

EC336 Term Paper

EC336-6-AU: Economic Development in a Global Perspective

Question: 2. Developing countries benefit as senders of unskilled migrants because they receive significant remittances from these migrants. They also benefit as senders of skilled migrants because this increases educational attainment at home and contributions from returning migrants. The “brain drain” is therefore not a problem. Discuss.

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Introduction

As globalisation takes place, state borders become increasingly disintegrated. Cross-border human movement rise, with most opting to relocate to developed countries. Docquier and Marfouk (2006) estimate approximately 90% of highly-skilled migrants settle down in the OECD countries. Common reasons for migration include the search for better living standards, employment opportunities, fleeing a war-torn area or to seek political asylum.

So from which countries do the majority migrate from? Middle-income countries, where the people have both the incentive and means to migrate observe the highest emigration rates. Citizens in higher-income countries have lesser incentives to move whilst financial constraints prove to be a migration barrier for those in low-income countries. This holds true for both total and skilled migration. According to the United Nations (2013), half of the migrants in OECD bloc originate from 16 countries. Mexico leads the list with 11 million emigrants, followed by China (3.8 million), the United Kingdom (3.5 million) and India (3.4 million).

The Brain Drain Phenomena

However, immigration policies have taken a growing restrictive stance since 1974, especially in Europe. It was structured to deter further immigration and motivate return migration. Additionally, immigration policies have increasingly been geared towards favouring the entry of skilled workers, and halting the flow of unskilled ones. The number of tertiary educated immigrants in OECD countries increased by 70% in the past decade, reaching 27.3 million in 2010/11 (United Nations, 2013). One-fifth of this group migrated from three Asian countries, India (2 million), China (1.7 millions) and the Philippines (1.4 millions).

This begs some serious questions? Is this departure of talent robbing the potential of the sending countries? If so, is the alleged consequent economic downswing large enough to warrant a need to regulate, or even stop this outflow? The strict immigration stances are in place to combat the 'brain drain' phenomena, where migration is deemed to reduce the supply of skilled workers in a particular country. Generally, a population with large shares of lower-skilled labour struggle in terms of economic development. Thereafter, according to the brain drain theory, talent outflow robs a country of its growth potential. Contrastingly, a theory, coined the 'revisionist approach' argues that the brain drain, instead of inhibiting economic growth, offers some benefits to the sending countries, therefore being a 'brain gain' instead (Faini, 2003).

In this paper, we attempt to assess each tenet of the revisionist theory, with the help of real world data. The aim is to provide a more concrete insight as to whether brain drain is

unpleasantly detrimental to a country's economic performance, or does it make the sending country better off, as per the notions brought forth by the revisionist theory.

Revisionist theory

This theory bases its argument on the positive effects of migration around three tenets:

1) Remittance

Migrant workers, especially the unskilled ones, tend to remit to their home country, providing finance to family members living there. Thereafter, the recipients will be able to afford a better standard of living. Remittance figures tend to be large, with the Malaysian Finance Ministry reporting RM34.75 billion remitted home by foreign workers in 2015, the largest recipient being a neighbouring country, Indonesia (Malaysiakini, 2016). The total increase in remittance volume also skyrocketed by 23.2 percent from the 2014 figures. Additionally, large flow of remittances may boost exchange rates of the home country, as the demand for its currency increase.

2) Education Attainment

Stark et al. (1997) argues that the prospect of migration works as an incentive for aspiring emigrants to acquire new skills, in order to increase their likelihood of overseas employment. This group will seek to obtain higher education as developed countries prefer highly-skilled immigrants. In turn, this indirectly increases the education level of the home country population. Potentially, even in the occurrence of a brain drain, the average education level of those remaining in the home country could be higher than otherwise.

3) Skills of Return Migrants

The Office of National Statistics (2017) reported that a total of 51,000 non-British citizens emigrated home in year-ending March, with 44,000 of them being citizens of the European Union. Generally, migrants may return home after learning sets of productive skills beneficial to the growth prospects of their home country. The initial loss to the home country may then be more than cancelled out by the different and important skills that the migrants were able to learn from abroad. New migration literature stressed that an interim move abroad may be an approach to deal with domestic market failures. For example, if due to financial market imperfections, a citizen is unable to take up a profitable project, then a short-term stay abroad may allow him to acquire adequate capital to fund such project.

Remittance

IMF data placed overall remittances at US\$65 billion in the mid-1990s. To highlight the heftiness of this sum, this figure is larger than the overall flow of official development assistance.

Arguments for remittances cancelling out the brain drain effect

There are plenty of evidences, which will be explained later on this paper, on skilled migrants remitting less to their home countries, compared to their unskilled counterparts. Therefore, arguments for remittance playing a positive role for the sending countries are focused on the unskilled group.

Li and Zhou (2013) found high remittance rates for unskilled migrants, especially for countries with large shares of their population consisting of this faction. They also discovered that this action decreases the home country's skilled–unskilled wage inequality due to the finance sent back by the unskilled group. For Asia's largest labour importer, Malaysia, 13.4% of the labour force are foreign workers (Khazanah Research Institute, 2014), with 95% of them being unskilled (World Bank, 2013). The remittances outflow by this group of foreign workers are staggering, and the trend is on the increase. The volume is so large that levy fees have been charged on the foreign workers to combat this huge remittance outflow, with levies contributing around RM2 billion to the Malaysian economy annually (UNDP, 2013).

Unfortunately, besides these studies, there is a severe lack of evidence on studies of remittance of the unskilled group in other countries.

Arguments against remittance cancelling out the brain drain effect

Using the example that skilled migrants are more likely to bring their family along when moving abroad, and therefore having less propensity to remit, Faini (2003) explained that this higher-skilled faction potentially hold looser attachments with their home country. The group of highly-skilled migrants is focused in the argument against the revisionist theory as this faction has the highest chance of success shifting abroad. In an empirical study in 2002, Faini found that remittances fall as the percentage of migrants with tertiary education increases. This is also consistent with the idea that skilled migrants tend to relocate permanently to the host country. Thereafter, diminishing their attachments to the home country alongside the propensity to remit.

Lucas and Stark (1985) discovered that the longer the stay of migrants in the host country, the lower the flow of remittances. This support Faini's point the brain drain cannot associated with a larger flow of remittances. Taking 2015 as an example, in this single year

alone, selected OECD country recorded an influx of 4,322,100 permanent migrants. Although there was a dip from 2007 to 2011, the number of permanent migrants has been steadily increasing from 2011 till 2015 (OECD Library, 2017). The notion that migrants may hold less attachments to this home country is getting more pronounced.

Unfortunately, besides the two studies mentioned above, existing evidence on the propensity to remit of skilled workers is also rather limited. Several results of other studies contrast with Faini's argument. Johnson and Whitelaw (1974) and Rempel and Lobdell (1978) instead discovered evidence that remittances tend to increase with the level of education. However, Rodriguez and Horton (1994) found that for the case of Philippines, the education level of migrants has no influence on the amount of remittances.

By and large, it is difficult to deduce whether remittance play a role in mitigating the effect of brain drain or not, from existing literatures. Several studies however strongly disapprove of the revisionist view on remittance's role in creating a 'brain gain' for sending countries, citing that the concerns of brain drain are warranted.

Education Attainment

For the source countries, the crucial point is not the number educated people but the number of educated who remain in the country after education is acquired.

Arguments for education attainment cancelling out the brain drain effect

The revisionist approach holds that the brain drain may foster growth by raising the return to education. Utilising cross-section data for 37 developing countries, Beine et al. (2001) found evidence that migration prospects seem to play a significant role in education decisions. The study distinguished between two growth effects. First, the 'brain effect' in which migration prospects induce investments in education because of higher returns abroad. Second, the 'drain effect' due to actual migration flows. This study found that it is possible that the first effect dominates the second one. Investments in education for those targeting migration had elevated the average level of human capital in the country. When this happens, beneficial brain drain emerges as the average level of human capital is higher in an economy opened to migration than a closed one.

Stark (2002) supports of such claim. He developed a simple model where the sheer possibility to migrate induces investments in education acquisition, ultimately boosting growth. Bhagwati and Hamada (1974) found similar results, and this effect is even more

pronounced if the wages of local skilled workers catch up with those of their foreign counterparts.

Arguments against education attainment cancelling out the brain drain effect

The Carrington and Detragiache data set provides the data on the skill composition of migration. Using this important information, Faini (2003) conducted an empirical study relating educational achievements to a set of explanatory variables that include emigration. The several results produced are listed below, and they do not support the conclusions of Beine et al. (2001).

Faini's findings:

- a) The probability of migration for workers with a secondary education has no distinct impact on the home country secondary educational attainment.
- b) A higher probability of migration for employees with a tertiary education has a positively significant impact on the scale of secondary school enrolment. This finding suggests that increasing the return of higher education magnifies the motivation to acquire lower secondary education.
- c) Most surprisingly, the migration probability for workers with a tertiary education has a negative impact on tertiary enrolment. One way to construe this result is by explaining that prospective migrants wish to boost their chance for admission into the host country by undertaking their graduate studies there. The cream of the crop would then have an incentive to move abroad at a relatively early stage of their school curriculum, thereby lowering the average enrolment rate in the home country's university system.

Another separate evidence is a large ratio of science and engineering doctoral graduates from developing countries are still working in the United States four years after graduation (Solimano, 2002). This is consistent with Faini's findings that prospective migrants pursue their graduate studies abroad also with a view to strengthening their chance of being able to immigrate.

These results provide little evidence in support of the 'brain gain' argument. Whilst higher probability of migration for individuals with a tertiary education seems to raise the return to secondary education, it dampened the numbers of tertiary enrolment.

Skills of Returning Migrants

There are two main questions to be answered in order to find out if return migration does take place and is beneficial for the home country. The first being, how common do migrants return home for good? The second question, are their skills helpful and do proper channels for these skills to be applied exist in the home countries?

Arguments for skills of returning migrants cancelling out the brain drain effect

Unfortunately, real world data points towards permanent migration being on the increase. Therefore, in the argument for the increase in skills of residents in the presence of migration opportunities, we look at notion that migration prospects can raise the expected return to human capital. Using recent data on emigration rates by education levels, Docquier and Marfouk (2006) found evidence of a positive effect of skilled migration prospects on pre-migration human capital levels in a cross-section of 127 developing countries. They drew comparisons of observed human capital level by running counterfactual simulations. In aggregate, there were 116.5 million skilled workers living in the 127 developing countries of the sample in 2000 (representing about 5% of the sample's labour force). This number would fall to 113.2 million under the counterfactual scenario, meaning the brain drain trigger a 3% increase in the total number of skilled workers in developing countries

Do this group of skilled labour have the proper channels to implement their abilities then? Historical evidence exists of countries enjoying development when the country has the capacity and proper legislations for it. Subsequent to a large outflow of Taiwanese students United States in the previous decade, the 1980s witnessed a massive return of students and this group were instrumental in developing Taiwan's ICT sector. This is partially seen in a study of doctoral students' work intentions by the National Science Foundation, spanning the period 1988 to 1996.

Interestingly, there is evidence that due to the savings they managed to accumulate during their stay abroad, return migrants prefer self-employment or entrepreneurial activities. For example, Dustmann and Kirchkamp (2001) found that most returning Turkish migrants choose self-employment or to not work at all. Using survey data, McCormick and Wahba (2001) discovered that length of stay abroad combined with savings strengthens the probability of becoming an entrepreneur for literate returners. Therefore, a brief stay overseas can help a resident jumpstart his or her business. All in all, positive effects from return migration depend heavily on government policies in the sending or home country (Castles 2000)

Arguments against skills of returning migrants cancelling out the brain drain effect

There are strong evidences that return migration do not occur for most sending countries. This nullifies the argument of returning migration. The study of Carrington and Detragiache (1998) noted that more than 15 per cent of the population of Ghana with a tertiary education has migrated to the US, and 25.7% to the OECD countries. The figures for poorer countries in North America are more astounding. More than 20 per cent of Mexicans with a secondary education live in the US. 29.7% of Dominican Republic citizens with secondary educated relocate to the US, and 29.1% for El Salvador.

Evidence also point towards negative selection bias of return migration abound, which means the ones returning are those who failed to relocate permanently, not by choice. Solimano (2002) reports that, a large ratio of doctoral graduates who originate from developing countries, especially for science and engineering courses, stayed on in the United States after graduating. National Science Foundation data reaffirms this, with 88 and 79 per cent of respectively China's and India's graduates in science and engineering still working in the United States four years after graduation. Supporting evidences can be found in studies conducted by Lindstrom and Massey (1994) for Mexican migrants, Reagan and Olsen (2000) for the United States and Bauer and Gang (1998) for Egypt.

Rodriguez and. Horton (1994) show that, for the Philippines, returning migrants are somewhat less educated than the ones overseas. Correspondingly, Knerr (1994) found that skilled Pakistani migrants remain abroad for a longer duration compared to the unskilled ones. Borjas (1989) provided evidence that foreign scientists with higher probability of returning home from the United States are the least successful ones. In the case of Pakistan, it is shocking that Knerr (1994) discovered a trend of skilled returnees remaining unemployed for longer timeframes.

Reasons against why the more successful prefer to relocate permanently may be attributed to better working environment overseas, monthly salary and opportunities which are simply unavailable in the home country. For example, using a small sample of members of the U.S. National Academy of Sciences and National Academy of Engineering, Guellec and Cervantes (2001) found foreign-born scientists earnings to be substantially higher on average than the local ones.

Conclusion

One distinct fact is that permanent migration is on the increase. Thereafter, the argument that skilled returnees can be an asset to the home country is void, if the migrants do not return at all. To compound this matter, there has been a lack of historical evidence of such happenings besides the Taiwan experience in the 1980s. This is related to the revisionist notion that education attainment of residents in the sending country will increase with the prospects of migration. Even if the citizens do obtain higher education, after migrating, they remain permanently in the developed countries, as seen of the doctoral graduates in the United States. The only positive evidence of education attainment is the enrolment of secondary education increases, but the ratio of tertiary education drop instead in case of a brain drain. On the argument of remittances, it is difficult to conclude that unskilled workers tend to channel significant amount of remittances back to the home country, given the severe lack of evidences. However, it is true that the skilled workers, with tendencies to migrate for good, hold looser attachments with their home countries, therefore having lesser propensity to remit. By and large, the brain drain phenomenon is very real and the concerns are warranted. Governments will do well to regulate both the inflows and outflows of human movement to sustain economic growths of their countries.

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