

The Impact of Brain Drain: Role of New Media and social media in affecting Migration Decision- A Descriptive study

Kishor Kumar Hira

Senior Graphic Instructor,
Department of Journalism and Mass Communication,
Swami Vivekananda University

Abstract

This paper reviews four decades of economics research on the brain drain, with a focus on recent contributions and on development issues. We assess the magnitude, intensity and determinants of the brain drain, showing that brain drain (or high-skill) migration is becoming the dominant pattern of international migration and a major aspect of globalization. We then use a stylized growth model to analyse the various channels through which a brain drain affects the sending countries and review the evidence on these channels. The recent empirical literature shows that high-skill emigration need not deplete a country's human capital stock and can generate positive network externalities. Social media and internet are acknowledged as important growth engines in modern world. Internet and social media have touched political, social, cultural dimensions of a country and also have played a role in connecting people across the globe. Since long, developing countries are facing problem of exodus of workers i.e. people are leaving their home countries due to various reasons. Social connections and easy accessibility of information has influenced migration intensions also. Since social media and internet has penetrated each aspect of our lives it also has influenced intensions and decisions to stay or leave their home country. Internet and social media acts as a major source of information for prospective migrants. This paper highlights various factors through which media and internet can influence or stimulate migration decisions.

Keywords- Mobile, Internet, Globalisation, Cultural Communication, Cultural Shock, Media Marketing

Introduction

Brain drains due to cross border migration of skilled workers has always been a cause of concern for developing nations. There have been various numbers of studies done which have concentrated on cross border people mobility which gives rise to brain drain. Few of the key reasons which can serve as a cause of emigration of human capital include economic, political, social and cultural factors. In the modern world in which internet and social media has reached and influenced political, social, cultural aspects within a nation it also has contributed to link the people of different countries. Internet and social media are recognized as one of the key growth drivers in the modern world. They have linked the farthest edges of the nation with the modern world. According to a report, India boasts 462.1 million internet users (which account for about 34 percent of population) of whom 430.3 million surf the net via mobile phones (79% of total web traffic). 282 million are active users and spend about 7 hours daily on the net. Active social media penetration in India is 19% of the total population and global average is 42% of the total population (TRAI, 2018).

In this technological era internet and social media have become a vital part of one's life. It has also integrated individuals with the outside world and has become a significant means of communication. The pattern of communication has been modified and developed over time. Human communication began with oral communication and over time it was developed to script, to print, wired electronics, wireless electronics and finally to digital medium. Internet and digital media in early 1990s introduced paradigm shift in channel and communication pattern. Digital technology has shortened the distance between national and international boundaries (Harvey, 1991). Thoughts, opinions and Information provided and exchanged by digital media results in the formation of a network and impacts intercultural relationship of virtual community (Boyd & Ellison, 2007). Internet and social media have changed our thoughts, actions and lives. Thus, internet

and social media have validated their influence on every aspect of humanity (Chen, 2012). The number of international migrants rose from 75 million in 1960 to 190 million in 2005, at roughly the same rate as the world population, so the world migration rate rose only modestly, from 2.5 to 2.9 percent.¹ During the same time, the world trade/GDP ratio tripled, rising from 0.1 to 0.2 between 1960 and 1990 and from 0.2 to 0.3 between 1990 and 2000; the ratio of FDI to world output, however, tripled during the 1990s alone.

From such figures it would be possible to conclude that globalization is primarily concerning trade and FDI, rather than migration. But the image becomes different after the migration focusing is drawn down to developed nations and specifically its skilled fraction. As can be seen from Figure 1, the proportion of foreign-born within the population of high-income nations has trebled since 1960 (and doubled since 1985). In addition, these immigrants are more skilled: whereas migration into the OECD area grew at the same rate as trade, high-skill migration (or brain drain) from developing to developed nations grew much more rapidly² and can clearly be seen as one of the key elements of globalization. Why is there this brain drain internationally, and what are the effects on sending countries? This paper covers four decades of economic literature on the subject, concentrating on the latter period. The first wave of economics articles on the brain drain was in the late 1960s and primarily comprised welfare analyses within traditional trade-theoretic frameworks (e.g., Grubel and Scott, 1966, Johnson, 1967, Berry and Soligo, 1969). These initial contributions tended to conclude that the effect of the brain drain on source nations was largely neutral and highlighted the advantages of free migration to the world economy. This was attributed to the fact that high-skill emigrants tend to leave behind some of their wealth in their home country, which complements residual high and low-skill labor (Berry and Soligo, 1969), as well as remitting back home. This and other favourable comments offset sending nations for the actual loss brain drain might generate. From a general point of view, such research (particularly Grubel and Scott, 1966) highlights high-skill immigrants' contribution towards knowledge, which is an

international public good, and ignores “obsolete” assertions regarding the presumable losses for developing nations.

The second wave follows a decade later. Led by Jagdish Bhagwati, in the 1970s a sequence of alternative models was constructed to investigate the welfare implications of the brain drain in different institutional frameworks. Rigidities in domestic labor markets, informational defects, and Öscal and other forms of externalities (Bhagwati and Hamada, 1974, McCulloch and Yellen, 1977) were invoked to bring home the adverse implications of brain drain for the behind group. Emigration of high skills was considered to lead to enhanced inequality at the global level, with rich nations getting richer at the cost of poor nations. The earliest works to examine the brain drain in an endogenous growth model relied on similar assumptions and drew similar results.

2. What is Brain Drain: An Overview

It has been approximated that approximately 3.25 percent of word’s population reside abroad (UN, 2016) out of which 58 percent reside in the developed nations. According to International migration report, 2017, the destination country is United States (46.1 million), Germany (11.1 million) and Russia (11.0 million). Shortages of human resource in professional fields such as medical, engineering and sciences etc. have been experienced by both developing and developed nations. There are chances that with growing competition, more talent shall be attracted from the developing countries. As developed nations offer good remuneration, better infrastructure, facilities, lifestyle etc. the professional from developing nations opt to shift to such nations. Consequently, developing nations are plagued with a shortage of human resources and brain drain. Several reasons such as salary, employment, training, improved infrastructure, attributed, quality of life etc. have been established as being among the key causes of brain drain. Nevertheless, technology advancement is also contributing to migration choice (Bhardwaj B, 2017). Availability and access of relevant information re4alted to migration and destination country is one of the important factors influencing migration decisions.

Internet and social media can play an important role behind motivation or strengthening migration decision (Braga, 2007). Previous research related to brain drain and human resource migrations has been highly concentrated on antecedent or consequence of brain drain. But in modern world internet and social media has influenced every phase of life. We cannot neglect their influence on brain drain intentions. This article attempts to contribute towards the studies regarding brain drain through understanding how internet and social media play their roles in impacting brain drain intention. Different studies associated with migration, brain drain, internet, and social media have been referred to understand the potential of internet in impacting brain drain interventions.

3. The Importance of Brain Drain in today's World

What is the "Brain Drain" and why is it significant today? The concept of a "Brain Drain" implies that there exists an uneven division of the pros and cons of international migration. The countries of origin appear to suffer most of the losses and in their reckoning, still have not been sufficiently rewarded for the net input their indigenes have provided to the host nations. The term "Brain Drain" is not controversy-free and there are some authors, e.g., David Hart (2006), who use the term "High Skill Migration" instead of "Brain Drain." High Skill Migration (HSM) is, for Hart, migration of individuals with higher levels of skills and education who, if they remained, would be able to make a meaningful contribution to the country's development. But issues come up when we attempt to distinguish between high skill migration and general/low skill migration. There isn't a single standard in all countries that can be applied to determine who should be regarded as highly skilled. The fact is that not all migrants elicit the same degree of loss of human capital. The sole differentiating factor (and a highly subjective one, at that) between overall migration and HSM or "Brain Drain" is that in the "Brain Drain," there is human capital, skill and expertise accompanying the migrant (Grubel and Scott 1977). In addition, the ones who emigrate are more likely to be from the professional and middle classes and are mostly educators, health care professionals, scientists, engineers, professors and

political activists (Dugger 2005). In the home country, high skilled migrant workers are also differentiated from less skilled migrant workers by the higher wages they earn.

As I mentioned before, the countries of origin require these educated, skilled workers so that they may develop. At the most extreme part of the analysis we can argue that the working class of these nations invests time, energy and resources into educating these individuals who subsequently emigrate and abandon them to survive. Therefore, it is clear that freedom of movement and access to financial prosperity by some individuals is gained at the cost of the freedom of countrymen from hunger, homelessness, poverty and curable diseases. Small, poorer and less developed nations are likely to suffer most from this emigration of human capital. For instance, most of the High Skilled Migrants to the U.S. come from countries that are not members of the Organization for Economic Cooperation and Development (OECD). The National Science Foundation is on record stating that about 70% of the U.S. science and engineering labor force come from non-OEDC developing nations (Hart 1). The nations in the global North that gain the most from the "Brain Drain" do not mind admitting to its existence but do little to remedy it. Let it be said that the "Brain Drain" phenomenon is not so recent. As far back as 1973, the U.N. General Assembly asked the Secretary General to present a report on how the world could address this issue of the exportation of trained or skilled human resources from developing nations to developed nations (Grubel and Scott 1977).

However, the discourse of the "Brain Drain" phenomenon seemed to disappear following the Vietnam War and has only re-emerged in the last two decades, but noticeably on a larger scale. The problem in the past was that this international flow of human capital was often overlooked due to migration that was attributed to voluntary exile, political and religious conflict, or involuntary flight from persecution (Grubel and Scott 1977). In order to comprehend how the "Brain Drain" occurs, we have to take a few minutes discussing migration and why individuals migrate from their native countries in the first place. The reasons Caribbean natives move overseas

and never return home are categorized into two types that are usually mentioned as pull and push factors. Push factors are conditions or incidents that occur in native countries leading to individuals departing. Push factors include the structural adjustment policies imposed by the International Monetary Fund and the World Bank on developing nations that raised unemployment and cut government expenditure on social programs in such nations that consequently resulted in heightened migration. Pull factors refer to the attractions in the host countries that motivate individuals to move there for work purposes. Examples of pull factors include the receiving countries' immigration incentive policies that have a tendency to attract more educated, skilled and trained individuals. For instance, the H-1B visa program in the U.S. is commonly utilized as a stepping stone by immigrants seeking to gain employment-based permanent residence there.

The existing immigration policy in the U.S. allows the applicants for the H-1B visa to possess the dual intention of gaining temporary work status but with the intention of applying for permanent residence (Kapur and McHale 2005). Other developed nations have such immigration policies that continue to attract highly skilled professionals from developing nations. Currently, in Australia, employers of foreign workers do not have to prove that domestic staff will be at a disadvantage when foreign employees work, in reality, all employers have to present is that by hiring the foreign worker, Australian interests will in some way or another be best served (Kapur and McHale 2005).

4. The Active & Passive Role of New Media and Social Media in Influencing Brain Drain Intensions-Social Influence Theory

Social network theory concerns the function of social relations in passing information, directing personal or media influence, and facilitating attitudinal or behavioural change (Liu, Sindhu, Beacom and Valente, 2017). Historically, migration choice has been made on the grounds of information gathered from different sources like network overseas, consultants, relatives and friends. But today with the growth of internet and social media in individual lives dependence has mostly switched to

these zones. Use of internet and social media has made their presence globally with about 95 percent population living in a region with a mobile network cover. Use of internet and penetration of smart phones globally is increasing. Rise in the use of internet and diffusion of smart phones globally is increasing and has an impact on every aspect of our life. The number of individuals using internet has grown from 1,024 million in 2005 to 3,488 million in 2016 (ICT Facts and Figures, 2016). Migration decision and Intentions to a great extent rely on the availability of information which can be obtained from friends, family, relatives, earlier migrants or social network. But with digital revolution internet has become one of the most used and evident sources of information. Because of enormous information, which is accessible on internet and social media it is influencing our social life (Graham, Schroeder and Taylor, 2013; Dutton, 2009). Media have significant influence on thoughts and behaviors of people (McCullagh, 2002, Kohring & Matthes, 2007; UNESCO, 2015). Migration choices are guided by information availability and internet and social media drive migration by facilitating easy access to information about destination country. Hence, the data obtained from these sources assists in demystifying unclear concepts of migration and possible destinations.

Availability of information via internet assist in location discovery and influences virtual emigration plans. Resilient network founded on relationship, kin, community etc. constitute strong relations as a social capital. It has always functioned as an enabling tool in migration. Internet and social media notwithstanding, people with brain drain intention find it easy to obtain information which is an enabler for their movements. Accordingly, as postulated by the social network theory, the decision and intentions of migration could be shaped by human networks that build and enable migrating. It is seen that a robust network among people of the same origin (e.g. same nation) enhances the likelihood of migration flow as well (Massey, 1990 and Polyzos, 2006). Admittance to pertinent information concerning labour market and the risk involved while moving into the foreign nation, lowers the costs of cross border mobility significantly which further

encourage international travel. Some years back, international migration was also known as radical departure which completely severed the social relationship of the emigrants (Faist, 2000). But internet and social media have reversed the trend allowing a close relationship between nonimmigrants and immigrants (Vertovec, 2006; Horst, 2006). Brain drains and emigration choices are not spontaneous but have well defined stages (Brown & More 1970; McHugh 1984; Kley 2011).

Internet and social media are involved in every stage right from the stage of intension to move until the settling downing in foreign nation. Internet and social media support assists in overcoming limitations and assists in discovering new locations (Thulin & Vilhelmson 2016; Schutz, 2011). Internet information flow assists in the adjustment of the expatriates (Hattingh, Matthee and Lotriet, 2014). Personalized, clear and rationalized information about locations, employment, culture, jobs, education, housing, political and social conditions in far away places facilitates adaptation and social interaction. Therefore, it is clearly seen that the interest, planning, and act of migration is shaped by social media and the internet (Stevenson 2009; Hiller & Franz 2004; DaVanzo 1981& Massey 1990, Thulin and Vilhelmson, 2014). Another means in which internet and social media are involved in migration decisions and intensions is web-based place-marketing strategies. Online marketing campaigns draw visitors, tourists, and migrants (Urban 2002; Gertner et al. 2007). This also stimulate migration interest and migration intentions (Vilhelmson & Thulin 2014). Information scarcity increases the likelihood of impulsiveness of a potential migrant (Burrell & Anderson, 2008; Thulin and Vilhelmson, 2016). In this scenario, social media and internet can be utilized for information access as well as for migration prospects (Hiller and Franz, 2004). Internet has scope for other opportunities and therefore strengthens migration decision (Burrell and Anderson, 2008). It also contributes to altering perspective and migration or loving a nation decision (Palm, 2002). Additionally, there has been an identified positive correlation between internet use and migration planning (Vilhelmson & Thulin, 2013).

5. Does the “Brain Drain” truly exist?

One of the first refutations of the theory of the “Brain Drain” was the “Emulation Model” (Grubel and Scott 1977). The model states that the emigration of educated and skilled individuals leads to those left behind in the source country asking for higher pay and improved education. In a way, they desire their nations to emulate the situation in the destination nations. Therefore, trained and educated employees who stay in the source nations will pursue positive and productive work that will help them earn greater wages corresponding to the wages of the advanced countries. Additionally, the hope for migration stimulates those staying in the source nations to acquire higher levels of education as they seek greater pay. Consequently, more individuals access universities and there is increased demand for constructing additional institutions of higher learning. Kapur and McHale (2005) term this as the “Prospect Channel” because the promise of exiting the country alters the prospective emigrants’ perception about human, social and financial capital. Regrettably, such models do not consider the over-expectations these individuals develop when accessing higher education. They are not acquiring a university education to help their country’s economy; they are acquiring a higher education because, in many cases, they think that this will enhance their probability of migrating. Another argument posits that even if the migrants do not return home, the knowledge they gain usually does.

Those arguing from this perspective sometimes assume that certain source countries will even be more advantaged if the skilled migrants do not return (Hart 2006). This is because within the developed nations, they are able to acquire specialized skills and gain expertise training that they would most likely have foregone if they had stayed in the home country. With the improvement in communication channels, it has been made easier for these migrants to transfer their acquired knowledge back home. The “Brain Drain” is then a kind of legal export business (Sanders 2007). The source nations equip their nationals with the foundational knowledge and facilities and then ship them to developed nations. Then, those who migrated remit money and acquired knowledge

back. Consequently, it could be more of a mutual benefit than a “Brain Drain” since the expansion of knowledge and technology will ultimately spread to the source nations.

6. Brain Drain-Possible Proposed Solutions

It is crucial that the Caribbean nations eliminate or reduce the push factors causing their citizens to leave. The governments now need to become proactive and not continue attempting to control those already departed; they can do nothing about that. It would be advisable for them to instead redirect their effort and begin to find means of making the country better for those who still live there as well as offer incentives for individuals to remain.

Limiting migration is not practical because any stringent limit on migration violates fundamental human rights. In addition, stringent limits on migration will only create more discontent and illegal behavior (Sanders 2007). Economic and social growth should not be relied on to end the “Brain Drain” entirely, but it will make huge gains in curbing the issue. Three of the main reasons people leave their home country are: to receive higher incomes, to capitalize on better career developmental opportunities and to gain a greater degree of freedom (Grubel and Scott 1977). Globalization has highlighted the Caribbean’s need for a more competitive and highly skilled labor force. But the problem is that while the nation invests in education and more and more individuals get higher studies then this also acts as a motivation for individuals to move. Source nations must address improving affairs there that will offer more incentives for the highly qualified workers to remain. These could include improved human rights, remuneration, political system adjustments, newer facilities for health and education as well as making an environment more appealing to businesses. Without these changes there can little else be done to make natives remain or encourage migrants to come back. Both developed and developing nations must have a fair distribution of the returns of highly skilled migration. Receiving nations can help develop Caribbean education and training as a form of compensation.

Kapur and McHale (2005) identify a number of compensation alternatives which would make development assistance become part of “human capital recruitment” (Kapur and McHale 2005). For instance, the receiving countries could export skilled employees to serve as replacements in the source countries as workers’ exchange. They also proposed that the destination countries grant the source countries benefits from income tax revenue collected from migrant workers as well as share revenue from visa fees obtained. Also, source countries could charge education grants for secondary and tertiary studies in the home country that would become repayable upon migration. But again, there is the issue of determining how much compensation to pay as well as in which country’s economy the compensation is to be measured. Still, this is possibly the most suggested solution thus far that benefits the most at the least costs. Ultimately, the intention would be to assist source nations in learning how to best utilize the spillover information and establish improved “absorptive capacity”. In most classrooms and kids’ libraries across the Caribbean, there are banners proclaiming that “Education is the key to success” and “Reading maketh a successful man.” However, there exists a tremendous lack of jobs within the Caribbean. Many university graduates in all fields of study are without work, months and sometimes years after they graduate.

Education is being preached and motivated endlessly but afterward there is scarce space for getting hired and those fortunate enough to find job interviews being given regularly are repeatedly told they are overqualified. Governments should come up with new policies for their educated workforce so that employment opportunities become readily available for them. Reinstatement of nationalism adds to the dismal manner with which migration has been treated by developing nations. Increased nationalism, though, also tends to create more stringent immigration policy in developed nations that wish to recreate barriers (though they frequently fail in this). After the September 11, 2001 attacks in New York, a xenophobia was created in the U.S. that is likely to go on and impact immigration and thus lower the migration of highly

skilled individuals. There are also specific areas of study that have limited the registration of foreign-born students. This is a routine practice particularly in the natural sciences like chemistry and biology which might be useful to terrorists (Hart 2006). If these immigration policies further tighten, then perhaps the issue of the “Brain Drain” will remedy itself. Another suggested solution to reduce the problem is to alter the language employed in the discourse. That is, we must drop the “Brain Drain” terminology because the mere mention of “Brain Drain” elicits an automatic aversive reaction. This is the reason why Hart (2006) recommends that we employ “High Skill Migration” because this is actually the crux of what is happening and provides a better sense of direction of what the problem actually is. The issue of diaspora communities is one that I am keen on and firmly believe that from these diaspora communities, the solution to the problem of the “Brain Drain” is possible. Source country diasporas, particularly in the Caribbean, are growing very fast in the host countries and are comprised of numerous highly educated migrants. Source country governments can take advantage of this and foster linkages and partner relations between the diasporas and institutions in the source countries. Such programs would assist members of the diaspora in becoming more socially and economically integrated into their countries of origin and could potentially act as an incentive to return home. It should not be presumed that when individuals depart they abandon their cultures and values.

Strauss and Quinn (1997) support the argument that cultures are unbounded; the experiences of the people can be shared across time and space. In most instances, the members of the diasporas want to remain with those who remain behind at home. Hart advises that governments of the host countries eliminate part of the obstacles to communication and movement and ease remittances sending and investing by emigrants (2006). They could accomplish this through cutting ticket costs for planes, lowering call fees, subsidizing diaspora expatriates’ organizational infrastructure and granting incentives for cooperation at the education, scientific, and commercial level between diaspora communities and host

institutions. The receiving countries can also cooperate with the source countries in establishing networks to help highly skilled migrants establish programs and projects in the source countries with the aim that these programs will be able to expand and become autonomous.

7. Conclusion and Discussion

Digital age has reached every nook and corner of our life. Brain drains and migration research have found several reasons that stimulate brain drain intensions. Internet and social media is also one of the reasons which play a significant role by serving as a main source of information. A study of available research has revealed that there is paucity of research on the role internet and social media's impact on migration research. Brain drain & brain drain intensions related research will be incomplete if we overlook the role of internet and social media. This paper makes contribution in the area of brain drain and migration studies by reviewing the previous researches to find the motivating role of internet and social media. We have found some factors which cause reinforcement of migration intentions. Therefore, we can say that social media and internet triggers brain drain intensification by giving information, creating a robust network, reducing down the risk of migration, moderating the effect of obstacles, giving an access to employment opportunities, facilitates adjustment and remain connected with family and friends. The "Brain Drain" is the majority of the emigration of highly trained and educated individuals from poorer, developing and less industrialized nations to wealthier, more industrialized ones. This article investigated the relationship between the new paradigm of globalization and how it is fueling this new interest and re-emergence of discourse regarding the "Brain Drain." The Caribbean region has recently been one of the most profoundly impacted regions in terms of human capital loss. The article had some sobering facts regarding the Caribbean such as the fact that the largest percentage of educated individuals entering the U.S. are from the Caribbean. The Caribbean also receives the most remittances from developed nations, no surprise there. It also glanced over some of the methodological issues with the

statistics on the “Brain Drain” and the importance of being cautious when drawing conclusions.

Internet and media give information on migration area and destinations’ quantity. With access to these media foreign locations could be accessed very rapidly via virtual network. Implications of the future migration choice can be viewed to lead towards stimulating to actual migration intentions. Access to related information shortens the interval between migration intentions and ultimate decision (Taylor 1969). This research is clear that social media and internet have a critical role in the formation of intentions towards exodus of individuals. With the expansion of cheap and resourceful means of communication, distant and unreachable territories can be found. With the factors given as reasons to influence migration intentions, further research can be done to test empirically the influence of internet and social media on brain drain intentions. Also, the topic of inhibiting role of media and intentions on brain drain intentions can be undertaken by future researches.

References:

Peralta, F. (n.d.). *Brain drain*. Retrieved from <https://home.fau.edu/peralta/web/facs/braindrain.pdf>

Pramana Research. (n.d.). *Title of the paper*. Pramana Research Journal. Retrieved from <https://www.pramanaresearch.org/gallery/prj-p1305.pdf>

Harvard University, Center for International Development. (n.d.). *Faculty working papers: Paper 219*. Retrieved from <https://www.hks.harvard.edu/sites/default/files/centers/cid/files/publications/faculty-working-papers/219.pdf>

Dugger, Celia, W. (Oct. 25, 2005). Study Finds Small Developing Lands Hit Hardest by ‘Brain Drain’. New York Times, New York N.Y. pA.9

Hart, David M. 2006. From brain drain to mutual gain: Sharing the benefits of high-skill migration. *Issues in Science and Technology*, Fall. *Issues in Science and Technology*. Fall 2006. FindArticles.com. 24 May. 2008.

Bhardwaj, B. (2017). Migration Vulnerability: Role of Digital Media and Internet in Stimulating and Inhibiting Brain Drain. *International Journal of Advances in Management and Economics*, 6(6), 24-32.

Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210- 230

Braga, M. (2007). Dreaming another life- The role of Foreign media in Migration decisionEvidence from Albania. Retrieved on 19/6/2017 from <http://www.edgepage.net/jamb2007/papers/DreamingAnotherLife.pdf>

Brown L. A., Moore E. G. (1970). The intra-urban migration process: A perspective. *GeografiskaAnnaler, Series B*, 52, 1–13; *Yearbook of the General Systems Society*, 15, 109–122.

Acemoglu, D., S. Johnson and J.A. Robinson (2005a): Institutions as a fundamental cause of long-run growth, in Ph. Aghion and S. Durlauf (eds): *Handbook of Economic Growth*, Elsevier North Holland. Chapter 6, pp. 385-472. Acemoglu, D., S. Johnson, J.A. Robinson and P. Yared (2005b): From Education to Democracy, *American Economic Review*, AEA Papers and Proceedings, 95, 2: 44-49.