint to international migration is deemed to be essential when addressing the migrationdevelopment nexus (Faist 2000; Bauböck and Faist 2010; Faist et al. 2011). The transnational engagements of migrants, their types of initiatives and the structural settings and institutional interventions are all areas that have received special attention in recent literature. While many studies provide evidence of migrants' experiences in the countries of destination, thereby helping to shed light on interdependence mechanisms with the country of origin, recent research also points to institutional support and favourable environments in the host countries and also in the home countries, and these act as enablers for the implementation of good knowledge transfer practices (Kapur and McHale 2005; Kuznetsov 2006; Tejada and Bolay 2010). In a similar vein, specific migration policies and investment environments are seen as necessary conditions to favour the development impact of migration (de Haas 2011).

The discussion concerning the influence of the migrants' integration on their transnational ties is another key topic when referring to the host country environment. This issue has attracted attention in the recent literature on migrant transnationalism,

with empirical-based research leading mostly to two opposing premises concerning the relationship between integration and the maintenance of transitional connections. While one of the views argues that economic and social integration favours transnational activities (Portes 2001, 2003; Itzigsohn and Giorguli Saucedo 2002; Vertovec 2004), the other claims that the migrants' assimilation in the host country weakens the transnational ties (Castles and Miller 2003; Snel et al. 2006). Although the discussion on this issue is still inconclusive, a recent study by de Haas and Fokkema (2011) questions the theoretical perspectives that conceptualise transnationalism as a cause or consequence of integration failure.

In considering this set of theoretical reflections, and by taking a transnational viewpoint as a research framework, our interests lie in the activities in the host countries, and our focus is on the impact that local conditions and settings have on the efforts of skilled migrant to engage in their home countries. Concretely, our research tries to shed light on two interconnected issues: (1) the diverse mechanisms by which diasporas can stimulate positive change and the dynamics they follow to channel their resources and initiatives, either individually or collectively, and (2) structural settings and policies, which either facilitate or hinder their endeavours.

3.3.1 Mechanism for Diaspora Transfers

The literature on migration provides evidence of a range of mechanisms used to transfer diaspora resources. Most studies into the impact of migration on development focus on financial flows, which are mainly implemented in two principal ways: *financial remittances* and *foreign direct investments (FDI)*. The former have become an increasingly significant source of monetary flows for developing countries, and the effects have been studied extensively (Ghosh 2006; Agunias 2006; de Haas 2005; Acosta et al. 2007; Adams 2011). While India is the world's top recipient of remittances (receiving an estimated \$55 billion in 2010),⁴ FDIs from the Indian diaspora have not reached significant levels. However, evidence shows how the successful position of many Indian professionals abroad has enabled them to drive greater FDI by *outsourcing activities* to India (Kapur 2010; Saxenian 2006).

Other financial instruments include *investment funds* and *diaspora bonds*, implemented by home countries for the purpose of raising a stable and easy source of external development finance by tapping into the wealth accumulated abroad by diasporas. Israel and India are good examples of countries that have benefitted from remittance-backed bonds from their diaspora (Ketkar and Ratha 2009).

Business and entrepreneurial investments and links by skilled migrants are another mechanism to get diasporas involved in their countries of origin. Recent literature evidences the cases of China and India as being relevant in this regard, as they show how relations between skilled professionals abroad and the home

⁴World Bank, Migration and Remittances Fact Book, 2010. http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1199807908806/Top10.pdf. Accessed 10 Nov. 2011

countries and regions can trigger economic and social transformations through business and investment relations (Saxenian 2005, 2006; Lucas 2001).

Philanthropy is one of the most frequent approaches used to engage diasporas in the development of their countries of origin. Despite unpredictable contributions and sustainability, as well as a lack of evidence concerning its poverty-reducing impact (Wickramasekara 2010), philanthropy has become more organised and strategic with the development of intermediary organisations and the engagement of migrants in their social investment. As such, it is seen as a significant contribution from migrants for the public benefit, and it can complement development aid.

Return migration is another option that researchers see as a powerful tool for development. Several studies attribute return migrants, who have international exposure, with a significant role in investment and economic development once they return (Cassarino 2004; Lowell and Gerova 2004). Furthermore, even though the return of skilled migrants may be highly beneficial for the home country insofar as they bring improved levels of knowledge and technical skills with them and may create new employment, the return option has still not been comprehensively explored. Temporary return or circular migration schemes have also been studied as alternatives to recovering the capacities of emigrated human capital and capitalising on the experiences and resources of migrants (Agunias and Newland 2007; Newland et al. 2008; Wickramasekara 2011).

Diaspora knowledge networks or scientific diasporas, which bring together groups of scientists, engineers and skilled professionals who collectively act in the creation of opportunities, are an instrument that is considered to have significant influence, especially in terms of knowledge transfer. Recent studies provide evidence of the value that these mechanisms have in the transfer of skills, knowledge and technologies through collective initiatives (Barré et al. 2003; Kuznetsov 2006), based on the logic of connectivity and the individual multiplier effect to participate in a common project (Meyer 2011). Several country case studies have provided evidence of the active involvement of these networks in science and technology advancements in the home countries over the last two decades through the exchange of information, specialist knowledge transfer, joint research projects or training and technology assessment from a distance.

The idea that migrants, as individuals, might be considered as agents of change (Lowell and Gerova 2004; Katseli et al. 2006; de Haas 2006) fits in with the optimistic functionalist visions of migration and development of recent years. These predict that the individual efforts of migrants reach their maximum potential through group mobilisation and collective action, which facilitate their influence in the home country (Tejada 2012). We argue here that the ability to mobilise is a crucial factor in terms of enabling diasporas to function. Recent research provides evidence of the participation of skilled migrants in associations, organisations or networks, motivated by their common international exposure and their shared cultural ties, which is essential for the collective harnessing of their social capital and which may crystallise into contributions to the homeland (Westcott and Brinkerhoff 2006; Tejada and Bolay 2010). In this fashion, Saxenian (2006) provides evidence of Indian and Chinese engineers and technicians who mobilised many of their conationals into active associations and networks in the Silicon Valley

region of the USA during the late 1990s. Her research stresses the importance of contacts and community support in extending social networks through linkages and long-distance collaborations between technology hubs in destination countries and urban centres in the home country. Several case country examples show the relevance of structures and institutional policies as enablers and enhancers of bottom-up transnational initiatives by migrants for the benefit of the home countries (Tejada and Wickramasekara 2010; de Haas 2008).

3.3.2 Significance of Structural Settings in Host Countries

Today, host countries are aware of the role that skilled migrants can play as bridges in the development of new trade relationships or the nurturing of existing ones, and they also understand that they can become part of their stock of global talent, thereby increasing their competitiveness. For this reason, governments have been introducing various measures aimed at mobilising and capitalising the resources of skilled migrants. First of all, institutional settings (in the wide sense of the term 'institution', in other words, in the sense that includes sets of rules and regulations) have a bearing on whether a country is able to attract and retain skilled foreigners. Secondly, institutional interventions and conditions also facilitate the mobilisation of migrants' resources for the exchange of knowledge with their home countries.

It goes without saying that a skilled person's decision to work or study abroad and his/her choice of destination depend on a multitude of monetary and nonmonetary factors that go beyond the institutional settings. However, host country governments have limited control over the geographical location, climate or scenery of their country or over push factors such as the limited range of postsecondary studies or the lack of modern equipment in research facilities or hospitals in the home countries of migrants. Host countries that are looking for options to attract and retain foreign talent must work on institutional settings that they can shape or at least influence. Issues such as a country's academic structure and its technical business environment are central to its ability to attract talent and retain it, as are its labour market regulations and its migration policy. There seems to be increasing recognition of the fact that branding and marketing may also have an important role to play.

There seems to be a growing awareness that all sides might gain most by allowing migrants to develop transnational identities and by creating an environment that enables exchange, regardless of whether it be through physical or virtual mobility. Host countries can contribute to the shaping of such an environment via their migration policies (in the broad sense, ranging from admission to the granting of citizenship) as well as through other structural settings and by encompassing economic policies, R&D policies and development cooperation as shown in Table 3.4.

Within the framework of migration policies, the governments of the host countries have the option to promote beneficial return or circular migration by permitting the

⁵For a comprehensive list of the most important student rationales, see Internationalization and Trade in Higher Education – Opportunities and Challenges, OECD 2004, p. 30.

Table 3.4 Overview of host country policies fostering knowledge exchange

Host country policies fostering the link between skilled migration and knowledge transfer	
Nature of policy	Possible measures
1. Migration policies	Easy entry under academic exchange programmes
	Grant multiple entry visas to skilled migrants, allowing 'circularity'
	'Earned adjustment' of immigration status, towards a more permanent status
	Allow dual nationality
2. Structural settings (economic,	Internationalisation of the academic research community
business, R&D, development cooperation)	Allow/provide incentives for joint ventures (e.g. between returned migrants and their former host country employers)
	Encourage international scientific cooperation (e.g. via bilateral agreements/MOUs)
	Provide funding for academic exchanges (e.g. joint
	research projects, student and researcher exchanges)

movement of migrants back and forth to their country of origin. Indeed, when the European Commission first coined the term 'circular migration', it gave it a twofold definition, i.e. it envisaged two forms of circular migration: (i) migrants may move from a third country of residence to a destination country in the EU and then return or move on (privileged mobility between home and host country, but no settlement in the EU) and (ii) migrants or members of diaspora communities who have settled in the EU may choose to return temporarily to their country of origin or ancestry. Migrants should not be penalised with a worse position on acquiring a residence permit in their host country if they return to home countries for a certain period. Not only do repeated returns foster ties and knowledge transfers, but giving preferential treatment to people with an in-country experience also has positive implications for the receiving country. It benefits from a labour force which is familiar with the situation in the host country and accustomed to local work ethics. On the other hand, possessing acquired country-specific human capital is an important reason for internationally mobile workers to choose the same destination country for successive migration.

Newland and Agunias (GFMD 2007) claim that migrants who have settled permanently and successfully in their host country have the best capacity to contribute to development in their country of origin. Well-established high-income migrants are more likely to visit their countries of origin to set up businesses, monitor their subsidiaries or engage in any other way when they have a secure residency status in the country of destination. Following such reasoning, destination countries can support circular migration by allowing longer, if not permanent, stays, thus enabling migrants to acquire valuable experience and accumulate more capital for investment in their home countries.

Allowing dual citizenships is another way of enabling migrants to be engaged in both countries. Dual citizenship is supported on the grounds of the already mentioned examples of migrants who are intensively involved in their countries of origin and

in their new countries of settlement because of their well-settled position. While the interests of the countries of origin to maintain the link with their diaspora are clear, dual citizenship is often perceived as a controversial matter for the receiving countries, because of the fear that it may lead to 'thin citizenship' and 'split loyalties' (Calhoun 1997; Spiro 1997; Waldrauch 2006). Such concerns do not arise with dual citizenship among the developed countries, but they are considered to be more problematic when one of the citizenships is of a developing country.

While migration policies only enable the circulation of people, institutional interventions in structural settings are put in place in order to motivate this circulation and transfer knowledge between countries. Such top-down institutional interventions can take place in the form of bilateral agreements, memoranda of understanding and the encouragement of joint study programmes or research projects. International cooperation can be strengthened by forging strategic partnerships at a country level as well as between individual institutions. Mobility schemes within such structural cooperation allow exchanges of students, graduates and researchers to take place. Exchange programmes usually allow the exchange of professionals or students between countries for limited periods of time for the purpose of gaining specific skills and fostering international relations between two countries. Twinning programmes are another structured approach to transfer skills and knowledge between two countries. They mainly cover the health-care sector and include training in another country followed by a return home, anticipating the transfer of knowledge and technology.

Some knowledge exchange takes place through the aforementioned institutionalised networks and bilateral programmes, while many migrants keep in touch with their colleagues and acquaintances on a personal basis. Researchers often collaborate with national professional organisations in their countries of origin, or they stay in touch with their lecturers and colleagues through various possible linkage mechanisms. Collaboration can take place through joint projects, mentoring, temporary visits for training and the like. In order to boost motivated individuals in their personal efforts, funding for academic exchanges or joint research projects can work as a welcome top-down intervention to enhance the possibilities of collaboration. In the rest of this chapter, we will look at how far the institutional interventions in the observed host countries influence the connections between migrants and their contacts in the home country.

3.4 Policy Review in Host Countries Settings

3.4.1 Migration Policies

A theoretical overview of the different mechanisms for migrants to engage with their home country shows us that there are several ways for destination countries to influence knowledge transfers with home countries. In fact, destination country governments have established some programmes that have been specifically designed for this purpose. There are other policies which do not necessarily have this effect as their main objective, but which encourage circulation in a positive way nonetheless. Most high-income countries now encourage mobility, and they also frequently stimulate the settlement of highly skilled migrants. Continental Europe is a relative latecomer to the global competition for talent. However, it is advancing rapidly, and in recent years European migration policies have become more and more favourable towards the admission of highly skilled workers, and in certain aspects they have become more 'attractive' than the prominent American H-1B visa (Hercog and Wiesbrock 2010). This section highlights the main changes on the policy agenda with regard to attracting and retaining skilled migrants in Germany, the Netherlands, Switzerland and France.

Germany introduced new migration legislation in 2005, simplifying the system and offering highly qualified professionals and investors an easy path to permanent residency. The previous five legal residence titles were reduced to two: a short-term residence permit (befristete Aufenthaltserlaubnis) and a settlement permit (unbefristete Niederlassungserlaubnis) (Heß and Sauer 2007).6 Similarly, the Netherlands adopted a specific policy for highly skilled migrants (the kennismigrantenregeling or 'knowledge-migrant scheme') in October 2004. The new regime allows for rapid admission procedures and the granting of a number of residential and socio-economic rights to highly skilled professionals with a guaranteed annual minimum salary. In Switzerland, the main policy instrument controlling the employment of 'third-country nationals' and regulating their admission is the New Foreign National Act (FNA), which has been in force since 2008.⁷ While admissions for employment-related purposes give priority to workers from the EEA region, the admission of nationals from third countries is based on their skills' level as well as their (expected) capacity for long-term social and economic integration. Even though the migration policy gives priority to skilled workers in Switzerland, no special recruitment mechanisms have been specifically put in place for them. Exceptions only apply when a particular sector is experiencing labour force shortages in both the Swiss and European labour markets. France, where immigration flows are heavily dominated by family immigration, is also attempting to promote the immigration of skilled workers with its so-called *politique 'immigration choisie* (policy of 'chosen immigration'). The New Immigration and Integration Law, passed in 2006, simplified immigration procedures for students and professionals. Two of the main measures taken to achieve this goal are (a) a 'skills and talent visa' (Carte Compétences et Talents), valid for a renewable period of 3 years and reserved for migrants with at least a

⁶ In complying with an EU Directive, Germany added a third title in 2007, a permanent EU residency (*Erlaubnis zum Daueraufenthalt-EG*) available to third country nationals after 5 years of legal residency in an EU member state. The latter title offers equality of treatment with EU nationals in terms of access to the labour market and social benefits, akin to the settlement permit, as well as the right to move to another member state (p. 2011).

⁷The FNA is not applicable to people from the European Economic Area countries – including the EU and the EFTA – (EEA) and their family members as Switzerland has signed free-circulation agreements with these countries. Therefore, when the FNA refers to foreigners, it is referring to 'third-country nationals'.

Bachelor's degree and 3 years' professional experience or a Master's degree and 1 year's professional experience, and (b) an 'employee on assignment card' for secondments to France with multinational companies or temporary hires within companies of the same group. In addition, France has defined a list of shortfall sectors for which employers can hire 'third-country nationals' without limitations.

All the observed countries are liberalising their policies and making it easier for highly skilled migrants to enter, even though the trend 'is not going on to the same extent or at the same rate' (Cerna 2009). Differences appear in several aspects, starting with the possibility for migrants to stay for a longer term. In this respect, Germany now offers very favourable conditions for a selected group of high-earning skilled migrants. It enables permanent residence to be granted from the beginning, while the other countries make it rather difficult to stay on in the country once the employment contract has ended. In the Netherlands, by comparison, all non-EU/ EEA immigrants, including knowledge migrants, have to pass an integration examination, which tests migrants on their Dutch language skills and their knowledge of Dutch society (Article 21, Aliens Act (Vreemdelingenwet 2000)).8 The French system also strongly favours temporary stays, even for highly skilled foreigners. New 'skills and talent' visas for people who can be classified as 'global talent' are being granted on the condition that the beneficiaries will return to their home country within 6 years. The official discourse for supporting such a policy is in line with policies to prevent South-North brain drain. Thus, enforcing return by only giving temporary options for migration is seen in France as part of a development policy for the countries of origin.9

Speaking about the diversity of mobility schemes and policies to attract skilled Indians to Europe, Philippe de Taxis du Poet, the First Counsellor and Head of Science and Technology of the European Commission Delegation to India, emphasised the fact that joint efforts should be put in place: 'Because Europe is not number one for India since the USA is still the most important country, what we need to do when attracting Indian students and researchers is to make things easier for Indian people, having a more united Europe instead of 27 different laws' (personal communication, September 14, 2011).

In addition, 'surprisingly resilient national differences' persist with regard to dual citizenship (Howard 2005). Allowing first-generation immigrants to become naturalised citizens while still maintaining their first citizenship is repeatedly recommended to host countries on the basis that well-settled, well-integrated migrants are better positioned to engage in both countries. France and Switzerland do not require naturalised citizens to give up their first citizenship, unlike the other two observed countries. In general, there is a 'tendency toward a more liberal tolerance of multiple nationality', and even countries such as Germany, which are against dual nationality in principle, have 'largely facilitated the retention of a

⁸ http://www.st-ab.nl/wetten/0345_Vreemdelingenwet_2000_Vw_2000.htm

⁹For countries within the Priority Solidarity Zone, this permit cannot be renewed after the initial 3 years. It includes countries that are considered to be most exposed to the threat of brain drain. It includes almost all the African countries, Lebanon, the Palestinian territories, Yemen, Cambodia, Laos, Vietnam, Cuba, Haiti, Dominican Republic, Surinam and Vanuatu.

previous nationality...' (Hailbronner 2006, pp. 82–83). In Germany, the children of any nationality born in the country to at least one parent who has been a legal resident for at least 8 years, now automatically receive German citizenship and can hold dual citizenship up to the age of 23, when they must choose one or the other (Howard 2005). While the most recent modifications to citizenship policies in Europe have moved towards a greater tolerance of dual citizenship, this has not been the case in the Netherlands, which in 2003 restricted the number of exceptions to the renunciation requirement for the former nationality (De Hart and van Oers 2006, p. 337). By obliging new citizens to renounce their previous citizenship, it becomes more difficult for new citizens to get involved in their countries of origin, because in addition to losing their citizenship, they also lose many of the rights that enable a more intensive involvement.

As we have already seen, host countries can foster, or at least enable engagement in more than one country, thereby allowing the movement of migrants on a circular basis. The situation with regard to being allowed to be absent from the receiving country's territory has improved with the EU Blue Card Directive. This allows EU Blue Card holders to return to their home countries for a consecutive period of up to 1 year, and not more than 18 months in total, during the required 5-year period of residence, without affecting the rights that they have previously acquired to attain long-term EC resident status. 10 A further policy option that encourages the circularity of highly skilled people is preferential treatment for people who have had an earlier in-country experience. In-country work experience adds additional points in the point systems of the traditional immigration countries, which are Canada, Australia, New Zealand and the UK. In addition, people who have completed their studies in one of the universities of these countries are given preferential treatment in the point systems of the countries concerned. Following this example, all the case-study countries now allow foreign students to stay in the country for a period of between 6 months (Switzerland and France) and 1 year (Germany and the Netherlands) to look for a job after the completion of their studies in the respective countries. Previously, most non-EU students had to leave within 90 days of the expiry of their student visa (Commission of the European Communities 2002). Moreover, in the Netherlands, a person who has completed a Master's degree or a doctorate at a Dutch university can get a 1-year residence permit within 3 years after graduation and look for employment in the Netherlands without a prior job offer. Similarly, in Switzerland, the different stays for training purposes are taken into consideration when calculating the number of years that are required to obtain a residence permit, if the foreign student has already held a residence permit for a consecutive period of 2 years after completing the training programme. Changes to immigration policies are also making it easier for foreign graduates when transitioning to the labour markets. In Germany, they are allowed to find employment through the Labour Administration without having to go through the labour market test (Schneider 2009). In the Netherlands, which uses salary thresholds to grant knowledge-migrant visas, a different salary criterion applies to former students who

¹⁰ Article 16 (3) of Directive 2009/50/EC.

find work corresponding to their level of education immediately after completing their studies. Although this situation corresponds better to actual salary levels for new entrants to the labour market, it also gives them the advantage of an exemption from the labour market test since the knowledge-migrant scheme allows employers to hire without a work permit.

The simplification of immigration policies has had an impact on the structure of flows to the countries described. As a result of the aforementioned changes, there has also been a noticeable increase in the presence of Indian migrants, who are the focus of this chapter. Indians are the most dominant nationality in the Dutch knowledge-migrant scheme, and they account for almost 30 % of all the knowledge-migrant applications that have been granted in the past few years. With a similar share in 2010, Indians are also highly represented among those who took the opportunity to stay in the Netherlands after they completed their degrees from Dutch institutions. In Switzerland, the growing Indian immigrant population is predominantly highly skilled, with around 70 % of the adult population holding third-level qualifications in 2010.¹¹

3.4.2 Structural Settings Enabling Knowledge Exchange and Cooperation

Besides migration policies, other structural settings play a role in constituting a favourable environment for migrants to link with their home countries. Cooperation agreements between countries are very relevant as they ease the development of cooperation at an institutional level. In addition to memoranda at a national level, individual institutions also sign agreements with their counterparts at a university level. As we have already mentioned, knowledge transfer between the home country and migrant communities abroad can take place in a number of ways. Such memoranda seek to promote institutional exchanges in research and education, as well as student exchanges, jointly organised conferences, joint research projects and the exchange of information regarding curricula and research developments. Even though we can see a convergence between structural settings in the destination countries since they are all trying to attract foreign talent, there are still some noticeable differences. For the purpose of this chapter, we have observed the differences in terms of overall institutions as well as the country-specific connections with India.

A number of memoranda of understandings (MoUs) have been signed in order to promote bilateral cooperation between India and the observed countries. All the observed countries have also signed specific memoranda for cooperation in the field of education and scientific research at a national level between the designated ministries and also between respective universities. The German-Indian S&T Cooperation (STC) started in 1971 with an agreement on the peaceful use of nuclear

¹¹ Information provided by the Swiss Federal Statistical Office (FSO), Information Centre, Section Population, on 25 Sept. 2012.

energy and space, and it was subsequently expanded through a number of agreements. Since 1996, the extent and aims of STC have been determined by the Indo-German Committee on Science and Technology (International Bureau of the BMFB 2011). The STC with India falls into three areas: student and scientists exchange programmes [primarily through the German Academic Exchange Service (DAAD), the Alexander von Humboldt Foundation (AvH) and the German Research Association (DFG)], joint research projects and workshops, conference and visits. In order to give a special impetus to German-Indian collaboration in science and industry, an Indo-German Science and Technology Centre (IGSTC) was established in 2008 to fund application-oriented research.

Several MoUs have also been signed between French and Indian institutions. In 2007, the Indian Ministry for Human Resource Development and the French Ministry of Foreign Affairs signed an MoU on an Indo-French Educational Exchange Programme (IFEEP), which is monitored through a Joint Working Group. France even set up a central institution in India to promote bilateral scientific cooperation in basic sciences, frontier technologies and to exchange scientists and post doctoral researchers; the Indo-French Centre for the Promotion of Advanced Research (CEFIPRA) is a top-down response to the interest that Indian and French scientists have shown in working together. CEFIPRA has become a model of bilateral cooperation in science and technology in its 25 years of existence. Each year, it supports up to 15 joint research projects of a very high scientific quality, selected through an open competition across all disciplines in the basic sciences. Most of the selected institutions are prestigious leading scientific bodies.

CEFIPRA is currently designing a new scheme aimed at encouraging the open participation of all Indian universities in international exchanges and the exposure of their scholars through the provision of 25 scholarships per year for the best students. These scholarships, known as the Raman-Charpak Scholarships, will complement the 10 scholarships already provided to Indian students by the French government each year and which are selected from around 300 applications received. This scheme is planned to encourage those students with the best performance, regardless of the institute or university they come from. The premise of the programme is that students will come back and build competences in their own universities and not just at the top Indian institutions. The French President's visit to India in December 2010 helped to boost collaboration between India and France. On that occasion, a number of further MoUs were signed, and the Indian Institute of Technology (IIT) Jodhpur project was announced. Just as the USA and Germany have done in the past, France expressed an interest in participating in the creation of a new IIT. However, the economic crisis and the current French political and economic situation have made it difficult to complete the project. During our interview at the Indian embassy in Paris, we learned that all the programmes launched during the presidential visit to India are suffering delays.

¹² International Bureau of the BMFB (2011, October). India. http://www.internationales-buero.de/en/934.php

In Switzerland, the bilateral agreement signed in 2003 between the Swiss Federal Council and the Government of the Republic of India on cooperation in the fields of science and technology endorsed the scientific dialogue that had already existed for many decades between the two countries, and it established the framework for bilateral collaboration in these areas for the following years. Furthermore, the Indo-Swiss Joint Research Programme¹³ initiated by the Swiss State Secretariat for Education and Research (SER) and the Indian Department of Science and Technology (DST) was created in 2005. Its aim is to encourage bilateral cooperation in scientific and technological areas that are of strategic relevance for both India and Switzerland. Within this framework, the Leading House of India was established with the objective of encouraging research partnerships between scientists from both countries and enhancing faculty and student exchanges. Another cooperation initiative is the Indo-Swiss Collaboration in Biotechnology (ISCB), a bilateral research and development programme, jointly funded and steered by the Department of Biotechnology (DBT) at the Ministry of Science and Technology of India and the Swiss Agency for Development and Cooperation (SDC). Established in 1974, the ISCB promotes research partnerships in various areas of biotechnology, and it fosters the transfer of technology to private industry.¹⁴

In addition to a number of agreements between individual universities, the Netherlands and India signed a bilateral agreement between the Association of Universities in the Netherlands (VSNU) and the Association of India Universities (AIU). A further agreement is the MoU on bilateral cooperation in the field of Science, Technology and Innovation, signed by the Ministry of Science and Technology (India) and the Ministry of Economic Affairs (the Netherlands), which includes topics that are of relevance for both countries as its major focal points: Life Sciences and Health, Food and Nutrition, Water and New Renewable Energies. Jan Frerichs Freek, the Attaché for Science and Technology at the Embassy of the Netherlands in Delhi, mentioned that collaboration in this scheme can be both from an innovation standpoint in a public-private partnership setting and from a science perspective, and he stressed the fact that this bilateral structure stimulates new linkages to enhance further cooperation (J.F. Freek, personal communication, September 12, 2011):

'We have seen increasing interest from the government here to have programmes that are focused on training for a PhD or at postdoc level. We do not have a functioning system for that under the MoU, but we will have one in the future, where we will define specific topics and where we promote the exchange of people in a postdoc position and so forth'.

Furthermore, at an institutional level, several Dutch universities are seeking to attract Indian talent and engage with India in scientific collaboration. While the focus in the past has been more on attracting students, we now find that science linkages and scientist exchanges are becoming more important (J. F. Freek, personal communication, September 12, 2011). A step has been taken beyond institutional exchanges with the development of a joint programme involving the private sector.

¹³ http://indo-swiss.epfl.ch

¹⁴ http://iscb.epfl.ch

Under a Phillips India initiative, a joint Master's degree in Computer Science and Engineering has been established by Eindhoven University of Technology and Manipal University, with the support of several multinational companies including Philips, Cap-gemini, LogicaCMG and Cordys. The students spend their first year at the University of Manipal and the second year at Eindhoven University of Technology. Students do their final project at one of the four sponsoring companies, and after graduation they work for the company for at least 3 years, at one of its international offices in India, the Netherlands or elsewhere. This is an interesting example of collaboration between two countries, and it is also a good example of a private-public partnership. The companies are strongly involved, and they also participate in the process of selecting students. In fact, the Netherlands expects public-private cooperation to play an increasingly important role, and it plans new schemes in this regard beyond the existing cooperation structures.

From the information gathered, we can appreciate an increasing interest to make mobility schemes more flexible in order to encourage industrial cooperation. In this regard, the Head of Science and Technology of the Delegation of the European Commission to India stressed that mobility schemes should focus more on industry and they should try to establish industrial cooperation between SMEs in Europe and India. To do this, it is necessary to promote the passage of persons through industry and not just through universities (Ph. de Taxis du Poet, personal communication, September 14, 2011).

Individual educational institutions and funding agencies offer scholarships in all of the observed countries. Some of the scholarships offered include short-term stays at specific universities, while others cover full-time programmes. The Netherlands and Switzerland are particularly attractive for PhD students as they offer salaried positions to almost any student who is admitted to a PhD programme. Mattia Celio, Head of the Science and Technology Section at the Embassy of Switzerland in India, also emphasised that scholarships and funding for PhD students are the most effective way to promote collaboration and create links (M. Celio, personal communication; September 12, 2011). There is a large difference in the degree of internationalisation in the four observed countries. On the one hand, the Netherlands and Switzerland represent open knowledge-driven economies with highly internationalised education systems and labour markets. Switzerland also stands out at a global level as it is one of the countries with the highest level of incoming student mobility, with international students accounting for 14.9 % of all tertiary enrolments (OECD 2011). On the other hand, Germany and France are also gradually changing their institutions in order to become more internationalised, but they are still set in a more rigid nationally specific system. For many countries across the world 'internationalisation' and academic harmonisation have meant 'anglophying' the local academic systems. In an increasing number of institutions, courses are now taught in English in order to overcome the language barrier and attract foreign students. The Netherlands has been particularly active in this regard, and two-thirds of

¹⁵ http://www.tue.nl/en/university/departments/mathematics-and-computer-science/the-department/organization/partnerships/

all Master's programmes are now taught through English (OECD 2011, p. 323). In Europe, internationalisation was formalised in the 1999 Bologna Declaration which set out the agenda for the future harmonisation of higher learning structures (Mahroum 2003, p. 4). France, Germany, the Netherlands and Switzerland have all launched new university programmes, divided into Bachelor and Master's programmes. While the Netherlands was one of the first to introduce the two-cycle curriculum which it saw as an opportunity to become more attractive for foreign students, the introduction of a Bachelors' degree caused a small revolution in Germany, as students traditionally received only one university degree after completing the entire period of higher education. Although France and Germany generally lag behind the Netherlands and Switzerland in terms of internationalisation, they both host a number of prestigious schools which serve as centres of excellence, and they have a strong international focus. These include the nine institutions under Paris Tec in France and the Max Planck institutes in Germany, which are well known internationally and which attract large numbers of foreign students and research staff.

In addition to the bilateral efforts, regional initiatives in international cooperation in science and technology with India at a European Union level have recently been put in place in an attempt to combine the efforts to ensure a more coherent and coordinated promotion of Europe among skilled Indians and to have a higher collaboration impact. Until very recently, there was a lot of fragmentation and duplication of work between the Member States and the EU regarding cooperation with India in S&T (Ph. de Taxis du Poet, personal communication, September 14, 2011). The organisation of the Indian Pilot Initiative, which Switzerland is also participating in, is worth particular mention.

(We) launched in June this year a big information campaign involving science counsellors of the member and associated countries who went to 27 cities around India, not just to the traditional cities but also to hubs and spots that are neglected *de facto*. ... In one single shot they had all the information on European countries. (Ph. de Taxis du Poet, personal communication, September 14, 2011)

A number of scholarships are being offered to Indian students by European governments. The European Union has initiated the Erasmus Mundus External Cooperation Window for India to foster institutional cooperation in the field of higher education between the European Union and India through a mobility scheme that allows students and academic staff to study, teach, train and carry out research. The objective is to enhance international cooperation between higher educational institutions in order to exchange knowledge and skills. In this sense, mobility in both directions is also an important way of enhancing links that might end up in specific collaboration agreements, and the EU is aware of this in its initiatives concerning India.

When you look at cooperation in S&T between Europe and India, one very important thing is to invest in people. Not only in Indian students, researchers and entrepreneurs who are willing to go to Europe, but also the other way around; European students and researchers coming to India, because this will give them some inside knowledge, which is extremely important in terms of building cooperation. ... We try to encourage this mobility in both directions through diverse schemes. (Ph. de Taxis du Poet, personal communication, September 14, 2011)

3.5 Empirical Data

This section presents a general overview of the first observations from the quantitative survey answered by skilled Indians in Germany, France, the Netherlands and Switzerland during the period from June to December 2011. This is supported by excerpts from the open questions included in the survey.¹⁶ We can see that a motivation for higher training and an interest in gaining professional experience are the most important reasons cited by skilled Indians when choosing their destination countries. The internationalisation of higher education and increasing international labour mobility are certainly major driving forces in this respect. We can observe that pull factors in the destination countries are stronger than push factors in India. The fact that these countries host a number of prestigious research and academic institutions that are very internationally oriented, the favourable conditions of multinational companies, together with the countries' strategies to attract skilled personnel, are all significant factors of attraction. We can also see that skilled Indians have major expectations about the effect that their migration project will have on their career progress. In fact, recognising the importance of international exposure on scientific and professional careers plays a relevant role in their decisions to seek opportunities for scientific advancement abroad. Similarly, the search for further training outside the home country is an equally important motivation. Indeed, the most important migration determinant for skilled Indians in emigrating to France, Germany, the Netherlands or Switzerland is to complete higher studies (see Table 3.5). It is important to note that the different reasons in the different countries do not represent the motives for the overall distribution of the Indian population in the country, but to a large extent they do reflect our sampling strategies in different countries at this stage of our research.

With regard to their mobility plans, two-thirds of the skilled Indians in all the observed countries plan to return to India sometime in the future even though some of them do intend to stay in their present country of destination or to move on to a third country. This confirms their belief in the economic and professional opportunities that India has to offer, but this is also related to their family ties there and the push factors in the destination countries. We can see that their mobility plans are mostly based on a combination of both professional and family factors.

The settings of host countries are important in terms of their attractiveness for skilled migrants, but they also matter with regard to how they facilitate the exchange of knowledge with the home countries. In other words, knowledge exchange and the mobilisation of migrants' resources depend on the environment they are exposed to in the host countries and on the policies and structural settings that these countries have to offer. As enablers of social capital accumulation, all

¹⁶ The total number of respondents to our survey and their general socio-demographic characteristics are shown in Annex 3.1.

	Reason			
Country	Studying reasons (%)	Job reasons (%)	Other reasons (such as joining a partner) (%)	Total responses
France	77	16	7	326
Germany	71.3	18.2	10.5	143
The Netherlands	34.8	39.1	26.1	92
Switzerland	71.6	17.2	11.2	222

Table 3.5 Share of the main reasons for migration by country

these factors influence migrants' experiences. For example, if the institutions in the host countries appear as centres of excellence, there will be more learning opportunities for migrants during their stay abroad, as one Indian student in France explains: 'I am a student in the nuclear energy sector. At this moment, nuclear energy is the most viable option for meeting India's future energy needs. Studying in France (which is one of the pioneers in this field) will be really beneficial when I go back to India.'

There are other ways in which the policies and institutions of host countries can facilitate the learning experience. Our respondents were very complimentary about the education systems in the observed European countries, especially in terms of the practical application of the content learned. Students appreciated having an opportunity to be exposed to a working environment, either by being allowed to work parallel to their studies or by doing internships. In this way, employers also get to know their potential employees and this facilitates the transition from studying to the labour market. Students in science and engineering disciplines in particular are more likely to become a source of labour for the destination countries, especially in sectors where there is a shortage of labour. From what we observed, we can say that Indian students are very interested in exploring opportunities to work in the observed host countries for a period after they have completed their studies.

As far as residential status is concerned, a stable residence permit and a permanent job position have been shown to have a significant influence in terms of helping migrants to feel integrated and to eventually settle down in the destination country. There are apparent differences and similarities across host countries. Unlike the Netherlands where the majority of skilled Indians have a knowledge-migrant visa (40 %), the majority of skilled Indians in the other three countries hold student or researcher residence permits. There are clear differences in the types of contracts held by those working in the host countries. Most of those based in the Netherlands are in permanent employment (72.5 %), while only 37.7 % of the respondents in Switzerland hold permanent contracts.

Skilled Indians abroad cultivate strong transnational links with India, and they express an interest in the socio-economic development of their home country. The great majority of respondents in the four destination countries maintain systematic and everyday links with family and friends and with former colleagues back in India. Besides personal affairs and matters related to the political and social situation in India, they often discuss issues concerning professional and scientific

collaboration opportunities, job and training opportunities overseas as well as business prospects in the home country. The majority keep abreast of current social and political developments in India by following the news on a daily basis. Social remittances in the shape of ideas, behaviours and social capital (Levitt 1998) occur either through visits or returns to the home country or by communication from a distance. One respondent explains how experiences abroad shape perceptions of the home country:

Living abroad often gives an opportunity to look at India from different perspectives. One can easily identify the pros and cons of living in India or living in the host country; the problems facing India - political, social, environmental vis-à-vis the host country. We also get a clue as to what makes the host country good in some aspects and also how major changes are required in India's policies, whether they be in the colonial educational system or the bureaucracy or environmental awareness or personal health issues.

As social remittances work both ways, migrants also carry information about their homeland, and in this way they influence perceptions in the host countries. This is particularly important since the receptiveness of the local community in the destination countries is based on the image that has been created about migrants from certain countries of origin. Several respondents mentioned how they feel that they are representing India abroad and how they feel obliged to behave appropriately in order to portray a favourable image of India to their colleagues and to the general population in the host countries. During their stay abroad they learn about potential markets and business practices, they build contacts and they learn about local customs. It is very important for multinational companies with branches in India and Indian companies with branches abroad to hire people who understand the ground situation, working habits and different cultures. Their role as mediators or information providers is recognised by skilled Indians abroad.

After my studies are completed, I can work in a European company and help bridge the gap between the two countries by acting as an interface between the two. Having knowledge of both cultures will help me to integrate and increase business between the two.

A supportive environment, in both the host and the home countries, plays an important role in terms of encouraging transnational activities, regardless of whether these are collectively organised or carried out as individual initiatives. We can say that skilled Indians with a higher frequency of interactions and exchanges have a higher possibility of generating group mobilisation and collective action, thereby facilitating home-country interventions. While the great majority of skilled Indians in all four observed countries maintain regular contact with other Indians in the host countries, we see that very few of them are interested in participating in diaspora or migrant organisations (8.2 %) or in international associations whose members are primarily of Indian origin (11 %). The numbers are particularly low in France and in Germany. The few skilled Indians who do participate in associations mentioned initiatives such as Indian students' associations, alumni associations, professional associations as well as Indian associations in the host country. Among the globally oriented associations, some respondents mentioned their participation in the Global Organization of People of

Indian Origin, as well as some international academic and professional associations, such as the IIT-EU Alumni Association. Irrespective of whether the orientation of these associations is social, professional, academic or cultural, the main effect is the same: they gather nationals living abroad together and forge links among them and they also promote collective action. Non-involvement in diaspora associations is related to a lack of individual interest to engage in communities, a lack of time, the idea that involvement in such organisations prevents one from experiencing the culture of the host country, the expansion of globalisation which facilitates a feeling of closeness to India without having to meet with conationals, increasing short-term stays in the host country as well as the small size of Indian communities in Europe, which was mentioned by one respondent who lives in Germany:

'In the USA it was comparatively easier to get involved in some home country development projects as a student (more organization and initiative, bigger Indian community, more awareness).'

As far as financial contributions are concerned, we can observe that most skilled Indians in the four countries have not made any investments in their home country since their arrival in their present country of residence. In France, only 9.4 % of respondents have invested, while in the other three countries, this share is around 20 %. Among those few direct investments, the most common ones are related to expenditure on housing and stock market investments. More people are sending money to their families. The share of people who sent money home ranges from 66.7 % in the Netherlands to only 32 % in France. The vast majority of skilled Indians in the four countries consider regional and national socio-economic development of India to be very important, and they also believe that their present activity could benefit their home country. We also observed that the aspirations of skilled Indians to contribute to home-country development depend on their length of stay and their main activity in the host country. Those who have stayed in the host country for up to 5 years and those who are studying or who are employed in academic and research institutions have more positive feelings about the possibility of impacting India than people working in industry do. While skilled Indians often do not know how they can contribute personally, we observed that scientists and researchers feel more strongly about contributing, probably because they believe Indian society can absorb direct benefits from their scientific and research activities. We can also see that skilled Indians lack trust in the necessary structures and the enabling environment provided by their home country and this may limit their engagement and contribution. A change in the fundamental structures in India was often mentioned as a precondition for the socio-economic development of India. This feeling can be seen in this statement by one respondent who is currently living in France:

I know some people who donate money (small amounts) to charity to a small organization/ school etc., but they only do so when they are sure that the money they contribute is getting used for the stated purpose. Indians here are very sceptical about donating money to government organizations where they might never know if their contribution was really used. They should create more avenues to enable home country developments in a transparent manner!

With regard to the specific institutional programmes that the Indian government is implementing to tap into the potential of skilled Indians abroad, we can observe that most of the respondents knew very little about the existence of these. About one-third of respondents were familiar with the Overseas Citizenship of India (OCI) and Person of Indian Origin Card (PIO) programmes, but they are usually unaware of other initiatives:

'I think the government should do more. If it's doing a lot of things, it should publicise what opportunities are available. The Indian consulates abroad should do a proper count, and organise events to integrate and network the diaspora.'

This shows that the ways used to promote the visibility of such institutional programmes need to be improved.

3.6 Conclusion

This chapter has taken India as a case in point to analyse issues related to the influence of host country policies and structural settings in linking skilled migration to home-country development. India is a major player in international migration due to its large volumes of emigrants, the great value of its human capital, but it is also important in that it is an example of a country of origin which has been able to benefit from its skilled professionals overseas. Today, more and more qualified Indians are leaving their home country, either in search of professional opportunities abroad or as part of the academic stream, responding to the internationalisation of higher education as well as the interest of industrialised countries to recruit foreign talented people to meet their industry requirements and alleviate skills gaps. Although Indians have mostly emigrated to the USA and the UK since the 1970s, emigration patterns have changed over the past few years, and several continental European countries have now emerged as new destinations. This paper focuses on the position of France, Germany, the Netherlands and Switzerland as new destination countries that have all experienced a recent rise in Indian immigration and which are becoming increasingly aware of the value of skilled personnel as added talent that will help them to increase their competitiveness. Consequently, they are introducing innovative immigration policies focused on skilled foreign people. These include admitting these people on a permanent basis or allowing them to stay for longer periods, encouraging beneficial returns or circular migration, allowing dual citizenship and giving preferential treatment to skilled people who have had a previous in-country experience. Furthermore, these countries have signed a number of bilateral cooperation agreements with India. Our discussion indicates that host countries' settings matter in terms of their attractiveness for skilled migrants but also in how they facilitate the exchange of knowledge with the home country. In fact, knowledge exchange and the mobilisation of migrants' resources depend on the environment that they are exposed to in the host countries, as well as on the policies and structural settings that these countries have to offer. As enablers of social capital accumulation, all these factors influence migrants'

experiences and the encouragement of transnational activities, regardless of whether these are collectively organised or carried out as individual initiatives. We can see how both research and policies have started to focus on encouraging the development potential of such skilled mobility, and this chapter contributes to this discussion. Diverse studies provide evidence of a range of mechanisms used to transfer diaspora resources, stimulating positive benefits in the form of knowledge transfer through diaspora networks, business and entrepreneurial investments and links, social and financial remittances and the like. The participation of skilled migrants in associations or networks linked by their common international exposure and their shared cultural ties is considered to be essential for the collective harnessing of their social capital, which may develop into contributions to the home country. Empirical studies also show how bottom-up diaspora engagement needs to be complemented by top-down institutional interventions in order to enhance their possible impact. Despite the existence of Indian associations, and initiatives by the Indian government to capitalise on the resources of skilled Indians abroad, little knowledge is available about these, and migrants show little interest in getting involved in diaspora groups.

Our study shows that skilled Indians place strong expectations in their migration project and its effect on their career and academic progress. Their mobility plans, specifically those regarding the decision to stay in the host country, return to India or move to a third destination, follow a combination of both professional and familiar factors. Furthermore, while many Indian students plan to return to their home country, they wish to benefit from international working experience before going back. Indian students in science and engineering disciplines in particular are more likely to become a source of labour for these countries, especially in sectors where there are shortages of labour. The influence that institutional settings have on the drafting of labour market regulations and migration policies in the host countries is increasingly reinforced by strategies that are looking for a way to attract and retain skilled migrants. Our research indicates that skilled Indians in the four observed countries cultivate strong transnational links with India. The desire to contribute to the development of India is quite pronounced among people in academia, especially those who have been abroad for a short time. They see themselves as contributing through three main channels: transferring specialised knowledge, through social remittances and as mediators and information providers. However, they show a lack of trust in the necessary enabling environment provided by the home country.

This is a work in progress. The preliminary observations of the research project presented here invite us to reconsider the position of host countries with regard to skilled migration and the ways they can help to merge it with development goals by creating enabling structures and institutional policies for diaspora engagement. Furthermore, it has been shown that a supportive environment in the home country is necessary to trigger the development impact of migration.

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Annex

Annex 3.1 Socio-demographic characteristics of respondents including percentage distribution by gender, main activity, main sector of employment/main field of studies; age and length of stay

					Main Sc	ctor or emp	Main sector of employment		Main fields of studying (students only)	ls of stud	ying (stude	ents only)			
	Number Number	Number									Life	Social			
	of persons of	Jo	Number			Financial					sciences sciences	sciences			
	in paid	students	of self-	in paid students of self- Unemployed,		and	Biotechnology	_	IT and		and	and			
	employ- (including employed retired or	(including	employed	retired or		manage-	manage- and pharma-		computer	Basic	biotech-	humani-	computer Basic biotech- humani- Management		
Women	dents Men Women ment (%) Ph.D.) persons other	Ph.D.)	persons	other	ICT	ment	ceuticals	other	sciences	sciences	sciences sciences nology ties	ties	and business	and business Engineering Other	Other
341 206 68	83	182	10	29	36	13	3	43	15	10	10 9	5	62	53	16
%) (24.8 %)	$(75.2\ \%)\ (24.8\ \%)\ (27.3\ \%) (59.9\ \%) (3.3\ \%) (9.6\ \%)$	(26.6 %)	(3.3 %)	(% 9.6)	(39.1 %	(39.1 %) (14.1 %) (3.3 %)	(3.3 %)	(46.7 %	$(46.7\ \%)\ (8.8\ \%) (5.9\ \%)\ (5.3\ \%)\ (2.9\ \%)\ (36.5\ \%)$	(5.9%)	(5.3 %)	(2.9 %)	(36.5 %)	(31.2%)	(9.4 %)
25	46	82	1	9	15	2	5	24	7	12	25	4	1	21	3
%) (20.7 %)	(34.1%)	(% 2.09)	(0.7%)	(4.5 %)	(33.3 %	(4.4%)	(11.1%)	(53.3 %	(% 9.6)	(16.4%)	(34.2 %)	(5.5 %)	(1.4%)	(28.85)	(4.1%)
55 20	40	28	2	13	19	4	4	15	3	5	5	1	2	7	3
%) (26.7 %)	(48.2 %)	(33.7 %)	(2.4 %)	(15.6 %)	(46.3 %	(9.8%)	(9.8 %)	(36.6 %) (11.5 %)	(19.2%)	(19.2%)	(3.8 %)	(7.7 %)	(26.9%)	(11.5%)
150 32	50	143	7	11	12	3	17	23	22	19	36	1	5	40	4
(%) (17.6%)	(23.7 %)	(67.8 %)	(3.3 %)	(5.2 %)	(22.6 %	(5.7 %)	(32.1%)	(43.4 %) (17.3 %)	(15%)	(28.3 %)	(0.8%)	(3.9%)	(31.5 %)	(3.1%)
145		435	20	59	82	22	29	105	47	48	75	Ξ	70	121	26
	25 6) (20.7 %) 20 6) (26.7 %) 32 32 32 145	96 25 46 (79.3 %) (20.7 %) (34.1 %) 55 20 40 (73.3 %) (26.7 %) (48.2 %) 150 32 50 (82.4 %) (17.6 %) (23.7 %) 507 145 219	25 46 82 20 40 28 5) (26.7%) (48.2%) (33.7%) 32 50 143 6) (17.6%) (23.7%) (67.8%) 145 219 435	5) 46 82 1 20 40 28 2 5) (26.7%) (48.2%) (33.7%) (2.4%) 32 50 143 7 5) (17.6%) (23.7%) (67.8%) (3.3%) 145 219 435 20	82 1 28 2 3 (33.7%) (2.4%) 143 7 9 (67.8%) (3.3%) 435 20	82 1 6 28 2 13 (33.7%) (2.4%) (15.6%) 143 7 11 (67.8%) (3.3%) (5.2%) 435 20 59	82 1 6 28 2 13 (33.7%) (2.4%) (15.6%) 143 7 11 (67.8%) (3.3%) (5.2%) 435 20 59	82 1 6 6 15 2 1 (60.7 %) (0.7 %) (4.5 %) (33.3 %) (4.4 %) 28 2 13 19 4 29 (33.7 %) (2.4 %) (15.6 %) (46.3 %) (9.8 %) 143 7 11 12 3 3 (67.8 %) (3.3 %) (5.2 %) (22.6 %) (5.7 %) 435 20 59 82 22	82 1 6 15 2 5 1 (60.7 %) (0.7 %) (4.5 %) (33.3 %) (4.4 %) (11.1 %) 28 28 2 13 19 4 4 9) (33.7 %) (2.4 %) (15.6 %) (46.3 %) (9.8 %) (9.8 %) 3 143 7 11 12 3 17 9) (67.8 %) (3.3 %) (5.2 %) (22.6 %) (5.7 %) (32.1 %) 435 20 59 82 22 29	82 1 6 15 2 5 1 (60.7%) (0.7%) (4.5%) (33.3%) (4.4%) (11.1%) 28 2 13 19 4 4 9) (33.7%) (2.4%) (15.6%) (46.3%) (9.8%) (9.8%) 143 7 11 12 3 17 10 (67.8%) (3.3%) (5.2%) (22.6%) (5.7%) (32.1%) 435 20 59 82 22 29	82 1 6 15 2 5 1 (60.7%) (0.7%) (4.5%) (33.3%) (4.4%) (11.1%) 28 2 13 19 4 4 9) (33.7%) (2.4%) (15.6%) (46.3%) (9.8%) (9.8%) 143 7 11 12 3 17 10 (67.8%) (3.3%) (5.2%) (22.6%) (5.7%) (32.1%) 435 20 59 82 22 29	82 1 6 15 2 5 1 (60.7%) (0.7%) (4.5%) (33.3%) (4.4%) (11.1%) 28 2 13 19 4 4 9) (33.7%) (2.4%) (15.6%) (46.3%) (9.8%) (9.8%) 143 7 11 12 3 17 10 (67.8%) (3.3%) (5.2%) (22.6%) (5.7%) (32.1%) 435 20 59 82 22 29	82 1 6 15 2 5 1 (60.7%) (0.7%) (4.5%) (33.3%) (4.4%) (11.1%) 28 2 13 19 4 4 9) (33.7%) (2.4%) (15.6%) (46.3%) (9.8%) (9.8%) 143 7 11 12 3 17 10 (67.8%) (3.3%) (5.2%) (22.6%) (5.7%) (32.1%) 435 20 59 82 22 29	82 1 6 15 2 5 24 7 12 10 (60.7%) (0.7%) (0.7%) (4.45%) (11.1%) (60.7%) (4.45%) (11.1%) (53.3%) (9.6%) (16.4%) 23 3 5 28 2 13 19 4 4 15 3 5 33.7%) (3.2%) (2.4%) (15.6%) (46.3%) (9.8%) (9.8%) (9.8%) (36.6%) (11.5%) (19.2%) 143 7 11 12 3 17 23 22 19 435 20 59 82 22 29 105 47 48	82 1 6 6 15 2 5 24 7 12 25 4 1 (60.7%) (0.7%) (4.5%) (33.3%) (4.4%) (11.1%) (53.3%) (9.6%) (16.4%) (34.2%) (5.5%) (1.4%) 28 2 13 19 4 4 4 15 3 5 5 1 2 (33.7%) (2.4%) (15.6%) (46.3%) (9.8%) (9.8%) (36.6%) (11.5%) (19.2%) (19.2%) (38.%) (7.7%) 143 7 11 12 3 17 23 22 19 36 1 5 (67.8%) (3.3%) (5.2%) (22.6%) (5.7%) (32.1%) (43.4%) (17.3%) (15.%) (28.3%) (0.8%) (3.9%) 435 20 59 82 22 29 105 47 48 75 11 70

Information up to date as per 5 December 2011

Note: in each of the four categories the total numbers of observations are different due to missing values in the survey

References

Acosta, P., Fajnzylber, P., & Humberto, L. J. (2007). The impact of remittances on poverty and human capital: Evidence from Latin American household surveys. In M. Schiff (Ed.), *International migration, economic development and policy*. Washington, DC: World Bank.

- Adams, R. (2011). Evaluating the economic impact of international remittances on developing countries using household surveys: A literature review. *Journal of Development Studies*, 47(6), 809–828.
- Agunias, D. R. (2006). Remittances and development: Trends, impacts and policy options a review of the literature. Washington, DC: Migration Policy Institute.
- Agunias, D. R., & Newland, K. (2007). Circular migration and development: Trends, policy, routes and ways forward. In *Policy brief*. Washington, DC: Migration Policy Institute.
- Barré, R., Hernández, V., Meyer, J.-B., & Vinck, D. (2003). Diasporas scientifiques. ¿Comment les pays en développement peuvent-ils tirer parti de leurs chercheurs et de leurs ingénieurs expatriés? Paris: Institute de Recherche pour le Développement.
- Bauböck, R., & Faist, T. (2010). *Diaspora and transnationalism. Concepts, theories and methods*. Amsterdam: Amsterdam University Press.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York: Greenwood Press.
- Bruggeman, J. (2008). Social networks, an introduction. New York: Routledge.
- Calhoun, C. (1997). Nationalism. Minnesota: University of Minnesota Press.
- Cassarino, J. P. (2004). Theorising return migration: A revisited conceptual approach to return migrants (EUI working papers RSCAS, 2004/02).
- Castles, S., & Miller, M. J. (2003). The age of migration. London: MacMillan Press.
- Cerna, L. (2009). The varieties of high-skilled immigration policies: coalitions and policy outputs in advanced industrial countries. *Journal of European Public Policy*, 16(1), 144–161.
- Chaloff, J., & Lemaitre, G. (2009). Managing highly-skilled labour migration: A comparative analysis of migration policies and challenges in OECD countries. OECD social, employment and migration working papers, no. 79.
- Commission of the European Communities. (2002). Proposal for a council directive on the conditions of entry and residence of third-country nationals for the purposes of studies, vocational training or voluntary service, COM (2002) 548 final 2002/0242 (CNS), Brussels, 7 Oct 2002.
- de Haas, H. (2005). International migration, remittances and development: Myths and facts. *Third World Quarterly*, 26(8), 1269–1284.
- de Haas, H. (2006). Engaging diasporas. How governments and development agencies can support diaspora involvement in the development of origin countries. Oxford: International Migration Institute; University of Oxford.
- de Haas, H. (2008). *Migration and development. A theoretical perspective*. International Migration Institute, Oxford: University of Oxford.
- de Haas, H. (2011). The migration and development pendulum: A critical view on research and policy. The migration-development nexus revisited: State of the art and ways ahead. University of Trento
- de Haas, H., & Fokkema, T. (2011). The effects of integration and transnational ties on international return migration intentions. *Demographic Research*, 25(24), 755–782.
- de Hart, B., & van Oers, R. (2006). European trend in nationality law. In R. Bauböck, E. Ersboll, K. Groenendijk, & H. Waldrauch (Eds.), Acquisition and loss of nationality. Policies and trends in 15 European countries. Volume 1:Comparative analyses (pp. 317–350). Amsterdam: Amsterdam University Press.
- European Commission. (2006). European Union Labour Force Survey. Eurosat Indicators. http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/lfs coalitions and policy outputs in advanced industrial countries. *Journal of European Public Policy*, 16(1), 144–161.
- Faist, T. (2000). The volume and dynamics of international migration and transnational social spaces. Oxford: Oxford University Press.

- Faist, T., Fauser, M., & Kivisto, P. (2011). *The migration-development nexus. A transnational perspective* (Migration, diasporas and citizenship). Basingstoke: Palgrave McMillian.
- GFMD, Global Forum on Migration and Development. (2007). Background paper for Roundtable 1 *Human capital development and labor mobility: Maximizing opportunities and minimizing risks*. http://www.migrationpolicy.org/research/MPI-GlobalForum_circularmigration.pdf
- Ghosh, B. (2006). *Migrants' remittances and development: Myths, rhetoric and realities*. Geneva: IOM/The Hague Process on Refugees and Migration.
- Goldring, L. (2003). Re-thinking remittances: Social and political dimensions of individual and collective remittances (CERLAC working paper series). York University. http://www.yorku.ca/ cerlac/documents/Goldring.pdf. Accessed 9 Aug 2011.
- Hailbronner, K. (2006). Nationality in public international law and European law. In R. Bauböck, E. Ersboll, K. Groenendijk, & H. Waldrauch (Eds.), Acquisition and loss of nationality. Policies and trends in 15 European countries. Volume 1: Comparative analyses (pp. 35–85). Amsterdam: Amsterdam University Press.
- Hercog, M., & Wiesbrock, A. (2010). The legal framework for highly-skilled migration to the EU: EU and US labour migration policies compared (MGSOG working paper no.01).
- Heß, B., & Sauer, L. (2007). Conditions of entry and residence of third country highly qualified and highly skilled workers: The situation in Germany. Study in the framework of the European Migration Network (EMN) by the German National Contact Point, Budesamt für Migration und Flüchtlinge and EMN. http://www.bamf.de/SharedDocs/Anlagen/EN/Publikationen/ DasBAMF/EMN/emn-small-scale-3-highly-skilled-germany-en.html. Accessed 4 May 2011.
- Howard, M. M. (2005). Variation in dual citizenship policies in the countries of the EU. The International Migration Review, 39(3), 697–720.
- Itzigsohn, J., & Giorguli Saucedo, S. (2002). Immigrant incorporation and sociocultural transnationalism. *International Migration Review*, *36*(3), 766–798.
- Kapur, D. (2001). Diasporas and technology transfer. *Journal of Human Development*, 2(2), 265–286.
- Kapur, D. (2010). Diaspora development and democracy; The domestic impact of international migration from India. New Jersey: Princeton University Press.
- Kapur, D., & McHale, J. (2005). Give us your best and brightest: The global hunt for talents and its impacts on the developing world. Washington, DC: Center for Global Development.
- Katseli, L., Lucas, R., & Xenogiani, T. (2006). Effects on migration on sending countries. What do we know? OECD working papers.
- Ketkar, S., & Ratha, D. (2009). *Innovative financing for development*. Washington, DC: The World Bank
- Khadria, B. (2008). *International migration policy: Issues and perspectives for India* (IMDS project working paper series, WP no. 1, pp. 2–20). New Delhi: IMDS Project.
- Kumar, P., Sarkar, S., & Sharma, R. (2009). *Migration and diaspora formation: Mobility of Indian students to the developed world* (IMDS project working papers series, WP no. 8, pp. 29–45). New Delhi: IMDS Project.
- Kuptsch, C. (2006). Students and talent flow the case of Europe: From castle to harbour? In C. Kuptsch & E. F. Pang (Eds.), Competing for global talent (pp. 33–61). Geneva: ILO.
- Kuznetsov, Y. (2006). Diaspora networks and the international migration of skills: How countries can draw on their talent abroad. Washington, DC: World Bank Institute Development Studies.
- Levitt, P. (1998). Social remittances: Migration-driven local-level forms of cultural diffusion. International Migration Review, 32(4), 926–948.
- Levitt, P., & Lamba-Nieves, D. (2011). Social remittances revisited. *Journal of Ethnic and Migration Studies*, 37(1), 1–22.
- Lowell, B. L., & Gerova, S. G. (2004). Diasporas and economic development: State of knowledge. Institute for the Study of International Migration, Georgetown University.
- Lucas, R. (2001). Diaspora and development: Highly skilled migrants from East Asia. Report prepared for the World Bank. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.147.6 620&rep=rep1&type=pdf. Accessed 9 Aug 2011.
- Mahroum, S. (2003). Brain gain, brain drain. An international overview. Background paper for the Austrian Ministry for Transport, Innovation and Technology (bmvit). Alpbach Technology Dialogue.

Meyer, J.-B. (2011). A sociology of diaspora knowledge networks. In T. Faist, M. Fauser, & P. Kivisto (Eds.), *The migration-development nexus. A transnational perspective* (pp. 159–181). Basingstoke: Palgrave McMillian.

- Newland, K., Agunias, D. R., & Terrazas, A. (2008). Learning by doing: Experiences of circular migration. Washington, DC: Migration Policy Institute.
- OECD. (2008). A profile of immigrant populations in the 21st century: Data from OECD countries. Paris: OECD.
- OECD. (2010a). Table C2.7. Number of foreign students in tertiary education, by country of origin and destination (2008), and market shares in international education (2000, 2008) Education at a Glance 2010: OECD Indicators. Paris: OECD.
- OECD. (2010b). International migration outlook: Annual report 2010. Paris: OECD.
- OECD. (2011). Education at a glance, OECD Indicators. http://dx.doi.org/10.1787/eag-2011-en
- Portes, A. (2001). Introduction: The debates and significance of immigrant transnationalism. *Global Networks*, 1(3), 181–194.
- Portes, A. (2003). Conclusion: Theoretical convergencies and empirical evidence in the study of immigrant transnationalism. *International Migration Review*, 37(3), 874–892.
- Saxenian, A. (2005). From brain drain to brain circulation: Transnational communities and regional upgrading in India and China. *Studies in Comparative International Development*, 40(2), 35–61.
- Saxenian, A. (2006). *The new argonauts. Regional advantage in a global economy*. Cambridge: Harvard University Press.
- Schneider, J. (2009). *The organisation of asylum and migration policies in Germany*. Nürnberg: Bundesamt für Migration und Flüchtlinge.
- Singh, M. (2010, January 8). Speech by the Prime Minister at Pravasi Bharatiya Divas 2010. New Delhi, India. http://www.thaindian.com/newsportal/business/prime-minister-manmohan-singhs-address-at-diaspora-conclave 100300673.html
- Snel, E., Engbersen, G., & Leerkes, A. (2006). Transnational involvement and social integration. Global Networks, 6(3), 285–308.
- Spiro, P. J. (1997). Dual nationality and the meaning of citizenship. *Emory Law Journal*, 46(4), 1411–1485.
- Tejada, G. (2012). Mobility, knowledge and cooperation: scientific diasporas as agents of development. *Migration and Development*, 10(18), 59–92.
- Tejada, G., & Bolay, J.-C. (2010). Scientific diasporas from developing countries in Switzerland: Empirical evidence and policy responses. Skilled migrants from Colombia, India and South Africa in Switzerland as partners in development. Bern: Peter Lang.
- Tejada, G., & Wickramasekara, P. (2010). An action-oriented tool-kit to assess good practices of skilled migrants and scientific diasporas. Lausanne: Cooperation@epfl and International Labour Office.
- Vertovec, S. (2004). Migrant transnationalism and modes of transformation. *The International Migration Review*, 38(3), 970–1001.
- Waldrauch, H. (2006). Rights of expatriates, multiple citizens and restricted citizenship for certain nationals. In R. Bauböck, E. Ersboll, K. Groenendijk, & H. Waldrauch (Eds.), *Acquisition and loss of nationality. Policies and trends in 15 European countries. Volume 1: Comparative analyses* (pp. 359–379). Amsterdam: Amsterdam University Press.
- Wescott, C., & Brinkerhoff, J. (2006). Converting migration drains into gains harnessing the resources of overseas professionals. Manila: Asian Development Bank.
- Wickramasekara, P. (2010). Transnational communities: Reflections on definitions, measurements and contributions. In G. Tejada & J.-C. Bolay (Eds.), *Scientific diasporas as development partners. Skilled migrants from Colombia, India and South Africa in Switzerland: Empirical evidence and policy responses* (pp. 137–178). Bern: Peter Lang.
- Wickramasekara, P. (2011). Circular migration: A triple win or a dead end. Geneva: ILO.