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Reversing Ethiopia's Intellectual Capital Flight

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ABSTRACT

Recently, the Ethiopian Government drafted a five year plan (2010 to 2015) to achieve the country's economic growth. When Ethiopia's Growth and Transformation plan was analyzed in light of the new growth theory and traced historically in terms of the push and pull factors that contributed to the flight of skilled Ethiopians to more advanced countries, it was found that over the years Ethiopia has funded the education of its nationals only to see them contributing to the growth of developed countries. Being stripped of skilled human capital, leaving it ill prepared to face globalization and survive in the new global economic order, it was concluded that Ethiopia will be unable to achieve its economic growth and transformation plan by 2015. Given the outcome of the analysis, it was proposed that to ensure a long-term sustainable macroeconomic growth pattern, the Ethiopian Government must establish a well-developed infrastructure base and have a reserve of highly talented human capital, in order to grow in global knowledge. In addition, to innovate effectively, Ethiopia needs to form links with well-known global universities, international consultants, and other friendly overseas organizations. If these types of friendly environmental factors are integrated systematically and harmoniously, with pertinent human rights policies, there is no doubt that Ethiopia can entice the Ethiopian Diaspora to return to their motherland. The ability to harness the intellectual capital of the returnees with their contacts from the outside world would bring about very competitive ventures. Ethiopia therefore would achieve its Medium Growth and Transformation plan but also in the long run endure sustainable development.

Keywords*:* human capital flights, push and pull factor of brain drain, brain gain, New Growth Theory, environmentally sustainable development, diaspora, intellectual capital of returnees, dual citizenship

1.INTRODUCTION

It is claimed by the Ethiopian Government that it has drafted a five year program (2010/11 to 2014/15), a medium term strategic framework in consultation with its citizens, private sector, civil society, etc., to achieve the country's growth and transformation plan (GTP). To accomplish the envisaged Growth and Transformation Plan, Ethiopian policy makers are determined to maintain at least an average real GDP growth rate of 11% to meet the Millennium Development Goals (MDGs), expand and ensure the qualities of education and health services, to achieve the MDGs in the social sectors, and to establish favorable conditions for sustainable state-building through the creation of a stable, democratic, and developmental state (Ministry of Finance and Economic Development, September 2010).

If we analyze Ethiopia's Growth and Transformation Plan in light of the new growth model, or endogenous growth, or innovation economics theory, the driving force behind Ethiopia's anticipated economic growth seems to be based on the improvement in knowledge, technology, entrepreneurship, and innovation (see, Paul Romer, 1994, and Robert Lucas, 1988). Using the endogenous growth model, Hugue and Kim (1995) also argue that the emigration of people with high levels of human capital reduces the growth rate of effective human capital that remains in the country and generates a reduction of the per capita growth in the source country (Hague and Kim, 1995). In addition, Grandy states that the new growth theory "places technological change and knowledge at the center of explanations for why high-income countries continue to grow (June 1999)." Stated in simple terms, "without enough trained agronomists, biologists, engineers, scientists, doctors, nurses, and information and communication technology professionals, it is impossible for the firms and farms to use technology to upgrade their products and efficiency – and that makes it difficult for them to face foreign competitors" (University World News, 2007). In addition to the new growth theory, government policy plays an important role in supporting the accumulation of knowledge that contributes to high standards of living. Economists, now more than ever, seem to be convinced that effective government policies contribute substantially to the economic growth of a nation (Grandy, June 1999).

Therefore, to ensure a long-term sustainable macroeconomic growth pattern, the Ethiopian Government needs to establish a well-developed infrastructure base and have a reserve of highly talented human capital, so vital for growth in global knowledge. In addition, to be involved in an effective and innovative system, Ethiopia needs to form links with well known global universities, international consultants, and other friendly overseas organizations. If these types of friendly environmental factors are integrated systematically and harmoniously, with pertinent human rights policies, there is no doubt that Ethiopia can entice the Ethiopian Diaspora to return to their motherland. The ability to harness the intellectual capital of the returnees with their contacts from the outside world would bring about very competitive ventures.

The acute lack of intellectual capital is a core problem not only in Ethiopia but also in other parts of Africa. As stated by Idehen (2010), the United Nations has reported that the failure of the postcolonial state in Africa in the 1970s and 1980s is due to the exodus of highly skilled Africans as the result of low morale, lack of academic freedom, and collapse of tertiary education, as well as the rise of authoritarian regimes, and hardship and paralysis ushered in by Structural Adjustment Programs (SAP). For example, the United Nations Economic Commissions for Africa estimated that between 1960 and 1990, an estimated 67,000 highly qualified Africans left the continent for the West. Between 1985 and 1990, Africa has been losing an average of 20,000 skilled human resources annually. Similarly, the World Bank reported that some 70,000 highly qualified African professionals, experts in their fields, scholars, and managers with internationally marketable skills leave the continent every year (World Bank, 2002). For example, ". . . the continuous outflow of skilled personnel from Africa has widened the gap in science and technology between Africa and other continents. Africa's share of global scientific output has fallen from 0.5 in the mid-1980s to 0.3 in the mid-1990s" (Woldetensae, 2007).

To offset the serious skills shortage created by lost human capital, Atanga, et al. estimate that African countries have been recruiting about 100,000 skilled non-African expatriates at an exorbitant cost, estimated at US $4 billion annually (2006). What is disturbing is, "… the outflow of the best and the brightest qualified personnel makes it impossible for Africa to train either enough or enough qualified persons to the high standards desired, nor is it able to do so in numbers sufficient to offset and replace those who migrated from the continent" (Mohamoud, 2005). Put in simple terms, the flight of intellectual capital from Africa has crippled African economies and imposed huge strains on the African continent. Although data are incomplete and not wholly reliable, if the net potential benefit (i.e., benefits minus costs) is computed by subtracting productivity of labor supply acquired by the receiving countries from remittance benefits sent to the source countries, the problem of the 'brain drain' has affected Africa more severely than any other region. As Mohamoud narrates it, the problem is now a matter of especially great concern "…because Africa is losing the research and innovative capacity needed to participate in the development and exploitation of global knowledge –knowledge required to find solutions to the eradication of hunger and abject poverty and degradation of the natural environment" (2005). Similarly, as succinctly narrated by Sachs, Africa now actually lacks the capacity to design good policies and deliver services in all sectors and at all levels. Among other factors, to be competitive in the globalization era, Africa will need far more scientists, engineers, accountants, health professionals , managers, teachers, economists and agricultural instructors than are currently available on the continent (January 17, 2005).

It is reasonable to argue that African countries are funding the education of their nationals only to see them end up contributing to the growth of developed countries with little or no return on their investment. As stated in one of the editions of African Journal, "…African universities are actually training one third of their graduates for export to the developed nations. We are operating one third of African universities to satisfy the manpower needs of Great Britain and the United States. The African education budget is nothing but a supplement to the American education budget. In essence, Africa is giving developmental assistance to the wealthier western nations which make the rich nations richer and the poor nations poorer" (Emeagwal, 2010). When we look at the impact of human capital at a country level, between 1980 and 1991, Ethiopia alone lost about 74.6% of its human intellectual capital. Currently, Ethiopia ranks first in the continent in terms of the rate of loss of human capital, followed by Nigeria and Ghana.

To galvanize the intellectual capital of the African Diaspora, in recent years a number of African countries have either changed their rules to allow dual citizenship or are considering such changes. Among those countries that have changed the rules in the last 15 years are Angola, Burundi, Republic of Congo, Djibouti, Gabon, Gambia, Ghana, Kenya, Mozambique, Rwanda, Sao Tome, and Principe, Sierra Leone, Sudan, and Uganda. Others, including Egypt, Eritrea, and South Africa, allow dual citizenship but only with official permission of the government. Still other countries like Tanzania and Liberia introduced a Citizenship Retention Act. For example, December 14, 2010 the Liberian President, Ellen J. Sirleaf introduced to the Liberian parliament a proposal that Liberians who had left during the civil war and had become naturalized as citizens in other countries should be allowed to reclaim their Liberian nationality (Manby, 2010, p. 58).

Ethiopia has also created an intermediate status for over 2 million of the Ethiopian Diaspora who have settled abroad. In 2002, according to a government proclamation, No. 270/2002, foreign nationals of Ethiopian origin were issued special identity cards, called Ethiopian Origin Identity Cards. Though the Ethiopian diaspora may not vote or be elected to any office at any level of government, or to be employed on a regular basis in the armed forces or diplomatic corps, holders of such cards do enjoy rights and privileges that other foreigners do not, including visa-free-entry, residence, employment, the right to own immovable property in Ethiopia, and the right to access public services (Manby, 2010, p. 76).

With the unleashed forces of globalization, the problems of brain drain and capacity building have become pertinent to the ongoing discourse on development among conscientious Ethiopians. Ethiopia at this moment in time is in dire need of massive capacity building projects and has planned to achieve the medium term Growth and Transformation Plan by 2015. If the assets of the Ethiopian Diaspora are purposefully tapped, there is no doubt that this would enable Ethiopia to accomplish its growth and transformation goals.

The focus of this paper is to trace briefly the push and pull factors that contribute to the brain drain of skilled Ethiopians who move to more advanced countries. In addition, the paper examines the policy options available to the Ethiopian government and to host countries for ways to restrain and manage the brain drain. By drawing on some policy initiatives undertaken elsewhere, options include reversing the brain drain so that highly skilled personnel can return to their homelands, and/or establishing some kind of brain circulation between those of the diaspora in technologically advanced countries where they reside and the less developed countries where they were born (Mohamud, 2005).

II. THE PUSHAND PULL FACTORS OF THE MIGRATION OF HIGHLY SKILLED ETHIOPIANS

The "brain-drain" term was coined to describe the outflow of scientists and engineers to the United States and Canada that took place in the 50s and 60s (see Grozard and Llull, November 2004). Before the 1960s, the brain drain from developing countries in the South to industrial countries in the North "…involved mainly manual workers and poorly qualified service personnel …the migration of professional and academically qualified staff, by contrast, occurred primarily between industrial countries and reached its peak (immediately after) the two world wars…when a large number of well trained workers and academic and professional specialists emigrated to North America from the economically weak countries of Europe" (Korner, 1996). Currently, the impact of the brain drain on the developing economies has been assessed by the divergent and convergent schools of thought. The divergent and dependency school of thought argues that brain drain from the developing countries to the developed countries drains the sending countries of their best and most talented human capital and is regarded as the most important cause of underachievement in the developing countries.

On the other hand, looking at "brain drain" from the functionalist perspective, adherents of the convergence school argue that remittances from the receiving countries promote development by improving income distribution and quality of life. The value of migrant remittances can significantly exceed that of national export earnings. Expanding this perspective, the "brain gain" hypothesis argues that the brain drain is not a dead end that intensifies economic and social crises of the sending countries. Instead, the brain gain hypothesis deduces that through a remigration of elites the human capital stock increases and contribute to the potential growth of the developing country" (Rena, 2007). Furthermore, the brain gain hypothesis assumes that "returned migrants will probably invest (i.e., make better investments than foreigners) their capital with advanced economic know-how that they gained in the industrialized country"(Hunger, January 2002).

Placing the brain drain argument within a very sound theoretical framework, Zimmerman (1996), analyses the migration of skilled professionals from developing to developed countries and concludes that it is a result of internal home 'push' factors that dislodges skilled personnel from their home countries, or 'pull' factors that attract the highly skilled to more advanced countries. Despite the fact that globalization is leading to further marginalization of developing countries and to a deepening of inequality, in spite of global interdependence of production, consumption, knowledge creation and sharing, Zimmerman implicitly assumes that by default or design, the new industrialized and developed countries have become magnets for the migration of highly skilled workers from the developing countries.

2.1. The Push Factors

The push reasons for emigration are: adverse domestic conditions such as the inability to advance professionally, the lack of educational opportunities to undertake more research and training, lower living standards, inadequate coordination between education and the labor market, internal political instability, and uncertainty about the future. For example, of those 20,000 Ethiopians who left the country from 1941-74 for higher education and diplomatic missions, Levine (1965) indicates only 63 Ethiopians were granted asylum in the United States. A vast majority returned, not because the economic prospects in Ethiopia were so attractive, but because a number of the returnees felt that they had an obligation to serve their country and at the same time politicize high school and college students, labor, and members of the military to stand against the ruling class. In fact, it was the student, labor, and military demonstrations that aggravated the conflict that eventually brought the collapse of the Haile Selassie regime in Ethiopia in 1974.

However, the greatest push factor of migration in the history of Ethiopia arose after the council of soldiers known as the Derg seized power in 1974 and proclaimed socialist order in Ethiopia. For example, during the Carter administration, "Volunteer Departure status" was accorded to a number of Ethiopians in the United States. In 1977-82, the Derg imposed the Red Terror to persecute and eliminate those opposed to the Derg rule. During the Ogaden war of 1978, and the establishment the "Villagization Program" in 1985, about 12 million peasants were relocated and collectivized. Then there was the famine of 1984-85. All of these events contributed to the mass exodus of Ethiopian refugees to neighboring countries.

The number of Ethiopians who emigrated to the periphery such as the Sudan, Djibouti, Somalia, and Kenya were urged to settle in the United States, Canada, Australia, New Zealand, United Kingdom, Sweden, Federal Republic of Germany, Denmark, Holland, Netherlands, Israel, Switzerland, Greece, Italy, and France via Sudan or Kenya, etc., either because of the family reunification policy in the West, or they were given refugee status to establish permanence in the European and Western countries. Facing a "massive flight of people from Ethiopia, the Mengistu regime outlawed departure from Ethiopia without government approval." Anyone who fled was labeled a traitor "against the country and the people, and could receive a punishment of five to 25 years in prison or in extreme cases, life imprisonment or execution" (Terrazas, 2007).

2.2. The Pull Factors

The pull reasons for migration from less developed countries to advanced countries are generally related to self-selection for those seeking better personal and professional opportunities in the host country, international wage differentials, differences in the quality of life, educational opportunities for children, interaction with other professionals, and political stability (see for example, Dzvimbo, 2003). According to the factor price equalization theory (FPE) that originated out of the Heckscher-Ohlin (H-O) model, when the prices of the output of goods are equalized between countries as they move to free trade, then the prices of the factors (capital and labor) will also be equalized between countries (Suranovic, 2006). Therefore, using the factor price equalization theory, Solow (1956) developed the income convergence model or the inequality-decreasing effects across economies in a perfectly competitive market. That is, once free trade is allowed to set the prices of factors, capital and labor are likely to be relatively equal between countries that follow free competition. The brain drain rates are well above 40 percent, particularly for Sub-Saharan African countries, and Central American countries (Marhiori et al, June 2009). The rationalization given by economists for the migration of highly skilled workers from the developing countries to the developed countries is that in an integrated international labor market migration will eventually equalize oversupply (the brain overflow) and demand in different locations and that both economies benefit (Korner, 1996). It is generally assumed that "emigration serves as a vent for surplus labor, alleviating the pressure to remove the structural rigidities which exist in many Third World countries and causes labor market inflexibility (Korner, 1996).

At the same time, many industrialized countries introduced favorable immigration policies with active recruitment opportunities to fill gaps in their labor force from the developing countries . Such gaps are caused by aging population and by shortages in rapidly growing fields that are mentioned above. For instance, in 1967, Canada adopted the point system that favors highly educated and highly skilled young individuals. Australia followed suit in 1989, then New Zealand in 1991. In 2006, a detailed plan was presented in the British Parliament on how to implement a points-based immigration system. In 2007, the European Commission announced a “Blue Card” system in the hope of luring more qualified migrants for specific technology fields ((Marhiori et al, June 2009, p.3).

According to Shinn, putting aside the traditional emphasis on family reunion, the United States has implemented a number of immigration bills to attract skilled labor, such as a selective, temporary immigration policy to select the best and brightest skilled workers during the 1990s. It also offered the diversity immigrant visa program, better known as the DV program to encourage the immigration of underrepresented nationalities to the United States. The E-category visa of the Immigration and Nationality Act for about 140,000 employment-based immigrants was divided into five preference categories. The three categories generally applicable to Ethiopians are: 1) persons of extraordinary ability in the sciences, arts, education, business and athletics; 2) professionals with advanced academic degrees and 3) investors who can invest at least half million dollars (November 23, 2002).

After 1991, a number of Ethiopians migrated to some of the more advanced countries because in Ethiopia every citizen is allowed free access to the Ethiopian passport and also, unlike the Derg period, the country does not require an exit visa for Ethiopian visitors leaving the country. As a result, a number of Ethiopians in the Diaspora have been accorded lawful immigrant status and permanent residency, or have eventually been allowed to become naturalized citizens in the United States of America because they have claimed that Ethiopia is ravaged by ethnic violence and various types of human rights violations endangering their return (see for example, Terrazas, 2007).

With globalization trends, over the years the emigration wave of highly skilled persons from Ethiopia has significantly increased to the West, especially starting in 1974. Given that there are no reliable global estimates on brain drain from Ethiopia, it is very difficult to estimate precisely the amount of foreign currency repatriated to Ethiopia. As defined by Mishra, workers remittances are “… the value of monetary transfers sent to the source countries by workers who have been abroad for more than one year. These are recorded under “current transfers” in the current account of the IMF’s Balance of Payments Statistics Yearbook” (Mishra, January 2006).

A broad measurement of remittance includes compensation of employees (i.e., is the value of gross earnings of foreigners residing abroad for less than 12 months, including the value of in-kind benefits such as housing and payroll taxes), migrant transfers which include the net worth of migrants who move from one country to another, and from informal transfer systems that operate outside the formal banking or financial channels, also know as hawala (January 2006). Today, workers’ remittances are becoming increasingly important as a source of external funding for many developing countries. Though unstable due to business cycles, the World Bank estimated that Diaspora remittances to Ethiopia “grew from US$18 million in 2001 to US$174 million in 2005, an increase of over 300 percent” (cited by Terrazas, June 2007). Though the official report of the National Bank of Ethiopia indicates that the amount of money Ethiopia gets from remittance inflow has never surpassed the one billion dollars, the World Bank on the other hand states that the country get at least 3.2 billion of dollars yearly (Tamene, 2010).

Those who came from wealthy families may not have the incentive to remit and remittance tends to decline with the length of migrants' stay, the Ethiopians of the Diaspora are very involved in many activities which benefit their home country. For example, they have been sending money to family members to build houses and to start and expand businesses. As social networks, they mobilize through hometown associations and groups for community development, serving as cultural ambassadors, maintaining and extending public infrastructure (schools, hospitals, health centers and roads), and donating clinical equipment. However, other than inflow of remittances which have been affected by business cycles, emigration from Ethiopia has decreased human capital stock and there is a very limited transfer of venture capital such as investment in green technology. Currently, it has become obvious that the under-developed countries are in the process of being stripped of their skilled human capital leaving them ill prepared to face globalization and survive in the new global economic order. Given this information, what possible strategies can be proposed to policy makers in developing countries that will assist underdeveloped countries to become included instead of excluded from the emerging technological path?

3. POLICY IMPLICTIONS FOR DUAL CITIZENSHIP

There are three possible objectives developing countries could target to enhances and reverse the flow of knowledge : 1) minimize losses by trying to retain the highly skilled, 2) seek to increase the benefits of emigration by adopting the brain-circulation approach, and 3) offering duel citizenship to the Diaspora.

3.1. Retaining the highly skilled. The loss of high-skilled labor from migration is very substantial in developing countries. Though reliable data is not available, it is assumed that more than 80 percent of Ethiopia's GDP (i.e., calculated in terms of income) is composed of labor wages. The negative externalities of migration from Ethiopia's GDP is likely to outweigh the remittances sent by Ethiopians living abroad. Due to human rights, Ethiopian graduates can't be prevented from migrating to countries where their skills are needed. Therefore, a civilized way to retain the skilled labor force in Ethiopia is to reorganize the education system and provide higher skills in agro-business and medical technology, both of which dominate the economy. It has become axiomatic that a large number of developed countries are moving away from agriculture. Therefore, by changing the present system of land ownership, Ethiopia can add value to its endowed resources by re-orienting the curriculum of its educational system toward sustainable and environmentally-oriented agri-business and medical technology. Making clear the value of environmentally-oriented agri-business to the local communities can make them aware of the pressing the need to conserve local resources for future generations. Thus, Ethiopia's comparative advantage is in its resources, the government might reap higher returns in the long run by investing in agri-business, medical education, infrastructure, and better employment and career opportunities, leading to greater retention of the highly skilled (see for example, Mishra, 2006). However, with globalization, even if the education system in Ethiopia is restructured, it may be difficult to prevent emigration, therefore, the real policy challenge is how Ethiopia, while respecting human rights, can maximize the benefits from its high-skilled labor from living and working overseas.

3.2. Brain-circulation. In the early 1990s, in a number of developed countries the idea of brain-circulation emerged. The "brain gain" hypothesis encourages those of the Diaspora to undertake collaborative research projects in the countries of their birth without requiring them to relocate back to their home countries. This approach is based on the premise that the home country would thrive from such vibrant intellectual networks by gaining from the added value of human capital in the Diaspora who reside in host countries. From this perspective, the brain drain was viewed as a potential asset rather than a liability. Therefore, it became a challenge to devise ways to tap into the pool of nationals abroad (Tettey, W., 1 May, 2003). It is argued by Hunger, that two basic social trends support the idea that emigrated elites represent a resource for developing countries that can be used for the development process, “Firstly the trend towards transnationalization due to globalization which makes it possible to live in two countries simultaneously, and secondly the trend towards a ‘knowledge society’, in which the importance of human beings – who carry the knowledge –in the development process is increasing (2002). Therefore, the “brain gain hypothesis” highly encourages the sending countries to motivate and induce their Diaspora to return home and/or to build up a transnational network. To justify this argument, Hunger mentions that the Taiwanese boom in its technology sector in the 1990s was influenced by non-resident Taiwanese returning from the United States of America. Similarly, the positive economic development in China is related to the remigration of the so called Overseas Chinese. Like India, the South-Korean state government has installed a government office, which is supposed to motivate emigrated elites to return to their home country (Hunger, 2002).

3.3. Dual citizenship. This research paper goes one step further and argues that if Ethiopia is to achieve its medium term Growth and Transformation Plan in 2015, it needs to welcome and offer dual citizenship to the Ethiopians scattered throughout the world. Yes, it was quite innovative in 2002 to offer the “Dual Origin Identity Card” to all Ethiopians in the Diaspora. Now, since we are in the period of highly interconnected global economies involving diverse human interactions, Ethiopia need not left behind but instead must offer dual citizenship to the Ethiopians scattered throughout the world. As stated by Raghuvanshi, dual citizenship is becoming more common in our increasingly interconnected global economy. Many countries are now seeing the advantages of dual citizenship and are liberalizing their citizenship laws. They see that dual citizenship has the advantage of broadening a country’s economic base by promoting trade and investment between citizens and their two respective countries (2010).

As dual citizenship has become a hot button topic, almost all African countries are vigorously pursuing it. Ensuring the continental trend, “the countries of the East Africa Community (EAC) - Burundi, Rwanda, Kenya, Tanzania, and Uganda,…have taken steps in recent years toward the legalization of dual citizenship” (Manby, B.(2010, p. 60). Therefore, it will be advantageous for Ethiopia also to pursue the legalization of dual citizenship for its original citizens, now in the Diaspora. For example, the UNDP cites the example of the Philippines, whose 2003 restoration of dual citizens resulted in increased economic and governing participation by the country’s citizens in the Diaspora (Mpofu, May, 2010). However, since a favorable political and business environment is perquisite to bear fruit for dual citizenship, the necessary human rights need to be practiced in Ethiopia. It will encourage not only those planning to leave the country to remain in Ethiopia but also it will entice those Ethiopians in the Diaspora to return to their revered motherland.

To mitigate the “reverse technology transfer” or the indirect transfer of prosperity (or the subsidization of the North by the poor South) or the intellectual migration of skilled labor force from the developing countries to developed countries, Jaddish Bhagwai issued a pioneering proposal in the 1970s. Bhagwati’s tax plan was designed to compensate the developing countries for the loss incurred by the outflow of intellectual knowledge. Put differently, the basic idea of the migration tax initiated by Bhagwati proposes that migration tax would either be paid by qualified migrants themselves to their home countries or levied by the governments of the destination countries and transferred to the originating developing countries through the United Nations to compensate developing countries for the losses experienced by those natives left behind (See Korner, 1996, Wilson, 2006 and Marchiori, 2009). A different line of argument by Groizard and Llull, suggests that if developed countries establish specific programs to attract skilled workers from developing countries, “one useful way of reducing the impact of brain drain in sending economies is to subsidize education through foreign aid. Investing in local education becomes a necessary condition to replace human capital flight" (November 2004). But, it is worth emphasizing that to apply Groizard and Llull's proposal there needs to be a synergy between the design and implementation of human capital that originates in the sending countries in collaboration with the returnees, and the development packages that are given by the sending countries.

On the other hand, if a country transforms brain drain into brain gain through the re-integration process so that the returnees are gainfully employed and they begin to participate in the social and economic development of their home country, it is likely that the returnees might face double taxation. That is, the returnees might be levied taxes on their income from their original home and also from the countries where they have become naturalized citizens. Under international law a country can tax the income of its expatriates abroad as long as they retain its citizenship. For instance, the US regularly taxes its citizens abroad (see for example, Lowell, 2001). However, it should be left up to the original home country to negotiate with the host country to make the returnees only pay taxes to each country based on the incomes obtained in each country. The host countries, as their developmental aid, could be generous enough to give a tax write-off of income generated abroad to those who have returned to their original home country. Then, the returnees could give the amount of tax write-off to the home government so that it could be spent on productive environmentally sustainable projects.

Through the now out-of-date "Original Identity Card," the current government attempted to lure Ethiopians in the Diaspora to return home and invest. Similarly, the Ethiopian government attempted to use a minimally opportunistic mechanism to explore the potential of the Diaspora, such as remittances, bank deposits, investment in government bonds, etc. Though controversial and with the possibility of creating dissension between those who stayed home and the Diaspora, the government has gradually attempted to employ professionals and scholars by offering to pay their relocation expenses, giving free or subsidized housing, and tax relief for the first few years (see Shinn November 23, 2003). To reiterate, the Ethiopian Diaspora need to be offered dual citizenship status rather than the outdated status, known as the "Origin Identity Cards" so that the returnees may collaboratively design with policy makers to implement a new socio-economic developmental plan for their beloved country.

In order to effectively tap the developmental potential of the Ethiopian Diaspora, existing laws need to be amended to allow for dual citizenship so that the attachment of the emigrants to their home country becomes a permanent one. In addition, offering the Ethiopian Diaspora a dual citizenship would make up for the shortfalls of highly qualified human capital which the country lacks. The returnees would bring back the necessary entrepreneurship skills, offer academic talents, engineering, medical, and scientific research skills, and other professional resources. In addition, instead of the current status of brain drain, by offering dual citizenship, Ethiopians are likely to play a major role in influencing the economic and political decisions in their host countries to favor their countries of birth and descent. As argued by Emerson, Naturalized US citizens are not legally obligated to give up their citizenship of their country. The United States has never ordered newly naturalized citizens to present themselves to their native country's embassy in order to formally renounce their original citizenship. Legally, there is nothing in the constitution and there are none from the United States Supreme Court preventing in the constitution (via the State Department) from requiring all naturalized citizens to officially renounce their citizenship to their native country as condition for naturalization (April, 2009).

By effectively recruiting the Ethiopian Diaspora back to their respective homes, Ethiopia could serve as a magnet for attracting competitive investments by galvanizing capital knowledge from a number of higher educational institutions. But foreign diplomatic missions which Ethiopia is now pursuing need to be reformed. For example, the United States could be divided into four regions - North, South, East and West. The existing Diaspora residing in those four regions could nominate three representatives from each region to the council of Ethiopia's Foreign Affairs to serve as "Attachés of Intellectual Capital" for their region. Then, the Council of Ethiopia's Foreign Ministry, could select four attachés from the twelve candidates to represent the four regions in the United States as "Attachés for Intellectual Capital." Of course, these selected representatives though autonomous in their decision process are supposed to work under the guidance of the Ethiopian Foreign Affairs Ministry. In addition, it is worth mentioning that the person elected to represent a region, say in the United States should never be asked to be involved in issuing visas. Issuing visas to foreign visitors who are intending to visit Ethiopia can be handled efficiently by diplomatic missions either in Washington or New York.

In short, the "Attaché for Intellectual Capital," selected by the Council of Foreign Affairs upon the recommendation of residents of the four regions in the United States needs to be highly skilled in marketing and disseminating the most current and valuable information about Ethiopia. In addition, to be credible any "Attaché for Intellectual Capital" needs to be endowed with research capabilities and communication skills. If these innovative strategies are carefully integrated into its developmental strategies, it is axiomatic that Ethiopia could achieve not only its Medium Growth and Transformation plan but Ethiopia in the long run will likely endure sustainable development.

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