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European Report on Development

EU POLICIES AND
AFRICAN HUMAN CAPITAL DEVELOPMENT

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EUROPEAN UNIVERSITY INSTITUTE, FLORENCE
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Abstract

Brain Circulation between the European Union (EU) and Sub-Saharan Africa is a crucial ingredient in Human Capital formation in the latter. A major constraint to African development is the very low base of skilled and highly educated workers and professionals. The production of skilled workers has been low, and only recently has seen a dramatic increase. Recent papers by many authors have indicated that a channel for human capital growth has been, paradoxically, the possibility of the brain drain which serves as both an incentive mechanism and which results in higher human capital when the drainers return. After a review of some of the literature, these insights are applied to the debates raging today on European Union migration policy: the Blue Card, Migration Con-tracts, anti-Brain Drain legislation, etc. This paper argues that a careful calibration of the EU policies may enable faster Human Capital growth in Africa, while, at the same time, being beneficial to the EU by supplying critically needed skills into the EU economy. By carefully planning the production of human capital and the consequent flow of skilled migrants into Europe, the EU can assist in the development of vitally needed numbers of trained or skilled workers in Africa.

Keywords

Brain Drain, Immigration, Migration, Human Capital, Economic Development

1. Introduction^{*1}

Today, there are vigorous debates and meetings going on in the halls of the European Union (henceforth EU) and the African Union (henceforth AU) and at other multi-national settings regarding the appropriate policies for migration between Africa and the European Union.

In this paper, we review some of the recent literature, including work of the author, on the question of the Brain Drain, which indicates that there are many positive aspects of the Brain Drain, and that, paradoxically, the presence of a large Brain Drain may actually be associated with high Human Capital because of incentives to obtain training in the first place, and also the fact that, from those who drain come those who return, and that a large stock of Drainers may result in a large stock of highly-trained returnees. This has important consequences for the current debates on EU migration policy.

The fear is that, because of the current financial crisis, there may be an attempt to slow the conversations and legislation and close the door to immigration into the EU, both skilled and unskilled immigration. The computations and analyses of many recent papers, including those of this author, suggest that this may not be a wise move. By causing restrictions in the ability of Africans to migrate, the financial crisis may have important negative consequences on human capital development in Sub-Saharan Africa.

The conversations on EU migration policy can usually be broken down into two almost mutually exclusive topics – skilled migration and unskilled migration, and two perspectives – the European and the African.

First, there are the debates on unskilled labour. Due to local political pressures within the EU, there is usually a desire to restrict the immigration of unskilled labourers. The discussions around the unskilled immigration into the EU very quickly becomes one of law enforcement and how to handle refugees, with many stark pictures of hungry and thirsty immigrants hanging onto life in very fragile boats. On the issue of unskilled labour, there is usually much less passion on the African side. Often, there are entreaties that nationals be treated well and with dignity; occasionally, one hears of African leaders using the threat of surges of immigrants to extract better concessions from the EU.

On the other hand, there are the debates around skilled labour. On the European side, there is the question of the need for skilled labour to enter into Europe to help in economic growth, also because of the aging of the European populations. On the African side, the debate typically revolves around the brain drain and the loss of skills in Africa. In that view, Africa is losing vitally-needed skilled professionals to Europe. The argument is typically made that those skilled were developed using scarce resources from poor African nations, and that it is unjust that they be allowed to pack up and leave for Europe. It is typically the claimed loss of health workers, doctors and nurses in particular, which seems to arouse the most passion. (I am yet to hear of concern about the loss of economists, my own profession, although I suspect that that number is also high.) There are voices in Europe, especially among the NGOs, siding with this “African” view and advocating, for example, the banning of the employment of African nurses and doctors in the UK National Health Service. There are also clauses within some drafts of the EU Blue Card directives, pushed by NGOs and some African governments, which state that there should not be any “brain drain” consequences, with health and education workers often explicitly mentioned.

* Paper prepared for the Conference on “Financial markets, adverse shocks and policy responses in fragile countries”, organised by the European Report of Development in Accra, Ghana, 21-23 May, 2009.

¹ I would like to thank the EU and, in particular, Giorgia Giovannetti, who encouraged me to work on this paper. This paper builds on prior joint work with my co-author William Easterly and current work under the auspices of the National Bureau of Economic Research (NBER) Africa Project. All errors are, of course, my own.

This paper will take the perspective of African countries, but will stress that care needs to be taken in calling for an unambiguous stop or halt to the brain drain. Many, including the current author, have argued that there are channels through which the emigration of skilled labour from Africa may be good for Africa (see Easterly and Nyarko (2009), Clemens (2006), and Clemens and Pettersson (2008)). The computations in these papers suggest that there is a net benefit of the brain drain to Africa since this has an incentive effect and, more obviously, a large fraction of those who leave return with superior skills.

A look at the data shows a number of interesting things, which will be discussed in the paper. First, a primary concern in Sub-Saharan Africa is the low level of the production of human capital. In some countries, there is, indeed, a huge brain drain. However, it is a large percentage of an exceptionally small base. A great deal of attention is placed on the numbers draining, and these are exceptionally small amounts. Second, the literature has shown that it appears as if the presence of a brain drain is itself an incentive for the creation of skills in the first time. Many go through the process of acquiring human capital to enable them to take part in the lottery associated with leaving the country in the brain drain and thereby receiving high foreign wages. However, since only a fraction are able to leave, those who do not leave are a fraction of a higher number, which could be bigger than those who would remain if there was no brain drain. Finally, the data show that there is a fairly high number who return after draining. They often return with high human capital, having undertaken post-graduate studies and having obtained experience in their jobs abroad.

All of this suggests that there should be ways to design EU policies on migration to help increase human capital in Africa. This paper looks at a number of the policies currently under consideration and evaluates their potential in increasing human capital in Africa. There are, it is argued here, many possible gains to both Africa and the EU in carefully calibrated migration policies. We look at the following debates in the EU regarding immigration policies: the EU Blue Card for Skilled Migrants; bilateral Migration Contracts; student loan schemes (or, to use more modern language, securitised education bonds), the Bhagwati Brain Drain Tax (which we do not advocate), the Grey Haired Peace Corps (which is a great idea, we believe due to Bhagwati) and research and academic consortia (which, we must confess, represents a conflict of interest as the author is in an academic institution).

In the current financial crisis, one of the items for which there is great concern, stridently voiced by African leaders at many AU meetings, is the reduction in foreign aid, the EU engagement with Africa, and, most importantly in the view of this author, the possible closing of the door enabling emigration out of the Africa. This fear, of course, is not only related to Africa-EU relations. In the US, international development assistance and engagement was the only area that President Obama said, during his long campaign for President, that would be reduced in the current financial crisis. US bail-out monies have many explicit and implicit restrictions, which require that the recipients of the funds do not use the funds to hire foreign workers.

This paper will review some of the historical interactions between the EU and Africa, emphasising the development of human capital. A quick review of some of the positive advantages of skilled migration to Africa, documented in the literature, will be provided.

2. Some History – Ancient and Otherwise

As the very impassioned debates rage today, it is important to remember that the current movements of people have been a staple factor of human existence since the beginning of human history. A quick review may enable us to establish a better perspective on the debates today.

The oldest skeleton of our human ancestors seems to indicate the origin of man in Africa, with the oldest skeletal remains being found in Tanzania, suggesting early origins in Ethiopia and/or Tanzania. Then, began the mother of all migrations with the exodus out of the rift valley from which all human populations outside of Africa are believed to have originated.

From the 1500s onwards, the movement of significant numbers of Europeans, with superior fighting technologies, back into Africa in the eras of conquest, can be seen. Next came the Atlantic slave-trade, which resulted in the migration of millions back out of Africa and into the European dominated New World.

At the close of the era of slavery, we saw the beginnings of the movement of Africans to Europe for educational purposes, returning to Africa with a European education. A much-studied early instance of this is the ex-slave Jacobus Capitein, who was sold into slavery in Elmina around 1735. He was given formal education in the Netherlands, and, because he showed much promise, was enrolled in a four year programme in theology in the University of Leiden. He later returned to Africa and became a Chaplain in Elmina at a time when slavery was still practiced there. Either because of this experience or because of something else, he began to theorise that slavery was consistent with Christianity. He believed in the “the Curse of Ham” – the theory that Africans are descendants of Ham, the son of Noah, whose son Noah cursed to be a slave of his brothers, so could be enslaved.

Fourah Bay College was founded in 1827 and was West Africa’s first European style university (as opposed to older Islamic centres of learning). It was aligned to University of Durham in the UK and was a centre for returned slaves. For a long time, it was the hub of academic and intellectual activity in West Africa, with African literature and newspapers, and the writings and debates there formed the beginnings of the African liberation movements. Many of the leaders of the Fante Confederacy were educated in Fourah Bay or received their inspiration from academic leaders there.

The early parts of the 20th Century saw many Africans travel to Europe and the US, and return to lead the Independence movement against the colonial administrations. Kwame Nkrumah, Jomo Kenyatta and many other African independence leaders began organising while abroad as students. The past couple of decades have seen increased emigration of Africans as the economies of their home countries have collapsed and as war has afflicted many nations. The next section will quickly review the data on recent migrations, with special attention to skilled emigration.

3. The Picture Today from available Data Sources

Conversations on human capital formation in Africa never seem to go beyond the issue of the brain drain. We will begin with this and look at the data, which give us a snapshot of the Africans living abroad. The important recent studies on the brain drain is due to Docquier and Marfouk (2005), Bhargava and Frédéric Docquier (2007), and various co-authors. Discussions on the African brain drain often begin with the tables showing high rates of emigration of the skilled from Africa. It is these figures which stir up passion and lead to almost immediate pleas to halt the brain drain.

Table 1: Emigration Rates of Labour as Percentage of total labour of given skill level (2000)

Countries	High	Medium	Low
Cape Verde	67.46%	37.44%	18.66%
Gambia	63.29%	8.27%	1.92%
Mauritius	56.17%	9.06%	7.52%
Seychelles	55.87%	18.93%	10.94%
Sierra Leone	52.52%	7.92%	0.43%
Ghana	46.86%	2.41%	0.76%
Mozambique	45.13%	6.33%	0.58%
Liberia	44.99%	9.21%	0.54%
Kenya	38.44%	3.91%	0.40%
Uganda	35.56%	3.13%	0.28%
Eritrea	33.98%	7.47%	0.75%
Angola	32.95%	7.75%	1.87%
Somalia	32.65%	9.37%	1.57%
Rwanda	25.99%	3.50%	0.09%
Guinea-Bissau	24.42%	4.95%	1.65%
Congo	22.16%	2.44%	1.63%
Sao Tome and Principe	21.96%	5.68%	4.57%
Comoros	21.19%	3.12%	3.44%
Togo	18.74%	1.67%	0.61%
Malawi	18.72%	2.51%	0.08%
Senegal	17.70%	6.19%	2.07%

Source: Docquier and Marfouk (2005)

Table 1 shows the emigration rates of different skill levels. Low-skilled workers are those with primary education (or with 0 to 8 years of schooling); medium-skilled workers are those with secondary education (9 to 12 years of schooling); high-skilled workers are those with tertiary education (13 years and above). The data show what fraction of working age people (25 years and above) born in a given country and of a particular skill level are residing outside the country. The top 5 or 6 countries have more than half of all tertiary-educated nationals by birth resident abroad. The top 4 countries are all small nations (Cape Verde, Gambia, Mauritius and the Seychelles) are all small nations – and many small nations have high brain drain rates. Sierra Leone has just experience internal conflict. Ghana is a relatively large country with a large skilled brain drain, 46.86%, and will be used often as an illustration of the material to follow. Kenya and Uganda also have relatively large skilled emigration rates, at 38.44% and 35.56% respectively. Nigeria and South Africa are on the lower end, with 10.72% and 7.51%. In comparison, the skilled migration rates of China and India are respectively 3.8% and 4.3%.

There are also data in Table 2 on the skill composition of the emigrants. Some of the larger countries such as Ghana, Kenya and Nigeria have about half of the emigrants being highly skilled. Interestingly, for some of the poorer and smaller countries and some Francophone countries, most of the emigrants are unskilled (for example, Mali, Comoros, Algeria and Morocco with between 81% and 70% unskilled) as we can see from Table 3.

Table 2: Distribution of skill levels among Emigrants in 2000

Countries	High	Medium	Low
Cape Verde	0.1515	0.2936	0.5548
Gambia	0.2037	0.2822	0.5141
Mauritius	0.2886	0.2792	0.4322
Seychelles	0.3707	0.335	0.2943
Sierra Leone	0.5036	0.3172	0.1792
Ghana	0.4407	0.31	0.2493
Mozambique	0.1773	0.2185	0.6042
Liberia	0.5848	0.2845	0.1306
Kenya	0.4483	0.348	0.2037
Uganda	0.4617	0.3033	0.2349
Eritrea	0.4053	0.3351	0.2596
Angola	0.1693	0.2343	0.5964
Somalia	0.2818	0.3169	0.4013
Rwanda	0.4835	0.2798	0.2367
Guinea-Bissau	0.1425	0.1862	0.6713
Congo	0.405	0.2456	0.3494
Sao Tome and Principe	0.1842	0.2102	0.6056
Comoros	0.1344	0.0765	0.7891
Togo	0.3999	0.1682	0.4319
Malawi	0.4318	0.322	0.2462
Senegal	0.1673	0.1494	0.6833

Source: Docquier and Marfouk (2005)

Table 3: Distribution of Skills among the Emigrants (Sorted by top Unskilled)

COUNTRIES WITH MANY UNSKILLED EMIGRANTS IN 2000			
Countries	High	Medium	Low
Mali	0.1092	0.079	0.8118
Comoros	0.1344	0.0765	0.7891
Algeria	0.1407	0.0918	0.7674
Tunisia	0.149	0.1209	0.7301
Morocco	0.1289	0.1646	0.7065
Senegal	0.1673	0.1494	0.6833
Guinea-Bissau	0.1425	0.1862	0.6713
Mauritania	0.2192	0.1464	0.6344
Sao Tome and Principe	0.1842	0.2102	0.6056
Mozambique	0.1773	0.2185	0.6042
Angola	0.1693	0.2343	0.5964
Burkina Faso	0.3008	0.1225	0.5767
Cape Verde	0.1515	0.2936	0.5548

Source: Docquier and Marfouk (2005)

Although the percentages tell a very interesting story, what is probably much more interesting and more important is not the rates of emigration, but the quantities of emigration. In particular, it is very surprising that the numbers are so very small. As we see from Table 4, Ghana, a country of almost 20 million in 2000 and with a high skilled emigration rate of 46.86% has but all of 81,000 tertiary educated in the country and 71,309 abroad. The rates of skilled emigration are high, but the absolute numbers are tiny. My own university, New York University, which is in a state of the US with a population similar to that of Ghana, in 2000 had 40,000 students with half in the undergraduate level and half at the graduate level. One university has half the total number of tertiary educated within the

Ghana and a quarter of all highly skilled Ghanaian workers. The same is true for many of the other high brain drain countries. The big issue with high skilled labour in many sub-Saharan African nations is not the brain drain, but the exceptionally small numbers of highly skilled workers.

Table 4: Numbers of High Skilled Emigrants and Stock in Country

Countries	Emigrants	Residents
Cape Verde	8128	4000
Gambia	3648	2000
Mauritius	23043	18000
Seychelles	2426	2000
Sierra Leone	18010	16000
Ghana	71309	81000
Mozambique	10696	13000
Liberia	20842	25000
Kenya	77516	124000
Uganda	34970	63000
Eritrea	13144	26000
Angola	20449	42000
Somalia	27916	58000
Rwanda	4528	13000
Guinea-Bissau	1525	5000
Congo	14672	52000
Sao Tome and Principe	571	2000
Comoros	1349	5000
Togo	7874	34000
Malawi	5474	24000
Senegal	15729	73000

Source: Docquier and Marfouk (2005)

From many empirical and theoretical economics papers (see Spiegel and Benhabib (2000, 2005), we believe that highly skilled labour is a critical component in the adoption of technologies and, through this mechanism, it is critical in increasing economic growth. The very low numbers of highly skilled labour in many African countries is, therefore, of great concern. Many of the countries with high brain drain rates are those with small numbers of highly skilled to begin with. The countries with large numbers of emigrants tend to be the bigger countries (South Africa and the Arab countries), which also have low emigration rates, as indicated in Table 5.

Table 5: Countries Largest Numbers of High Skilled Emigrants

HIGH SKILLED EMIGRANTS SORTED BY NUMBER OF EMIGRANTS			
Countries	Emig. Rate	Drained in OECD	Local Economy
South Africa	0.0751	168,083	2,071,000
Nigeria	0.1072	149,494	1,245,000
Egypt	0.0455	149,432	3,131,000
Morocco	0.1695	141,168	691,000
Algeria	0.0942	85,537	822,000
Kenya	0.3844	77,516	124,000
Ghana	0.4686	71,309	81,000
Ethiopia	0.1006	51,392	460,000
Tunisia	0.1255	39,350	274,000
Uganda	0.3556	34,970	63,000
Zimbabwe	0.1274	32,676	224,000
Tanzania	0.1236	32,255	229,000

Source: Docquier and Marfouk (2005)

Also of interest are the data from the UK Census (2001) on the percentage of blacks among the emigrants from African countries. The usual story on the brain drain runs along the lines of black Africans trained by their national governments, who go abroad for greener pastures. We see in Table 6 that, for many African countries, there are only small percentages which are black African, suggesting that emigration may have more to do with national politics than economics. This, one would presume, is the case in countries such as South Africa (3% of emigrants are black), Mozambique (9% black), Kenya (11% black) and Tanzania (13% black).

Table 6: Percentage and Numbers of Black African Highly Skilled Emigrants in the UK

Countries	% black	num black	Total
Mauritius	2.00%	569	27,080
South Africa	3.00%	4,389	141,394
Mozambique	9.00%	310	3,352
Kenya	11.00%	13,666	129,632
Namibia	13.00%	160	1,232
Tanzania	13.00%	4,222	32,635
Malawi	15.00%	1,910	12,343
Madagascar	17.00%	132	787
Zambia	24.00%	5,140	21,530
Central African Republic	25.00%	77	310
Uganda	27.00%	14,901	55,212
Swaziland	28.00%	245	862
Mauritania	36.00%	9	25
Zimbabwe	37.00%	18,270	49,524
Lesotho	40.00%	132	328

Source: UK Census (2001)

One group of skilled emigrants that receives a lot of press is the medical profession, and doctors in particular. A similar pattern emerges regarding the emigration of doctors. There are high emigration rates of doctors from many African countries. Table 7 gives the list of the countries with the highest rates of emigration.

Table 7: Emigration of African Doctors in (2004)

Countries	Rate of Emigration	Drained	Local
Cape Verde	0.55	98	80
Sao Tome and Principe	0.45	61	74
Liberia	0.42	56	78
Malawi	0.37	72	124
Zimbabwe	0.37	433	751
South Africa	0.32	15,136	31,718
Ghana	0.32	870	1,860
Somalia	0.26	136	385
Uganda	0.25	402	1,188
Ethiopia	0.24	603	1,961
Zambia	0.22	201	718
Sudan	0.17	1,083	5,307
Angola	0.14	183	1,082
Togo	0.13	42	275
Guinea	0.12	97	744
Cameroon	0.11	163	1,287

Source: Bhargava and Docquier (2007)

Again, we see that there are small countries with high emigration rates (Cape Verde and Sao Tome and Principe), as well as Zimbabwe and South Africa which, given what we saw about the UK Census data in Table 6, suggests that a large percentage of these emigrant doctors are non-white presumably leaving for political reasons as well as economic.

As before, even more startling is the paucity of the total number of doctors being produced. The first 5 countries each have less than 200 doctors in total (drained and local): Cape Verde, Sao Tome and Principe, Liberia, and Malawi. Ghana, again, is one of the large countries with a significant drain of doctors, 32%, but with relatively few doctors, too - less than 3,000 in total. Again, New York University's Medical School has about that number of students and faculty!

It is interesting to note how this translates into patients per doctor. To set the context, in Table 8, note there are around 300-400 patients per doctor in countries such as the US, the UK, and other European nations, and 714 per doctor in Singapore. This is probably an under-estimate since it does not include foreign born doctors. In many African nations, the numbers are much higher with one doctor on average having around 88,000 patients in Malawi through to 11,000 approximately in Ghana. The issue here, of course, is the small number of doctors. Even if all of the drained doctors were to return to their home countries, the patient doctor ratios would still be nowhere near the level of advanced countries. Since the technology used in the advanced countries is presumably better than in the developing countries, the difference in doctor-patient ratios under-estimates the difference in medical care.

Table 8: Patients per native born and resident Doctor in Home Country (2004).

Countries	Current Patient/Doctor
Italy	227
France	303
United States	333
United Kingdom	476
Japan	500
Singapore	714

Source: Bhargava and Docquier (2007)

Table 9: Patients per native born and resident Doctor in Home Country (2004) for some select African Countries (highest 9, some middle ranking, and Lowest 3).

Countries	Current Pat/Doc
Malawi	88,403
Rwanda	53,471
Liberia	43,256
Mozambique	41,028
Chad	39,548
Ethiopia	34,989
Eritrea	33,258
Niger	29,929
Central African Republic	28,537
Angola	12,497
Cameroon	12,500
Ivory Coast	11,112
Ghana	11,112
Guinea	10,630
Senegal	10,524
Kenya	7,576
Algeria	1,000
Seychelles	757
Egypt	472

Source: Bhargava and Docquier (2007)

In passing, we should remark that skilled migrants from Africa are, for the most part, somewhat evenly distributed between America and Europe, with an exception being South Africa, where there is a large percentage going to Asia/Oceania.

4. A Computation of the Costs and Benefits over Time of Educating Citizens

Easterly and Nyarko (2009) computed some of the costs and benefits of education to the individual. On the cost side, there is information available on the costs of educating each student at university level. There are two lotteries of importance in the computation. Upon graduation, the lottery faced by students, in which a fraction are able to drain and go abroad, while the rest stay in the local economy, is modelled. These probabilities are obtained from the emigration data presented in the earlier section. Those in the local economy obtain increased salaries (relative to not getting tertiary education). These can be estimated from local wage data.

Those who drain obtain foreign country wages, estimated from the host country wage and census data. They also send back remittances to their country of origin. This enables us to perform a very simple net present value computation of the costs and benefits.

There is also an incentive effect that many authors have studied. In particular, the possibility of draining and receiving high foreign country wages may be an incentive for many to invest in education. The numbers within the school system will therefore be higher in the presence of brain drain opportunities. The incentive effect could be so high that the numbers left in the source country even after the drain is higher than if there was a smaller level of the drain.

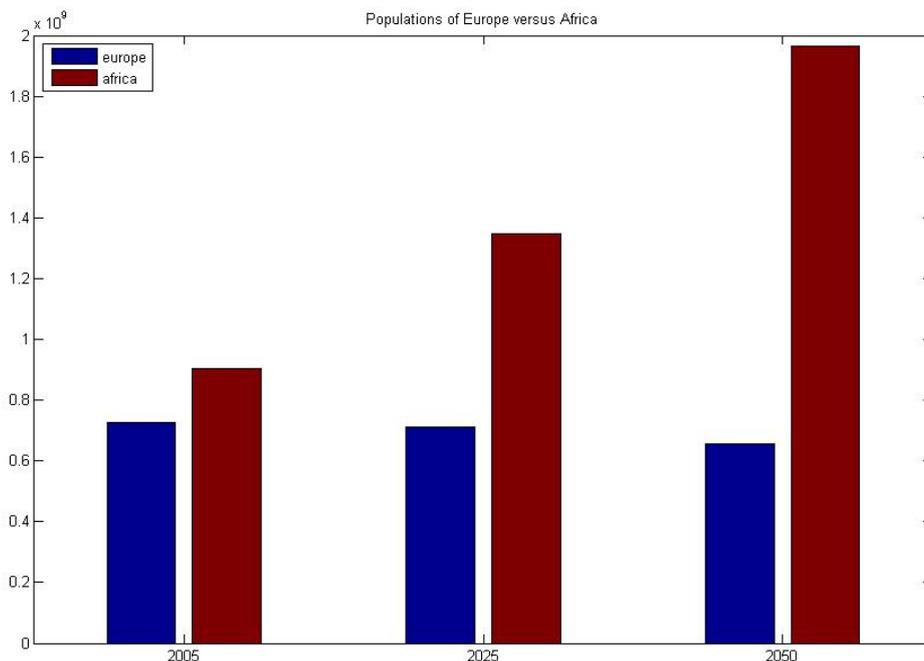
Finally, a fraction of those who leave also return to their home country. They return with higher skills than when they left. Many leave to obtain further degrees. Some return with experience in industry.

It should be remembered that the data on the brain dDrain are snapshots, and do not account for the eventual return to the country of origin. Many who are currently in top positions in Government in African nations have once before been classified as emigrants or the brain drain, according to the protocols used in Table 1.

5. The Background to EU Policies on Migration

Any discussion on migration issues revolves around some population realities. European population is predicted to decline over the next 50 years or so, becoming much older in the process. Africa's population is predicted to increase rapidly over time. In Figure 1, we present the data from UN sources on current (actually 2005) and projected future population levels in Africa and Europe. Europe,² which has a population around 700 million today, is projected to have a slight decline through 2025 and 2050. Africa, on the other hand, has a current population close that of Europe (in 2005 the populations were around 700 million and 900 million for Africa and Europe respectively), but will be significantly larger than that of Europe in 2050 (a little less than 2 billion and 700 million, and 900 million for Africa and Europe respectively). In particular, Europe will be experiencing increasing labour shortages over time, while Africa could end up with large numbers of young unemployed people. The fraction of the European labour force made up of immigrants has been put at 10%.³ The population figures in Figure 1 seem to indicate that there will be pressure to increase this percentage over time, with demand factors within Europe and supply pressures from Africa.

Figure 1: Population of Africa and Europe



Source: UN Population Statistics

² In the UN Population numbers used in the figure, Europe is defined as West of the Ural Mountains.

³ A recent report by the French office of statistics, INSEE, as quoted in:
<http://www.migrationanddevelopment.net/popular-press-news/eu-bids-to-bring-africa-into-immigration-pact>.

In addition to the differences in numbers, the demographic profiles will also be different. Africa currently has, and is projected to continue to have, a relatively young population, while that of Europe is projected to become much older over time. While large numbers Africans will be looking for work, large numbers of Europeans will be in need of services and support during their old age.

Estimates state that there will be a short-fall of 20 million skilled and non-skilled workers by 2030. Various estimates by the European Union predict that the labour shortages will peak around 2050, and there are estimates that, at that time, over one third of the population will be over 65 years of age.

In addition to the question of the shortfall of labour and the need for immigration in the EU, there is also the question of the balance between skilled and unskilled workers in the immigrant pool in Europe. There is quite a bit of concern that the EU has a large number of unskilled labour relative to skilled. There is a perception that it is primarily unskilled labour that goes into Europe. Some data⁴ have indicated that 85% of the global unskilled migrants goes to the EU with 5% going to the US, while 55% of skilled labour goes to US and only 5% goes to the EU.

On the EU side, the debates hover around issues of how to keep out the unskilled labour (with some voices saying that even the skilled are needed) and also how to attract and retain skilled migrants in the country (with some voices saying that even the skilled should be kept out). Those claiming that all migrants should be kept out, often point to the fact that Europe is already currently the most populated region of the world.

The EU, through its Member States, is the largest contributor to foreign aid, which is the mainstay of the national budgets of many African nations. One half of all Official Development Aid comes from the EU. This aid exceeds that of the United States both in terms of aggregate amounts and in terms of percentage of GDP.

Although the Official Development Aid of the EU is important, the earlier sections indicated that EU policy might be equally important regarding human capital development in Africa. In the next section, we will review some of the recent discussions and proposals on EU immigration.

6. The EU Blue Card

6.1 The EU Blue Card Proposals

There is legislation in the process of being passed on the EU Blue Card. At the time of writing, this has not yet been passed into law. Quite a bit of debate has gone around this in the halls of the EU and in national parliaments in the Member States.

The Blue Card scheme is new legislation, which is being proposed to help Europe recruit highly-skilled foreign labour into sectors which are experiencing job losses. There are a number of parts to many versions of the legislation being proposed:

1. The applicant must have a “good” job in the EU and the relevant experience or qualification (university degree). The job must have health insurance benefits, must meet an income threshold (it must be 1.7 times average gross salary in the Member States country and not lower than that in host country);
2. Family re-unification benefits - spouses can also seek a job in the EU. Also, card holders are allowed to leave for their home countries for more than the 6 months allowed on the US Green Cards.

⁴ <http://blog.globalvisas.com/what-is-the-eu-blue-card-immigration-scheme.html>.

3. Community Preference: Preference for jobs should be given to Union citizens (for example, by posting for some time - a month? - before the job can be given to non-citizens).
4. Anti-Brain Drain Provisions: Should not encourage “brain draining” (whatever that means) especially in the health and education fields.
5. The EU Blue Card is valid initially for 3 years with the possibility of two-year renewals. Unlike the US Green Card, the EU Blue Card will not penalise extended stays outside of the EU. This will enable, it is believed, opportunities for brain circulation.
6. The EU Blue Card applicant must not be a threat to public policy, security or health.

Somewhat ambiguous and unresolved in the discussions on the Blue Card is the question of mobility within the EU. It appears, at this time, that the jobs are restricted to one particular country, but, after a certain period, residency is allowed in other countries. Clearly, mobility would be good for Europe, as it would presumably allow skills to move to their most productive uses, and further enable the Blue Card to compete with the US Green Card, which can be used in all the states of the US.

Currently, it does not appear that the intent of the law is to enable the Blue Card to be a gateway to citizenship. It appears as if the intent is to maintain the Blue Card as a temporary work permit, although this does not seem to be clear in the language.

It is of interest to note that, on the African side, there are usually constraints and ambiguities in the process for foreigners to attain citizenship. Indeed, many have remarked that it is actually harder for a European to get citizenship in many African countries than *vice versa*.

6.2 EU and US competition: The Blues versus the Greens

On the European side, it is clear that the reason for the Blue Card proposals is to attract highly-skilled workers to aid the European economy. The EU president José Manuel Barroso said,⁵ in support of the Blue Card:

“We are not good enough at attracting highly-skilled workers nor are we young enough or numerous enough to keep the wheels of our societies and economies turning on our own.”

In another quote, he is also said to have mentioned that there will be an estimated shortfall of 20 million workers (skilled and unskilled) by 2030.

The EU clearly seeks to compete for the best talent globally. According to German MEP Ewa Klampert, the percentage of highly skilled workers from third countries (*i.e.*, non-EU nations) is 1.7% of workforce, while it is 9.9% in Australia, 7.3% in Canada, 3.2% in the US and 5.3% in Switzerland. This new found vigour in the EU has begun to raise alarm bells in the US, where, because of popular responses to the current financial crises, there have been attempts to limit the number of skilled foreigners allowed into the country. Restrictions on the US skilled workers visa, the H-1B, have been proposed and the introduction of increased fees from \$1,500 to \$3,500 were discussed (the Grassley/Sanders bill). The EU's Blue Card is clearly seeking to compete with the US's green card (or, more accurately, the H-1B which usually precedes it). American business leaders have raised the alarm bells that Europe is now beginning to compete more vigorously for global talent, so the US should make the H1-B visa application processes much more streamlined. Craig Barrett, the Chairman of Intel, has been a strident voice in the US on this, with opinion pieces in many major US newspapers.

⁵ As quoted by the EU Observer (<http://www.europeanunionbluecard.com/?p=10>).

6.3 Opportunities for Africa from the EU Blue Card

Given our picture of the state of skill levels, the brain drain and brain circulation in Africa, what should the impact of the Blue Card on Africa be, and what should the position of African nations be on this? What will be the marginal impact of the EU Blue Card?

It is unclear whether there will be much of a marginal impact on Africa. This is for several reasons. First, many African emigrants have first degrees (BA) when leaving Africa. These degree holders are not the people which the Blue Cards are targeting. The typical route of emigration of skilled workers in Africa involves Africans getting schooling abroad. The main channel for an impact on Africans will probably have to be upon completion of post-graduate degrees. The net effort of this may be small, as many are already able to find ways of getting jobs within Europe upon completion of study within EU. The additional impact is unclear.

How well will Sub-Saharan Africans compete with people from other nationalities? The stereotype of the person obtaining the Green Card is the highly-skilled engineer from India who has completed schooling from one of the famed engineering schools, the IITs, after being selected from a competition involving millions of students. Africa has much fewer of such engineering schools and certainly does not have continent-wide competitive institutions. In addition, as noted earlier, there are relatively small numbers of students being produced in the tertiary education and post-graduate systems who would be available for the Blue Cards in Sub-Saharan Africa. (This is one area in which most of Sub-Saharan Africa, the focus of this work, may differ from the Northern African nations, with more extensive higher education systems, and from South Africa – which has very good higher educational institutions but which have traditionally been restricted to whites.)

The Anti-Brain Drain clauses in the proposed Brain Drain legislation are probably the most interesting, and, at the same time, potentially the most harmful to Sub-Saharan African nations. One area that has been targeted for the anti-Brain Drain clauses is the area of health and education. The presumption is that this is targeting doctors, nurses and teachers. As we have noted, one strategy for African countries to increase the skills of their citizens is to increase the brain circulation – this involves increasing both the outflow and the inflow.

One can imagine the anti-Brain Drain clauses with accompanying resources for enhancing the supply of skills. This could be, for example, via resources for increased technical schooling in Africa for skills production in combination with a brain drain for some of the products of these schools and a return of another fraction of those who initially drained. If legislation can help with the production, draining and return of skilled Africans, then this could be extremely beneficial.

If, on the other hand, attempts are made only to restrict the brain drain, without making any effort to increase the supply of skills, the result could be, paradoxically, a worsening of the aggregate numbers of trained health and education workers in the source Africa nations.

7. Migration Contracts

The Blue Card process is designed to work, for the most part, at individual level: the individual non-EU citizens need to show proof of a job and then will be given an individual Blue Card. The source country governments are not envisaged as having a direct role in this process.

Migration contracts typically involve more than one individual and are agreements made with source country governments. These contracts enable a pre-determined number of nationals from a given source nation to emigrate to a richer foreign country. These contracts are typically negotiated bilaterally between countries.

A number of such contracts do exist currently and have also existed in the past. I am aware of contracts between Canada and Mauritius and also between Mauritius and some individual European nations.

The typical contract involves the source country agreeing to screen some of its citizens to send off to particular programmes in the host country. Typically, the receiving country, in addition to receiving the source country's citizens, also transfers some income to the source country. For example, in an initiative between the Governments of Mauritius and Canada, brokered by the International Organisation for Migration, workers from Mauritius have been recruited to work in agricultural factories in Canada.⁶ These were for renewable 3 year contracts.

These contracts are not that dissimilar from what actually goes on in soccer today, where the home country or home team is paid some money when an African soccer player leaves to play for Chelsea, Arsenal or some other European team.

Migration contracts with the EU could provide the resources for major increases in the production of skilled people in the country. Contracts for the export of doctors could be combined with massive increases in the output of doctors within the country, so that the process results in higher numbers of doctors who remain within the country.

Note that this involves the source country using education as an explicit tool for the brain drain of some of its citizens. What we argue here is that this can be calibrated appropriately so that it ends up being a net benefit to the source, brain-draining, country.

Clearly, some may cringe at this thought when expressed in this manner. Does this not sound like the exportation of people, and feel like something akin to the slave trade? Of course, the answer is that all of this is done with free-will, and presumably those who decide to leave their country do so because they believe they will be better off by leaving.

8. Exotic Financial Schemes

An immediate logical extension of the idea of migration contracts is a scheme which uses the brain drain and circulation to run an educational financing scheme in which the loans of graduated students are used to pay for the schooling of the current crop of students. This particular policy is being fleshed out in a companion paper under preparation for the National Bureau of Economic Research Africa Project. To the best of my knowledge, such plans are not under consideration by the European Union, although they should be.

As we remarked earlier, the EU is a big contributor to the ODA financial assistance received by African governments. It is possible that financing for education could be a cost effective use of EU funds, while at the same time aiding the EU itself in its looming skills and labour shortages.

9. Other Ideas

Some have argued for the "Bhagwati" Tax, a tax on all skilled people who have drained from poor nations and are working in affluent countries. It is called the Bhagwati tax in honour of Jagdish Bhagwati, who wrote extensively about this some 30 years ago. Variants of the proposal involve the host affluent country collecting taxes from the drained citizen of the source country and repatriating that back to the home country.

This proposal is today probably not implementable as many of the drained nationals are either students or have citizenship in the host country. It is also unclear whether this will result in added

⁶ <http://www.netnewspublisher.com/mauritius-workers-leave-for-canada-under-special-migration-program/>.

transfers to the source countries, or whether it would merely replace some part of the existing foreign aid flows. For Sub-Saharan Africa, the numbers are probably too small to make this that important.

Another idea that has been floated is to give immigrants Sabbatical leaves every several years so that they can return to their home countries. The International Organisation for Migration has a number of such plans, as has the World Bank and a few other international institutions. A large-scale programme of this sort could have a major impact, similar to the impact of the Fulbright awards in Academia.

10. What about the Unskilled?

Most of the European focus on immigration is on skilled migration. With regard to unskilled migrants, the focus has been on keeping them out. Frontex is the European Union agency given the task, in co-ordination with national government Border control agencies, of protecting the EU borders against illegal migrants.

I have been in conferences where members of the audience have shouted at me that “Europe is full”. In a certain sense, this is correct. The EU region contains some of the most densely populated places on Earth. Furthermore, Europe is absorbing around 2 million migrants a year, mainly unskilled workers, which is a larger percentage than the US and most parts of the world.⁷

For African nations, the unskilled leaving Africa relieves some of the employment pressures locally, and results in remittances which are an important source of income for relatives who remain in the home countries. Indeed, there are some studies which seem to suggest that the unskilled remit more than the skilled. (See Faini (2007)).

Further, unskilled migrants also give African governments some leverage in asking for economic assistance from European countries. There has been the occasional threat by an African leader that, if European country X does not do Y (say agree to a trade policy or provide more loans), it will flood country X with its unskilled migrants, or, at least, be less vigorous in stemming the outflow of illegal migrants from its borders.

11. Conclusion

In this paper we have discussed some of the EU policies toward migration and their impact on human capital formation in Sub-Saharan Africa. We have highlighted the fact that one principle constraint in human capital formation in Africa is the paucity of the supply, and not necessary the brain drain out of the small stock of skilled labour.

Indeed, it has been pointed out that the possibility of a drain may itself provide an incentive for the acquisition of skills, which may more than offset the drain, and result, counter-intuitively, in higher remaining stocks of skilled labour in the source or sending nation.

We have not addressed the political issues related to the question of migration, which is intense on each side. On the European side, there are voices saying that jobs should be reserved for locals, and training should be supplied for the young to fill the skills gap. There have also been calls to avoid bringing into Europe people from different cultural backgrounds. The extreme right-wing in many European countries get most of their support from such demands.

It should also be mentioned that there are both political and political economy issues surrounding the debates on the brain drain in Africa. Many African governments are worried about the political leanings of their migrants abroad – often more radical, sometimes stridently and boldly asking for

⁷ Brady (2008).

democracy at home. In many cases, there has been resistance to re-integrating returned migrants, or allowing those outside the country to vote.

The EU is a major aid donor to Sub-Saharan Africa. This is, evidently, a sign of caring by the EU for African nations and, presumably, African nationals. One part of the debate that is often left out is that, by allowing Africans to migrate to Europe, that group of Africans usually see immediate improvements in their economic well-being. In addition to these gains, the source country also gains as remittances are sent back home. Furthermore, the incentive effect may cause investment in human capital formation in the home country, which could result in higher levels of human capital in the home country and higher economic development.

One of the messages of this paper is that migration and policies around migration should be factored into the general discussions on EU economics assistance to Sub-Saharan Africa.

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