

Education and Brain Gain Instead of Brain Drain

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Abstract

This paper studies a two-region model in which unemployment, education decisions and interregional migration are endogenous. The poorer region exhibits both lower wages and higher unemployment rates, and migrants to the richer region are disproportionately skilled. The brain drain from the poor to the rich region is accompanied by stronger incentives to acquire skills even for immobile workers. Regional shocks tend to affect both regions in a symmetric fashion, and skill-biased technological change reduces wages of the unskilled. Both education and migration decisions are distorted by a uniform unemployment compensation, which justifies a corrective subsidization.

INTRODUCTION

Rigorous discussion concerning the concept of a 'brain drain' began in the early 1980s and continued until the 1990s. The discussion formed a dominant role in scholarly debate aiming for the development of third world (Hazen and Alberts, 2006). However, in the first decade of the 21st century, scholars are convinced that it is widely accepted that the brain drain generates a high income of foreign currency into the third world (Lucas, et al., 2006). This has effectively quietened discussions concerning the effect of the brain drain.

The term 'brain drain' is used to denote the migration of highly skilled people from one country to another, particularly from the developing world to the developed world. Many types of worker (highly skilled, semi-skilled, unskilled) travel from the developing world to find an employment in a suitable profession and enjoy a higher standard of living in the first world. There are other significant reasons put forward to explain why individuals migrate from the developing world. While we can calculate the contribution made by the emigrants to increase the income of foreign currency, we usually fail to quantify the specific contribution made by highly skilled emigrants by the conducting of a comparative study between the highly skilled and semi-skilled or unskilled groups. Such a comparative study has now been conducted. It seeks an answer as to how much of a contribution is made by either the highly skilled and semi- or unskilled emigrants to increase foreign currency income. In addition, this paper provides answers to the following questions.

1. Why do individual migrate from the third (developing) world?

2. How much public money is invested in the production of a highly skilled and semi- or unskilled emigrant?

3. What contribution is made by highly skilled and semi/unskilled emigrants in order to increase higher income in foreign currency?

4. What are the advantages of the brain drain?

5. What are the disadvantages of the brain drain?

6. How emigrants, particularly the highly skilled group, can contribute more significantly to the development of their country of origin? To help find answers to the questions, I have used fieldwork data from interviews conducted, rather than secondary literature, as the main source of information.

Data

Qualitative methods were used that allowed interviewees to express their views in a free and personal way, giving as much prominence as possible to their thematic associations.

Semi-Structured Interviews by Qualitative Approach Here Held With

- Four highly skilled emigrants
- Four semi/unskilled emigrants
- Two policy-makers, one from India, the other from Bangladesh
- Two children of highly skilled emigrants
- Two children of semi/unskilled emigrants
- The parent of a highly skilled emigrant
- The parent of a semi/unskilled emigrant

Interview Sample

The subjects of this paper are the respondents of eight interviews. It has been proven that, in order to receive proper, specific and reliable data, attention must be paid to the triangulation of samples (Cohen, et al., 2002). I therefore selected my respondents from four countries: USA, UK, United

Arab Emirates and Malaysia. These particular countries were chosen as each has a significant number of emigrants living and working within them. The first two countries are first world; the latter two are middeveloped. The immigration rules and regulations of each of the countries differ in several ways. Two people were selected from each country, one with highly skilled emigrant status and the other with semi/unskilled status. The identity of each of the respondents has been withheld to respect confidentiality and ethical issues, but brief descriptions have been provided.

Respondent A is highly skilled emigrant working in one of the biggest hospitals in the UK. Born and brought up in India, he gained his degree in medicine in South India. He then worked in India for four years before receiving a government scholarship to complete further study in the UK. **Dr A** and his wife (also a medical professional) travelled to the UK in 1999 in order for him to pursue this higher study. After its completion, he was offered employment within the British National Health Service (NHS). He and his family now live in the UK and plan to settle permanently. **Dr A** has two children, both of whom are studying at a private UK school. **Dr A's** father, once a senior government official in India, still lives in India. Although his parents are retired, they do not require financial support from **Dr A**.

Respondent B lives in the UK, a student at a 'college' in London. Although officially a student, his main intention is to work. His 'student' visa status is maintained as this is the only way he can live and work in the UK. Raised in a village in Bangladesh and the second of five children, his father ran a small business. **Mr B's** UK wages are the main source of income for the family in Bangladesh. He works in an Indian restaurant and lives in a shared room above the restaurant with two of his colleagues. His plan is to marry a British Bangladeshi so that he can settle in the UK. **Mr B** has completed and passed his bachelor degree from a Bangladeshi college located in an urban area. However, he does not need a degree to carry out his job of work. It is worth mentioning here that, in preparing answers for this paper, only the cost of education required to be proficient in any particular job will be considered as the total educational expenditure invested to educate each of the respondents is calculated. **Respondent C** is an engineer, graduated from what is considered to be the finest engineering institute in India, the Indian Institute of Technology (IIT) in Bombay. He has worked for the Microsoft Corporation for the last three years, travelling to the USA to take up a post with Microsoft after graduating from the IIT. His father is an officer in the Indian army, his mother a medical professional. **Mr C** is married to a USA citizen and his parents are financially comfortable. **Respondent D** has lived in the USA for fifteen years. He preferred not to reveal his country of origin. A taxi driver, he lives in New York with his family, three daughters and one son, all of whom attend a public school. **Mr D's** wife does not work. His parents still live in his country of origin. Before arriving in the USA through a diversification visa (DV) programme, he worked as an office administrator. He holds a masters degree; however his job needs only a secondary school certificate. It is worth noting that, in order to qualify for DV lottery, the candidate must have at least a higher secondary school certificate. **Respondent E** is a Bangladeshi currently living in Malaysia. After graduating from the University of Dhaka, he remained and taught at the University for a few years before receiving a commonwealth scholarship, travelling to the UK to study for a PhD. After completion of the PhD he was offered employment with a Malaysian university, where he now

lives with his family. His wife, a doctor, works in a hospital in Malaysia and his children attend a private school. All of **Mr E's** brothers and sisters have settled in various developed countries as highly skilled emigrants. Their parents lead a nomadic existence, travelling between the countries to stay with their children live, although they continue to use Bangladesh as their permanent address. **Respondent F** is a Malaysian factory worker. He has lived in Malaysia for ten years and been married for five. His wife, two children and parents live in Bangladesh. After completing eight years of schooling in a very remote Bangladeshi village, he worked in a garment factory in Dhaka before travelling to Malaysia in December 1995 to seek employment. Since that time he has worked in several different factories in Kuala Lumpur, Malaysia. **Respondent G** works as a doctor in a Dubai hospital. She gained her medical degree in Bangladesh. Before travelling to the UK in 1994 for further education, she worked in a hospital in Dhaka, Bangladesh. She has lived in Dubai since 2001 with her husband and two children. Her mother lives in Dhaka. **Dr G** has lost her father in 2004 and her mother needs some financial support. **Dr G's** husband runs a business in Dubai and her children attend private educational institutes, also in Dubai. **Respondent H** is a diploma engineer who graduated from a Dhaka polytechnic institute in 1988. Prior to emigrating to Dubai for work, he worked for a private organisation. His wife, three children and parents live in a district town in Bangladesh. **Mr H** has three sisters and five brothers, all living in Bangladesh. Draft Paper, not for Citation Respondents **A, C, E** and **G** are considered as belonging to the *highly skilled* group of emigrant and, as such, their migration is treated as part of the 'brain drain'. On the other hand, however, respondents **B, D, F**, and **H** are considered as semi/unskilled emigrants and their migration is considered as a 'physical drain'. I was also able to interview a legislator working within the Bangladeshi education sector, labelled **I**. In addition, an informal conversation was held with a policy maker working with the Ministry of Labour and Employment, India, based in Mumbai. She is labelled **J**.

Limitations of Research

Financial constraint has been the main limitation of this piece of personal research, meaning that it was not possible to conduct a wider research. The constrained circumstances have meant that I could conduct few interviews, and mainly by telephone. I was therefore unable to observe the physical appearance of the respondents and this was unfortunate, as the physical appearance of a respondent can occasionally guide the researcher in the formulation of his questions (Bell, 1999). In addition, there was occasionally a poor connection during some of the long distance telephone calls, making it hard to hear the interviewees.

How much public money is invested to produce a highly skilled and semi- or unskilled emigrant?

The following data sets out to determine the amount of public money invested in order to transform **A, C, E** and **G** into highly skilled individuals. It is important to note that the calculation has made by compiling data from various sources. In addition, I sought to ascertain where each of the respondents had received their primary, secondary and tertiary education as I interviewed them, Being from southern Asia and having experience in conducting education research assisted me in my calculation of the amount of public funding invested to make these individuals highly skilled.

The figures do not include any sums invested by the parents or guardians of these individuals in any capacity.

The following data sets out to analyse the public funds invested in order to educate the individuals **B, D, F, and H** in a similar manner. However, this calculation does not include all of education received. This calculation will only consider the extent that education is required in order to carry out their jobs, as scholars Richard (2003), Psacharopoulos & Patrions (2002), and Prithchett (1996) believe that extra or unnecessary education received by individuals that is not required for completing the individual's task merely increases the cost of investment in the education budget, as there is no rate of return for that said education.

The children of the underprivileged cannot prove themselves as highly skilled in the rigid and competitive atmosphere."

What contributions are made by highly skilled and semi/unskilled emigrants in order to create a higher income of foreign currency?

Before focusing on this issue, it should be acknowledged that highly skilled individuals always have a higher salary potential, as empirically discovered by Psacharopoulos and Patrions (2002), Harmon and Walker (1999), Hartog, et al., (1999) and Appleton (2000). Moreover, Tilak (2002) claims that data from virtually every society shows that a post-secondary education ensures a higher income and greater opportunities for graduates. Comparison between those who have attended college or university and those who have not reveals consistent benefits to the degree holders. In my opinion, the highly skilled individual receives a better salary package than the semi-skilled individual, while the semi-skilled individual has more salary potential than the unskilled. In contrast, Alam (2006) expresses an interesting point:

"Those who seek to pursue higher education expect to benefit in both their professional and personal lives, and the areas in which they hope to gain will also differ greatly. Higher Education provision reflects this. Research repeatedly finds that primary and secondary education contributes to a higher rate of return for the nation overall, whilst higher education provides greater benefits for the individual."

The purpose of the following discussion is not for any comparative study of the salary package received by skilled and semi/unskilled emigrants, nor will it reveal the ratio of salary packages received by the two groups. The data aims to illustrate the contribution made by highly skilled and semi/unskilled emigrants in order to create a higher income of foreign currency? Respondent Identifier Remittance forwarded during previous 12 months

It is interesting to note that the highly skilled emigrants do not send huge remittances. However, all of the respondents state that their family at home is financially comfortable, and that they do not necessarily need the financial support. However, they do occasionally send money home to donate to the people of their country of origin, even though they consider themselves to be part of economical and social development of the country to which they have emigrated. **C** makes a fundamental point:

"Although I was born and raised in India, now I am an American, and as an American I must contribute to the economical and social development of the USA. Moreover, in order to lead a luxurious life and secure good prospects, I should not waste my money by sending it for unnecessary reasons to India."

As an individual, **C** always tries to understand what is beneficial to him. However, **C** also should understand that he has a responsibility to provide a financial return to his country of origin, where he was educated with public funds. There is also a moral and ethical obligation to provide support to the country of birth as a citizen of India (**I** and **J**). **I** and **J** also state that every citizen is a part of the country, so **C**'s comments cannot be considered as a civic comment (see below). Respondent Identifier Remittance forwarded during previous 12 months

It is clear that semi/unskilled emigrants send comparatively more money home than the highly skilled group even though they receive smaller salaries. The semi/unskilled group are better placed to send a larger remittance home, as they have no family in the country where they are working. They are also keen to accumulate savings, as savings will help them both gain financial stability and support their family in achieving a better standard of life. In this regards, **B** says:

"We are not living as the part of the society where we are working, and our family needs money from us. It is important that, at the end of the day, we have to return so we save money and will try to establish business in the home country."

Children of semi/unskilled emigrants who are now living in the developed world also feel some level of responsibility to support the relatives of their parents in the country of origin, although they consider themselves as part of the country where they have been educated (**L**).

In contrast, children of the highly skilled group do not feel the same as the children of semi/unskilled emigrants as they know very little about the country from where their parents originated (**M** and **N**). **What are the advantages and disadvantages of the 'brain drain'? Remittance** On one hand, a significant number of scholars such as Marchal and Kegels (2003) Mora and Taylor (2005), Richard (2005), McKenzie, and Yang and Martinez (2005) firmly advocate that highly skilled emigrants generate a higher income of foreign currency for the country of origin. However, they often miscalculate. In addition, they fail to ensure that the higher income in foreign currency is entirely generated by the semi/unskilled group. It is also important to note that highly skilled emigrants are the product of large amounts of public funds, therefore it is commonly presumed that they will contribute more to the development of their original country. In contrast, it is found that the emigration of highly skilled manpower essentially provides personal benefits for the individual, rather than public benefits (see below). Scholars such as Chellaraj, et al., (2005), Schiff (2005) and Ozden (2005) empirically prove that skilled individuals provide greater benefits for the countries to which they have migrated. They argue that, with the assistance of research conducted by and the professional engagement of skilled emigrants, the developed world is progressing outstandingly towards economical and social freedom.

Collaboration

However **J**'s view differs from that of **A** and it is important to note it:

"I acknowledge that Indian IT professionals work around the globe and, to some extent, help us to establish international IT business in India. However, the main reason is that the Indian government provides very good support in order for the international businesses to be established in India, especially within the IT sector. In addition, the IT professional is cheaper

is India than in other countries, and this is what mainly persuades the international IT business organisations to establish their business in India. I also want to add one more issue; in some cases the skilled immigrants are harmful for India as they sell their consultancy services to the Indian government and business organisations at a higher cost. Moreover, the wages they receive as a consultancy fee is tax free, as they often argue that they have to abide by the income tax rules of the country where they are currently working and, if they also have to pay tax to the Indian government, it will be double burden.

The disadvantages of 'brain drain' are manifold; however, I will attempt to discuss some of them briefly here:

To provide private benefit According to J:

"I acknowledge that, as we cannot provide sufficient wages and a good working atmosphere here for highly skilled individuals, that leads them to seek suitable positions in the developed world. However, we must bear in mind that highly skilled people consume most of the education budget. The money for this budget comes from the public funds, contributed through tax paid. Moreover, a portion of the budget is also provided by donor agencies as either aid or a loan. Since there is hardship, we usually take the funds from international organisations, such as UNESCO, IFM, and the World Bank, under any condition. It is also important to note that the remittances received from highly skilled emigrants essentially contribute to the private and family benefit of the individuals; the country gains somewhat less. It is shame that our skilled individuals don't understand our situation and I must say that they are turncoats."

Shortage of professionals The third world is currently experiencing difficulty in the development of essential competent professionals for many different professions. In such circumstances, the migration of highly skilled manpower makes significant progress in the third world even more restricted. It is frequently found that schools and universities in the third world suffer from a dearth of academic staff. Hospitals face not only a shortage of competent doctors and nurses but there are also shortages of medical professionals. In this context I observes that:

"In the name of high immigration, the developed world is collecting skilled, well-trained, and experienced individuals from the third world; so the third world cannot meet its own demands. Moreover, successful entrepreneurs migrate to the developed world through an 'entrepreneurial migration' scheme; this is even more dangerous as they migrate from the third world to the first with huge funding. This is because, according to the rules of the scheme, the entrepreneur who wishes to migrate has to deposit a large amount of funds."

Under the present circumstances to hire graduates from the third world or to provide highly skilled emigrants' status, developed countries are not concerned about contracts with the third world governments, and the third world government also has no misgivings. Therefore, in order to hire the graduates or to provide highly skilled migrant status, an agreement is usually made between the graduate and the business organisation within the developed country where the graduate is hoping to provide a service. Once the graduate and the business organisation reach a mutually acceptable agreement, no intervention from the third world government is possible. Therefore the graduates try to gain as much as they can in personal benefits. A, E and G have an intention to contribute to the development of third world. E explores a means of contributing to the country of origin. According to E:

"When the third world employs a consultant from the first world, the hired consultant usually does not need to pay tax in the country where he or she provides services. If the income is exempt from taxation, then we are happy to remit this amount for the development of third world. However, it would be better if the first world could design a system whereby the exempted tax could be directly remitted from our employers to the concerned third world government."

Some scholars propose that, as the developed countries enjoy the benefits of the third world's brain drain, thus they should invest in the establishment of better education provision in the third world. This idea is not exempt from criticism: if individuals from the first world invest in education in the third world, for instance Bangladesh, they would affect the Bangladeshi education system in such a way that in the individuality and ethical values of Bangladesh may be lost. Moreover, the philosophy of first world entrepreneurs may not necessarily be that of the third world's countries, or may conflict with national objectives. In addition, the threat of privatisation of education through franchise provision continues to exist. In this regard, an example from China and Malaysia may be put forward. A considerable number of US, UK and Australian universities provide education in China and Malaysia, and the main purpose of these universities is to earn money. This situation is threatened as it has been illustrated by some scholars that the first world universities operating in China and Malaysia are providing a lower quality of education for Chinese and Malaysia students that that which is provided on the parent campus overseas. As a result, although the Chinese and Malaysian students receive international degrees from international providers, the acceptability of their qualification is less than that of Western graduates (see Alam, 2006). It is worth noting that, because of 'diploma disease', educational standards across the entire world are a declining feature. It is also interesting to note that, following the introduction of the GATS agreement, higher education has been seen as a commodity that results the deterioration of quality education internationally (see Alam, 2006).

CONCLUSION

Before concluding, it should be noted that people who have migrated with a body but not necessarily a brain contribute more to the development of their country of origin financially, even though the highly skilled group are more productive and their reward significantly higher. Moreover, in the developing world, the privileged group always take the cream while the underprivileged struggle with a hand-to-mouth existence, either because of inefficient taxation rules, corruption, or some other fault of existing systems. In order to address the situation, urgent steps need to be taken by donor agents. All major donor agencies need to jointly establish a commission to oversee the 'brain drain' policy. This should be designed to ensure that, before any agreement is made between labour seeking to emigrate and the overseas employer, the potential emigrant's country of origin should receive legal public benefit. Once the proposed commission can ensure that the country that has funded production of the graduate will benefit from the country where graduate intends to work as skilled manpower, the donors may claim that they have fulfilled their role. Otherwise developing countries can claim that they are contributing some form of donation to the developed world.

In conclusion, until and unless the policymakers, legislators and governments of the third world's countries provide a decent and adequate working environment for their educated people, the educated community will continue to seek employment overseas and the brain drain will continue. However, without the use of the trained and skilled 1 Some of the developed countries provide subsidy for their agriculture industry, while most of the developing worlds impose higher tax to their poor farmers compared to the richer industrialists. It is worth to note that privileged group also do not pay the right tax imposed to them since they have very diplomatic and corrupt connection with high officials and politicians. What' more, farmer has to pay the 'land tax' whether he/she can make profit or lose. This tax is additional amount from the regular tax paid according to the 'income code'. In contrast, businessmen and service holders need to pay tax only after the earning of a certain amount of money. Due to flood, other natural disaster, farmers can not cultivate regularly; however, they still need to pay the 'land tax'. It is also added that service holders enjoy 'pension benefits' after the retirement whereas farmers have no chances to receive 'pension benefits'. This circumstances lead farmers to be di-motivated doing cultivation though still agriculture is the biggest sector for national income. In addition to, we must note that in most of the developing countries, same tuitions fees is paid by both children of poor farmer and elite industrialist to pursue 'high quality education' from reputed public education institutes where access is easier for elite children since they always receive careful parental participation for the development of their education and career. Moreover, their parents maintain high official connection. It generates a question to think,- why do underprivileged group always be victimized of lose, is it because they are not intellectuals and legislator? In my opinion, they are suffering since they are not intellectually capable enough to calculate their lose; moreover, they do not have any voice in the legislation process. manpower within the undeveloped countries, the shortage of trained professionals to meet the requirements of home-based professions will also continue, and there will be little hope of development on that front.

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