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Human Capital Flight and Its Impact on the Emerging Economies of the Third World

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Abstract:

Over the years, the global economy has been divided between the rich and poor countries. While the rich/developed countries constitute 22 percent of the world population, the poor/developing economies have 78 percent. The Developing nations blessed with vast natural resources have continued to be plundered by developed nations. This resulted in abject poverty which has become the leading cause of human and capital flight as expertise from Third World continue to seek greener pastures abroad. The paper therefore, examines the negatives impacts of human capital flight on the emerging economies. Relevant literatures were consulted and the view of the dependence theory was highly considered in view of the implications of brain drain to emerging economies. Furthermore, various comparisons are drawn from different countries to demonstrate the net worth of brain drain which is highly detrimental to the growth of Africa economies. The paper also illustrates the absence of basic social amenities, which are equally considered the most determinant factors influencing human capital flight in Less Developed Countries (LDC). Finally, the paper draws conclusion and makes some recommendations.

Keywords: Human capital flight, brain drain, emerging economies, third world

1. Introduction

he Organization of Economic Cooperation and Development (OECD) considers human capital as 'the knowledge, skills, competencies and other attributes embodied in individuals or group of individuals acquired during their life and used to produce goods, services or ideas in market circumstances'. While human capital flight according to Velciu (2016) is the emigration of highly skilled or well-educated workers and professionals from one country to more developed nations. Velciu (2016) also attempts at differentiating between human capital flight and brain drain by noting that in economic expression, human capital flight refers to the movement of capital which is lost by the country that spends the resources for creating the talents. Whereas, brain drain is related to social lost and the high exodus of specialized professionals like researchers, students and scientist migrating from home for better opportunities in foreign countries. Over times, scholars of international political economy have argued that talents generated within the Third World economies are sizably enough to transform the political and economic spheres of the LDC. Perhaps, if those potentials were to be retained and nurtured within the Third World countries, the intensity of technology and industrial skills acquired over time should have greatly influenced growth and development in order to discourage human capital flight phenomenon. Regrettably the political and economic instabilities, which have characterized the policy arena of the Less Developed Economies (LDE), etc. are influencing human capital flight from developing nations to industrialized capitalists' countries.

According to Docquier (2006) immigrants from LDC to the developed nations are predominantly specialists in the field of health, engineering, science and technology, and not limited to social service personnel and information technology experts. More so, students who are in need of quality education, that is not accessible in the developing economies. Similarly, high salaries and access to advanced technology and more stable political conditions in the world place environment is known to be among the attraction for human capital flight. However as noted by Docquier (2006) the phenomenon otherwise known as brain drain may no longer be the Third World crisis alone, as recent data revealed, some developed economies are currently affected as well. For example, Greece, seem to be among some of the European nations affected by the brain drain related crisis, due to unstable economic policies after the FIFA tournament of 2004. Its health

workers and other professionals are migrating to Germany and other OECD member countries. In regard to this development, Greece economy is in massive shortage of health worker (UNESCO, 2001 and UNDP, 1992).

Within the Third World Setting some significantly factors have influencedtalent mobility to European nations. These according to velciu (2016) are the economic depression and imperfect market condition, health risk, insecurity of lives and properties, freedom of choices and family influence and individual ambitions in the pursuits of their dreams.

Africa, Asia and Latin America are usually regarded as the emerging economies. Likewise, Latin America and Asia countries appeared to have attained certain levels of technological advancement. As such, Singapore, China, Brazil as well as Indian are technically among economies currently regarded as the fastest growing markets in the world. On the contrary, Africa is still wallowing in poverty and diseases in addition, to low Gross National Product (GNP) index. Nevertheless, scholars such as Walter Rodney and Frank Fanon have argued, that the crisis of brain drain in Africa is not a recent phenomenon. It has always existed alongside the Trans-Atlantic Slave Trade and capitalist's accumulation dated back to the 14th century. When Africans were shipped as commodities and workman tools crossed the globe for the expertise.

For this reason, this paper intends to examine the impact of human capital flight from emerging nations to developed economies in view of the opportunities feasible in those advance countries.

2. Theoretical Framework

The research adopted the theory of Dependency popularly known as the Underdevelopment Theory (UDT). The theory is a reaction to the modernization theory, which held the view that resources flow from the periphery of the poor countries and underdeveloped nations to the core supper rich capitalist economies. The assumption that the emerging economics development, has been and continues to be impeded by forces internationally or domestically bent, on constant exploitation of the economic resources of the Third World. Thus, Thomas (2010:157) posits that the theory take root in the 1950 as against the idea that all societies progress through similar stages of development. Therefore, undeveloped economies are in similar condition of what the developed economics used to be.

The premises of dependency theory, according to Echezona (1998), is that the poor nations provide natural resources, cheap labour and a sources of dumping ground for obsolete technology and markets, for finished goods of western economies. Similarly, the capitalist system brings about the dependency of the Third World countries, through various means which include, but not limited to the following number of issues. Political instrument, cultural and sport domain, socio-economic and media manipulations in additions, to finance and education and all aspect of development sphere of the Third World economies. Finally, the capitalist countries continue to counter every development efforts by the Third World countries through economic sanction or military forces as the case may be.

The pioneers of dependency theory are A.G Frank, Sami Amin, Dos Santos, Sunkel, Walter Rodney and Emmanuel Wallenstein. The reasons for the application of dependency theory to human capital flight, is the fact that the theory best captures the condition of the state of affairs in the developing economies which give rises to brain drain of young vibrant educated men and women of the emerging nations. International influence of capitalist power in the political structure of the Third World has over the year's restricted government in developing nation from providing the population with quality education. According to John (1984) V.A ponmell (2013) foreign powers of the West constrain Third World government from participating in crucial infrastructure in order for Multinational Corporation to gain access into natural resources of the continent. Thus, quality education is neglected by the government which attracts the citizens to seek for better one overseas. More so, as a result of neglected education in the LDC, specialists and professionals who could legitimately Man the extractive industries are not available to do so hence, the responsibilities falls on the multinational corporation to do that. The consequence, are repatriation and exploitation of these natural resources by the development economies to the disadvantages of the LDC.

Similarly, because of the bad economic policies of the government in LDC, the market system is so uncertain that industrialists are not guarantee of the security of their investments thus, sponsor their children and allies overseas for better investment and security of their businesses. Nepotism was another factor, influencing human capital flight, which was largely due to the comprador bourgeoisies created by the capitalist's government to protect their interest in the developing economies. These agents of the western economies ensure the over dependency of the economy on foreign goods and services. That is importation of goods and services into the countries for their selfish interest. It has been argued by some school of thoughts, that the political instabilities in most Third World countries are manipulated by the western powers in order to implant their choice of interest IOC (2014. This is often responsible for several death tolls and political crisis that have in many instance, affected educational calendar in LDC which made the public to lose interest and to pursue their education abroad.

3. Historical Dimension of Brain Drain from African to Europe and America

According to Walter Rodney (1972) the trade in human beings from African to developed economies in 1414, symbolizes a modern phenomenon of brain drain. Walter Rodney, in his analysis, on How Europe Underdeveloped Africa, establishes detailed information and underpins salient facts on how the slave trade exported able-bodied men in area of blacksmith specialization, which at the time, represents African science and technology accordingly. This development therefore, marks the origin of human capital flight in the developing economies. Besides, states such as Manchester and Glasgow were built by African expertise shipped to England, during the slave trade era from the knowledge acquired through blacksmith and other professions.

Abiola (1975) notes that between 1530 A.D. and 1600 A.D., an average of 13,000 Africans were shipped annually in slave related business to Europeans nation, and that by the first quarter of the nineteenth century, the figure had

increased to 135, 000 annually. Thus, human capital flight is not a new phenomenon in international economy rather the dimension to it is practised in modern economies, only changes from forced to legal migration in the face value. In a related development, Fanon (1963) posits that Europeans deliberately 'manufacture' few indigenes, who shall in their absent, continue to project and protect their political and economic interest in the aftermath of political independent. For this reason, Fanon argues that during the colonial rule, basic indictors for economic growth were deliberately ignored. Rather, the colonialists handpicked few indigenes that were sent overseas, studies, nurtured and were retained in their economies for the development of capitalist nations. In his own words:

The Europeans elite undertook to manufacture native elites, they picked out promising adolescents; they branded them, as with a red-hot iron, with the principle of western culture; they stuffed their mouths full with high-sounding phrases, grand glutinous words that stock to the teeth. After a shot stay in the mother country they were sent home, white-washed and only echoed from Pairs, from London, from Amsterdam (Fanon, 1963:7)

ForCollier, Hoeffler and Patillo (1999) the same factors that inhibit capital inflows to LDC also motivate capital flight from developing countries. Hence, the overall consequences, rest on the impact of human capital flight in the emerging economies. According to OIC Outlook Series (2014) emphasis was laid on the underline factors accountable for talent movement abroad. According to the assumption, push and pull facilitation model are the catalysts for brain drain in the emerging economies. Pull factors includes, higher and better employment prospects, higher standards of living and intellectual freedom as well as political stability, better research amenities and funding for research purposes and access to quality education. On the other hand, the push factors are, but not limited to, low wages, unemployment and underemployment, weak research facilities and funding for research work and Political instability. In addition to poor governance and lack of freedom and discrimination in appointments opportunities, as well as corruption and poverty that has greatly reduced the life expectancy of Third World population. Another trend facilitating brain drain in the 21st century is globalization and internationalization of professions and professional markets. Basically, the availability and access to communications and information about job opportunities oversea is made easy by Information Technology (IT).

4. Comparative Analysis of Third World Countries Migration to European Nations

In the opinion of Kumar (2007) the economic gap between the rich capitalist economies and the emerging nations, principally, comes down to the financial and physical assets with which wealth is created. He maintained that the developed economies possess more sophisticated skills and superior technologies, including strong financial institutions which offer, citizens opportunities and choices in contrast to the emerging nations. Thus, attracts talents relocation to foreign economies. Another determinant of human capital flight is export promotion and preferential mode in market and trading. This is associated with foreign investors, who outsource foreigner markets for cheap labour and resources elsewhere. Despite the fact that capital flows to developing economies seem to have increased from \$104 billion in 1980 to \$472 billion in 2005, brain drain continues to sustain mass exodus of professional and technical skills to overseas opportunities. The estimated figures of talented immigrants from African, Latin America and Asia have been a serious challenge to development effort in the economies concerned (Ndulu, 1996; 2001).

According to World Health Organization's (WHO, 1970) survey to determine the scale of flow of health professionals overseas in about 40 countries, nearly 90% of all migrating physicians were relocating to merely five countries, which were Australia, Canada, Germany, UK and USA respectively. The report further stated that in 1972, the annual figure of (140 000') which was 6% of the world's physicians were located outside of their countries of origin. Over three-quarters of them were found, in barely three countries and in order of scale, they are USA, UK and Canada. More so, it was further disclosed that the main donor countries, all reflected colonial linguistic and ties, which were predominantly Asian countries of India, Pakistan and Sri Lanka included. Ironically, some of these countries produced more physicians; than they had the capacity to absorb in their economy. For instance, Ndulu (1996) believes that the increase in numbers of African population in human capital flight is alarming, in comparison to other regions of the world. He notes that the African International Migration records show that Africa brain drain is one of the fastest growing in the last decades. And that African share was 10.6 percent in 1965 and significant increased to 13.4 percent by the year 1990. And that if compares with other emerging economies; it surpasses its share in the world population of approximately 10 percent. Hence, Solimano (2002) added his voice to the debate, citing the International Organization for Migration (IOM), which estimated about 300,000 Africa professionals living and working in Europe and North America annually. The distributing countries included Nigeria, Ethiopia, South Africa and Ghana respectively.

Similarly, Velciu (2016) points out Romania as another country confronting the menace of brain drain phenomenon, stressing the country population figure was drastically reduced by over 3.1 million annually between 1990 and 2012. Due to high rate of abortion and death, issues of low birth and other maternal mortality related crisis. However, a devastating population figure of77% was lost to talent mobility to overseas employment and educational opportunities. An investigation conducted to determine the impacts of human capital flight on the Organisation of Islamic Countries (OIC) member states and economic, a shocking figure was exposed. According to the study, Guyana and Suriname situated in Latin America has an astronomically figure of 82.55% of brain drain to America and Europe economies (OIC,2014) Other OIC member countries, which demonstrated, high figure in human capital flight trend are in Sub-Saharan Africa with 12.40%. While the Middle East and North Africa countries are figured at 10.25% which is disturbing to the regions. The reports, lamented that the figured revealed, suggested that many of its member states, have exceeded more than 15% of it share in brain drain crisis. Especially, when Lebanon has 43.91%, talents in overseas jobs and Morocco have 18.59% with Iran rated 14.29% of its population working in foreign economies.

Furthermore, OECD stated in the early 1990s about 900,000 skilled professionals primarily trained in IT immigrated to the United States from India, China, Russia and other member countries of the OECD. The IOM also confirms that Germany equally joined in the competition for talent generation. Starting in 2000, Germany launched a sort of green card proposal, which was used to recruit about 20,000 foreign IT specialists. The core recruiters come from Russia, Poland and other Eastern European nations, which already have the pool of scientific and technical expertise trained. Similar initiatives are currently, ongoing in the U.K., Australia, New Zealand and other European economies.

As stated by Gokhberg and Nekipelova (2002) previously, Russia was estimated to have about 1,000 to 2,000 people employed in science and scientific services. However, these clusters of specialists, have said to have left Russia for other economies since the early 1990s. Currently, Germany and Israel account for 86% of the Russian emigrants in this category since 2000. For the purpose of this study, the tables below illustrated some figure of talents that emigrated from Sub-Saharan Africa from 1960 to 1987 in such of better living.

Period	Total emigration of highly	Average per year		
	skilled migrants from			
	Africa			
1960 to 1975	27,000	1.800		
1975 to 1984	40,000	4.400		
1974 to 1987	70.000	23.000		
1986 to 1990	50,000 - 60,000 middle and high level managers			
	emigrated from the continent			
1960 to 1987	100,000 trained and qualified Africans abroad.			
	30% of its highly skilled manpower.			
1960s	More than Half of the Africans who went overseas			
	to study physics and chemistry in the 1960s			
	never return home.			

Table 1: Estimates of Brain Drain from Sub-Saharan Africa Source Ehaque and Aziz (1998)

5. Skills and Age-Grades Migrating from Emerging Economies

In fact, UNESCO (2001) has posited that the developing economies have the most populated world figure of 78% and in sharp contrast to the developed nations whose population was estimated to be barely 22%. It has also been observed that the Third World economy is abundantly rich in human and natural resources, but as a result of the exploitation and repatriation of these resources to the capitalist economies, the Third World cannot account for basic social facilities which can sustain its economies. Consequently, merely 16% of its 39% Gross National Product in 1996 and 1997 was contributed to World Global Research and Development Expenditure. This clearly demonstrated the Third World economies cannot provide the basic standard for its population. Hence, the consequence is human capital flight. According to International Organization for Migration (IOM, 2000) brain drain is depriving Africa continent, of its future, due to the highly skills professionals seeking overseas opportunities. As a result of the huge, economic gap that continues to hampered the economic development of the continent.

Ndulu (1996) argued that more than 30 percent of Africa highly skilled professionals, are lost to the capitalist economies and that 88% of middle-age grades, who emigrated from Africa to the U.S., have had high school education or higher educational background. Similarly, 58 percent of African immigrants in the USA were also found to have had PhDs in different professional fields of studies, including but not limited to the 19 % of those who had Masters Degrees in diverse fields of learning. And in addition, 20 % of those were said to be university professors, previously in their home countries before undertaking jobs overseas.

Furthermore, the 1990 U.S., Census results, revealed about 128,000 African immigrants annually were said to be, in between the age bracket of 20 to 25 years, another 95,000 were also believed to be highly educated and trained in science and engineering. Thus, only a handful of about 20,000 scientists and engineers were left in Africa servicing almost about 600 million people.

Velciu (2016) laments, besides, the job lost in the economy, another danger poses by human capital flight is the migrants of active working population of age 25 to 64 in the continent, which potent stern socio-political and economic challenges to the continent at large.

A report by UNDP (1992) on Sudan, for stance, revealed that about 17% of its doctors and dentists have all moved abroad. Similarly, 20% of its university lecturers and another 30% of its engineers and 45% of its surveyors have all gone to work abroad, thereby, undermining social growth in these economies. The report further states how South Africa has since lost its 25% graduates to the USA economy alone and at same time, South Africa account for 9.7% of all international medical graduates practicing in Canada. Out of all the medical graduates produced by Witwatersrand University in the last 35 years, more than 45% or about 2000 physicians have left the country for better offers in capitalist economies.

In a related development, the Integrated Regional Information Network (IRIN, August, 2001), acknowledges Gambia has lost almost 60% of its graduates to destinations abroad. That in the 1980s Zambia had 1600 doctors in the country. However, the number has plunged downwards to 400. More so, The Southern African Development Community – Human Resources Division estimated that at least 10,000 teachers have left SADC countries for greener pastures since 1996. Similarly, the South Africa's Bureau of Statistics estimated that between 1 million to 1.6 million people in professional skilled and managerial employment have emigrated by 1994 to capitalist economies.

The U.S. National Science Foundation (1998)has equally released a survey that seems to encouraged brain drain from developing economies, this is achievable through a systematic incentives induced by the state to attract talented students from emerging economies in pursuits of education in the U.S.A., whereby after graduation, they are given fantastic job opportunities that cannot be rejected.

Furthermore, a statistics of NSF revealed that about 47 percent of the foreign student on temporary visas, who earned doctorates in 1990 and 1991, were all working in the United States of America as at 1995. In addition, 79 percent of the majorities of the foreign doctoral recipients in 1990 and 1991 were all from India and 88 percent were from China who still resides and works in the U.S.

With these statistics, Collier, Hoeffler and Patillo (1999) conclude that the crisis of brain drain in LDC rest on the overwhelming shortage in human capital and skill deficiencies, which has drastically reduced investment and growth in the continent. Therefore, the desire to surmount the lack of skilled and trained manpower in the continent, has not delivered the desirable result.

Consequently, as noted by OECD (1994) this deficiency is sustained at the same time; Africa is losing a very significant proportion of its skilled and professional manpower to other markets. As a result, Africa has been dependent on expatriates for important functions. The table below disclosed the level of education few emigrates, attained in selected capitalist economies.

	Low Secondary		Upper secondary school		Third level	Tertiary
	Foreigners	Nationals	Foreigners	Nationals	Foreigners	National
USA	34	15.7	24.1	35	40.9	49.3
Germany	48.5	13.2	37	62.2	14.4	24.6
France	63.3	33.4	22.9	45.4	13.8	21.1
Italy	47.1	56.3	38.3	34.3	14.6	9.3
U.K	65.1	43.9	14.7	32.5	20.2	23.7
Canada	22.2	23.1	54.9	60.3	22.9	16.6
Sweden	30.8	20.4	41.5	50.3	27.3	29.3

Table 2: Foreign and National Adult Populations Classified by

Level Of Education In Selected OECD Countries 1995-98 Average Percentages Source: Ndulu(2001)

6. Some Incentives Adopted by Developed Nations to Attract Foreign Talents

According to OECD (2002) some governments in the developed economies have over the years, formulated polices that enable these countries to acquired specialized talents in the area of needs. Examples of incentives given to talents, in order to attract them are listed below.

In Quebec Province of Canada, the provincial government of Quebec is offering five-year income tax holidays credits, to attract foreign academics in IT, engineering, health science and finance to take-up employment in the provinces and universities. More so, The European Union is in the lead, as a follow-up to the Bologna Charter on education, where efforts were made in harmonizing the processes of educational certification and qualification systems among member states, in order to encourage greater student's mobility within the EU member states.

Similarly, in Finland the government has taken steps to encourage, the enrolment of foreign students in the country, including Asia and other Third World economies. In France, there have been recent measures seeking to facilitate the temporary migration of foreign scientists and researchers into the country. For example, in 1998, the government established an agency called EduFrance, with a budget of FRF 100 million to attract larger number of students to France, Mainly from Asia and Latin America. In addition, the Germany government over the years increased its foreign student inflows, through grants and fellowships schemes. It has also launched a programme which issued over 20000 immigration visas to fill its IT job vacancies.

Furthermore, in Ireland, there was a serious shortage of skilled workers, particularly in the IT unit in which the government was compelled to formulate strategic plan which attracted overwhelming foreign talents way back. In addition, the government sponsored job fairs, which held in Canada, the Czech Republic, and India and South Africa and the United States. Where work visas, were issued to some talented foreigners. This programme was introduced explicitly; in 2000 to allow for the entry of highly skilled workers, into the country particularly, in those field where the country was experiencing shortages in the economy.

Similarly, in Japanthere is a government policy which is to double the number of foreign students in the country, through the use of scholarship schemes and other incentives. While, in the United Kingdomsince 1999, the UK government launched a major campaign which increases, the number of international students in higher education from 198000 to 248000. The strategy is based on the background to (a) a promotional/marketing campaign; (b) streamlining of visa procedures and rules on employment for foreign students and (3) special scholarships for top achievers. Finally, in the United States, the U.S. Congress leached a kind of temporarily increased to the annual cap, on the number of temporary visas, granted to professional immigrants, under the H-1B visa program, whose statutory limit in 2000 were set at 195000 visas per year until 2003.

The forgoing programs initiated by heads of government in different countries, only goes to show talents shall continue to emigrants from LDC to developing economies (OECD, 2002)

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Thus, the table below revealed Africa exports of talents to USA economy alone.

Country of Origin	Schooling Level				Secondary Plus Tertiary	Secondary Plus Tertiary, A Percentage of total	Tertiary as Percentage of Total
Country	Total	Primary or less	Secondary	Tertiary	Secondary I	Secondary Pl Percenta	Tertiary as Per
Uganda	5060	120	1000	3940	4940	98	77.87
Tunisia	2816	60	1120	1634	2756	98	58.10
Algeria	3904	60	1280	2564	3844	98	65.68
Benin	180	20	80	80	160	89	44.44
Cameroon	1694	60	200	1434	1635	96	82
CAR	160	0	60	100	160	100	62.00
Congo	200	0	20	180	200	100	90.00
Egypt	53261	980	13020	39261	52281	98	73.71
Gambian	747	100	120	527	647	87	70.55
Ghana	12544	40	3400	9104	12504	100	
Kenya	8372	40	1420	6912	8332	100	82.56
Lesotho	160	0	20	140	160	100	87.50
Malawi	381	0	120	161	381	100	68.50
Mali	220	0	100	120	220	100	76.36
Mauritius	1100	0	260	840	1100	100	90.00
Mozambique	920	80	280	560	840	91	60.87
Rwanda	200	0	20	180	200	100	90.00
Senegal	1370	180	420	770	1190	87	56.20
Sierra Leone	4155	80	1060	3015	4075	98	72.56
South Africa	22678	200	4980	17498	22478	99	77.16
Sudan	2496	0	140	300	440	96	65.22
Zambia	1613	0	340	1273	1613	100	73.92
Togo	460	20	140	300	440	96	65.55
Zimbabwe	3161	20	420	2721	1613	3141	99
Total/average	127852	2060	30640	95152	125792	98%	74.42%

Table 3: Showing Migration to the USA by Education Attainment for Selected African Countries 1990 SOURCE: NDULU (2001)

Note: Most of the Individuals Reflected in the Above Estimates Have Received Their Academic Qualifications in Their Home Countries

7. Globalization and Brain Drain in Developing Nations

The study cannot be complete without paying few attentions to the influence of globalization on the brain drain among the developing nations of the south. This phenomenon, according to Ndul (2001), Meyer and Brown (1999) seems to have largely influenced production of trade, enhanced specialization in the workplace environment, networking and breaking international boundaries. Arguably, globalization offers opportunities to brain drain and other sources of additional, motivation for emigration of skilled manpower, from poor developing countries to super power nations. The intensification of globalization has overtime, lowered the impediments to mobility of all forms of talents and capital, which have similarly, accelerated the standardization of knowledge requirements. Even among Multinationals Corporation and other international organization. It is therefore, recognized as the most significant drivers for job mobility and enhancement of the scope for private sector growth.

Shuval, (2000) and Solimano (2002) both have stressed one of the most important determinants of international migration of scientists and technology experts are the availability of resources materials to researchers in receipt countries, including, assessing the volume of resources devoted to science and technology. This ranges from new and old characterization of science and technology addition, to new discovering through the aid of IT.

Furthermore, the existence of scientific Diasporas was popularized through the use IT, and one of the vital roles of the scientific Diasporas, is to try as much as possible, to maintain an attachment to parent countries, in order to export back the expertise acquired over the years in capitalist economies. This has been made possible, through networking and constant link to different professionals and scientists scattered across the globe. Thus, doctors without borders, the Chinese Scholars Abroad (CHISA), The Colombian Network of Engineers Abroad (Red Caldas), and The Global Korean Network, The Silicon Valley, Indian Professionals Association (SIPA), and many othersfall under this classification. In a related development, OECD (2002) revealed, how human and capital flight have had to influenced, one of the most

superior state of the art technology in the world, the Silicon Valley. The study showed, foreign talents and financial capital were highly involved in its establishment.

For instance, Asian business enterprise and capital invested in the Silicon Valley, was initially, estimated to be more than 31firms, primarily from Taipei and China. Others came from Japan, Hong Kong and Korea including, Singapore and Malaysia. In which most of these nations committed capital that started-ups some specialization in the Internet and semiconductors revelation. Furthermore, the Taipei-based InveStar Capital Inc., founded in 1996, invested more than USD 100 million in Silicon Valley by 1998 (Solimano, 2002) and Findlay,1978)

8. Impacts of Human Capital Flight on the Socio-Economic Sector of Emerging Nations

Adams Smith, a popular classical political economic theorist, in his Wealth of Nation, advocates for an individual development and the concept of invincible hand upon which international labor mobility and other trading and market related issues seem to have incorporated into business culture. Thus, propagate aggregate national development through talented individuals. Based on this belief, cross board talents are encouraged among countries. However, the implication for the emerging economies is far greater than the advantages there-in.

According to Francis Fukuyama (2012:1), the early 1970 marked a significant point in international political economy. It was a period of time, when Government and nation states at different levels, were in the forefront of achieving both qualitative and quantitative development. Spain Portugal and Greece all seem to have fallen to dictatorial government, while in far Soviet Union and her Eastern European appendages, appeared to be resourceful and consistent with the concept of socialist ideology. In addition, Chain under Mao Zedong's Cultural Revolution was working towards attaining industrialization. However, in Africa the African leaders sew the opportunity to consolidate corruption and sit-tight presidential ambition for life notion; whereas, most of the Latin America countries had in the same way fallen, to military rule.

In the interim, at the formation of Britton Wood in 1945, nations were encouraged to further economic ties and political alignment for common interest. Consequently, liberalization of trade and financial capitals played essential roles, which saw powerful countries and leaders, consolidating power in the international arena. As a result of which informed the First Deputy Managing Director of the IMF, to call for the need for global accumulation of resources through policy which are of immense benefit to the capitalist economies. Part of these policies includes human capital flight for human resources personnel in policy making and other specialized fields. In his words "The economics profession knows a great deal about current account liberalization ... It knows far less about capital account liberalization. It is time to bring order both to thinking and policy on the capital account.' (Fischer, 1998:8)

The above expression, after the Second World War (WWII), seeks the needs for greater participation of foreign talents in specialized fields of interest, predominantly, in the developed economies which appeared to have the shortage of work force in certain areas of interest. Besides, the performance of Third World personnel's in the WWII, heartening the desire to engage foreigners as a result, increased the attraction for immigrates to capitalist's nation.

For that reason Ndulu(2001) discloses the concerns expressed by some notable Africa leaders during the meeting of Association of African Central bank in which, they lamented the danger brain drain has posed to the continent through the immigrate of highly skilled professional working in overseas jobs.

A recent remark by the Geneva-based International Organization for Migration (IOM) captioned 'African brain drain robs continent of future' perhaps best captures the sentiment on the human capital outflow from the region. The remark asserts that the brain drain of highly skilled professionals from Africa to overseas opportunities is making economic growth and poverty alleviation an almost impossible task across the continent. Recent meetings of the Heads of State of the Southern African Development Community and the meeting of the Association of African Central Banks (August 2001) echoed similar sentiments (1MO 2000)

UNCTAD cited by IMO (2000)estimates that the economic loss for each professional emigrant originating from Africa stands at US\$184,000 annually. Ndulu(2001) posits that as a result of human capital flight, investment in Africa remains low, given that Africa valuables in private capital have left the continent to Europe and America. Likewise, 40% of Africa's private wealth according to an independent estimate which stated, that in 1990 Africans held up to \$360 billion, which was almost 40 percent of their wealth outside the region, was regarded an equivalent to the size of Africa's debt, or 90 percent of its GDP as observed by the study.

Another impact is found the report by UNHCR, (2001) which estimates that the educational capital associated with highly skilled graduates immigrated to the United States in 1990 alone was worth \$640 million. It concludes that emigration represents a significant transfer of resource from poorer countries to richer ones. In another development, UNHCR, (2001) and UNCTAD Ndulu, 2001) in his analysis estimates that the annual cash value of each African Professional migrant, based on the 1979 prices, is worth \$184,000., with just a roughly estimates of 95,000 African Professional in the U.S economy only. Therefore, Africa may be losing nearly US\$ 17.5 billion annually, through brain drain. In the interim, African is only receiving a technical assistance of barely US\$ 4 billion annually. Solimano(2002) also confirms that Africa is losing as much as US\$ 4 billion annually to brain drain syndrome.

9. Conclusion

The generation of knowledge is an individual pursuit, and when translated into creativities and other sphere of human endeavours, society at large benefits immensely from the wealth of knowledge generated. In the developed nations, huge funds are budgeted into research expenditure annually, where talented and best brains are trained and nurtured for national and economic development. However, in the less developing economies, budget is highly low and salaries are

poor. In addition to poor health facilities, political instabilities and lack of political will on the side of the government in providing enabling environment for learning. Seemingly, corruption and bad leadership oftentimes, play out in the stipends devoted to annual allocation of the educational sector. And as noted bySolimano(2002) science and technology is the motivating force of economic development, which largely resides in research and technology activities. Though, R&D is basically depended upon the Gross Domestic Product GDP of countries and how much, these countries are willing to devote to R&D. In the final analysis, the GDP of countries determine the financial vote that goes into the education sector. For example, the coefficient of R&D of countries ranges from countries to countries so also in percentages. The global research and world percentages of R&D between 1991 and 1997 stand at 2.9 percent for Japan, 2.6 percent for the U.S., 0.9 percent for Russia, while 0.5 percent in Latin America and the Caribbean and finally 0.3 percent in the Sub-Saharan Africa. The implication for emerging economies is a bad news and going by this report, human capital flight from emerging economies will continue occur except drastic actions are taken by developing economies to curb the tide.

10. Recommendations

According to Solimano (2002) the globalization of human capital and talent is the end result of the globalization of goods and capital markets and to less degree labor markets as complementarities exist among different factors of production and qualified human resources at a global scale. Consequently, if the emerging economies must reduce brain drain phenomenon and bring about real development the following recommendations are therefore necessary:

- The Africa Union should compel its member states through legislative instrument to ensure special fund are devoted to science and technology within the Africa sub-region where research and development, can be taken seriously and affordable to the best brain within the Africa continent.
- The South-South Corporation should henceforth, have the capacity to properly renegotiation with the western economics, through their representatives in the LDC Multinational Corporations MNC., to economically get more involved in their social corporate responsibility to communities where their businesses are dominances, by intensifying their effort in educational interest of the indigenes through exporting technology incentives back to those communities where their businesses are located rather than importing finished goods for only repackaging or reassembling in emerging economies.
- Electorates in emerging economics should also be willing and more participating in the political process, of their
 nation in order to change and upturn the bad political system created by the super power in conjunction with bad
 and obsolete leaders in those economies, with a more vibrant and articulated leaders who are willing to provide
 the continent with good governance. For example, political stability, proper funding of education, freedom of
 choices, economic empowerment and security of lives and properties which appreciate competition and allows for
 individual growth and development.
- Finally, there is the need for each state in the emerging economies, to devote more funds to its state science and development and research expenditure with the systematic approach of reducing human capital flight in development nations of the world.

11. References

- i. ----- (1999a), editor. Social Inequality, Values, Growth and the State. The University of Michigan Press.
- ii. ----- (1999b), 'Globalization and National Development at the End of the 20th Century', Policy Research Working Paper 2137, The World Bank.
- iii. ----- (2001) 'The Evolution of World Income Inequality: Assessing the Impact of Globalization' Series of Macroeconomics of Development No 14, ECLAC, United Nations.
- iv. (2002) 'The Evolution of Science and Technology: Latin America and the Caribbean in Comparative Perspective'mimeo, World Bank.
- v. Abiola, E. Ola. (1975) A Textbook of West Africa History. (Nigeria: Omolayo StandardPress & Bookshops Co (Nig) Ltd
- vi. Africa Journal (2002) 'Education in Africa: The Brain Drain'.
- vii. Africa Journal (2002) 'Education in Africa: The Brain Drain'.
- viii. Bahgwati, J. N. and Hamada, K. (1974). 'The Brain Drain, International Integration of Markets for Professionals and Unemployment: A Theoretical Analysis'. Journal of Development Economics Vo.1. No.1 pp.19-42
- ix. Collier, et' al, (1999)'Flight Capital as a Portfolio Choice' Policy Research Working Paper 2066, World Bank.
- x. Collier, P. and Gunning, J. (1999) 'Why Has Africa Grown Slowly?' Journal of Economic Perspectives 37, *March: 64-111.
- xi. Docquier, F. (2013) Cross-Border Migration, Employment and Economic Growth Background Research Paper Submitted to the UN High Level Panel on Post-2015 Development Agenda, 2013-05.
- xii. Docquier, F., Lowell, B. L., Marfouk, A. (2009)'A gendered assessment of highly skilled Emigration'Population and Development Review 35:2 (2009): 297–322.DOI: 10.1111/j.1728-4457.2009.00277.x
- xiii. Docquier, R. N. and Rapoport, H. (1997). 'La fuite des cerveaux, unechance pour lespays Endeveloppement?'.Annual Meeting on French Economic Association, Paris, September.
- xiv. Fanon, F. (1963) The Wretched of the Earth. Bungay: Richard Clay (the Chaucer Press)Ltd
- xv. Findlay, R. (1978) 'Relative Backwardness, Direct Foreign Investment, and the Transfer of Technology: A simple dynamic model' Quarterly Journal of Economics, 92, 1-16

DOI No.: 10.24940/ijird/2020/v9/i3/MAR20010

xvi. Fukuyama, F. (2012) the Origins of the political Order. London: Profile Books Ltd

- xvii. Gokhberg, L. and Nekipelova, E. (2002) 'International Migration of Scientistsand Engineers in Russia', ch.10 of OECD, International Mobility of the Highly Skilled, Paris Integrated Regional
- xviii. Haque, Ul. N. and Aziz J. (1998) 'The Quality of Governance: 'Second –Generation' Civil Service Reform in Africa' IMF Working Paper No. 164.
- xix. Information Networks (IRIN), 2001: 'Southern Africa: New Initiative to Tackle Brain Drain' A Bulletin.
- xx. Integrated Regional Information Networks (IRIN), (2001)'Southern Africa: New Initiative to Tackle Brain Drain' A Bulletin.
- xxi. IOM (2000) 'Migration in Africa: Globalization and Prospects for Regional Mechanisms' AStatement by Brunson McKinley, Director General, AddisAbaba October 18.
- xxii. Kumar, A. (2007) 'Does Foreign Direct Investment Help Emerging Economies?Vol. 2, No. 1 (2007) Insights from theFederal Reserve Bank of Dallas
- xxiii. Meyer, J. B. and Brown, M. (1999) 'Scientific Diasporas: A New Approach to the Paper # 41,Prepared for World Conference on Science UNESCO-ICSU, Budapest.
- xxiv. Nancy, E. and Guisinger, A. (2006) Myth or Reality? The Diffusion of Financial Liberalization in Developing CountriesNational Science Foundation (1998) 'International Mobility of Scientists and Engineers to the United States-Brain Drain or Brain Circulation?' NSF 98-316, June.
- xxv. National Science Foundation (1998) 'International Mobility of Scientists and Engineers to the United States-Brain Drain or Brain Circulation?' NSF 98-316, June.
- xxvi. Ndulu, B. J. (1996). 'Africa's New Realities Challenge Policy Institutes'. Center for International Private Enterprise.
- xxvii. Ndulu, B. J. (2001). 'From Vision to Reality of African Economic Integration: Priority Actions and the Institutional Framework for the Way Forward' a paper presented to the Conference of the Association of African Central Banks, Johannesburg, South Africa.
- xxviii. Ndulu, B. J. (2002) Human Capital Flight: Stratification, Globalization and the Challenges to Tertiary Education in Africaby Brunson McKinley, Director General, Addis Ababa October 18.
- xxix. OECD (2002) International Mobility of the Highly Skilled. OECD Proceedings.
- xxx. OECD Observer (2002) 'The Brain Drain: Old Myths, New Realities' www.oecdobsever.org.
- xxxi. OED (1994) 'The World Bank's Role in Human Resource Development in Sub-Saharan Africa: Education, Training and Technical Assistance', SectorStudy no. 13449, World Bank.
- xxxii. OIC (2014) Organization of Islamic Cooperation Statistical, Economic and Social Research and Training. Center for Islamic Countries.
- xxxiii. Pellegrino, A. Y.J. Martínez (2001)'Una Aproximación al Diseño dePolíticassobre la MigracióninternacionalCalificadaen 31 América Latina' Serie Población y Desarrollo, CELADE ECLAC.
- xxxiv. Ponmell, V.A (2013) Advantages and Disadvantages of Migration of Skilled Indians to Abroad.
- xxxv. Shuval, J. (2000) 'Diaspora Migration: Definitional Ambiguities and TheoreticalParadigm' International Migration. QuarterlyReview, vol. 38, # 5.
- xxxvi. Solimano, A. (2002) Globalizing Talent and Human Capital: Implications for Developing Countries.
- xxxvii. Solimano, A. (2001) 'International Migration and the Global EconomicOrder: An Overview' Policy, Research Working Paper 2720, The World Bank, November.
- xxxviii. The Plight of Human Capital Flight in OIC Countries, (2014) OIC Outlook Series
 - xxxix. UNDP (1992) Human Development Report
 - xl. UNDP (1992) Human Development Report
 - xli. UNESCO (2001) The State of Science and Technology in the World, Institute for Statistics. Montreal, Quebec, Canada.
 - xlii. UNHCR, 2001: A Bulletin; Key Findings, Refugees and migration
 - xliii. United Nations (2002) United Nations Population Division Populations Database. New York: UN
 - xliv. Velciu, M. (2016) Human Capital Flight' Romania's Case Human National Scientific Institute for Labour and Social Protection Bucharest, Romania. Sea Practical Application of Science Volume IV, Issue 3 (12)/2016.
 - xlv. World Bank (2000). World Development Report, 2000/01. Washington, DC: World Bank,
 - xlvi. Zeleza, P. T. (1998) African Labor and Intellectual Migrations to the North: Building New Transatlantic Bridges.