

ICT, Globalization and the Labour Market: turning brain drain to brain gain

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Abstract

The relationship between globalization and the growth of a global labour market is examined in this paper. Using exploratory methods, it was discovered that ICT has contributed to the phenomenon of brain drain but it has also created avenues for repatriations of the gains accruable to the drain. Using **Scenario Network Mapping (SNM)**, the study tries to define possible alternative futures for this opportunity. Furthermore, globalization and the internet has made it possible for brains to be tapped at home without being drained from the local labour market through the processes of **outsourcing** and **off-shoring** of productive efforts by transnational and multi-national organizations. This was aptly termed **glocalization** in this study. Training and equipping the local labour force in globally relevant skills, has been identified as a means of turning the negative effect of brain drain to positive economic gains.

Key words: Globalization, off-shoring, out-sourcing, glocalization, Scenario-Network-Mapping (SNM)

1. Introduction

Globalization is a process whereby national borders cease to be an impediment to the movement of products and capital (Grant, 1996). It is the interlinking of national economies into an interdependent global economy and the development of a shared set of global images (Nazombe, 1995). It is also the transformation of the global economy into one in which not only exchange but also production and finance are organized and articulated on a global scale. Gambari (1996) referred to it as “The inevitable wave of the economic future of the world.....from which no nation, poor or rich, big or small, could realistically opt out of”. Globalization has been considered an instrument for progress, wealth creation, expansion of opportunities and providing a nurturing environment for entrepreneurship and enterprise. It would also create access to much better opportunities for decent work, and promoting development with social justice in the context of open economies and open societies (Somavia, 2001)

However, this transformation from multiple-unidirectional and national economies to a single multidimensional, uniformed globalize economy is being accepted in certain quarters with distrust and caution. This is especially so for

those around the world who, for obvious reasons, are not ecstatic about surfing on the Internet, but whose basic concerns centres around the provision of more basic economic and social needs associated with constrained infrastructure and amenities of life, high crime rate, abject poverty and disease, and other negative frequent occurrences which bring about disruption of their lives; to them, globalization is nothing more than a rehash of traditional capitalist ideology. Some may even aver that the emerging technologies are simply tools for renewed exploitation and oppression, of social and political maneuvers, and the invasion of privacy all in line with a new world order that is actively polarizing humanity into those “with us” and those “against us”. They fear that the risks are too great and the benefits are too small and that in the long run, it would lead to further exacerbation of inequalities and insecurity (Somavia, 2001).

2. Conceptual framework

The emergence of this new way of global interaction on all identifiable platforms such as the social and economic platforms could be ascribed to accidental occurrence of certain politically enabling events as well as the emergence of certain micro-factors that were to a large extent unforeseen or fore planned. These multivariate factors were the trends and triggers of globalization.

2.1 *Globalization: A Mega-trend*

Several trends could be ascribed to the ascendancy of globalization as a phenomenon on the world stage. A cursory look at these trends would present them as precursors, one unto the other, with a unilateral foundation in the post second world war agitation for self governance by former colonies of imperial western nations.

The achievement of independence led to a gradual transition to various forms of liberal democratic structures in many of these ex-colonies. The word “gradual” as used here is indicative of the fact that it took some of these nations more than 30 years to finally have a semblance of governments based on certain elements of the democratic principle. The fetal turmoil experienced by these pseudo-democratic states in the throes of their transition to near full democracies characterized the last two decades of the last century. The implosion of the then Soviet Union and its final capitulation in 1990 gave further impetus to the drive towards a global liberal political system (Mimiko, 1996). This gave the so called free-world and their agencies unhindered leeway in prescribing and imposing political and economic conditionalities on erstwhile non-democratic, aid seeking regimes. This “new world order” showcased the dominance of world affairs by a few nations under the aegis of the United States; a situation that presents notable world bodies and organs of the United Nations such as the IMF and World Bank as tools of coercive and neo-colonial policies. To the rest of the world, such policies appeared to be derived from an agenda aimed at continuing the dominance and pauperization of the developing world while having unhindered access to its vast resources and this view has been generally being reinforced by unhindered use of the developed countries military and superior technology over the less powerful but heavily resource laden nations (Pougala, 2011).

The world metamorphosed into a village where a caucus of nations assumed, autocratically, the right to determine the fate of the world and by extension, the fate of the people within it. Adedeji (1996) averred pontifically that “In spite of the talk of the global village, there are two distinct worlds in that village – the industrialized world with 20% of global population but consuming 70% of its metals, 85% of its woods and 60% of its food and accounting for about 83% of its GDP, 81.2% of world trade, 94.6% of all commercial lending, about 81% of both domestic saving and investment and 94% of all research development.....The region which accounts for 10% of the world’s population and is potentially very rich in *natural and human resources* (emphasis are mine) contributes only one percent of world’s GDP and accounts also for 1% of its trade”. It is therefore safe to agree with Ihonvbere (1996) that globalization seems to be consolidating and deepening extant poverty in African countries. It would however appear grossly unfair to totally attribute the failures of African and other developing nations to tap into the vast opportunities presented by globalization to the machinations of the developed world.

Many developing nations have continued to be plagued by a myriad of self-inflicted problems such as corruption and despotism, two hydra headed ailments of the third world that have proven to be impervious to time-limited antidotes such as the administration of text-book economic theories and practices. Their occurrence was not helped by the incessant military coup-de-tat and the constant inter-tribal cum inter-religio-ethnic conflicts, which, in many cases, were actively supported or even initiated by developed countries. A very good recent example is the case of

the economic sapping campaigns in the Niger Delta, where Nigeria is losing billions of naira on a daily basis.

However, where collective effort have failed to tap into opportunities presented by globalization on governmental level, private efforts of the citizenry has ensured that accrued benefits do not elude the individual in its entirety. The reality is that but for the lack of the macro-economic mechanisms to stimulate a consensus of interest and action, ICT as a factor of globalization has presented interactive tools and opportunities to individuals beyond the usual control of the state. An obvious consequence of the pervasiveness of ICT was the hosting of a global, borderless platform, the Internet, which has made interactions possible beyond political and economic boundaries and is gradually assuming the position of a normal part of the emerging global lifestyle.

2.2 The Internet: a revolutionary platform of global interaction.

The ICT revolution was an all-purpose revolution that has been described by Blinder (2006) as the third industrial revolution. It has stimulated growth in generally all facets of economic interactions, not least of which is the transferability of labour skill and knowledge. Its transformatory role has change the notion of “market” from a time and space limited entity to a rather more pervasive concept through which exchanges in virtual and tangible commodities could be made.

ICT has created a platform for ease of exchange of information and ideas between prospective employers and employees. The internet for instance has provided an applicant with the ability to search for jobs globally. It is also quite easy for a firm to search for experts and professionals on a global scale using the internet. Apart from this, ICT has also made it easy for people to move from their native country to another with little physical efforts. A case in study is the recent launch of the e-passport by the Nigerian Immigration Services. Embassies of various countries now receive applications for visas “on-line” via the internet. This further accelerated both physical and virtual brain drain of professionals from developing countries of Africa and Asia.

However, it has also enabled easier repatriation of earnings to home countries. It was in recognition of this fact that Brinkerhoff (2007) wrote in a study of the Diasporas, emigrants living in developed countries that IT has emerged as an essential enabler of Diaspora knowledge transfer and exchange.

3 Discussion

Traditionally, a market is conceived to be any gathering of suppliers and buyers of either services or tangible products operating in a definable environment and possibly under certain time and space constraints. To this end, there exist financial markets, stock markets and the labour markets among others. These markets existed both locally and internationally, but in most cases operating independently of one another, although they may be influenced by similar factors such as the prevailing political, economic, social and legal sub-systems of the environment in which they operate. All these forms of markets have however been impacted upon by the boom in Information and Communication Technology. The labour market for instance became more open and it became easier for extended utilization of ICT factors in relatively new ways. This is evident in the increasing role that Information and Communication technology plays in accelerating economic growth and promoting development. For example, the diffusion of mobile telephones has made a huge difference for the mass of unemployed youth in every nook and cranny of Nigeria, providing relatively cheap and easy access to money making opportunities and creating new products targeted at new and emerging local markets. Likewise, greater internet access and more affordable computers are radically changing the way people access job opportunities in many countries, offering applicants several direct and almost instant means of applying for and searching for vacancies as they occur. The on-time virtual environment also facilitated cooperation and exchange among people. Due to the pervasive nature of ICT and the universality of its elements, this interaction between and among people has grown beyond national boundaries, supersedes ethnic and tribal barriers and languages to evolve into the concept of globalization.

3.1 The emergence of the global labour market

Several factors have been attributed to be the cause of the emergence of a global labour market within the last couple of decades. As has earlier been mentioned, the collapse of the Soviet Union and the subsequent “release” of

its allies to fully participate in global economic transactions is a leading cause. But looking at the emergence of the global labour market from a broader perspective, Akindele et al (2002), averred that "...critical to our understanding of globalization is the dire need to use it as a synonym for liberalization and greater openness". The resultant liberalization and "civilianization" of formerly highly classified military technologies pushed up the surge in civilian technologies. For example, features of present day GSM technology have been "locked up" in the military realm (see Armada International, June / July 1994:69) from public view since the 1980s to forestall such technologies falling into enemies' hands across the iron curtain. Technology hoarding eventually became uneconomical once the presumed rivalry had evaporated. This led to a resurgence of market forces which have grown in stature and structure to cause a partial amalgamation and integration of national economies. I call it partial amalgamation because of the fact that not all nations of the world, as of today, subscribe to the idea of democratic liberalism which makes universal assimilation of democratic principles the oil in the wheel of progress of global market interactions; enabling and making movement of market factors a lot easier, smoother and faster across borders. The true essence of this was well captured by Akindele et al (op cit) when they surmised that "the implication of this is that both domestic and foreign liberalization are said to imply globalization, since the former brings domestic markets more in conformity with forces operating in markets abroad, and, the removal of administrative barriers to international movement of goods, services, labour and capital increases economic interaction among nations".

Another major factor of the global labour market is the reforms implemented in India and China, the two most populous nations in the world. Together, both countries account for about one-third of the World's over 6 billion people. Demographically, the reforms were projected to unleash millions of skilled and semi-skilled workers on the global labour market (UNDP 2000). Due to these changes, global labour supply quadrupled between 1980 and 2005 with most of the increase taking place after 1990 (note: Soviet Union collapsed in 1990). East Asia contributed about half of the increase due to a marked rise in the working-age population and rising trade openness.

3.2 *Brain drain: causes and effects*

The existence of certain macroeconomic and sociopolitical factors engendered the flow of trained professionals from developing countries to the developed ones. The state of local infrastructures for instance, which are non-existent in certain cases, may be considered to be the number one factor leading to the brain drain. Restricted economic opportunities which may be as a result of political instability, racial and ethnic discrimination, corruption and internecine warfare leading to a further aggravation of poverty, unemployment and widespread diseases and death constitute some factors why trained professionals leave their native countries for another. On the other hand the assurance of higher incomes, higher standard of living, balanced political outlook, availability of basic infrastructure such as adequate housing, good road network, efficient transportation system, electricity and health care became irresistibly attractive (Meyer, 2001; Astor et al, 2005). The lopsided rating of foreign currencies against the local ones does not help matters especially when such professionals consider the fact that a year earning in a foreign currency could convert to as much as one could earn in a life time at home. In their study of physicians from Colombia, India, Nigeria, Pakistan and Philippines, Astor et al (2005) highlighted greater access to enhanced technology and a desire for increased income as reasons why the surveyed physicians migrated. The question at this point is; is there a return on investment on the human capital so lost to the developed economies?

Given the amalgamation and metamorphosis of national markets across the globe into a single and highly interactive global market, the participation of emigrants from developing countries, notwithstanding the sociological negativity associated with emigration, could be viewed as a positive representation of the home country in the global economy. A global economy is an economy whose core activities work as a unit in real time on a planetary scale. Such core activities are also universally recognized as basic features and requirements for the sustenance of any local economy. For instance, capital markets are interconnected worldwide, so that savings and investment in all countries, even if most of them are not globally invested, depend for their performance on the evolution and behaviour of the global financial market. In the same light, highly skilled labour is also increasingly being globalized, with talents being sourced and hired around the world when companies, institutions and governments really need them and are ready to pay for them. The overwhelming proportion of jobs, and to a large extent, people, who constitute the labour force, are however not global but are local and, to a certain extent, regional. Nevertheless, their fate, their jobs and their living standards are ultimately influenced by the globalized sector of the national economy, or on the direct connection of their economic units to global networks of capital, production and trade. It is important to note at this point that globalization does not eliminate the nation state, but fundamentally redefines its

role and affects its operation, either positively or negatively.

3.3 *The Glocalized labour market.*

The continuing integration of labour markets around the world is largely due to political changes and economic reforms occurring in three major sectors of the world: china, India and the Eastern Europe. This was aided by the explosion in the development of technology coupled with the gradual but progressive removal of restriction on cross-border trade and movement of capital (Rybinski, 2006). It became possible for organizations to splinter production processes and locate such splinters in areas where optimum utility of resources could be achieved. Many goods and skills today are produced far away from their target consumer markets. Such production units are located in areas, most importantly, where relative labour cost is low. I refer to this segment of the labour market as the ***glocalized labour market***. The implication here is that while the labour force is being utilized locally, the target of the out come of its utility is global. Though the reason for adopting a glocalized process of production may not solely be the relative low cost of labour, it is never-the-less significantly influenced by it. Other micro-economic determinants such as availability of cheap raw materials, stable political and economic policies and availability of significant technical infrastructure may also be part of this consideration. This process of relocating workplaces in search of employees was aptly termed *out-sourcing* and *off-shoring*. According to Rybinski (op cit) out - sourcing means relocating orders, services, production, employment or, in a broader sense, a business process to another company (irrespective of its location), whereas off-shoring means relocating a business process *abroad* (irrespective of whether to another company or within the same enterprise). This is a growing phenomenon which many Asian (especially India) and South American countries (e.g. Colombia) are benefiting from. Another concept that is fast becoming the norm in many of these countries is *telecommuting*; a process of working for an organization in a virtual environment devoid of a physical presence in a workplace. However, sub-saharan Africa is yet to make maximum utility of these blossoming global opportunities (see Langfield and Metaloni, 2006). Several empirical studies have demonstrated that out-sourcing and off-shoring entail increased competitiveness of enterprises, which raised their employment level abroad in subsidiary company's and intensify their expansion on foreign markets, thus being forced to create work places, often much better paid and requiring higher qualifications (Rybinski, 2006).

From all indication, Africa is still poorly prepared for the kind of competition demanded to be a premium out-sourcing and off-shoring destination. As late as 2006, it was still being derogatively considered a "very poor continent of an unfavourable climate and poorly qualified workforce" (Rybinski, 2006). This assertion may however have its basis in various studies on Africa and its economic performance in the past. Reports from such major world organizations such as the International Labour Organization and the UNDP indicated that world trade and exports of goods and services have been on the increase since 1990, Africa's share, however, have continued to be relatively marginal. For instance, the OECD reported that between 1990 and 1998, total world export of goods and services increased from \$4.7 billion to 7.5 billion, while exports declined in the Least Developed Countries (LDC) of Africa. They accounted for only 0.47% of global exports in 1998 down from 0.6 in 1980 and 0.5% in 1990. On readiness to participate in the emerging ICT driven global economy, it was revealed that by 1998, while more than ¼ (25%) of US citizens were internet users, the average for the whole of Africa was 0.1 % (OECD, 2004).

There is however, a thread of hope that demographic developments coupled with other globalization mechanisms which have led to the establishment of the global labour market will drive Asia and possibly some areas of Africa, e.g. South Africa, Egypt and Ghana, to become fierce competitors for Europe and the U.S. in the forth coming decades (Rybinski, 2006). The demographic advantages notwithstanding, Africa must look towards improving on its participation in the global labour market through improving its human capital via adequate and appropriate training and development.

3.4 *The Gains*

There is no doubt that globalization, like a double edged sword, has brought with it new opportunities for jobs and income as well as possible exposure to poverty, unemployment and insecurity. It is however the duty of Governments in the developing world to come up with realistic mechanisms for tackling globalization's unpleasant aspects while tapping maximally from its abundant opportunities, especially in the global labour market.

The fact still remains that, aside from the industrial raw materials for which this part of the world is known for, the only other area where African countries could make any reasonable impact in the globalization process is in the utilization of their demographic advantage, by generating supply of quality manpower in all cadres and levels of skills, across professions, for the global labour market.

For instance, China and India have blazed the trail of dominating areas of interest within the context of a globalized and a glocalised world economy respectively. India, in particular has significantly strengthened her status as an ICT sub-contracting and off-shoring destination. This is an area considered to be not only vital to the sustenance of the global drive, but the very foundation upon which globalization itself is laid. China on its part has been able to come up with unique strategies of turning its huge population of Diasporas into driving force for its economic development. The direct effects of these strategies include the attraction of about 50% of all Direct Foreign Investments (DFI) aimed at the developing world to China alone (OECD, 2004).

In co-opting the Diasporas into China's development, the Chinese "government maintains five central agencies that interface with oversea Chinese professionals, as well as several quasi-government agencies with funding to support knowledge exchange activities, representing the most formal and deliberate approach"(Brinkerhoff, op cit). In addition to these proven and tested steps, active private initiatives aimed at opening up investment opportunities for Diasporas should be encouraged.

3.5 Plausible Futures for Developing Nations in a Global Labour Market

Taking Nigeria as a case study of a developing nation characterized by the myriad of challenges typically bedeviling this category of nations, the following views of a possible utilization of its immense human resource could be derived by using a method of forecasting possible futures developed by List (2007) known as Scenario Network Mapping (SNM). We decided to use this method because of its simplicity of use and easy applicability to all foreseeable challenge whether in an organization or any other entity. Though the future can not be predicted with any sense of certainty, SNM allows us to determine and identify probable alternative futures for any single situation or event, in this case the possible future use of our people in the diaspora (see figure 1). We have made the network as simple as possible to enable a graphical understanding of the situation.

4 Conclusion

It is imperative that government should play leading roles in tapping the opportunities that globalization provides in virtually all areas of economic endeavors. Concerning the global labour market for instance, labour policy formulation should not only be limited to consideration for the local labour market but due consideration should also be accorded to the requirements for participation in the international arena.

The power of the Diaspora should also be utilized adequately. The emigrants from any developing country are generally attracted to their host countries for certain economic reason among which may be the issue of infrastructure and the extensive wage-gap. But for whatever consideration, they represent the country's funnel for knowledge acquisition and transfer, if properly managed. It is incumbent on any serious government to put structures in place to tap this opportunity for the growth and development of the mother land.

The Diaspora also contribute in real term by sending remittance back home which Brinkerhoff (2007), quoting world bank sources, described as "...the impressive totals of economic remittances (defined as transfers of money by foreign workers to their home countries), which now outpace official development assistance." These remittances were estimated at \$70 billion per year in 2004, \$125 billion in 2005, and \$167 billion in 2006. These remittances represent only a fraction of what could be earned if the emigration of such Diasporas had been well organized, planned and managed in the interest of the native country in the first place. One African leader who showed a marked understanding of the power of remittance capture in his Diaspora integration strategies was Zambia's president, Levy Mwanawasa when he was quoted to have said in an address to the Zambian community in the United State: "I know you expect me to say come home. I am not going to do that. I have no jobs to give you. Work here and send money home" (quoted in Manda, 2004:74). This succinctly summarized the overwhelming importance and objective for turning Africa's brain drains to economic gains for sustainable local development.

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