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# **EU Policies and African Human Capital Development**

Yaw Nyarko





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Yaw Nyarko\*,\*\*

New York University

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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 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 Contracts, 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.

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\*\* Professor of Economics, New York University, Department of Economics, 19 West 4th Street, NYC NY 10012. (email) yaw.nyarko@nyu.edu

## 1. Introduction

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 multinational settings 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 get 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 EU, both skilled and unskilled. 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 labor. Due to local political pressures within the EU, there is usually a desire to restrict the immigration of unskilled laborers. 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 labor, 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 labor. On the European side there is the question of the need for skilled labor to enter into Europe to help in economic growth and 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 pick up and leave for Europe. It is typically the claimed loss of health workers, Doctors and Nurses in particular, which seem 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 NGO's and

some African governments, which state that there should not be any "brain drain" consequences, with health and education workers often explicitly mentioned.

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 this current author, have argued that there are channels through which the emigration of skilled labor 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 show 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 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 decent number who return after draining. They often return with high human capital, having undertaken post-graduate studies and obtaining 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, securitized 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, 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, 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 was in international development. US Bailout monies have many explicit and implicit restrictions requiring that recipients of funds do not use these to hire foreign workers.

This paper will review some of the historical interactions between the EU and Africa, emphasizing 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 of human existence since the beginning of human history. A quick review may enable us to get a better perspective on the debates today.

The oldest Skeleton of our human ancestors seem to indicate the origin of man in Africa, with the oldest skeletal remains 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 1500's and onwards saw the movement of significant numbers of Europeans, with superior fighting technologies, back into Africa in the eras of conquest. 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 with education back to Africa. 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 program in the University of Leiden in theology. He later returned to Africa and became a Chaplain in Elmina at a time when slavery was still practiced there. Either because of that experience or something else, he began to theorize 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 who 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 centers of learning). It was aligned to University of Durham in the UK and was a center 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 20<sup>th</sup> 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 organizing as students 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 seems 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 coauthors. 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 the passion and lead to almost immediate pleas to halt the brain drain.

Table 1: Emigration Rates of Labor as Percentage of total labor of given skill level.

RATES OF EMIGRATION OF DIFFERENT SKILL LEVELS (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%
ocquier and Marfouk (2005)			

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 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 like 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 (e.g., Mali, Comoros, Algeria and Morocco with between 81% and 70% unskilled) as we can see from Table 3.

Table 2: Distribution of Skills among the Emigrants.

# 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 has 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 labor 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** 

#### HIGH SKILLED EMIGRANTS AND STOCK IN COUNTRY

COUNTRIES	<b>EMIGRANTS</b>	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 labor 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 labor 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

	EMIG.	DRAINED IN	LOCAL
COUNTRIES	RATE	OECD	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 who are Black African, suggesting that the emigration may have more to do with national politics than economics. This, one would presume, is the case in countries like 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 High Skilled Emigrants in the UK

			NUM	
COUNTRIES	% BLACK		BLACK	TOTAL
Mauritius		2.00%	569	27080
South Africa		3.00%	4389	141394
Mozambique		9.00%	310	3352
Kenya		11.00%	13666	129632
Namibia		13.00%	160	1232
Tanzania		13.00%	4222	32635
Malawi		15.00%	1910	12343
Madagascar		17.00%	132	787
Zambia		24.00%	5140	21530
Central African Republic		25.00%	77	310
Uganda		27.00%	14901	55212
Swaziland		28.00%	245	862
Mauritania		36.00%	9	25
Zimbabwe		37.00%	18270	49524
Lesotho		40.00%	132	328

Source: UK Census (2001)

One group of skilled emigrants that receives a lot of press is 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)** 

	Rate of		
COUNTRIES	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 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 presumable 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 significant drain of doctors, 32%, but with relatively few doctors too - less than 3000 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 like the US, UK, and other European nations, and 714 per doctor in Singapore. This is probably an underestimate 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 he drained doctors were to return to their home country, the patient doctor ratios will 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 ratio's underestimates the difference in medical care.

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

Current Patient/Doctor
227
303
333
476
500
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)

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 Costs and Benefits over Time of Educating Citizens

In Easterly and Nyarko (2009) computed some of the costs and benefits to the individual of education. On the cost side, there is information available on the costs of educating each student at the university level. There are two lotteries of importance in the computation. Upon graduation, there is modeled a lottery faced by students where a fraction are able to drain and go abroad, while the rest stay in the local economy. 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 the home country. They return with higher skills than when they left. Many leave to obtain further degrees. Some return with experience in some industries.

It should be remembered that the data on the Brain Drain are snapshots, and do not account for eventual return to the country of origin. Many who are currently in African nations in top positions in Government 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. Europe¹ 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 (2005 populations are around 700 million and 900 million respectively for Africa and Europe), but will be significantly larger than that of Europe in 2050 (a little less than 2 billion and 700 million and 900 million respectively for Africa and Europe). In particular, Europe will be experiencing increasing labor shortages over time, while Africa could end up with large numbers of young unemployed people. The fraction of the European labor force made up of immigrants has been put at 10%². The population figures in Figure 1 seem to indicate that there will be pressures to increase that percentage over time, with demand factors within Europe and supply pressures from Africa.

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<sup>&</sup>lt;sup>1</sup> In the UN Population numbers used in the figure, Europe is defined as West of the Ural Mountains.

<sup>&</sup>lt;sup>2</sup> 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).

Figure 1: Population of Africa and Europe

Source: UN Population Statistics

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 greyer 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 predicts that the labor 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 labor and the need for immigration in the EU, there is also the question of the balance between skilled and unskilled in the immigrant pool in Europe. There is quite a bit of concern that the EU has a large number of unskilled labor relative to skilled. There is a perception that it is primarily unskilled labor that goes into Europe. Some data<sup>3</sup> have indicated that 85% of the global unskilled migrants goes to the EU with 5% going to the US, whereas 55% of skilled labor goes to US and only 5% goes to the EU.

<sup>3</sup> http://blog.globalvisas.com/what-is-the-eu-blue-card-immigration-scheme.html

On the EU side, the debates hover around issues of how to keep out the unskilled labor (with some voices saying that even the skilled are needed) and also how to attract and retain skilled migrants into 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, with its member states are the largest contributors 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 may 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.

### The EU Blue Card

#### 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 EU national parliaments.

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

- a. 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 (must be 1.7 times average gross salary in member country and not lower than that in host country);
- b. Family reunification 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.
- c. Community Preference: Preference for jobs should be given to Union citizens (e.g., by posting for some time a month? before the job can be given to non-citizens).
- d. Anti-Brain Drain Provisions: Should not encourage "brain draining" (whatever that means) especially in the health and education fields.
- e. The EU Blue Card is valid initially for 3 years with the possibility of 2 year renewals. Unlike the US green card, the EU Blue card will not penalize extended stays outside of the EU. This will enable, it is believed, opportunities for Brain Circulation.
- f. 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. Of course, 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 country than the vice versa.

### 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 in the European economy. The EU president Jose Manuel Barroso said<sup>4</sup> 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 Klampt 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 vigor in the EU has began 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 increased fees introduced to \$3500 from \$1500 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.

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<sup>&</sup>lt;sup>4</sup> As quoted by the EU Oberver (http://www.europeanunionbluecard.com/?p=10)

#### Opportunities for Africa of the EU Blue Card

Given our picture of the state of skill levels, the brain drain and brain circulation in Africa, what should be the impact of the Blue Card on Africa, 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 degrees are not those 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. For many already are 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 getting the Green card is the highly skilled engineer from India who has completed schooling from one of the famed engineering schools, the IIT's, after being selected from a competition involving millions of students. Africa has much fewer of such engineering schools and certainly does not have the 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 where most of Sub-Saharan Africa, the focus of this work, may differ from the Northern African nations, with more extensive higher education systems, and South Africa – which has very good higher educational institutions but which have traditionally be 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. An area that has been targeted for the anti Brain Drain clauses is in the area of Health and Education. The presumption is that this is targeting doctors, nurses and teachers. As we have noted, a strategy for African countries to increase the skills of its 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 on net this could be extremely beneficial.

If, on the other hand, attempts are made at restricting the Brain drain only, without efforts 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.

## **Migration Contracts**

The Blue Card process is designed to work, for the most part, on an 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 to have 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 predetermined number of nationals from a given source nation to emigrate to a richer foreign country. These are typically negotiated bilaterally between countries.

A number of such contracts do exist currently and 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 programs 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 Organization for Migration, workers from Mauritius have been recruited to work in agricultural factories in Canada. 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 on net the process results in higher numbers of doctors that 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, braindraining, country.

<sup>&</sup>lt;sup>5</sup> http://www.netnewspublisher.com/mauritius-workers-leave-for-canada-under-special-migration-program/

Of course some may cringe at this thought when put in this manner. Does this not sound like the export 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 the country do so because they believe they will be better off leaving.

#### **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 where 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, but should be.

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

### 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 honor 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 either are students or have citizenship in the host country. It is also unclear whether this will result in added 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 Organization for Migration has a number of such plans, as has the World Bank and a few other international institutions. A large scale program of this sort could have a major impact, similar to the impact of the Fulbright awards in Academia.

## How about the Unskilled?

Most of the European focus on immigration is on skilled migration. As regards unskilled migrants, the focus has been on keeping them out. Frontex is the European

Union agency given the task, in coordination 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 screamed at me that "Europe if full." In some sense this is correct. The EU region is contains some of the most densely populated places on Earth. Further Europe is absorbing around 2 million migrants a year, mostly unskilled, which is a larger percentage than US and most parts of the world.<sup>6</sup>

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) the country will flood that country X with its unskilled, or at least be less vigorous in stemming the outflow of illegal migrants from its borders.

## 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 a 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 labor.

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 labor 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

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<sup>&</sup>lt;sup>6</sup> Brady (2008).

about the political leanings of their migrants abroad – often more radical, sometimes stridently and boldly asking for democracy at home. There has been in many cases resistance to reintegrating 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. Further, the incentive effect may cause investments 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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