The Diaspora and Development

V.N. Balasubramanyam (Baloo)

Yingqi Wei (Annie)

Department of Economics
Lancaster University
Lancaster, LA1 4YX

The Diaspora and Development

1. Introduction

International labour flows are as much a part of the globalisation phenomenon as international capital flows and trade. There is now a substantial literature on international labour flows. The three broad strands in this literature relate to – costs and benefits of immigration of labour for the host countries, costs and benefits of emigration to the home countries and the more recent strand, the economic impact of the diaspora on their home countries or countries of origin. In the main all three strands are concerned with the economic consequences of international flows of skilled labour for the host and home countries. The nationalist model of the phenomenon of skilled labour flows from the developing countries to the developed countries suggests that the costs of such emigration may outweigh the benefits. The policy proposal for a tax on the skilled emigrants first proposed by Bhagwati (1976) and now known as the Bhagwati tax is based on an extensive analysis of the costs and benefits of brain drain. The cosmopolitan model (Grubel and Scott, 1976), in contrast, argues that international flows of skilled labour is a positive sum game – there are benefits for both the host and home countries of the emigrants.

The growth in numbers of the diaspora, especially the Chinese, the Indian and the Philippine diaspora in the US, Canada, the UK and Australia (Table 1) and their growing involvement in the economies of the countries of their origin has implications for the analysis and conclusions of the nationalist and cosmopolitan models of the brain drain or the brain circulation phenomenon. This brief paper is concerned with the economic welfare implications of the involvement of the diaspora in the economic activity of the countries of their origin. The paper argues that the contribution of the diaspora to the social product of their countries of origin could be much higher than that of traditional types of capital. Put differently the social rate of return to a unit of investment by the diaspora may be higher than that in the case of non-diaspora foreign direct investment (FDI).

2. Size and Patterns of Diaspora Investments

Whilst the beginnings of international flows of human capital are to be traced to the decades of the sixties and the seventies, recent data suggests that emigration of skilled people from the developing countries continues unabated. For small African and Latin American countries the outflows of such human capital are substantial. According to a recent World Bank study, Docquier and Marfouk (2004), the emigration rates of skilled workers of Suriname, Guyana, Jamaica and Haiti were more than 80% in 2000. For Cape Verde, Gambia, Seychelles and Somalia, the rates were 69%, 65%, 59% and 57% respectively. Among the Asian countries, 39% of educated Vietnamese lived abroad and the figure for Hong Kong was around 29% in 2000. But in absolute terms, Philippines, India and China have the largest stocks of skilled emigrants abroad, with the figures being 1,260,879, 1,012,613 and 906,337, respectively.

Most members of the diaspora are educated in the higher education institutions of their countries of origin, many of them graduates of elite institutions such as the Indian Institutes of Technology (IIT). India, for instance, produces around 25,000 engineering graduates every year, but only 2,000 of them graduate from the prestigious Indian Institutes of Technology. Every year about 100,000 of India's top students take a competitive examination for the 2,000 places at the IITs, in contrast to about 10,000 applicants for the 1,000 places at MIT (Bhagwati, 1998). Many of the IT companies owned by Indians in the Silicon Valley are headed by graduates from the elite IITs in India.

The diaspora possess a unique combination of ownership advantages. Taking Indians in the Silicon Valley as an example, the ownership advantages they possess extends from engineering expertise to the networks they have established in the US with customers for software, and an ability to forecast new developments. 73% of the 1.7 million Indians in the US are employed, of which 43% are in managerial positions and another 33% are in the technical, sales and service sectors. Around 300,000 Indians work in the information technology (IT) sector in Silicon Valley, there are 700 Indian owned companies in the Silicon Valley. These figures suggest that there is a substantial volume of human capital embedded in the diaspora of Indian origin. As the jargon relating to FDI would have it they possess transferable tacit knowledge.

Indian diaspora are also amongst the high income groups in the US. Based on median income, Indian born residents in the US comprise one of the highest paid groups in the country (Desai et al., 2001) (Table 2). Average income per capita of Indian entrepreneurs in the Silicon Valley is estimated to be around $60,000 which compares with an annual average of $38,000 for the country as a whole. The Fortune magazine places the wealth generated by Indian IT experts in the Silicon Valley at $250 billion (Market Value) which is more than half of India's GNP.

Available information though suggests that investments by its diaspora in the Indian economy is very low. Total amount of investments by Indian expatriates (NRIs) over the period 1991-2001 is put at $2.6 billion out of the total $10 billion FDI in India which is meagre compared with around 70% of $196 billion FDI received by China during the late eighties and the nineties (Table 3). There are several reasons for the relatively low volume of diaspora investments in India which are discussed elsewhere (Balasubramanyam, 2004) and are not central to the argument in the paper. It should though be noted that reported Indian diaspora's FDI may understate the extent of their participation in the Indian economy which extends to technology and know-how made available by Indian expatriates to India's IT industry. The analysis of the impact of diaspora involvement in the economies of the countries of their origin in the paper is against the backdrop of the potential for investment possessed by the diaspora and their visible presence in India's IT sector. The relatively large investments by the Chinese diaspora in China also justifies an analysis of the impact of diaspora investments on the economies of the countries of origin of the diaspora.

3. Impact

The central proposition we argue here is that the social rate of return to diaspora investments for the host countries are likely to be high relative to non-diaspora FDI. The contribution of the diaspora to development differs from that of non-diaspora FDI in some significant respects. The diaspora occupy an intermediate position between inflows of FDI (flows of capital to labour) and immigration (flows of labour to capital). It is the contribution of capital made by the diaspora that is emphasised in the literature. No doubt the diaspora do invest, they have the means to do so. For example, as said earlier, based on median income, Indian born residents in the US

comprise one of the highest paid groups in the country and the wealth generated by Indian IT experts in the Silicon Valley is more than half of India's GNP. Since 1979, overseas Chinese investment (mainly from Hong Kong, Macao, and Taiwan) has been the dominant source of FDI inflows in China and in 1992 their share was over 80% of the total $11 billion. In recent years, however, it has decreased, but still 45% of total $41 billion FDI was from Chinese diaspora in 2000 (Wei, 2004). Apart from bringing capital to labour they also, perhaps more importantly, bring labour skills to capital. The skills they transfer to their countries of origin are mostly tacit knowledge, rather than knowledge embodied in capital equipment. Still in the case of China, it is found that the extent of technology transfer from FDI is fairly limited and there is only evidence on low and intermediate technology transfers, mainly from investors from Chinese diapsora (Wei, 2004).

There are also other significant differences between diaspora involvement in the development of their countries of origin and non-diaspora FDI. First, the motives and pattern of diaspora investments are significantly different from that of traditional FDI. Diaspora investments may be guided not only by profit motives but also by long run considerations of establishing a base in the countries of their origin. Second, for a variety of reasons, externalities, a recognised contribution of FDI to host countries, is a much more readily recognisable feature of diaspora investments. They are likely to be better informed on the capabilities and requirements of domestic labour and the sort of training local labour requires. Third, quite often the factors which influenced the diaspora to migrate from their homelands may influence the extent of their involvement and contribution to the development of their countries of origin. In this context it is interesting to note an explanation given for the low involvement of the Scottish diaspora in the Scottish economy compared with the active involvement of the Irish daispora in the economy of Ireland. It is said that the Scottish diaspora are not all that keen on contributing to Scottish development as they are mostly professionals who left Scotland voluntarily and look upon Scotland as a miserable left wing place. This is in contrast to the Irish diaspora who were poor and unskilled and were pushed out into exile by the English and take pride in their new found ability to liberate Ireland economically (Economist, October 20, 2001). Indian professionals may have left the country in pursuit of riches abroad. But they resemble the Irish diaspora to the extent that they wish to contribute to the development of a country

which was until recently a miserable left wing place. Fifth, diaspora involvement in the economies of their countries of origin may contribute to growth of human capital and increased flows of FDI to these countries. Sixth, whilst diaspora investments may encourage temporary migration of skilled labour from the countries of their origin, they may serve to limit permanent migration.

These propositions are admittedly based on intuition and require empirical verification, although studies based on information gathered through interviews with the Indian Diaspora in the Silicon Valley and Indian software firms do provide some support for these propositions (Balasubramanyam and Balasubramanyam, 2000). Here we attempt to anchor these propositions in models of technology transfer developed by Findlay (1978) and the brain drain model developed by Bhagwati and Hamada (1974).

The Findlay Model

Findlay's model provides a synthesis of the Gerschenkron-Veblen proposition concerning economic backwardness and the proposition concerning the contamination effect of FDI. The well-known Gerschenkron-Veblen proposition is that "the rate of technological progress in a relatively backward region is an increasing function of the gap between its own level of technology and that of the advanced region which improves at a constant rate". The idea here is that greater the backlog of opportunities in the backward country greater would be the pressure to adopt them and catch up with the advanced region. The contamination proposition suggested by Arrow (1976) is that technical innovations are most effectively copied when there is personal contact between the innovators and the imitators. Such personal contacts spread and diffuse technology effectively much like a contagious disease. In Findlay's model the contaminating agents are the foreign firms which transfer technology to locally owned firms. Findlay's synthesis of the two propositions rests on a model which posits the rate of technical change in the backward country to be a function of the initial distance between the technological levels between the backward and the advanced country and the proportion of foreign investment to domestic investment in the backward country. Rate of technical progress in the domestic sector varies inversely with the technological distance between the backward and advanced country

(backwardness proposition) and directly with the proportion of foreign to domestic investment (contagion proposition).

Diagrammatically the level of technology in the backward country (B) as a proportion of the level of technology in the advanced foreign sector (A) (i.e. x = B/A) is plotted on the vertical axis and the ratio of the stock of foreign capital (K_f) to the stock of domestic capital (K_d) (i.e. $y = K_f/K_d$) is plotted on the horizontal axis (Figure 1a). Given the assumption that high levels of backwardness result in high rates of technical change in the backward sector relative to that in the foreign sector (backwardness effect) and high levels of foreign to domestic capital stock (contamination effect) also generate increased rates of technical progress, the $\dot{x}$ curve (TT) slopes upward. All along the TT curve the percentage rate of technical change in the domestic sector equals the given rate of technical change in the foreign sector. High levels of backwardness go along with low levels of foreign to domestic capital stock to generate this equality in the percentage rates of technical change. An upward movement along the curve suggests a declining impact of the backwardness effect but an increasing impact of the contagion effect. All along the downward sloping $\dot{y}$ curve (KK), the rate of change of foreign capital stock equals the rate of change of domestic capital stock. As B/A increases on the vertical axis (backwardness declines) both the rate of profits and the wage bill increases in the domestic sector leaving the savings available for investment unchanged. And as the foreign sector pays a wage rate higher than that in the domestic sector the foreign sector's wage bill increases at low levels of backwardness and reduces its after tax profits available for investment. So a combination of low levels of backwardness and low levels of foreign to domestic capital stock results in the equality of rate of change of capital stock in the domestic sector with the rate of change of capital stock in the foreign sector all along the downward sloping KK curve. The intersection of the TT and KK curves (point E in the graph) determines the long run steady state rate ratios of technical efficiency x* and ratio of foreign to domestic capital y*.

Now a shift in the upward sloping TT curve to the left, signifying increased technical progress in the backward country, say due to skill formation, will result in an increase in the domestic level of technology to that of the foreign sector, and a decline in the

ratio of foreign to domestic capital. If the rate of technical progress in the foreign sector increases it would shift the TT locus to the right resulting in a decrease in the relative level of technology in the country and an increase in the ratio of foreign to domestic capital. Any decline in the ratio of foreign to domestic capital in the model (shift of the KK curve to the left) would decrease the rate of technical progress in the country because of a weakening of the contagion effect.

The foregoing provides an intuitive summary of Findlay's model. How best to augment the contagion effect and/or increase skill levels in the country? It is in this context that the diaspora involvement in the country's economy is likely to be significant. Such diaspora involvement can take various forms.

First, the diaspora may provide technology and know-how to the domestic sector, as in the case of licensing agreements, without commitment of capital. Indian software firms, for instance, benefit from outsourcing arrangements with diaspora software firms in the US. The diaspora firms provide the specifications for the software to be manufactured and also a market for the product. Also visits to Indian firms by the diaspora – the to and fro variety of labour movements identified by Bhagwati (1977), may also provide technical know-how. This would serve to shift the TT curve in the diagram to the left (T_bT_b) resulting in increased levels of technology and reduced dependence on foreign firms (Figure 1b). This could also be regarded as a contagion effect – the technology virus as it were is carried from the US by the diaspora, who themselves would have caught the virus through their work and learning by doing in American firms, and it is dispersed among the firms in the countries of their origin. Admittedly such transfer of technology is not a free good; the diaspora have to be paid royalties or fees and in the case of outsourcing the local firms are paid a fixed sum. Such skill formation would of course increase wages in the locally owned firms but the productivity of such labour would also be commensurately high because of the contagion effect. The contagion effect of such technology transfer is likely to be much stronger than in the case of FDI by foreign firms or for that matter stronger than in the case of licensing agreements between locally owned and non-diaspora foreign firms. This is because, as argued earlier, the contagion effect is likely to be stronger when there is personal contact between the innovators or carriers of the technology virus and the receivers. Such personal contacts are likely to be the norm in the case of

diaspora investments because of a shared culture and language with domestic labour. Put differently the diaspora firms are likely to enjoy location advantages superior to that the foreign firms have recourse to.

A second avenue of diaspora involvement is direct investment in the locally owned firms, either through joint ventures or acquisitions or through the setting up of greenfield ventures. In the case of joint ventures the ratio of domestic investment plus the diaspora investments to non-diaspora foreign investments is likely to increase. This would shift the KK curve to the left (Figure 1c). Findlay suggests that this would be the result if domestic investments increase as result of growth in domestic savings, but it would lower both the extent of foreign investment in the country and the rate of technological change. This is because the contagion effect would weaken. Findlay, however, allows for the possibility that increased savings may enable the country to adopt advanced technology more intensively resulting in a shift of the TT curve to the left thus arresting the decline in technical progress. In the case of diaspora investments in locally owned firms technology is imparted by the diaspora and for reasons stated earlier the contagion effect of such investments is likely to be relatively intensive. This would shift the TT curve to the left (Figure 1c). It is thus we argue that diaspora investments are likely to be much more contagious and beneficial to the local firms than increased foreign investment.

But should we treat diaspora acquisitions or greenfield investments as domestic investment? It could be agued that these are in the nature of foreign investments. This would not alter the proposition argued here. Diaspora investments treated as foreign investments would increase the ratio of foreign to domestic investments and shift the KK curve to the right resulting in both increased foreign presence and technical progress in the host economy (Figure 1d). Indeed, it can be argued that along with a shift in the KK curve to the right there would also be a shift of the TT curve to the left resulting in reduced foreign presence as a whole or leaving it unchanged and raising the rate of technical progress (Figure 1d). The reduction in foreign presence may come about because of a substitution of diaspora investments for foreign investments.

A third interesting case of the contagion effect relates to situations when the diaspora assume top managerial positions in the foreign owned firms in the countries of their

origin. Here again the contagion effect could be strengthened because of the familiarity of the diaspora with local markets including labour markets and their knowledge of local norms and customs. A major benefit of FDI to host countries recognised in the literature is the transfer of technology and know how from foreign owned to locally owned firms. The precise mechanisms of such spillovers, though, are not identified in the literature. Indeed, there is considerable doubt expressed in several studies on the extent of such spillovers (Greenaway and Gorg, 2004; Haddad and Harrison, 1993) and some studies even identify negative spillovers from the presence of foreign firms. One channel for such spillovers or contamination though could be the presence of diaspora in top managerial positions in the foreign owned firms. Endowed with knowledge of the local economy and location advantages they may be better equipped to identify and nurture local suppliers of components and also organise training and learning by doing for the local labour force they employ. All this would facilitate spillovers through the strengthening of the contagion effect. Diagrammatically, this is similar to the first case (Figure 1e).

A fourth variant of the diaspora model relates to a case identified by Findlay. It is suggested that the presence of foreign firms may, in fact, deter rather than promote technological progress in the local economy. Their sizeable presence may dwarf the locally owned firms and they may assume a dominant position in the economy. In other words, the rate of technological progress may be an inverse function of the ratio of foreign to domestic investment resulting in a downward sloping TT curve (Figure 1f). This would indeed be inimical to technical progress in the local economy. Now if diaspora investments are introduced into the model the negative effect of foreign presence could be arrested. This would require the assumption that whilst the rate of technical progress is an inverse function of foreign presence, it would be a positive function of the growth of diaspora investments. Whilst the former assumption may have some justification the later needs explanation. It is likely that locally owned firms and the local economy in general see the diaspora as much less of a threat than the non-diaspora foreign firms, simply because of their cultural affinity with the diaspora. Also diaspora investments are likely to be relatively small in size. For these reasons growth in diaspora investments may arrest the adverse foreign firm effect, especially so if diaspora investments are substitutes for foreign investments, limited

though such substitution may be, and if such diaspora investments build up local skills.

It is though arguable whether each and every type of diaspora investments augments the technology contamination effect. In the case of diaspora investments in relatively unskilled labour intensive activities there may be little by way of technology transfer, but such investments could generate employment opportunities for the unskilled unemployed and promote exports. This sort of investments by the diaspora would conform with the vent for surplus model of trade developed by Myint (1958). The growth of exports and employment resulting from the Chinese diaspora investments in the export processing zones in China and the town and village enterprises is a case in point (Fu and Balasubramanyam, 2005).

The Bhagwati-Hamada Model

In the Findlay model there is no discussion of movement of labour between the domestic and foreign sectors and there is no discussion of employment effects. The Bhagwati and Hamada model addresses the issue of employment effects of migration of skilled people from the country. The wide ranging paper discusses a variety of situations which might result in growth of unemployment of educated people and a reduction in national income. Here we confine the discussion to the case where skilled people emigrate from the country and the impact of such emigration on employment.

The model posits two sectors – the skilled sector (M1) which employs only skilled people and produces goods in conjunction with other factors of production and an unskilled sector (M2) which employs only unskilled labour and produces goods. The wage rate in the skilled sector is higher than in the unskilled sector and there is downward wage rigidity in both sectors. Now if a certain proportion of skilled labour emigrates to developed countries the expected wage rate in the skilled sector would increase both because of the emulation effect – possible increase in wages reflecting that in the advanced countries or because the pool of skilled labour is reduced. Now if the supply of educated labour increases because the expected wage in the skilled sector is relatively high unemployment in the skilled sector is a distinct possibility. This would be so if the elasticity of demand for educated labour is less than unity, and

supply increases but demand decreases. The situation could be worse if the wage rate in the unskilled sector increases because of the leap-frogging process. In this case there could be unemployment in the unskilled sector too depending on the elasticity of demand for such labour. This highly simplified version of the elaborate Bhagwati-Hamada model suggests that migration of skilled labour may result in increased unemployment in the country and if the costs of education are also taken into account it might also reduce national income.

Our purpose here is to analyse the implications of diaspora investments in the country for employment and incomes. The diaspora impact on the economy can be classified into two effects. First is the emulation effect of the consumption patterns of the diaspora by the skilled labour. The superior consumption patterns of returning or visiting diaspora may set in motion a demand for higher wages and a reduction in savings in the economy. And any increase in wage rates would, much like in the Bhagwati-Hamada model increase the supply of skilled workers, for it is skilled labour that can demand and obtain higher wages, and again depending on the elasticity of demand for skilled labour unemployment of skilled labour may increase.

The second case is one where the diaspora actively engage in economic activity in their home countries through investments of the sort discussed earlier. The diaspora would be competing for skilled labour in the economy and the wage rate in the diaspora sector could be expected to be higher than in the domestic skilled sector. If the demand for skilled labour is greater than unity there would be increased employment in the diaspora sector. But this movement of labour is likely to be from the skilled domestic sector and this would increase the wage rate in the skilled domestic sector. The movement of labour would cease when the wage rates in the two sectors are eqaulised. The presence of the diaspora would thus serve to increase wage rates for skilled labour in the economy. It is likely that the level of unemployment may also decrease because of the presence of the diaspora investments. However if the demand for labour in the domestic sector is less than unity increased wages in the sector may result in unemployment. The supply of labour from the unskilled sector may also increase in response to the higher expected wage in the other two sectors and this again may result in unemployment of the educated labour force. All this mirrors the Bhagwati-Hamada case of emigration of skilled labour.

The presence of the diaspora sector, however, may have another effect on the economy which can be termed the brain gain effect. As discussed earlier this would be the contagion effect which would disperse technical and managerial skills in the economy. The on the job training provided by the diaspora and the marketing know how they provide may serve to increase the skill levels and exports of the country. Here the assumption is that the diaspora bear the costs of education. Also the facilities for work and the learning environment they provide may be superior to that in locally owned firms, mirroring the work practices and management techniques in the developed host countries of the diaspora. This sort of a brain gain effect may arrest flows of emigration of skilled labour. This would be so because the diaspora are able to provide the sort of facilities for work and skill formation they would have had access to abroad. If the migration of skilled labour is in response to the sort of facilities for work which is available abroad, the diaspora may be able to replicate such facilities at home. For these reasons the presence of the diaspora may result in increased skill formation, reduction in the levels of migration and it would also result in increased productivity matching the increased wages.

4. Conclusions

The conclusions of the paper can be briefly stated. First the presence of diaspora in the countries of their origin may serve to intensify the so-called technology contamination effect associated with FDI. For several reasons, most importantly the superior location advantages the diaspora enjoy, they may be superior carriers and contaminators of the virus of technology and know-how. And the sort of externalities associated with FDI may also be higher in the case of diaspora investments. They may also serve as effective conduits of technology from non-diapora foreign owned firms to domestic firms in the countries of their origin. Their presence may also serve to limit some of the costs associated with FDI such as negative spillovers. The paper, however, has not discussed the determinants of diaspora investments and has not elaborated on the impact of their presence on employment such as the ones identified by Bhagwati and Hamada in the context of the brain drain phenomenon. It has not also discussed the various policy proposals for increasing diaspora involvement in the countries of their origin.

References

Arrow, K.J. (1962), 'The Economic Implications of Learning by Doing', *Review of Economic Studies*, 29, 166-170.

Balasubramanyam, V.N. (2003) 'Foreign Direct Investment in India', *Transnational Corporations*, 12(2).

Balasubramanyam, V.N. and A. Balasubramanyam (2000), 'The Software Cluster in Bangalore', in J.H. Dunning (ed) *Regions, Globalisation and the Knowledge-Based Economy*, Routledge, London.

Bhagwatti, J.N (1977), 'The Brain Drain: International resource flow accounting, compensation, taxation and related policy proposals', United Nations Conference on Trade and Development.

Bhagwati, J.N. and K. Hamada (1974), 'The Brain Drain, International Integration of Markets for Professionals and Unemployment: a theoretical analysis', *Journal of Development Economics*, 1(1), 19-42.

Bhagwati, J.N. (1998), *A Stream of Windows*, MIT Press, Cambridge, Massachusetts.

Desai, M.A, D. Kapur and J. Mchale (2001), 'The Fiscal Impact of the Brain Drain: Indian Emigration to the US', NBER Conference paper.

Docquier, Frédéric and Abdeslam Marfouk (2004), 'Measuring the International Mobility of Skilled Workers (1990-2000)', World Bank Working Paper 3381.

Economist (2001), 'Keep Your Kilt to Yourself', October 20 2001.

Findlay, Ronald (1978), 'Relative Backwardness, Direct Foreign Investment and the Transfer of Technology: a Simple Dynamic Model', *Quarterly Journal of Economics*, 92(1), 1-16.

Fu, Xiaolan and V.N. Balasubramanyam (2005), 'Exports, Foreign Direct Investment and Employment: the Case of China', *The World Economy*, Forthcoming.

Greenaway D. and H. Gorg (2004), 'Much Ado about Nothing? Do domestic firms really benefit from foreign direct investment?' *World Bank Research Observer*, 19, 171-197.

Grubel, H. and A. Scott (1966), 'The International Flow of Human Capital', *American Economic Review*, 56, 268-274.

Guha, A and A.S. Ray (2000), 'Multinational versus Expatriate FDI: A Comparative Analysis of the Chinese and Indian Experience', Indian Council For Research on International Economic Relations.

Haddad, M. and A. Harrison (1993), 'Are There Positive Spillovers from Foreign Direct Investment? Evidence from Panel Data for Morocco', *Journal of Developing Economics*, 42, 1-74.

Myint, H (1958), 'The Classical Theory of International Trade and the Underdeveloped Economy', *The Economic Journal*, 68, 317-337.

Wei, Y. (2004), 'Foreign Direct Investment in China', in Balasubramanyam, V.N. and Y. Wei (eds), *Foreign Direct Investment: Six Country Case Studies*, Edward-Elgar.

Table 1: Inflows of Permanent Settlers by Country/Region of Birth

Unit: Thousands

	Destination	US			Destination	Canada		
	Source	1992	1996	2000	Source	1992	1996	2000
1	Mexico	213.8	163.6	173.9	China	10.4	17.5	36.7
2	China	38.9	41.7	45.7	India	12.7	21.3	26.1
3	Africa	27.1	52.9	44.7	Pakistan	..	7.8	14.2
4	Philippines	61.0	55.9	42.5	Philippines	13.3	13.2	10.1
5	India	36.8	44.9	42.0	Korea	..	3.2	7.6
6	Vietnam	77.7	42.1	26.7	Sri Lanka	12.6	6.2	5.8
7	Nicaragua	8.9	6.9	24.0	US	7.5	5.8	5.8
8	El Salvador	26.2	17.9	22.6	Iran	..	5.8	5.6
9	Haiti	11.0	18.4	22.4	UK	7.1	5.6	4.6
10	Cuba	11.8	26.5	20.8	Taiwan	7.5	13.2	3.5
11	Dominican Republic	42.0	39.6	17.5	Russia	..	2.5	3.5
12	Russia	8.9	19.7	17.1	Hong Kong	38.9	30.0	2.9
13	Korea	19.4	18.2	15.8	Vietnam	7.7	2.5	1.8
14	Ukraine	14.4	21.1	15.8	Poland	11.9	2.1	1.3
15	Pakistan	10.2	12.5	14.5	Bosnia Herzegovina	..	5.1	1.0
	Other countries	347.6	314.6	284.0	Other countries	37.8	18.6	17.3
	Total	974.0	915.9	849.8	Total	252.8	226.0	227.2

	Destination	Australia			Destination	UK		
	Source	1992	1996	2000	Source	1992	1996	2000
1	New Zealand	7.2	12.3	21.9	US	43.9	43.2	47.0
2	UK	14.5	11.3	9.2	Australia	25.0	25.1	31.3
3	China	3.4	11.2	6.8	India	9.2	13.0	19.9
4	South Africa	1.3	3.2	5.7	South Africa	2.3	12.9	19.5
5	India	5.6	3.7	4.6	New Zealand	10.6	11.0	13.7
6	Philippines	5.9	3.2	3.2	Pakistan	8.3	7.8	12.4
7	Yugoslavia	..	..	2.2	Philippines	2.6	6.8	11.0
8	Fiji	2.1	1.7	1.9	Canada	6.4	7.4	10.7
9	Taiwan	3.2	1.6	1.7	Japan	10.4	10.8	9.6
10	Vietnam	9.6	3.6	1.5	Poland	3.5	3.6	5.5
11	Hong Kong	12.9	4.4	1.5	Russia	..	3.6	4.6
12	Sri Lanka	2.8	2.0	1.3	Bangladesh	3.2	3.3	4.2
13	Lebanon	1.6	1.3	1.2	Somalia	3.1	1.9	4.1
14	US	1.7	1.6	1.1	China	1.8	3.2	4.0
15	Croatia	..	0.7	1.0	Sri Lanka	4.1	1.9	3.2
	Other countries	35.6	37.3	27.5	Other countries	69.5	61.0	87.9
	Total	107.4	99.1	92.3	Total	203.9	216.4	288.8

Notes: For UK, the figures are for inflows of foreign population by nationality. .. = Not Available

Source: OECD International Migration Statistics.

Table 2: The Median Incomes for Native-born, Indian-born, and Other Foreign-born (Age 18-64) Living in the US

	Native-born	**Indian-born**	**Other foreign-born**
1990	$20,293	$20,670	$14,483
1994	$19,836	$21,943	$13,053
1995	$20,100	$24,980	$13,803
1996	$20,626	$25,145	$13,562
1997	$21,418	$24,301	$13,729
1998	$21,580	$27,915	$14,443
1999	$22,826	$31,715	$14,816
2000	$23,126	$29,986	$15,510
2001	$23,925	$28,121	$16,084

Source: Desai, Kapur and Mchale, 2001

Table 3. Chinese and Indian Diaspora Investment in Their Countries of Origin

Unit: US$ million

Year	Chinese Diaspora	MNEs	Total FDI in China	Indian Diaspora	Total FDI in India
1983	472	327.9	799.9		
1984	748	617.1	1365		
1985	956	795.6	1752		
1986	1329	697.9	2027		
1987	1809	590.5	2400		
1988	2429	957.2	3386		
1989	2342	770.7	3113		
1990	1913	1097	3010		
1991	2959	1192	4151		
1992	8762	2143	10905		
1993	21001	4329	25330	61	341
1994	23565	6650	30215	217	620
1995	23790	9206	32996	442	1314
1996	24940	11055	35995	715	2133
1997	25296	13641	38937	639	2696
1998				241	3197

Source: Guha and Ray (2000)

Figure 1. Phase Diagram